Draft Environmental Assessment
Jefferson County Drainage District No. 6
Ditch 600 Community Flood Control East China Relief Project
EMT-2020-FM-007-0011
Jefferson County, Texas
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For

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LIST OF ACRONYMS

AAI – All Appropriate Inquiries

ACT – Antiquities Code of Texas

AJD - Approved Jurisdictional Determination

ALERT - Automated Local Evaluation in Real Time

APE - Area of Potential Effect

ASTM – American Society for Testing and Materials

BMP - Best Management Practice

CAA – Clean Air Act

CEQ - Council on Environmental Quality

CFR – Code of Federal Regulations

CGP - Construction General Permit

CIP - Capital Improvements Project

CNN - Certificate of Convenience and Necessity

CWA - Clean Water Act

DOI – Department of the Interior

EA – Environmental Assessment

EIS - Environmental Impact Statement

EO – Executive Order

EPA – US Environmental Protection Agency

ESA - Endangered Species Act

FEMA – Federal Emergency Management Agency

FIRM – Flood Insurance Rate Map

FMA - Flood Mitigation Assistance

FNI – Freese and Nichols, Inc.

FONSI - Finding of No Significant Impact

FPPA - Farmland Protection Policy Act

GIS - Geographic Information Systems

GLO - General Land Office

GPS – Global Positioning Systems

HEC-RAS – Hydrologic Engineering Center River Analysis System

HEC-HMS – Hydrologic Engineering Center Hydrologic Modeling System

HREC - Historical Recognized Environmental Condition

HW - Hazardous Waste

IH – Interstate Highway

IPaC – Information for Planning and Consultation

JCDD6 - Jefferson County Drainage District No. 6

LOMA – Letter of Map Adjustment

LOMR - Letter of Map Revision

LNVA – Lower Neches Valley Authority

LPST - Leaking Petroleum Storage Tank

MSL – Mean Sea Level

NAAQS - National Ambient Air Quality Standards

NDD - Natural Diversity Database

NEPA – National Environmental Policy Act

NFIA - National Flood Insurance Act

NFIP - National Flood Insurance Program

NHPA - National Historic Preservation Act

NMFS – National Marine Fisheries Service

NOAA - National Oceanic and Atmospheric Administration

NOI – Notice of Intent

NRCS - Natural Resources Conservation Service

NRHP – National Register of Historic Places

NWI - National Wetland Inventory

NWS - National Weather Service

O3 – Ozone

Pf – palustrine, farmed

PST – Petroleum Storage Tank

PUC – Public Utility Commission

RCRA – Resource Conservation and Recovery Act

REC - Recognized Environmental Condition

ROW – right of way

RRC – Railroad Commission of Texas

SALs – State Archeological Landmarks

SHPO – State Historic Preservation Office

SIP – State Implementation Plan

SWPPP - Storm Water Pollution Prevention Plan

TASA – Texas Archeological Sites Atlas

TCEQ - Texas Commission on Environmental Quality

TDAT – Tribal Directory Assessment Tool

THC – Texas Historical Commission

TMDL - Total Maximum Daily Load

TPDES – Texas Pollutant Discharge Elimination System

TPWD – Texas Parks and Wildlife Department

TWDB - Texas Water Development Board

USACE – US Army Corps of Engineers

USDA – US Department of Agriculture

USFWS – US Fish and Wildlife Service

UT-BEG – University of Texas Bureau of Economic Geology

WOTUS – Waters of the United States

INTRODUCTION

PROJECT AUTHORITY

Jefferson County Drainage District No. 6 (JCDD6) (the Applicant) is a Conservation and Reclamation District and a political subdivision of the State of Texas. JCDD6 was established on 21 January 1920, after a favorable vote by the Texas Legislature on 10 January 1920. The JCDD6 district boundary was extended and enlarged (Vol. 63, P. 478) according to the authority of the 57th Legislature, Chapter 349, and Chapter 7, Title 128, Revised Civil Statutes of Texas, Article 8129. Enlargement came about in 1961 through legislation (HB 1063) that also established JCDD6 as a Conservation and Reclamation District under Section 59, Article XVI, of the Texas Constitution. Containing approximately 450 square miles, JCDD6 lies wholly within Jefferson County, which includes much of the City of Beaumont, and was created primarily to provide drainage for flood-prone areas within the district. JCDD6 is governed by a 5-member Board of Directors appointed by the County Commissioners Court of Jefferson County, Texas (the Commissioners Court).

Funding for the Ditch 600 Community Flood Control East China Relief Project (Project) is being requested from the Federal Emergency Management Agency (FEMA) under the Flood Mitigation Assistance (FMA) Program. FEMA's project number is EMT-2020-FM-007-0011. The purpose of this Environmental Assessment (EA) is to comply with FEMA's responsibilities under the National Environmental Policy Act (NEPA) of 1969, Section 7 of the Endangered Species Act (ESA), and Section 106 of the National Historic Preservation Act (NHPA). This Environmental Assessment has been prepared in accordance with NEPA, the President's Council on Environmental Quality regulations to implement NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508), and FEMA's procedures for implementing NEPA (FEMA Instruction 108-1-1). FEMA is required to consider potential environmental impacts before funding or approving actions and projects. The purpose of this EA is to analyze the potential environmental impacts of the proposed Project. FEMA will use the findings in this EA to determine whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

PROJECT LOCATION

The Project is situated north of US 90 east of China, Jefferson County, Texas (**Appendix A, Figure 1**). The proposed improvements will benefit the community of China by increasing stormwater detention capacity during flood events (Benefit Area). Approximate GPS coordinates for the center of the Project Area are Latitude: 30.063391; Longitude: -94.321535. The adjacent land use surrounding the Project consists of residential development and undeveloped land.

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Major transportation arteries in the area include US 90. Topography is generally flat with elevations ranging from 34 to 42 feet above mean sea level (msl) (**Appendix A, Figure 2**). Drainage is generally to the southeast toward Green Pond Gully. Representative photographs taken at the Project Area are provided in **Appendix B**.

PROJECT BACKGROUND

Over the last five years, the Project Area has been subjected to several natural disasters including Hurricane Harvey and Tropical Storm Imelda both of which brought about unprecedented volumes of rainfall. The East China Relief Project is a drainage project that will address shallow and moderate home flooding that has and will continue to occur if not addressed. Ditch 600 is the main outlet for runoff flows from China. The existing drainage infrastructure within the Ditch 600 watershed is inadequate to convey flood flows from the area. A combination of improvements to existing ditches and new detention infrastructure are proposed to aid in flood relief.

PROJECT COMPONENTS

JCDD6 proposes to widen Ditch 600 from its origin in China eastward tying into a previous widening project. From the origin to Ditch 600's crossing with Lower Neches Valley Authority (LNVA) Beaumont Irrigation Canal, the widening would be done with the objective of creating linear detention capacity. This would tie into a detention basin excavated in an agricultural field adjacent to the Beaumont Irrigation Canal. In conjunction, these detention features would have a capacity of 447 acre-feet. Visual representation of the Project components is presented on aerial background in **Figure 3** (**Appendix A**).

PURPOSE AND NEED

PURPOSE

The purpose of the Project is to provide flood relief to residents of East China and their homes/personal property. Through FMA, FEMA provides grants for flood hazard mitigation projects as well as plan development. The FMA Program is authorized by Section 1366 of the National Flood Insurance Act of 1968, as amended (NFIA), 42. U.S.C. 4104c with the purpose of reducing or eliminating claims under the National Flood Insurance Program (NFIP).

NEED

Jefferson County experiences a relatively high level of rainfall. National Weather Service (NWS) statistics currently indicate an average annual rainfall rate at 56 inches. In 2001, Automated Local Evaluation in Real Time (ALERT) stations measured 103 inches of rainfall, and the Applicant's gauges have measured 80 inches of rainfall in

various years. The NWS statistics also indicate that a 24-hour rain event with a 100-year recurrence interval is 13 inches, though the highest point rainfall for a 24-hour period recorded by the Applicant is 24 inches, which occurred on June 7, 2001, during Tropical Storm Allison. Other tropical systems have impacted the region in recent years, including Rita, Ike, Harvey, and Imelda.

At the local level, China and the surrounding areas frequently experience high levels of rainfall that have resulted in moderate residential flood events. The capacity of Ditch 600 is inadequate to convey flows away from the Benefit Area, which includes approximately 273 homes and a population of 955 people. Thus, the residents of China need a solution to stormwater capacity/conveyance to reduce the frequency and likelihood of flooding to their properties.

ALTERNATIVES

NO ACTION ALTERNATIVE

The No Action Alternative would involve no acquisition of FEMA FMA grant funds and no construction of the proposed channel widening or detention areas. Thus, the No Action Alternative would result in continued flooding issues in East China.

PROPOSED ACTION

The Proposed Action would improve Ditch 600 from its origin in China eastward tying into a previous widening project. From the origin to Ditch 600's crossing with the LNVA Beaumont Irrigation Canal, the widening would be done with the objective of creating linear detention capacity. This would tie into a detention basin excavated in an agricultural field adjacent to the Beaumont Irrigation Canal. In conjunction, these detention features would have a capacity of 447 acre-feet. It is important to note that channel widening would avoid impacts to the pilot channel and excavation would occur above the pilot channel elevation on either side, creating readily accessible benches for floodwaters, thus increasing the overall channel width.

ALTERNATIVES CONSIDERED AND DISMISSED

For an Alternative Action, other parcels were considered for the detention basin and a different channel widening design was considered. Due to land use constraints and agricultural activities of the Project Area, finding an available parcel for the detention basin was not feasible or practicable. The design for channel widening under this alternative would have involved a complete widening of the channel bottom which would increase the overall added capacity as compared to the Proposed Action, but would also impact the existing pilot channel. Due to potential permitting requirements and general impacts to aquatic habitat, this channel design was determined to be unreasonable due to environmental constraints and impacts relative to the Proposed Action.

Table 1. Summary of Alternatives Considered for East China Ditch 600 Flood Risk Reductions and Reasons for Selecting the Proposed Action.

Alternative Considered	Meets Purpose and Need	Practicability	Availability	Reason for Elimination
No Action	No	No – does not meet purpose and need	N/A	Does not meet purpose and need
Proposed Action (Applicant's Preferred Alternative)	Yes	Yes – alternative is within cost expectation, is logistically feasible, technologically feasible	Yes – locations for preferred detention locations and channel widening extents are available	N/A – carried forward for NEPA analysis
Alternative Action	Yes	Yes – alternative is within cost expectation, is logistically feasible, technologically feasible	No - minimal opportunities to secure an alternative parcel for detention	Other locations to accommodate a detention basin are not available and potential impacts to aquatic habitat due to channel modification approach would be greater than Proposed Action

AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS

PHYSICAL RESOURCES

Geology, Soils, and Seismicity

Geologic development of the Texas Coastal Plain began approximately 220 million years ago and consisted of several periods of continental extension (rifting) and compression. As continental separation continued, rifts were eventually filled by marine salt, then subsequently buried by river sediment from the newly emerging Rocky Mountains. Additionally, rapid deposition of deltaic sands over marine mud resulted in linear fault zones of growth of various ages extending from northeastern Mexico into Louisiana also resulting in large oil and gas fields. The surface topography of the region tends to be

characterized by relict river channels, pimple mounds, and estuarine features and resources.

The proposed Project is located within the Beaumont Formation of Pleistocene age (UT-BEG, 1992). Regionally, soils consist of varying proportions of clays, silts, and sands originating from primarily stream channel, point-bar, natural levee, backswamp, and, to a lesser extent, coastal marsh and mud-flat depositional systems. Specifically, the Project Area is located on two general soil map units (NRCS, 2006) – the League-Beaumont-China and the Labelle-Morey-Meaton soil map units. Regarding detailed soil map units for the Project Area, this includes Labelle clay loam, Beaumont clay, League clay, and Viterbo silty clay loam (**Appendix A, Figure 4**). Labelle and League soils are considered Prime Farmland soils (NRCS, 2006). A letter was submitted to the NRCS on January 12, 2021 requesting review for the Project's consistency with the Farmland Protection Policy Act (FPPA) and the NRCS responded on July 12, 2022 indicating that the Project is exempt from the provisions of the FPPA (**Appendix C**).

No known seismic faults occur on the site or in the nearby area (UT-BEG, 1992). Occasional earthquakes do occur within the Coastal Plain, but these are usually situated between San Antonio and Corpus Christi. Additionally, much seismic activity (earthquakes and subsidence) within the Coastal Plain has been attributed to well injections associated with oil and gas field operations and groundwater pumping. Seismic activity in the Project Area is considered to have a low probability of occurrence.

No Action Alternative

Under the No Action Alternative, the construction of the proposed channel widening, or detention areas would not take place. Thus, the No Action Alternative would not affect geology, soils, or seismicity.

Proposed Alternative

Under the proposed alternative no impacts to geology or seismicity would be expected. Soils in the Project Area would be impacted through physical disturbance during construction and soil moisture would be affected from increased ponding depths and duration of inundation within the widened channel and detention basin. Prime farmland soils, which comprise a portion of the Project Area, could be affected depending on where excavated soils are placed.

Air Quality

The Clean Air Act (CAA) of 1970 requires the U.S. Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. The EPA established NAAQS for six criteria pollutants including carbon monoxide, nitrogen dioxide, lead, sulfur dioxide, fine particulate matter (PM10 and PM2.5), and ozone (O3). The EPA categorizes individual regions or counties into three levels of compliance with the NAAQS for criteria

pollutants: attainment, nonattainment, or unclassifiable. Attainment areas are those that meet the NAAQS; nonattainment areas are those that exceed the NAAQS and must develop and implement a plan to meet the NAAQS. Unclassifiable are areas that cannot be classified based on available information. Jefferson County in Texas is categorized as either unclassifiable or in attainment for all NAAQS (TCEQ, 2022).

Established under the CAA, the General Conformity Rule (40 CFR Part 51, subpart 54) ensures that Federal actions conform to the Texas State Implementation Plan (SIP). To proceed with a Federally funded project, a General Conformity program requires an emissions inventory to ensure that increased air pollution from the project does not negatively affect the state's emissions budget and SIP. The General Conformity Rule are applicable to projects located in nonattainment areas. A General Conformity Determination would not be required because Jefferson County is within attainment.

No Action Alternative

Under the No Action Alternative, the construction of the proposed channel widening, or detention areas would not take place. Thus, the No Action Alternative would result in no change to air quality. Jefferson County would continue to be in attainment status for NAAQS.

Proposed Alternative

During construction activities, particulate matter, carbon monoxide and nitrogen oxide, and other airborne pollutants may increase from earth moving activities and operation of construction machinery. However, the proposed Project is not expected to violate any federal, state, or local air quality standards. During construction activities, Best Management Practices (BMPs) would be implemented to reduce and control fugitive dust emissions. Impacts to air quality would be temporary and localized and expected to return to baseline conditions after construction is concluded. Jefferson County is expected to remain in attainment during and after project construction.

Climate Change

Texas has been experiencing climate change and the Project Area is no exception. Temperature increases of up to 1 degree (F) has happened in the past 100 years. Rainfall average has increased for the eastern portion of the state (but soil moisture is decreasing), but the timing and intensity of rainfall has changed as well (EPA, 2016). More catastrophic flooding has occurred in recent years, and several disaster declarations associated with flood impacts have resulted. These increased flood impacts are a significant driver of this Project.

No Action Alternative

Under the No Action Alternative, the construction of the proposed channel widening, or detention areas would not take place. Thus, areas surrounding Ditch 600 will continue to

experience increased flood risks and potential damages. Climate change trends would continue.

Proposed Alternative

Under the Proposed Action, flood risks and the potential for damages would be reduced or decreased through significant increases in stormwater storage capacity as well as improvements in conveyance. Climate change trends would continue, but the effects of climate change may be reduced in the East China area as it pertains to flooding.

WATER RESOURCES

Water resources are abundant in Southeast Texas. Below the surface, the Chicot and Evangeline Aquifers are the two primary sources of groundwater in the Beaumont area and are the youngest aquifers within the Gulf Coast aquifer system. The hydrogeologic units are laterally discontinuous fluvial-deltaic deposits of gravel, sand, silt, and clay that dip and thicken from northwest to southeast. Recharge to the aquifers generally occurs through the percolation of fresh water (precipitation, stream flow, lakes, etc.) along the aquifers' area of outcrop at the surface. The aquifers crop out in bands inland from and approximately parallel to the coast and become progressively more deeply buried and confined toward the coast. The Chicot, which comprises the youngest sediments, outcrops nearest to the coast, followed farther inland by the Evangeline outcrop. These outcrop areas are located north and west of the Project Area. Groundwater movement is generally from the area of outcrop toward the southeast (down-dip) but may vary in the vicinity of natural discharge points, such as along stream banks, or artificial discharge points, such as groundwater wells (TWDB, 2022).

The Texas Water Development Board (TWDB) online Groundwater Data Viewer was accessed to search for water well records within a 0.5-mile radius from the Project Area. No water wells were located within the Project Area; however, twelve wells are recorded within 0.5 mile. The 0.5-mile radius search and well locations are depicted in **Figure 5** (**Appendix A**). These wells all draw or used to draw water from the Chicot Aquifer. While no water wells were observed during a site visit, the online search and field effort do not preclude the existence of a well.

At the surface level, the Project Area falls within the Taylor Bayou watershed. The Taylor Bayou watershed is a relatively small watershed that captures most of the overland flow and runoff in northwestern Jefferson County. Many of JCDD6's maintained channels, including Ditch 600, drain into the Taylor Bayou watershed.

Water Quality

The receiving stream for the proposed Project, Taylor Bayou, is listed as an impaired stream above tidal. Segments 0701_01 and 0701_02 are listed as Category 5c segments with depressed dissolved oxygen levels by the Texas Commission on Environmental

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Quality (TCEQ, 2022). The TCEQ is required, under Section 303(d) of the federal Clean Water Act (CWA), to identify water bodies for which effluent limitations are not stringent enough to implement water quality standards. Category 5a water bodies do not meet applicable water quality standards or are threatened for one or more designated uses by one or more pollutants and Total Maximum Daily Loads (TMDLs) are underway, scheduled, or will be scheduled for one or more parameters. Category 5b segment water bodies do not meet applicable water quality standards or are threatened for one or more designated uses by one or more pollutants and a review of the water quality standards for this water body is conducted before a TMDL is scheduled. The TCEQ monitors the condition of the state's surface waters and assesses the status of water quality every 2 years. The TCEQ also develops a schedule identifying TMDLs that will be initiated in the next 2 years for priority impaired waters. The TCEQ submits this assessment to the EPA. The report is also published on the TCEQ web site as the Texas Integrated Report and 303(d) List (TCEQ, 2022). The List assigns each assessed water body to 1 of 5 categories to provide information to the public, EPA, and internal agency programs about water quality status and management activities.

No Action Alternative

Under the No Action Alternative, the construction of the proposed channel widening, or detention areas would not take place, thus, the No Action Alternative would not affect water resources or water quality in any way. Ditch 600's water quality would presumably remain the same as would water quality in the downstream receiving waterbodies.

Proposed Alternative

The Proposed Alternative is not anticipated to have any adverse effects to water resources or water quality. In some cases, stormwater detention infrastructure can actually improve water quality (Heitz et al., 2000). Although the additional water storage capacity through inline detention and the detention basin is primarily proposed to detain stormwater and provide flood relief, water quality improvements are more likely than degradation. Beyond Ditch 600, no other waterbodies are anticipated to be impacted by the Project. JCDD6 will coordinate with LNVA as necessary as it pertains to their Beaumont Irrigation Canal, however, no impacts are proposed. Based on the Project Area and proposed land disturbance exceeding 5 acres, the Project will be subject to requirements of the Texas Pollutant Discharge Elimination System (TPDES) Construction General Permit (CGP) TXR150000. As such, JCDD6 will prepare a Storm Water Pollution Prevention Plan (SWPPP) and will file a Notice of Intent (NOI) with TCEQ at least 48 hours prior to initiating construction. Monitoring and maintenance of erosion and sedimentation controls in accordance with BMPs will be conducted on a regular basis as prescribed by the TPDES CGP.

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Wetlands

Federal policy recognizes that wetlands have unique and significant public values and calls for the protection of wetlands. Executive Order (EO) 11990 sets forth policy directives associated with wetlands for federal agencies including (1) avoiding long and short-term adverse impacts associated with the destruction or modification of wetlands; (2) avoiding direct or indirect support of new construction in wetlands; (3) minimizing the destruction, loss, or degradation of wetlands; (4) preserving and enhancing the natural and beneficial values served by wetlands: and (5) involving the public throughout the wetlands protection decision-making process.

The term wetland refers to those areas that are inundated by surface water or groundwater with a frequency sufficient to support vegetation or aquatic life that requires saturated or seasonally saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, wet meadows, river overflows, mud flats, and natural ponds.

Under the CWA, the U.S. Army Corps of Engineers (USACE) is the regulatory authority for the discharge of dredged or fill material into waters of the U.S. (WOTUS), including jurisdictional wetlands, pursuant to Section 404 of the CWA.

According to the National Wetland Inventory (NWI) map (USFWS, 2022a), much of the Ditch 600 corridor within the Project Area is bordered by palustrine, farmed wetlands (Pf), including the proposed detention basin area. The farmed wetland designation is the result of past and present rice cultivation in the area. The NWI features identified in and around the Project Area are depicted in **Figure 6** (**Appendix A**).

Despite the NWI classifications, JCDD6 received an Approved Jurisdictional Determination (AJD) letter from the USACE on May 17, 2022, informing that the agricultural areas within the Project Area were not considered WOTUS, and therefore not regulated under Section 404. A copy of the AJD letter is provided in **Appendix C**.

No Action Alternative

Under the No Action Alternative, the construction of the proposed channel widening, or detention areas would not take place. Thus, the No Action Alternative would have no impacts to wetlands.

Proposed Alternative

Similar to the No Action Alternative, the Proposed Alternative is not anticipated to impact wetlands or other WOTUS. As described above, the USACE has determined that no wetlands or WOTUS are located within the Project Area. Freese and Nichols, Inc. (FNI) conducted a site visit on April 29, 2022, and did not observe any wetlands within the Project Area. Wetland conditions are present in the proposed detention basin location; however, these conditions are being artificially supported by rice cultivation and/or crawfish farming activities.

Floodplains

EO 11988 mandates that all federal agencies shall provide leadership and take action to reduce the risk of flood loss; to minimize the impact of floods on human safety, health, and welfare; and to restore and preserve the natural and beneficial values served by floodplains in carrying out their responsibilities for (1) acquiring, managing, and disposing of federal lands and facilities; (2) providing federally undertaken, financed, or assisted construction and improvements; and (3) conducting federal activities and programs affecting land use, including, but not limited to, water and related land resources planning, regulating, and licensing activities.

Before taking an action, each agency shall determine whether the proposed action will occur in a floodplain. For major federal actions significantly affecting the quality of the human environment, the evaluation would be included in any statement prepared under Section 102(2)(C) of the NEPA. The agency shall make a determination of the location of the floodplain based on the best available information.

There are many flood mitigation activities within areas of Jefferson County. The County of Jefferson has land use, building code, and permit authority over the land within its boundaries, including the authority to regulate development proposed within the special flood hazard areas designated on the county's Flood Insurance Rate Maps (FIRM). The Applicant seeks to obtain a FEMA grant that would help reduce the flooding of existing structures in the Benefit Area.

According to FEMA FIRMs, the proposed Ditch 600 drainage improvements are located in Zone X (unshaded), which is an area that is not inundated by 100- or 500-year flooding (**Appendix A, Figure 7**). The Project is located on FIRM panel numbers 4803850125C, 4803850110C, and 4803850120C dated August 6, 2002.

No Action Alternative

The No Action Alternative would have no effect on floodplains and flooding events would continue to have the same impacts on the China community as observed during similar past events.

Proposed Alternative

The Proposed Alternative will provide flood relief to the China community through significant increases in stormwater storage capacity as well as improvements in conveyance. Despite the Project Area not sitting within a mapped floodplain, JCDD6 has documented shallow to moderate structure (homes) flooding within the Benefit Area; the Benefit Area includes approximately 273 homes. The added detention area has been designed to accommodate the floodwaters troubling the China community, rather than accommodate additional growth. The Engineering Department at JCDD6 utilized Atlas 14 precipitation data and the USACE's Hydrologic Engineering Center's Hydrologic Modeling System (HEC-HMS) and River Analysis System (HEC-RAS) software to model the existing and proposed floodplain conditions for East China associated with the

Project, which are included in **Table 2** below. Since the FEMA 100-year floodplain will not be modified or affected the Project, a Letter of Map Adjustment (LOMA) or Letter of Map Revision (LOMR) should not be required.

Table 2. Existing and Proposed Floodplain Conditions for East China Based on Atlas 14 Precipitation Data.

Frequency	500-Year	r	100-Year	r	50-Year		10-Year	
Condition	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
Flow (cubic feet per second)	3271	2700	2283	2188	1863	1733	1143	780
Elevation (feet)	34.25	33.15	33.86	32.25	33.24	31.68	32.60	30.84

COASTAL RESOURCES

While Jefferson County's boundary does extend as far as the Gulf Coast, Sabine Lake, and into the General Land Office (GLO) Coastal Management Zone, the City of China is inland away from any coastal resources. Furthermore, Horizon Environmental Services, Inc. (Horizon), on behalf of JCDD6, submitted a Federal Consistency review request to the Texas GLO on January 25, 2021. On January 29, 2021, the GLO responded that no review would be completed due to the Project's location outside of the Coastal Zone (**Appendix C**).

Based on the Project Area existing beyond the limits of the Coastal Management Zone and the GLO's response to the agency coordination letter, the effect on coastal resources for both the No Action and Proposed Alternatives should be considered none.

BIOLOGICAL RESOURCES

Threatened and Endangered Species and Critical Habitat

Section 7(a) of the ESA requires all federal agencies to consult with and with the assistance of the Department of the Interior (DOI) U.S. Fish and Wildlife Service (USFWS) and/or National Oceanographic and Atmospheric Administration (NOAA), National Marine Fisheries Service (NMFS), to advance the purposes of the ESA by implementing programs for the conservation of endangered and threatened species, and to ensure that project actions and activities do not jeopardize the continued existence of threatened and endangered species or result in the destruction or adverse modification of the species' Critical Habitat.

Table 3, which was generated from the USFWS Information for Planning and Consultation (IPaC) website (USFWS, 2022b), provides a list of federally listed species which have been identified as potentially occurring in area of potential affect within Jefferson County. Only species that are listed as threatened or endangered by the USFWS have complete federal protection under the ESA. Information such as life history, habitat requirements, and potential project effects are provided below.

Table 3. List of Species Recognized by the USFWS as Threatened or Endangered and Which May Occur in Jefferson County¹, Texas.

	Common Name	Scientific Name	Federal Status	Potential Habitat in Project Area
Mammals	West Indian Manatee	Trichechus manatus	Т	No
Birds	Eastern Black Rail	Laterallus jamaicensis jamaicensis	Т	No
	Red-cockaded Woodpecker	Picoides borealis	Е	No
	Piping Plover	Charadrius melodus	T	No
	Red Knot	Calidris canutus rufa	T	No
	Whooping Crane	Grus americana	Е	No
Reptiles	Green Sea Turtle	Chelonia mydas	Т	No
	Hawksbill Sea Turtle	Eretmochelys imbricata	Е	No
	Kemp's Ridley Sea Turtle	Lepidochelys kempii	Е	No
	Leatherback Sea Turtle	Dermochelys coriacea	Е	No
	Loggerhead Sea Turtle	Caretta caretta	Т	No
Insects	Monarch Butterfly	Danaus plexippus	С	No
Plants	Texas Trailing Phlox	Ohlox nivalis texensis	Е	No

¹USFWS IPaC website, 2022b

^{*} E = Endangered, T = Threatened, C = Candidate

West Indian Manatee

Adult manatees are typically 9.8 feet long and can weigh around 2,200 pounds. They have two front flippers and a wide tail. West Indian Manatees are found in bays, estuaries, lakes, rivers, and shallow coastal waters. Manatees are herbivores and feed on a variety of submerged, floating, and emergent vegetation (USFWS, 2001). More recently, manatees were observed in Laguna Madre and South Padre Island in 2021 (Aguirre, 2021; Von Preysing, 2021). The USFWS has not designated Critical Habitat for the West Indian Manatee within Texas (USFWS, 2022b). It is unlikely that manatees would travel up the Neches River and occupy the Project area. The Project is not expected to affect the species.

Eastern Black Rail

The Eastern Black Rail are small black birds with white speckling on their back and wings with long dark legs and red eyes. Black rails occupy salt, brackish, and freshwater marshes. The Gulf coast subspecies can be found in higher elevation wetland areas with shrubby vegetation and dense cover. Their habitats included high elevation zones dominated by gulf cordgrass (*Spartina spartinae*), salt meadow cordgrass (*S. patens*), eastern baccharis (*Baccharis halimifolia*), salt grass (*Distichlis spicata*), and sea oxeye (*Borrichia fructescens*). Black rails are found year-round in Texas (USFWS, 2020a). No Critical Habitat for the species has been designated within the Project Area (USFWS, 2022b). No preferred habitat for the species were observed within the Project Area. No effect to the species is expected from the Project.

Red-cockaded Woodpecker

The endangered Red-cockaded Woodpecker (*Picoides borealis*) is small black-and-white woodpecker with a long bill. These woodpeckers live in mature pine forests and excavate cavities exclusively in living pine trees with preference for those infected with fungal red heart disease that softens heartwood. They also peck holes around actively used cavities so that the tree will exude resin that coats much of the tree, serving as defense against rat snakes and other predators (USFWS, 2003; Texas Parks and Wildlife Department [TPWD], 2022) database found no observations of red-cockaded woodpeckers within 5-miles of the Project Area. While it is possible that Red-cockaded Woodpeckers exist within vicinity of the Project Area, the Project Area itself lacks suitable mature pine forest habitat. Thus, the Project would have no effect on the species.

Piping Plover

The threatened Piping Plover (*Charadrius melodus*) is a small shorebird that inhabits coastal beaches and tidal flats (Haig and Elliott-Smith, 2004). Approximately 35 percent of the known global population of Piping Plover winters along the Texas Gulf coast, where they spend 60 to 70 percent of the year (Campbell, 2003). The Piping Plover population that winters in Texas breeds on the northern Great Plains and around the Great Lakes. From September to March, Piping Plovers are typically found along the Gulf Coast shoreline using beaches, sandflats, tidal mudflats, dunes, and dredge islands as

loafing and foraging areas (Haig and Elliott-Smith, 2004). TPWD (2022) data show no observations of Piping Plover within 5-miles of the Project Area. Habitat suitable for Piping Plover was not observed within the Project Area and no effect to species would result from the Project.

Red Knot

The threatened Red Knot (*Calidris canutus rufa*) is a medium-sized, stocky, short-necked sandpiper with a short, straight bill. The *rufa* subspecies, one of three subspecies occurring in North America, has one of the longest distance migrations known, travelling between its breeding grounds in the central Canadian Arctic to wintering areas in South America (USFWS, 2007). During migration and winter in Texas, Red Knots may be found feeding in small groups on sandy, shell-lined beaches, bay flats, and lagoons (Oberholser, 1974). It is an uncommon to common migrant along the coast, and a rare to casual inland, primarily in the eastern half of the state (USFWS, 2015). There have been no recorded observations of Red Knots within 5-miles of the Project Area (TPWD, 2022). No suitable habitat for the red knot was observed within the Project Area and no effects to the species would result from the Project.

Whooping Cranes

The whooping crane (*Grus americana*) are the tallest birds in North America and are known for their call, size, and white plumage. The migratory Texas population breeds and nests in northern Alberta, Canada during the summer and flies south to Aransas National Wildlife Refuge near Rockport, Texas where they spend the winter (USFWS, 2012). During migration, whooping cranes stopover in wetlands, fallow cropland, and pastures to roost and feed. Based on migration data compiled from a variety of information (Austin and Richert, 2001), the Project Area is located within the designated migration corridor for the whooping crane. Their preferred habitat includes coastal marshes, estuaries, inland marshes, lakes, and ponds. For feeding, they forage in brackish bays, marshes, and salt flats. TPWD (2022) data show no official observations reported within 5-miles of the Project Area. There is no suitable stopover habitat within the Project Area. Based on desktop analysis, no potential habitat is present within the proposed Project Area.

Sea Turtles

There are five species of sea turtles with the potential to occur within Jefferson County. Juvenile and adult sea turtles are more commonly found in shallow coastal and estuarine waters feeding on crabs, bivalves, jellyfish, and other crustaceans. Female sea turtles prefer to nest on beaches with deep sand (Campbell, 2003; USFWS, 2011). There are no Critical Habitat for sea turtles designated within the Project Area. It is highly unlikely that sea turtles would occupy the Project Area since there is no coastal habitat present. The Project is not expected to affect the five sea turtle species.

Monarch Butterfly

The Monarch Butterfly (Danaus plexipuss) is a candidate species for federal listing. USFWS has determined that listing the species was warranted, but a timeline on when listing is undetermined (85 FR 81813-81822). Adult Monarch Butterflies are large with bright orange wings with black borders and white spots. During the breeding season, Monarch Butterflies lay their eggs on milkweed (Asclepias sp.) plants. Due to their short lifespan, there are multiple generations of Monarch Butterflies within a breeding season and along their 3,000-mile migratory route. Monarch migration begins in early spring from February to March. During their breeding season, Monarchs are typically found in open grassland areas and plains. Important nectar sources include Coreopsis sp., goldenrods (Solidago sp.), Asters (Carlquistia sp.), gayfeathers (Latris sp.), coneflowers (Echinacea sp.), and milkweeds (Asclepias sp.). During the breeding season, monarchs lay their eggs on their obligate milkweed host plant (primarily Asclepias spp.) (USFWS, 2019). The eastern population of Monarch Butterflies can be found throughout Texas during its migratory season. Construction for the Project is not expected to impact Monarch Butterfly migratory route and the butterfly's host plant, milkweed is not typically found within the Project Area. It is unlikely that the Project will affect populations of Monarch Butterfly.

Texas Trailing Phlox

Texas Trailing Phlox is a fire-dependent, herbaceous perennial plant species. The flowering plant is often associated with long leaf pine (Pinus palustris) across the Big Thicket region of the East Texas Pineywoods in open pine-oak woods on sandy slopes. The phlox blooms in the spring and flowers are purple to lilac and rarely white. To date there are seven known extant populations of the species in Hardin, Polk, and Tyler Counties (USFWS, 2020b). There are no known observations of the plant within 5 miles of the Project Area (TPWD, 2022). The Project is not expected to affect the species.

No Action Alternative

The Project Area does not appear to contain any habitat suitable or critical to the listed species. Thus, the No Action Alternative would have no effect on federally listed species.

Proposed Alternative

Based on a review of the species life history, habitat requirements and the scope of the proposed Project, FEMA has determined that the proposed alternatives would have no effect on any federally listed species. There is no designated Critical Habitat within the Project Area, therefore the project alternatives would not adversely modify any Critical Habitat.

Migratory Birds

The Migratory Bird Treaty Act of 1918 makes it illegal to kill, capture, possess, transport, buy, sell, or trade any migratory bird parts (bones, feathers, etc.), nest, or eggs without

prior authorization by the USFWS (USFWS, 2020c). Many birds may nest or roost in trees, brushy areas, and other suitable habitat. These areas provide nesting habitat and support rookeries for migratory birds. The USFWS Information for Planning and Consulting website lists 12 migratory species that may have the potential to occur within the study area (**Table 4**) (USFWS, 2022b).

Table 4. Migratory Birds Listed by the USFWS that May be Found Within the Study Area

Common Name	Scientific Name	Season(s)
American Golden Plover	Pluvialis dominica	Migrating
American Kestrel	Falco sparverius palus	Breeding
Bald Eagle	Haliaeetus leucocephalus	Year-round
Gull-billed Tern	Gelochelidon nilotica	Breeding
Hudsonian Godwit	Limosa haemastica	Migrating
King Rail	Rallus elegans	Breeding
Lesser Yellowlegs	Tringa flavipes	Migrating
Prothonotary Warbler	Protonotaria citrea	Breeding
Red-headed Woodpecker	Melanerpes erythrocephalus	Breeding
Ruddy Turnstone	Arenaria interpres morinella	Migrating
Short-billed Dowitcher	Limnodromus griseus	Migrating
Willet	Tringa semipalmata	Breeding

No Action Alternative

Migratory birds are expected to utilize the Project Area for nesting. The No Action Alternative would not result in any impacts to migratory bird species.

Proposed Alternative

Vegetation clearing activities related to the Project has to potential to affect migratory bird nesting habitat. However, if clearing can be phased to occur outside of nesting season (March 1 to August 30), impacts to migratory bird species can be reduced. If tree removal activities must occur during the nesting season, JCDD6 will deploy a qualified biological monitor with experience conducting breeding bird surveys to survey the vegetation management area for nests prior to conducting work. The biologist will determine the appropriate timing of surveys in advance of work activities. If an occupied migratory bird nest is found, work within a buffer zone around the nest will be postponed until the nest is vacated and juveniles have fledged. The biological monitor will determine an appropriate buffering radius based on species present, real-time site conditions, and proposed vegetation management methodology and equipment. For work

near an occupied nest, the biological monitor would prepare a report documenting the migratory species present, the rationale for the buffer radius determination, and submit that report to FEMA for inclusion in project files. Migratory birds may eventually benefit from the increased riparian areas after construction of the alternative.

Wildlife Communities and Habitat

The Project Area is located within the Western Gulf Coastal Plains in the Northern Humid Gulf Coastal Prairies ecoregion. The ecoregion is characterized by gently sloping, mostly flat plains. Vegetation consists of tallgrass grasslands with clusters of oak mottes. Historically, wildlife included bison (*Bison bison*), pronghorn (*Antilocarpa americana*), and white-tailed deer (*Odocoileus virginianus*). Today, waterfowl and birds are still relatively abundant (Griffith et al., 2007). Other common wildlife species include raccoon (*Procyon lotor*), nine-banded armadillo (*Dasypus novemcinctus*), American bullfrog (*Rana catesbeiana*), Gulf Coast toad (*Bufo nebulifer*), diamond-backed watersnake (*Nerodia rhombifer*), American alligator (*Alligator mississippiensis*), red-tailed hawk (*Buteo jamaicensis*), and belted kingfisher (*Ceryle alcyon*) (Dixon, 2000; TPWD, 2022a). Common fish species may include largemouth bass (*Micropterus salmoides*), bullhead minnow (*Pimephales vigilax*), channel catfish (*Ictalurus punctatus*), and bluegill (*Lepomis macrochirus*). Invasive species such as red imported fire ants (*Solenopsis invicta*) and feral hogs (*Sus scrofa*) have been detrimental to native vegetation and wildlife (Griffith et al., 2007).

No Action Alternative

The No Action Alternative would not result in any direct impacts to wildlife or their habitats. Wildlife would continue to experience indirect impacts as human activity and development encroaches on or near wildlife habitats which can decrease abundance and overall species diversity within the ecosystem.

Proposed Alternative

In the proposed alternative, wildlife can be disturbed by construction noise and earth moving activities. Wildlife can temporarily relocate to other areas during construction activities, thereby temporarily decreasing species diversity and abundance within the Project Area. However, wildlife is expected to recolonize the area after construction is completed.

CULTURAL RESOURCES

Sections 106 of NHPA and its implementing regulation 36 CFR Part 800, requires agencies to consider the effects on historic properties of projects they carry out, assist, fund, permit, license, or approve throughout the country. Historic properties are those included in or eligible for listing in the National Register of Historic Places (NRHP), which may include archeological sites, historic sites, building, structures, objects, and

districts. Additionally, the Antiquities Code of Texas (ACT) requires political subdivisions of the state, such as JCDD6, to coordinate with the Texas Historical Commission (THC) for projects that will disturb greater than 5 acres or 5,000 cubic yards.

An archival desktop review for known cultural resources for the proposed Area of Potential Effects (APE) was completed. The archival desktop review conducted on the THC's online Texas Archeological Sites Atlas (TASA) restricted-access database indicates that no documented cultural resources, archeological sites, cemeteries, or historic properties listed on the NRHP and/or designated as State Antiquities Landmarks (SAL) are located within or immediately adjacent to the boundaries of the Project Area.

Historic Properties

Previously conducted surveys show an absence of historic-age structures within the Project Area. The site has been subject to historical farming practices, residential, and commercial use. The proposed Project includes the widening of existing man-made ditches and excavation of a detention basin, all within current and historical farmland, and the likelihood of remaining intact cultural deposits would be low. Horizon submitted a consultation letter to the THC requesting review by the State Historic Preservation Officer (SHPO) on January 12, 2021. The THC provided a response on January 26, 2021, stating that no identified historical property, archeological sites, or other cultural resources are present or affected. These letters are provided in **Appendix C**.

Based on the THC's response to the agency coordination letter, the effect on historic properties for both the No Action and Proposed Alternatives should be considered none.

Native American Cultural/Religious Sites

In accordance with EO 13175 for *Consultation and Coordination with Indian Tribal Governments*, FEMA conducted tribal consultations with federally recognized Indian tribal governments with interest to exchange information, receive input, and consider their views on actions that have tribal implications. Consultation with the Kiowa Tribe, Tonkawa Tribe, Jena Band of Choctaw Indians, and Alabama-Coushatta Tribe of Texas was conducted per 36 CFR §800.2(c)(2)(i)(B), dated September 22, 2022. Tribes were given 30 days to respond and or identify possible historic properties effected by this Project. The Kiowa Tribe, Tonkawa Tribe, Jena Band of Choctaw Indians, and Alabama-Coushatta Tribe of Texas did not provide comments within 30 days or declined to comment.

No Action Alternative

Under the No Action Alternative, the construction of the proposed channel widening, or detention areas would not take place. Thus, the No Action Alternative would not result in any impacts to Native American or Tribal cultural/religious sites.

Proposed Alternative

Based on tribal coordination and consultation, FEMA has determined that proposed project will not adversely affect traditional, religious, or culturally significant sites.

SOCIOECONOMIC RESOURCES

U.S. Census Bureau estimates for 2021 indicate a population of 253,704 for Jefferson County. A demographic profile of the area shows that approximately 39% of the population is reported as white, 34% as black, 22% as Hispanic, and 5% as other. The Project is not expected to affect the population of the area. The county population is the reference population for the Environmental Justice analysis below.

Local employment in Jefferson County is dominated by manufacturing jobs, with retail, construction, healthcare, and education occupations also being common. The median household income is reported as \$50,840; the national median household was reported as \$69,560 for 2020 by the U.S. Census Bureau, whereas the U.S. Department of Housing and Urban Development reported this amount to be \$78,700 for 2020 and \$79,900 for 2021.

Environmental Justice

EO 12898, entitled Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, mandates that federal agencies identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of programs on minority and low-income populations. The Council on Environmental Quality (CEQ) Environmental Justice guidance document defines minority populations as areas that have a substantially higher percentage of minorities in comparison to the general population or other appropriate unit of geographic analysis (CEQ, 1997). Based on the statistics presented in the socioeconomic analysis, there is a potential for individuals with environmental justice concerns within Jefferson County. However, by necessity, the proposed Project is in the vicinity of the area for which it is designed to provide flood protection and there are no low-income residences in the immediate vicinity of the Project.

No Action Alternative

Under a No Action Alternative, continued flooding of structures would continue to place a burden on local, state, and federal flood relief resources and would also continue to depress property values. Although no low-income residents occur in the immediate vicinity, these continued flood impacts may have disproportionate effects to those residences with relatively lower income.

Proposed Alternative

The proposed Project is not expected to have adverse or disproportionate impacts on minority or low-income populations. The benefits of the proposed Project are expected to be proportional to all residents in the Benefit Area. No existing residential properties or structures will be adversely affected by the Project.

Hazardous Material

FNI conducted a desktop hazardous materials review to evaluate the presence of regulated materials sites and recognized environmental conditions (RECs) in accordance with American Society for Testing and Materials (ASTM) International Standard E-1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (2013) and EPA Standards and Practices for All Appropriate Inquiries (AAI), Final Rule to characterize environmental conditions in the Project Area by evaluating factors such as land use, site history, obvious indicators of environmental contamination, and the presence of adjacent or nearby properties that could pose environmental concerns(Banks Environmental Data Inc., 2022)

Table 5 below summarizes the findings of the regulatory database search. Thirteen records of mapped properties were identified, most of which were located along Highway 90. Of the thirteen, three properties were identified as a Low Historical REC (HREC). **Figure 8** (**Appendix A**) depicts the location of all mapped properties listed in **Table 5**. After reviewing the surrounding properties identified in the regulatory record database search, none of the sites were determined to pose an ongoing potential REC or REC relative to the Property or the proposed Project.

A records search was conducted to determine the presence of active oil or gas wells that may exist on or within 500 feet from the Property. The records reviewed indicated the presence of three dry hole wells and one active oil well. None of these records indicate any release of contaminants that could affect the Project Area. No major utility pipelines occur within the Project Area.

No Action Alternative

The No Action Alternative would not impact or contribute to hazardous materials in the Project Area.

Proposed Alternative

Since no hazardous materials occur in the Project Area, the Proposed Alternative would not impact or contribute to hazardous materials in the Project Area.

Table 5. Summary of Findings from the Banks Environmental Database Report.

Facility Name Address	Relative Location	Potential Environmental Risk	Regulatory Database	Comments
JD Resale 140 E Highway 90 China, TX 77613	0.13 miles SW	Low	LPST	 Final pending well plug No apparent receptors impacted. Closure date 6/27/2008.
Kibodeaux Grocery 229 N Broadway St China, TX 77613	0.17 miles W	Low HREC	LPST	 Final concurrence issued. Soil contamination only. Site closure 1/11/2001.
China Elementary Campus 717 Broadway St, China, TX 77613	0.25 miles NW	Low HREC	LPST	Final concurrence issued.Soil contamination only.Closure date 2/15/1991.
Jefferson Hardin ISD 717 Broadway St, China, TX 77613	0.25 miles NW	Low HREC	LPST	 Final concurrence issued. Soil contamination only. Closure date 9/1/1992.
Frank Lewis 303 Hwy 90 W China, TX 77613	0.1 miles S	Low	PST	- Three empty 2,000 gallon tanks removed from ground.
Pricewise 107 212 Hwy 90 E China, TX 77613	0.11 miles S	Low	PST	- Three 4,000 gallon tanks containing gasoline in use.

Facility Name Address	Relative Location	Potential Environmental Risk	Regulatory Database	Comments
J&D Resale 140 E Hwy 90, China, TX 77613	0.13 miles SW	Low	PST	 Two 1,000 gallon tanks containing gasoline removed from ground. One 500 gallon tank containing gasoline removed from ground. One 500 gallon tank containing kerosene removed from ground.
Road & Bridge China SVC CTR 111 W Railroad Ave China, TX 77613	0.16 miles W	Low	PST	 One 1,000 gallon tank containing gasoline removed from ground. One 500 gallon containing gasoline and one 1,000 gallon tank containing diesel permanently filled in place.
China Market 229 N Broadway St China, TX 77613	0.17 miles W	Low	PST	 One 4,000 gallon tank containing diesel in use. Three 4,000 gallon tanks containing gasoline removed from ground. One 4,000 gallon tank containing gasoline in use. One 6,000 gallon tank containing gasoline in use. One empty 4,000 gallon tank removed from ground.
China Elementary Campus 717 Broadway St China, TX 77613	0.25 miles NW	Low	PST	- One 1,000 tank containing gasoline removed from ground.

Facility Name Address	Relative Location	Potential Environmental Risk	Regulatory Database	Comments
Moreaux Brothers Trucking	0.16 miles SW	Low	HW	Inactive transporterNo violations found
150 W Hwy 90 China, TX 77613				
Moreaux Brothers Trucking Inc.	0.16 miles SW	Low	HW	Merged transporterNo violations found
150 W Hwy 90 China, TX 77613				
Moreaux Brothers Trucking Inc.	0.16 miles SW	Low	RCRA	- Inactive non-generator
150 W Hwy 90 China, TX 77613				

Noise

The Project Area is generally surrounded by undeveloped agricultural land with some residential development present along the western terminus/origin of Ditch 600. Existing noise is generated by agricultural operations (e.g. tractors) and traffic along US 90 to south of the Project Area. The noise level is generally low.

No Action Alternative

Under the No Action Alternative, the construction of the proposed channel widening, or detention areas would not take place. Thus, under a No Action Alternative, noise levels in and around the Project Area would remain unchanged and at generally low levels.

Proposed Alternative

The Proposed Alternative will introduce temporary elevated noise levels associated with the heavy machinery and equipment needed to construct the Project. Following construction, there will be no continuous or permanent noise generation associated with the Project. Occasional mowing as part of the necessary maintenance regime would result in temporary noise generation, however, JCDD6 currently mows the Ditch 600 right of

way (ROW), so the changes associated with the Project should be considered minimal and not adverse.

Traffic

The only major transportation corridor near the Project Area is US 90. Traffic is generally low on US 90, with peak flow correlated with accidents on Interstate Highway (IH) 10 to the south causing traffic between Houston and Beaumont to reroute via US 90. The remainder of the roadways in and around China are single-lane each way with relatively low traffic volumes.

No Action Alternative

Under the No Action Alternative, the construction of the proposed channel widening, or detention areas would not take place. Thus, the No Action Alternative would not affect traffic near the Project Area.

Proposed Alternative

The Proposed Alternative is not expected to have any significant or long-term impacts to traffic. Construction access will be coordinated carefully as to not impede access of nearby residents to their homes or any public services. There may be short-term traffic congestion on Turner Road due to the movement of construction equipment and machinery and/or dump trucks should any fill material need to be hauled away from the Project Area for disposal. Appropriate traffic control measures and signage will be used during construction.

Public Service and Utilities

Public Services are provided to local residents by the City of China as well as Jefferson County. The City is responsible for water utilities. Electric is provided via Entergy and Jasper-Newton Electric Co-op. FNI researched the Public Utility Commission (PUC) Water and Sewer Certificate of Convenience and Necessity (CCN) Viewer and did not observe any mapped utility lines within the Project Area. Similarly, FNI reviewed the Railroad Commission of Texas (RRC) for documented oil or gas wells and pipelines. One dry hole was observed in the Project Area. Beyond the Project Area there is one oil well, two gas wells and several other dry holes documented nearby.

No Action Alternative

Under the No Action Alternative, the construction of the proposed channel widening, or detention areas would not take place. Thus, the No Action Alternative would have no effect on public service and utilities.

Proposed Alternative

The Proposed Alternative is not anticipated to impact public services to residents of China. JCDD6 will conduct appropriate utility surveys prior to construction and

coordinate with any utility providers as needed. If any undocumented utilities, pipelines, cables, or wells are encountered during construction, JCDD6 would stop activities and report to the appropriate agency.

Public Health and Safety

Currently the site is agricultural fields or used as stormwater drainage features, and there are normally no safety risks associated with the proposed Project Area except potentially during flood events associated with storms and hurricanes. Safety issues during construction and machinery would include construction traffic entering and exiting the Project Area. The purpose of the Project is to convey stormwater during flood stages. Once the Project is completed, the risk of flooding in the affected area will be decreased.

No Action Alternative

The No Action Alternative would not change the risk of flooding within the affected area. Potentially life-threatening flooding during severe storms or hurricanes will still persist. Continued flooding of structures in the area would continue to place a burden on local, state, and federal flood relief resources and depress property values.

Proposed Alternative

The proposed alternative is intended to alleviate flooding risks and damages within the affected area. Public health and safety is expected to benefit from the Project's goal of conveying floodwaters from public property to detention areas.

Zoning and Land Use

The Project Area lies just beyond any officially zoned areas in the City of China based on the City's zoning map viewer. The nearest zoned areas (and majority of the City's zoning in general) are classified as Single-Family Dwellings. Other zoning classifications include Neighborhood Business, Community Business District, Industrial, and Multi-Family Dwellings which are all closely associated with Broadway Ave and US 90. Land use in and around the Project Area is generally residential or agricultural.

No Action Alternative

Under the No Action Alternative, the construction of the proposed channel widening, or detention areas would not take place. Thus, the No Action Alternative would not affect zoning or land use.

Proposed Alternative

The Proposed Alternative is not anticipated to affect zoning in the City of China. The majority of the affected area is agricultural land. The Project will convert some agricultural land to stormwater infrastructure; however, these changes are considered minimal and necessary.

SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Table 6. Summary Table

Resource	Anticipated Effects	Mitigation Measures
Geology, Seismicity, and Soils	Geology – no impacts. Seismicity – no impacts. Soils – Conversion of prime farmland soils.	Project is exempt from FPPA. No mitigation measures proposed.
Air Quality	Temporary increase of dust and exhaust emissions during construction. No post-construction effects.	Contractors will water down construction areas as needed to mitigate excess dust. Vehicle running times on site will be kept to a minimum and engines will be properly maintained.
Climate Change	No impacts; potential reduction of climate change effects via reduction of flooding.	No mitigation measures proposed.
Water Resources and Water Quality	Groundwater – no anticipated impacts. Surface water quality – temporary, minor impacts; potential improvements post-construction. Developed water resources – no impacts.	JCDD6 will comply with conditions of Construction Storm Water General Permit TXR 150000, including preparation of SWPPP and implementing BMPs.
Wetlands	Regulated impacts to jurisdictional wetlands or "waters of the US" will be avoided based on the USACE AJD. Spoil material will be disposed of in non-wetland areas.	BMPs will be implemented to prevent erosion and sedimentation to surrounding, nearby or adjacent wetlands. This includes equipment storage and staging of construction to prevent erosion and sedimentation.
Floodplains	No adverse impacts to the 100-year or 500-year floodplain.	No mitigation measures proposed.
Coastal Resources	No impacts; Project is not within the Coastal Zone Boundary.	No mitigation measures proposed.

Resource	Anticipated Effects	Mitigation Measures
Threatened or Endangered Species and Critical Habitat	No impacts.	No mitigation measures proposed.
Migratory Birds	Minor vegetation clearing activities would reduce available habitat; adverse impacts are not anticipated.	To minimize impacts to migratory bird species, JCDD6 will limit tree removal work during the peak migratory birdnesting period of March through August as much as possible. Otherwise, JCDD6 will deploy a qualified biological monitor.
Wildlife Communities and Habitat	Land clearing activities would temporarily reduce available habitat; adverse impacts are not anticipated.	JCDD6 will review and implement BMPs as recommended by TPWD in their letter dated March 8, 2021 (Appendix C).
Cultural Resources	No anticipated impacts per SHPO letter dated January 26, 2021 (Appendix C).	In the event that archeological deposits, including any buried cultural resources or human remains, are uncovered, the Project shall be halted and the Applicant shall stop all work immediately in the vicinity of the discovery and take all reasonable measures to avoid or minimize harm to the finds. All archeological findings will be secured by JCDD6, and access to the sensitive area will be restricted by JCDD6. The applicant will inform FEMA immediately, and FEMA will consult with the SHPO. Work in sensitive areas shall not resume until consultation is completed and until FEMA determines that the appropriate measures have been taken to ensure complete project compliance with the NHPA.

Resource	Anticipated Effects	Mitigation Measures
Environmental Justice	No impacts.	No mitigation measures proposed.
Hazardous Materials	No impacts.	Unusable equipment, debris and material shall be disposed of in an approved manner and location. In the event significant items (or evidence thereof) are discovered during implementation of the Project, applicant shall handle, manage, and dispose of petroleum products, hazardous materials and toxic waste in accordance to the requirements and to the satisfaction of the governing local, state and federal agencies.
Noise	Temporary equipment and machinery noise during construction; no long-term impacts anticipated.	Construction activities will take place during normal business hours. Machinery operating at the proposed Project Area will meet all local, state, and federal noise regulations.
Traffic	Potential, temporary traffic interruptions during construction; no long-term impacts anticipated.	Traffic control measures will be implemented during construction as needed.
Public Services and Utilities	Public services – no impacts. Utilities – no impacts Pipelines – no impacts.	No mitigation measures proposed. If any undocumented utilities or pipelines are uncovered during construction activities would cease and the proper entities (e.g. TCEQ or RRC) would be contacted.
Public Health and Safety	No adverse impacts; improvements to public health and safety as a result of decreased flooding.	The appropriate signage and barriers will be in place prior to construction activities to alert pedestrians and motorists of Project activities.

Resource	Anticipated Effects	Mitigation Measures
Zoning and Land Use	1	No mitigation measures proposed.

CUMULATIVE IMPACTS

To qualitatively discuss potential cumulative impacts, it is necessary to consider past, present, and reasonably foreseeable actions that did or could result in lasting impacts. Following the identification of those impacts, it is necessary to consider the direct and indirect permanent impacts of the proposed alternatives. In considering potential cumulative impacts associated with the proposed alternatives and in conjunction with the past, present, and reasonably foreseeable actions, evaluation of cumulative impacts would be spatially bounded to the general Project region and temporally bounded by approximately 5 years in the past and 5 years into the future.

To consider past, present, and reasonably foreseeable actions in the general Project region within the past or future 5 years, we reviewed proposed Capital Improvement Projects (CIPs) for Jefferson County (Jefferson County, 2021) and City of Beaumont. In addition, the County flood risk reduction projects are also considered in this analysis. To capture actions occurring in the last 5 years, past aerial imagery was reviewed for construction activity in the region. Based on this review of CIP project and aerial imagery, the following past, present, and reasonably foreseeable actions that were considered include:

- Various Jefferson County park improvements
- Flood Risk Reduction Projects
- Agricultural Activities

Potential impacts of these past, present, or reasonably foreseeable projects are not readily available, so this discussion of their impacts is conceptual and qualitative. Park improvements, particularly land acquisition, can reduce flood impacts through the preservation of green space and floodways. Similarly, flood risk reduction projects could improve or maintain water quality, while reducing potential flood damages. Agricultural activities in the region can result in both positive and negative impacts in that rice, crawfish farming, turf farming, and fallow fields all provide wildlife with habitat and these areas may also help reduce flood impacts since they offer large pervious areas for infiltration or storage. Temporary and localized impacts for all of these projects would be expected during construction, but implementation of BMPs and compliance with environmental regulations may reduce or eliminate substantial temporary impacts.

The Proposed Action, in conjunction with some of these past, present, and reasonably foreseeable actions, could contribute to potential cumulative impacts. All of these kinds of projects have the potential to help with flood risk reduction, so in combination with the

Proposed Action, cumulative effects should be beneficial. This is particularly true when considering proposed flood risk reduction efforts for Ditch 505 and South Nome, which are within the same watershed or drainage area. Also, the past action of Ditch 600 channel widening performed downstream of this Project would also yield positive cumulative effects in terms of flood risk reductions.

AGENCY COORDINATION, PERMITS AND PUBLIC INVOLVEMENT

Agency Coordination

Prior to the preparation of this EA, JCDD6 contracted Horizon to complete environmental work related to the Project. As such, agency coordination was handled by Horizon and is summarized below:

- General Land Office (GLO)
 - A letter was submitted requesting review and concurrence on January 12, 2021
 - o GLO responded on January 29, 2021
- Jefferson County (Local Floodplain Administrator)
 - o A letter was submitted requesting review and concurrence on January 12, 2021
- Natural Resources Conservation Service (NRCS)
 - o A letter was submitted requesting review and concurrence on January 12, 2021
 - o NRCS responded on July 12, 2022
- Texas Commission on Environmental Quality (TCEQ)
 - o A letter was submitted requesting review and concurrence on January 12, 2021
 - o TCEQ responded on February 4, 2021
- Texas Historical Commission (THC)
 - o A letter was submitted requesting review and concurrence on January 12, 2021
 - o THC responded on January 26, 2021
- Texas Parks and Wildlife Department (TPWD)
 - A letter was submitted requesting review and concurrence on January 12, 2021
 - o TPWD responded on March 8, 2021
- Texas Water Development Board (TWDB)

- o A letter was submitted requesting review and concurrence on January 12, 2021
- U.S. Army Corps of Engineers (USACE)
 - o A letter was submitted requesting review and concurrence on January 12, 2021
 - o USACE responded on May 17, 2022
- U.S. Fish and Wildlife Service (USFWS)
 - o A letter was submitted requesting review and concurrence on January 12, 2021

During the preparation of EA, FEMA contacted the following Federally Recognized Tribes with interest for consultation and invited them to participate in a historical review process by assisting in identifying historical properties of interest within the Project Area:

- Kiowa Tribe,
- Tonkawa Tribe
- Jena Band of Choctaw Indians
- Alabama-Coushatta Tribe of Texas
 - o Consultation letters were sent to the tribes on September 22, 2022
 - Tribes were given 30 days to respond and or identify possible historic properties effected by this Project

No responses were received from any of the tribes. The agency coordination letters and responses received are included in **Appendix C**.

Permits

The TPDES CGP TXR150000 and SWPPP are the only required permits that have been identified for the Project. Based on the Project Area not existing within a FEMA-mapped floodplain, no LOMA or LOMR are required. The USACE has determined that no Section 404 permit is required.

Approval for the Project is being sought via FEMA through this EA in order to obtain FMA grant funding.

Public Involvement

A Notice of Availability of the Draft EA will be published in the Beaumont Enterprise (**Appendix D**) and on FEMA's website (https://www.fema.gov/emergency-managers/practitioners/environmental-historic/region/6) requesting public comments. FEMA will consider and respond to all public comments in the Final EA. If no substantive comments are received for the Draft EA, then it will become final and a FONSI will be issued for the Project.

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madre/.>

LIST OF PREPARERS AND REVIEWERS

Organization	Name	Education/Expertise	Contribution
Freese and Nichols, Inc.	Michael Lane, PWS	M.S., Environmental Science; 9 years experience	Project Manager; Water Resources, Coastal Resources, Noise, Traffic, Public Service and Utilities, and Mitigation.
	Tom Dixon	M.S., Wildlife Ecology; 18 years experience	Senior Advisor; Climate Change, Environmental Justice, and Cumulative Impacts
	Michelle Clement, P.G.	M.S., Geology; 8 years experience	Geoscientist; Geology, Soils, and Seismicity & Hazardous Material
	CJ Sellers	B.S., Environmental Science; 10 years experience	Environmental Scientist; Cultural Resources & GIS Analysis
	Tam Tran	B.S., Ecology, Evolution & Behavior; 12 years experience	Biologist; Air Quality, Biological Resources, and Public Health and Safety
	Brynn Putnam	B.S., Biology; 5 years experience	Environmental Scientist; List of Tables, List of Figures, document formatting
	Kelsey Calvez	B.S., Environmental Geoscience; 7 years experience	Environmental Scientist; Quality Control
Jefferson County Drainage District No. 6	Doug Canant, P.E.		District Engineer (Retired)
	Butch Wilson, P.E.		District Engineer
Horizon Environmental, Inc.	Lee Sherrod		Previous JCDD6 Consultant; Baseline Studies & Agency Coordination
FEMA	Dorothy Cook		Senior Environmental Protection Specialist, Quality Control

Kevin Jaynes	Regional Environmental Officer, Quality Control
Sarah McGovern	Environmental Protection Specialist, Quality Control
Subha Pandey	Environmental Protection Specialist, Quality Control

APPENDICES

APPENDIX A Figures

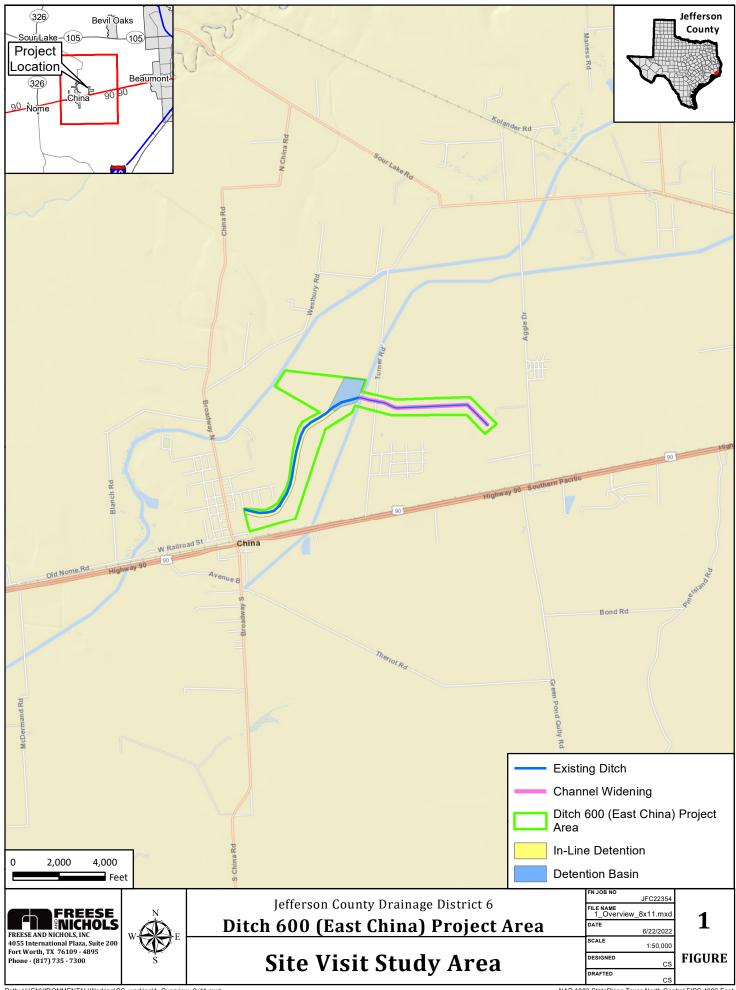
APPENDIX B Representative Photos

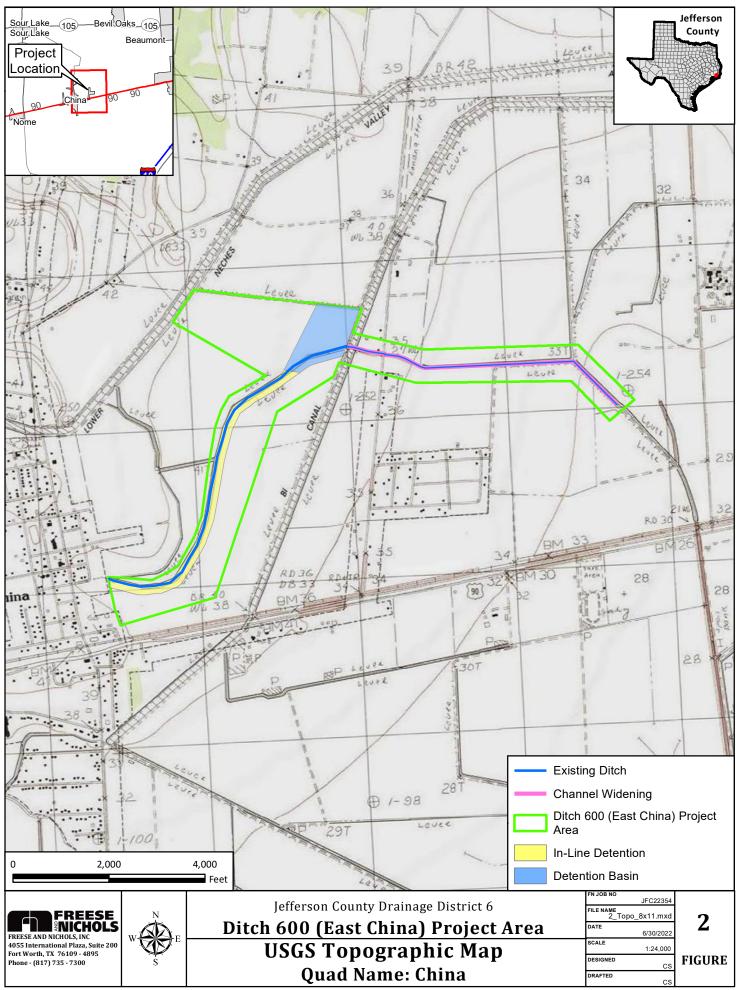
APPENDIX C Agency Coordination Letters & Responses Received

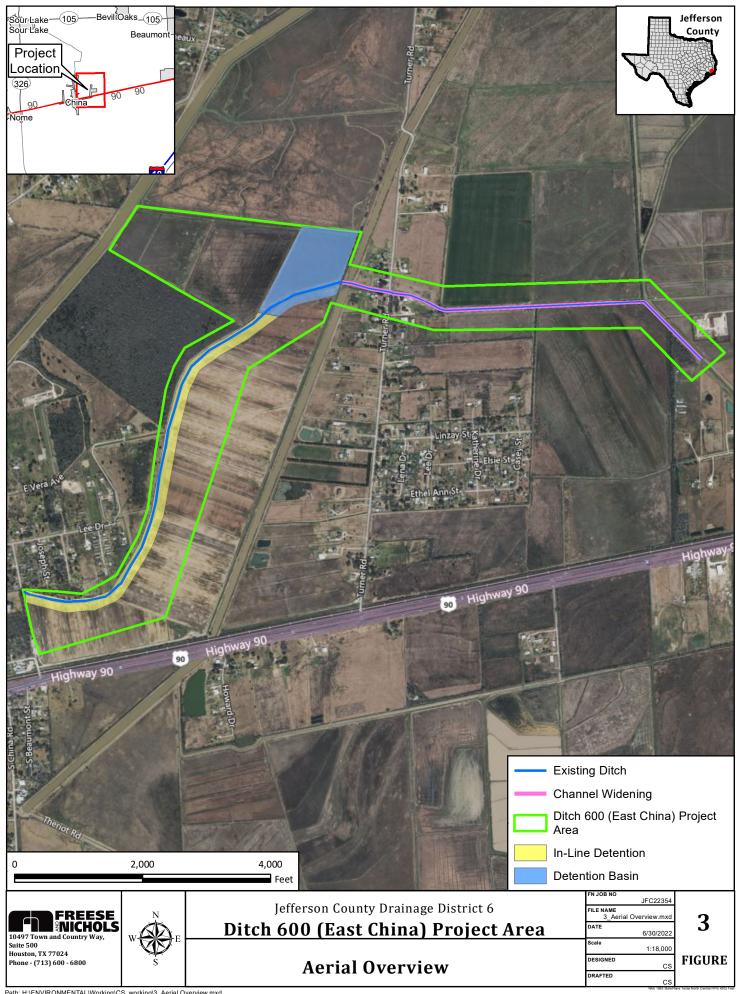
APPENDIX D FEMA Notice of Availability

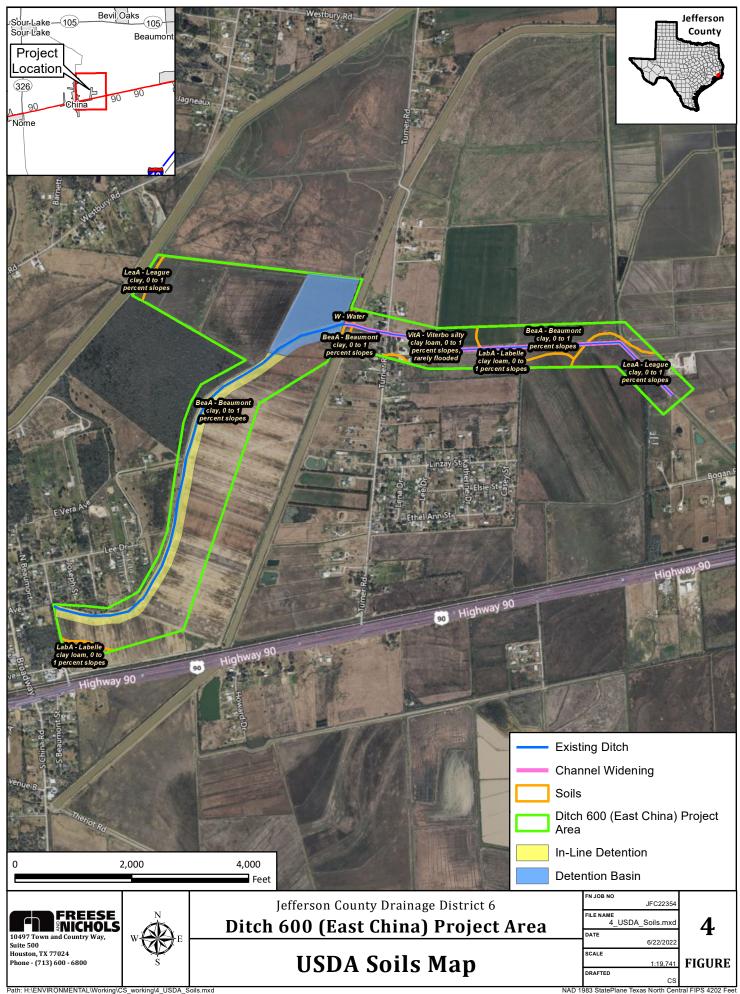
APPENDIX A

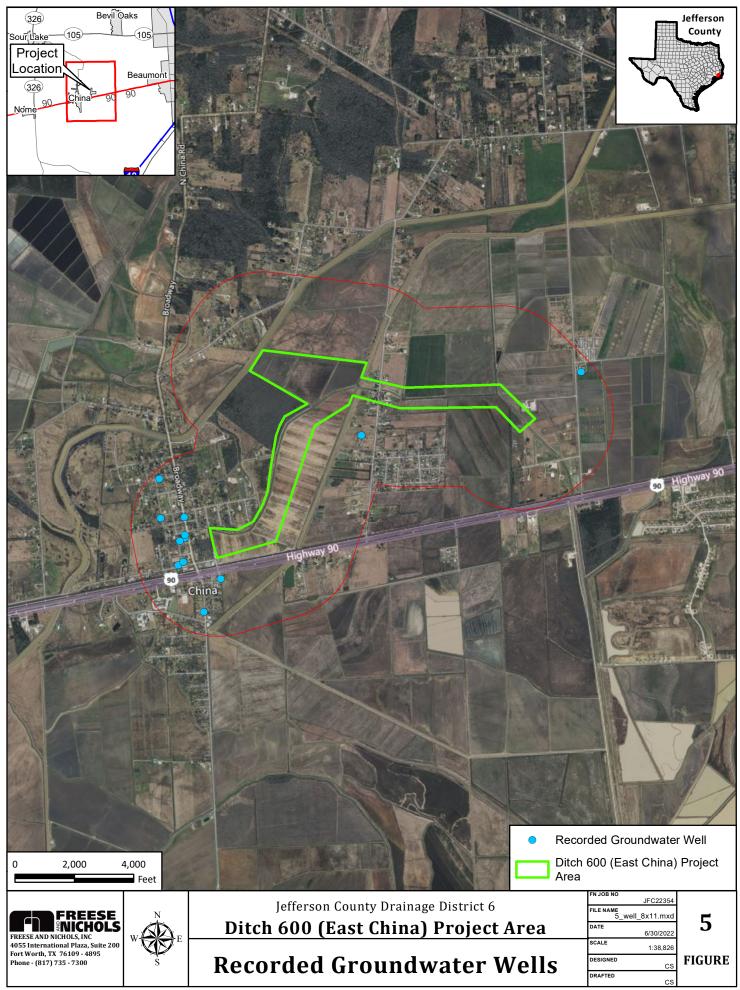
Figures

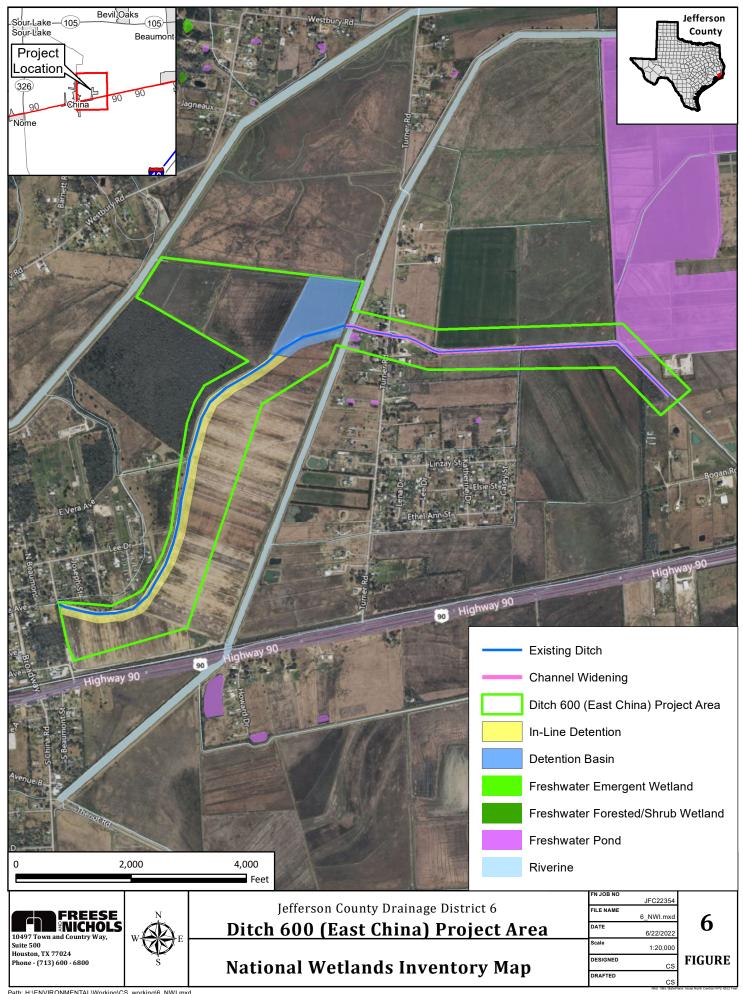


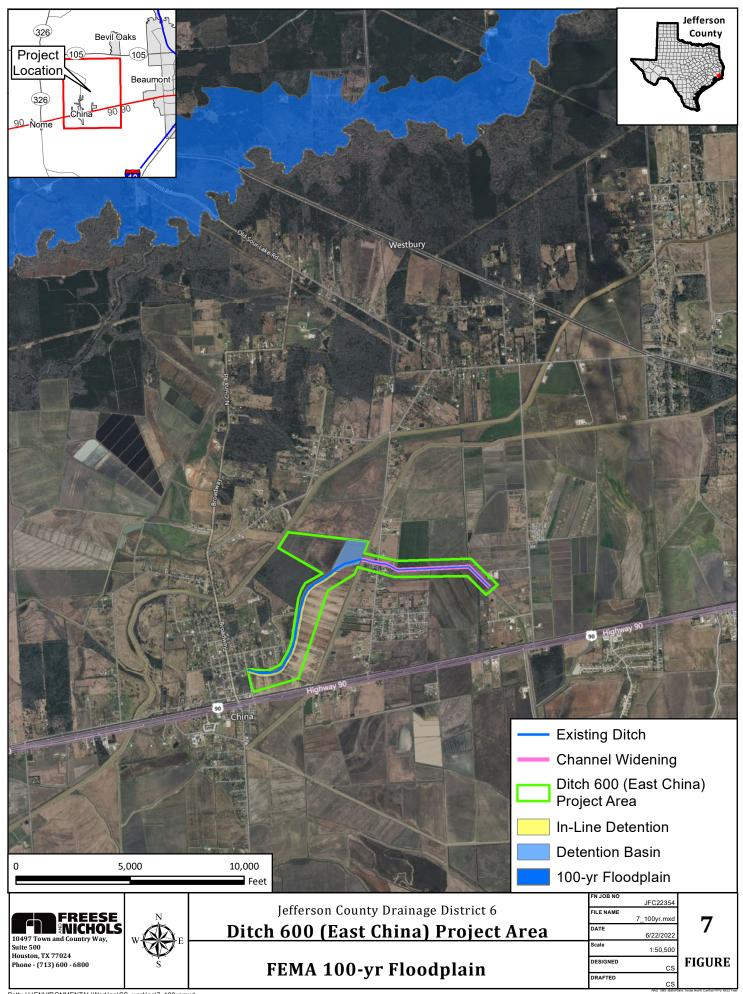


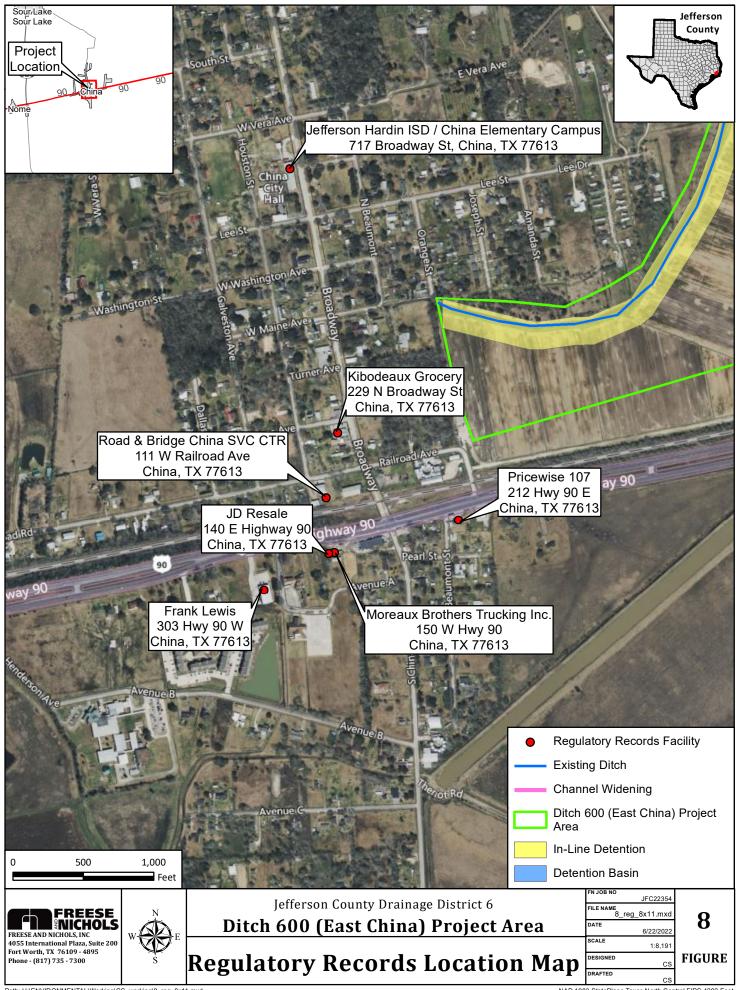












APPENDIX B Representative Photos



Photograph 1. This photo was taken by FNI staff during the April 29, 2022 site visit. The photo was taken at Turner Road (latitude/longitude: 30.06409, -94.31538) facing west. The photo shows the general width and condition of the channel. The JCDD6 is proposing to widen the channel to improve drainage downstream of the detention basin.



Photograph 2. The photo was taken at Turner Road (lat./long.: 30.06409, -94.31538) facing east. The photo shows the general width and condition of the channel. The JCDD6 is proposing to widen the channel to improve drainage downstream of the detention basin.



Photograph 3. The photo was taken at the proposed corner of the detention basin (lat./long.: 30.06287, -94.32277) facing north. The photo shows the corner of a flooded agricultural field. The JCDD6 is proposing to deepen the agricultural area to increase capacity and detain more water during storm events.



Photograph 4. The photo was taken at lat/long: 30.06342, -94.32152 facing southeast down the channel. The JCDD6 is proposing to widen the channel to improve conveyance and drainage.



Photograph 5. The photo was taken at lat/long: 30.05737, -94.32683 facing northeast. The JCDD6 is proposing to widen the channel to improve conveyance and drainage.



Photograph 6. The photo was taken at lat/long: 30.05737, -94.32683 facing southwest. The JCDD6 is proposing to widen the channel to improve conveyance and drainage.

APPENDIX C Agency Coordination Letters & Responses Received



Environmental Services, Inc.

12 January 2021

Consistency Review Coordinator
Texas General Land Office
P. O. Box 12873
Austin, Texas 78711-2873
Federal Consistency <Federal.Consistency@GLO.TEXAS.GOV>

RE: Proposed Jefferson County Drainage District No. 6 Project:

East China Relief

China, Jefferson County, Texas

HJN 21007-001EA

Dear Sirs:

Jefferson County Drainage District No. 6 (DD6) implements and maintains drainage projects throughout the Districts' 486 square mile area located in Jefferson County and includes the cities of Beaumont, Bevil Oaks, China and Nome, Texas. DD6 also works with other jurisdictions to indentify flood-prone areas, to encourage inclusion of flood-damage avoidance measures in land development. DD6 has applied to the Federal Emergency Management Agency (FEMA) for grant funding to assist with the improvement to drainage of existing portions of China, north of US 90 in Jefferson County. Environmental reviews are required under the National Environmental Policy Act (NEPA) and the Council on Environmental Quality Guidelines, 40 CFR Parts 1500 to 1508. This coordination letter is being provided for your agency's' response in conformance with NEPA procedures.

The project will involve widening a portion of Ditch 600 (Green Pond Gully) approximately 140 feet wide beginning on the east side of the Town of China and extending along the south side of the ditch for approximately 1.5 miles to the LNVA Beaumont Industrial Canal near Turner Road to create in-line detention. Additionally, a 19.5-acre detention basin will be constructed north of the ditch (see project figures in Appendix 1). Ditch 600 will also be widened to a 20 ft bottom width for approximately 1.2 miles downstream of the detention areas.

Appendix 1 contains maps depicting the proposed drainage improvement project, including an aerial view of the project area and a topographic map of the project area. Note that the project area is not located within the Coastal Zone boundary of Texas. Land use of the surrounding area is agricultural, residential, and commercial.

Please review the attached figures and information concerning the proposed project to determine if the project is consistent with your agency's environmental regulations or policies. Please respond by letter at your earliest convenience. Your prompt attention to this matter would be greatly appreciated, as your signed concurrence letter is necessary to complete the application for grant funding from FEMA.



Please call me should you have any questions concerning this project or if I can be of any further assistance.

Sincerely,

For Horizon Environmental Services, Inc.

C. Lee Sherrod

Senior Project Manager



APPENDIX 1

PROJECT FIGURES





Figure 1: Location



Figure 2: Project



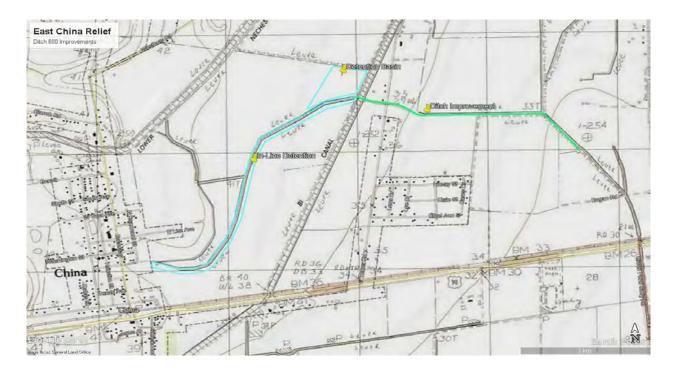


Figure 3: Topo

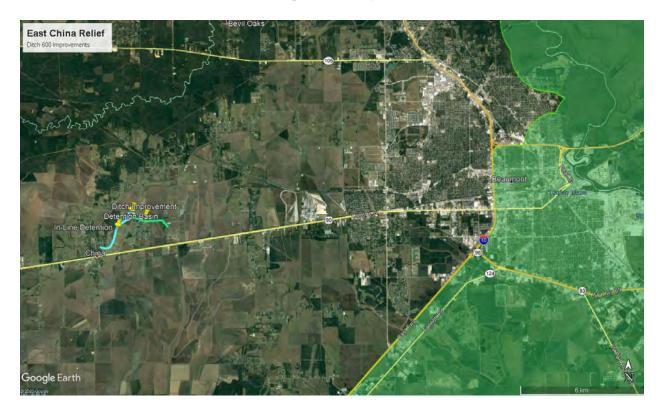


Figure 4: Coastal Zone Boundary

From: Federal Consistency Lee Sherrod To:

Subject: RE: 3 FEMA Funded Projects in Jefferson County

Date: Friday, January 29, 2021 9:05:53 AM

[EXTERNAL EMAIL]

Since these projects are not located within the Coastal Zone, no review will be completed.

Allison Buchtien Federal Consistency Texas General Land Office federal.consistency@glo.texas.gov

Please send all Federal Consistency review requests to this email address.

From: Lee Sherrod <lee_sherrod@horizon-esi.com>

Sent: Monday, January 25, 2021 12:54 PM

To: Federal Consistency < Federal. Consistency @GLO.TEXAS.GOV> **Subject:** [EXTERNAL] 3 FEMA Funded Projects in Jefferson County

For your review and comment please.

Thanks,

C. Lee Sherrod

Certified Professional Wetland Scientist-Emeritus

Direct 512.439.4788 | Office 512.328.2430 | Cell 512.431.3562

LJA ENVIRONMENTAL SERVICES, LLC.

1507 S INTERSTATE 35 AUSTIN TX 78741-2502

https://ljaenvironmental.com



Please consider the environment before printing this e-mail.

CAUTION: This email originated from OUTSIDE of the Texas General Land Office. Links or attachments may be dangerous. Please be careful clicking on any links or opening any attachments.

[EXTERNAL EMAIL] Exercise caution. Do not open attachments or click links from unknown senders or unexpected email



Environmental Services, Inc.

12 January 2021

County Engineer County Flood Plain Administrator Jefferson County 1149 Pearl Street, 5th Floor Beaumont, Texas 77701

RE: Proposed Jefferson County Drainage District No. 6 Project:

East China Relief

China, Jefferson County, Texas

HJN 21007-001EA

Dear Sirs:

Jefferson County Drainage District No. 6 (DD6) implements and maintains drainage projects throughout the Districts' 486 square mile area located in Jefferson County and includes the cities of Beaumont, Bevil Oaks, China and Nome, Texas. DD6 also works with other jurisdictions to identify flood-prone areas, to encourage inclusion of flood-damage avoidance measures in land development. DD6 has applied to the Federal Emergency Management Agency (FEMA) for grant funding to assist with the improvement to drainage of existing portions of China, north of US 90 in Jefferson County. Environmental reviews are required under the National Environmental Policy Act (NEPA) and the Council on Environmental Quality Guidelines, 40 CFR Parts 1500 to 1508. This coordination letter is being provided for your agency's' response in conformance with NEPA procedures.

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Appendix 1 contains maps depicting the proposed drainage improvement project, including an aerial view of the project area and a topographic map of the project area. Note that the project area is not located within the FEMA 100-year floodplain. Land use of the surrounding area is agricultural, residential, and commercial.

Please review the attached figures and information concerning the proposed project to determine if the project is consistent with your agency's environmental regulations or policies. Please respond by letter at your earliest convenience. Your prompt attention to this matter would be greatly appreciated, as your signed concurrence letter is necessary to complete the application for grant funding from FEMA.



Please call me should you have any questions concerning this project or if I can be of any further assistance.

Sincerely,

For Horizon Environmental Services, Inc.

C. Lee Sherrod

Senior Project Manager



Environmental Services, Inc.

12 January 2021

Natural Resources Conservation Service US Department of Agriculture 101 South Main Temple, Texas 76501-6624 carlos.villarreal@tx.usda.gov

RE: Proposed Jefferson County Drainage District No. 6 Project:

East China Relief

China, Jefferson County, Texas

HJN 21007-001EA

Dear Sirs:

Jefferson County Drainage District No. 6 (DD6) implements and maintains drainage projects throughout the Districts' 486 square mile area located in Jefferson County and includes the cities of Beaumont, Bevil Oaks, China and Nome, Texas. DD6 also works with other jurisdictions to identify flood-prone areas, to encourage inclusion of flood-damage avoidance measures in land development. DD6 has applied to the Federal Emergency Management Agency (FEMA) for grant funding to assist with the improvement to drainage of existing portions of China, north of US 90 in Jefferson County. Environmental reviews are required under the National Environmental Policy Act (NEPA) and the Council on Environmental Quality Guidelines, 40 CFR Parts 1500 to 1508. This coordination letter is being provided for your agency's' response in conformance with NEPA procedures.

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Soils on the subject site include Beaumont clay, Viterbo silty clay loam, and League clay (Soils map, Appendix 1). The League soils are listed as Prime Farmland Soils. Approximately 2000 feet of ditch widening with adjacent spoil disposal will occur within the League soil area (approximately 2.25 acres). Prime farmland soils are very prevalent throughout the watershed and region.

In accordance with NEPA and the Farmland Protection Policy Act (FPPA), your determination of impact significance to prime and other important farmlands is requested. Your prompt attention to this matter would be greatly appreciated, as your response is necessary to complete the application process for Jefferson County DD6's grant from FEMA.



Please call me should you have any questions concerning this project or if I can be of any further assistance.

Sincerely,

For Horizon Environmental Services, Inc.

C. Lee Sherrod

Senior Project Manager

Natural Resources Conservation Service

State Office

101 S. Main Street Temple, TX 76501 Voice 254.742.9800 Fax 254.742.9819 Attention: C. Lee Sherrod

Subject: East China Relief Project

NEPA/FPPA Evaluation

We have reviewed the information provided in your correspondence concerning the proposed project This review is part of the National Environmental Policy Act (NEPA) evaluation. We have evaluated the proposed site as required by the Farmland Protection Policy Act (FPPA).

The proposed site contains less than one acre of Prime Farmland or Farmlands of State Importance and is therefore exempt from the provisions of the FPPA.

As such, no further consideration from protection is necessary. We strongly encourage the use of acceptable erosion control methods during the construction of this project.

If you have further questions, please contact me at 505-516-7822 or by email at mark.palmer@tx.usda.gov.

Sincerely,

Mark V. Palmer Jr. Digitally signed by Mark V. Palmer Jr. Date: 2022.07.12 07:24:16 -05'00'

Mark V. Palmer Jr.



Environmental Services, Inc.

12 January 2021

Intergovernmental Relations Division Texas Commission on Environmental Quality 12100 Park 35 Circle Austin, Texas 78753

RE: Proposed Jefferson County Drainage District No. 6 Project:

East China Relief

China, Jefferson County, Texas

HJN 21007-001EA

Dear Sirs:

Jefferson County Drainage District No. 6 (DD6) implements and maintains drainage projects throughout the Districts' 486 square mile area located in Jefferson County and includes the cities of Beaumont, Bevil Oaks, China and Nome, Texas. DD6 also works with other jurisdictions to identify flood-prone areas, to encourage inclusion of flood-damage avoidance measures in land development. DD6 has applied to the Federal Emergency Management Agency (FEMA) for grant funding to assist with the improvement to drainage of existing portions of China, north of US 90 in Jefferson County. Environmental reviews are required under the National Environmental Policy Act (NEPA) and the Council on Environmental Quality Guidelines, 40 CFR Parts 1500 to 1508. This coordination letter is being provided for your agency's' response in conformance with NEPA procedures.

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Appendix 1 contains maps depicting the proposed drainage improvement project, including an aerial view of the project area and a topographic map of the project area. Note that the project area is not located within the FEMA 100-year floodplain. Land use of the surrounding area is agricultural, residential, and commercial.

Minimal and temporary diesel emissions and fugitive dust emissions from equipment during construction are possible. Once construction is complete there will be no motorized equipment associated with this project. Best management practices for temporary erosion and sedimentation control will be implemented during project construction.

Please review the attached figures and information concerning the proposed project to determine if the project is consistent with your agency's environmental regulations or policies. Please respond by letter at your earliest convenience. Your prompt attention to this matter



would be greatly appreciated, as your signed concurrence letter is necessary to complete the application for grant funding from FEMA.

Please call me should you have any questions concerning this project or if I can be of any further assistance.

Sincerely,

For Horizon Environmental Services, Inc.

C. Lee Sherrod

Senior Project Manager

Jon Niermann, *Chairman*Emily Lindley, *Commissioner*Bobby Janecka, *Commissioner*Toby Baker, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

February 4, 2021

C. Lee Sherrod Certified Professional Wetland Scientist-Emeritus LJA Environmental Services, LLC. 1507 S Interstate 35 Austin, Texas 78741-2502

Via: E-mail

Re: TCEQ NEPA Request #2020-012. East China Relief. Jefferson County.

Dear Mr. Sherrod,

The Texas Commission on Environmental Quality (TCEQ) has reviewed the above-referenced project and offers the following comments:

In accordance with the general conformity regulations in 40 CFR Part 93, this proposed action was reviewed for air quality impact. The proposed action is located in County name County, which is currently designated as attainment/unclassifiable for the National Ambient Air Quality Standards for all six criteria air pollutants. The TCEQ is evaluating the South Coast Air Quality Management District v. EPA, No. 15-1115 (D.C. Cir. 2018), which may reinstate general conformity requirements for County name County as part of the Beaumont-Port Arthur maintenance area for the 1997 eight-hour ozone NAAQS. Volatile organic compounds (VOC) and nitrogen oxides (NOX) are precursor pollutants that lead to the formation of ozone. A general conformity demonstration may be required when the total projected direct and indirect VOC or NOX emissions from an applicable action are equal to or exceed the de minimis emissions level, which is 100 tons per year (tpy) for ozone NAAQS maintenance areas. Please consult with the lead federal agency associated with this project for National Environmental Policy Act compliance and/or with the United States Environmental Protection Agency to determine whether this proposed action is subject to federal general conformity regulations.

We recommend the environmental assessment address actions that will be taken to prevent surface and groundwater contamination.

Any debris or waste disposal should be at an appropriately authorized disposal facility.

Thank you for the opportunity to review this project. If you have any questions, please contact the agency NEPA coordinator at (512) 239-0010 or NEPA@tceq.texas.gov

Sincerely,

Ryan Vise,

Division Director External Relations



Environmental Services, Inc.

12 January 2021

Mr. Mark Wolfe Texas Historical Commission P.O. Box 12276 Austin, Texas 78711-2276

RE: Proposed Jefferson County Drainage District No. 6 Project:

East China Relief

China, Jefferson County, Texas

HJN 21007-001EA

Dear Sirs:

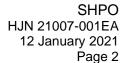
Jefferson County Drainage District No. 6 (DD6) implements and maintains drainage projects throughout the Districts' 486 square mile area located in Jefferson County and includes the cities of Beaumont, Bevil Oaks, China and Nome, Texas. DD6 also works with other jurisdictions to identify flood-prone areas, to encourage inclusion of flood-damage avoidance measures in land development. DD6 has applied to the Federal Emergency Management Agency (FEMA) for grant funding to assist with the improvement to drainage of existing portions of China, north of US 90 in Jefferson County. Environmental reviews are required under the National Environmental Policy Act (NEPA) and the Council on Environmental Quality Guidelines, 40 CFR Parts 1500 to 1508. This coordination letter is being provided for your agency's' response in conformance with NEPA procedures.

The project will involve widening a portion of Ditch 600 (Green Pond Gully) approximately 140 feet wide beginning on the east side of the Town of China and extending along the south side of the ditch for approximately 1.5 miles to the LNVA Beaumont Industrial Canal near Turner Road to create in-line detention. Additionally, a 19.5-acre detention basin will be constructed north of the ditch (see project figures in Appendix 1). Ditch 600 will also be widened to a 20 ft bottom width for approximately 1.2 miles downstream of the detention areas.

Appendix 1 contains maps depicting the proposed drainage improvement project, including an aerial view of the project area and a topographic map of the project area. Land use of the surrounding area is agricultural, residential, and commercial.

The proposed project includes the widening of existing man-made ditches and excavation of a detention basin, all within current and historical farmland. A 1938 aerial photograph is included in the Appendix 1. No structures will be affected, and the surface condition will be returned to pre-project conditions following construction. We believe that the undertaking would have a low likelihood to cause adverse impacts to any properties listed on or considered eligible for listing on the NRHP. It is also Horizon's further opinion that a formal cultural resources survey of the Project Area is unwarranted.

Should you concur with Horizon's findings and recommendations, please sign below and





return. Otherwise, Horizon requests that your office respond with additional information pertaining to the type and intensity of cultural resources investigations you require within the Project Area. If you need any additional information, please feel free to call or email me.

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For Horizon Environmental Services, Inc.

C. Lee Sherrod

Senior Project Manager

Concurrence	Date

Jesse Owens

From: noreply@thc.state.tx.us

Sent: Tuesday, January 26, 2021 9:32 AM **To:** Jesse Owens; reviews@thc.state.tx.us

Subject: Section 106 Submission

[EXTERNAL EMAIL]



Re: Project Review under Section 106 of the National Historic Preservation Act and/or the Antiquities Code of Texas **THC Tracking #202104992**

East China Relief Project East of China, North of US 90 China,TX 77613

Description: Request for consultation regarding cultural resources compliance requirements for 1.5 miles of ditch widening and construction of 18.5-acre detention basin in China, Jefferson County, TX.

Dear Jeffrey D. Owens:

Thank you for your submittal regarding the above-referenced project. This response represents the comments of the State Historic Preservation Officer, the Executive Director of the Texas Historical Commission (THC), pursuant to review under Section 106 of the National Historic Preservation Act and the Antiquities Code of Texas.

The review staff, led by Taylor Bowden, Ashley Salie, has completed its review and has made the following determinations based on the information submitted for review:

Above-Ground Resources

• No historic properties are present or affected by the project as proposed. However, if historic properties are discovered or unanticipated effects on historic properties are found, work should cease in the immediate area; work can continue where no historic properties are present. Please contact the THC's History Programs Division at 512-463-5853 to consult on further actions that may be necessary to protect historic properties.

Archeology Comments

• No identified historic properties, archeological sites, or other cultural resources are present or affected. However, if cultural materials are encountered during project activities, work should cease in the immediate area; work can continue where no cultural materials are present. Please contact the THC's Archeology Division at 512-463-6096 to consult on further actions that may be necessary to protect the cultural remains.

We look forward to further consultation with your office and hope to maintain a partnership that will foster effective historic preservation. Thank you for your cooperation in this review process, and for your efforts to preserve the

irreplaceable heritage of Texas. If the project changes, or if new historic properties are found, please contact the review staff. If you have any questions concerning our review or if we can be of further assistance, please email the following reviewers: taylor.bowden@thc.texas.gov, ashley.salie@thc.texas.gov.

This response has been sent through the electronic THC review and compliance system (eTRAC). Submitting your project via eTRAC eliminates mailing delays and allows you to check the status of the review, receive an electronic response, and generate reports on your submissions. For more information, visit http://thc.texas.gov/etrac-system.

Sincerely,

for Mark Wolfe, State Historic Preservation Officer Executive Director, Texas Historical Commission

Please do not respond to this email.

Torph Bouch

[EXTERNAL EMAIL] Exercise caution. Do not open attachments or click links from unknown senders or unexpected email



Environmental Services, Inc.

12 January 2021

Texas Parks and Wildlife Department Wildlife Habitat Assessment Program 4200 Smith School Road Austin, Texas 78744

RE: Proposed Jefferson County Drainage District No. 6 Project:

East China Relief

China, Jefferson County, Texas

HJN 21007-001EA

Dear Sirs:

Jefferson County Drainage District No. 6 (DD6) implements and maintains drainage projects throughout the Districts' 486 square mile area located in Jefferson County and includes the cities of Beaumont, Bevil Oaks, China and Nome, Texas. DD6 also works with other jurisdictions to identify flood-prone areas, to encourage inclusion of flood-damage avoidance measures in land development. DD6 has applied to the Federal Emergency Management Agency (FEMA) for grant funding to assist with the improvement to drainage of existing portions of China, north of US 90 in Jefferson County. Environmental reviews are required under the National Environmental Policy Act (NEPA) and the Council on Environmental Quality Guidelines, 40 CFR Parts 1500 to 1508. This coordination letter is being provided for your agency's' response in conformance with NEPA procedures.

The project will involve widening a portion of Ditch 600 (Green Pond Gully) approximately 140 feet wide beginning on the east side of the Town of China and extending along the south side of the ditch for approximately 1.5 miles to the LNVA Beaumont Industrial Canal near Turner Road to create in-line detention. Additionally, a 19.5-acre detention basin will be constructed north of the ditch (see project figures in Appendix 1). Ditch 600 will also be widened to a 20-ft bottom width for approximately 1.2 miles downstream of the detention areas.

Appendix 1 contains maps depicting the proposed drainage improvement project, including an aerial view of the project area and a topographic map of the project area. Land use of the surrounding area is agricultural, residential, and commercial.

The site is generally characterized as agricultural fields and man-made ditches. Dominant vegetation includes agricultural species such as rice and St. Augustine sod along with various weeds, including ragweed (*Ambrosia* sp.), Brazilian vervain (*Verbena brasiliensis*), sumpweed (*Iva* annua), and scattered trees and shrubs including sugarberry (*Celtis laevigata*), sweetgum (*Liquidambar* styraciflua), Chinese tallow (*Triadica sebifera*), water oak (*Quercus nigra*), and yaupon (*Ilex vomitoria*). On-site photographs are provided in Appendix 2.

Federally listed threatened or endangered (T/E) species known to occur in Jefferson County include eastern black rail (*Laterallus jamaicensis* ssp. *Jamaicensis*), piping plover (*Charadrius melodus*), red knot (*Calidris canutus rufa*), West Indian manatee (*Trichechus manatus*), green



sea turtle (*Chelonia mydas*), Atlantic hawksbill sea turtle (*Eretmochelys imbricata*), Kemp's ridley sea turtle (*Lepidochelys kempii*), leatherback sea turtle (*Dermochelys coriacea*), and loggerhead sea turtle (*Caretta caretta*) (IPAC, 2021 – Appendix 3). No federally designated critical habitat is present in the project area. Horizon observed no federally listed T/E species or potential habitats on or within the immediate vicinity of the project area. We believe that a "No Effect" finding is appropriate for this project.

Please review the attached figures and information concerning the proposed project to determine if the project is consistent with your agency's environmental regulations or policies. Please respond by letter at your earliest convenience. Your prompt attention to this matter would be greatly appreciated, as your signed concurrence letter is necessary to complete the application for grant funding from FEMA.

Please call me should you have any questions concerning this project or if I can be of any further assistance.

Sincerely,

For Horizon Environmental Services, Inc.

C. Lee Sherrod

Senior Project Manager



APPENDIX 2

PHOTOGRAPHS





PHOTO 1 Existing Ditch 600 to be widened on the left (south) side for in-line detention



PHOTO 2
Existing Ditch 600 to be widened on the right (south) side for in-line detention





PHOTO 3
Rice field to be excavated for detention basin



PHOTO 4
Typical benefit area within Town of China



APPENDIX 3 IPAC SPECIES LIST



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Texas Coastal Ecological Services Field Office 4444 Corona Drive, Suite 215 Corpus Christi, TX 78411 Phone: (281) 286-8282 Fax: (281) 488-5882

http://www.fws.gov/southwest/es/ES_Lists_Main2.html

In Reply Refer To: January 12, 2021

Consultation Code: 02ETTX00-2021-SLI-0822

Event Code: 02ETTX00-2021-E-01883

Project Name: East China Relief

Subject: List of threatened and endangered species that may occur in your proposed project

location or may be affected by your proposed project

To Whom It May Concern:

The U.S. Fish and Wildlife Service (Service) field offices in Clear Lake, Tx, and Corpus Christi, Tx, have combined administratively to form the Texas Coastal Ecological Services Field Office. A map of the Texas Coastal Ecological Services Field Office area of responsibility can be found at: http://www.fws.gov/southwest/es/TexasCoastal/Map.html. All project related correspondence should be sent to the field office responsible for the area in which your project occurs. For projects located in southeast Texas please write to: Field Supervisor; U.S. Fish and Wildlife Service; 17629 El Camino Real Ste. 211; Houston, Texas 77058. For projects located in southern Texas please write to: Field Supervisor; U.S. Fish and Wildlife Service; P.O. Box 81468; Corpus Christi, Texas 78468-1468. For projects located in six counties in southern Texas (Cameron, Hidalgo, Starr, Webb, Willacy, and Zapata) please write: Santa Ana NWR, ATTN: Ecological Services Sub Office, 3325 Green Jay Road, Alamo, Texas 78516.

The enclosed species list identifies federally threatened, endangered, and proposed to be listed species; designated critical habitat; and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project.

New information from updated surveys, changes in the abundance and distribution of species, changes in habitat conditions, or other factors could change the list. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the ECOS-IPaC website http://ecos.fws.gov/ipac/ at regular intervals during project planning and implementation for updates to species list and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

2

Candidate species have no protection under the Act but are included for consideration because they could be listed prior to the completion of your project. The other species information should help you determine if suitable habitat for these listed species exists in any of the proposed project areas or if project activities may affect species on-site, off-site, and/or result in "take" of a federally listed species.

"Take" is defined as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. In addition to the direct take of an individual animal, habitat destruction or modification can be considered take, regardless of whether it has been formally designated as critical habitat, if the activity results in the death or injury of wildlife by removing essential habitat components or significantly alters essential behavior patterns, including breeding, feeding, or sheltering.

Section 7

Section 7 of the Act requires that all Federal agencies consult with the Service to ensure that actions authorized, funded or carried out by such agencies do not jeopardize the continued existence of any listed threatened or endangered species or adversely modify or destroy critical habitat of such species. It is the responsibility of the Federal action agency to determine if the proposed project may affect threatened or endangered species. If a "may affect" determination is made, the Federal agency shall initiate the section 7 consultation process by writing to the office that has responsibility for the area in which your project occurs.

Is not likely to adversely affect - the project may affect listed species and/or critical habitat; however, the effects are expected to be discountable, insignificant, or completely beneficial. Certain avoidance and minimization measures may need to be implemented in order to reach this level of effects. The Federal agency or the designated non-Federal representative should seek written concurrence from the Service that adverse effects have been eliminated. Be sure to include all of the information and documentation used to reach your decision with your request for concurrence. The Service must have this documentation before issuing a concurrence.

Is likely to adversely affect - adverse effects to listed species may occur as a direct or indirect result of the proposed action or its interrelated or interdependent actions, and the effect is not discountable, insignificant, or beneficial. If the overall effect of the proposed action is beneficial to the listed species but also is likely to cause some adverse effects to individuals of that species, then the proposed action "is likely to adversely affect" the listed species. An "is likely to adversely affect" determination requires the Federal action agency to initiate formal section 7 consultation with this office.

No effect - the proposed action will not affect federally listed species or critical habitat (i.e., suitable habitat for the species occurring in the project county is not present in or adjacent to the action area). No further coordination or contact with the Service is necessary. However, if the project changes or additional information on the distribution of listed or proposed species becomes available, the project should be reanalyzed for effects not previously considered.

Regardless of your determination, the Service recommends that you maintain a complete record of the evaluation, including steps leading to the determination of affect, the qualified personnel conducting the evaluation, habitat conditions, site photographs, and any other related articles.

Please be advised that while a Federal agency may designate a non-Federal representative to conduct informal consultations with the Service, assess project effects, or prepare a biological assessment, the Federal agency must notify the Service in writing of such a designation. The Federal agency shall also independently review and evaluate the scope and contents of a biological assessment prepared by their designated non-Federal representative before that document is submitted to the Service.

The Service's Consultation Handbook is available online to assist you with further information on definitions, process, and fulfilling Act requirements for your projects at: http://www.fws.gov/endangered/esa-library/pdf/esa-section7 handbook.pdf

Section 10

If there is no federal involvement and the proposed project is being funded or carried out by private interests and/or non-federal government agencies, and the project as proposed may affect listed species, a section 10(a)(1)(B) permit is recommended. The Habitat Conservation Planning Handbook is available at: http://www.fws.gov/endangered/esa-library/pdf/HCP_Handbook.pdf

Service Response

Please note that the Service strives to respond to requests for project review within 30 days of receipt, however, this time period is not mandated by regulation. Responses may be delayed due to workload and lack of staff. Failure to meet the 30-day timeframe does not constitute a concurrence from the Service that the proposed project will not have impacts to threatened and endangered species.

Proposed Species and/or Proposed Critical Habitat

While consultations are required when the proposed action may affect listed species, section 7(a) (4) was added to the ESA to provide a mechanism for identifying and resolving potential conflicts between a proposed action and proposed species or proposed critical habitat at an early planning stage. The action agency should seek conference from the Service to assist the action agency in determining effects and to advise the agency on ways to avoid or minimize adverse effect to proposed species or proposed critical habitat.

Candidate Species

Candidate species are species that are being considered for possible addition to the threatened and endangered species list. They currently have no legal protection under the ESA. If you find you have potential project impacts to these species the Service would like to provide technical assistance to help avoid or minimize adverse effects. Addressing potential impacts to these species at this stage could better provide for overall ecosystem healh in the local area and ay avert potential future listing.

Several species of freshwater mussels occur in Texas and four are candidates for listing under the ESA. The Service is also reviewing the status of six other species for potential listing under the ESA. One of the main contributors to mussel die offs is sedimentation, which smothers and suffocates mussels. To reduce sedimentation within rivers, streams, and tributaries crossed by a

project, the Service recommends that that you implement the best management practices found at: http://www.fws.gov/southwest/es/TexasCoastal/FreshwaterMussels.html.

Candidate Conservation Agreements (CCAs) or Candidate Conservation Agreements with Assurances (CCAAs) are voluntary agreements between the Service and public or private entities to implement conservation measures to address threats to candidate species. Implementing conservation efforts before species are listed increases the likelihood that simpler, flexible, and more cost-effective conservation options are available. A CCAA can provide participants with assurances that if they engage in conservation actions, they will not be required to implement additional conservation measures beyond those in the agreement. For additional information on CCAs/CCAAs please visit the Service's website at http://www.fws.gov/endangered/what-we-do/cca.html.

Migratory Birds

The Migratory Bird Treaty Act (MBTA) implements various treaties and conventions for the protection of migratory birds. Under the MBTA, taking, killing, or possessing migratory birds is unlawful. Many may nest in trees, brush areas or other suitable habitat. The Service recommends activities requiring vegetation removal or disturbance avoid the peak nesting period of March through August to avoid destruction of individuals or eggs. If project activities must be conducted during this time, we recommend surveying for active nests prior to commencing work. A list of migratory birds may be viewed at http://www.fws.gov/migratorybirds/regulationspolicies/mbta/mbtandx.html.

The bald eagle (*Haliaeetus leucocephalus*) was delisted under the Act on August 9, 2007. Both the bald eagle and the goden eagle (*Aquila chrysaetos*) are still protected under the MBTA and BGEPA. The BGEPA affords both eagles protection in addition to that provided by the MBTA, in particular, by making it unlawful to "disturb" eagles. Under the BGEPA, the Service may issue limited permits to incidentally "take" eagles (e.g., injury, interfering with normal breeding, feeding, or sheltering behavior nest abandonment). For more information on bald and golden eagle management guidlines, we recommend you review information provided at http://www.fws.gov/midwest/eagle/pdf/NationalBaldEagleManagementGuidelines.pdf.

The construction of overhead power lines creates threats of avian collision and electrocution. The Service recommends the installation of underground rather than overhead power lines whenever possible. For new overhead lines or retrofitting of old lines, we recommend that project developers implement, to the maximum extent practicable, the Avian Power Line Interaction Committee guidelines found at http://www.aplic.org/.

Meteorological and communication towers are estimated to kill millions of birds per year. We recommend following the guidance set forth in the Service Interim Guidelines for Recommendations on Communications Tower Siting, Constructions, Operation and Decommissioning, found online at: http://www.fws.gov/habitatconservation/ communicationtowers.html, to minimize the threat of avian mortality at these towers. Monitoring at these towers would provide insight into the effectiveness of the minimization measures. We request the results of any wildlife mortality monitoring at towers associated with this project.

We request that you provide us with the final location and specifications of your proposed towers, as well as the recommendations implemented. A Tower Site Evaluation Form is also available via the above website; we recommend you complete this form and keep it in your files. If meteorological towers are to be constructed, please forward this completed form to our office.

More information concerning sections 7 and 10 of the Act, migratory birds, candidate species, and landowner tools can be found on our website at: http://www.fws.gov/southwest/es/
TexasCoastal/ProjectReviews.html.

Wetlands and Wildlife Habitat

Wetlands and riparian zones provide valuable fish and wildlife habitat as well as contribute to flood control, water quality enhancement, and groundwater recharge. Wetland and riparian vegetation provides food and cover for wildlife, stabilizes banks and decreases soil erosion.

These areas are inherently dynamic and very sensitive to changes caused by such activities as overgrazing, logging, major construction, or earth disturbance. Executive Order 11990 asserts that each agency shall provide leadership and take action to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial value of wetlands in carrying out the agency's responsibilities. Construction activities near riparian zones should be carefully designed to minimize impacts. If vegetation clearing is needed in these riparian areas, they should be re-vegetated with native wetland and riparian vegetation to prevent erosion or loss of habitat. We recommend minimizing the area of soil scarification and initiating incremental re-establishment of herbaceous vegetation at the proposed work sites. Denuded and/or disturbed areas should be re-vegetated with a mixture of native legumes and grasses.

Species commonly used for soil stabilization are listed in the Texas Department of Agriculture's (TDA) Native Tree and Plant Directory, available from TDA at P.O. Box 12847, Austin, Texas 78711. The Service also urges taking precautions to ensure sediment loading does not occur to any receiving streams in the proposed project area. To prevent and/or minimize soil erosion and compaction associated with construction activities, avoid any unnecessary clearing of vegetation, and follow established rights-of-way whenever possible. All machinery and petroleum products should be stored outside the floodplain and/or wetland area during construction to prevent possible contamination of water and soils.

Wetlands and riparian areas are high priority fish and wildlife habitat, serving as important sources of food, cover, and shelter for numerous species of resident and migratory wildlife. Waterfowl and other migratory birds use wetlands and riparian corridors as stopover, feeding, and nesting areas. We strongly recommend that the selected project site not impact wetlands and riparian areas, and be located as far as practical from these areas. Migratory birds tend to concentrate in or near wetlands and riparian areas and use these areas as migratory flyways or corridors. After every effort has been made to avoid impacting wetlands, you anticipate unavoidable wetland impacts will occur; you should contact the appropriate U.S. Army Corps of Engineers office to determine if a permit is necessary prior to commencement of construction activities.

If your project will involve filling, dredging, or trenching of a wetland or riparian area it may require a Clean Water Act Section 404 permit from the U.S. Army Corps of Engineers (COE).

For permitting requirements please contact the U.S. Corps of Engineers, District Engineer, P.O. Box 1229, Galveston, Texas 77553-1229, (409) 766-3002.

Beneficial Landscaping

In accordance with Executive Order 13112 on Invasive Species and the Executive Memorandum on Beneficial Landscaping (42 C.F.R. 26961), where possible, any landscaping associated with project plans should be limited to seeding and replanting with native species. A mixture of grasses and forbs appropriate to address potential erosion problems and long-term cover should be planted when seed is reasonably available. Although Bermuda grass is listed in seed mixtures, this species and other introduced species should be avoided as much as possible. The Service also recommends the use of native trees, shrubs, and herbaceous species that are adaptable, drought tolerant and conserve water.

State Listed Species

The State of Texas protects certain species. Please contact the Texas Parks and Wildlife Department (Endangered Resources Branch), 4200 Smith School Road, Austin, Texas 78744 (telephone 512/389-8021) for information concerning fish, wildlife, and plants of State concern or visit their website at: http://www.tpwd.state.tx.us/huntwild/wildlife_diversity/texas_rare_species/listed_species/.

If we can be of further assistance, or if you have any questions about these comments, please contact 281/286-8282 if your project is in southeast Texas, or 361/994-9005, ext. 246, if your project is in southern Texas. Please refer to the Service consultation number listed above in any future correspondence regarding this project.

Attachment(s):

Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Texas Coastal Ecological Services Field Office 4444 Corona Drive, Suite 215 Corpus Christi, TX 78411 (281) 286-8282

Project Summary

Consultation Code: 02ETTX00-2021-SLI-0822 Event Code: 02ETTX00-2021-E-01883

Project Name: East China Relief
Project Type: LAND - DRAINAGE
Project Description: Drainage Improvement

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@30.057029800000002,-94.32812568199611,14z



Counties: Jefferson County, Texas

Endangered Species Act Species

There is a total of 9 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME

West Indian Manatee Trichechus manatus

Threatened

There is **final** critical habitat for this species. The location of the critical habitat is not available.

This species is also protected by the Marine Mammal Protection Act, and may have additional consultation requirements.

Species profile: https://ecos.fws.gov/ecp/species/4469

Birds

NAME STATUS

Eastern Black Rail Laterallus jamaicensis ssp. jamaicensis

Threatened

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10477

Piping Plover Charadrius melodus

Threatened

 $Population: [At lantic\ Coast\ and\ Northern\ Great\ Plains\ populations] \ -\ Wherever\ found,\ except$

those areas where listed as endangered.

There is **final** critical habitat for this species. The location of the critical habitat is not available.

Species profile: https://ecos.fws.gov/ecp/species/6039

Red Knot Calidris canutus rufa

Threatened

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1864

Reptiles

NAME

Green Sea Turtle Chelonia mydas

Threatened

Population: North Atlantic DPS

There is **final** critical habitat for this species. The location of the critical habitat is not available.

Species profile: https://ecos.fws.gov/ecp/species/6199

Hawksbill Sea Turtle Eretmochelys imbricata

Endangered

There is **final** critical habitat for this species. The location of the critical habitat is not available.

Species profile: https://ecos.fws.gov/ecp/species/3656

Kemp's Ridley Sea Turtle *Lepidochelys kempii*

Endangered

There is **proposed** critical habitat for this species. The location of the critical habitat is not

available.

Species profile: https://ecos.fws.gov/ecp/species/5523

Leatherback Sea Turtle Dermochelys coriacea

Endangered

There is **final** critical habitat for this species. The location of the critical habitat is not available.

Species profile: https://ecos.fws.gov/ecp/species/1493

Loggerhead Sea Turtle Caretta caretta

Threatened

Population: Northwest Atlantic Ocean DPS

There is **final** critical habitat for this species. The location of the critical habitat is not available.

Species profile: https://ecos.fws.gov/ecp/species/1110

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.



March 8, 2021

Life's better outside.®

Commissioners

S. Reed Morian Chairman Houston

Arch "Beaver" Aplin, III Vice-Chairman Lake Jackson

> James E. Abell Kilgore

> > Oliver J. Bell Cleveland

> > Anna B. Galo Laredo

Jeffery D. Hildebrand Houston

Jeanne W. Latimer San Antonio

Robert L. "Bobby" Patton, Jr. Fort Worth

> Dick Scott Wimberlev

Lee M. Bass Chairman-Emeritus Fort Worth

T. Dan Friedkin Chairman-Emeritus Houston

Carter P. Smith Executive Director Mr. Lee Sherrod Horizon Environmental Services, Inc. 1507 South IH 35 Austin, TX 78741

RE: Proposed Jefferson County Drainage District No. 6 Project: East China Relief, China, Jefferson County, Texas HJN 21007-001

Dear Mr. Sherrod:

Texas Parks and Wildlife Department (TPWD) has received the request for review of the proposed project referenced above. TPWD staff has reviewed the information provided and offers the following comments and recommendations concerning this project. For tracking purposes, please refer to TPWD project number 45920 in any return correspondence regarding this project.

Project Description

The project will involve widening a portion of Ditch 600 (Green Pond Gully) approximately 140 feet wide beginning on the east side of the Town of China and extending along the south side of the ditch for approximately 1.5 miles to the LNVA Beaumont Industrial Canal near Turner Road to create in-line detention. Additionally, a 19.5-acre detention basin will be constructed north of the ditch. Ditch 600 will also be widened to a 20-ft bottom width for approximately 1.2 miles downstream of the detention areas.

General Construction Recommendations

TPWD would like to provide the following general construction recommendations to assist in project planning.

Recommendation: TPWD recommends the judicious use and placement of sediment control fence to exclude wildlife from the construction area. In many cases sediment control fence placement for the purposes of controlling erosion and protecting water quality can be modified minimally to also provide the benefit of excluding wildlife access to construction areas. The exclusion fence should be buried at least six inches and be at least 24 inches high. Construction personnel should be encouraged to examine the inside of the exclusion area daily to determine if any wildlife species have been trapped inside the area of impact and provide safe egress opportunities prior to initiation of construction activities. The exclusion

Mr. Lee Sherrod Page 2 March 8, 2021

fence should be maintained for the life of the project and only be removed after the construction is completed and the disturbed site has been revegetated with site-specific native species.

For soil stabilization and/or revegetation of disturbed areas, TPWD recommends erosion and seed/mulch stabilization materials that avoid entanglement hazards to snakes and other wildlife species. TPWD recommends the use of no-till drilling, hydromulching and/or hydroseeding due to a reduced risk to wildlife.

Because the mesh found in many erosion control blankets or mats pose an entanglement hazard to wildlife, TPWD recommends avoiding the use of plastic mesh matting. If erosion control blankets or mats containing netting must be used, the netting should be loosely woven, natural fiber material where the mesh design allows the threads to move, therefore allowing expansion of the mesh openings.

During construction, operation, and maintenance of the proposed facility, TPWD recommends observing slow (25 miles per hour, or less) speed limits within the project site. Reduced speed limits would allow personnel to see wildlife in the vehicle path and avoid harming them.

Federal Laws

Migratory Bird Treaty Act

The Migratory Bird Treaty Act prohibits direct and affirmative purposeful actions that reduce migratory birds, their eggs, or their nests, by killing or capturing, to human control, except when specifically authorized by the U.S. Fish and Wildlife Service. This protection applies to most native bird species, including ground nesting species.

Recommendation: TPWD recommends excluding vegetation clearing activities during the general bird nesting season, March 15 through September 15, to avoid adverse impacts to birds. If clearing vegetation during the migratory bird nesting season is unavoidable, TPWD recommends surveying the area proposed for disturbance for active nests (nests with eggs or young). Nest surveys should take place within 5 days of scheduled clearing to maximize the detection of active nests. Any vegetation (trees, shrubs, and grasses) or bare ground where occupied nests are located should not be disturbed and a vegetation buffer area of no less than 150-feet in diameter should remain around the nest until all young have fledged.

Mr. Lee Sherrod Page 3 March 8, 2021

State Laws

Parks and Wildlife Code – Chapter 64, Birds

Texas Parks and Wildlife Code (PWC) Section 64.002, regarding protection of nongame birds, provides that no person may catch, kill, injure, pursue, or possess a bird that is not a game bird. PWC Section 64.003, regarding destroying nests or eggs, provides that, no person may destroy or take the nests, eggs, or young and any wild game bird, wild bird, or wild fowl.

Recommendation: Please review the *Federal Law: Migratory Bird Treaty Act* section above for recommendations as they are also applicable for PWC Chapter 64 compliance.

Species of Concern/Special Features

In addition to state and federally protected species, TPWD tracks species considered to be Species of Greatest Conservation Need (SGCN) that, due to limited distributions and/or declining populations, face threat of extirpation or extinction but currently lack the legal protections given to threatened or endangered species. Special landscape features, natural plant communities, and SGCN are rare resources for which TPWD actively promotes conservation, and TPWD considers it important to minimize impacts to such resources to reduce the likelihood of endangerment and preclude the need to list SGCN as threatened or endangered in the future. These species and communities are tracked in the Texas Natural Diversity Database (TXNDD). The most current and accurate TXNDD data can be requested from the TXNDD website.

No records of rare, threatened, or endangered species have documented within 1.5 miles of the project area in the TXNDD. Please note that the absence of TXNDD information in an area does not imply that a species is absent from that area. Given the small proportion of public versus private land in Texas, the TXNDD does not include a representative inventory of rare resources in the state. Although it is based on the best data available to TPWD regarding rare and protected species, data from the TXNDD does not provide a definitive statement as to the presence, absence or condition of special species, natural communities, or other significant features within your project area. These data are not inclusive and cannot be used as presence/absence data. This information cannot be substituted for on-the-ground surveys.

Recommendation: Please review the TPWD county list for Jefferson County, as rare and protected species could be present, depending upon habitat availability. The county lists are available on the Rare, Threatened, and Endangered Species of

Mr. Lee Sherrod Page 4 March 8, 2021

Texas website. If during construction, the project area is found to contain rare or protected species, natural plant communities, or special features, TPWD recommends that precautions be taken to avoid impacts to them.

Determining the actual presence of a species in an area depends on many variables including daily and seasonal activity cycles, environmental activity cues, preferred habitat, transiency, and population density (both wildlife and human). The absence of a species can only be established with repeated negative observations and consideration of all factors contributing to the lack of detectable presence. If encountered during construction, measures should be taken to avoid impacting wildlife.

TPWD strives to respond to requests for project review within a 45-day comment period. Responses may be delayed due to workload and lack of staff. Failure to meet the 45-day review timeframe does not constitute a concurrence from TPWD that the proposed project will not adversely impact fish and wildlife resources.

TPWD advises review and implementation of these recommendations. If you have any questions, please contact me at (806) 761-4936 or Richard.Hanson@tpwd.texas.gov.

Sincerely,

Rick Hanson

Wildlife Habitat Assessment Program

Wildlife Division

Rick Hanson

RH: 45920



Environmental Services, Inc.

12 January 2021

NFIP State Coordinator Texas Water Development Board P. O. Box 13231 Austin. Texas 78711-3231

RE: Proposed Jefferson County Drainage District No. 6 Project:

East China Relief

China, Jefferson County, Texas

HJN 21007-001EA

Dear Sirs:

Jefferson County Drainage District No. 6 (DD6) implements and maintains drainage projects throughout the Districts' 486 square mile area located in Jefferson County and includes the cities of Beaumont, Bevil Oaks, China and Nome, Texas. DD6 also works with other jurisdictions to identify flood-prone areas, to encourage inclusion of flood-damage avoidance measures in land development. DD6 has applied to the Federal Emergency Management Agency (FEMA) for grant funding to assist with the improvement to drainage of existing portions of China, north of US 90 in Jefferson County. Environmental reviews are required under the National Environmental Policy Act (NEPA) and the Council on Environmental Quality Guidelines, 40 CFR Parts 1500 to 1508. This coordination letter is being provided for your agency's' response in conformance with NEPA procedures.

The project will involve widening a portion of Ditch 600 (Green Pond Gully) approximately 140 feet wide beginning on the east side of the Town of China and extending along the south side of the ditch for approximately 1.5 miles to the LNVA Beaumont Industrial Canal near Turner Road to create in-line detention. Additionally, a 19.5-acre detention basin will be constructed north of the ditch (see project figures in Appendix 1). Ditch 600 will also be widened to a 20 ft bottom width for approximately 1.2 miles downstream of the detention areas.

Appendix 1 contains maps depicting the proposed drainage improvement project, including an aerial view of the project area and a topographic map of the project area. Note that the project area is not located within the FEMA 100-year floodplain. Land use of the surrounding area is agricultural, residential, and commercial.

Please review the attached figures and information concerning the proposed project to determine if the project is consistent with your agency's environmental regulations or policies. Please respond by letter at your earliest convenience. Your prompt attention to this matter would be greatly appreciated, as your signed concurrence letter is necessary to complete the application for grant funding from FEMA.



Please call me should you have any questions concerning this project or if I can be of any further assistance.

Sincerely,

For Horizon Environmental Services, Inc.

C. Lee Sherrod

Senior Project Manager



Environmental Services, Inc.

12 January 2021

US Army Corps of Engineers Galveston Compliance Section PO Box 1229 Galveston, TX 77553-1229

RE: Proposed Jefferson County Drainage District No. 6 Project:

East China Relief

China, Jefferson County, Texas

HJN 21007-001EA

Dear Sirs:

Jefferson County Drainage District No. 6 (DD6) implements and maintains drainage projects throughout the Districts' 486 square mile area located in Jefferson County and includes the cities of Beaumont, Bevil Oaks, China and Nome, Texas. DD6 also works with other jurisdictions to identify flood-prone areas, to encourage inclusion of flood-damage avoidance measures in land development. DD6 has applied to the Federal Emergency Management Agency (FEMA) for grant funding to assist with the improvement to drainage of existing portions of China, north of US 90 in Jefferson County. Environmental reviews are required under the National Environmental Policy Act (NEPA) and the Council on Environmental Quality Guidelines, 40 CFR Parts 1500 to 1508. This coordination letter is being provided for your agency's' response in conformance with NEPA procedures.

The project will involve widening a portion of Ditch 600 (Green Pond Gully) approximately 140 feet wide beginning on the east side of the Town of China and extending along the south side of the ditch for approximately 1.5 miles to the LNVA Beaumont Industrial Canal near Turner Road to create in-line detention. Additionally, a 19.5-acre detention basin will be constructed north of the ditch (see project figures in Appendix 1). Ditch 600 will also be widened to a 20 ft bottom width for approximately 1.2 miles downstream of the detention areas.

The site is generally characterized as agricultural fields (rice and sod farm) and man-made ditches. Dominant vegetation includes agricultural species such as rice and St. Augustine sod along with various weeds, including ragweed (*Ambrosia* sp.), Brazilian vervain (*Verbena brasiliensis*), sumpweed (*Iva* annua), and scattered trees and shrubs including sugarberry (*Celtis laevigata*), sweetgum (*Liquidambar* styraciflua), Chinese tallow (*Triadica sebifera*), water oak (*Quercus nigra*), and yaupon (*Ilex vomitoria*). On-site photographs are provided in Appendix 2.

Soils on the subject site include Beaumont clay, Viterbo silty clay loam, and League clay (Soils map, Appendix 1). These soils are listed as hydric soils.

Review of a 1914 topographic and drainage map of Jefferson County prepared by the U.S. Department of Agriculture does not show Ditch 600 or any other drainage feature in the position it is today. A 1920 map of the Jefferson County Drainage District No. 6



showing existing drainage features also does not show Ditch 600 as it is today or any other drainage feature in the vicinity of the project. However, a 1938 aerial photograph does show the ditch as it is today with adjacent levees (Appendix 1). It is apparent that the ditch was constructed in its present location sometime between 1920 and 1938. Therefore, it would be considered a man-made upland-cut drainage ditch.

The project site is not within the FEMA 100-year floodplain (Appendix 1) and would not be subject to flooding from a regulated water of the US during a normal year. Based on this information, we would conclude that Ditch 600 is not a Water of the US and that any adjacent wetlands would also not be jurisdictional under the 2020 NWPR.

Please review the attached figures and information concerning the proposed project to determine if the project may affect waters of the US, including wetlands subject to your regulatory purview. Please respond by letter at your earliest convenience. Your prompt attention to this matter would be greatly appreciated, as your signed concurrence letter is necessary to complete the application for grant funding from FEMA.

Please call me should you have any questions concerning this project or if I can be of any further assistance.

Sincerely,

For Horizon Environmental Services, Inc.

C. Lee Sherrod

Senior Project Manager



DEPARTMENT OF THE ARMY U.S. ARMY CORPS OF ENGINEERS, GALVESTON DISTRICT 2000 FORT POINT RD GALVESTON, TEXAS 77550

May 17, 2022

Compliance Branch

SUBJECT: **SWG-2022-00058** – Jefferson County Drainage District No.6 (DD6), Approximate 37.4-Acre Site, Approved Jurisdictional Determination (AJD), Proposed East China Relief Ditch 600 Drainage Project, China, Jefferson County, Texas

C. Lee Sherrod Horizon Environmental Services, Inc. 1507 South Interstate Highway 35 Austin, Texas 78741

Dear Mr. Sherrod:

This is in response to January 12, 2021 request for an approved jurisdictional determination (AJD), on behalf of Jefferson County Drainage District No. 6 for an approximate 37.4-acre site of proposed DD6 Drainage Ditch 600 improvements. The site is located south and east of China, Jefferson County, Texas (map enclosed).

Based on our review of the submitted information, additional detailed off-site information, and the 25 January 2022 site visit, we determined the approximate 37.4-acre subject site contains one (1) approximate 3.9-acre upland man-made drainage ditch and one (1) approximate 19.1-acre artificially irrigated rice field. The site was assessed using the Atlantic and Gulf Coastal Plain Region (Version 2.0) to the 1987 Corps of Engineers Wetland Delineation Manual which requires under normal circumstances, a predominance of hydrophytic vegetation, wetland soils, and sufficient hydrology at/or near the surface for adequate duration and frequency to support this aquatic ecosystem. Site hydrology is artificially maintained in the northern portion of the subject site for the purpose of rice production. If human-induced wetland hydrology were to cease and water control berms remove the area vegetation would revert to nonobligate species. Therefore, per the 1987 Corps of Engineers Wetland Delineation Manual, Section F (Atypical Situations), Subsection 4, the subject site rice field is not considered a wetland and as such is not a water of the United States (U.S.). The subject site Ditch 600 was created for the purpose of conveying stormwater from the area, was excavated wholly within and drain only uplands, and does not carry relatively permanent water flow. Therefore, per the Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in Rapanos v. United States and Carabell v. United States joint guidance issued by the Environmental Protection Agency and the U.S. Army Corps of Engineers on December 2, 2008, these aquatic resources would not be considered waters of the U.S. Consequentially the discharge of dredge and/or fill material within the project sites does not require a Department of the Army (DA) permit.

This approved jurisdictional determination will remain valid for five (5) years from the date of this letter unless new information warrants revision or reissuance prior to the expiration date.

Areas of Federal Interests (federal projects, and/or work areas) may be located within the proposed project area. Any activities in these federal interest areas would also be subject to federal regulations under the authority of Section 14 of the Rivers and Harbors Act of 1899 (33 U.S.C. 408 - Section 408). Section 408 makes it unlawful for anyone to alter in any manner, in whole or in part, any work (ship channel, flood control channels, seawalls, bulkhead, jetty, piers, etc.) built by the United States unless it is authorized by the Corps (i.e., Navigation and Operations Division).

Corps determinations are conducted to identify the limits of the Corps Clean Water Act jurisdiction for particular sites. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985, as amended. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work.

If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331.5. Also enclosed are a combined Notification of Administrative Appeal Options and Process (NAP) and Request for Appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA to the Southwestern Division Office at the following address:

Mr. Jamie Hyslop Administrative Appeals Officer Southwestern Division, USACE (CESWD-PD-O) U.S. Army Corps of Engineers 1100 Commerce Street, Suite 831 Dallas, Texas 75242-1317 Telephone: 469-487-7061; FAX: 469-487-7199

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete; that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division Office within **60 days** of the date of the NAP. It is not necessary to submit an RFA form to the Division office if you do not object to the determination in this letter.

If you have questions concerning this matter, please reference file number **SWG-2022-00058** and contact me at the letterhead address, by e-mail at kevin.s.mannie@usace.army.mil, or by telephone at 409-766-3016. To assist us in improving our service to you, please complete the survey found at

https://regulatory.ops.usace.army.mil/customer-service-survey/ and/or if you would prefer a hard copy of the survey form, please let us know, and one will be mailed to you.

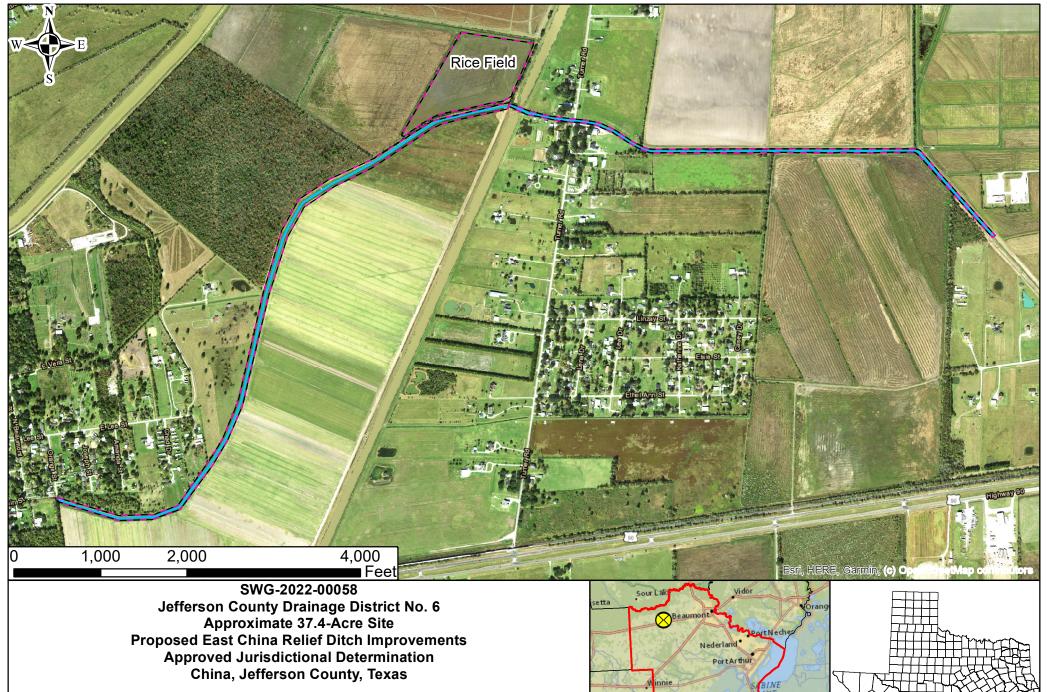
Sincerely,

Kevin Mannie

Project Manager, Evaluation Branch

Enclosures

cc: Dorothy Cook, U. S. Department of Homeland Security, Federal Emergency Management Agency (FEMA) Region 6 Mitigation Division, 800 North Loop 288, Denton, Texas 76209



Stowell

National Geographic,

Sarmin, RCAN, GEBCO,

Review_Area ~ 37.4 ac

Ditch_600

Imagery: 2020 National Agriculture Imagery Program (NAIP), 1.0-meter Near Color. Note: Review area reflects neither property boundaries nor ownership.

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applic	cant: JEFFERSON COUNTY DRAINAGE	File Number:	Date:
DISTRICT NO. 6		SWG-2022-00058	5/17/22
Attached is:			See Section
			below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)		Α
	PROFFERED PERMIT (Standard Permit or Letter of permission)		В
	PERMIT DENIAL		С
Х	APPROVED JURISDICTIONAL DETERMIN	IATION	D
	PRELIMINARY JURISDICTIONAL DETERM	MINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/appeals.aspx or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer
 for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is
 authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in
 its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional
 determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer
 for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is
 authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in
 its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional
 determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions
 therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by
 completing Section II of this form and sending the form to the division engineer. This form must be received by the
 division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information. ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD. APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice. E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD. SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.) ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the

administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

Kevin S. Mannie, Project Manager Regulatory Division, Evaluation Branch (CESWG-RD-E) U.S. Army Corps of Engineers, Galveston District 2000 Fort Point Road Galveston, Texas 77550

Telephone: 409-766-3016; Fax: 409-766-3931

If you only have questions regarding the appeal process you may also contact:

Mr. Jamie Hyslop Administrative Appeals Review Officer (CESWD-PD-O) U.S. Army Corps of Engineers, Southwest Division 1100 Commerce Street, Suite 831 Dallas, Texas 75242-1317

Telephone: 469-487-7061; Fax: 469-487-7199

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

	Date:	Telephone number:
Signature of appellant or agent.		



Environmental Services, Inc.

12 January 2021

US Fish and Wildlife Service Ecological Services Field Office – Clear Lake 17629 El Camino Real, Suite 211 Houston, Texas 77058-3051

RE: Proposed Jefferson County Drainage District No. 6 Project:

East China Relief

China, Jefferson County, Texas

HJN 21007-001EA

Dear Sirs:

Jefferson County Drainage District No. 6 (DD6) implements and maintains drainage projects throughout the Districts' 486 square mile area located in Jefferson County and includes the cities of Beaumont, Bevil Oaks, China and Nome, Texas. DD6 also works with other jurisdictions to identify flood-prone areas, to encourage inclusion of flood-damage avoidance measures in land development. DD6 has applied to the Federal Emergency Management Agency (FEMA) for grant funding to assist with the improvement to drainage of existing portions of China, north of US 90 in Jefferson County. Environmental reviews are required under the National Environmental Policy Act (NEPA) and the Council on Environmental Quality Guidelines, 40 CFR Parts 1500 to 1508. This coordination letter is being provided for your agency's' response in conformance with NEPA procedures.

The project will involve widening a portion of Ditch 600 (Green Pond Gully) approximately 140 feet wide beginning on the east side of the Town of China and extending along the south side of the ditch for approximately 1.5 miles to the LNVA Beaumont Industrial Canal near Turner Road to create in-line detention. Additionally, a 19.5-acre detention basin will be constructed north of the ditch (see project figures in Appendix 1). Ditch 600 will also be widened to a 20-ft bottom width for approximately 1.2 miles downstream of the detention areas.

Appendix 1 contains maps depicting the proposed drainage improvement project, including an aerial view of the project area and a topographic map of the project area. Land use of the surrounding area is agricultural, residential, and commercial.

The site is generally characterized as agricultural fields and man-made ditches. Dominant vegetation includes agricultural species such as rice and St. Augustine sod along with various weeds, including ragweed (*Ambrosia* sp.), Brazilian vervain (*Verbena brasiliensis*), sumpweed (*Iva* annua), and scattered trees and shrubs including sugarberry (*Celtis laevigata*), sweetgum (*Liquidambar* styraciflua), Chinese tallow (*Triadica sebifera*), water oak (*Quercus nigra*), and yaupon (*Ilex vomitoria*). On-site photographs are provided in Appendix 2.

Federally listed threatened or endangered (T/E) species known to occur in Jefferson County include eastern black rail (*Laterallus jamaicensis ssp. Jamaicensis*), piping plover (*Charadrius melodus*), red knot (*Calidris canutus rufa*), West Indian manatee (*Trichechus manatus*), green



sea turtle (*Chelonia mydas*), Atlantic hawksbill sea turtle (*Eretmochelys imbricata*), Kemp's ridley sea turtle (*Lepidochelys kempii*), leatherback sea turtle (*Dermochelys coriacea*), and loggerhead sea turtle (*Caretta caretta*) (IPAC, 2021 – Appendix 3).

Horizon observed no federally listed T/E species or potential habitats on or within the immediate vicinity of the project area. We believe that a "No Effect" finding is appropriate for this project. We understand that the Service does not reply in writing to No Effect determinations. Therefore, we are requesting herein whether your office has any additional information on the potential occurrence of listed T/E species in the project vicinity that we should consider in making a findings recommendation to FEMA.

Please review the attached figures and information concerning the proposed project to determine if the project is consistent with your agency's environmental regulations or policies. Please respond by letter at your earliest convenience. Your prompt attention to this matter would be greatly appreciated, as your signed concurrence letter is necessary to complete the application for grant funding from FEMA.

Please call me should you have any questions concerning this project or if I can be of any further assistance.

Sincerely,

For Horizon Environmental Services, Inc.

C. Lee Sherrod

Senior Project Manager



September 21, 2022

RE: Section 106 Review Consultation, Ditch 600 Flood Control Relief Project (EMT-2020-FM-007-0011), Jefferson County, Texas (30.063391, -94.321535).

To: Representatives of Federally recognized Tribes with Interest in this Project Area

The Federal Emergency Management Agency (FEMA) will be providing funds authorized under the Flood Mitigation Assistance (FMA) Program for the South Nome Community Flood Control Relief Project (EMT-2020-FM-007-0011). FEMA's Flood Mitigation Assistance (FMA) Program is a competitive grant program that provides funding to states, local communities, federally recognized tribes, and territories. Funds can be used for projects that reduce or eliminate the risk of repetitive flood damage to buildings insured by the National Flood Insurance Program. FMA is authorized under Section 1366 of the National Flood Insurance Act of 1968, as amended.

FEMA proposes to fund the Jefferson County Drainage District No. 6 through the FMA Program to design and construct a drainage project that will address shallow and moderate home flooding. This flooding has and will continue to occur if not addressed in China, Texas. The existing drainage infrastructure is inadequate to convey flood flows from the area created by frequent intense rainfall. Roadside ditches are presently unable to carry the volume of runoff they receive, notably due to the lack of a receiving waterbodies downstream from the roadside ditches. Jefferson County Drainage District No. 6 (DD6) has determined that the most feasible solution to provide flood relief is to widen Ditch 600 from its origin in China eastward tying into a previous widening project. From the origin to Ditch 600's crossing with Lower Neches Valley Authority (LNVA) Beaumont Irrigation Canal, the widening would be done with the objective of creating linear detention capacity. This would tie into a detention basin excavated in an agricultural field adjacent to the Beaumont Irrigation Canal.

Ground disturbing work will involve widening a portion of Ditch 600 approximately 140 feet wide beginning on the east side of the Town of China and extending along the south side of the ditch for approximately 1.5 miles to the LNVA Beaumont Industrial Canal near Turner Road to create in-line detention. Additionally, a 19.5-acre detention basin will be constructed north of the ditch. Ditch 600 will also be widened to a 20 ft bottom width for approximately 1.2 miles downstream of the detention areas. Portions of the work will take place in undisturbed ground, but most of the area has been disturbed through agricultural activities. FEMA has determined that the Area of Potential Effect (APE) for the proposed undertaking shall include the footprint of the project based on the scale and nature of the undertaking, as well as the area reasonably required to stage materials.

We are writing to request your comments on historic properties of cultural or religious significance to your Tribe that may be affected by the proposed undertaking. Any comments you may have on FEMA's findings and recommendations should also be provided.

On January 12, 2021, a Jefferson County DD6 performed a cultural records search using the Texas Historical Commission (THC) Archaeological Sites Atlas database and associated site files, photographs, and maps to identify historic properties within the APE. The review suggests that there exists a low potential for

undocumented prehistoric archeological resources and a low potential for historic-age architectural resources within the APE. No structures will be affected, and the surface condition will be returned to pre-project conditions following construction. The review suggests that the undertaking would have a low likelihood to cause adverse impacts to any properties listed on or considered eligible for listing on the NRHP. It is also suggests that a formal cultural resources survey of the Project Area is unwarranted.

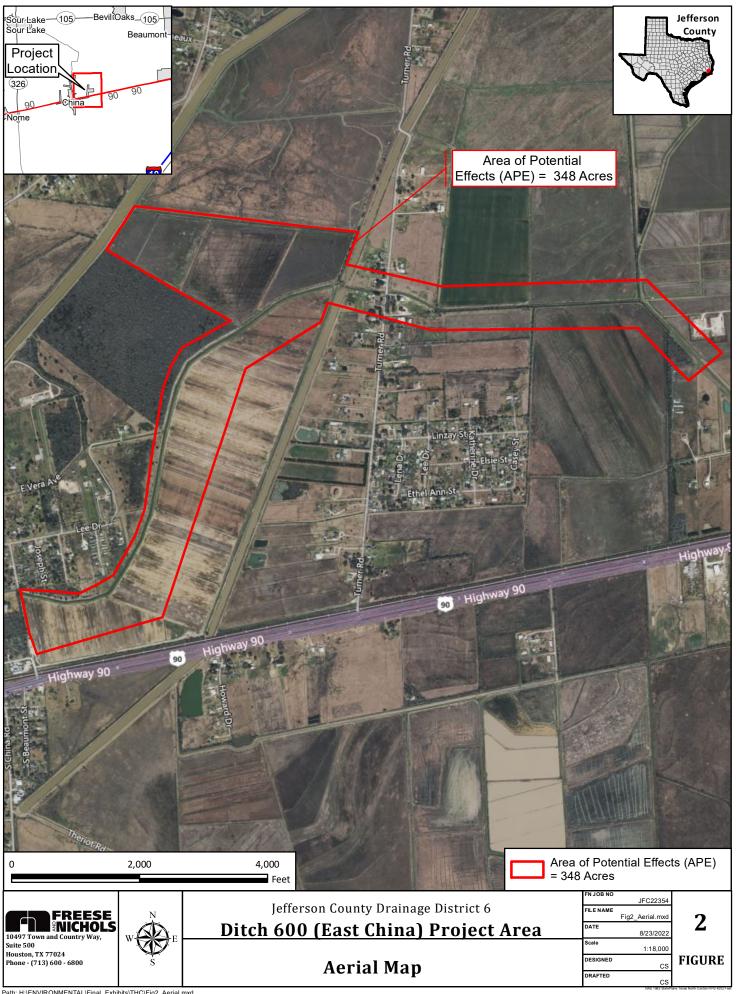
On January 26, 2021, THC consultations resulted in the following determinations:

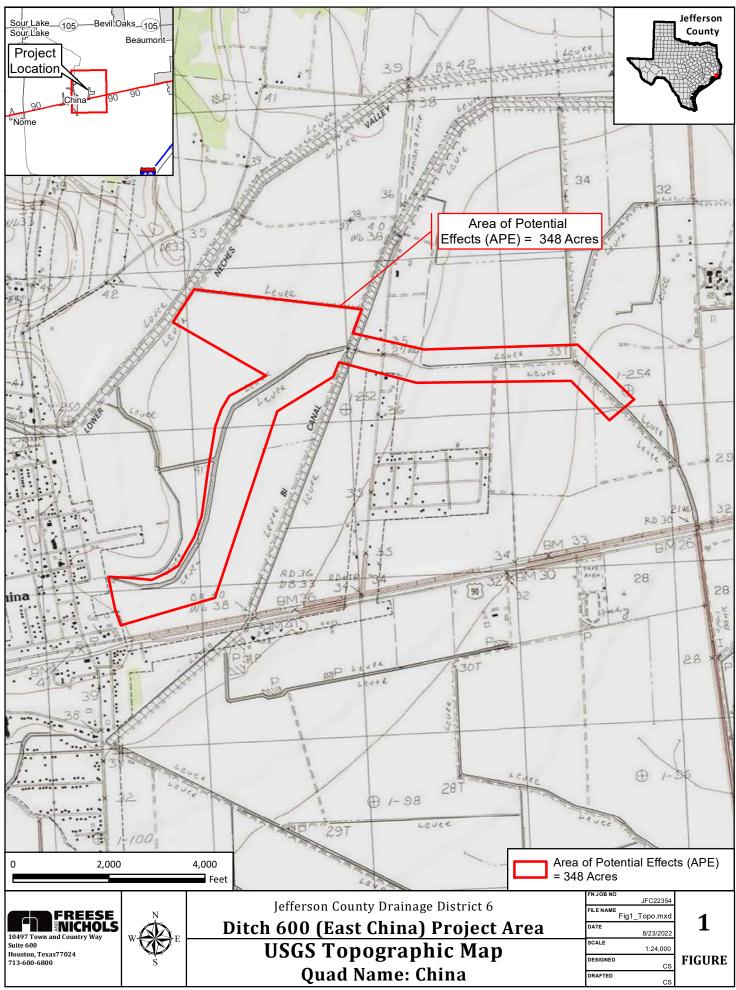
- Above-Ground Resources: No historic properties are present or affected by the project as proposed.
 However, if historic properties are discovered or unanticipated effects on historic properties are found,
 work should cease in the immediate area; work can continue where no historic properties are present.
 Please contact THC's History Programs Division at 512-463-5853 to consult on further actions that
 may be necessary to protect historic properties.
- Archeology Comments: No identified historic properties, archeological sites, or other cultural resources
 are present or affected. However, if cultural materials are encountered during project activities, work
 should cease in the immediate area; work can continue where no cultural materials are present. Please
 contact THC's Archeology Division at 512-463-6069 to consult on further actions that may be
 necessary to protect the cultural remains.

We are writing to request your comments on historic properties of cultural or religious significance to your Tribe that may be affected by the proposed undertaking. Please provide your comments within 30 days of receipt of this letter. If you concur with FEMA's determination, please sign below. If you notify us that your review identifies cultural properties within the APE, or project work discloses the presence of archeological deposits, FEMA will contact your Tribe to continue consultation.

An aerial view, a topographic map, and photos showing the project location and APE are attached. Your prompt review of this project is greatly appreciated. Should you need additional information please contact Robert Scoggin, EHP Tribal Liaison at Robert.w.scoggin@fema.dhs.gov (202) 716-4139.

	Sincerely,	
	Kevin Jaynes Regional Environmental Officer FEMA Region 6	
Concurrence by:	Date:	
Tribe		







Photograph 1. This photo was taken by FNI staff during the April 29, 2022 site visit. The photo was taken at Turner Road (latitude/longitude: 30.06409, -94.31538) facing west. The photo shows the general width and condition of the channel. The JCDD6 is proposing to widen the channel to improve drainage downstream of the detention basin.



Photograph 2. The photo was taken at Turner Road (lat./long.: 30.06409, -94.31538) facing east. The photo shows the general width and condition of the channel. The JCDD6 is proposing to widen the channel to improve drainage downstream of the detention basin.



Photograph 3. The photo was taken at the proposed corner of the detention basin (lat./long.: 30.06287, -94.32277) facing north. The photo shows the corner of a flooded agricultural field. The JCDD6 is proposing to deepen the agricultural area to increase capacity and detain more water during storm events.



Photograph 4. The photo was taken at lat/long: 30.06342, -94.32152 facing southeast down the channel. The JCDD6 is proposing to widen the channel to improve conveyance and drainage.



Photograph 5. The photo was taken at lat/long: 30.05737, -94.32683 facing northeast. The JCDD6 is proposing to widen the channel to improve conveyance and drainage.



Photograph 6. The photo was taken at lat/long: 30.05737, -94.32683 facing southwest. The JCDD6 is proposing to widen the channel to improve conveyance and drainage.

FEMA PUBLIC NOTICE OF AVAILABILITY JEFFERSON COUNTY DRAINAGE DISTRICT NO. 6 DITCH 600 COMMUNITY FLOOD CONTROL EAST CHINA RELIEF PROJECT JEFFERSON COUNTY, TEXAS EMT-2020-FM-007-0011

Interested persons are hereby notified that the Jefferson County Drainage District No. 6 (JCDD6) has applied to the Federal Emergency Management Agency (FEMA) for Flood Mitigation Assistance (FMA) Program funding. Through FMA, FEMA provides grants for flood hazard mitigation projects as well as plan development. The FMA Program is authorized by Section 1366 of the National Flood Insurance Act of 1968, as amended (NFIA), 42. U.S.C. 4104c with the purpose of reducing or eliminating claims under the National Flood Insurance Program (NFIP).

FEMA proposes to provide funding to JCDD6 to widen a portion of an existing ditch and construct a new detention infrastructure to provide flood relief to the residents of East China and their homes/personal property in Jefferson County, Texas. A portion of Ditch 600 would be widened from its origin on the east side of Town of China to Ditch 600's crossing with the Lower Neches Valley Authority (LNVA) Beaumont Irrigation Canal to create in-line detention. This would tie into a detention basin excavated in an agricultural field adjacent to the Beaumont Irrigation Canal. In conjunction, these detention features would have a capacity of 447 acre-feet.

A draft Environmental Assessment (EA) has been prepared to assess the potential impacts of the proposed action and alternatives on the human and natural environment in accordance with the National Environmental Policy Act of 1969 (NEPA), the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 CFR Parts 1500 – 1508), FEMA's Instruction 108-1-1 for implementing NEPA, the National Historic Preservation Act, Executive Order 11988, Executive Order 11990, and 44 CFR Part 9. The draft EA evaluates alternatives that provide for compliance with applicable environmental laws. The alternatives evaluated include (1) No Action; (2) the Proposed Action described above.

The draft EA is available for review and comment at Jefferson County Drainage District 6, 6550 Walden Road, Beaumont, TX 77705, from 7:00 a.m. to 4:00 p.m. Monday-Friday. An electronic version of the draft EA can also be requested from Subha Pandey, FEMA Region 6, at subha.pandey@fema.dhs.gov, or viewed on FEMA's website at https://www.fema.gov/emergency-managers/practitioners/environmental-historic/nepa-repository

The comment period will begin on November 3, 2022, and end 30 days later by close of business December 2, 2022. Written comments on the draft EA can be mailed or emailed to Subha Pandey, Environmental Protection Specialist, FEMA Region 6, 800 N Loop 288, Denton, TX 76209, subha.pandey@fema.dhs.gov. If no substantive comments are received, the draft EA will become final and a Finding of No Significant Impact (FONSI) will be issued for the project. Substantive comments will be addressed as appropriate in the final documents.

All other questions regarding disaster assistance should be directed to FEMA's Helpline at 1-800-621-3362 or visit www.DisasterAssistance.gov.

FEMA Region 6 800 North Loop 288 Denton, TX 76209



FINDING OF NO SIGNIFICANT IMPACT JEFFERSON COUNTY DRAINAGE DISTRICT NO. 6 DITCH 600 COMMUNITY FLOOD CONTROL EAST CHINA RELIEF PROJECT JEFFERSON COUNTY, TEXAS EMT-2020-FM-007-0011

BACKGROUND

In accordance with the Federal Emergency Management Agency's (FEMA) Instruction 108-1-1, an Environmental Assessment (EA) has been prepared pursuant to Section 102 of the National Environmental Policy Act (NEPA) of 1969, as implemented by the regulations promulgated by the President's Council on Environmental Quality (CEQ; 40 CFR Parts 1500-1508). The purpose of the proposed project is to provide flood relief to residents of East China and their homes/personal property in Jefferson County, Texas. This EA informed FEMA's decision on whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

The Jefferson County Drainage District No. 6 (JCDD6) has applied for FEMA funding assistance through FEMA's Flood Mitigation Assistance (FMA) Program, EMT-2020-FM-007-0011, for the improvement to drainage of existing portions of China, north of US 90 in Jefferson County. Through FMA, FEMA provides grants for flood hazard mitigation projects as well as plan development. The FMA Program is authorized by Section 1366 of the National Flood Insurance Act of 1968, as amended (NFIA), 42. U.S.C. 4104c with the purpose of reducing or eliminating claims under the National Flood Insurance Program (NFIP).

Two project alternatives were evaluated in this EA: 1) No Action Alternative; and 2) Proposed Action Alternative. For additional alternative actions, other parcels were considered for the detention basin and a different channel widening design was considered initially but were dismissed from further consideration due to their increased adverse environmental impacts and environmental constraints.

Under the No Action Alternative, the construction of the proposed channel widening, or detention areas would not take place. Thus, the No Action Alternative would result in continued flooding issues in East China. The No Action Alternative would not meet the purpose and need of the proposed project.

Under the Proposed Action Alternative, a portion of Ditch 600 would be widened from its origin on the east side of Town of China to Ditch 600's crossing with the Lower Neches Valley Authority (LNVA) Beaumont Irrigation Canal to create in-line detention. This would tie into a

Finding of No Significant Impact Ditch 600 Community Flood Control East China Relief Project EMT-2020-FM-007-0011 Page 2

detention basin excavated in an agricultural field adjacent to the Beaumont Irrigation Canal. In conjunction, these detention features would have a capacity of 447 acre-feet.

A public notice was posted in the Beaumont Enterprise and on FEMA's website. The draft EA was made available for public comment for 30 days on FEMA's website and upon request in hard or electronic copy from FEMA. No comments were received from the public during the comment period.

FINDING OF NO SIGNIFICANT IMPACT

The Proposed Action as described in the EA will not significantly impact geology, seismicity, climate change, ground water resources, floodplain, developed water resources, threatened and endangered species, essential fish habitat, coastal zone resources, hazardous materials, land use, minority and low-income populations, public services and utilities or cultural or historic resources. During construction, short-term, minor impacts to surface water quality, air quality, wetlands, migratory birds, Wildlife Communities and Habitat, noise, and traffic, are anticipated. The project will result in long term beneficial impacts to hydraulic conditions and public health and safety.

No long-term adverse impacts are anticipated. Minimal direct impacts to conversion of prime farmland soils anticipated to occur. However, the proposed site contains less than one acre of Prime Farmlands of State Importance and is therefore exempt from the provisions of the Farmland Protection Policy Act (FPPA). All adverse impacts to the proposed project site and surrounding areas will be minimized and/or mitigated through required project conditions.

CONDITIONS

The following conditions must be met as part of this project. Failure to comply with these conditions may jeopardize the receipt of federal funding.

- 1. This review does not address all federal, state, and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize federal funding.
- 2. Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.
- 3. In the event that archeological deposits, including any buried cultural resources or human remains, are uncovered, the Project shall be halted, and the Applicant shall stop all work immediately in the vicinity of the discovery and take all reasonable measures to avoid or minimize harm to the finds. All archeological findings will be secured by JCDD6, and access to the sensitive area will be restricted by JCDD6. The applicant will inform

Finding of No Significant Impact Ditch 600 Community Flood Control East China Relief Project EMT-2020-FM-007-0011 Page 3

FEMA immediately, and FEMA will consult with the SHPO. Work in sensitive areas shall not resume until consultation is completed and until FEMA determines that the appropriate measures have been taken to ensure complete project compliance with the NHPA.

- 4. The applicant will employ dust control techniques, such as covering of transported material, and watering of the construction area and haul routes to control dust emissions. Emissions will be minimized by complying with the Texas low emission diesel fuel standards, limits on idling, construction equipment maintenance in accordance with the manufacturer's specifications and other emission limitation techniques, as appropriate.
- 5. The applicant must comply with conditions of Texas Pollutant Discharge Elimination System (TPDES) Construction Storm Water General Permit TXR 150000, including preparation of a Storm Water Pollution Prevention Plan, filing a Notice of Intent (NOI) with the Texas Commission on Environmental Quality (TCEQ) prior to the start of construction. Monitoring and maintenance of emplaced Best Management Practices (BMPs) for storm water management must be conducted on a regular basis as prescribed by the General Permit.
- 6. To minimize impacts to migratory bird species, applicant will limit tree removal work during the peak migratory bird-nesting period of March through August as much as possible. Otherwise, applicant will deploy a qualified biological monitor.
- 7. To reduce noise levels during construction, construction will be timed to occur during the daytime hours. Machinery and equipment operating at the proposed Project Area will meet all local, state, and federal noise regulations.
- 8. The applicant will implement traffic control measures, if needed, during the construction phase of the project.
- 9. If any undocumented utilities or pipelines are uncovered during construction activities would cease and the proper entities (e.g., TCEQ or RRC) would be contacted.
- 10. Appropriate signage and barriers must be in place prior to construction to notify pedestrians and motorists of construction activities.
- 11. Unusable equipment, debris and material shall be disposed of in an approved manner and location. In the event significant items (or evidence thereof) are discovered during implementation of the Project, applicant shall handle, manage, and dispose of petroleum products, hazardous materials and toxic waste in accordance to the requirements and to the satisfaction of the governing local, state and federal agencies.
- 12. BMPs will be implemented to prevent erosion and sedimentation to surrounding, nearby or adjacent wetlands. This includes equipment storage and staging of construction to prevent erosion and sedimentation.

Finding of No Significant Impact Ditch 600 Community Flood Control East China Relief Project EMT-2020-FM-007-0011 Page 4

CONCLUSION

Based on the findings of the EA, coordination with the appropriate agencies, comments from the public, and adherence to the project conditions set forth in this FONSI, FEMA has determined that the proposed project qualifies as a major federal action that will not significantly affect the quality of the natural and human environment, nor does it have the potential for significant cumulative effects. As a result of this FONSI, an EIS will not be prepared (FEMA Instruction 108-1-1) and the proposed project as described in the attached EA may proceed.

APPROVAL AND ENDORSEMENT

Kevin Jaynes Regional Environmental Officer FEMA Region 6

Brianne Schmidtke Hazard Mitigation Assistance Branch Chief FEMA Region 6