General Recommendations:

Access methods for development may result in loss of wetland habitat and can significantly alter coastal processes such as salinity and hydrology, which can modify the distribution and abundance of living marine resources. The placement of fill material should avoid covering sensitive areas and altering hydrology. Fill materials such as sand, gravel, rock, or similar materials for roadway construction may not be placed below mean high water or in state-owned wetlands.

Lessees must, to the greatest extent possible, use existing channels, canals, and other deep-water areas to avoid impacts to sensitive areas, and minimize initial and maintenance dredging requirements. Where construction of a new channel is unavoidable, siting to avoid impacts to sensitive areas such as bird rookeries, oyster reefs, and areas of submerged aquatic vegetation is important. In addition, canals and channels should not cut through barrier beaches, barrier islands, or other Gulf shoreline protection features.

All activities should be coordinated with the commenting agencies and should use Best Management Practices to avoid unnecessary impacts to sensitive areas. The following mitigation sequence may be applied during the evaluation of potential adverse impacts of a project: (1) avoidance of adverse impacts; (2) minimization of adverse impacts; and (3) compensation for unavoidable adverse impacts.

For information on Best Management Practices and guidelines to reduce the overall impact to the environments and facilitate permitting, please visit:

U.S. Army Corps of Engineers Galveston District construction guidelines:

Definitions and Explanations

CA - Use existing channels.

New dredging may not be authorized on this tract; however, maintenance dredging of existing and previously dredged channels may be authorized if sensitive areas are not impacted.

CC – The dredging of one channel may be authorized for development of this tract.
If no channel is present on the tract, the dredging of a single channel may be authorized to provide access if impacts to submerged aquatic vegetation and other sensitive areas are avoided.

CF- Limit vehicular access for development activities.

Vehicular access methods and staging areas should be designed to avoid impacts to sensitive areas.

DREDGING AND DREDGE MATERIAL DISPOSAL

General Recommendations:

In general, discharge of dredged material is not allowed on state-owned submerged lands. Discharge of dredged material in sensitive areas has the potential to directly bury aquatic habitats and animals, adversely impact water quality, reduce oxygen availability for aquatic species and reduce light for submerged aquatic vegetation. Sediment control techniques such as silt curtains or other barriers that minimize turbidity and migration of dredged materials into sensitive areas are encouraged and may be required. Prop-washing is not an acceptable dredging method or means of entering or traveling in tracts.

Dredged material, however, is a resource that should be used to create or restore habitat in a process called “beneficial use of dredged material”. Beneficial use of dredged material includes, but is not limited to, beach and aquatic habitat creation or restoration. If dredged material cannot be used beneficially, it should be placed in existing placement areas or upland sites where levees will contain the material.

All activities should be coordinated with the commenting agencies and should use Best Management Practices to avoid unnecessary impacts to sensitive areas. The following mitigation sequence may be applied during the evaluation of potential adverse impacts of a project: (1) avoidance of adverse impacts; (2) minimization of adverse impacts; and (3) compensation for unavoidable adverse impacts.

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U.S. Army Corps of Engineers Galveston District construction guidelines:

**Definitions and Explanations**

**DA – Dredging may not be allowed on this tract.**

Dredging may not be authorized on this tract due to the occurrence of sensitive areas, sediment contamination or existing infrastructure. If impacts to sensitive areas occur, mitigation may be required.

**DB - Dredging may not be approved in water less than 6 feet deep as measured from mean low water.**

Dredging may not be approved to protect shallow water sensitive areas. This tract has shallow areas and the creation of excessively deep pockets of water could alter current patterns, cause stagnation pools and create traps for fish when tide levels drop.

**MISCELLANEOUS**

**General Recommendations:**

Miscellaneous codes include general concerns that are not activity-specific and that apply to sensitive areas and habitats along the coast. These include, but are not limited to, the following:

- Coastal wetlands
- Submerged aquatic vegetation
- Cultural resources
- Private oyster leases
- Endangered species habitat
- Designated-use areas
- Tidal sand and mud flats
- Hard substrate reefs
- Bird rookeries
- Dredge material placement areas
- Regional designated sand sources

Dredging may not be allowed and other construction activities should be located at safe distances from sensitive areas. Specific setback distances depend on the type of sensitive areas present. Special methods may need to be incorporated to reduce turbidity and sedimentation impacts to sensitive areas from construction activities. A survey to locate any existing sensitive areas may be required before activity commences. In addition, plans for development and routes and methods of structure installation or construction must be included on applications for U.S. Army...
Corps of Engineers permits and Texas General Land Office plat maps for all state-owned submerged lands.

All activities should be coordinated with the commenting agencies and should use Best Management Practices to avoid unnecessary impacts to sensitive areas. The following mitigation sequence may be applied during the evaluation of potential adverse impacts of a project: (1) avoidance of adverse impacts; (2) minimization of adverse impacts; and (3) compensation for unavoidable adverse impacts.

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U.S. Army Corps of Engineers Galveston District construction guidelines:  

**Definitions and Explanations**

**MA - No special recommendations relating to sensitive areas, other than cultural resources.**

No specific concerns have been identified at this time.

**MB – Avoid impacts to hard substrate reefs.**

This tract contains hard substrate reefs which include rock outcrops, coral reefs, serpulid worm reefs (living or dead) and relic reef structures in intertidal or subtidal areas. Activities may be permissible if best management practices are used to avoid adverse impacts to these sensitive habitats.

**MC – Avoid impacts to artificial reefs.**

This tract contains artificial reefs; however, activities may be permissible if best management practices are used to avoid adverse impacts to these sensitive habitats.

**MD – Avoid impacts to tidal sand and mud flats.**

This tract contains tidal sand and mudflats; however, activities may be permissible if best management practices are used to avoid adverse impacts to these sensitive habitats.

**ME – Avoid impacts to coastal wetlands.**

Coastal wetlands exist within this tract; however, activities may be permissible if best management practices are used to avoid adverse impacts to these sensitive habitats. A survey may be required to locate existing wetlands.
MG – **Avoid impacts to submerged aquatic vegetation.**

Submerged aquatic vegetation, such as seagrass, has been documented on this tract; however, activities may be permissible if best management practices are used to avoid adverse impacts to these sensitive habitats. A survey may be required to locate existing submerged aquatic vegetation.

MI – **Avoid impacts to bird rookeries.**

Bird rookeries exist within this tract; however, activities may be permissible if best management practices are used to avoid adverse impacts to these sensitive habitats.

MJ – **Cultural resources may be present.**

These tracts lack sufficient data regarding the presence of submerged cultural resources. An archeological remote-sensing survey, issued under a Texas Antiquities Permit, may be required for proposed work that introduces bottom disturbing activities such as dredging and/or creation of sediment placement areas. Consult with the Texas Historical Commission for more information.

MK – **Avoid impacts to cultural resources.**

State Antiquities Landmarks or other cultural resources protected by state law are known to be or may be located on this tract and should not be disturbed. An archeological remote-sensing survey, issued under a Texas Antiquities Permit, may be required prior to commencement of activities. Consult with the Texas Historical Commission for more information.

ML – **This tract contains private oyster leases.**

Private oyster leases have been documented on this tract. Consult with the Texas Parks and Wildlife Department for more information.

MM – **Avoid impacts to public oysters characterized as reefs, beds, patches, or scattered.**

Oysters (reefs, beds, patches, or scattered) exist on this tract; however, activities may be permissible if best management practices are used to avoid adverse impacts to these sensitive habitats. A survey may be required to locate existing oyster cover.

MN – **Work on this tract is subject to state threatened or endangered species regulations.**

Activities conducted on this tract would require consultation with the Texas Parks and Wildlife Department. Laws and regulations pertaining to endangered or threatened species
are contained in Chapters 67 and 68 of the Texas Parks and Wildlife Code and Sections 65.171 - 65.176 of Title 31 of the Texas Administrative Code.

**MO – Work on this tract is subject to review under the Endangered Species Act.**

Activities conducted on this tract would require consultation with the corresponding agency. The U.S. Fish and Wildlife Service administers the Endangered Species Act for freshwater and land-based species, while the National Marine Fisheries Service is responsible for marine species.

**MP – This tract contains designated use areas.**

This tract contains designated use areas such as coastal protected areas, navigation districts, patented areas, and other designated use areas, which may be subject to special recommendations. Federal, state and local government entities should be consulted regarding restrictions or special use permits.

**MR – This tract contains restoration areas.**

This tract contains restoration areas; activities should not be undertaken which may adversely impact restoration features or the intended recovery of the ecosystem or which may undermine the management goals established for that area.

**MS – This tract contains mitigation sites.**

This tract contains sites established for the purpose of providing compensatory mitigation; however, activities may be permissible if best management practices are used to avoid adversely impacting mitigation features.

**MV – This tract contains identified sand sources.**

This tract contains identified sand sources; however, activities may be permissible if conflicts with other uses of this area are avoided.

**MX – This tract contains dredge material placement areas.**

This tract contains dredge material placement areas; however, activities may be permissible if conflicts with other uses of this area are avoided.
OIL AND GAS DEVELOPMENT

**General Recommendations:**

All oil and gas related activities should avoid, to the maximum extent practicable, impacts to sensitive areas. In general, impacts to submerged aquatic vegetation, marsh, oysters, and other structured habitats are of particular concern. Biological monitors may be required when conducting activities. Oil and gas related activities on state-owned submerged lands may be subject to requirements of the Oil Spill Prevention and Response Act (Natural Resources Code Chapter 40), which designates the General Land Office as the lead state agency for the prevention of and response to oil spills into Texas coastal waters.

All activities should be coordinated with the commenting agencies and should use Best Management Practices to avoid unnecessary impacts to sensitive areas. The following mitigation sequence may be applied during the evaluation of potential adverse impacts of a project: (1) avoidance of adverse impacts; (2) minimization of adverse impacts; and (3) compensation for unavoidable adverse impacts.

For information on Best Management Practices and guidelines to reduce the overall impact to the environments and facilitate permitting, please visit:

U.S. Army Corps of Engineers Galveston District construction guidelines:

**Definitions and Explanations**

**OA – Surface drilling may not be allowed.**

Directional drilling from off-tract locations may be required for mineral development of this tract. Sensitive areas dominate this tract, thus drilling activity may significantly damage the ecosystem.

**OH - Drill in water deeper than 6 feet as measured from mean low water or from land above mean high water.**

This tract has deep-water (greater than 6 feet) areas and sensitive areas in shallow-water. Drilling activities may need to be confined to the deep-water areas or adjacent uplands.

**OM - Pipeline and platform construction may be prohibited on top or near oyster reefs, hard substrate reefs, artificial reefs and banks.**
Construction activities may be prohibited or restricted within 500 feet of artificial or natural reefs, banks or hard bottoms to minimize damage caused by accidental discharges of hazardous substances, sedimentation, or physical impacts, and to protect fish and other organisms attracted to the area. A survey for the presence of reefs may be required.

**OP - The use of high-velocity energy sources may be prohibited for performing geophysical surveys on top of or near oyster reefs, hard substrate reefs, artificial reefs and banks.**

Geophysical activities may be prohibited within 500 feet of artificial or natural reefs, banks, or hard bottoms to minimize impacts to reefs and to protect fish and other organisms attracted to the area. A survey for the presence of reefs may be required. A three-year recovery period is usually required between consecutive surveys over the same geographic area.

**OR – No drilling within two miles seaward of the Gulf shoreline along the Padre Island National Seashore.**

Drilling activity within two miles of the Gulf shoreline along the Padre Island National Seashore is restricted to protect both the aesthetic and recreational values of the public beach. Access to minerals in the two-mile zone along the Gulf beach may be achieved by directional drilling from upland sites, if authorized by the National Park Service, or from submerged state tracts beyond the two-mile limit.

**RIGHT-OF-WAY**

**General Recommendations:**

Use of existing rights-of-way is encouraged to lessen adverse impacts to sensitive areas on state-owned submerged lands. Pipeline construction under navigation channels is subject to special routing and burial requirements. Development may be accomplished by directional drilling from parts of state tracts that are outside the federal right-of-way. All work on tracts where navigation concerns have been identified should be coordinated with the U.S. Army Corps of Engineers (USACE) Galveston District, Operations Division, local navigation districts, port authorities and the U.S. Coast Guard.

To ensure compliance with federal regulations regarding navigation channels, dredge material placement areas, anchorage areas, safety fairways, and other navigational concerns, contact the USACE Galveston District Navigation Division and the U.S. Coast Guard.

Following is a link to USACE Standard Operating Procedures for Federal Channel Setbacks:
All activities should be coordinated with the commenting agencies and should use Best Management Practices to avoid unnecessary impacts to sensitive areas. The following mitigation sequence may be applied during the evaluation of potential adverse impacts of a project: (1) avoidance of adverse impacts; (2) minimization of adverse impacts; and (3) compensation for unavoidable adverse impacts.

For information on Best Management Practices and guidelines to reduce the overall impact to the environments and facilitate permitting, please visit:

U.S. Army Corps of Engineers Galveston District construction guidelines:

RW – Navigation concerns may exist.

This tract may contain navigation channels, dredged material placement areas, safety fairways, designated channel setbacks, anchorage areas and other navigation concerns.

TIME RESTRICTIONS

General Recommendations:

Activities on some tracts may be limited to specific time periods to avoid disturbance to state or federally listed endangered or threatened species and colonial nesting waterbirds and their critical habitat. Lessees should coordinate activities with the corresponding agencies to ensure that their activities do not adversely impact endangered or threatened species or colonial nesting waterbirds. Consultation agencies include: the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, the National Park Service and the Texas Parks and Wildlife Department.

All activities should be coordinated with the commenting agencies and should use Best Management Practices to avoid unnecessary impacts to sensitive areas. The following mitigation sequence may be applied during the evaluation of potential adverse impacts of a project: (1) avoidance of adverse impacts; (2) minimization of adverse impacts; and (3) compensation for unavoidable adverse impacts.
For information on Best Management Practices and guidelines to reduce the overall impact to the environments and facilitate permitting, please visit:

U.S. Army Corps of Engineers Galveston District construction guidelines:

**Definitions and Explanations**

**TA – Drilling is prohibited within the area from two miles to three miles seaward of the Gulf shoreline of the Padre Island National Seashore during sea turtle nesting season from March 15 through September 30.**

Drilling is prohibited within the area from two miles to three miles seaward from March 15 through September 30 to avoid interference with nesting sea turtles. Drilling is allowed within the area from two miles to three miles seaward from October 1 through March 14. Drilling activity in this area must begin before January 15 to ensure completion before March 15. Contact the National Park Service Division of Sea Turtle Science and Recovery for regulations and mitigation measures required for oil and gas operations to reduce the direct impacts that could occur to nesting sea turtles.

**TB – Dredging, oil and gas related activity, or development operations may not be allowed during whooping crane overwintering season from October 15 through April 15. Permanent structures higher than 15 feet above ground are not allowed.**

This tract contains whooping crane designated critical habitat. Most activities on this tract are restricted during the period from October 15 through April 15 to protect overwintering whooping cranes.

**TC – Dredging, oil and gas related activity, development operations, or watercraft landing may be prohibited, within 1000 feet of a bird rookery during peak nesting season, which typically occurs from February 15 through September 1.**

Bird rookeries are located on or near this tract. Nesting birds must be left undisturbed. Any activities may be prohibited within 1000 feet of a rookery area during the peak-nesting season from February 15 through September 1. A biological monitor may be required.

**TD - Geophysical surveying may be restricted from the seaward base of the sand dunes or vegetation line Gulfward three miles during sea turtle nesting season from March 15 through September 30.**
Sea turtles have been documented using the beach in or adjacent to this tract for nesting. Geophysical surveying on this tract may be restricted from March 15 through September 30 to protect nesting sea turtles. A biological monitor may be required. Contact the National Park Service Division of Sea Turtle Science and Recovery for regulations and mitigation measures required for oil and gas operations to reduce the direct impacts that could occur from crushing or covering of nests or turtles.

**TE - Dredging, oil and gas related activity or other development operations may be restricted within 1000 feet of a sea turtle nesting beach from March 15 through September 30.**

This tract contains areas with documented or potential sea turtle nesting beaches. Activities may be restricted within 1000 feet of a sea turtle nesting beach from March 15 through September 30. A biological monitor may be required. Contact the National Park Service Division of Sea Turtle Science and Recovery for regulations and mitigation measures required for oil and gas operations to reduce the direct impacts that could occur to nesting sea turtles.

**TF – Dredging, oil and gas related activity or other development operations may be restricted during piping plover season, typically from July 15 through May 15.**

This tract contains designated critical habitat for piping plovers. During this period, oil and gas related or other development activities may be restricted. A biological monitor may be required.

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**Desalination**

**General Recommendations:**
House Bill 2031 (84th Legislature) directed the Texas Parks and Wildlife Department and the Texas General Land Office to develop a study [link to study] that identifies zones in the Gulf of Mexico that are appropriate for the diversion of marine seawater, and for the discharge of marine seawater desalination brine concentrate, while taking into account the need to protect marine organisms. Based on available information and known concerns, the recommended diversion and discharge zones are identical.

Results from the study inform a new expedited permit application program under development at the Texas Commission on Environmental Quality.

**Definitions and Explanations**

**DZ – Marine Desalination Zones – Areas identified in the Gulf of Mexico that are appropriate for the diversion of marine seawater, and for the discharge of marine seawater desalination brine concentrate.**
U.S. Army Corps of Engineers Galveston District construction guidelines:

Project specific guidelines for Best Management Practices can be found at the following website. The guidelines are intended to reduce impacts to the environment and if incorporated, may qualify applications for nationwide or general permits and expedite review.


U.S. Army Corps of Engineers Webpage for Permit Guidance:


U.S. Army Corps of Engineers Webpage for Federal Regulations and Permit Guidance: