Draft Environmental Assessment Jefferson County Drainage District No. 6 Southern Nome Community Flood Control Relief Project EMT-2020-FM-007-0001 Jefferson County, Texas *July 2023*





For:

U.S. Department of Homeland Security Federal Emergency Management Agency Region 6 800 North Loop 288 Denton, TX 76209



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LIST OF ACRONYMS

ALERT – Automated Local Evaluation in Real Time APE – Area of Potential Effect ASTM - American Society for Testing and Materials BFE - Base Flood Elevation **BMP** – Best Management Practice CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act CERCLIS - Comprehensive Environmental Response, Compensation, and Liability Information System CESQGs - Conditionally Exempt, Small-Quantity Generators CFR - Code of Federal Regulations CORRACT - Corrective Action DRYC - Dry Cleaning EA - Environmental Assessment EPA – US Environmental Protection Agency ERNS - Emergency Response Notification System ESA – Endangered Species Act FEMA – Federal Emergency Management Agency FIRM – Flood Insurance Rate Map FM – Farm to Market FONSI - Finding of No Significant Impact FPPA – Farmland Protection Policy Act GLO - General Land Office HDPE – High-Density Polyethylene H&H Study – Hydrology and Hydraulics Study HEC-1 – Hydrologic Engineering Center – 1 Model HECRAS - Hydrologic Engineering Center River Analysis System HECHMS - Hydrologic Engineering Center Hydrologic Modeling System HMGP - Hazard Mitigation Grant Program IH – Interstate Highway JCCAD - Jefferson County Central Appraisal District JCDD6 – Jefferson County Drainage District No. 6 LFUN - TCEQ Solid Waste Facilities and Unauthorized and Unpermitted Landfill LOMA - Letter of Map Adjustment LOMR - Letter of Map Revision LNVA - Lower Neches Valley Authority LOGs – Large-Quantity Generators MSA - Metropolitan Statistical Area MSL – Mean Sea Level NDD - Natural Diversity Database NEPA - National Environmental Policy Act NFIP - National Flood Insurance Program NFRAP – No Further Remedial Action Planned NHPA – National Historic Preservation Act NOI - Notice of Intent NOx - nitrogen oxides NPL – National Priority List NPS - National Park Service NRCS - Natural Resources Conservation Service

NRHP - National Register of Historic Places NWI - National Wetland Inventory NWS – National Weather Service PEM1Cd - palustrine, emergent, persistent, seasonally flooded, partly drained/ditched PFO1Ad – palustrine, forested, broad-leaved deciduous, temporarily flooded, partly drained/ditched PFO1Cd - palustrine, forested, broad-leaved deciduous, partly drained/ditched PRPs - Potentially Responsible Parties PUBHx - palustrine, unconsolidated bottom, permanently flooded, excavated RCRA - Resource Conservation and Recovery Act RCRA-G-RCRA Generators RCRA-TSD - RCRA Treatment, Storage, or Disposal RCRIS - Resource Conservation and Recovery Information System RCT - Railroad Commission of Texas RFI-RCRA Facility Investigation ROW - right of way SALs - State Archeological Landmarks SARA - Superfund Amendments and Reauthorization Act SH – State Highway SHPO – State Historic Preservation Office SQGs - Small-Quantity Generators SWPPP - Storm Water Pollution Prevention Plan TAC - Texas Administrative Code TCEQ - Texas Commission on Environmental Quality THC - Texas Historical Commission TMDL - Total Maximum Daily Load TPDES – Texas Pollutant Discharge Elimination System TPWD - Texas Parks and Wildlife Department TSHA – Texas State Historical Association TSMASS - Texas State Minimum Archeological Survey Standards TWDB – Texas Water Development Board TXAST – Texas Aboveground Storage Tank TXIOP - Texas Innocent Owner/Operator Program TXLF - TCEQ Solid Waste Facilities TXLUSTs - Texas Leaking Underground Storage Tanks TXSPILL - Hazardous or Potentially Hazardous Substances Spills TXSSF - Texas State Superfund database TXUSTs - Texas Underground Storage Tanks TXVCP - Texas Voluntary Cleanup Program 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 VOC - volatile organic compound

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 January 21, 1920, after a favorable vote by the Texas Legislature on January 10, 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 Southern Nome Community Flood Control Relief Project (Project) is requested from the Federal Emergency Management Agency (FEMA) under the Flood Mitigation Assistance Program (FMA). FEMA's project number is FMA-EMT-2020-FM-007-0001. The purpose of this Environmental Assessment (EA) is to comply with FEMA's responsibilities under the National Environmental Policy Act (NEPA), Section 7 of the Endangered Species Act (ESA), and Section 106 of the National Historic Preservation Act (NHPA). This EA 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 south of US 90 in Nome, Jefferson County, Texas (**Appendix A**, **Figure 1**). The proposed improvements will benefit the community of Nome by increasing stormwater detention capacity and improving stormwater conveyance during flood events. Approximate GPS coordinates for the center of the Project Area are Latitude: 30.024121; Longitude: -94.417283. The adjacent land use surrounding the Project consists of residential development and undeveloped land.

Major transportation arteries in the area include US 90 and FM 365. The topography is generally flat with elevations ranging from 42 to 46 feet above mean sea level (msl)

(Appendix A, Figure 2). Drainage generally flows to the southeast toward North Fork Taylor Bayou. 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 Southern Nome Relief Project is a drainage project that will address shallow and moderate home flooding that has and will continue to occur if not addressed. The existing drainage infrastructure is inadequate to convey flood flows from the area. A combination of improvements to existing ditches, addition of new ditches, and new detention infrastructure are proposed to aid in flood relief.

The existing small roadside drainage swales in Nome carry only a fraction of the total runoff generated by significant rainfall, which results in overland flow across the flat terrain of the land, ultimately causing street and residential flooding. Currently, there is no outfall of adequate depth or capacity to make improvements to the roadside swales.

PURPOSE AND NEED

PURPOSE

The purpose of the Project is to provide flood relief to residents of Nome 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 of 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, Nome and the surrounding areas frequently experience high levels of rainfall that have resulted in moderate residential flood events. Ditch 804-B and Ditch 804-D lack the capacity to adequately convey flows away from the Benefit Area, which

includes approximately 140 homes and a population of 490 people. Thus, the residents of Nome 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 mean that FEMA FMA grant funds would not be used for the proposed channel widening or creation of detention areas, and there would be no construction. Although there would be no environmental effects from construction, the No Action Alternative would result in continued flooding issues in South Nome.

PROPOSED ACTION

The proposed solution to adequately convey flood flows in (and away from) Nome is to place an underground drainage system consisting of 48" High-Density Polyethylene (HDPE) culverts under 2nd St. and Ave. C, improve existing ditches, and construct new ditches.

The underground system for 2nd Street will start at US 90 and run south before terminating at the beginning of Ditch 804-D on the south side of Gulf Street. For Ditch 804-D, starting at Gulf Street, approximately 1,250 LF of a 48" culvert will be placed, allowing 804-D to be enclosed. A swale ditch will be constructed on the top of the pipes to convey the water. After the 48" pipe, 804-D will be widened to the culvert crossing beneath the Lower Neches Valley Authority (LNVA) Main Canal.

The underground system for Ave. C will start at Florida St. and run south before terminating at the beginning of new ditch, Ditch 804-B1A, on the south side of Gulf St. From there, 804-B1A will be constructed and run south to converge with Ditch 804-D on the north side of the LNVA Main Canal (the beginning of 804-B1A lies within the footprint of existing ditch, Ditch 804-B1).

A new ditch, Ditch 804-B4, will be constructed from FM 365 and run westerly, tying into Ditch 804-B1A.

Finally, a new ditch, Ditch 804-B3, will be constructed to intersect Ditch 804-B approximately 500' west of FM 365 and 1,118' south of Kotz Rd. The proposed ditch will follow a path westerly along the northern perimeter of what is currently Silver Spur Mobile Home & RV Park before turning south and tying into 804-B4.

Ditches 804-D and 804-B1A will converge before crossing the LNVA Main Canal at the structures that have been sized to carry the increased flow into a 70-acre detention basin. The basin is designed to detain any excess volume below the LNVA Main Canal. Stormwater detained in this basin would eventually flow downstream into Ditch 804-D. The proposed right of way (ROW) for the majority of these new ditch segments

optimizes existing cleared lanes of land. Visual representation of the Project components is presented on aerial background in Figure 3 (Appendix A).

Excavated soil will be utilized on-site for fill material (e.g., construction of berm structures). JCDD6 will either dispose of excess soils at existing permitted landfills or sandpits and will coordinate with private landowners in the project area regarding placement of any excess excavated soils. Excavated soils that are placed on private lands must be placed outside of wetlands, the 100-year floodplain, and any National Register of Historic Places (NRHP)-listed or eligible historic sites. Soil placement areas must not be graded or otherwise excavated for the sole purpose of placement of fill.

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, such as residences and the historic Berry Cemetery, and agricultural activities within/around the Project Area, design configuration options were limited. Other alternatives considered would require more costly parcels of land and/or extensive clearing/grubbing prior excavation. For example, one alternative considered constructing Ditch 804-B1A to cut westward around coordinates: 30.020968 N, -94.416401 W and connect to Ditch 804D further north than the LNVA Main Canal crossing. This, however, was viewed as a more detrimental impact to both the landowner and the landscape. Additional land clearing was also viewed as a more detrimental ecological impact.

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, new channels, and channel widening extents are available	N/A – carried forward for NEPA analysis
Alternative Action	Yes	Yes – alternative is	No - minimal opportunities to	Other locations to

Table 1. Summary of Alternatives Considered for South Nome Flood RiskReductions and Reasons for Selecting the Proposed Action

		1
within cost expectation, is logistically feasible, technologically feasible	secure alternative parcel(s) for detention	accommodate stormwater infrastructure are not available and potential impacts to aquatic and
feasible		potential impacts to aquatic and terrestrial habitats 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 (TSHA, 2019).

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 three general soil map units (NRCS, 2006) – the Anahuac-Aris-Leton, the League-Beaumont-China, and the Labelle-Morey-Meaton soil map units. Regarding detailed soil map units for the Project Area, this includes Anahuac very fine sandy loam, Anahuac-Aris complex, Beaumont clay, Labelle clay loam, and League clay (**Appendix A, Figure 4**). Anahuac, Labelle, and League soils are considered Prime Farmland soils (NRCS, 2006). A letter was submitted to the NRCS on January 12, 2021 (**Appendix C**) requesting review for the Project's consistency with the Farmland Protection Policy Act (FPPA) and the NRCS responded on March 24, 2023 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, new ditches, 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 are 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 channels, new channels, and detention basin. Excavated soil will be utilized on-site for fill material (e.g., construction of berm structures). JCDD6 will either dispose of excess soils at existing permitted landfills or sandpits or will coordinate with private landowners in the project area regarding placement of any excess excavated soils. Excavated soils that are placed on private lands must be placed outside of wetlands, the 100-year floodplain, and any National Register of Historic Places (NRHP)-listed or eligible historic sites. Soil placement of fill.

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 is

applicable to projects located in nonattainment areas. A General Conformity Determination would not be required here because Jefferson County is within attainment.

No-Action Alternative

Under the No Action Alternative, the construction of the proposed channel widening, new channels, 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) have happened in the past 100 years. Rainfall average has increased for the eastern portion of the state (yet 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, new channels, or detention areas would not take place. Thus, the South Nome area 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 may be reduced in the South Nome 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 (TWDB, 2006). 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. Seven water wells were located within the Project Area and 18 additional wells are recorded within 0.5 mile. The 0.5-mile radius search and well locations are depicted in **Figure 5** (**Appendix A**). Majority of these wells draw or used to draw water from the Chicot Aquifer for domestic use, however, there are some of the wells in the TWDB's Groundwater Data Viewer are related to oil and gas, including those associated with brackish groundwater resources. One water well not documented by the TWDB was observed during a site visit east of Ditch 804-D (near its origin). However, this well is unlikely to be impacted by the proposed widening activities. Although no wells have been identified that are proposed to be impacted, online records search and field effort do not preclude the existence of additional wells.

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 Ditches 804-B, 804-B1 and 804-D drain into the Taylor Bayou watershed. Similarly, the proposed new channels would also drain in 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 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. The water quality of Ditches 804-B, 804-B1, and 804-D 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 the widening of existing channels, the construction of new channels, and the construction of a detention basin is primarily proposed to detain stormwater and provide flood relief, water quality improvements are more likely than degradation. In addition to Ditches 804-B, 804-B1, and 804-D, two isolated wetlands are likely to be impacted by the Project. These wetland impacts are likely to have de minimis effects to water quality, but are described in more detail below. JCDD6 will coordinate with LNVA as necessary as it pertains to their Main Canal. However, no permanent 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.

Wetlands

Federal policy recognizes that wetlands have unique and significant public values and calls for the protection of wetlands. 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. FEMA's regulations at 44 CFR Part 9 implement EO 11990. For the purposes of EO 11990, FEMA defines wetlands 44 CFR part 9.4 as "those areas which are inundated or saturated by surface or ground water with a frequency sufficient to support, or that under normal hydrologic conditions does or would support, a prevalence of vegetation or aquatic life typically adapted for life in saturated or seasonally saturated soil conditions. Examples of wetlands include, but are not limited to, swamps, fresh and salt water marshes, estuaries, bogs, beaches, wet meadows, sloughs, potholes, mud flats, river overflows and other similar areas. This definition includes those wetlands areas separated from their natural supply of water as a result of activities such as the construction of structural flood protection methods or solid-fill road beds and activities such as mineral extraction and navigation improvements."

Section 404 of the Clean Water Act defines wetlands as 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. Waters of the United States (WOTUS), including jurisdictional wetlands, pursuant to Section 404 of the CWA. The definition of WOTUS has recently been revised based on the U.S. Supreme Court's May 25, 2023 decision in the Sackett v. Environmental Protection Agency case. In light of the court decision, USACE will interpret the phrase "waters of the United States" consistent with the Supreme Court's decision in Sackett. The agencies continue to review the decision to determine next steps (USACE, 2023).

According to the National Wetland Inventory (NWI) map (USFWS, 2022), there are several wetland areas identified in the Project Area. Freese and Nichols, Inc. (FNI) conducted site visits on April 29, 2022 and November 15, 2022 to investigate for the presence of wetlands and did not observe wetland conditions at the areas where NWI shows wetlands. Conversely, FNI identified two wetlands within the Project Area in areas not demarcated by the NWI map. The NWI features identified in and around the Project Area are depicted in **Figure 6** (Appendix A)

Wetland 1 is an isolated depressional scrub-shrub wetland located approximately 1,500 ft east of Ditch 804 - D and 700 ft north of the LNVA Canal along the alignment of a proposed relief ditch. Wetland 2 is an isolated depressional forested wetland located approximately 1,500 ft east of Ditch 804 - D and 1,100 ft north of the LNVA Canal also along the alignment of a proposed relief ditch. Wetlands 1 & 2 are dominated by Chinese tallow (*Triadica sebifera*). No hydrologic connection was observed between Wetlands 1 and 2 and a WOTUS.

Coordination with the USACE, Galveston District was initiated by Horizon Environmental Services, Inc. (Horizon), on behalf of JCDD6, on January 21, 2021 as part of the NEPA scoping process. Further correspondence between FNI and the USACE resulted in the preparation of a Jurisdictional Evaluation Report (JER) to support an Approved Jurisdictional Determination (AJD). This JER includes a comprehensive review of waterbodies identified in the Project Area and was submitted to the USACE on April 13, 2023 and is included in **Appendix C**. The JER determined that water features impacted by the proposed project are not subject to USACE jurisdiction under Section 404 of the Clean Water Act. USACE's official jurisdictional determination is pending review. Although, it is not anticipated that the proposed activities will have adverse impacts to wetlands., JCDD6 is responsible for coordinating with and obtaining any required Section 404 Permit(s) from the United States Army Corps of Engineers (USACE) and/or any Section 401/402 Permit(s) from the State prior to initiating work. JCDDC will comply with all conditions of the required permit(s).

No Action Alternative

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

Proposed Alternative

The Proposed Alternative is anticipated to impact two isolated wetlands that are presumed to be non-jurisdictional pending USACE's official determination Based on these wetlands' lack of connectivity to other water resources, invasive vegetation communities, and small size, the proposed Project activities should not be considered adverse impacts. Furthermore, the impacts proposed would not result in adverse impacts to WOTUS. 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. The 8-step decision-making process for EO 11990 and 44 CFR Part 9 compliance is documented in **Appendix D**.

Floodplains

Floodplain Management, Executive Order (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. FEMA regulations at 44 CFR Part 9 also implement EO 11988.

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. Per Executive Order 11988, 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 South Nome drainage improvements are located in Zone C (**Appendix A, Figure 7**), which are designated as areas on the FIRMs as "*Areas of minimal flooding (No shading)*". The Project is located on Preliminary FIRM panel 48245C0100F, dated August 30, 2012.

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 Nome community as observed during similar past events.

Proposed Alternative

The Proposed Alternative will provide flood relief to the Nome 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; which includes approximately 140 homes. The added detention area has been designed to accommodate the floodwaters troubling the Nome 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 South Nome associated with the Project, which are included in **Table 2** below. Since the FEMA 100-year floodplain will not be modified by

or affect the Project, a Letter of Map Adjustment (LOMA) or Letter of Map Revision (LOMR) should not be required.

Frequency	500-Year	r	100-Year	ſ	50-Year		10-Year	
Condition	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
Flow (cubic feet per second)	1960	3594	1355	2493	1143	1282	707	806
Elevation (feet)	44.30	42.50	43.80	42.20	43.60	41.80	43.00	41.40

Table 2. Existing and Proposed Floodplain Conditions for South Nome Based onAtlas 14 Precipitation Data.

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 Nome is inland away from any coastal resources. Furthermore, Horizon, on behalf of JCDD6, submitted a Federal Consistency review request to the Texas GLO on January 13, 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 Alternative should be considered none.

BIOLOGICAL RESOURCES

Threatened and Endangered Species and Critical Habitat

Section 7(a) of the Endangered Species Act (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 implemented 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, 2023), provides a list of federally listed species which have been identified as potentially occurring in the 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.

	Common Name	Scientific Name	Federal Status*	Potential Habitat in Project Area
Birds	Eastern Black Rail	Laterallus jamaicensis jamaicensis	Т	No
	Piping Plover	Charadrius melodus	Т	No
	Red Knot	Calidris canutus rufa	Т	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	E	No
	Leatherback Sea Turtle	Dermochelys coriacea	Е	No
	Loggerhead Sea Turtle	Caretta caretta	Т	No
	Alligator Snapping Turtle	Macrocheyls temminckii	PT	No
Insects	Monarch Butterfly	Danaus plexippus	С	No

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

¹from USFWS Information for Planning and Consultation (IPaC) website, 2023

* E = Endangered, T = Threatened. PT = Proposed Threatened, C = Candidate

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,

2023). No preferred habitats for the species were observed within the Project Area. No effect to the species is expected from the Project.

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*) is the tallest species of 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 unobstructed hydrologic connection with the coast. The Project is not expected to affect the five sea turtle species.

Alligator Snapping Turtle

The Alligator Snapping Turtle (*Macrocheyls temminckii*) is the largest species of freshwater turtle in North America and is among the most aquatic. These turtles are generally associated with deeper water (usually large rivers, major tributaries, bayous, canals, swamps, lakes, ponds, and oxbows). They are also typically associated with structure (e.g., tree root masses, stumps, submerged trees, etc.) and may occupy areas with a dense canopy cover or undercut banks (USFWS, 2021). In the greater vicinity, waterways such as Pine Island Bayou and the Neches River are their likely habitat. In the Project Area, the LNVA Main Canal, could host Alligator Snapping Turtles. However, no substantial or permanent impacts are proposed by the Project within the LNVA Main Canal. JCDD6 ditches are unlikely to host these turtles, as such the Project is not expected to affect Alligator Snapping Turtles.

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 (Carlauistia 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.

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 alternative would have no effect on any federally listed species. There is no designated Critical Habitat within the Project Area. Therefore the project alternative 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, 2020b). 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 which includes the project area (**Table 4**) (USFWS, 2023).

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

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

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 have the 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. Any impact to wildlife from the proposed construction alternative would be minor and temporary.

CULTURAL RESOURCES

Section 106 of NHPA and its implementing regulation 36 CFR Part 800, require 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 archaeological 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 by Horizon in 2021 as well as initial coordination with the THC. THC then requested an archaeological survey to test for buried cultural materials. In 2022, AmaTerra Environmental, Inc. (AmaTerra) continued coordination with the THC to develop a scope of work and acquire a permit (Texas Antiquities Permit No. 30788) for the archaeological survey.

Historic Properties

A desktop review identified no above-ground resources within the Project Area, which was verified by THC's letter dated January 26, 2021 indicating that no identified aboveground resources will be affected by the Project as proposed. The Project Area has been subject to historical farming practices, residential, and commercial use. The proposed Project includes the widening of existing man-made ditches, addition of new ditches, and excavation of a detention basin, within current and historical farmland and along roadways in the City of Nome.

The archival desktop review conducted on the THC's online Texas Archeological Sites Atlas (TASA) restricted-access database indicated the presence of one Registered Texas Historic Landmark (RTHL), one historical marker, and two cemeteries within one kilometer of the Project Area. The Pivoto-Robinson House is an RTHL with a corresponding historical marker near the Project Area, but this RTHL will not be affected by the proposed Project. The Pivoto Cemetery is nearly 1,000 feet west of the Project Area and will similarly not be affected by the Project. The Berry Cemetery is adjacent to the Project Area (approximately 100 feet west of Ditch 804-D) with limited information

available. The Project's proximity to the Berry Cemetery was a significant reason for the THC's requirement of an archaeological survey.

The archaeological survey was conducted on October 24-27, 2022, and consisted of pedestrian survey, 86 shovel tests, and a 60-meter backhoe scrape (along the west side of Ditch 804-D). The survey resulted in the documentation of one previously unrecorded twentieth century archaeological site (41JF117), which is recommended as not eligible for inclusion in the NRHP or for designation as a Texas State Antiquities Landmark (SAL), and a single, isolated find (IF01). No artifacts were collected, and all Project records will be curated at the Center for Archeological Studies in San Marcos, Texas.

The THC accepted the results of the survey and cleared the Project to proceed on January 27, 2023. Correspondence with the THC is provided in **Appendix C**.

No Action Alternative

Under the No Action Alternative, the construction of the proposed channel widening, new channels, or detention areas would not take place. Thus, the No Action Alternative would not result in any impacts to historic properties.

Proposed Alternative

Based on the results of the archaeological survey, FEMA has determined that there will be No Historic Properties Affected. SHPO concurrence with this determination was received, dated January 27, 2023 (**Appendix C**).

In the event that archaeological 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 archaeological 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.

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 April 21, 2023. 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, new channels, 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 (2021) 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 (2021) reported this amount to be \$78,700 for 2020 and \$79,900 for 2021.

Environmental Justice

Executive Order 12898, 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. While it is unclear whether there are any lowincome households within the immediate vicinity of the Project Area, the EPA's EJ Screen tool statistics indicate low-income households make up ~15% of Nome community, which is much less than state (33%) or national (30%) averages (EPA, 2023).

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. 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 serve all residents in the Benefit Area. No existing residential properties or structures will be adversely affected by the Project.

Hazardous Materials

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. Eight records of mapped properties were identified, most of which were located north of the project site along Highway 90. Of the eight mapped properties, four 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 proposed Project Area.

A records search was conducted to determine the presence of active oil or gas wells that may exist within 500 feet of the Project Area. The records that were reviewed indicated the presence of 12 dry hole wells. Additionally, it was found that 32 plugged oil/gas wells exist within the 500-foot buffer of the property. None of these records indicate any release of contaminants that could affect the Project Area. (Banks Environmental Data, Inc., 2022).

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. 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.

Facility Name Address	Relative Location	Potential Environmental Risk	Regulatory Database	Comments
Briggs Motor Co 2163 HWY 90, Nome, TX 77629	0.02 miles N	Low	RCRA GEN	 The facility does not exist on the operating/Post-closure Permit Baseline Conditionally Exempt small Quantity Generator
Briggs Texaco HWY 90, Nome, TX 77629	0.52 miles E	Low HREC	LPST	 Final concurrence issued. Soil contamination only. Site closure 11/29/1990.
Nome Mini Mart W Corner of 2 nd ST and HWY 90, Nome, TX 77629	0.03 miles N	Low HREC	LPST	 Final concurrence issued. GW impacted no apparent threats or impacts to receptors. Closure date 12/10/2010.
Nome Mini Mart 2215 HWY 90, Nome, TX 75961	0.03 miles N	Low HREC	LPST	 Final pending well plug. Assessment incomplete no apparent receptors impacted. Closure date 12/10/2010.

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

Facility Name Address	Relative Location	Potential Environmental Risk	Regulatory Database	Comments
Briggs Motor HWY 90, Nome, TX 77629	0.03 miles N	Low	PST	- One empty 1,000 gallon tank removed from ground.
Briggs Texaco HWY 90, Nome, TX 77629	0.03 miles N	Low	PST	 One 4,000 gallon tank containing diesel removed from the ground. Two 1,000 gallon tanks removed from the ground One 2,000 gallon tank removed from the ground.
Nome Mart 2323 US HWY 90, Nome, TX 77629	0.02 miles N	Low	PST	 One 8,000 gallon tank containing gasoline in use. One 4,000 gallon tank containing diesel in use. Three 2,000 gallon tanks containing gasoline removed from ground.
Nome Mini Mart 2315 HWY 90, Nome, TX 75961	0.03 miles N	Low	PST	 One 2,000 gallon tank containing gasoline removed from ground. Two 1,000 gallon tanks containing gasoline removed from ground One 500 gallon tank containing gasoline removed from ground.

Noise

The Project Area is generally surrounded by undeveloped and/or agricultural land with some residential development present along the northern and eastern extents of the Project Area. Existing noise is generated by agricultural operations (e.g., tractors) and traffic along US 90 to the north and FM 365 to the east 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, new channels, 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. 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. 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 ROW along Ditches 804-B, 804-B1, and 804-D, 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 vis US 90. FM 365 is a minor transportation corridor that runs south from US 90 in Nome and eventually turns southeast connecting with IH 10 near Fannett, Texas. The remainder of the roadways in and around Nome 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, new channels, 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 Gulf St/Kotz Rd 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 residents by the City of Nome as well as Jefferson County. The city is responsible for water utilities. Electricity is provided via Entergy. FNI researched the Public Utility Commission (PUC) Water and Sewer Certificate of Convenience and Necessity (CCN) Viewer (PUC, 2022) and observed at least one mapped water utility inside the Benefit Area. Similarly, FNI reviewed the Railroad Commission of Texas (RRC) for documented oil or gas pipelines. One natural gas pipeline crosses the proposed detention area and Ditch 804-D at the southern limits of the Project Area. Beyond the Project Area there are numerous petrochemical utility lines documented nearby, particularly to the southeast associated with the abundance of former and current oil and gas wells in the greater area.

No Action Alternative

Under the No Action Alternative, the construction of the proposed channel widening, new channels, 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 Nome. JCDD6 will conduct appropriate utility surveys prior to construction and coordinate with any utility providers as needed. If any undocumented utilities, pipeline, cable, or wells are encountered during construction, JCDD6 would stop activities and report to the appropriate agency.

Public Health and Safety

Currently the Project Area consists of agricultural fields and existing stormwater drainage features. Thus, there are no safety risks associated with the proposed Project Area except potentially during flood events associated with storms and hurricanes. Safety issues during construction would include, but may not be limited to operating heavy machinery and construction traffic entering and exiting the Project Area. The purpose of the Project is to detain and 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 majority of the Project Area lies just beyond any officially zoned areas in the City of Nome based on the U.S. Census Bureau's city profile. Work within the City limits will mainly be restricted to the installation of 48" HDPE culverts along City streets. The nearest zoned areas could be classified as Single-Family Dwellings. 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, new channels, 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 Nome. 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 TABLE

Table 5. Effects Summary Table

Resource	Anticipated Effects	Mitigation Measures
Geology, Seismicity, and Soils	Geology – no impacts. Seismicity – no impacts. Soils – short term, minor impacts.	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	Impacts to jurisdictional wetlands or "waters of the US" are not anticipated pending the USACE AJD. No significant adverse impacts to two non- jurisdictional, low quality wetlands. Spoil material will be disposed of in non- wetland areas.	BMPs will be implemented to prevent erosion and sedimentation to surrounding, nearby, or adjacent non- jurisdictional 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.
Threatened or Endangered Species and Critical Habitat	No effect to federally listed species or critical habitat.	No mitigation measures proposed.

Resource	Anticipated Effects	Mitigation Measures
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 bird- nesting 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 response dated January 27, 2023 (Appendix C).	In the event that archaeological 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 archaeological 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.
Environmental Justice	No impacts.	No mitigation measures proposed.
Hazardous Materials	No impacts.	Unusable equipment, debris and material shall be disposed
Resource	Anticipated Effects	Mitigation Measures
----------------------------------	---	---
		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.
Zoning and Land Use	No impacts.	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 alternative. In considering potential cumulative impacts associated with the proposed alternative 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 five years in the past and five years into the future.

To consider past, present, and reasonably foreseeable actions in the general Project region within the past or future five years, we reviewed proposed Capital Improvement Projects (CIPs) for Jefferson County (Jefferson County, 2022) and City of Beaumont. In addition, the County flood risk reduction projects are also considered in this analysis. The CIP budget for Jefferson County for fiscal year 2022-2023 is \$4,280,442, which is estimated to only be a fraction of the funding being sought by the County and City of Beaumont (among other political subdivisions in the region) from flood relief programs being administered by FEMA or GLO.

To capture actions occurring in the last five 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
- Agricultural Activities
- Flood Risk Reduction Projects

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. Agricultural activities in the region can result in both positive and negative impacts. As land across the region was converted from its natural condition to farmland, the impacts may have been generally viewed as negative, and even more so cumulatively. However, when considering the more recent past, the present, and future conditions, routine agricultural activities could generally be seen more neutrally. Rice cultivation, 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 permeable areas for infiltration or storage.

Similarly, flood risk reduction projects tend to also result in the preservation of green space and floodways as well as maintain permeable expanses of land that might otherwise be subject to development. Flood risk reduction projects generally improve or maintain water quality, while reducing potential flood damages. 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. As a whole, Jefferson County, and the entire region of southeast Texas has been collectively working to provide flood mitigation and relief to citizens in the wake of the most recent natural disasters (notably Hurricane Harvey) in tandem with new data such as Atlas 14 precipitation that is reshaping mapped floodplains. Cumulatively, these flood mitigation projects tend to become even more effective when planned at a greater scale as watershed and regional approaches to stormwater management and flood reduction are generally considered best practice. Under the Proposed Action, cumulative impacts should be beneficial. This is further substantiated when considering proposed flood risk reduction efforts for Ditch 600 (East China) and Ditch 505, which are also within the Taylor Bayou watershed.

AGENCY COORDINATION, PUBLIC INVOLVEMENT AND PERMITS

Agency Coordination

Prior to the preparation of this EA, JCDD6 contracted Horizon to complete environmental work related to the Project. As such, the majority of 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
 - GLO responded on January 29, 2021
- Jefferson County (Local Floodplain Administrator)
 - A letter was submitted requesting review and concurrence on January 12, 2021
- Natural Resources Conservation Service (NRCS)
 - A letter was submitted requesting review and concurrence on January 12, 2021
 - NRCS responded on March 24, 2023
- Texas Commission on Environmental Quality (TCEQ)
 - A letter was submitted requesting review and concurrence on January 12, 2021
 - TCEQ responded on February 4, 2021
- Texas Historical Commission (THC)

- A letter was submitted requesting review and concurrence on January 12, 2021
- THC responded on January 26, 2021
- AmaTerra reengaged the THC on July 27, 2022
- THC provided the archeological survey permit (Texas Antiquities Permit No. 30788) on August 29, 2022
- AmaTerra submitted a draft archeological survey report to THC on December 5, 2022.
- THC accepted the archeological survey report on January 27, 2023.
- 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)
 - A letter was submitted requesting review and concurrence on January 12, 2021
- U.S. Army Corps of Engineers (USACE)
 - A letter was submitted requesting review and concurrence on January 12, 2021
 - FNI submitted a JER to USACE on April 13, 2023.
- U.S. Fish and Wildlife Service (USFWS)
 - 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

Consultation letters were sent to the tribes on April 21, 2023. 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 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. FNI anticipates that a USACE permit will not be required; however, JCDD6 is awaiting an AJD from the USACE before this can be verified.

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 E**) and on FEMA's website (<u>https://www.fema.gov/emergency-managers/practitioners/environmental-historic/region/6</u>) 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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APPENDICES

APPENDIX A Figures

APPENDIX B

Representative Photos

APPENDIX C Agency Coordination Letters & Responses Received

APPENDIX D

8-Step Decision Making Process

APPENDIX E

Notice of Availability of the Draft EA

APPENDIX F

Draft FONSI

APPENDIX A Figures





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APPENDIX B Representative Photos



Photo 1. View looking downstream (south) along Ditch 804 – D near where the 2nd St culvert will outlet into the ditch.



Photo 2. View looking downstream (south) along Ditch 804 – D north of the LNVA Canal, a ditch proposed for widening within the Project Area.



Photo 3. View looking downstream (south) along Ditch 804 – D facing the existing culvert that conveys water beneath the LNVA Canal.



Photo 4. View looking east towards Wetland 1, an isolated shrub wetland along the alignment of a relief ditch within the Project Area.



Photo 5. View looking south towards Wetland 2, an isolated forested wetland along the alignment of a relief ditch within the Project Area.



Photo 6. View looking east along the proposed Ditch 804 – B4 alignment near where it will confluence with the proposed Ditch 804 – B1A.



Photo 7. Typical view looking east along the proposed Ditch – B1A alignment through uplands parallel to the LNVA Canal.



Photo 8. View looking upstream (north) along Ditch 804 – B3, a ditch proposed for widening within the Project Area.



Photo 9. View looking upstream (west) along Ditch 804 – B1, a ditch which intersects the proposed Project Area at its confluence with Ditch 804 – B3.



Photo 10. View looking north at the LNVA Canal which runs from east to west within the Project Area.



Photo 11. View looking downstream (south) along Ditch 804 – D south of the LNVA Canal, and the proposed placement of a detention basin within the Project Area.



Photo 12. View looking west at the proposed detention area south of the LNVA Canal.

APPENDIX C Agency Coordination Letters & Responses Received



Environmental Services, Inc.

13 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: South Nome Relief Nome, Jefferson County, Texas HJN 21006-001EA

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 Nome, south 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 Town of Nome experiences structure flooding during heavy rain events due to undersized ditches and a major constriction to drainage having to pass through inadequate culverts under the Lower Neches Valley Authority (LNVA) Canal south of Nome. The project will involve widening portions of several existing ditches and excavation of several additional ditches north of the LNVA Canal, adding 3-60" structures under the LNVA Canal, and construction of an approximately 70-acre detention basin south of the LNVA Canal (see project figures in Appendix 1).

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.

CORPORATE HEADQUARTERS

1507 South IH 35 ★ Austin, Texas 78741 ★ 512.328.2430 ★ Fax 512.328.1804 ★ www.horizon-esi.com An LJA Company



GLO HJN 21006-001EA 13 January 2021 Page 2

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


GLO HJN 21006-001EA 13 January 2021 Page 3

APPENDIX 1

PROJECT FIGURES



GLO HJN 21006-001EA 13 January 2021 Page 4



Figure 1: Location



Figure 2: Project



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Figure 3: Topo



Figure 4: Coastal Zone Boundary



13 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: South Nome Relief Nome, Jefferson County, Texas HJN 21006-001EA

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 Nome, south 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 Town of Nome experiences structure flooding during heavy rain events due to undersized ditches and a major constriction to drainage having to pass through inadequate culverts under the Lower Neches Valley Authority (LNVA) Canal south of Nome. The project will involve widening portions of several existing ditches and excavation of several additional ditches north of the LNVA Canal, adding 3-60" structures under the LNVA Canal, and construction of an approximately 70-acre detention basin south of the LNVA Canal (see project figures in Appendix 1).

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 mapped within FEMA Zone C (areas of minimal flooding). 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.

CORPORATE HEADQUARTERS

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Jefferson County HJN 21006-001EA 13 January 2021 Page 2

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



13 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: South Nome Relief Nome, Jefferson County, Texas HJN 21006-001EA

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 Nome, south 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 Town of Nome experiences structure flooding during heavy rain events due to undersized ditches and a major constriction to drainage having to pass through inadequate culverts under the Lower Neches Valley Authority (LNVA) Canal south of Nome. The project will involve widening portions of several existing ditches and excavation of several additional ditches north of the LNVA Canal, adding 3-60" structures under the LNVA Canal, and construction of an approximately 70-acre detention basin south of the LNVA Canal (see project figures in Appendix 1).

Soils on the subject site include Anahuac-Aris Complex, Anahuac-Urban land, Anahuac very fine sandy loam, Leton loam, Beaumont clay, LaBelle-Urban Land Complex, LaBelle clay loam, and League clay (Soils map, Appendix 1). The Anahuac very fine sandy loam, Anahuac-Aris Complex, LaBelle clay loam, League clay soils are listed as Prime Farmland Soils. Approximately 1650 feet of ditch widening with adjacent spoil disposal will occur within the Anahuac very fine sandy loam and Anahuac-Aris Complex soil areas (approximately 1.9 acres), and 70 acres of League clay and LaBelle clay loam soils will be occupied by the detention basin.

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

CORPORATE HEADQUARTERS

1507 South IH 35 ★ Austin, Texas 78741 ★ 512.328.2430 ★ Fax 512.328.1804 ★ www.horizon-esi.com An LJA Company



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

Subject:

Attention:

South Nome Drainage Project

Lee Sherrod

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 may involve areas of Prime Farmland; however, we consider the location to be exempt from provisions of FPPA as the project described does not constitute a permanent conversion of farmland. Additionally, modifications to existing drainage structres is considered minmal impact activity. 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: 2023.03.24 13:40:30 -05'00'

Mark V. Palmer Jr. NRCS Cartographic Technician

Attachment: None



13 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: South Nome Relief Nome, Jefferson County, Texas HJN 21006-001EA

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 Nome, south 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 Town of Nome experiences structure flooding during heavy rain events due to undersized ditches and a major constriction to drainage having to pass through inadequate culverts under the Lower Neches Valley Authority (LNVA) Canal south of Nome. The project will involve widening portions of several existing ditches and excavation of several additional ditches north of the LNVA Canal, adding 3-60" structures under the LNVA Canal, and construction of an approximately 70-acre detention basin south of the LNVA Canal (see project figures in Appendix 1).

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.

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

CORPORATE HEADQUARTERS

1507 South IH 35 ★ Austin, Texas 78741 ★ 512.328.2430 ★ Fax 512.328.1804 ★ www.horizon-esi.com An LJA Company



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 #2020-013. South Nome 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

P.O. Box 13087 • Austin, Texas 78711-3087 • 512-239-0010 • tceq.texas.gov



January 13, 2021

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

Re: Cultural Resources Archival Review South Nome Relief Project Nome, Jefferson County, Texas H066-21006.001.EA

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 Nome, south 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 Town of Nome experiences structure flooding during heavy rain events due to undersized ditches and a major constriction to drainage having to pass through inadequate culverts under the Lower Neches Valley Authority (LNVA) Canal south of Nome. The project will involve widening portions of several existing ditches and excavation of several additional ditches north of the LNVA Canal, adding 3-60" structures under the LNVA Canal, and construction of an approximately 70-acre detention basin south of the LNVA Canal (see project figures in Appendix 1).

MANAGEMENT SUMMARY

Horizon Environmental Services, Inc. (Horizon) has completed a desktop archival review for known cultural resources for the proposed South Nome Relief Project in Nome, Jefferson County, Texas. No documented cultural resources are located within or immediately adjacent to the boundaries of the Property. Based on the physiographic setting of the Property on a coastal flat set well away from natural water bodies, it is Horizon's opinion that there exists a low potential for undocumented prehistoric archeological resources within the boundaries of the Property. Based on the absence of historic-age structures within the Property boundaries, it is Horizon's opinion that there exists a low potential for historic-age architectural resources within the Property. Several structures of historic age are visible on historical maps adjacent to the project area within



the community of Nome at the northern end of the Property; as such, it is Horizon's opinion that there exists a moderate to high potential for historic-age archeological resources within the northern boundaries of the Property. In particular, one historic age structure was noted during a general site reconnaissance near the northern end of the project.

CULTURAL RESOURCES ARCHIVAL REVIEW RESULTS

Database Review

Archival research conducted on the Texas Historical Commission's (THC) online *Texas Archeological Sites Atlas* (TASA) restricted-access database indicates the presence of two previously recorded cemeteries within an approximately 1.0-mile radius of the Property. These documented cultural resources and their distances from the Property are summarized in Table 1 below. No documented cultural resources, including any archeological sites, cemeteries, or historic properties listed on the National Register of Historic Places (NRHP) and/or designated as State Antiquities Landmarks (SAL) are located within or immediately adjacent to the boundaries of the Property.

Examination of historical US Geological Survey (USGS) topographic maps dating from 1956 to the present and aerial photographs dating from 1952 to the present indicate that no standing structures of potentially historic age (i.e., 50 years of age or older) are located within the boundaries of the Property. Several historic-age structures are visible on historical maps adjacent to the project area within the community of Nome at the northern end of the Property. One of these historic structures was noted and photographed near an existing ditch to be widened on the south edge of Nome (see Appendix 1 and Appendix 2).

Based on the TASA database, no prior cultural resources surveys have been conducted within the limits of the Property.

Probability Assessment

Prehistoric archeological sites are commonly found in upland areas and on alluvial terraces near stream/river channels or drainages. Based on the physiographic setting of the Property on a coastal flat set well away from natural water bodies, it is Horizon's opinion that there exists a low potential for undocumented prehistoric archeological resources within the boundaries of the Property.

Based on the absence of historic-age structures within the Property boundaries, it is Horizon's opinion that there exists a low potential for historic-age architectural resources within the Property.



Several structures of historic age are visible on historical maps adjacent to the project area within the community of Nome at the northern end of the Property; as such, it is Horizon's opinion that there exists a moderate to high potential for historic-age archeological resources within the northern boundaries of the Property.

Recommendations

Based on the assessed moderate to high potential for undocumented historic-era archeological resources on or near the northern portion of the Property, it is Horizon's opinion that a formal cultural resources survey of the portions of the Property near the Town of Nome may be appropriate.

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 at (512) 328-2430 or at jesse_owens@horizon-esi.com if you have any questions or require additional information.

Sincerely,

e52 ((

Jesse Owens Cultural Resources Director Horizon Environmental Services, Inc.

References

National Environmental Title Research (NETR)

2020 Historic Aerials by NETR Online. http://www.historicaerials.com. Accessed January 13, 2020.

Texas Historical Commission

2020 *Texas Archeological Sites Atlas.* Access-restricted online database. Texas Historical Commission. https://atlas.thc.state.tx.us/. Accessed January 13, 2020.



Site No./Name	Site Type	NRHP/SAL Eligibility Status ¹	Distance/Direction from Property	Potential to be Impacted by Project?
Cemeteries				
Berry Cemetery (JF-C019)	Cemetery	N/A	105.0 feet west	No
Pivoto Cemetery (JD-C020)	Cemetery	N/A	0.2 mile west	No

Table 1. Previously Documented Cultural Resources within 1.0 Mile of Property

¹ Determined eligible/ineligible = Site determined eligible/ineligible by SHPO Recommended eligible/ineligible = Site recommended as eligible/ineligible by site recorder and/or sponsoring agency but eligibility has not been determined by SHPO Undetermined = Eligibility not assessed or no information available

NRHP National Register of Historic Places

SAL State Antiquities Landmark

SHPO State Historic Preservation Office

Horizon

THC-SHPO HJN 21006-001EA 13 January 2021 Page 5

APPENDIX 1

PROJECT FIGURES



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Figure 1: Location



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Environmental Services, Inc.



Figure 3: Topo



Figure 4: 1938 Aerial Photograph

Horizon

THC-SHPO HJN 21006-001EA 13 January 2021 Page 9

APPENDIX 2

PHOTOGRAPHS





PHOTO 1 Typical view of Pastureland



PHOTO 3 Typical view of Woodlands



PHOTO 2 Typical view of Pastureland



PHOTO 4 Typical view of Woodlands





PHOTO 5 Typical view of Agricultural Fields



PHOTO 7 Typical view of Existing Ditches



PHOTO 6 Typical view of Existing Ditches



PHOTO 8 Historic Structure near Ditch ROW

Jesse Owens

From:	noreply@thc.state.tx.us	
Sent:	Tuesday, January 26, 2021 9:32 AM	
То:	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 #202104991

South Nome Relief Project Southwest of FM 385 & US 90 China,TX 77629

Description: Request for consultation regarding cultural resources compliance requirements associated with drainage improvements project in Nome, Jefferson County, Texas.

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 Amy Borgens, 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

• An archeological survey is required. You may obtain lists of archeologists in Texas through the <u>Council of Texas</u> <u>Archeologists</u> and the <u>Register of Professional Archaeologists</u>. Please note that other qualified archeologists not included on these lists may be used. If this work will occur on land owned or controlled by a state agency or political subdivision of the state, a Texas Antiquities Permit must be obtained from this office prior to initiation of fieldwork. All fieldwork should meet the <u>Archeological Survey Standards for Texas</u>. A report of investigations is required and should be produced in conformance with the Secretary of the <u>Interior's Guidelines for</u> <u>Archaeology and Historic Preservation</u> and submitted to this office for review. Reports for a Texas Antiquities Permit should also meet the <u>Council of Texas Archeologists Guidelines for Cultural Resources Management</u> <u>Reports</u> and the <u>Texas Administrative Code</u>. In addition, any buildings 45 years old or older that are located on or adjacent to the tract should be documented with photographs and included in the report. To facilitate review and make project information available through the Texas Archeological Sites Atlas, we appreciate emailing survey area shapefiles to <u>archeological projects@thc.texas.gov</u> concurrently with submission of the draft report. Please note that this is required for projects conducted under a Texas Antiquities Permit.

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: amy.borgens@thc.texas.gov, 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,

Town Bouch

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

Please do not respond to this email.

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

eTRAC

electronic THC review and compliance

Home | Reviews | Archeo Permits | Abstracts | Shapefiles



Hello sthomas@amaterra.com Log off

Review Request Confirmation

Your request for consultation has been successfully submitted to the Texas Historical Commission.

Project Name

Archaeological Survey for the Proposed South Nome Relief Project

Track Number 202302988

Date Received

12/5/2022 11:28:08 AM

Due Date:

1/4/2023 11:28:08 AM (30 Days)

Thank you!

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Sunshine Thomas

From:noreply@thc.state.tx.usSent:Friday, January 27, 2023 2:18 PMTo:Sunshine Thomas; reviews@thc.state.tx.usSubject:South Nome Relief Project



Re: Project Review under Section 106 of the National Historic Preservation Act and/or the Antiquities Code of Texas THC Tracking #202304199 Date: 01/27/2023 South Nome Relief Project (Permit 30788) Nome, TX

Description: Archaeologists excavated 86 shovel test and one mechanical scrape along a 5,619 m long linear project location and within a 70-acre detention basin. One new archaeological site was recorded.

Dear Sunshine Thomas:

Nome,TX 77629

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 Justin Kockritz and Emily McCuistion , has completed its review and has made the following determinations based on the information submitted for review:

Archeology Comments

• This draft report is acceptable. To facilitate review and make project information and final reports available through the Texas Archeological Sites Atlas, we appreciate submission of tagged pdf copies of the final report including one restricted version with all site location information (if applicable), and one public version with all site location information information redacted; an online abstract form submitted via the abstract tab on eTRAC; and survey area shapefiles submitted via the shapefile tab on eTRAC. For questions on how to submit these please visit our video training series at: https://www.youtube.com/playlist?list=PLONbbv2pt4cog5t6mCqZVaEAx3d0MkgQC Please note that these steps are required for projects conducted under a Texas Antiquities Permit.

We have the following comments: Because site 41JF117 "may extend east, into the lawn of the nearby home" please alter the site boundary to show that the site touches the eastern boundary of the project APE on Figure 23 and Appendix B for the final report.

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: justin.kockritz@thc.texas.gov, Emily.McCuistion@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 <u>http://thc.texas.gov/etrac-system</u>.

Sincerely,

Emily Mccuistion

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

Please do not respond to this email.



13 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: South Nome Relief Nome, Jefferson County, Texas HJN 21006-001EA

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 Nome, south 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 Town of Nome experiences structure flooding during heavy rain events due to undersized ditches and a major constriction to drainage having to pass through inadequate culverts under the Lower Neches Valley Authority (LNVA) Canal south of Nome. The project will involve widening portions of several existing ditches and excavation of several additional ditches north of the LNVA Canal, adding 3-60" structures under the LNVA Canal, and construction of an approximately 70-acre detention basin south of the LNVA Canal (see project figures in Appendix 1).

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 project area is generally characterized as a mixture of residential areas, pastureland, woodlands, and agricultural fields with man-made ditches. Dominant vegetation of agricultural fields includes agricultural species such as rice along with various weeds, including ragweed (*Ambrosia* sp.), Brazilian vervain (*Verbena brasiliensis*), sumpweed (*Iva* annua). Dominant vegetation of woodlands includes sugarberry (*Celtis laevigata*), live oak (*Quercus virginiana*), Chinese tallow (*Triadica sebifera*), water oak (*Quercus nigra*), loblolly pine (*Pinus taeda*), slash pine (*Pinus elliottii*), southern red cedar (*Juniperus virginiana var. silicicola*), and yaupon (*Ilex vomitoria*). Dominant vegetation of pasturelands includes dallisgrass (*Paspalum* dilatatum), bermudagrass (*Cynodon* dactylon), St. Augustine (*Stenotaphrum* secondatum), dewberry

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(*Rubus* trivialis), ragweed, and scattered trees and shrubs as noted above. 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



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

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Jeffery D. Hildebrand Houston

Jeanne W. Latimer San Antonio

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

> Dick Scott Wimberley

Lee M. Bass Chairman-Emeritus Fort Worth

T. Dan Friedkin Chairman-Emeritus Houston

Carter P. Smith Executive Director March 8, 2021

C. Lee Sherrod Horizon Environmental Services, Incorporated 1507 S Interstate 35 Austin, TX 78741

RE: Jefferson County Drainage District No. 6 Project: South Nome Relief Nome, Jefferson County, Texas

Dear Mr. Sherrod:

Texas Parks and Wildlife Department (TPWD) has received the review request for the proposed project referenced above. Jefferson County Drainage District No. 6 (DD6) has applied for funding from the Federal Emergency Management Agency (FEMA) to assist with the project. TPWD has reviewed the information provided and offers the following comments and recommendations.

Project Description

To alleviate potential flooding in the Town of Nome, the proposed project would widen portions of existing drainage ditches and excavate several additional ditches north of the Lower Neches Valley Authority (LNVA) Canal. The proposed project would also include the construction of a detention basin, approximately 70 acres in size, south of the LNVA Canal.

General Construction Recommendations

Recommendation: Regarding trenching and excavations, TPWD recommends the judicious use and placement of sediment control fence to exclude wildlife from the disturbance areas that would be trenched or excavated. 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. The exclusion fence should be maintained for the life of the project and only removed after the construction is completed and the disturbed sites have been revegetated. 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. TPWD recommends that any open trenches or excavation areas be covered overnight and/or inspected every morning to ensure no wildlife species have been trapped. For open trenches and excavated areas that cannot be covered overnight, escape ramps fashioned from soil or boards should be installed at an angle of less than 45 degrees (1:1) in the trenches that will allow wildlife to climb out on their own.

4200 SMITH SCHOOL ROAD AUSTIN, TEXAS 78744-3291 512.389.4800

www.tpwd.texas.gov

To manage and conserve the natural and cultural resources of Texas and to provide hunting, fishing and outdoor recreation opportunities for the use and enjoyment of present and future generations.

Mr. C. Lee Sherrod Page 2 of 4 March 8, 2021

Recommendation: For soil stabilization and/or revegetation of disturbed areas within the project areas, TPWD recommends using erosion and seed/mulch stabilization materials that avoid entanglement hazards to snakes and other wildlife species. Because the mesh found in many erosion control blankets or mats pose an entanglement hazard to wildlife, TPWD recommends the use of no-till drilling, hydromulching and/or hydroseeding due to a reduced risk to wildlife. If erosion control blankets or mats would be used, the product should contain no netting or contain loosely woven, natural fiber netting in which the mesh design allows the threads to move, therefore allowing expansion of the mesh openings. Plastic mesh matting and hydromulch containing microplastics should be avoided.

Recommendation: During construction, operation, and maintenance of the existing and proposed drainage ditches and detention pond, TPWD recommends observing slow (25 miles per hour, or less) speed limits within project areas. Reduced speed limits would allow personnel to see wildlife in the vehicle path and avoid harming them.

Impacts to Vegetation and Wildlife Habitat

As described in the information provided, the proposed project is located in areas characterized as a mixture of residential, pastureland, woodlands, and agricultural. Dominant woodlands vegetation includes sugarberry, live oak, and yaupon. The area proposed for the 70-acre detention pond appears to be cleared for agricultural use.

Recommendation: To the greatest extent practicable, TPWD recommends minimizing the amount of woody vegetation to be removed when widening existing ditches, creating new ditches, or to accommodate heavy equipment access to project sites. Mast producing species (e.g., live oak and sugar berry) should be preserved as much as possible as they are valuable food sources for wildlife including deer, squirrels, and birds. Material and equipment staging areas should be located in previously disturbed areas that do not require vegetation clearing. Staging areas should also be located away from aquatic habitats. Colonization by invasive species, particularly invasive grasses and weeds, should be actively prevented. Vegetation management should include removing invasive species early on while allowing the existing native plants to revegetate the disturbed areas. TPWD recommends referring to the Lady Bird Johnson Wildflower Center Native Plant Database (available online) for regionally adapted native species that would be appropriate for post-construction revegetation.

Beneficial management practices (BMPs) for erosion control and sediment runoff should be installed prior to construction and maintained until disturbed areas are permanently revegetated using site-specific native vegetation. BMPs should be properly installed in order to effectively minimize the amount of sediment and other debris entering aquatic habitats. Mr. C. Lee Sherrod Page 3 of 4 March 8, 2021

Federal Law: Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) 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 Department of the Interior. This protection applies to most native bird species, including ground nesting species. The U.S. Fish and Wildlife Service (USFWS) Migratory Bird Office can be contacted at (505) 248-7882 for more information on potential impacts to migratory birds.

Within the project area, potential impacts to migratory birds may occur during site preparation, excavation, and grading activities through the disturbance of existing vegetation and bare ground that may harbor active nests, including nests that may occur in grass, shrubs and trees, and on bare ground.

Recommendation: TPWD recommends that vegetation clearing and soil excavation within the project area or in areas needed to provide heavy equipment access to the sites be scheduled to occur outside of the March 15 through September 15 migratory bird nesting season. Contractors should be made aware of the potential of encountering migratory birds (either nesting or wintering) in the proposed project site and be instructed to avoid negatively impacting them.

If vegetation clearing must be scheduled to occur during the nesting season, TPWD recommends the vegetation to be impacted should be surveyed for active nests by a qualified biologist prior to disturbance. Nest surveys should be conducted no more than five days prior to scheduled clearing to ensure recently constructed nests are identified. If active nests are observed during surveys, TPWD recommends a 150-foot buffer of vegetation remain around the nests until the young have fledged or the nest is abandoned.

State Law: Parks and Wildlife Code – Chapter 64, Birds

State law prohibits any take or possession of nongame birds, including their eggs and nests. Laws and regulations pertaining to state-protection of nongame birds are contained in Chapter 64 of the Texas Parks and Wildlife (TPW) Code; specifically, Section 64.002 provides that no person may catch, kill, injure, pursue, or possess a bird that is not a game bird. TPW Code 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.

Although not documented in the Texas Natural Diversity Database (TXNDD), many bird species which are not listed as *threatened* or *endangered* are protected by Chapter 64 of the TPW Code and are known to be year-round or seasonal residents or seasonal migrants through the proposed project area

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

Mr. C. Lee Sherrod Page 4 of 4 March 8, 2021

Species of Greatest Conservation Need

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 protection given to threatened or endangered species. Special landscape features, natural communities, and SGCN are rare resources for which TPWD actively promotes conservation, and TPWD considers it important to evaluate and, if necessary, 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 TXNDD. The most current and accurate TXNDD data can be requested from the TXNDD website.

Recommendation: Please review the TPWD county list for Jefferson County, as rare and protected species could be present, depending on habitat availability. TPWD Annotated County Lists are available online using the TPWD Rare, Threatened, and Endangered Species of Texas (RTEST) web application. The USFWS should be contacted for species occurrence data, guidance, permitting, survey protocols, and mitigation for federally listed species.

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 determined with repeated negative observations and consideration of all the variable factors contributing to the lack of detectable presence. If encountered during construction, measures should be taken to avoid impacting all wildlife, regardless of listing status.

Recommendation: Implementation of the *General Construction Recommendations* discussed above would serve to minimize risks to many SGCN and other wildlife species.

I appreciate the opportunity to review and comment on this project. Please contact me at (361) 825-3240 or **russell.hooten@tpwd.texas.gov** if we may be of further assistance.

Sincerely,

Russell Hooten

Russell Hooten Wildlife Habitat Assessment Program Wildlife Division

/rh 4521



13 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: South Nome Relief Nome, Jefferson County, Texas HJN 21006-001EA

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 Nome, south 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 Town of Nome experiences structure flooding during heavy rain events due to undersized ditches and a major constriction to drainage having to pass through inadequate culverts under the Lower Neches Valley Authority (LNVA) Canal south of Nome. The project will involve widening portions of several existing ditches and excavation of several additional ditches north of the LNVA Canal, adding 3-60" structures under the LNVA Canal, and construction of an approximately 70-acre detention basin south of the LNVA Canal (see project figures in Appendix 1).

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 mapped within FEMA Zone C (areas of minimal flooding). 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.



TWDB HJN 21006-001EA 13 January 2021 Page 2

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



13 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: South Nome Relief Nome, Jefferson County, Texas HJN 21006-001EA

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 Nome, south 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 Town of Nome experiences structure flooding during heavy rain events due to undersized ditches and a major constriction to drainage having to pass through inadequate culverts under the Lower Neches Valley Authority (LNVA) Canal south of Nome. The project will involve widening portions of several existing ditches and excavation of several additional ditches north of the LNVA Canal, adding 3-60" structures under the LNVA Canal, and construction of an approximately 70-acre detention basin south of the LNVA Canal (see project figures in Appendix 1).

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 project area is generally characterized as a mixture of residential areas, pastureland, woodlands, and agricultural fields with man-made ditches. Dominant vegetation of agricultural fields includes agricultural species such as rice along with various weeds, including ragweed (*Ambrosia* sp.), Brazilian vervain (*Verbena brasiliensis*), sumpweed (*Iva* annua). Dominant vegetation of woodlands includes sugarberry (*Celtis laevigata*), live oak (*Quercus virginiana*), Chinese tallow (*Triadica sebifera*), water oak (*Quercus nigra*), loblolly pine (*Pinus taeda*), slash pine (*Pinus elliottii*), southern red cedar (*Juniperus virginiana var. silicicola*), and yaupon (*Ilex vomitoria*). Dominant vegetation of pasturelands includes dallisgrass (*Paspalum* dilatatum), bermudagrass (*Cynodon* dactylon), St. Augustine (*Stenotaphrum* secondatum), dewberry

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(*Rubus* trivialis), ragweed, and scattered trees and shrubs as noted above. On-site photographs are provided in Appendix 2.

Soils on the subject site include Anahuac-Aris Complex, Anahuac-Urban land, Anahuac very fine sandy loam, Leton loam, Beaumont clay, LaBelle-Urban Land Complex, LaBelle clay loam, and League clay (Soils map, Appendix 1). Most of these soils are listed as hydric or contain hydric inclusions.

Review of 1914 and 1920 topographic and drainage maps of the project area do not indicate any natural drainage features in the vicinity of the project. However, a 1938 aerial photograph does show various ditches within agricultural areas south of Nome (Appendix 1). It would appear that most of the drainage ditches were constructed sometime between the 1920s and 1950s. Therefore, we conclude that the existing ditches proposed for widening are man-made upland-cut drainage ditches.

Based on the absence of regulated water courses in the project vicinity, we would conclude that any wetland areas in the project vicinity 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

JURISDICTIONAL EVALUATION REPORT

South Nome Community Flood Relief Project

April 2023

Prepared for

Jefferson County Drainage District No. 6



Prepared by

Freese and Nichols, Inc. 10497 Town and Country Way Suite 500 Houston, Texas 77024 (713) 600-6823



JFC22352

<u>Jurisdictional Evaluation Report for</u> <u>South Nome Community Flood Relief Project</u> <u>Freese and Nichols, Inc.</u> <u>April 2023</u>

On April 29, 2022, and November 15, 2022, environmental scientists with Freese and Nichols, Inc. (FNI) conducted a site visit to the South Nome Community Flood Relief Project Area in Nome, Jefferson County, Texas (**Figure 1; Appendix A**). Jefferson County Drainage District No. 6 (JCDD6) is seeking FEMA funding through the Flood Mitigation Assistance (FMA) program to provide flood relief to the community of Nome, Texas. The objective of the site visit was to identify potential waters of the U.S. (WOTUS) related to the proposed South Nome Community Flood Relief project. The information gathered during the site visit is presented below. The Project Area is described as the limits of investigation (LOI) within this report and consists of approximately 984 acres, including the Lower Neches Valley Authority (LNVA) Canal and various JCDD6 maintained ditches (804-B, 804-B1, 804-D, 804-D1, 804-D3, and 804-D4).

Purpose:

The purpose of this Assessment is to identify potential WOTUS within the proposed South Nome Community Flood Relief project.

Applicant:

Jefferson County Drainage District No. 6 c/o Karen Stewart Chief Business Officer 6550 Walden Road Beaumont, Texas 77707 (409) 842-1818

Applicant's Agent:

Michael Lane, PWS Freese and Nichols, Inc. 10497 Town and Country Way, Suite 500 Houston, Texas 77024 (713) 600-6823

Methods:

<u>Approach</u>

Procedures for performing routine wetland determinations as outlined in the *Corps of Engineers 1987 Wetlands Delineation Manual*, the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0),* and the U.S. Army Corps of Engineers Jurisdictional Determination form Instructional *Guidebook* were used to delineate and identify potential WOTUS.

<u>Mapping</u>

A variety of resources were used to obtain information regarding potential WOTUS within the South Nome Community Flood Relief Project LOI. These sources included the U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) maps, U.S. Geological Survey (USGS) digitized versions of the 7.5 minute topographic maps, USGS National Hydrography Dataset (NHD), National Wetlands Inventory (NWI) data, and NRCS Soil Survey Geographic (SSURGO) database. Maps of the LOI are located in **Appendix A**. **Figures 2.1-2.4** depict the LOI on an aerial photograph background. **Figure 3** depicts the LOI on the USGS Topographic Quad Moss Bluff, **Figure 4** depicts the LOI with NWI data, **Figure 5** depicts NRCS soil map units within the LOI, and **Figure 6** depicts the 100-year floodplains in the project vicinity. The maps included in this report were created using ESRI ArcMap 10.7.1.

Results:

<u>Vicinity Map</u>

Figure 1 (**Appendix A**) shows the general location of the South Nome Community Flood Relief LOI, including the LNVA Canal on ESRI World Street Map.

Site Description

The South Nome Community Flood Relief is located in Nome, Jefferson County, Texas. The project would involve widening several existing ditches and the excavation of several additional ditches north of the LNVA Canal, adding three 60" structures under the LNVA Canal, and construction of an approximately 70 acre detention basin south of the LNVA Canal. The project area encompasses the LNVA Canal, which extends through the southern half of the project area from 2,300 ft southeast of Bonner Rd east to Hwy 365. The canal draws water from Pine Island Bayou to the northeast of the project area. Six existing ditches drain to the canal within the project area (804-B, 804-B1, 804-D, 804-D1, 804-D3, and 804-D4). Representative photos taken at the project area can be found in **Appendix B**.

Hydrologic Characterization

Open Water

No open waterbodies were observed within the proposed project LOI.

Streams

No streams were observed within the proposed project LOI.

Wetlands

Two wetlands were observed within the proposed project LOI. Wetland 1 is an isolated depressional scrub-shrub wetland located approximately 1,500 ft east of Ditch 804 – D and 700 ft north of the LNVA Canal along the alignment of a proposed relief ditch (**Photo 1**). Wetland 2 is an isolated depressional forested wetland located approximately 1,500 ft east of Ditch 804 – D and 1,100 ft north of the LNVA Canal also along the alignment of a proposed relief ditch (**Photo 2**). Wetlands 1 & 2 are dominated by Chinese tallow (*Triadica sebifera*). No hydrologic connection was observed between Wetlands 1 and 2 and a WOTUS. Wetland Determination Data Forms associated with Wetlands 1 & 2 and uplands within the project area are located in **Appendix C**.

Canals and Ditches

Six ditches and one canal were observed with the proposed project LOI. The LNVA Canal extends through the southern half of the project area from 2,300 ft southeast of Bonner Rd to Hwy 365 (Photo 3). Ditch 804 – B extends from east of the intersection of Kotz Rd and Hwy 365 south to LNVA Canal (Photo 4). Ditch 804 – B1 extends from the intersection of Ave C and Kotz Rd east to Ditch 804 – B (Photo 5). The segment of Ditch 804 – D north of LNVA Canal extends from the intersection of Gulf St and 2nd St south to the LNVA Canal (Photo 6), while the segment south of LNVA Canal extends from 500 ft north of 35115 FM 365 north to the LNVA Canal (Photo 7). Ditch 804 - D1 extends from west of the intersection of Bonner Rd and FM 1009 east to 804 – D north of LNVA Canal. Ditch 804 – D3 is located in the southwest corner of the project area where it flows from a culvert beneath the LNVA Canal. Ditch 804 – D4 flows into Ditch 804 – D approximately 1,400 ft south of the LNVA Canal near the eastern border of the project. The LNVA Canal was constructed in uplands for the purpose of supplying water to communities along its route. Review of historic topo maps, historic aerials and field investigations revealed no indication that Ditches 804 – B, 804 – B1, 804 – D, 804 – D1, 804 – D3, and 804 D-4 were constructed within or rerouted WOTUS, therefore it is FNI assumption that these six ditches were constructed wholly in uplands. Additionally, while some of these ditches do hold water for extended periods, none exhibit relatively permanent flow.

Vegetative Characterization

The proposed project LOI is located within the Northern Humid Gulf Coastal Prairies subregion of the Western Gulf Coastal Plain Ecoregion (Griffith et al, 2004). Typical vegetation of the region consisted of grasslands dominated by little bluestem (Schizachyrium scoparium), yellow Indian grass (Sorghastrum nutans), brownseed paspalum (Paspalum plicatulum), gulf muhly (Muhlenbergia capillaris), and switchgrass (Panicum virgatum). Maritime woodlands were dominated by oaks (Quercus spp.) and loblolly pine (Pinus taeda), with incursions of exotic Chinese tallow and Chinese privet (Ligustrum sinense).

Trees and shrubs observed within the general project area include Chinese tallow, laurel oak (*Quercus laurifolia*), loblolly pine, southern wax myrtle (*Morella cerifera*), and yaupon (*Ilex vomitoria*). Herbaceous vegetation observed within the project area include Bahia grass (*Paspalum notatum*), southern dewberry (*Rubus trivialis*), and woodrush flatsedge (*Cyperus entrerianus*).

Soils Characterization

The proposed project LOI includes ten soil map units (including Water), as identified using GIS analysis. A GIS layer of soils was created using data from the NRCS Soil Survey Geographic Database (NRCS, 2016) for Jefferson County, Texas. The soil map unit descriptions were obtained from the *Soil Survey of Jefferson County, Texas* (USDA, 2004) and is presented in the following paragraph. **Figure 5** (**Appendix A**) shows the soil map unit distribution within the LOI.

Anahuac very fine sandy loam, 0 to 2 percent slopes; this soil includes moderately well drained, hydric, and non-hydric components.

Anahuac-Aris complex, 0 to 1 percent slopes; this soil complex includes moderately well drained, poorly drained, hydric, and non-hydric components.

Anahuac-Urban land complex, 0 to 2 percent slopes; this soil complex includes moderately well drained and non-hydric components.

Beaumont clay, 0 to 1 percent slopes; this soil includes poorly drained, non-hydric components.

Labelle clay loam, 0 to 1 percent slopes; this soil includes somewhat poorly drained, hydric, and non-hydric components.

Labella-Levac complex, 0 to 1 percent slopes; this soil complex includes somewhat poorly drained, hydric, and non-hydric components.

Labella-Urban complex, 0 to 1 percent slopes; this soil complex includes somewhat poorly drained and non-hydric components.

League clay, 0 to 1 percent slopes; this soil includes poorly drained, hydric, and non-hydric components.

Leton loam, 0 to 1 percent slopes, occasionally flooded, frequently ponded; this soil includes somewhat poorly drained and hydric components.

100-Year Floodplain

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) No. 4803850100B and 4812970001B, the proposed project area is not located within a Regulatory Floodplain (**Figure 6; Appendix A**).

Conclusions:

No potential waters of the U.S. were identified within the South Nome Community Flood Relief LOI, therefore, in FNI's opinion no water features impacted by the proposed project are subject to USACE jurisdiction under Section 404 of the Clean Water Act. The proposed project area is not located within the Regulatory Floodplain.

References:

- Griffith, G.E., Bryce, S.A., Omernik, J.M., Comstock, J.A., Rogers, A.C., Harrison, B., Hatch, S.L., and Bezanson, D. 2004. Ecoregions of Texas (color poster with map, descriptive text, and photographs): Reston Virginia, U.S. Geologic Survey (mal scale 1:2,500,000).
- U.S. Department of Agriculture (USDA). 2004. Soil Survey of Trinity County, Texas. Natural Resources Conservation Service.
- U. S. Fish and Wildlife Service (USFWS). 2016. Ecological Services. National Wetlands Inventory. https://www.fws.gov/wetlands/
- U. S. Geological Survey (USGS). 2016. Hydrography. National Hydrography Dataset. http://nhd.usgs.gov/index.html

Natural Resources Conservation Service (NRCS). 2016. United States Department of Agriculture. Web Soil Survey. https://www.websoilsurvey.nrcs.usda.gov

Appendix A Figures



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NAD 1983 StatePlane Texas South Central FIPS 4204 Fe



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NAD 1983 Stat



Appendix B Photographs



Photo 1. View looking east towards Wetland 1, an isolated shrub wetland along the alignment of a relief ditch within the project LOI.



Photo 2. View looking south towards Wetland 2, an isolated forested wetland along the alignment of a relief ditch within the project LOI.



Photo 3. View looking north at the LNVA Canal which runs from east to west within the project LOI.



Photo 4. View looking north along Ditch 804 – B, a ditch proposed for widening within the project LOI.



Photo 5. View looking west along Ditch 804 – B1, a ditch which intersects the proposed project LOI at its confluence with Ditch 804 – B.



Photo 6. View looking south along Ditch 804 – D north of the LNVA Canal, a ditch proposed for widening within the project LOI.



Photo 7. View looking south along Ditch 804 – D south of the LNVA Canal, and the proposed placement of a detention basin within the project LOI.



Photo 8. Typical view looking east along the proposed alignment of a relief ditch through upland pasture in the project LOI.



Environmental Services, Inc.

13 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: South Nome Relief Nome, Jefferson County, Texas HJN 21006-001EA

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 Nome, south 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 Town of Nome experiences structure flooding during heavy rain events due to undersized ditches and a major constriction to drainage having to pass through inadequate culverts under the Lower Neches Valley Authority (LNVA) Canal south of Nome. The project will involve widening portions of several existing ditches and excavation of several additional ditches north of the LNVA Canal, adding 3-60" structures under the LNVA Canal, and construction of an approximately 70-acre detention basin south of the LNVA Canal (see project figures in Appendix 1).

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 project area is generally characterized as a mixture of residential areas, pastureland, woodlands, and agricultural fields with man-made ditches. Dominant vegetation of agricultural fields includes agricultural species such as rice along with various weeds, including ragweed (*Ambrosia* sp.), Brazilian vervain (*Verbena brasiliensis*), sumpweed (*Iva* annua). Dominant vegetation of woodlands includes sugarberry (*Celtis laevigata*), live oak (*Quercus virginiana*), Chinese tallow (*Triadica sebifera*), water oak (*Quercus nigra*), loblolly pine (*Pinus taeda*), slash pine (*Pinus elliottii*), southern red cedar (*Juniperus virginiana var. silicicola*), and yaupon (*Ilex vomitoria*). Dominant vegetation of pasturelands includes dallisgrass (*Paspalum* dilatatum), bermudagrass (*Cynodon* dactylon), St. Augustine (*Stenotaphrum* secondatum), dewberry

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(*Rubus* trivialis), ragweed, and scattered trees and shrubs as noted above. 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

FEMA PUBLIC NOTICE OF AVAILABILITY JEFFERSON COUNTY DRAINAGE DISTRICT NO. 6 SOUTHERN NOME COMMUNITY FLOOD CONTROL RELIEF PROJECT JEFFERSON COUNTY, TEXAS EMT-2020-FM-007-0001

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). This notice also serves as FEMA's final notice in compliance with Executive Order 11990 for the Protection of Wetlands (44 CFR Part 9).

FEMA proposes to provide funding to JCDD6 to provide drainage improvements in the City of Nome, Jefferson County, Texas. The proposed improvements, include converting segments of roadside swales along 2nd Street and Avenue C, situated south of US 90 in Nome, into 48" culverts that outfall into receiving streams for Nome. The outfalls are Drainage District 6 ditches 804-D and 804-B1, respectively.

Ditch 804-D would be widened from its origin southward all the way to its culvert crossing beneath the Lower Neches Valley Authority (LNVA) Main Canal, an above ground irrigation water supply channel. Ditch 804-B1 will be widened for a segment, and then a diversion is proposed to cut due south. The new ditches will converge and after being constructed in the southerly direction to the LNVA Main Canal right of way (ROW), the new Ditch 804-B1A will connect to Ditch 804-D near the Main Canal crossing. The culvert beneath the canal will be enlarged to occupy more flow volume and a 70-acre detention basin would be constructed on the receiving end of the culvert immediately south of Main Canal. Stormwater detained in this basin would eventually flow downstream into Ditch 804-D.

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 Omololu Dawodu, FEMA Region 6, at <u>omololu.dawodu@fema.dhs.gov</u>, or viewed on FEMA's website at <u>https://www.fema.gov/emergency-managers/practitioners/environmental-historic/nepa-repository</u>

The comment period will begin on July X, 2023 and end 30 days later by close of business August X, 2023. Written comments on the draft EA can be mailed or emailed to Omololu Dawodu, Environmental Protection Specialist, FEMA Region 6, 800 N Loop 288, Denton, TX 76209, <u>omololu.dawodu@fema.dhs.gov</u>. 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.



FINDING OF NO SIGNIFICANT IMPACT JEFFERSON COUNTY DRAINAGE DISTRICT NO. 6 SOUTHERN NOME COMMUNITY FLOOD CONTROL RELIEF PROJECT JEFFERSON COUNTY, TEXAS EMT-2020-FM-007-0001

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 Project is to provide flood relief to residents of Nome 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-007-0001, for the improvement to drainage of existing portions of Nome, south 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 but were dismissed from further consideration due to their increased adverse environmental impacts, environmental constraints and potential increases in project costs.

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 South Nome. The No Action Alternative would not meet the purpose and need of the proposed project.

Under the Proposed Action Alternative, JCDD6 will provide drainage improvements in the City of Nome, Jefferson County, Texas. The proposed improvements, include converting segments of roadside swales along 2nd Street and Avenue C, situated south of US 90 in Nome, into 48" culverts that outfall into receiving streams. The outfalls are Drainage District 6 ditches 804-D and Ditch 804-B1, respectively.

Finding of No Significant Impact Southern Nome Community Flood Control Relief Project EMT-2020-FM-007-0001 Page 2

Ditch 804-D would be widened from its origin southward all the way to its culvert crossing beneath the Lower Neches Valley Authority (LNVA) Main Canal, an above ground irrigation water supply channel. Ditch 804-B1 will be widened for a segment, and then a diversion is proposed to cut due south. The new ditches will converge and after being constructed in the southerly direction to the LNVA Main Canal right of way (ROW), the new Ditch 804-B1A will connect to Ditch 804-D near the Main Canal crossing. The culvert beneath the canal will be enlarged to occupy more flow volume and a 70-acre detention basin would be constructed on the receiving end of the culvert immediately south of Main Canal. Stormwater detained in this basin would eventually flow downstream into Ditch 804-D.

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, developed water resources, floodplain, coastal resources, threatened and endangered species, coastal zone resources, cultural resources, hazardous materials, minority and low-income populations, or public services and utilities. During construction, short-term, minor impacts to soils, air quality, surface water quality, migratory birds, wildlife communities and habitat, noise, and traffic are anticipated. Two small, low-quality, and non-jurisdictional wetlands will be permanently impacted by the proposed project, but the impacts are not significant. The project will result in long term beneficial impacts to hydraulic conditions and public health and safety. No long-term significant adverse impacts are anticipated. 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.

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- 3. The applicant will either utilize excavated soils on-site for fill material, dispose of excess soils at existing permitted landfills or sandpits, or will coordinate with private landowners in the project area regarding placement of any excess excavated soils. Excavated soils that are placed on private lands must be placed outside of wetlands, the 100-year floodplain, and any National Register of Historic Places (NRHP)-listed or eligible historic sites. Soil placement areas must not be graded or otherwise excavated for the sole purpose of placement of fill.
- 4. 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.
- 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 TPDES construction General Permit.
- 6. Best management practices (BMPs) will be implemented to prevent erosion and sedimentation to surrounding, nearby, or adjacent non-jurisdictional wetlands. This includes equipment storage and staging of construction to prevent erosion and sedimentation.
- 7. The applicant is responsible for coordinating with and obtaining any required Section 404 Permit(s) from the United States Army Corps of Engineers (USACE) and/or any Section 401/402 Permit(s) from the State prior to initiating work. The applicant must comply with all conditions of the required permit(s). All coordination pertaining to these activities should be retained as part of the project file in accordance with the respective grant program instructions.
- 8. To minimize impacts to migratory bird species, applicant will limit vegetation management work during the peak migratory bird-nesting period of March through August as much as possible to avoid destruction of individuals, nests, or eggs. If vegetation reduction activities must occur during the nesting season, applicant 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 and the rationale for the buffer radius determination, and submit that report to FEMA for inclusion in project files.

- 9. 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.
- 10. 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.
- 11. 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.
- 12. If any undocumented utilities, pipelines, cable, or wells are encountered during construction, the applicant would stop activities and report to the appropriate agency.
- 13. Appropriate signage and barriers must be in place prior to construction to notify pedestrians and motorists of construction activities.

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.

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APPROVAL AND ENDORSEMENT

Dorothy Cook Acting Regional Environmental Officer FEMA Region 6

Brianne Schmidtke Hazard Mitigation Assistance Branch Chief FEMA Region 6