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From: Patrick Smith
FAX: (504) 862-2088
Date: February 23, 2018

Subject: T&E Species concurrence for the Louisiana Coastal Area, Beneficial Use of Dredged Material Program at Tiger Pass II, Plaquemines Parish, Louisiana Project

Dear Mr. Ranson:

Attention: David Walther

The U.S. Army Corps of Engineers (USACE), New Orleans District has proposed Supplemental Environmental Assessment (SEA) #542.B titled "Louisiana Coastal Area, Beneficial Use of Dredged Material Program at Tiger Pass II, Plaquemines Parish, Louisiana." The SEA is being prepared to address actions proposed under the Louisiana Coastal Area Beneficial Use of Dredged Material program, which has an approved Programmatic Environmental Impact Statement (EIS) entitled *Louisiana Coastal Area Beneficial Use of Dredge Material Programmatic EIS* and Record of Decision dated 13 August 2010. The first phase of this project, SEA #542.A titled "Tiger Pass Marsh/Ridge Restoration Tier 2 Louisiana Coastal Area (LCA) Beneficial Use of Dredged Material Program (BUDMAT)", is currently under construction and the USFWS determined that the project was not likely to adversely affect Federal trust resources currently protected by the Endangered Species Act of 1973 via letter dated 28 September 2016.

The document herein proposes continued construction of a ridge restoration project at Spanish Pass which was originally proposed as part of the State's 2012 Coastal Master Plan and Plaquemines Parish Ridge Restoration Program. The proposed action would involve restoration of a historic ridge that has subsided and eroded over time. The feature would include construction of an approximately 6,800-foot (ft) long ridge backed by a 500-ft wide marsh platform that would serve as a means to reduce wave energy on the leeward side of the marsh.

Project Description

Spanish Pass Ridge Restoration

The Spanish Pass Ridge Restoration project alternative was originally proposed as part of the State's 2012 Coastal Master Plan and Plaquemines Parish Ridge Restoration Program. The project calls for the placement of dredge material on the site of a submerged former natural ridge that ran along the banks of Spanish Pass. The first phase of this project is currently under construction and the USFWS determined that the project was not likely to adversely affect Federal trust resources currently protected by the Endangered Species Act of 1973 via letter dated 28 September 2016.

This project has been reviewed for effects to Federal trust resources under our jurisdiction and currently protected by the Endangered Species Act of 1973 (Act). The project, as proposed,
() Will have no effect on those resources
(x) is not likely to adversely effect those resources

Joseph L. Ranson 23 Feb 18

Supervisor
Louisiana Ecological Services Office
U.S. Fish and Wildlife Service

This second phase would mirror the design developed for the initial Spanish Pass project that is currently under construction. The created feature would consist of another approximately 6,800-feet of ridge and 7,800-feet of marsh platform that would be constructed immediately adjacent to and to compliment the initial Spanish Pass Ridge and Marsh Restoration project. (Figure 1) The entire project length along the ridge face of the project is approximately 9,000-feet. However, due to numerous active oil and gas pipelines located within the project area, there are several breaks in the ridge resulting in a non-uniform and noncontiguous construction platform; therefore, the length of the ridge with the breaks excluded is approximately 6,800-feet and the length of the marsh platform is approximately 7,800-feet. This second phase would mirror the design developed for the initial Spanish Pass project that is currently under construction. The ridge will be constructed with a crown width of 80-feet and a 200-foot wide base. The crown elevation would measure +6.5-feet NAVD88 with 1V on 20H side slopes, down to elevation +3.5-feet NAVD88. The earthen ridge would be backed by an intermediate marsh platform measuring approximately 500-feet in width constructed to an initial fill height of +3.5-feet NAVD88. Tiger Pass 2 would entail the placement of approximately 2,000,000 cubic yards (CYS) of material to be dredged from the USACE hopper dredge disposal area (HDDA), located at the mouth of Pass a Loutre where it meets the Mississippi River Ship Channel.

Retention Dikes and Retention Dike Borrow

Earthen retention dikes will be needed in order to facilitate construction of the ridge and marsh platforms and will be allowed to settle and/or erode, as well as vegetate naturally over time. If necessary, these retention dikes would be later breached or degraded to the settled elevations of the disposal area by the non-federal sponsor. The retention dikes would be constructed to a crown width of 5-feet, crown elevation of +5-feet NAVD88, and side slopes no steeper than 1V on 4H. The dikes to be constructed along the south side of the ridge would also include a berm (approximately 25-feet in width), to be constructed to elevation 0.0-feet NAVD88, and with slopes no steeper than 1V on 4H. The berm would tie into the southern slope of the retention dike, extend at elevation 0.0-feet NAVD88, and then tie into the natural ground (approximately -3.5-feet NAVD88) on a slope no steeper than 1V on 4H. The above referenced berm width, side slopes and ground elevations will be verified by geotechnical investigations, testing and design, as well as surveys, to be performed for the proposed ridge and marsh platform expansion.

Borrow for construction of the retention dikes would be obtained from an adjacent borrow site and would come either from within or outside of the proposed ridge and marsh platform footprint. However, borrow excavation or placement would not be allowed within any pipeline corridors. Additionally, borrow excavation outside of the marsh creation in existing wetlands would not be allowed.

Figure 2 provides the general design details associated with the ridge and marsh platform, as well as proposed borrow locations and dimensions for retention dike construction.

Pipeline/ Utility Corridors

There are several pipeline/utility corridors that will pass through the Spanish Pass expansion that is proposed under the TP-2 project. (Figure 3) To avoid impacts to pipelines, no-work corridors will be established at each pipeline crossing location between each section of the proposed ridge expansion. With the exception of allowable placement of dredge fill over the pipelines to provide a land bridge for equipment access, no work will be performed within 50-feet of any pipelines, unless they have been abandoned in place and the pipeline owner has consented to construction over their pipeline(s). The no work area includes the outside toes of the earthen retention dikes that are to be constructed adjacent to and parallel to the pipelines.

Dredge Material Transport Method

A cutterhead suction dredge could be used to load hopper barges utilizing a spider barge. Once loaded, the hopper barges would be transported by tugboat to the designated pump-out location on the left descending bank of Grand Pass outside the navigation channel, approximately 0.5 miles inside its intersection with the Mississippi River. At this point an off-loader would be used to empty the barges, and transport the material via a temporary submerged pipeline across Grand Pass using the same pipeline corridor as Tiger Pass 1 to the jack-and-bored culvert under Tide Water Road. The arms of a spider barge are designed to optimize loading characteristics and production efficiency by loading the sediment into the hopper barges via multiple arms which allow for concurrent loading of multiple barges. This also allows for the cutterhead dredge to continue operating without having to shut down while awaiting for the arrival of offloaded barges. This alternative could also entail the loading of a hopper dredge with hopper pump-out capability. In this case, a shallow hopper dredge could be loaded with dredged material and then transit to Grand Pass at which point the dredged material within the hopper dredge would then be pumped out via the pipeline at the designated offloading site.

The planned pipeline route from Grand Pass to Haliburton Road is the same as used for current construction. The pipeline will exit Grand Pass approximately 800-feet upstream of the intersection of Grand and Tiger Passes. From this bankline access point the pipeline will snake its way directly to Haliburton Road within an allowable 45-foot access corridor. The dredge discharge pipeline would then travel along the north side of Haliburton Road and be placed within the existing drainage canal paralleling the road. A small triangular staging area is proposed at the pipelines intersection with Haliburton Road to accommodate pipeline and /or equipment offloading and reloading.

The dredge pipeline would then cross under Tide Water Road via a 42-inch casing that was bored under the road during the initial LCA BUDMAT Tiger Pass project. The dredge pipeline would then travel either to Spanish Pass at Spanish Pass Road, or via the open waters of Yellow Cotton Bay that has yet to be assessed. This unassessed reach of pipeline corridor is currently defined as a 500-foot wide direct route from the bored casing location to Spanish Pass, thus minimizing the original pipeline length required for construction of Tiger Pass 2 by approximately 2,000 linear feet. The Contractor would not be allowed to use this entire 500-foot width, but would select the most beneficial 100-

foot wide alignment within the larger corridor. (Figure 4) The proposed maximum extent of the pipeline corridor is approximately 57 acres; the maximum extent of the 100-foot wide construction area for the pipeline consists of less than 20 acres of nearly entirely open water. Approximately 0.7 acres of marsh adjacent to Tide Water Road would be temporarily impacted by the dredge pipeline during construction. If available, dredged material could be deposited in the impacted area adjacent to Tide Water Road after construction is complete. Upon reaching Spanish Pass, the dredge pipeline and all construction equipment would remain within the banks of Spanish Pass itself. It is not expected that any utilities or pipelines would be impacted along the access route, or within the entire ridge area. Delivery of dredge material to the project area would be in a manner that would avoid impacting pipeline rights-of-way and utilities passing through the access route.

The proposed route would not require the dredge material pipeline to traverse across any levees, federal or otherwise. The construction equipment would access the site primarily through open water bodies in order to minimize damage to existing wetlands.

Refurbishment of a staging area, located at the west end of Spanish Pass Road and adjacent to Spanish Pass, and previously cleared and constructed during the initial BUDMAT Tiger Pass project, would possibly be required. The staging area, comprised of crushed stone aggregate, was constructed under the initial BUDMAT project and measures approximately 75-feet in width and 75-feet in length, and impacted approximately 1.3 acres of intermediate marsh. The staging area will remain in place for future use.

Occurrence of Protected, Threatened and Endangered Species

Various species protected under the Endangered Species Act (ESA), Bald and Golden Eagle Protection Act (BGEPA), and the Migratory Bird Treaty Act (MBTA) are known to occur in the project vicinity. Protected species that may occur in the project vicinity include colonial nesting water/wading birds including the formerly listed brown pelican (*Pelecanus occidentalis*), various raptors including the formerly listed bald eagle (*Haliaeetus leucocephalus*) and peregrine falcon (*Falco peregrines*). Federally-listed threatened and endangered species that could be encountered in the project area are the endangered pallid sturgeon (*Scaphirhynchus albus*), the threatened West Indian manatee (*Trichechus manatus*), the threatened piping plover (*Charadrius melodus*), and the threatened red knot (*Calidris canutus rufa*), and sea turtles. The USACE would consult with the NMFS regarding sea turtles.

Pallid Sturgeon

The pallid sturgeon is an endangered, bottom-oriented, fish that inhabits large river systems from Montana to Louisiana. Within this range, pallid sturgeon tend to select main channel habitats in the Mississippi River and main channel areas with islands or sand bars in the upper Missouri River. In Louisiana it occurs in the Atchafalaya and Mississippi Rivers, and below Lock and Dam Number 3 on the Red River (with known concentrations

in the vicinity of the Old River Control Structure Complex). The pallid sturgeon is adapted to large, free-flowing, turbid rivers with a diverse assemblage of physical characteristics that are in a constant state of change. Many life history details and subsequent habitat requirements of this fish are not known. However, the pallid sturgeon is believed to utilize Louisiana riverine habitat during reproductive stages of its life cycle. Habitat loss through river channelization and dams has adversely affected this species throughout its range.

The following is recommended to minimize potential impacts to pallid sturgeon associated with dredging to ensure protection of the pallid sturgeon:

1. The cutterhead should remain completely buried in the bottom material during dredging operations. If pumping water through the cutterhead is necessary to dislodge material or to clean the pumps or cutterhead, etc., the pumping rate should be reduced to the lowest rate possible until the cutterhead is at mid-depth, where the pumping rate can then be increase; and
2. During dredging, the pumping rates should be reduced to the slowest speed feasible while the cutterhead is descending to the channel bottom.

West Indian Manatee

The threatened West Indian manatee is known to regularly occur in parts of coastal Louisiana, but is infrequent within the vicinity of the current project area. Based on data maintained by the Louisiana Natural Heritage Program (LNHP), over 80 percent of reported manatee sightings (1999-2011) in Louisiana have occurred from the months of June through December. During in-water work in areas that potentially support manatees all personnel associated with the project would be instructed about the potential presence of manatees, manatee speed zones, and the need to avoid collisions with and injury to manatees. All personnel would be advised that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act of 1972 and the Endangered Species Act of 1973. Additionally, personnel would be instructed not to attempt to feed or otherwise interact with the animal, although passively taking pictures or video would be acceptable. The following conservation measures would be included in all contracts and plans and specifications for in-water work in areas where the manatee may occur.

All on-site personnel are responsible for observing water-related activities for the presence of manatee(s). The following is recommended to minimize potential impacts to manatees in areas of their potential presence:

1. All work, equipment, and vessel operation should cease if a manatee is spotted within a 50-foot radius (buffer zone) of the active work area. Once the manatee has left the buffer zone on its own accord (manatees must not be herded or harassed into leaving), or after 30 minutes have passed without additional sightings of manatee(s) in the buffer zone, in-water work can resume under careful observation for manatee(s).

2. If a manatee(s) is sighted in or near the project area, all vessels associated with the project should operate at “no wake/idle” speeds within the construction area and at all times while in waters where the draft of the vessel provides less than a four-foot clearance from the bottom. Vessels should follow routes of deep water whenever possible.
3. If used, siltation or turbidity barriers should be properly secured, made of material in which manatees cannot become entangled, and be monitored to avoid manatee entrapment or impeding their movement.
4. Temporary signs concerning manatees should be posted prior to and during all in-water project activities and removed upon completion. Each vessel involved in construction activities should display at the vessel control station or in a prominent location, visible to all employees operating the vessel, a temporary sign at least 8½ " X 11" reading language similar to the following: “CAUTION BOATERS: MANATEE AREA/ IDLE SPEED IS REQUIRED IN CONSRUCTION AREA AND WHERE THERE IS LESS THAN FOUR FOOT BOTTOM CLEARANCE WHEN MANATEE IS PRESENT”. A second temporary sign measuring 8½ " X 11" should be posted at a location prominently visible to all personnel engaged in water-related activities and should read language similar to the following: “CAUTION: MANATEE AREA/ EQUIPMENT MUST BE SHUTDOWN IMMEDIATELY IF A MANATEE COMES WITHIN 50 FEET OF OPERATION”.
5. Collisions with, injury to, or sightings of manatees should be immediately reported to the United States Fish and Wildlife Service’s (USFWS) Louisiana Ecological Services Office (337/291-3100) and the Louisiana Department of Wildlife and Fisheries, Natural Heritage Program (225/765-2821). The nature of the call (i.e., report of an incident, manatee sighting, etc.); time of incident/sighting; and the approximate location, including the latitude and longitude coordinates, if possible, should be provided.

Piping Plovers

The piping plover, federally listed as a threatened species, is a small (7 inches long), pale, sandcolored shorebird that winters in coastal Louisiana and may be present for 8 to 10 months annually. Piping plovers arrive from their northern breeding grounds as early as late July and remain until late March or April. Piping plovers forage on intertidal beaches, mudflats, sand flats, algal flats, and wash-over passes with no or very sparse emergent vegetation. They roost in unvegetated or sparsely vegetated areas. They also forage and roost in wrack (i.e., seaweed or other marine vegetation) deposited on beaches. In most areas, wintering piping plovers are dependent on a mosaic of sites distributed throughout the landscape, because the suitability of a particular site for foraging or roosting is dependent on local weather and tidal conditions. Plovers move among sites as environmental conditions change, and studies have indicated that they generally remain within a 2-mile area. Major threats to this species include the loss and degradation of habitat due to development, disturbance by humans and pets, and predation.

On July 10, 2001, USFWS designated critical habitat for wintering piping plovers (Federal Register Volume 66, No. 132); a map of the seven critical habitat units in Louisiana can be found at <http://criticalhabitat.fws.gov/crithab>. Based on the information provided, the proposed action would not be located within any designated critical habitat units; therefore, no critical habitat would be affected.

Red Knots

The red knot, federally listed as a threatened species, is a medium-sized shorebird about 9 to 11 inches (23 to 28 centimeters) in length with a proportionately small head, small eyes, short neck, and short legs. The red knot breeds in the central Canadian arctic but is found in Louisiana during spring and fall migrations and the winter months (generally September through May). During migration and on their wintering grounds, red knots forage along sandy beaches, tidal mudflats, salt marshes, and peat banks. Observations along the Texas coast indicate that red knots forage on beaches, oyster reefs, and exposed bay bottoms, and they roost on high sand flats, reefs, and other sites protected from high tides. Major threats to this species along the Gulf of Mexico include the loss and degradation of habitat due to erosion, shoreline stabilization, and development; disturbance by humans and pets; and predation. Currently, there is no critical habitat designated for Red Knots in coastal Louisiana.

Colonial Nesting Waterbirds

The brown pelican (*Pelecanus occidentalis*), a year-round resident of coastal Louisiana that may occur in the project area, was removed from the Federal List of Endangered and Threatened Wildlife (i.e., “delisted”) by USFWS on November 17, 2009. Despite its delisting, brown pelicans - and other colonial nesting wading birds and seabirds - remain protected under the Migratory Bird Treaty Act. Portions of the proposed project area may contain habitats commonly inhabited by colonial nesting wading birds and seabirds. To minimize disturbance to pelicans and other colonial nesting birds and seabirds potentially occurring in the project area, the USACE would observe restrictions on activity provided by the USFWS, Lafayette, Louisiana Ecological Services Office. Special operating conditions addressing pelicans and other colonial nesting wading birds and seabirds (including reporting presence of birds and/or nests; no work distance restrictions—2000 feet for brown pelicans, 1000 feet for colonial nesting wading birds, and 650 feet for terns, gulls, and black skimmers; bird nesting prevention and avoidance measures; marking discovered nests) would be included in the USACE’s plans and specifications developed prior to dredging and disposal activities. In addition, dredging and disposal activities would be restricted to non-nesting periods for colonial nesting wading birds and seabirds when practicable.

Essential Fish Habitat

The project may be located within an area identified as Essential Fish Habitat (EFH) by the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA,

Magnuson-Stevens Act; P.L. 104-297). The USACE would consult with the NMFS regarding EFH.

Species of Management Concern

Species of fish, wildlife, and plants labeled as “S1” and S2” by the Louisiana Department of Wildlife and Fisheries are extremely and very rare species, respectively, that are vulnerable to extirpation in Louisiana. These species, along with those identified as priority species by the Gulf Coast Joint Venture are species of management concern. Continued population declines could result in these species becoming candidates for listing under the Endangered Species Act. Some of these species may also be referred to as at-risk species; USFWS has defined at-risk species as those species that have either been proposed for listing, are candidates for listing, or have been petitioned for listing.

Species of concern which use the study area include Wilson’s plover, gull-billed tern, reddish egret, black skimmer, and peregrine falcon. Species of concern that would use study area’s fresh, intermediate, brackish and saline marsh habitat and adjacent open waters, include the Louisianaeyed silk moth, glossy ibis, seaside sparrow, black rail, mottled duck, and the peregrine falcon.

Conclusion and Determination

Although threatened or endangered species may occur within the general project vicinity, their presence within the proposed project areas is unlikely. The proposed project area does not contain critical habitat for federally-listed species.

We believe that the project, as planned, is not likely to adversely affect federally-listed threatened or endangered species. Colonial nesting water/wading birds, the brown pelican, and other species of concerns mentioned in this document are not likely to be impacted by the proposed action. Please review this plan and inform us whether or not you agree with our determination. If there are any questions about the project or if any additional information is needed please contact Patrick Smith by phone at (504) 862-1544 or by email at Patrick.W.Smith@usace.army.mil.

Figures



Figure 1: Tiger Pass Extension Project Area

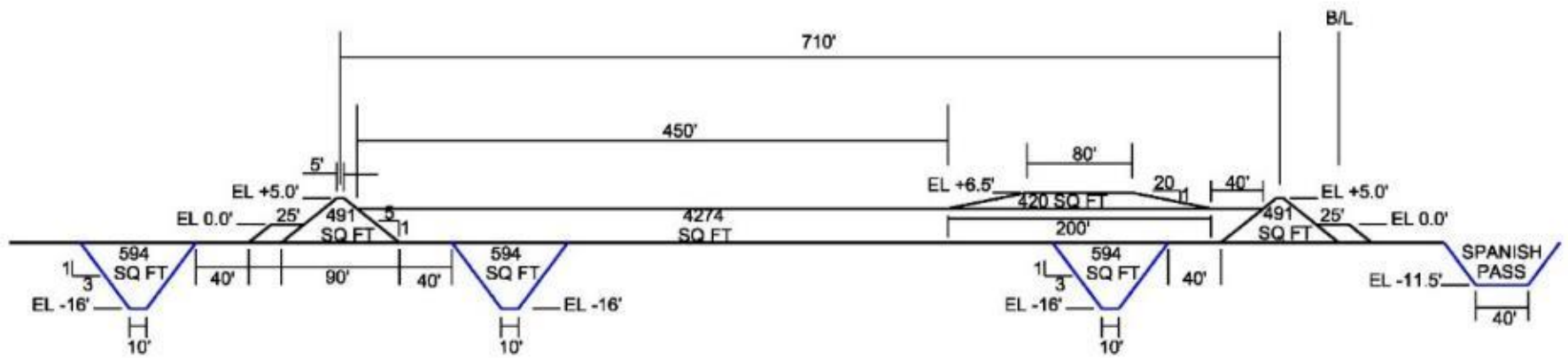


Figure 2: Proposed Retention Dike and Borrow Design for Dike Construction

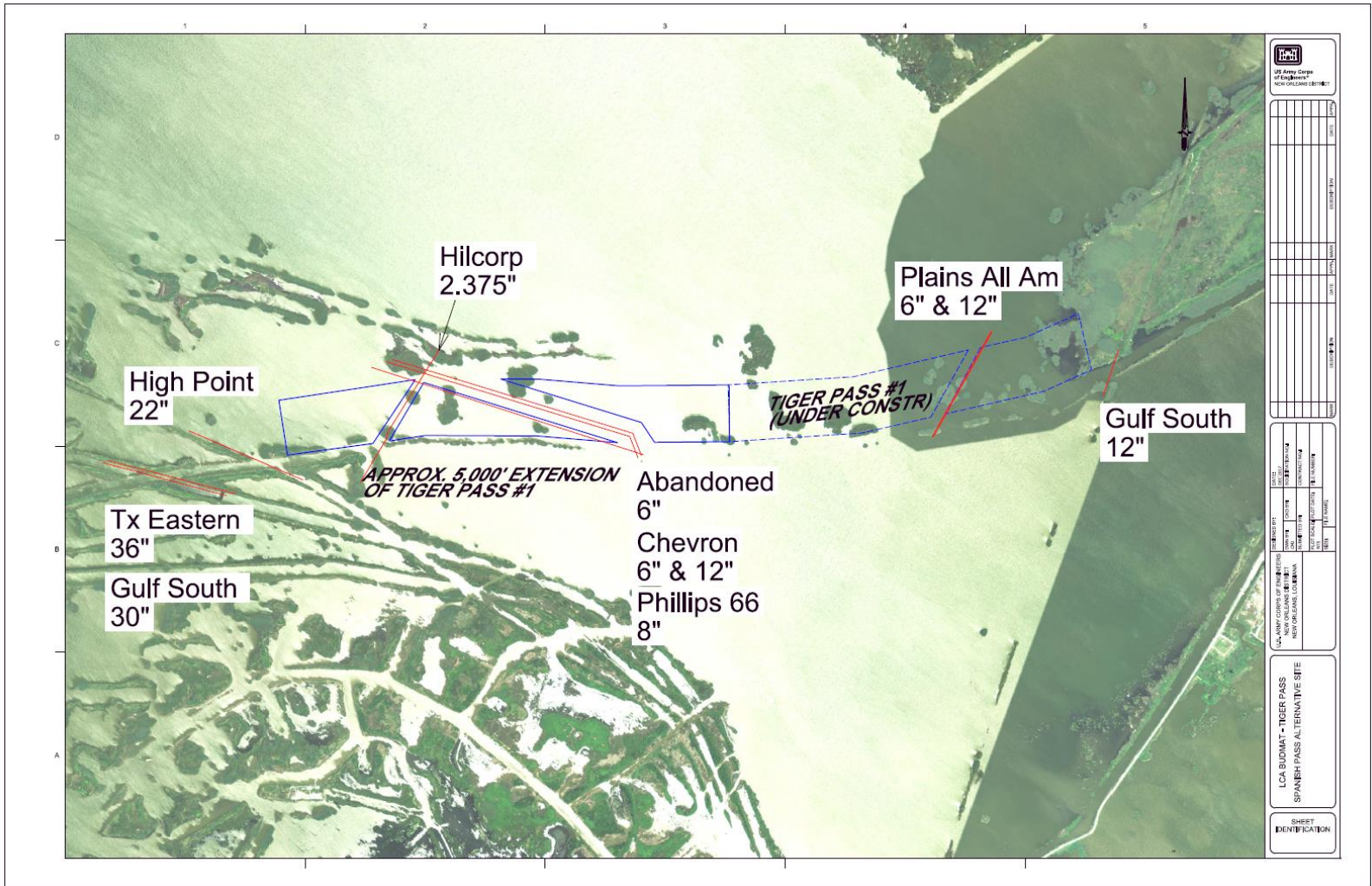


Figure 3: Pipeline locations relative to an early approximate location of the proposed project extension and the project area currently under construction

LCA BUDMAT - Tiger Pass II Project - Pipeline Access



U.S. Army Corps of Engineers
New Orleans District



Coordinate System:
Lambert Conformal Conic
Central Meridian: 91°20'00"W
1st Std Parallel: 29°15'00"N
2nd Std Parallel: 30°42'00"N
Latitude of Origin: 29°30'00"N

Figure 4: Primary and Alternate Dredge Material Transportation Route