

**Attachment D-5**  
**Coastal Consistency Determination**

TEXAS COASTAL MANAGEMENT  
PROGRAM  
CONSISTENCY DETERMINATION

GULF INTRACOASTAL WATERWAY  
BRAZOS RIVER FLOODGATES AND COLORADO  
RIVER LOCKS, TEXAS



US Army Corps  
of Engineers ®



Texas  
Department  
of Transportation

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## Acronyms and Abbreviations

Acronym or Abbreviation	Definition or Meaning
BRFG	Brazos River Floodgates
CNRA	Coastal natural resource area
CRL	Colorado River Locks
DMPA	Dredged Material Placement Area
GIWW	Gulf Intracoastal Waterway
FR-EIS	Integrated Feasibility Report and Environmental Impact Statement

Acronym or Abbreviation	Definition or Meaning
GLO	General Land Office
H&H	Hydrology and Hydraulics
ODMDS	Ocean Dredged Material Disposal Site
RRC	Railroad Commission
SLB	School Land Board
TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
TCMP	Texas Coastal Management Program
TPWD	Texas Parks and Wildlife Department
TxDOT	Texas Department of Transportation
USACE	U.S. Army Corps of Engineers

## 1.0 INTRODUCTION

The United States Army Corps of Engineers (USACE), in cooperation with the Texas Department of Transportation (TxDOT) Maritime Division, is conducting a feasibility study to investigate improvements to the Gulf Intracoastal Waterway (GIWW), Brazos River Floodgates (BRFG) and Colorado River Locks (CRL) facilities that would reduce navigational difficulties, delays, and accidents occurring as tow operators transit the BRFG and CRL structures and across the Brazos and Colorado Rivers. As part of the Feasibility Study, the USACE has prepared an integrated Feasibility Report and Environmental Impact Statement (FR-EIS) in compliance with the National Environmental Policy Act, USACE regulation ER-200-2, 33 Code of Federal Regulations 230, the Flood Control Act of 1970 – Section 216, and other Federal, state, and local environmental policies and procedures.

This report addresses consistency with the Texas Coastal Management Program (TCMP). Section 307 of the Coastal Zone Management Act of 1972, 16 U.S.C. 1456 et. seq., requires that “each federal agency conducting or supporting activities directly affecting the coastal zone shall conduct or support those activities in a manner which is consistent to the maximum extent practicable with the enforceable policies of approved State management programs.”

### 1.1 Background Information

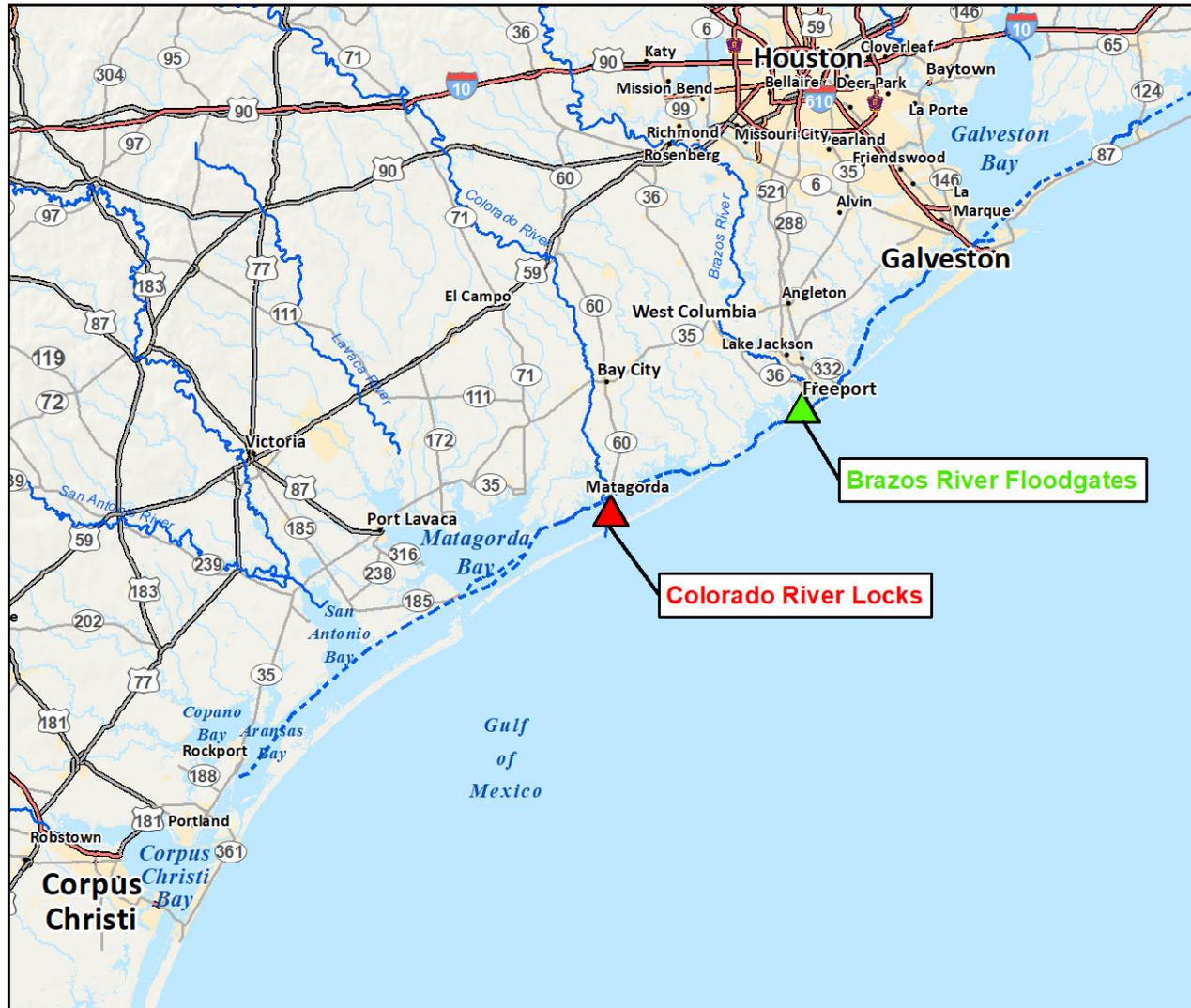
The GIWW is a shallow-draft navigation channel that extends from Brownsville, Texas, to the Okeechobee waterway at Fort Meyers, Florida. The authorized channel in the GIWW is 125 feet wide and is typically about 12 feet deep. The GIWW is an essential component of the transportation network of Texas and the nation, reducing congestion on highway and rail systems, thereby decreasing maintenance costs and extending the life of these transportation systems. Compared to truck or rail transport, the use of barges to transport goods produces fewer air emissions, is more fuel-efficient, and provides a safer mode of transportation. The GIWW is also used by the commercial fishing industry and for recreational activities such as fishing, skiing, sightseeing, and traveling long distances in the protected waterway.

The BRFG and CRL are two lock-type structures on the GIWW located about 40 miles apart on the upper to mid-Texas coast, in Brazoria and Matagorda Counties, respectively (**Figure 1**). They were initially installed in the early 1940s to prevent heavy sediment loads in the Brazos and Colorado Rivers from entering the GIWW. The structures are over 60 years old and were installed at a time when most tug boats pulled barges behind them, rather than using the modern pushing method. At each facility, the gate openings are 75 feet wide, which is narrower than the 125-foot-wide GIWW navigation channel. Although regulations restrict the width of tows to 55 feet, oversize tow permits are routinely granted for tows as wide as 108 feet, particularly along the upper Texas coast (TxDOT 2016). To move these wider tows through the BRFG and CRL, vessel operators must park the tows, break the barges apart, move them through the locks in smaller sets or individually, and reconnect the tows on the other side. This process, known as “tripping,” is inefficient and causes delays that result in substantial costs to the towing industry each year. In addition to narrow gates, high flows in the rivers make navigation through the BRFG and CRL structures more difficult and result in temporary navigation restrictions and/or closures imposed by the USACE and U.S. Coast Guard, which result in additional delays and economic impact to the towing industry.



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## Project Location Brazos River Floodgates and Colorado River Locks



### Legend

- ▲ Brazos River Floodgates
- ▲ Colorado River Locks
- - - Gulf Intracoastal Waterway
- ~ River



1:2,000,000

0 10 20 40 Miles

Base Map: ESRI

### Location Map



Figure 1 Project Location

## 1.2 Summary of Alternatives Considered and Recommended Plan Identification

The FR-EIS describes the alternatives that were evaluated for the project, but the alternatives are also summarized here for reference. Early on in alternatives development, the USACE and TxDOT identified a number of alternatives that involved various measures to improve navigation through the BRFG and CRL facilities. Through multiple screening efforts, the USACE and TxDOT narrowed the reasonable alternatives to the No Action Alternative and five Action Alternatives at the BRFG facility, and the No Action Alternative and three Action Alternatives at the CRL facility. In an effort to minimize environmental impacts, the disturbance areas associated with the reasonable alternatives are located in and adjacent to the existing GIWW, BRFG, and CRL facilities. The USACE and TxDOT further evaluated these alternatives through hydrology and hydraulics (H&H) modeling, economic analysis, and environmental analysis to identify a Recommended Plan. **Table 1** lists the alternatives, provides a general overview of each alternative, and provides an estimated area that would be affected by the alternative.

**Table 1. Summary of BRFG and CRL Alternatives Considered**

Alternative	Alternative Overview	Estimated Acreage Affected	Recommended Plan?
<b>BRFG Alternatives</b>			
No Action	No improvements would be made to the BRFG facility. Normal maintenance activities would continue.	0	No
2a	<u>Rehab Existing Facilities</u> – Rehabilitate existing floodgates, guide walls, and other infrastructure; no major changes to overall footprint, orientation, operations, or bathymetry; H&H and salinity modeling and analysis assume conditions would be the same as existing.	0 <sup>1</sup>	No
3a	<u>Gate Relocation on Existing Alignment</u> – Move floodgates farther from Brazos River along existing GIWW alignment; widen chamber wall opening from 75 feet to 125 feet wide.	83	No
3a.1	<b><u>Open Channel West/East Gate Relocation</u> – Similar to Alternative 3a but only includes a new east floodgate; removes west floodgate, leaving an open channel on the west side of the river.</b>	79	Yes <sup>2</sup>
9a	<u>Open Channel</u> – Remove floodgates and excavate an open channel north of the existing GIWW alignment to straighten this section of the GIWW.	75	No
9b/c	<u>New Alignment/Gates with Control Structures</u> – Excavate new channel north of existing GIWW alignment and construct 125-foot-wide floodgates on the new channel. Alt. 9c includes a flow control structure at existing west gate location, while Alt. 9b does not.	87	No
<b>CRL Alternatives</b>			
No Action	No improvements would be made to the BRFG facility. Normal maintenance activities would continue.	0	No
2a	<u>Rehab Existing Facilities</u> – Rehabilitate existing locks, guide walls, and other infrastructure as needed; no major changes to overall footprint, guide wall orientation, gate operations, or bathymetry; H&H and salinity modeling/analysis assume conditions would be the same as existing.	0 <sup>1</sup>	No
3b	<u>Open Channel</u> – Remove existing locks, creating an open channel through the intersection at the GIWW.	71	No
4b.1	<b><u>Removal of Riverside Gates</u> – Remove riverside gates, converting the locks to floodgates.</b>	71	Yes <sup>2</sup>

<sup>1</sup> BRFG Alternative 2a and CRL Alternative 2a would rehabilitate the existing facilities within the existing footprints.

<sup>2</sup> The Recommended Plan presented in the February 2018 DIFR-EIS was BRFG Alternative 3a.1 and CRL Alternative 4b.1.

The Recommended Plan that was presented to the public for review in the February 2018 DIFR-EIS included implementing Alternative 3a.1 (Open Channel West/East Gate Relocation) at the BRFG facility and Alternative 4b.1 (Removal of Riverside Gates) at the CRL facility. At the BRFG facility, the Recommended Plan consisted of (1) removing the existing floodgates, (2) constructing a new 125-foot-wide floodgate on the east side of the river (along the existing GIWW alignment and set back approximately 1,000 feet from the river), and constructing a minimum 125-foot-wide open channel (no floodgate) on the west side of the river crossing. At the CRL facility, the Recommended Plan consisted of the removal of the existing river-side sector gate structures and rehabilitation of the existing GIWW-side sector gate structures.

### **1.3 Refinement of the Recommended Plan**

In consideration of public comments and further discussions with the navigation industry, the USACE and TxDOT refined the Recommended Plan at each facility. First, the GIWW alignment at both facilities was shifted to the south of the existing alignment in order to maintain operation of the existing structures during construction. This refinement was made in response to concerns that the originally proposed temporary bypass channel, which would have remained open during the entire 1 to 2 years of anticipated construction, would result in excessive sedimentation and maintenance dredging costs in the GIWW and Freeport Channel during that period. Second, at the CRL facility, the Recommended Plan was refined to remove all four existing gate structures and construction a new 125-foot-wide gate on each side of the river. The following sections describe the refined plans at each facility.

#### **1.3.1 Refined Plan at the BRFG**

At the BRFG, the main features of the Recommended Plan are the removal of the existing gates on both sides of the river crossing, the construction of a 125-foot-wide open channel (no gate structure) on the west side of the river, and construction of a new 125-foot-wide sector gate structure on the east side of the river. **Figure 4** shows the refined plan at the BRFG. Detailed drawings are provided in **Attachment 1**. The centerline of the GIWW through the BRFG area would be shifted 300 feet south of the existing centerline, allowing the existing floodgates to remain in operation until the new channel and west floodgate are completed. The open channel on the west side of the river will have a bottom width of 125 feet and bottom depth of -12 feet NAVD88. The new 125-foot-wide sector gate on the east side of the river will be set back approximately 1,300 feet from the existing gate structure, providing increased safety and efficient vessel operation through the crossing. Construction of the open channel and new sector gate at the BRFG will take approximately two years to complete, if adequate funding is provided. Assuming one contract, the general construction sequence will include the following:

- Dredge the new channel alignment on the west and east sides of the river, leaving a plug at the existing floodgates to maintain separation between the new channel and the river.
- Construct the new gate structure, guidewalls, and end cells on the east side of the river.
- Excavate the plugs at the river, and complete dredging of the new channel.
- Transfer navigation traffic to the new GIWW channel and gate structure.

- Decommission existing floodgates, demolish the southern gate leaf on both sides of the river, and build levee access to the new gate structure.
- Complete final site work, including grading, parking, and support buildings.

Anticipated pile-driving activities associated with the proposed BRFG plan are outlined in **Table 2**.

**Table 2. Anticipated Pile-Driving for the BRFG Recommended Plan**

Project Component	Pile Size	Pile Type	Number of Piles	Hammer Type	Water Depth (meters)
Gate Structure Foundation	24"	Steel Pipe	246	Impact	< 5
Guidewalls	13"	Timber Piles	96	Impact	< 5
End Cells	18"	Steel Pipe	120	Impact	< 5
	20"	PS 31 Sheet Pile	930 LF	Impact	< 5
Needle Girder Storage	24"	Concrete	60	Impact	0 (on land)
Reservation Buildings	13"	Timber Piles	272	Impact	0 (on land)

### 1.3.2 Refined Plan at the CRL

At the CRL, the main features of the Recommended Plan are the decommissioning of all four existing gate structures and the construction of a new 125-foot-wide sector gate structure on the east and west sides of the river. **Figure 5** shows the refined plan at the BRFG. Detailed drawings are provided in **Attachment 1**. The centerline of the GIWW through the CRL area would be shifted 260 feet south of the existing centerline, allowing the existing lock structures to remain in operation until the new channel and gates are completed. The new channel will have a bottom width of 125 feet and bottom depth of -12 feet NAVD88. Construction of the new CRL facility will take approximately two years to complete, if adequate funding is provided. Assuming one contract, the general construction sequence will include the following:

- Dredge the new channel alignment on the west and east sides of the river, leaving a plug to maintain separation between the new channel and the river.
- Construct the new gate structures, guidewalls, and end cells on each side of the river.
- Excavate the plugs at the river, and complete dredging of the new channel.
- Transfer navigation traffic to the new GIWW channel and gate structures.
- Decommission the existing lock facilities, demolish the southern gate leaf at each gate, and build levee access to the new gate structures.
- Complete final site work, including grading, parking, and support buildings.

The new CRL gate structures will be the same general dimensions as the new BRFG gate structure, so pile-driving activities associated with the proposed CRL plan are expected to be double the anticipated pile-driving at the BRFG (**Table 3**).

**Table 3. Anticipated Pile-Driving for the CRL Recommended Plan**

Project Component	Pile Size	Pile Type	Number of Piles	Hammer Type	Water Depth (meters)
<b>West Gate Structure</b>					
Gate Structure Foundation	24"	Steel Pipe	246	Impact	< 5
Guidewalls	13"	Timber Piles	96	Impact	< 5
End Cells	18"	Steel Pipe	120	Impact	< 5
	20"	PS 31 Sheet Pile	930 LF	Impact	< 5
<b>East Gate Structure</b>					
Gate Structure Foundation	24"	Steel Pipe	246	Impact	< 5
Guidewalls	13"	Timber Piles	96	Impact	< 5
End Cells	18"	Steel Pipe	120	Impact	< 5
	20"	PS 31 Sheet Pile	930 LF	Impact	< 5
Reservation Buildings	13"	Timber Piles	272	Impact	0 (on land)
Flow Separator	22"	PZ-22 Sheet Pile	500	Vibratory	< 5

## 2.0 IMPACTS ON COASTAL NATURAL RESOURCE AREAS

There are 16 Coastal Natural Resource Areas (CNRAs) listed in 31 Texas Administrative Code (TAC) §501.3, and several of the CNRAs are found in and adjacent to the study areas. **Table 4** provides a brief description of each CNRA and identifies whether or not the CNRA is within the study area and would be impacted by the Recommended Plan.

## 3.0 COMPLIANCE WITH GOALS AND POLICIES

The following goals and policies of the TCMP were reviewed for compliance:

### 3.1 §501.15 – Major Actions

(a) *For purposes of this section, "major action" means an individual agency or subdivision action listed in §505.11 of this title (relating to Actions and Rules Subject to the Coastal Management Program), §506.12 of this title (relating to Federal Actions Subject to the Coastal Management Program), or §505.60 of this title (relating to Local Government Actions Subject to the Coastal Management Program), relating to an activity for which a federal environmental impact statement under the National Environmental Policy Act, 42 United States Code Annotated, §4321, et seq is required.*

**Compliance:** This project is subject to Section 501.15 and constitutes a major action. An Integrated Feasibility Report and Environmental Impact Statement (FR-EIS) has been prepared for the action.

(b) *Prior to taking a major action, the agencies and subdivisions having jurisdiction over the activity shall meet and coordinate their major actions relating to the activity. The agencies and subdivisions shall, to the greatest extent practicable, consider the cumulative and secondary adverse effects, as described in the federal environmental impact assessment process, of each major action relating to the activity.*

**Compliance:** The USACE as the Federal sponsor and TxDOT as the non-Federal sponsor have met, coordinated the proposed actions, and considered the cumulative and secondary adverse effects of each of the actions, as documented in the FR-EIS.

**Table 4. Coastal Natural Resource Areas in Study Areas**

Subchapter	Name	Brief Definition (see 31 TAC §501.3)	Present in or adjacent to study areas?	Methods to Minimize or Avoid Potential Impacts
A	Coastal barriers	Undeveloped area on barrier island	Yes (Both)	Dredging and dredged material placement are not expected to have adverse impact.
B	Coastal historic areas	Site identified by Texas Historical Commission as on National Register of Historic Places or a state archeological landmark	No	Project construction will occur in immediate area of the BRFG and CRL; no historic areas will be impacted.
C	Coastal preserves	Any park or wildlife management area owned by the State of Texas	Yes (Both)	Coastal preserves are near the facilities but will not be impacted by project construction.
D	Coastal shore areas	Area within 100 feet landward of high water mark on submerged land	Yes (Both)	Minimal impacts to coastal shore areas will occur.
E	Coastal wetlands	Wetlands as defined by Texas Water Code §11.502	Yes (Both)	Mitigation for 13.8 acres of wetland impacted at BRFG and 0.7 acre of wetland impacted at CRL.
F	Critical dune areas	Protected sand dune complex within 1,000 feet of mean high tide	No	Critical dune areas will not be impacted by project construction.
G	Critical erosion areas	Coastal area experiencing erosion that is a threat to public health and safety, public beach use, general recreation, traffic safety, private or commercial property, fish and wildlife habitat, or an area of national importance	No	Critical erosion areas will not be impacted by project construction or by placement of dredged material.
H	Gulf beaches	Beach that is bordering the Gulf of Mexico	No	Gulf beaches will not be impacted by project construction.
I	Hard substrate reefs	Naturally occurring hard substrate formation	No	No hard substrate reefs will be affected by the project.
J	Oyster reefs	Natural or artificial formation composed of oyster shell in intertidal or subtidal area	No	Oyster growth is limited to the floodgates and lock gates.
K	Submerged land	Land located below waters under tidal influence	Yes (Both)	Dredging, construction, and if used, ODMDS will disturb submerged lands. Areas will rapidly recover after project completion.
L	Special hazard areas	An area having special flood-related erosion hazards, e.g., floodplain	Yes	Dredging and construction will not impact the floodplains.
M	Submerged aquatic vegetation	Rooted aquatic vegetation growing in permanently inundated areas in estuarine and marine systems	Yes (CRL only)	Minor amount of seagrass is located in small tidal ponds in CRL study area but would not be impacted by the project.
N	Tidal sand or mud flats	Silt, clay, or sand substrate that occurs in intertidal areas	Yes (BRFG only)	Minor amount of tidal flat is located in BRFG study area but will not be impacted by the project.
O	Water of the open Gulf of Mexico	Open waters of the Gulf of Mexico within the territorial limits of the state	Yes (Both)	If dredged material is placed ODMDS, open waters will be disturbed intermittently during the life of the project.
P	Water under tidal influence	Water in the state that is subject to tidal influence	Yes (Both)	Projects will have minor impact to GIWW and adjacent wetlands.



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## Brazos River Floodgates - Alternative 3A.1

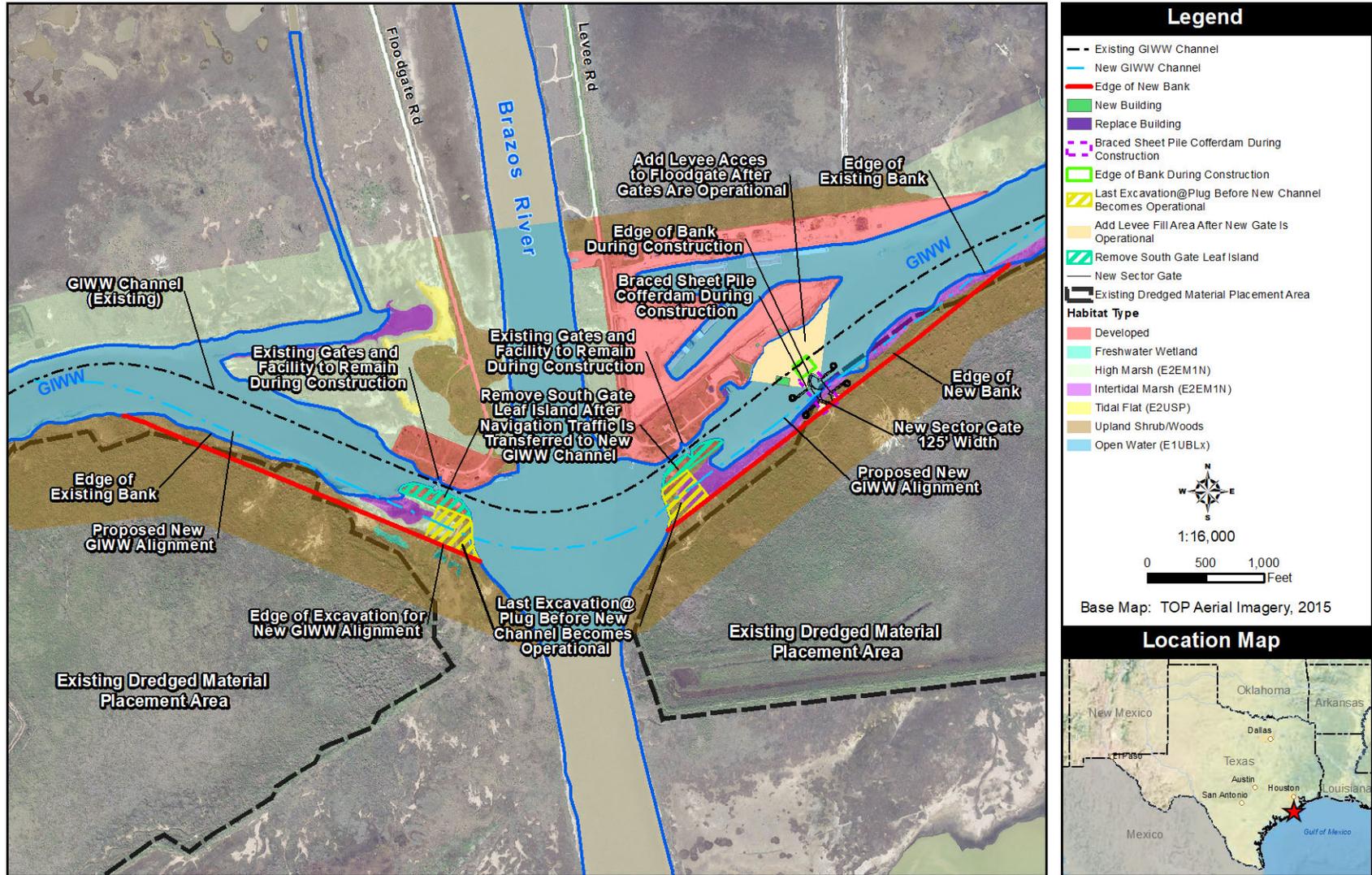
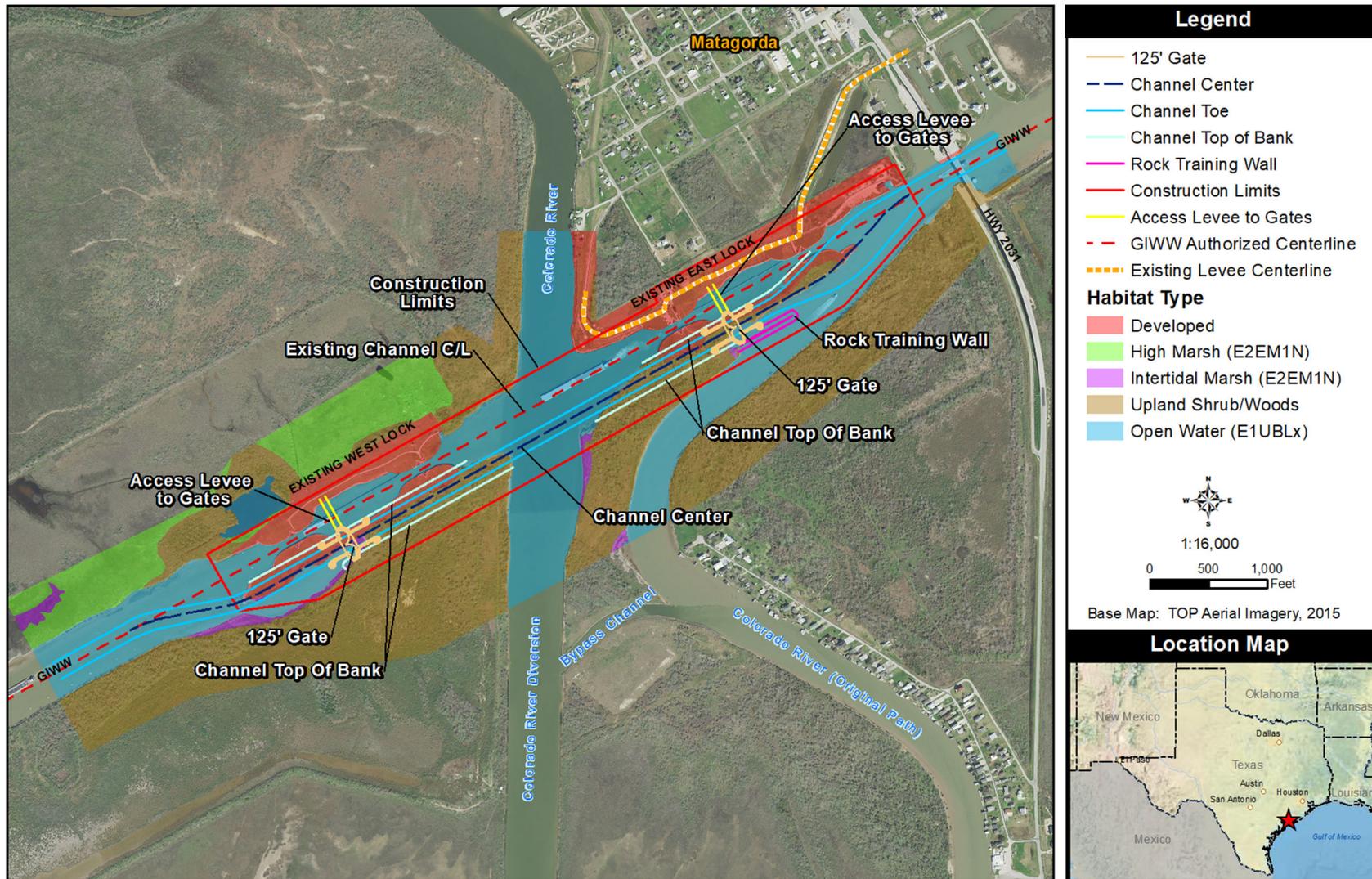


Figure 2 Vegetation/Wildlife Habitats Affected by BRFG Alternative 3a.1 (Recommended Plan)



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## Vegetation/Wildlife Habitats Affected Colorado River Locks - Alternative 4b.1



**Figure 3 Vegetation/Wildlife Habitats Affected by CRL Alternative 4b.1 (Recommended Plan)**

(c) No agency or subdivision shall take a major action that is inconsistent with the goals and policies of this chapter. In addition, an agency or subdivision shall avoid and otherwise minimize the cumulative adverse effects to coastal natural resource areas of each of its major actions relating to the activity.

**Compliance:** The Recommended Plan is consistent with the goals and policies of this chapter in that it was developed through evaluation of several alternatives and minimizes direct and indirect effects to CNRAs to the extent practicable; therefore, the Recommended Plan has minimized cumulative adverse effects.

### 3.2 §501.23 – Development in Critical Areas

Compliance with development in critical areas is described below, with emphasis on resource areas defined in **Table 4** that are likely to be affected by the proposed action. As defined in §501.23, critical areas include coastal wetlands, oyster reefs, hard substrate reefs, submerged aquatic vegetation, or tidal sand or mud flats.

(a) Dredging and construction of structures in, or the discharge of dredged or fill material into, critical areas shall comply with the policies in this section. In implementing this section, cumulative and secondary adverse effects of these activities will be considered.

**Compliance:** Compared to other alternatives that meet the project’s purpose and need and satisfy navigation needs based on public input, the Recommended Plan minimizes impacts to critical areas. During project development, several alternatives were considered. This analysis resulted in the identification of BRFG Alternative 3a.1 and CRL Alternative 4b.1 as the Recommended Plan. These alternatives would satisfy the project’s purpose while meeting navigation needs and the engineering capabilities of the USACE, and being economically feasible and minimizing impacts to the environment.

(1) The policies in this section shall be applied in a manner consistent with the goal of achieving no net loss of critical area functions and values.

**Compliance:** At the BRFG, the Recommended Plan will impact 11.4 acres of intertidal marsh and 2.4 acres of high marsh. At the CRL, the Recommended Plan will impact 0.7 acre of intertidal marsh (**Table 5**). The wetland areas will be mitigated, and therefore, there will be no net loss of coastal wetlands.

**Table 5. Impacts of Recommended Plan on Wetlands and Other Special Aquatic Sites**

Site (Recommended Plan)	High Marsh	Intertidal Marsh	Tidal Flat	Freshwater Wetlands	Total
BRFG (Alternative 3a.1)	2.4	11.4	0	0	13.8
CRL (Alternative 4b.1)	0	0.7	0	0	0.7
<b>Total</b>	<b>2.4</b>	<b>12.1</b>	<b>0</b>	<b>0</b>	<b>14.5</b>

(2) Persons proposing development in critical areas shall demonstrate that no practicable alternative with fewer adverse effects is available.

**Compliance:** During project development, alternatives were evaluated based on minimizing the impacts of the project to adjacent critical areas, including wetlands.

(3) *In evaluating practicable alternatives, the following sequence shall be applied:*

*(A) Adverse effects on critical areas shall be avoided to the greatest extent practicable.*

**Compliance:** As noted above, adverse effects on critical areas have been avoided to the greatest extent practicable by improving the BRFG and CRL in and immediately adjacent to the existing GIWW banks and using upland DMPAs. Some areas of coastal wetlands will be removed, but these areas will be mitigated, resulting in no net loss of coastal wetlands for the Recommended Plan.

*Unavoidable adverse effects shall be minimized to the greatest extent practicable by limiting the degree or magnitude of the activity and its implementation.*

**Compliance:** The purpose of the project is to improve navigation efficiency at the BRFG and CRL. The proposed alternatives minimize impacts on coastal wetlands to the extent possible.

*(B) Appropriate and practicable compensatory mitigation shall be required to the greatest extent practicable for all adverse effects that cannot be avoided or minimized.*

**Compliance:** The USACE has developed a compensatory mitigation plan that will offset unavoidable impacts to wetlands.

*(4) Compensatory mitigation includes restoring adversely affected critical areas or replacing adversely affected critical areas by creating new critical areas. Compensatory mitigation should be undertaken, when practicable, in areas adjacent or contiguous to the affected critical areas (on-site). If on-site compensatory mitigation is not practicable, compensatory mitigation should be undertaken in close physical proximity to the affected critical areas if practicable and in the same watershed if possible (off-site). Compensatory mitigation should also attempt to replace affected critical areas with critical areas with characteristics identical to or closely approximating those of the affected critical areas (in-kind). The preferred order of compensatory mitigation is:*

*(A) on-site, in-kind;*

*(B) off-site, in-kind;*

*(C) on-site, out-of-kind; and*

*(D) off-site, out-of-kind.*

**Compliance:** The USACE has prepared a compensatory mitigation plan that includes creation of in-kind wetlands on each of the project sites.

*(5) Mitigation banking is acceptable compensatory mitigation if use of the mitigation bank has been approved by the agency authorizing the development and mitigation credits are available for withdrawal. Preservation through acquisition for public ownership of unique critical areas or other ecologically important areas may be acceptable compensatory mitigation in exceptional circumstances. Examples of this include areas of high priority for preservation or restoration, areas whose functions and values are difficult to replicate, or areas not adequately protected by regulatory*

*programs. Acquisition will normally be allowed only in conjunction with preferred forms of compensatory mitigation.*

**Compliance:** The project sites are not within the service areas of any active mitigation banks that provide tidal wetland credits. Mitigation will be accomplished through on-site creation of wetlands.

*(6) In determining compensatory mitigation requirements, the impaired functions and values of the affected critical area shall be replaced on a one-to-one ratio. Replacement of functions and values on a one-to-one ratio may require restoration or replacement of the physical area affected on a ratio higher than one-to-one. While no net loss of critical area functions and values is the goal, it is not required in individual cases where mitigation is not practicable or would result in only inconsequential environmental benefits. It is also important to recognize that there are circumstances where the adverse effects of the activity are so significant that, even if alternatives are not available, the activity may not be permitted regardless of the compensatory mitigation proposed.*

**Compliance:** A total of 14.90 acres of tidal wetland, in the form of high marsh and intertidal marsh, will be created at the BRFG and CRL sites. This includes 14.14 acres at the BRFG site and 0.76 acre at the CRL site. Establishing 14.90 acres of wetland habitats at these locations will produce 12.10 Average Annual Habitat Units (AAHUs) to offset the 12.10 AAHUs that will be lost as a result of the Recommended Plan.

*(7) Development in critical areas shall not be authorized if significant degradation of critical areas will occur. Significant degradation occurs if:*

*(A) the activity will jeopardize the continued existence of species listed as endangered or threatened, or will result in likelihood of the destruction or adverse modification of a habitat determined to be a critical habitat under the Endangered Species Act, 16 United States Code Annotated, §§1531 - 1544;*

**Compliance:** Informal consultation has been initiated with preparation of a Biological Assessment (BA), in which a *may affect, not likely to adversely affect* determination has been made for sea turtles, piping plover, red knot, and whooping crane, and a *no effect* determination has been made for other listed species and critical habitat. The U.S. Fish and Wildlife Service and National Marine Fisheries Service are not expected to issue a Biological Opinion or jeopardy determination for the Recommended Plan.

*(B) the activity will cause or contribute, after consideration of dilution and dispersion, to violation of any applicable surface water quality standards established under §501.21 of this title;*

**Compliance:** The USACE will incorporate best management practices and conduct water quality and sediment testing prior to construction to insure that the project will not cause or contribute to violation of any applicable surface water quality standards.

*(C) the activity violates any applicable toxic effluent standard or prohibition established under §501.21 of this title;*

**Compliance:** The project is not expected to violate any applicable toxic effluent standards or prohibitions under §501.21.

*(D) the activity violates any requirement imposed to protect a marine sanctuary designated under the Marine Protection, Research, and Sanctuaries Act of 1972, 33 United States Code Annotated, Chapter 27; or*

**Compliance:** No marine sanctuaries are present in the study areas, and none will be impacted by the project.

*(E) taking into account the nature and degree of all identifiable adverse effects, including their persistence, permanence, areal extent, and the degree to which these effects will have been mitigated pursuant to subsections (c) and (d) of this section, the activity will, individually or collectively, cause or contribute to significant adverse effects on:*

*(i) human health and welfare, including effects on water supplies, plankton, benthos, fish, shellfish, wildlife, and consumption of fish and wildlife;*

*(ii) the life stages of aquatic life and other wildlife dependent on aquatic ecosystems, including the transfer, concentration, or spread of pollutants or their byproducts beyond the site, or their introduction into an ecosystem, through biological, physical, or chemical processes;*

*(iii) ecosystem diversity, productivity, and stability, including loss of fish and wildlife habitat or loss of the capacity of a coastal wetland to assimilate nutrients, purify water, or reduce wave energy; or*

*(iv) generally accepted recreational, aesthetic or economic values of the critical area which are of exceptional character and importance.*

**Compliance:** The effects of the proposed project on plankton, benthos, fish, and shellfish will be local and temporary, primarily caused by increased turbidity during construction. No adverse effects on aquatic life, wildlife, spread of pollutants, ecosystem diversity, or ecosystem function are expected. The project will not have significant adverse effects on recreational, aesthetic, or economic values of exceptional character and importance.

*(b) The Texas Commission on Environmental Quality (TCEQ) and the Texas Railroad Commission (RRC) shall comply with the policies in this section when issuing certifications and adopting rules under Texas Water Code, Chapter 26, and the Texas Natural Resources Code, Chapter 91, governing certification of compliance with surface water quality standards for federal actions and permits authorizing development affecting critical areas; provided that activities exempted from the requirement for a permit for the discharge of dredged or fill material, described in Code of Federal Regulations, Title 33, §323.4 and/or Code of Federal Regulations, Title 40, §232.3, including but not limited to normal farming, silviculture, and ranching activities, such as plowing, seeding, cultivating, minor drainage, and harvesting for the production of food, fiber, and forest products, or upland soil and water*

*conservation practices, shall not be considered activities for which a certification is required. The Texas General Land Office (GLO) and the School Land Board (SLB) shall comply with the policies in this section when approving oil, gas, or other mineral lease plans of operation or granting surface leases, easements, and permits and adopting rules under the Texas Natural Resources Code, Chapters 32, 33 and 51 - 53, and Texas Water Code, Chapter 61, governing development affecting critical areas on state submerged lands and private submerged lands, and when issuing approvals and adopting rules under Texas Natural Resources Code, Chapter 221, for mitigation banks operated by subdivisions of the state.*

**Compliance:** Water quality certification from the TCEQ will be consistent with these policies.

*(c) Agencies required to comply with this section will coordinate with one another and with federal agencies when evaluating alternatives, determining appropriate and practicable mitigation, and assessing significant degradation. Those agencies' rules governing authorizations for development in critical areas shall require a demonstration that the requirements of subsection (a)(1) - (7) of this section have been satisfied.*

**Compliance:** The USACE will coordinate with the TCEQ in compliance with this section.

*(d) For any dredging or construction of structures in, or discharge of dredged or fill material into, critical areas that is subject to the requirements of §501.15 of this title (relating to Policy for Major Actions), data and information on the cumulative and secondary adverse effects of the project need not be produced or evaluated to comply with this section if such data and information is produced and evaluated in compliance with §501.15(b) - (c) of this title.*

**Compliance:** This project is subject to §501.15 and constitutes a major action. Coordination has occurred among the State and Federal agencies having jurisdiction over the proposed activity.

### **3.3 §501.24 – Construction of Waterfront Facilities and Other Structures on Submerged Lands**

*(a) Development on submerged lands shall comply with the policies in this section.*

*(1) Marinas shall be designed and, to the greatest extent practicable, sited so that tides and currents will aid in flushing of the site or renew its water regularly.*

*(2) Marinas designed for anchorage of private vessels shall provide facilities for the collection of waste, refuse, trash, and debris.*

*(3) Marinas with the capacity for long-term anchorage of more than ten vessels shall provide pump-out facilities for marine toilets, or other such measures or facilities that provide an equal or better level of water quality protection.*

**Compliance:** The project does not involve construction of marinas.

- (4) Marinas, docks, piers, wharves and other structures shall be designed and, to the greatest extent practicable, sited to avoid and otherwise minimize adverse effects on critical areas from boat traffic to and from those structures.*

**Compliance:** The proposed east floodgate at the BRFG will be constructed on the existing GIWW alignment, farther east from the Brazos River, while the west floodgate will be permanently removed. At the CRL, the four existing gates will be removed, and two new 125-foot-wide gates will be constructed (one on each side of the Colorado River). Keeping the structures on and immediately adjacent to the existing GIWW alignment minimizes the potential for adverse effects on critical areas from boat and barge traffic that travel through the area. In addition, providing an open channel west of the Brazos River and a wider gate opening (125 feet) east of the Brazos River will reduce the frequency of “tripping” barges, which reduces the potential for impacts to CNRAs along the GIWW banks from mooring, pushing into the banks, and drifting into the banks.

- (5) Construction of docks, piers, wharves, and other structures shall be preferred instead of authorizing dredging of channels or basins or filling of submerged lands to provide access to coastal waters if such construction is practicable, environmentally preferable, and will not interfere with commercial navigation.*

**Compliance:** The project is intended to benefit commercial navigation and requires dredging.

- (6) Piers, docks, wharves, bulkheads, jetties, groins, fishing cabins, and artificial reefs (including artificial reefs for compensatory mitigation) shall be limited to the minimum necessary to serve the project purpose and shall be constructed in a manner that:*

*(A) does not significantly interfere with public navigation;*

*(B) does not significantly interfere with the natural coastal processes which supply sediments to shore areas or otherwise exacerbate erosion of shore areas; and*

*(C) avoids and otherwise minimizes shading of critical areas and other adverse effects.*

**Compliance:** Bulkheads, guidewalls, and other project components have been minimized and will be constructed in a manner consistent with these policies.

- (7) Facilities shall be located at sites or designed and constructed to the greatest extent practicable to avoid and otherwise minimize the potential for adverse effects from:*

*(A) construction and maintenance of other development associated with the facility;*

*(B) direct release to coastal waters and critical areas of pollutants from oil or hazardous substance spills or stormwater runoff; and*

*(C) deposition of airborne pollutants in coastal waters and critical areas.*

**Compliance:** Construction of the project is not expected to result in release of oil or hazardous substances, or deposition of airborne contaminants into coastal areas. Testing for lead paint and asbestos will be conducted at the BRFG and CRL prior to removal of existing structures and buildings. If lead paint or asbestos is found, removal of structures will be conducted using appropriate handling procedures, and the materials will be disposed of at an approved facility. Sediment sampling at both facilities will also be conducted prior to construction to characterize any contaminants present. If contaminated, the materials will be disposed of in accordance with applicable local, state, and federal permits, statutes, and regulations.

*(8) Where practicable, pipelines, transmission lines, cables, roads, causeways, and bridges shall be located in existing rights-of-way or previously disturbed areas if necessary to avoid or minimize adverse effects and if it does not result in unreasonable risks to human health, safety, and welfare.*

**Compliance:** Infrastructure will be placed in previously disturbed areas to the extent possible.

*(9) To the greatest extent practicable, construction of facilities shall occur at sites and times selected to have the least adverse effects on recreational uses of CNRAs and on spawning or nesting seasons or seasonal migrations of terrestrial and aquatic wildlife.*

**Compliance:** Proposed construction will be planned to minimize impacts on recreation, spawning, and nesting.

*(10) Facilities shall be located at sites which avoid the impoundment and draining of coastal wetlands. If impoundment or draining cannot be avoided, adverse effects to the impounded or drained wetlands shall be mitigated in accordance with the sequencing requirements of §501.23 of this title. To the greatest extent practicable, facilities shall be located at sites at which expansion will not result in development in critical areas.*

**Compliance:** The project will not impound or drain coastal wetlands. No future expansion of the facilities are planned.

*(11) Where practicable, piers, docks, wharves, bulkheads, jetties, groins, fishing cabins, and artificial reefs shall be constructed with materials that will not cause any adverse effects on coastal waters or critical areas.*

**Compliance:** Bulkheads, guidewalls, and other project components will be built in the water and will be constructed of materials that will not cause adverse effects on coastal waters or critical areas.

*(12) Developed sites shall be returned as closely as practicable to pre-project conditions upon completion or cessation of operations by the removal of facilities and restoration of any significantly degraded areas, unless:*

*(A) the facilities can be used for public purposes or contribute to the maintenance or enhancement of coastal water quality, critical areas, beaches, submerged lands, or shore areas; or*

*(B) restoration activities would further degrade CNRAs.*

**Compliance:** Developed areas that include facilities for the operation of the locks or floodgates will be removed, moved, or rehabilitated. These facilities would not be used for public purposes and would not be used for enhancement of water quality, critical areas, beaches, or shore areas. Renovation or moving the structures will not degrade CNRAs.

*(13) Water-dependent uses and facilities shall receive preference over those uses and facilities that are not water-dependent.*

**Compliance:** The proposed project is water-dependent.

*(14) Nonstructural erosion response methods such as beach nourishment, sediment bypassing, nearshore sediment berms, and planting of vegetation shall be preferred instead of structural erosion response methods.*

**Compliance:** Erosion control methods will be in compliance with this section.

*(15) Major residential and recreational waterfront facilities shall to the greatest extent practicable accommodate public access to coastal waters and preserve the public's ability to enjoy the natural aesthetic values of coastal submerged lands.*

**Compliance:** The proposed project does not involve construction of residential or recreational facilities.

*(b) Activities on submerged land shall avoid and otherwise minimize any significant interference with the public's use of and access to such lands.*

*(16) Erosion of Gulf beaches and coastal shore areas caused by construction or modification of jetties, breakwaters, groins, or shore stabilization projects shall be mitigated to the extent the costs of mitigation are reasonably proportionate to the benefits of mitigation. Factors that shall be considered in determining whether the costs of mitigation are reasonably proportionate to the cost of the construction or modification and benefits include, but are not limited to, environmental benefits, recreational benefits, flood or storm protection benefits, erosion prevention benefits, and economic development benefits.*

**Compliance:** The project will be constructed to minimize erosion.

*(c) To the extent applicable to the public beach, the policies in this section are supplemental to any further restrictions or requirements relating to the beach access and use rights of the public.*

**Compliance:** The proposed project will not occur in the vicinity of beaches, and public beach access will not be affected by the project.

*(d) The GLO and the SLB, in governing development on state submerged lands, shall comply with the policies in this section when approving oil, gas, and other mineral lease plans of operation and granting*

*surface leases, easements, and permits and adopting rules under the Texas Natural Resources Code, Chapters 32, 33 and 51 - 53, and Texas Water Code, Chapter 61.*

**Compliance:** The project is not expected to require any oil, gas, or mineral leases.

### **3.4 §501.25 – Dredging and Dredged Material Disposal and Placement**

*(a) Dredging and the disposal and placement of dredged material shall avoid and otherwise minimize adverse effects to coastal waters, submerged lands, critical areas, coastal shore areas, and Gulf beaches to the greatest extent practicable. The policies of this section are supplemental to any further restrictions or requirements relating to the beach access and use rights of the public. In implementing this section, cumulative and secondary adverse effects of dredging and the disposal and placement of dredged material and the unique characteristics of affected sites shall be considered.*

**Compliance:** Dredging during construction activities will impact 13.8 acres of wetland at BRFG and 0.7 acre of wetland at CRL. These impacts will be mitigated through on-site marsh creation. Dredged material from project construction or project maintenance will be placed at the approved DMPAs or ODMDS. The dredging operations for construction or maintenance will temporarily impact submerged lands but will avoid all critical areas, shore areas, and Gulf beach areas.

*(1) Dredging and dredged material disposal and placement shall not cause or contribute, after consideration of dilution and dispersion, to violation of any applicable surface water quality standards established under §501.21 of this title.*

**Compliance:** Dredging and dredged material disposal and placement will not result in the violation of any applicable surface water quality standards.

*(2) Except as otherwise provided in paragraph (4) of this subsection, adverse effects on critical areas from dredging and dredged material disposal or placement shall be avoided and otherwise minimized, and appropriate and practicable compensatory mitigation shall be required, in accordance with §501.23 of this title.*

**Compliance:** The project has minimized adverse effects to critical areas and will mitigate for the 14.5 acres of coastal wetlands that will be impacted.

*(3) Except as provided in paragraph (4) of this subsection, dredging and the disposal and placement of dredged material shall not be authorized if:*

*(A) there is a practicable alternative that would have fewer adverse effects on coastal waters, submerged lands, critical areas, coastal shore areas, and Gulf beaches, so long as that alternative does not have other significant adverse effects;*

*(B) all appropriate and practicable steps have not been taken to minimize adverse effects on coastal waters, submerged lands, critical areas, coastal shore areas, and Gulf beaches; or*

*(C) significant degradation of critical areas under §501.23(a)(7)(E) of this title would result.*

**Compliance:** During project development, several alternatives to improving navigation at the BRFG and CRL were evaluated to identify the least environmentally damaging alternative that was within the engineering capabilities of the USACE and was economically feasible. The Recommended Plan will minimize impacts to CNRAs and will provide for compensatory mitigation of impacts to coastal wetlands. No significant degradation of critical areas is expected as a result of the proposed project. Therefore, the criteria under (A), (B), and (C) have been met, and dredging and placement activities associated with the proposed project are not prohibited under this subparagraph.

*(4) A dredging or dredged material disposal or placement project that would be prohibited solely by application of paragraph (3) of this subsection may be allowed if it is determined to be of overriding importance to the public and national interest in light of economic impacts on navigation and maintenance of commercially navigable waterways.*

**Compliance:** The proposed action is not prohibited by subparagraph C.

*(b) Adverse effects from dredging and dredged material disposal and placement shall be minimized as required in subsection (a) of this section. Adverse effects can be minimized by employing the techniques in this subsection where appropriate and practicable.*

**Compliance:** Adverse effects of dredging and disposal, as described in the FR-EIS, have been minimized, as discussed under compliance with paragraph (1) of this subsection.

*(1) Adverse effects from dredging and dredged material disposal and placement can be minimized by controlling the location and dimensions of the activity. Some of the ways to accomplish this include:*

*(A) locating and confining discharges to minimize smothering of organisms;*

*(B) locating and designing projects to avoid adverse disruption of water inundation patterns, water circulation, erosion and accretion processes, and other hydrodynamic processes;*

*(C) using existing or natural channels and basins instead of dredging new channels or basins, and discharging materials in areas that have been previously disturbed or used for disposal or placement of dredged material;*

*(D) limiting the dimensions of channels, basins, and disposal and placement sites to the minimum reasonably required to serve the project purpose, including allowing for reasonable overdredging of channels and basins, and taking into account the need for capacity to accommodate future expansion without causing additional adverse effects;*

*(E) discharging materials at sites where the substrate is composed of material similar to that being discharged;*

*(F) locating and designing discharges to minimize the extent of any plume and otherwise control dispersion of material; and*

*(G) avoiding the impoundment or drainage of critical areas.*

**Compliance:** Adverse effects of dredging and dredge disposal will be minimized by minimizing the footprint of dredging and using existing disposal sites.

*(2) Dredging and disposal and placement of material to be dredged shall comply with applicable standards for sediment toxicity. Adverse effects from constituents contained in materials discharged can be minimized by treatment of or limitations on the material itself. Some ways to accomplish this include:*

*(A) disposal or placement of dredged material in a manner that maintains physiochemical conditions at discharge sites and limits or reduces the potency and availability of pollutants;*

*(B) limiting the solid, liquid, and gaseous components of material discharged;*

*(C) adding treatment substances to the discharged material; and*

*(D) adding chemical flocculants to enhance the deposition of suspended particulates in confined disposal areas.*

**Compliance:** Sediments to be dredged from the GIWW at the BRFG and CRL will be tested for a variety of chemical parameters. The project is expected to comply with applicable sediment toxicity standards.

*(3) Adverse effects from dredging and dredged material disposal or placement can be minimized through control of the materials discharged. Some ways of accomplishing this include:*

*(A) use of containment levees and sediment basins designed, constructed, and maintained to resist breaches, erosion, slumping, or leaching;*

*(B) use of lined containment areas to reduce leaching where leaching of chemical constituents from the material is expected to be a problem;*

*(C) capping in-place contaminated material or, selectively discharging the most contaminated material first and then capping it with the remaining material;*

*(D) properly containing discharged material and maintaining discharge sites to prevent point and nonpoint pollution; and*

*(E) timing the discharge to minimize adverse effects from unusually high water flows, wind, wave, and tidal actions.*

**Compliance:** During dredging operations, there will be localized, temporary increases in turbidity. The proposed project includes placement of dredged material into existing DMPAs or OMDMA. Discharges from the placement areas will be confined where applicable. The construction, dredging, and dredge material placement will be minimized by planning in a manner to reduce or avoid adverse impacts from unusually high water flows, wave, wind, or tidal actions.

- (4) *Adverse effects from dredging and dredged material disposal or placement can be minimized by controlling the manner in which material is dispersed. Some ways of accomplishing this include:*
- (A) *where environmentally desirable, distributing the material in a thin layer;*
  - (B) *orienting material to minimize undesirable obstruction of the water current or circulation patterns;*
  - (C) *using silt screens or other appropriate methods to confine suspended particulates or turbidity to a small area where settling or removal can occur;*
  - (D) *using currents and circulation patterns to mix, disperse, dilute, or otherwise control the discharge;*
  - (E) *minimizing turbidity by using a diffuser system or releasing material near the bottom;*
  - (F) *selecting sites or managing discharges to confine and minimize the release of suspended particulates and turbidity and maintain light penetration for organisms; and*
  - (G) *setting limits on the amount of material to be discharged per unit of time or volume of receiving waters.*

**Compliance:** Adverse effects of dredging and dredged material disposal will be minimized by controlling discharges.

- (5) *Adverse effects from dredging and dredged material disposal or placement operations can be minimized by adapting technology to the needs of each site. Some ways of accomplishing this include:*
- (A) *using appropriate equipment, machinery, and operating techniques for access to sites and transport of material, including those designed to reduce damage to critical areas;*
  - (B) *having personnel on site adequately trained in avoidance and minimization techniques and requirements; and*
  - (C) *designing temporary and permanent access roads and channel spanning structures using culverts, open channels, and diversions that will pass both low and high water flows, accommodate fluctuating water levels, and maintain circulation and faunal movement.*

**Compliance:** Adverse effects of dredging and dredged material disposal will be minimized.

- (6) *Adverse effects on plant and animal populations from dredging and dredged material disposal or placement can be minimized by:*
- (A) *avoiding changes in water current and circulation patterns that would interfere with the movement of animals;*
  - (B) *selecting sites or managing discharges to prevent or avoid creating habitat conducive to the development of undesirable predators or species that have a competitive edge ecologically over indigenous plants or animals;*
  - (C) *avoiding sites having unique habitat or other value, including habitat of endangered species;*
  - (D) *using planning and construction practices to institute habitat development and restoration to produce a new or modified environmental state of higher ecological value by displacement of some or all of the existing environmental characteristics;*
  - (E) *using techniques that have been demonstrated to be effective in circumstances similar to those under consideration whenever possible and, when proposed development and restoration techniques have not yet advanced to the pilot demonstration stage, initiating their use on a small scale to allow corrective action if unanticipated adverse effects occur;*
  - (F) *timing dredging and dredged material disposal or placement activities to avoid spawning or migration seasons and other biologically critical time periods; and*
  - (G) *avoiding the destruction of remnant natural sites within areas already affected by development.*

**Compliance:** The project will be designed and constructed to minimize impacts to plant and wildlife resources.

- (7) *Adverse effects on human use potential from dredging and dredged material disposal or placement can be minimized by:*
- (A) *selecting sites and following procedures to prevent or minimize any potential damage to the aesthetically pleasing features of the site, particularly with respect to water quality;*
  - (B) *selecting sites which are not valuable as natural aquatic areas;*
  - (C) *timing dredging and dredged material disposal or placement activities to avoid the seasons or periods when human recreational activity associated with the site is most important; and*
  - (D) *selecting sites that will not increase incompatible human activity or require frequent dredge or fill maintenance activity in remote fish and wildlife areas.*

**Compliance:** The project will be designed and constructed to minimize effects on human use.

*(8) Adverse effects from new channels and basins can be minimized by locating them at sites:*

*(A) that ensure adequate flushing and avoid stagnant pockets; or*

*(B) that will create the fewest practicable adverse effects on CNRAs from additional infrastructure such as roads, bridges, causeways, piers, docks, wharves, transmission line crossings, and ancillary channels reasonably likely to be constructed as a result of the project; or*

*(C) with the least practicable risk that increased vessel traffic could result in navigation hazards, spills, or other forms of contamination which could adversely affect CNRAs;*

*(D) provided that, for any dredging of new channels or basins subject to the requirements of §501.15 of this title (relating to Policy for Major Actions), data and information on minimization of secondary adverse effects need not be produced or evaluated to comply with this paragraph if such data and information is produced and evaluated in compliance with §501.15(b)(1) of this title.*

**Compliance:** The proposed GIWW realignment at the BRFG and CRL will occur immediately adjacent to the existing alignment and will minimize the area of new excavation, thereby minimizing adverse effects to coastal resources.

*(c) Disposal or placement of dredged material in existing contained dredge disposal sites identified and actively used as described in an environmental assessment or environmental impact statement issued prior to the effective date of this chapter shall be presumed to comply with the requirements of subsection (a) of this section unless modified in design, size, use, or function.*

**Compliance:** Existing DMPAs will be presumed to comply with the requirements of subsection (a).

*(d) Dredged material from dredging projects in commercially navigable waterways is a potentially reusable resource and must be used beneficially in accordance with this policy.*

**Compliance:** If possible, dredged material will be used to construct on-site wetlands for mitigation purposes.

*(1) If the costs of the beneficial use of dredged material are reasonably comparable to the costs of disposal in a non-beneficial manner, the material shall be used beneficially.*

*(2) If the costs of the beneficial use of dredged material are significantly greater than the costs of disposal in a non-beneficial manner, the material shall be used beneficially unless it is demonstrated that the costs of using the material beneficially are not reasonably proportionate to the costs of the project and benefits that will result. Factors that shall be considered in*

*determining whether the costs of the beneficial use are not reasonably proportionate to the benefits include, but are not limited to:*

- (A) environmental benefits, recreational benefits, flood or storm protection benefits, erosion prevention benefits, and economic development benefits;*
- (B) the proximity of the beneficial use site to the dredge site; and*
- (C) the quantity and quality of the dredged material and its suitability for beneficial use.*

*(3) Examples of the beneficial use of dredged material include, but are not limited to:*

- (A) projects designed to reduce or minimize erosion or provide shoreline protection;*
- (B) projects designed to create or enhance public beaches or recreational areas;*
- (C) projects designed to benefit the sediment budget or littoral system;*
- (D) projects designed to improve or maintain terrestrial or aquatic wildlife habitat;*
- (E) projects designed to create new terrestrial or aquatic wildlife habitat, including the construction of marshlands, coastal wetlands, or other critical areas;*
- (F) projects designed and demonstrated to benefit benthic communities or aquatic vegetation;*
- (G) projects designed to create wildlife management areas, parks, airports, or other public facilities;*
- (H) projects designed to cap landfills or other water disposal areas;*
- (I) projects designed to fill private property or upgrade agricultural land, if cost-effective public beneficial uses are not available; and*
- (J) projects designed to remediate past adverse impacts on the coastal zone.*

**Compliance:** If possible, dredged material will be used to construct on-site wetlands for mitigation purposes.

*(e) If dredged material cannot be used beneficially as provided in subsection (d)(2) of this section, to avoid and otherwise minimize adverse effects as required in subsection (a) of this section, preference will be given to the greatest extent practicable to disposal in:*

- (1) contained upland sites;*
- (2) other contained sites; and*
- (3) open water areas of relatively low productivity or low biological value.*

**Compliance:** Disposal of dredged material is expected to occur in existing DMPAs or ODMDS.

*(f) For new sites, dredged materials shall not be disposed of or placed directly on the boundaries of submerged lands or at such location so as to slump or migrate across the boundaries of submerged lands in the absence of an agreement between the affected public owner and the adjoining private owner or owners that defines the location of the boundary or boundaries affected by the deposition of the dredged material.*

**Compliance:** The project proposes to use existing disposal sites.

(g) *Emergency dredging shall be allowed without a prior consistency determination as required in the applicable consistency rule when:*

(1) *there is an unacceptable hazard to life or navigation;*

(2) *there is an immediate threat of significant loss of property; or*

(3) *an immediate and unforeseen significant economic hardship is likely if corrective action is not taken within a time period less than the normal time needed under standard procedures. The council secretary shall be notified at least 24 hours prior to commencement of any emergency dredging operation by the agency or entity responding to the emergency. The notice shall include a statement demonstrating the need for emergency action. Prior to initiation of the dredging operations the project sponsor or permit-issuing agency shall, if possible, make all reasonable efforts to meet with council's designated representatives to ensure consideration of and consistency with applicable policies in this subchapter. Compliance with all applicable policies in this subchapter shall be required at the earliest possible date. The permit-issuing agency and the applicant shall submit a consistency determination within 60 days after the emergency operation is complete.*

**Compliance:** The project would comply with section (g) in the event that emergency dredging is necessary.

(h) *Mining of sand, shell, marl, gravel, and mudshell on submerged lands shall be prohibited unless there is an affirmative showing of no significant impact on erosion within the coastal zone and no significant adverse effect on coastal water quality or terrestrial and aquatic wildlife habitat within any CNRA.*

**Compliance:** The project does not involve mining of sand, shell, marl, gravel, or mudshell.

(i) *The GLO and the SLB shall comply with the policies in this section when approving oil, gas, and other mineral lease plans of operation and granting surface leases, easements, and permits and adopting rules under the Texas Natural Resources Code, Chapters 32, 33, and 51 - 53, and Texas Water Code, Chapter 61, for dredging and dredged material disposal and placement. TxDOT shall comply with the policies in this subchapter when adopting rules and taking actions as local sponsor of the Gulf Intracoastal Waterway under Texas Transportation Code, Chapter 51. The TCEQ and the RRC shall comply with the policies in this section when issuing certifications and adopting rules under Texas Water Code, Chapter 26, and the Texas Natural Resources Code, Chapter 91, governing certification of compliance with surface water quality standards for federal actions and permits authorizing dredging or the discharge or placement of dredged material. The TPWD shall comply with the policies in this section when adopting rules at Chapter 57 of this title (relating to Fisheries) governing dredging and dredged material disposal and placement. The TPWD shall comply with the policies in subsection (h) of this section when adopting rules and issuing permits under Texas Parks and Wildlife Code, Chapter 86, governing the mining of sand, shell, marl, gravel, and mudshell.*

**Compliance:** The project is not expected to require any oil, gas, or mineral leases.

**3.5 §501.28 – Development Within Coastal Barrier Resource System Units and Otherwise Protected Areas on Coastal Barriers**

(a) *Development of new infrastructure or major repair of existing infrastructure within or supporting development within Coastal Barrier Resource System Units and Otherwise Protected Areas designated on maps dated October 24, 1990, as those maps may be modified, revised, or corrected, under the Coastal Barrier Resources Act, 16 United States Code Annotated, §3503(a), shall comply with the policies in this section.*

(1) *Development of publicly funded infrastructure shall be authorized only if it is essential for public health, safety, and welfare, enhances public use, or is required by law.*

**Compliance:** The infrastructure is necessary and will be constructed in compliance with the policies in this section.

(2) *Infrastructure shall be located at sites at which reasonably foreseeable future expansion will not require development in critical areas, critical dunes, Gulf beaches, and washover areas within Coastal Barrier Resource System Units or Otherwise Protected Areas.*

**Compliance:** There is no reasonably foreseeable future expansion associated with the proposed project.

(3) *Infrastructure shall be located at sites that to the greatest extent practicable avoid and otherwise minimize the potential for adverse effects on critical areas, critical dunes, Gulf beaches, and washover areas within Coastal Barrier Resource System Units or Otherwise Protected Areas from:*

(A) *construction and maintenance of roads, bridges, and causeways; and*

(B) *direct release to coastal waters, critical areas, critical dunes, Gulf beaches, and washover areas within Coastal Barrier Resource System Units or Otherwise Protected Areas of oil, hazardous substances, or stormwater runoff.*

**Compliance:** Infrastructure will be sited in accordance with this section.

(4) *Where practicable, infrastructure shall be located in existing rights-of-way or previously disturbed areas to avoid or minimize adverse effects within Coastal Barrier Resource System Units or Otherwise Protected Areas.*

**Compliance:** Infrastructure will be placed in previously disturbed areas to the extent possible.

(5) *Development of infrastructure shall occur at sites and times selected to have the least adverse effects practicable within Coastal Barrier Resource System Units or Otherwise Protected Areas on critical areas, critical dunes, Gulf beaches, and washover areas and on spawning or nesting areas or seasonal migrations of commercial, recreational, threatened, or endangered terrestrial or aquatic wildlife.*

**Compliance:** Proposed construction will be planned to have the least adverse impacts on areas listed in this section.

*(b) TCEQ rules and approvals for the creation of special districts and for infrastructure projects funded by issuance of bonds by water, sanitary sewer, and wastewater drainage districts under Texas Water Code, Chapters 49, 50, and 59; water control and improvement districts under Texas Water Code, Chapter 50; municipal utility districts under Texas Water Code, Chapter 54; regional plan implementation agencies under Texas Water Code, Chapter 54; special utility districts under Texas Water Code, Chapter 65; stormwater control districts under Texas Water Code, Chapter 66; and all other general and special law districts subject to and within the jurisdiction of the TCEQ, shall comply with the policies in this section. TxDOT rules and approvals under Texas Transportation Code Chapter 201, et seq., governing planning, design, construction, and maintenance of transportation projects, shall comply with the policies in this section.*

**Compliance:** The proposed project meets the policies of *section (b)*.

#### **4.0 CONCLUSION**

The USACE has determined that the Recommended Plan complies with the TCMP and will be conducted in a manner consistent with all rules and regulations of the program.

ATTACHMENT 1  
ENGINEERING DRAWINGS OF PROPOSED PLANS