

Draft Environmental Assessment
Georgia Street/Winnsboro Road Pump
Station and Force Main Project
Ouachita Parish, Louisiana
FEMA HMGP-4263-0013-LA
HUD CDBG-MIT

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Federal Emergency Management Agency
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LIST OF ACRONYMS

ABFE	Advisory Base Flood Elevation
ACHP	Advisory Council on Historic Preservation
APE	Area of Potential Effects
BFE	Base Flood Elevation
BMP	Best Management Practices
CDBG-DR	Community Development Block Grant-Disaster Recovery
CEQ	Council of Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CWA	Clean Water Act
DFIRM	Digital Flood Insurance Rate Map
EA	Environmental Assessment
e.g.	exempli gratia or “for example”
EHP	Environmental and Historic Preservation
EIS	Environmental Impact Statement
EO	Executive Order
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
FPPA	Farm Protection Policy Act
GCR	General Conformity Rule
GOHSEP	Governor's Office of Homeland Security and Emergency Preparedness
H & H	Hydrology and Hydraulic Study
HDPE	High Density Polyethylene
HMGP	Hazard Mitigation Grant Program
HP	Historic Preservation
HUD	Department of Housing and Urban Development
i.e.	id est or “in other words”
LAC	Louisiana Administrative Code
LADOTD	Louisiana Department of Transportation and Development
LA HMGP PA	Statewide Secondary Programmatic Agreement
LA OCD	Louisiana Office of Cultural Development
LDEQ	Louisiana Department of Environmental Quality
LDNR	Louisiana Department of Natural Resources
LOMR	Letter of Map Revision
LPDES	Louisiana Pollutant Discharge Elimination System
MBTA	Migratory Bird Treaty Act
NEPA	National Environmental Policy Act
NETR	Nationwide Environmental Title Research

NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act of 1966, as Amended
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
OCD	Louisiana Office of Community Development
OSHA	Occupational Safety and Health Administration
RHA	Rivers and Harbors Act
ROW	Right of Way
SHPO	State Historic Preservation Office/Officer
SONRIS	Strategic Online Natural Resources Information System
THPO	Tribal Historic Preservation Officer
U.S.	United States
USC	United States Code
USCB	United States Census Bureau
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WOTUS	Waters of the United States

1.0 INTRODUCTION

1.1 Project Authority

In March of 2016, heavy rainfall occurred across northern Louisiana, causing major flooding of the Ouachita River and City of Monroe in Ouachita Parish. The National Weather Service reported over 20 inches of rain in the Monroe area from March 8 to 12, 2016. Inadequate drainage in a low-lying residential community in Monroe resulted in the flooding of several homes. The affected area is within a watershed of approximately 325 acres. Rainfall and runoff drain out of the basin through the Swayze School Canal, which is a concrete drainage ditch where floodwaters have risen to 2 feet above the existing ground surface during significant rainfall events.

President Barack Obama signed a disaster declaration (FEMA-4263-DR-LA) for the state of Louisiana on March 13, 2016, authorizing the Department of Homeland Security's Federal Emergency Management Agency (FEMA) to provide federal assistance in designated areas of Louisiana. FEMA is administering this disaster assistance pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), PL 93-288, as amended. Section 404 of the Stafford Act authorizes FEMA's Hazard Mitigation Grant Program (HMGP) to provide funds to states and local governments to implement long-term hazard mitigation measures after a major disaster declaration.

Ouachita Parish has applied to FEMA, through the Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) for HMGP as an overmatch¹ project to construct a new pump station with detention pond; construct a new force main; and upgrade an existing outfall into the Ouachita River to address flooding in the Georgia Street-Winnsboro Road area of Monroe. This document and its attachments evaluate the environmental and cultural resources impacts of the proposal.

Section 404 of the Stafford Act limits the amount of funding under the HMGP to not more than 75 percent of the eligible total project costs. In an effort to alleviate the financial burden of some projects, Global Match can be utilized to offset some or all of the non-federal cost share requirements. The use of HMGP Global Match allows the Applicant to utilize any cost share match that exceeds the minimum requirement (referred to as overmatch) from certain subawards to alleviate the financial burden on other projects. It also increases flexibility for the application of various cost share methods. The non-federal cost share can come from a variety of sources, including cash or donated resources for eligible project costs from the Applicant, subapplicant, or mitigation recipient. The Applicant administers the program and has discretion to implement Global Match.

¹ Hazard Mitigation Cost Share Guide May 2016: **Overmatch-** The non-federal cost share above the minimum required contribution for the subaward or award. Overmatch in HMGP may be utilized as a cost share strategy for HMGP Global Match.

For FEMA-4263-DR-LA, the State of Louisiana has identified projects funded by the Department of Housing and Urban Development's (HUD) Community Development Block Grant-Disaster Recovery (CDBG-DR) grant administered by the State's Office of Community Development (OCD) to provide overmatch for the disaster and offset the required non-federal cost share for other HMGP projects.

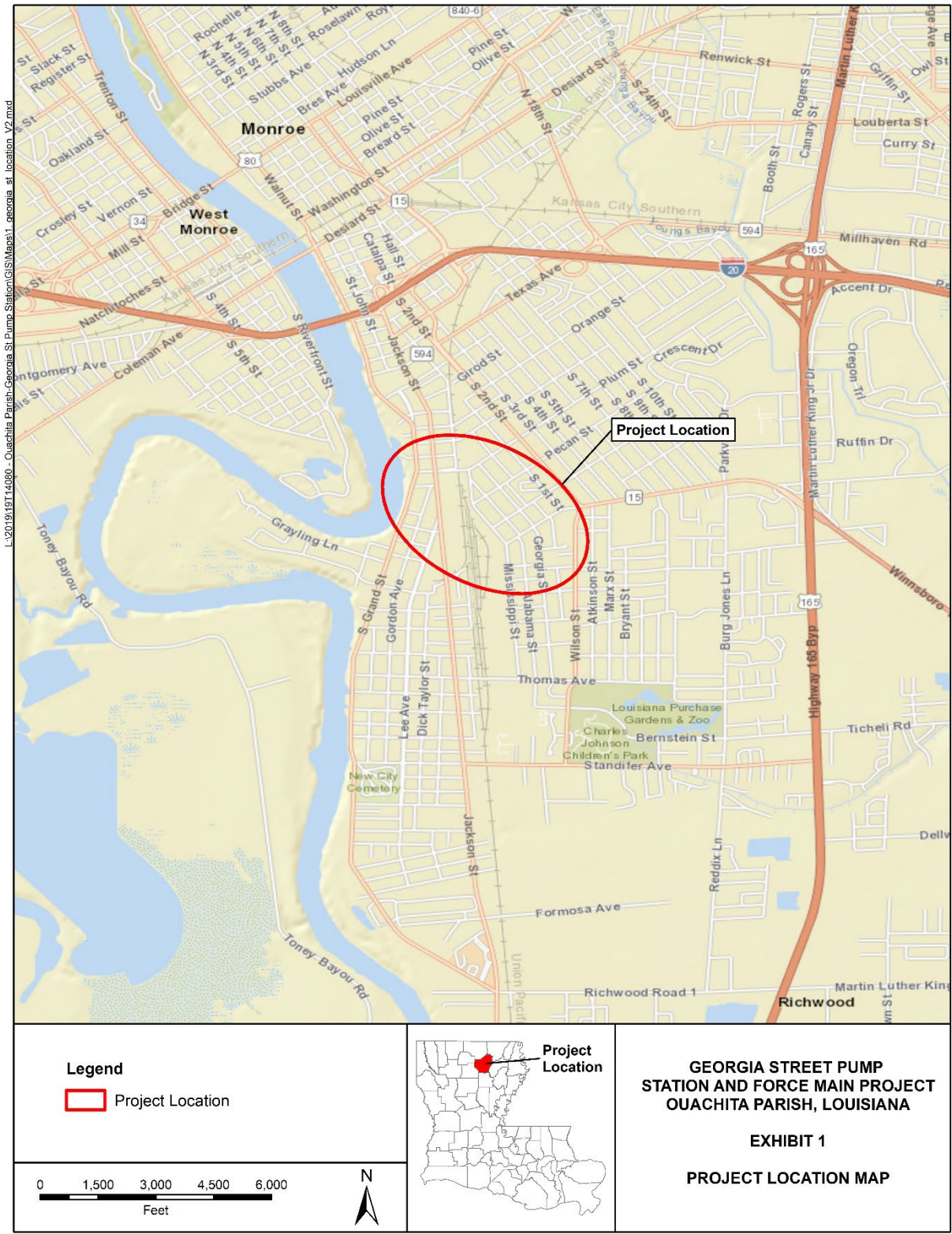
The Global Match process requires the applicant to submit a cost share strategy as part of its Administrative Plan for review and approval to FEMA. The Applicant must then submit applications for all Global Match projects to FEMA. FEMA will review the application(s) for all eligibility requirements, such as cost-effectiveness, technical feasibility, an approved hazard mitigation plan, and EHP considerations.

All other HMGP projects will generally be fully funded, with no additional cost share required from the subrecipient. The CDBG-DR projects will provide eligible overmatch projects that will offset the HMGP non-federal cost share. The Georgia Street/Winnsboro Road Pump Station and Force Main Project is one of the projects being fully funded by CDBG-DR to count as Global Match toward other FEMA-4263-DR-LA HMGP projects.

This Environmental Assessment (EA) has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, the President's Council on Environmental Quality regulations to implement NEPA (40 Code of Federal Regulations 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. This EA evaluates the proposal of Ouachita Parish (Applicant) to determine if the proposed Georgia Street/Winnsboro Road Pump Station and Force Main Project would have the potential for significant adverse effects on the quality of the human and natural environment. 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).

1.2 Project Location

The project area is in north-central Louisiana within the city limits of Monroe in Ouachita Parish (**Exhibit 1**). The City of Monroe serves as the seat of Ouachita Parish. According to 2018 census estimates Ouachita Parish has approximately 156,433 residents and the city of Monroe has a population of approximately 47,877. The proposed project site is located in southern Monroe and east of the Ouachita River. The Georgia Street-Winnsboro Road area of Monroe is a low-lying residential area where rainfall runoff from surrounding areas collects.



2.0 PURPOSE AND NEED

FEMA's Hazard Mitigation Grant Program (HMGP) provides funding to state, local, tribal, and territorial governments so they can develop hazard mitigation plans and rebuild in a way that reduces, or mitigates, future disaster losses in their communities. The purpose of HMGP is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster. HMGP is authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act.

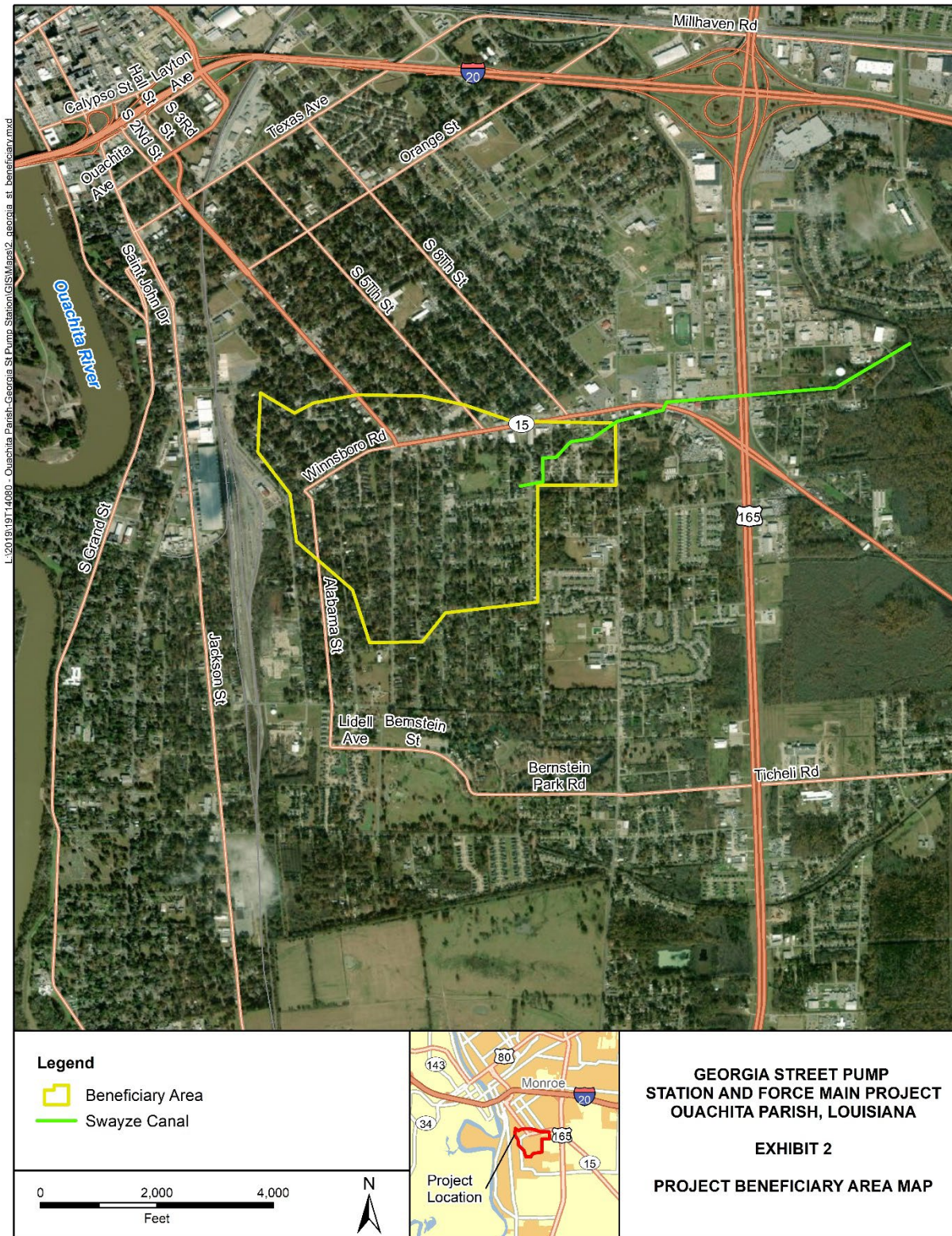
The purpose of the proposed project is to protect the health and safety of residents and properties in the Georgia Street-Winnsboro Road area of Monroe during future episodes of excessive rainfall. A total of 592 residential properties, 40 commercial properties, and 10 community facilities containing structures are currently within the flood prone drainage basin (See **Exhibit 2** for Beneficiary Area).

Inadequate drainage increases the health and safety risks for the population and property in the project area during natural disasters or other events that can cause excessive flooding. There is a need to protect against future damage and loss of life and property from flooding during periods of excessive rainfall in the Ouachita River basin. National Flood Insurance claims in the Beneficiary Area from January 1983 to March 2016 indicate numerous incidents of property damage from heavy rainfall and flooding episodes, resulting in a total of 262 flooded structures and over \$4.6 million in damage claims. The highest number of flooded structures occurred during the severe storms of March 2016 with at least 53 structures, resulting in over \$2 million in damage.

3.0 ALTERNATIVES

3.1 No Action Alternative

Under the No Action Alternative, Ouachita Parish would not engage in flood protection activities in the Georgia Street-Winnsboro Road area of Monroe. Consequently, residential areas would continue to be susceptible to flooding from intense rainfall events. Storm water would overwhelm the existing drainage system and cause areas to flood, impacting numerous residences and properties, businesses, and other services in the area.



3.2 Proposed Action Alternative

Under the Proposed Action, the drainage system for Monroe would be improved to prevent potential flooding in the Georgia Street-Winnsboro Road area of Monroe during intense rainfall events. The Swayze School Canal is currently used to support storm water drainage for the area and would continue to function as flood relief in support of the Proposed Action. The inadequacy of this drainage ditch to handle heavy rainfall events could result in a flooding situation for several residential structures, commercial buildings, and transportation facilities.

Details for the three key components of the Proposed Action – the pump station, force main, and outfall structure are provided below. Portions of the preliminary construction plans are provided in **Appendix A**.

Pump Station and Detention Pond

The proposed pump station measures approximately 320 feet (ft) by 120 ft and would be constructed on 1.4-acre property owned by City of Monroe and located on the east side of Georgia Street between Parker Street and Lock Drive (32.47909, -92.101934; **Exhibit 3**). The lot is within the Terminal Heights Subdivision of Monroe which was dedicated in 1916. Aerial photography dating back to the 1940s indicates that this area has been a residential subdivision since that time. A residential structure that was previously located on the proposed pump station parcel was torn down circa 2014. Currently, the site is vacant land owned by the City of Monroe. The pump station would be constructed to house three 22,500 gallons per minute (gpm) pumps powered by diesel engines to ensure operation during power outages. The third pump would serve as a backup in the case there is a mechanical problem with one of the primary pumps. The pumps would be 500 horsepower (HP) and capable of producing 52 ft of pressure head. The proposed pump station and force main piping would collect and discharge floodwaters from the approximately 285-acre watershed area into the Ouachita River at a rate up to 45,000 gallons per minute. The pump station would be equipped with an overhead crane for maintenance and adequate parking for operation and maintenance. The remainder of the parcel would be used for onsite storage consisting of a detention pond with concrete sides measuring approximately 0.82-acre. The existing collection pipes in the area would be tied directly into the storage pond. The entire facility would be enclosed with a chain link fence for security and safety purposes.

Force Main

The force main from the pump station to the Ouachita River would be approximately 5,250 ft in length and extends from the existing Plum Street outfall facility at the Ouachita River at South Ground St and Plum Street to near the intersection of Georgia Street and Parker Street. A 42-inch high-density polyethylene (HDPE) force main pipe would discharge water collected at the



pump station into the Ouachita River at the existing Plum Street outfall structure. This pipe would be fusion welded in the field with no joints and buried with a minimum cover of 30 inches. The force main would be constructed in existing City of Monroe rights of way (ROW) with some additional ROW required near the Union Pacific (UP) Rail Yard and Plum Street underpass. Five roadway crossings would be required, and the force main would be buried under several private driveways that would be reconstructed. The crossing at the Union Pacific Railway would require a horizontal bore and steel casing. The force main construction would impact local utilities (e.g., water, sewer, gas, and phone lines) in the existing ROW. Efforts would be made to minimize this impact, but some utilities would require relocation or lowering to make space available for construction. These specific utility impacts and easement agreements would be developed prior to construction. See **Appendix A** for contract specifications that cover street, sidewalk, and utility obstructions.

Outfall Structure

The force main would discharge into the Ouachita River utilizing the existing Plum Street pump station outfall structure (32.48513, -92.11193). The existing outfall structure discharges water from the Plum Street pump station at the Plum Street Underpass via a 30-inch force main. The outfall structure would require some modification that includes removal of the existing levee crossing for the existing Plum Street force main and replacement with a 54-inch ductile iron pipe that would serve as a levee crossing for both pump stations. Prior to the levee crossing, a prefabricated manifold would be fabricated to tie the existing 30-inch force main and new 42-inch force main to the single 54-inch pipe for the levee crossing. The levee crossing would require that the new pipe be placed over the design grade of the levee with 1 ft of cover. This construction would be completed within existing ROW for the Plum Street pump station. A 12-inch combination siphon break air release valve with a concrete manhole would be required at the apex of the levee crossing. The existing outfall structure itself would require some modifications to handle additional flow velocity and depth. The structure would be widened from 8 ft to 18 ft and the headwall would be raised from 5.5 ft to 7 ft.

Additive Alternates

Various alternate upgrades would be included as part of the Proposed Action if there is enough available funding under the FEMA grant, which is dependent on materials and construction costs. If any of the alternate upgrades cannot be included due to rising costs, the outcome of the project would not be negatively affected. Alternate upgrades include pump upgrades, increasing the pump motor size, adding structural support to accommodate additional weight, a backup generator, and a tower to support supervisory control and data acquisition (SCADA) equipment. Under the alternate upgrades, the pumps would be changed to a 9"Ø Solids Handling Pump (2 pumps) and the two 500-horsepower baseline motors would be increased by 200 horsepower (for a total of 700 horsepower). Additional support to accommodate the resultant increase in weight would be installed and would include additional or larger steel pump

support beams and additional steel sheet piling as needed for construction of a deeper wet well. Due to the increased submergence depth of the upgraded pumps, the reinforced concrete wet well will go 4 feet deeper into the ground. A 1,500-kilowatt (kW) diesel generator with an automatic transfer switch would be installed on a concrete pad at the pump structure. A 96-foot-tall SCADA tower would be installed to the north of the pump station on the northwest corner of the proposed detention pond. The SCADA equipment includes software that would allow for gathering and transmittal of data in real time from remote locations to control the pump station equipment and operating conditions.

This Draft EA includes the additive alternates as part of the NEPA analysis.

3.3 Other Action Alternatives Considered but Dismissed

Ouachita Parish considered upgrading the existing drainage ditches in the area as another alternative to address flooding in the project area. An analysis of upgrading the existing ditch that bisects the Benefit Area and drains the Swayze School Canal was undertaken. Ouachita Parish determined that this alternative would not be as effective in transporting floodwaters and could increase downstream flooding because the existing ditch meanders through a high-density residential area where there is insufficient space. Additional ROW would also be required. Additionally, the existing ditch flows under five city streets where bridges would have to be replaced to accommodate the increased ditch size and the headwater effects caused by these cross drains would not lower flood waters significantly. As such, the upgrade to existing drainage ditches alternative was determined to have little positive impact in lowering floodwaters and could increase flooding downstream. This alternative resulted in higher costs and increased adverse environmental and social impacts associated with residential relocations and multiple bridge replacements. For these reasons, this alternative was dismissed from further analysis in the Draft EA.

4.0 AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS

Based on a review of potential project impacts, several resources and areas of concern do not have potential to be affected by the Proposed Action and are therefore, are not addressed further in this EA. The resources not addressed include Air Quality, Climate, Coastal Management, Geology and Soils, and Wildlife and Fish. This section analyzes the surrounding environment for potential impacts of the Proposed Action Alternative and the No Action Alternative. Where potential impacts exist, conditions or mitigation measures are used to reduce or eliminate these impacts.

4.1 Water Resources

4.1.1 Water Quality

The Clean Water Act (CWA), as amended, is the primary federal law in the United States regulating water pollution (P.L. 92–500, 33 United States Code [U.S.C.] §1251). The CWA

regulates water quality of all discharges into Waters of the United States (WOTUS). Both wetlands and dry washes (i.e., channels that carry intermittent or seasonal flow) can qualify as WOTUS. Administered by USEPA, the CWA protects and restores water quality using both water quality standards and technology-based effluent limitations. The USEPA publishes surface water quality standards and toxic pollutant criteria in 40 CFR, Part 131.

The CWA also established the National Pollution Discharge Elimination System (NPDES) permitting program (Section 402) to regulate and enforce discharges into WOTUS. The NPDES permit program focuses on point source outfalls associated with industrial wastewater and municipal sewage discharges. Congress has delegated to many states the responsibility to protect and manage water quality within their legal boundaries by establishing water quality standards and identifying waters not meeting these standards. States are also responsible for managing the NPDES system.

Under the Louisiana Water Control Law, Louisiana controls and regulates discharged waste materials, pollutants, and other substances into Louisiana waters to properly protect and maintain the state's waters. The LDEQ is the state agency responsible for administering the NPDES Program known as Louisiana Pollution Discharge Elimination System (LPDES).

The project area surface waters include the Ouachita River and minor wetlands associated with the riverine system. Surface waters and manmade ditches within the project area drain directly into the Ouachita River or into Youngs Bayou which then drains into the Ouachita River.

Alternative 1 – No Action

The No Action Alternative would involve no undertaking and thus, no long- or short-term impacts to water quality would occur.

Alternative 2 – Proposed Action

The Proposed Action would entail excavation on previously developed land. There is a potential for a short-term localized increase in sedimentation during construction; however, long term, post-construction runoff would not increase because the surface area would be similar to the pre-construction conditions along the force main, and runoff would be localized at the proposed detention pond and pump station facility.

According to the Louisiana Department of Natural Resources (LDNR) Strategic Online Natural Resources Information System (SONRIS) database, there are no groundwater areas of concern in the project vicinity (LDNR 2019). According to the Louisiana Department of Transportation and Development (LADOTD) database, accessed via SONRIS, no recorded drinking water wells are located within the project vicinity; however, there may be unrecorded drinking wells near the project work areas.

Coordination with LDEQ was completed on June 12, 2012. A second coordination letter was sent to the LDEQ on July 12, 2019, but no response has been received.

To minimize indirect impacts (soil erosion, sedimentation, dust, and other construction-related disturbances) to the areas surrounding the Proposed Action, the following best management practices should be included into the daily operations of construction activities: silt screens, barriers (e.g., hay bales), berms/dikes, and/or fences to be placed where and as needed. All precautions should be observed to control nonpoint source pollution from construction activities. Fencing should be placed for marking staging areas to store construction equipment and supplies as well as conduct maintenance/repair operations. Hazardous materials associated with construction equipment must be handled according to local, state, and federal regulations to minimize the risk of spills and leaks and subsequent impacts to surface and groundwater resources.

Prior to construction, Ouachita Parish must coordinate with the LDEQ Water Permit Division to obtain any required stormwater permits for the proposed project. Ouachita Parish would be responsible for complying with all permit conditions. Best management practices would be implemented during pre- and post-construction activities and maintained until final stabilization is achieved. The intent is to perform the work during the dry season and periods of low flow, to the extent practical, to reduce the likelihood of sediment transport within the Ouachita River. Silt fencing should also be placed at various locations around the perimeter of the project area in a manner that would capture sediment during rain occurrences.

The contractor should observe all precautions to protect the groundwater of the region. If any unregistered drinking water wells are encountered during construction work. Ouachita Parish and its contractors must contact the LDNR Office of Conservation. All work associated with the project that is conducted on potable water systems must comply with applicable sections of the federal Safe Drinking Water Act and state regulations under Louisiana Title 51 Part XII (otherwise known as the Louisiana Public Health-Sanitary code and related State Plumbing code).

4.1.2 Wetlands and Waters of the United States

The United States Army Corps Engineers (USACE) regulates the discharge of dredged or fill material into WOTUS, including wetlands, pursuant to Section 404 of the CWA. Wetlands are identified as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. The USACE also regulates the building of structures in WOTUS pursuant to the Rivers and Harbors Act (RHA) and reviews proposed occupation or use of an existing USACE Civil Works project under Section 408 of the CWA.

Executive Order (EO) 11990, Protection of Wetlands, directs federal agencies to minimize the destruction, loss, or degradation of wetlands and to preserve and enhance the values of wetlands for federally funded projects. FEMA regulations for complying with EO 11990 are found at 44 CFR Part 9, Floodplain Management and Protection of Wetlands. The U.S. Fish & Wildlife Service (USFWS) National Wetlands Inventory (NWI) map did not indicate wetlands within the proposed project area. However, the outfall component of the Proposed Action is located within a non-wetland WOTUS that is subject to the jurisdiction of USACE.

Alternative 1 – No Action

The No Action Alternative would involve no undertaking and thus, no long- or short-term impacts to wetlands would occur.

Alternative 2 – Proposed Action

According to USACE's February 12, 2019, authorization of the Proposed Action, approximately 0.020-acre of non-wetland WOTUS would be permanently impacted by fill. These impacts are all associated with proposed improvements to the existing Plum Street outfall structure at the Ouachita River. The proposed pump station, detention pond, and approximately 5,250 ft of force main would be constructed within areas not under USACE jurisdiction. USACE determined that the project would be authorized by Nationwide Permit Number 12 (see **Appendix B**). The USACE authorization expired in March 2022, and Ouachita Parish is working to obtain a revised and current permit for the Proposed Action. Ouachita Parish is responsible for coordinating with and obtaining any required Section 404 Permit(s) from the USACE 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

The 2019 USACE coordination also noted that no Section 408 review is required for the Proposed Action.

4.1.3 Floodplains

Executive Order 11988 (Floodplain Management) requires federal agencies to avoid direct or indirect support or development within the 100-year floodplain whenever there is a practicable alternative. In compliance with FEMA policy implementing EO 11988, Floodplain Management, the proposed project was reviewed for possible impacts associated with occupancy or modification to a floodplain. To comply with EO 11988, FEMA is required to follow the procedure outlined in 44 CFR Part 9 to assure that alternatives to the Proposed Action have been considered. This procedure is known as EO 11988 - Floodplain Management Eight-Step Decision Making Process (Eight-Step Process).

The proposed project is within the floodplain of the Ouachita River. In accordance with EO 11988, FEMA's Eight-Step Process was applied to the Proposed Action to identify, minimize, and mitigate floodplain impacts. A narrative describing the Eight-Step Process implemented for the project is provided in **Appendix C**.

In September 2022, Denmon Engineering Company, Inc. released a Hydraulics and Hydrology (H&H) Report for the Georgia St. - Winnsboro Road Area of Monroe, LA (**Appendix D**). This H&H report is an addendum to several previous H&H studies prepared by the same engineering firm in 2012 and 2019. Per the report, residents in the Georgia Street-Winnsboro Road area experience flooding due to water levels rising between 1 and 2 feet above house slabs during heavy rainfall events. According to the FEMA mapping this flooding is likely due to the inefficient conveyance of water to the Swayze School Canal and high tailwater levels in the area that prevent local rainfall-runoff from flowing to the Swayze School Canal, and not necessarily backwater effects from the Swayze School Canal or Young's Bayou (Denmon Engineering, 2022; Appendix D).

Alternative 1 – No Action

The No Action Alternative would involve no undertaking and thus, no long- or short-term impacts to any floodplains would occur. Flooding in the Georgia Street-Winnsboro Road area of Monroe would continue.

Alternative 2 – Proposed Action

Per Flood Insurance Rate Map (FIRM) panel 22073C0280F (1/20/2016) and Letter of Map Revision (LOMR) 16-06-3067P, dated 4/28/2017, the pump station and force main are located in the Shaded X zone, area of .2 percent annual chance of flooding. A small portion of the force main runs through the AE zone, area of 100-year flooding with base flood elevations (BFEs) determined, at the intersection of Plum Street and the railroad. The outfall structure is located in Zone AE and the Regulatory Floodway, areas of 100-year flooding, per FIRM panel 22073C0280F (1/20/2016).

In compliance with FEMA policy implementing EO 11988, Floodplain Management, the proposed project was reviewed for possible impacts associated with occupancy or modification to a floodplain (see **Appendix C**). The construction of the pump station is considered a critical action, therefore the regulatory floodplain under EO 11988 is the 500-year floodplain.

Under the Proposed Action, the installation of the pump station and force main piping would collect and discharge floodwaters from the approximately 285-acre watershed area into the Ouachita River at a rate up to 45,000 gallons per minute. The new pump station and force main would create a more effective discharge rate of rainfall and runoff thereby reducing high water levels an average of 1.45 feet in the areas within a quarter mile of the project area during the 30-year event modeled in the H&H study (Denmon Engineering, 2022; Appendix D). The

Proposed Action, if implemented, would pump 120 cubic feet per second (cfs) to the Ouachita River. Base flow for the 100-yearflood on the Ouachita River is 105,000 cfs. The flow from this project would constitute 0.0015 of the flow in the Ouachita River, essentially an unmeasurable change. There is no detectable increase in flow as all water pumped by the project already flows to the Ouachita through existing canals and pumps. According to the most recent 2022 H&H, the construction of the Proposed Action would not result in any upstream or downstream adverse impacts.

The pump house structure would be elevated at or above the 500-year base flood elevation (BFE). The ground elevation at the pump station site is approximately 70.5 feet. The 500-year BFE for the pump station site is 69.5 feet according to the 2017 LOMR. The first-floor elevation of the pump station building is 73 feet, well above the 500-year BFE. The proposed force main piping would be buried such that the ground is returned to its original elevation. If the back-up generator is installed as part of the FEMA-funded additive alternate, it must be elevated at or above the 500-year base flood elevation per Flood Insurance Rate Map (FIRM) panel 22073C0280F and Letter of Map Revision (LOMR) 16-06-3067P, dated 4/28/2017.

Ouachita Parish must coordinate with the local floodplain administrator and obtain required permits prior to initiating work, including any necessary certifications that encroachments within the adopted regulatory floodway would not result in any increase in flood levels within the community during the occurrence of the base flood discharge. Applicant must comply with any conditions of permit and all coordination pertaining to these activities should be retained as part of the project file in accordance with the respective grant program instructions.

4.2 Biological Resources

4.2.1 Threatened and Endangered Species and Critical Habitat

The Endangered Species Act of 1973 (16 U.S.C. 1531-1543; 87 Stat. 884) (ESA) prohibits the take of listed, threatened, and endangered species unless specifically authorized by permit from the USFWS or the National Marine Fisheries Service (NMFS). "Take" is defined in 16 U.S.C. 1532 (19) as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct." Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering (50 CFR 17.3).

Section 7(a)(2) of the ESA requires the lead federal government agency to consult with either the USFWS or the NMFS, depending which agency has jurisdiction over the federally listed species in question, when a federally funded project may have the potential to adversely affect a federally listed species, or a federal action occurs within or may have the potential to impact designated critical habitat. The ESA defines critical habitat as "the specific areas within the geographical area occupied by the species, at the time it is listed, on which are found those

physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and specific areas outside the geographical area occupied by the species at the time it is listed that are determined by the Secretary to be essential for the conservation of the species."

According to the USFWS (2022), the following federally listed species may potentially be present in the project area. According to USFWS, designated critical habitat is not present in the project area (see **Appendix B**).

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Northern Long-eared Bat	<i>Myotis septentrionalis</i>	Threatened
Red-cockaded Woodpecker	<i>Picoides borealis</i>	Endangered
Alligator Snapping Turtle	<i>Macrochelys temminckii</i>	Proposed Threatened

The Migratory Bird Treaty Act (MBTA) of 1918 makes it unlawful to pursue, hunt, take, capture, kill, or sell birds listed in the statute as "migratory birds". It does not discriminate between live or dead birds and grants full protection to any bird parts including feathers, eggs, and nests. The MBTA is the primary law that affirms or implements the nation's commitment to four international conventions (with Canada, Japan, Mexico, and Russia) for the protection of a shared migratory bird resource. Under EO 13186, responsibilities of Federal Agencies to Protect Migratory Birds, protection of migratory birds and their habitats are strengthened by directing federal agencies to take certain actions that implement the MBTA.

Alternative 1 – No Action

The No Action Alternative would involve no undertaking and thus, no impacts to listed species or designated critical habitat would occur.

Alternative 2 – Proposed Action

Correspondence dated June 20, 2019, from the Louisiana Department of Wildlife and Fisheries stated that no impacts to rare, threatened, or endanger species or critical habitats are anticipated for the proposed project (see **Appendix B**). FEMA utilized the USFWS "Louisiana Endangered Species Act Determination Key" available in USFWS's Information for Planning and Consultation (IPAC) System to make determinations of effect and seek USFWS concurrence under Section 7 of the ESA. According to the results of the IPAC determination key analysis, FEMA has determined that the Proposed Action will have no effect on the Red-cockaded Woodpecker and may affect but will not likely adversely affect the Northern Long-eared bat. USFWS concurrence with these determinations of effect was received October 6, 2022 (see **Appendix B**). No minimization measures were required by USFWS. FEMA requested and received an updated species list from USFWS via IPAC on August 14, 2023. The species list did not change since FEMA's initial review in October 2022, and the application

of the IPAC determination key still yielded the same concurrence determination dated October 6, 2022.

4.3 Cultural Resources

The consideration of impacts to historic-age and archaeological resources is mandated under Section 101(b) 4 of the NEPA as implemented by 40 CFR Part 1501-1508. Section 106 of the National Historic Preservation Act (NHPA) requires Federal agencies to consider their effects on historic properties (i.e., historic-age and archaeological resources) and allow the Advisory Council on Historic Preservation (ACHP) an opportunity to comment. FEMA has chosen to address potential impacts to historic properties through the Section 106 consultation process of NHPA as implemented through 36 CFR Part 800.

In order to fulfill its Section 106 responsibilities, FEMA initiated consultation on this project with the Caddo Nation, Choctaw Nation of Oklahoma, Eastern Shawnee Tribe of Oklahoma, Jena Band of Choctaw Indians, Mississippi Band of Choctaw Indians, Quapaw Tribe of Oklahoma, and Tunica-Biloxi Tribe of Louisiana on September 2, 2022, to determine whether the Proposed Action has any potential effects to ancestral lands or properties that may be of religious or cultural significance.

FEMA consulted with the State Historic Preservation Office (SHPO) on September 2, 2022, which was a continuation of a previous consultation dated July 16, 2019, where SHPO previously concurred that no historic properties would be affected by the proposed Hazard Mitigation Grant Program project. FEMA continued consultation with SHPO on November 25, 2022, to ensure that the proposed additive alternate including a proposed SCADA tower was included in the Section 106 consultation. SHPO concurred with FEMA's determination of No Historic Properties Affected on January 4, 2023.

The Section 106 review process requires the identification of historic properties that may be affected by the Proposed Action or alternatives within the project's area of potential effects (APE). Historic properties, defined in Section 101(a)(1)(A) of NHPA, include districts, sites (archaeological and religious/cultural), buildings, structures, and objects that are listed in or determined eligible for listing in the National Register of Historic Places (NRHP). Historic properties are identified by qualified agency representatives in consultation with interested parties.

The APE for historic-age and archeological resources includes immediate area of proposed ground disturbing activities and an area measuring ½-mile in radius from the proposed location of the SCADA tower. The APE for ground-disturbing activities measures approximately 320 ft by 120 feet and 1.4 acres at the pump station and approximately 8 ft wide by approximately 5,200 ft long at the force main. The APE for viewshed impacts associated with the SCADA tower is ½ mile in radius and approximately 500 acres. The majority of work for this undertaking would take place in existing ROW, containing areas previously disturbed by construction activities

associated with public roadways and utilities, and residential development, which are common throughout the project area.

Standing Structures

The project is in a neighborhood community surrounding the intersection at Georgia Street and Winnsboro Road in the southern section of the City of Monroe. Historic aerial photography available at historicaerials.com (NETR 2022) indicates that the majority of the structures in the neighborhood were extant by 1969. FEMA Historic Preservation Staff consulted the NRHP database, and the Louisiana Office of Cultural Development (OCD) Standing Structures and Districts Map database in September 2022 and determined that the Proposed Action is not located within a listed or eligible NRHP District nor is it within the view-shed of a property listed in the NRHP. In addition, impacts to historic age standing structures are not anticipated for the Proposed Action.

Archaeological Resources

FEMA consulted the USDA Web Soil Survey to determine the soil types for the project area. The primary soil within the force main portion of the APE is Hebert complex, followed by Sterlington silt loam, 0 to 1 percent slopes and Levees-Borrow pits complex, 0 to 25 percent slopes. All three soil units have been disturbed by existing roadways, buildings, utilities, and other construction activities associated with residential development in the subdivision. The pump station is on an undeveloped lot composed entirely of Hebert complex, which the Web Soil Survey describes as predominately silt loam that forms on natural levees. The available background information and the physical setting in the APE indicate a low likelihood for intact historic properties.

Alternative 1 – No Action

This alternative does not include any FEMA undertaking and thus, FEMA has no further responsibilities under Section 106 of the NHPA.

Alternative 2 – Proposed Action

Based on research using the NRHP database, the Louisiana Cultural Resources Map on the Louisiana Division of Historic Preservation's website, and agency files, FEMA has determined that the project area is not located within a listed National Register Historic District nor is it located within the view-shed of a property individually listed in the NRHP.

FEMA has determined that the majority of ground disturbance associated with the Proposed Action would take place in previously disturbed areas; as such, it is unlikely that any intact archaeological deposits would be affected by the undertaking. Therefore, FEMA has determined that the undertaking would have no effect on historic properties. The SHPO concurred with this determination on October 3, 2022, and January 4, 2023, stating that "no known historic

properties will be affected by this undertaking... this effect determination could change should new information come to our attention.” In addition to SHPO’s response, the Choctaw Nation of Oklahoma replied on October 4, 2022, and noted the proposed project area was within approximately ½ mile from the Trail of Tears Removal Route. The tribe requested that FEMA and its Applicant exercise special attention to the ground disturbing work related to the project and concurred with FEMA’s finding of “no historic properties affected.” The Eastern Shawnee Tribe of Oklahoma replied on October 13, 2022 and stated that the project proposes No Adverse Effect or endangerment to known sites of interest to the Eastern Shawnee Tribe. The remaining tribes did not provide comments within 30 days or declined to comment. FEMA has determined that proposed project would not adversely affect traditional, religious, or culturally significant sites. (See **Appendix B**).

Louisiana Unmarked Human Burial Sites Preservation Act

If human bone or unmarked grave(s) are present within the project area, compliance with the Louisiana Unmarked Human Burial Sites Preservation Act (R.S. 8:671 et seq.) is required. Ouachita Parish must notify the law enforcement agency of the jurisdiction where the remains are located within twenty-four hours of the discovery. Ouachita Parish must also notify FEMA and the Louisiana Division of Archaeology at 225-342-8170 within seventy-two hours of the discovery.

Inadvertent Discovery Clause

If during the course of work, archaeological artifacts (prehistoric or historic) are discovered, Ouachita Parish must stop work in the vicinity of the discovery and take all reasonable measures to avoid or minimize harm to the finds. Ouachita Parish must inform FEMA. Ouachita Parish must not proceed with work until FEMA completes consultation with the SHPO, and others as appropriate.

4.4 Socioeconomic Resources

4.4.1 Environmental Justice

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, was signed on February 11, 1994. The EO directs federal agencies to make achieving environmental justice part of their missions by identifying and addressing, as appropriate, disproportionately high adverse human health, environmental, economic, and social effects of its programs, policies and activities on minority or low-income populations.

The Proposed Action is located within incorporated areas of Monroe and has a Beneficiary Area that covers a dense residential community one mile south of downtown Monroe. The project area includes Census Tracts 11, 14, 107, and 109. A map showing the Census Tracts is

included in as **Exhibit 4**. According to U.S. Census Bureau 2013-2017 estimates (USCB 2019), the percentage of families below the poverty level in the project area is approximately 50 percent and for Ouachita Parish is 19.6 percent.

The estimated number of households in the project vicinity is 4,329. The median household income is \$15,343 for Census Tract 11, \$14,438 for Census Tract 14, \$18,285 for Census Tract 107 and \$23,214 for Census Tract 109. The median household income for the four Census Tracts within the project area is \$16,814, compared to \$40,081 for Ouachita Parish. The 2017 demographic census data estimates are as follows: 97.8% African American and 1.4% Caucasian. The comparable demographic data for Ouachita Parish are 59.9% Caucasian and 37.5% African American.

Alternative 1 – No Action

The No Action Alternative would involve no undertaking, but the community would continue to be impacted by flooding which could potentially adversely impact low income and minority populations within the project area.

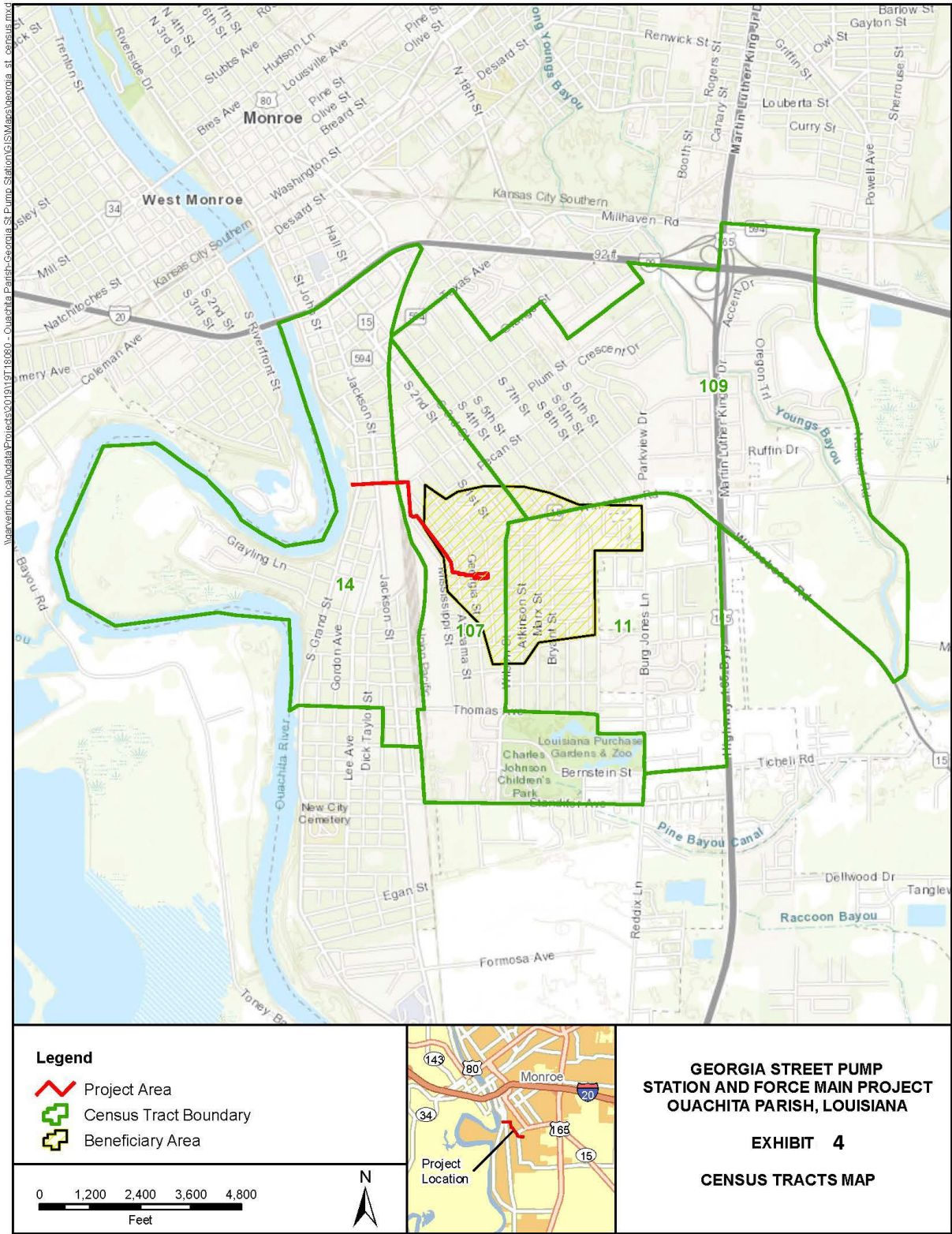
Alternative 2 – Proposed Action

The U.S. Census data indicate that there are concentrations of low income and minority populations within the project and beneficiary area.

The proposed pump station and supporting facilities are in the immediate vicinity of several structures with sensitive noise receptors such as residential homes located adjacent to much of the project area. Potential noise impacts for the project include temporary impacts to adjacent residential properties during construction, as well as permanent impacts to receivers adjacent to the pump station facility once in operation. The highest permanent noise levels are expected to occur when there is a flooding event which requires the pump station to be fully operable.

Under the Proposed Action, construction activities would result in short-term increases in noise during construction of the pump station and force main. Equipment and machinery utilized on the project site would meet all local, state, and federal noise regulations. The pump station would contain electric pumps enclosed within a building and noise levels are not estimated to exceed 60dB during pump station operation, which is the City's maximum permissible sound pressure level in a residential district during nighttime hours (10 pm to 7 am). Noise levels for the project during construction and normal operations after construction would comply with City of Monroe Code of Ordinance, Chapter 23, Sections 23-2 and 23-3.

Under the Proposed Action, traffic volumes along roads adjacent to the project would likely increase temporarily during work activities. Construction-related activities would not pose a significant impact to the transportation network or cause a significant increase in traffic for the area. Upon completion of the Proposed Action, there would be no long-term effect on the current traffic patterns.



Contractor requirements regarding traffic obstructions are available in **Appendix A**. During construction the contractor would take all reasonable precautions to control site access. The contractor would post appropriate signage and fencing to minimize foreseeable potential public safety concerns. Appropriate signage and barriers must be in place prior to construction activities in order to alert pedestrians and motorists of project activities and traffic pattern changes. The contractor would implement traffic control measures, as necessary.

The Proposed Action would not result in any adverse effect on low income or minority populations as it would protect the community against future damage, loss of life and property from flooding during and after heavy rainfall events in south Monroe. As such, all populations would benefit from the Proposed Action.

4.4.2 Hazardous Materials

The management of hazardous materials is regulated under various federal and state environmental and transportation laws and regulations, including the Resource Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Toxic Substances Control Act of 1976 (TSCA), the Emergency Planning and Community Right-to-Know Act, the Hazardous Materials Transportation Act, and the Louisiana Voluntary Investigation and Remedial Action statute. The purpose of the regulatory requirements set forth under these laws is to ensure the protection of human health and the environment through proper management (identification, use, storage, treatment, transport, and disposal) of these materials. Some of these laws provide for the investigation and cleanup of sites already contaminated by releases of hazardous materials, wastes, or substances.

The USEPA and LDEQ hazardous materials database searches were queried for the proposed project work areas. No sites of concern were identified by the database search within the project work areas. No environmental conditions of concern observed during field reconnaissance within the proposed project work areas. The LDNR SONRIS database was queried for the project work areas. According to the LDNR, there are no recorded oil/gas wells located in the proposed project area (LDNR 2022).

Alternative 1 – No Action

The No Action Alternative would involve no undertaking and thus, no additional impacts related to hazardous materials would be expected.

Alternative 2 – Proposed Action

Under the Proposed Action Alternative, hazardous materials are not anticipated to be generated or encountered. The project site is not adjacent to hazardous or solid waste facilities. If any solid or hazardous wastes, or soils and/or groundwater contaminated with hazardous constituents are

encountered during the project, notification to LDEQ's Single-Point-of-Contact (SPOC) at (225) 219-3640 is required. Additionally, precautions should be taken to protect workers from these hazardous constituents.

Unusable equipment, debris and material must be disposed of in an approved manner and location. In the event significant items (or evidence thereof) are discovered during implementation of the project, Ouachita Parish and its contractors must handle, manage, and dispose of petroleum products, hazardous materials and/or toxic waste in accordance with the requirements and to the satisfaction of the governing local, state, and federal agencies.

4.4.3 Public Health and Safety

Executive Order 13045 (Protection of Children) requires federal agencies to make it a high priority to identify and assess environmental health and safety risks that may disproportionately affect children. Safety and security issues considered in this EA include the health and safety of area residents, the public-at-large, and the protection of personnel involved in the activities related to the construction of the proposed project.

Alternative 1 – No Action

The No Action Alternative would involve no undertaking and thus, no additional impacts are anticipated related to public health and safety. Flooding in the Georgia Street-Winnsboro Road area of Monroe would continue, and structures, buildings, and people would remain at risk.

Alternative 2 – Proposed Action

No adverse impacts to public safety are anticipated for the Proposed Action. The improvements to the proposed project site would not increase potential hazards to human health. The project site is not adjacent to hazardous or solid waste facilities. The purpose of the proposed project is to protect the health and safety of residents and properties in the Georgia Street-Winnsboro Road area of Monroe during future episodes of excessive rainfall. Long-term beneficial impacts related to the protection of life and property are anticipated as a result of implementing the Proposed Action.

During the construction phase of the project, the contractor would place fencing around the work area perimeters to protect nearby residents from vehicular traffic. To minimize worker and public health and safety risks from project construction and closure, all construction and closure work would be done using qualified personnel trained in the proper use of construction equipment, including all appropriate safety precautions. Additionally, all activities would be conducted in a safe manner in accordance with the standards specified in the OSHA regulations. The contractor would post appropriate signage and fencing to minimize potential adverse public safety concerns.

4.4.4 Noise

Noise is generally defined as unwanted sound. Sound is most commonly measured in decibels (dB) on the A-weighted scale, which is the scale most similar to the range of sounds that the human ear can hear. The Day-Night Average Sound Level (DNL) is an average measure of sound. The DNL descriptor is accepted by federal agencies as a standard for estimating sound impacts and establishing guidelines for compatible land uses. USEPA guidelines, and those of many other federal agencies, state that outdoor sound levels in excess of 55 dB DNL are “normally unacceptable” for noise-sensitive land uses such as residences, schools, or hospitals.

According to the City of Monroe Code of Ordinance, Chapter 23 – Noise ordinance, Section 23-2, the maximum permissible sound pressure levels of any source of sound in a residential district is 65 dB during daytime hours (7 am to 10 pm) and 60 dB during nighttime hours (10 pm to 7 am). This includes, but is not limited to, sound from such activities as production, processing, cleaning, servicing, testing, operating, or repairing either vehicles, materials, goods, products, or devices. Sound pressure levels should be measured at the approximate location of the property line or the boundary of the public way, at a height of at least four feet above the immediate surrounding surface, on a sound level meter of standard design and operated on the A-weighted scale.

Section 23-3 (a) of the Ordinance is associated with construction and power equipment and states, “no person shall engage in, cause, or permit any person to be engaged in construction activities in any residential or commercial district between the hours of 9:00 p.m. of one day and 7:00 a.m. of the following day.” Construction projects should be subject to the maximum permissible noise level and respective times of day specified above for the periods within which construction is to be completed pursuant to any applicable building permit.

The project site is in the immediate vicinity of several structures with sensitive noise receptors such as residential homes located adjacent to much of the project area. Potential noise impacts for the project include temporary impacts to adjacent residential properties during construction, as well as permanent impacts to receivers adjacent to the pump station facility once in operation.

Alternative 1 – No Action

The No Action Alternative would involve no undertaking and thus, no impacts from noise would occur.

Alternative 2 – Proposed Action

Under the Proposed Action, construction activities would result in short-term increases in noise during construction of the pump station and force main. Equipment and machinery utilized on the project site would meet all local, state, and federal noise regulations. Additionally, the

contractor must coordinate with City of Monroe to minimize the potential disruption of any school activities to the extent possible.

Following the completion of construction activities, operations at the new facility would not result in any significant permanent increases in noise levels. The pump station would contain electric pumps enclosed within a building and noise levels are not estimated to exceed 60dB during pump station operation. Noise levels for the project during construction and normal operations after construction would comply with City of Monroe Code of Ordinance, Chapter 23, Sections 23-2 and 23-3.

4.4.5 Traffic and Transportation

The LADOTD is responsible for maintaining public transportation state highways, interstate highways under state jurisdiction, and bridges located within the state of Louisiana. These duties include the planning, design, and building of new highways in addition to the maintenance and upgrading of current highways. Roads not part of any highway system usually fall under the jurisdiction of and are maintained by applicable, local government entities. However, the LADOTD is responsible for assuring all local agency federal-aid projects comply with all applicable federal and state requirements.

Alternative 1 – No Action

The No Action Alternative would involve no undertaking. Impacts to transportation facilities would continue to occur as the road would continue to flood during heavy rainfall events.

Alternative 2 – Proposed Action

Under the Proposed Action, traffic volumes along roads adjacent to the project would likely increase temporarily during work activities. Construction-related activities, heavy equipment and materials that may be needed for site access and site preparation would not pose a significant impact to the transportation network or cause a significant increase in traffic for the area. Construction of the proposed project may require numerous truck trips to haul materials to the project site. However, this would be temporary because it would only occur during site construction. Upon completion of the Proposed Action, there would be no long-term effect on the current traffic patterns. Contractor requirements regarding traffic obstructions are available in **Appendix A**.

During construction the contractor would take all reasonable precautions to control site access. All activities would be conducted in a safe manner in accordance with Occupational Safety and Health Administration (OSHA) work zone traffic safety requirements. The contractor would post appropriate signage and fencing to minimize foreseeable potential public safety concerns.

Appropriate signage and barriers must be in place prior to construction activities in order to alert pedestrians and motorists of project activities and traffic pattern changes. The contractor would implement traffic control measures, as necessary.

5.0 CUMULATIVE IMPACTS

The CEQ's regulations state that cumulative impacts represent the "impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions." Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR § 1508.7).

Appendix E provides a summary table of local, state, and federal projects occurring, or that would occur or have occurred, at/near the same time as the proposed project. Information on these other past, present, and future projects was obtained through the City of Monroe's Engineering Department, interviews with the City of Monroe's Planning and Urban Development Department, and through the 2018-2022 Transportation Improvement Program (TIP) published by the Ouachita Council of Governments for the Monroe Metropolitan Planning Area.

The proposed project site is located in southern Monroe and east of the Ouachita River. The Georgia Street-Winnsboro Road area of Monroe is a low-lying residential area where rainfall-runoff from surrounding areas collect. The project area has a watershed of 285.6 acres. FEMA has determined that the larger 3,641-acre area encompassing the project area constitutes an appropriate resource study area for a cumulative impact analysis of the proposed action and alternatives. This resource study area, which is shown in **Exhibit 4**, coincides with the census tracts in the project area.

Cumulative impacts are analyzed in terms of the specific resource being affected. As wetland impacts are the only resource directly impacted by the proposed action, this is the only resource carried forward for cumulative impacts analysis. In accordance with NEPA, and to the extent reasonable and practicable, this EA considered the combined effects on wetlands of the Proposed Action (Alternative 2), as well as the other actions summarized in Table 1 of **Appendix E**. Based on information from the City of Monroe and the Monroe TIP, numerous projects have occurred, are occurring, or are reasonably foreseen to occur (developed with enough specificity to provide useful information to a decision maker and the interested public) to public utilities and roads. All federally funded actions are subject to various levels of environmental review as a requirement for the receipt of federal funding. An applicant's failure to comply with any required environmental permitting or other condition is a serious violation which can result in the loss of federal assistance and/or funding.

Based on the scope of work and specific location of the projects (if known), it has been determined that the incremental effects of the other infrastructure improvement projects

identified in **Appendix E** are likely to be similar to the impacts and effects this EA has described for the present Proposed Action, such that the effects to socioeconomic resources are expected to be beneficial, and effects to wetlands are expected to be either non-existent or minimal and temporary. FEMA has further determined that the incremental impact of the present proposed project, when combined with the effects of other past, present, and reasonably foreseeable future projects, is neither cumulatively considerable nor significant.

6.0 CONDITIONS AND MITIGATION MEASURES

Based upon the studies and consultations undertaken in this EA, the following conditions and mitigation measures must be taken by the Applicant prior to and during project implementation:

- This review does not address all federal, state, and local requirements. Acceptance of federal funding requires Ouachita Parish 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.
- Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.
- Best management practices must be implemented during pre- and post-construction activities and maintained until final stabilization is achieved. Silt fencing should also be placed at various locations around the perimeter of the project area in a manner that would capture sediment during rain occurrences.
- Ouachita Parish and its construction contractor are required to obtain LPDES permit, if applicable, and implement a Storm Water Pollution Prevention Plan. The LDEQ may require stormwater general permits for construction areas equal to or greater than one acre. The LDEQ Water Permit Division must be contacted to determine whether the proposed improvements require one of these permits. Ouachita Parish and its contractor must comply with any permit conditions.
- Hazardous materials associated with construction equipment must be handled according to local, state, and federal regulations in order to minimize the risk of spills and leaks and subsequent impacts to surface and groundwater resources.
- The LDNR Office of Conservation must be contacted if any unregistered drinking water wells are encountered during construction work.

- All work associated with the Proposed Action that is conducted on potable water systems must comply with applicable sections of the federal Safe Drinking Water Act and state regulations under Louisiana Title 51 Part XII (otherwise known as the Louisiana Public Health Sanitary code and related State Plumbing code).
- Ouachita Parish is responsible for coordinating with and obtaining any required Section 404 Permit(s) from the USACE 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.
- Ouachita Parish must coordinate with the local floodplain administrator and obtain required permits prior to initiating work, including any necessary certifications that encroachments within the adopted regulatory floodway would not result in any increase in flood levels within the community during the occurrence of the base flood discharge. Applicant must comply with any conditions of permit and all coordination pertaining to these activities should be retained as part of the project file in accordance with the respective grant program instructions.
- If the back-up generator is installed as part of the FEMA-funded additive alternate, it must be elevated at or above the 500-year base flood elevation per Flood Insurance Rate Map (FIRM) panel 22073C0280F and Letter of Map Revision (LOMR) 16-06-3067P, dated 4/28/2017.
- If during the course of work, archaeological artifacts (prehistoric or historic) are discovered, Ouachita Parish must stop work in the vicinity of the discovery and take all reasonable measures to avoid or minimize harm to the finds. Ouachita Parish must inform FEMA. The Applicant will not proceed with work until FEMA completes consultation with the SHPO, and others as appropriate.
- If human bone or unmarked grave(s) are present within the project area, compliance with the Louisiana Unmarked Human Burial Sites Preservation Act (R.S. 8:671 et seq.) is required. Ouachita Parish must notify the law enforcement agency of the jurisdiction where the remains are located within twenty-four hours of the discovery. Ouachita Parish must also notify FEMA and the Louisiana Division of Archaeology at 225-342-8170 within seventy-two hours of the discovery.
- If any solid or hazardous wastes, or soils and/or groundwater contaminated with hazardous constituents are encountered during the project, notification to LDEQ's Single-Point-of-Contact (SPOC) at (225) 219-3640 is required. Additionally, precautions should be taken to protect workers from these hazardous constituents.
- Unusable equipment, debris and material must be disposed of in an approved manner and location. In the event significant items (or evidence thereof) are discovered during

implementation of the project, Ouachita Parish and its contractors must handle, manage, and dispose of petroleum products, hazardous materials and/or toxic waste in accordance with the requirements and to the satisfaction of the governing local, state, and federal agencies.

- Ouachita Parish and its contractor are responsible for keeping all excavated areas periodically sprayed with water, all equipment maintained in good working order, and all construction vehicles would be limited to 15 mph to minimize pollution/fugitive dust.
- Noise levels for the project during construction and normal operations must comply with City of Monroe Code of Ordinance, Chapter 23, Sections 23-2 and 23-3.
- Construction traffic should be closely monitored and controlled as appropriate. All construction activities would be conducted in a safe manner in accordance with OSHA requirements. To alert motorists and pedestrians of project activities, appropriate signage and barriers should be used during construction. During construction activities, the construction site(s) would be fenced off to discourage trespassers. Traffic on affected streets would be controlled, as necessary, during construction and excavation activities.

7.0 PUBLIC INVOLVEMENT

A public comment period will be advertised regarding the availability of the Draft EA and Draft FONSI. A copy of this Draft EA and Draft FONSI (**Appendix G**) will be made available at Ouachita Parish Courthouse, 300 St John Street, Monroe, LA 71201, for a 30-day public comment period. Two public notices, one at the beginning and one 15 days into the public comment period, would be published in The News Star to inform the public of the report availability. Comments received during this public comment period would be given proper consideration prior to FEMA approval of the final report. If no substantive comments are received, then the Draft EA would become final. Any substantive comments would be addressed as appropriate in FEMA's final documents. A copy of the Public Notice included in **Appendix F**.

The Draft EA and Draft FONSI are also published on FEMA's website at <https://www.fema.gov/emergency-managers/practitioners/environmental-historic/nepa-repository>.

8.0 AGENCY AND TRIBAL COORDINATION

- U.S. Army Corps of Engineers, Vicksburg District
- U.S. Fish and Wildlife Service
- U.S. Geological Survey
- U.S. Department of Agriculture, Natural Resource Conservation Service
- Louisiana Department of Agriculture and Forestry
- Louisiana Department of Environmental Quality
- Louisiana Department of Wildlife and Fisheries
- Louisiana State Historic Preservation Office
- Caddo Nation
- Choctaw Nation of Oklahoma
- Eastern Shawnee Tribe of Oklahoma
- Jena Band of Choctaw Indians
- Mississippi Band of Choctaw Indians
- Quapaw Tribe of Oklahoma
- Tunica-Biloxi Tribe of Louisiana

9.0 LIST OF PREPARERS AND REVIEWERS

William McAbee: 20 years NEPA project management including CE, EA, EIS, and PEL studies. B.S. Wildlife Ecology; M.S. Biological Sciences.

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Cassie Schmidt: 8 years of experience in environmental analysis and NEPA document preparation with CE and EA experience specializing in T&E, wetlands and stream assessments, and hazardous materials. B.S. Zoology; M.A. Biology.

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Elise Haremski, Supervisory EHP Manager, FEMA Region 6

Tiffany Spann-Winfield, Environmental Liaison Officer, FEMA Region 6

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APPENDIX A

CONSTRUCTION PLAN EXCERPTS AND OBSTRUCTION

SPECIFICATIONS

APPENDIX B

AGENCY COORDINATION

APPENDIX C

EIGHT-STEP DECISION PROCESS

APPENDIX D

HYDRAULICS AND HYDROLOGY REPORT SUMMARY

APPENDIX E

CUMULATIVE IMPACTS TABLE

APPENDIX F

DRAFT EA NOTICE OF AVAILABILITY

APPENDIX G

DRAFT FONSI

APPENDIX A

Construction Plan Excerpts and Obstruction Specifications



CITY OF MONROE LOUISIANA

STATE PROJECT NUMBER - H.012010

STATEWIDE FLOOD CONTROL PROGRAM FLOOD CONTROL FOR THE GEORGIA STREET - WINNSBORO ROAD AREA OF MONROE

CITY OF MONROE

JAMES E. "JAMIE" MAYO - MAYOR

DOUGLAS "DOUG" HARVEY - COUNCIL MEMBER - DISTRICT 1

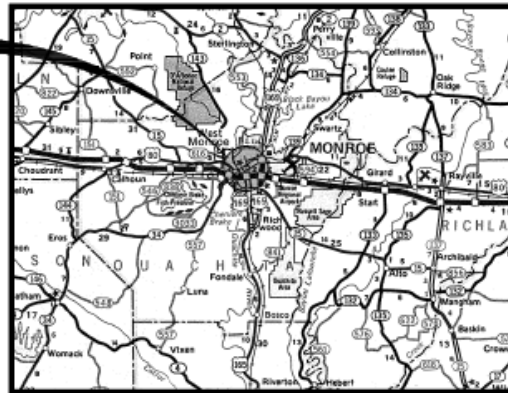
GRETCHEN EZERNACK - COUNCIL MEMBER - DISTRICT 2

JUANITA G. WOODS - COUNCIL MEMBER - DISTRICT 3

KENNETH WILSON - COUNCIL MEMBER - DISTRICT 4

EDDIE CLARK - COUNCIL MEMBER - DISTRICT 5

PROJECT
LOCATION



CITY OF MONROE VIGNETTE MAP

DATE: JULY, 2019
D. E. PROJECT NO. 12-01-07

PLANS PREPARED BY AND
RECOMMENDED FOR APPROVAL:



Clinton C. Patrick
CLINTON C. PATRICK, P.E.
LOUISIANA REGISTERED PROFESSIONAL ENGINEER
NO. 40819 (CIVIL ENGINEERING)
DENMON ENGINEERING

4/17/2020

TITLE OF CONSTRUCTION

HEAVY CONSTRUCTION AND/OR
MUNICIPAL AND PUBLIC WORKS

NOTE

1. THE 2016 EDITION OF THE LOUISIANA DOTD STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, AS AMENDED BY THE PROJECT SPECIFICATIONS, SHALL GOVERN ON THIS PROJECT.
2. BASIS OF BEARINGS ARE BASED ON LOUISIANA STATE PLANE COORDINATES, NORTH ZONE, US FOOT, NAD 83.

REV.	DATE	BY	CHKD.	REMARKS

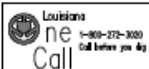
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INCHARGE BY: CCP
SCALE: NONE
DATE: JULY, 2019



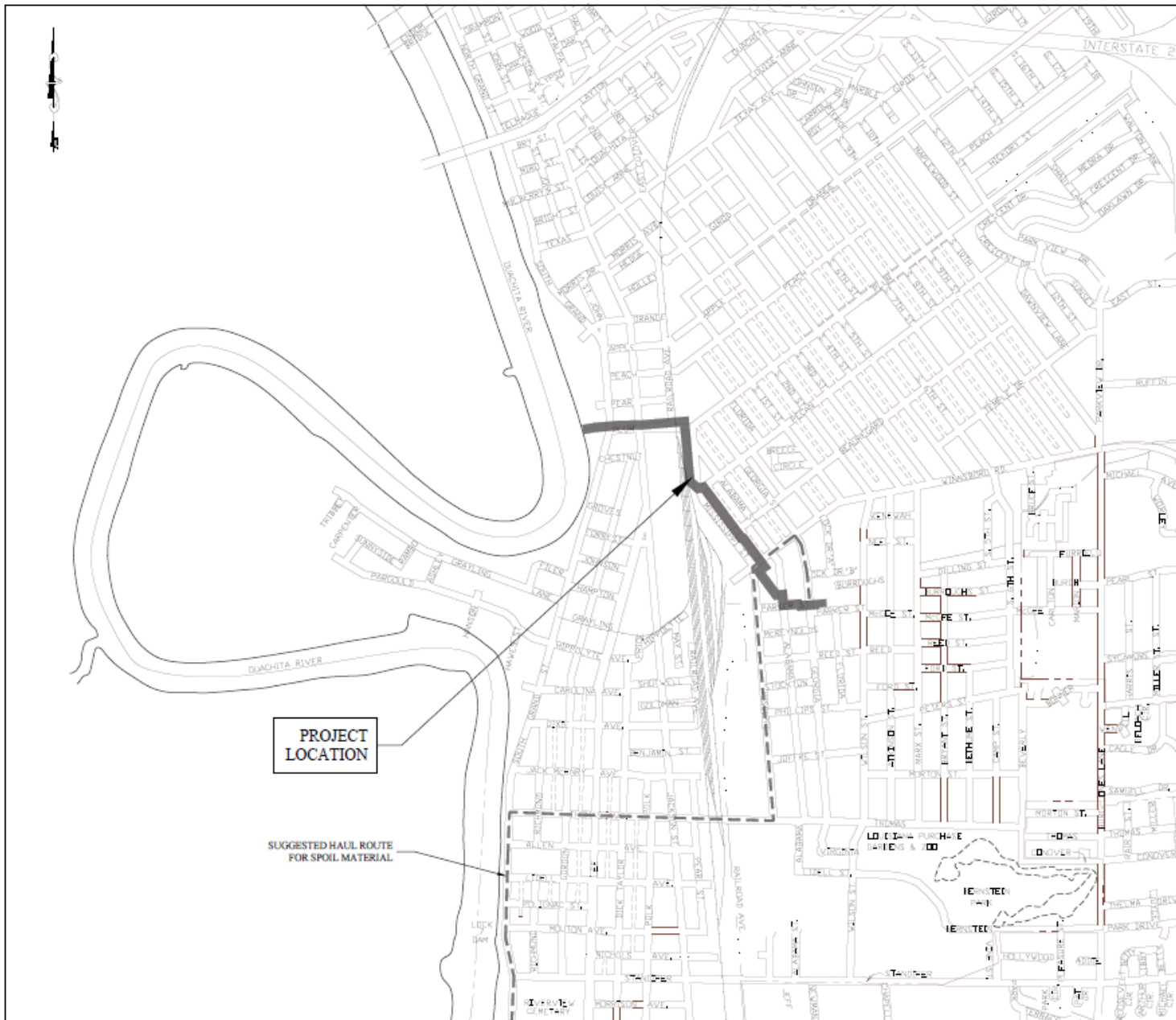
**DENMON
ENGINEERING**
Highways and Structures
P.O. Box 8460
Monroe, LA 70111-8460
Phone: (504) 388-1188
FAX: (504) 388-0036

CITY OF MONROE
STATEWIDE FLOOD CONTROL PROGRAM
FLOOD CONTROL FOR THE GEORGIA STREET -
WINNSBORO ROAD AREA OF MONROE

TITLE SHEET



PROJECT NO. 12-01-07
FILE NAME: TTL-01
SHEET NO. 1



**PROJECT
LOCATION**

SUGGESTED HAUL ROUTE
FOR SPOIL MATERIAL

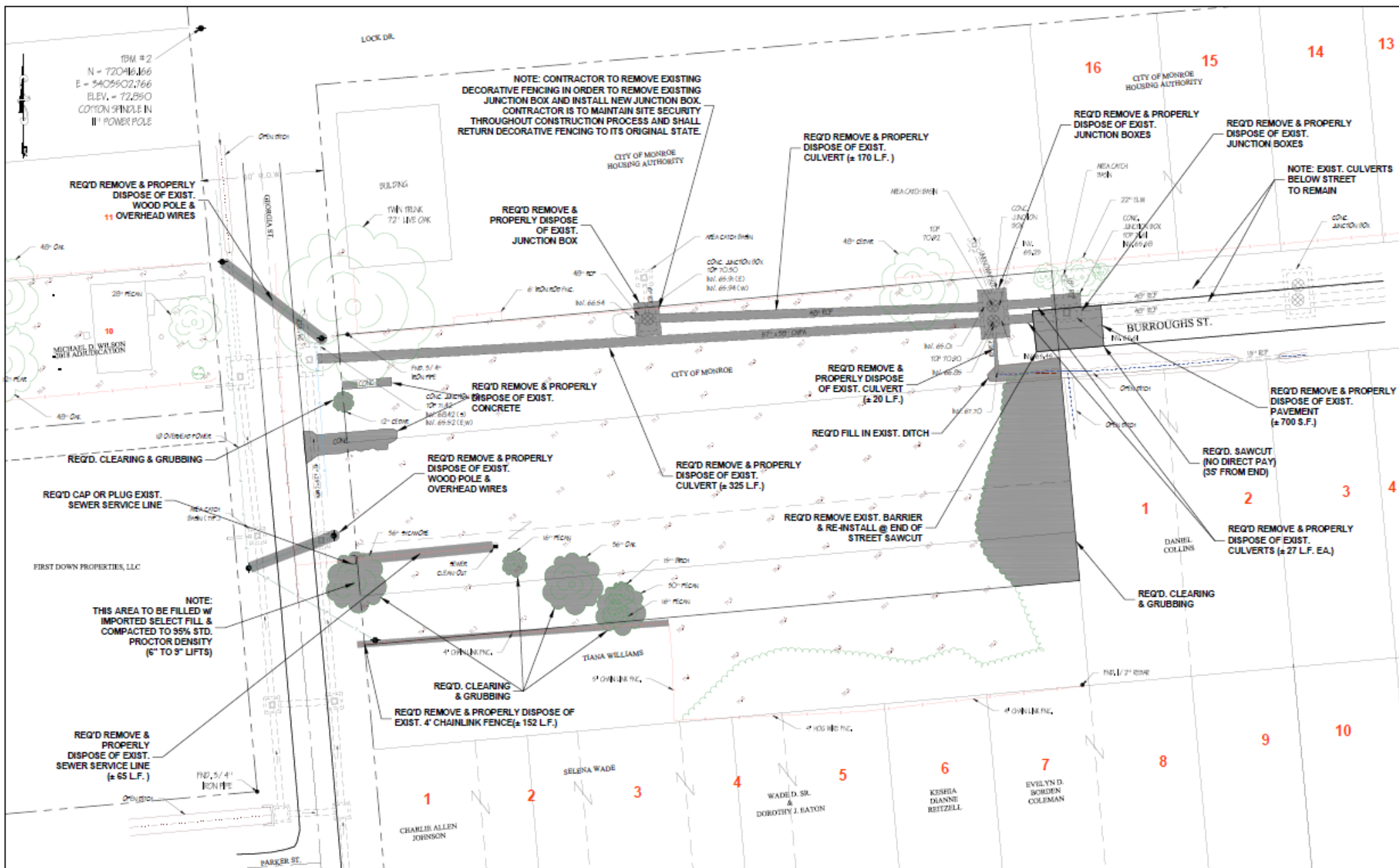
DRAWING INDEX



DRAWING NO.	DESCRIPTION
1	TITLE SHEET
2	LOCATION MAP & SHEET INDEX
2A-2B	SUMMARY OF ESTIMATED QUANTITIES
3	GENERAL NOTES
4	PUMP STATION EXISTING SITE PLAN
5	PUMP STATION STORMWATER POLLUTION PREVENTION PLAN
6	PUMP STATION DIVERSION PLAN
6A	PUMP STATION PROPOSED EXCAVATION
7	PUMP STATION PROPOSED SITE PLAN
7A	PUMP STATION LANDSCAPING SITE PLAN
8	PUMP STATION ENLARGED PROPOSED SITE PLAN
9	DETENTION POND CROSS SECTIONS
10	MISCELLANEOUS SITEWORK DETAILS (SHEET 1 OF 3)
11	MISCELLANEOUS SITEWORK DETAILS (SHEET 2 OF 3)
12	MISCELLANEOUS SITEWORK DETAILS (SHEET 3 OF 3)
13	FENCING DETAILS
14	PUMP STATION FLOOR PLAN
15	PUMP STATION DETAILS (SHEET 1 OF 2)
15A	PUMP STATION DETAILS (SHEET 1 OF 2) (ADDITIVE ALTERNATE NO. 2)
16	PUMP STATION DETAILS (SHEET 2 OF 2)
17	PUMP STATION STRUCTURAL DETAILS (SHEET 1 OF 2)
17A	PUMP STATION STRUCTURAL DETAILS (SHEET 1 OF 2) (ADD. ALT. NO. 2)
18	PUMP STATION STRUCTURAL DETAILS (SHEET 2 OF 2)
19	PUMP STATION FOUNDATION DETAILS
20	PUMP STATION BUILDING EXTERIOR ELEVATIONS
21	SCHEDULES AND FINISHES
22	FORCE MAIN SHEET INDEX MAP
23-30	FORCE MAIN PLAN & PROFILE
31	INTAKE PIPE STRUCTURE DETAILS (SHEET 1 OF 2)
32	INTAKE PIPE STRUCTURE DETAILS (SHEET 2 OF 2)
33	OUTFALL CHANNEL STRUCTURE ENLARGED SITE PLAN
34	OUTFALL CHANNEL STRUCTURE DETAILS
35	EFFLUENT FORCE MAIN LEVEE CROSSING DETAILS
36	SEWER COLLECTION DETAILS
37	FORCE MAIN DETAILS (SHEET 1 OF 3)
38	FORCE MAIN DETAILS (SHEET 2 OF 3)
39	FORCE MAIN DETAILS (SHEET 3 OF 3)
40	SITE ELECTRICAL PLAN
41	ELECTRICAL LIGHTING PLAN
42	ELECTRICAL POWER PLAN
43	ELECTRICAL DETAILS & SCADA CONTROL SYSTEM RISER DIAGRAM
44-45	ONE-LINE DIAGRAM

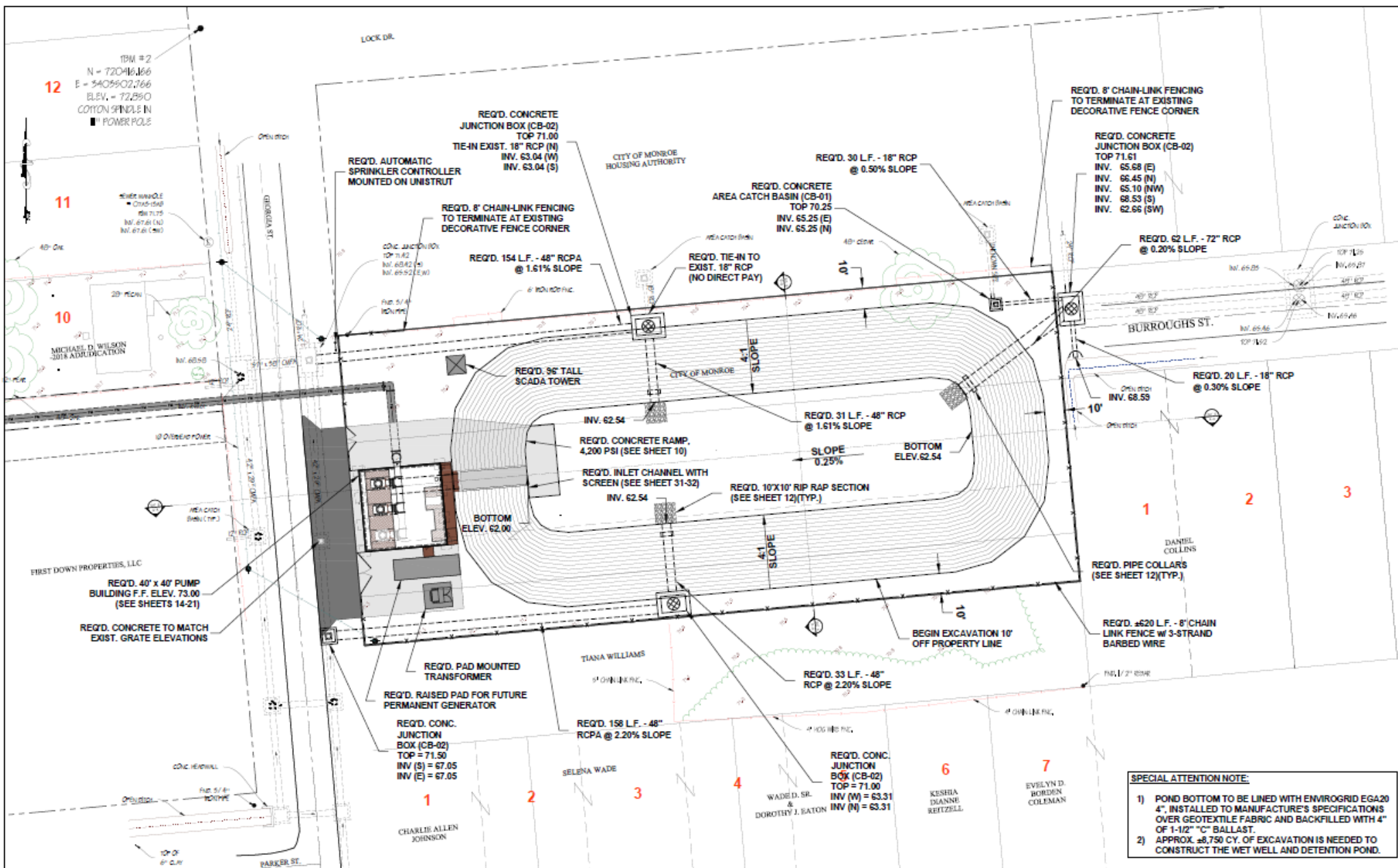
STANDARD PLANS

DRAWING NO.	DESCRIPTION
SP-1	BEDDING AND BACKFILL FOR DRAINAGE STRUCTURES - BM-01 (1 OF 2)
SP-2	BEDDING AND BACKFILL FOR DRAINAGE STRUCTURES - BM-01 (2 OF 2)
SP-3	CONCRETE OPEN TOP CATCH BASIN - CB-01
SP-4	CONCRETE OPEN TOP CATCH BASIN - CB-02
SP-5	TEMPORARY EROSION CONTROL DETAILS - EC-01 (1 OF 2)
SP-6	TEMPORARY EROSION CONTROL DETAILS - EC-01 (2 OF 2)
SP-7	DETAILS OF GRATES, GRATE FRAMES AND COVER FOR CATCH BASINS AND MANHOLES - MC-01
SP-8	TEMPORARY TRAFFIC CONTROL GENERAL NOTES - TC-00(A)
SP-9	TEMPORARY TRAFFIC CONTROL GENERAL NOTES - TC-00(B)
SP-10	TEMPORARY TRAFFIC CONTROL GENERAL NOTES - TC-00(C)
SP-11	TEMPORARY TRAFFIC CONTROL FOR WORK GREATER THAN 15 FEET FROM THE TRAVELED WAY - TT-01
SP-12	TEMPORARY TRAFFIC CONTROL FOR WORK LESS THAN 15 FEET FROM THE TRAVELED WAY - TT-02
SP-13	TEMPORARY TRAFFIC CONTROL - TTC-03
SP-14	TEMPORARY TRAFFIC CONTROL - TTC-04

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REV	DATE	BY	CHKD	REMARKS																																
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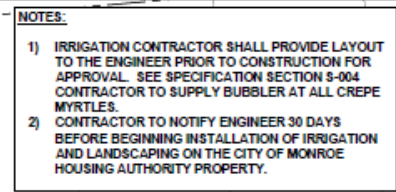


				DESIGNED BY: CDP		DENMON ENGINEERING 1000 N. 11TH ST. SUITE 100 DENVER, CO 80202 TEL: 303.733.1111 FAX: 303.733.1112	CITY OF MONROE STATEWIDE FLOOD CONTROL PROGRAM FLOOD CONTROL FOR THE GEORGIA STREET - WINNSBORO ROAD AREA OF MONROE	PUMP STATION DEMOLITION PLAN		PROJECT NO: 13-01-07
				DRAWN BY: JZ						PLAN NAME: 010-01
				CHECKED BY: CDP						SHEET NO:
				SCALE: 1" = 20'						6
REV. NO.	DATE	BY	CHKD	REMARKS	DATE: JULY, 2019					



SPECIAL ATTENTION NOTE:

- 1) POND BOTTOM TO BE LINED WITH ENVIROGRID EGA20 4", INSTALLED TO MANUFACTURER'S SPECIFICATIONS OVER GEOTEXTILE FABRIC AND BACKFILLED WITH 4" OF 1-1/2" "C" BALLAST.
- 2) APPROX. 48,750 CY. OF EXCAVATION IS NEEDED TO CONSTRUCT THE WET WELL AND DETENTION POND.



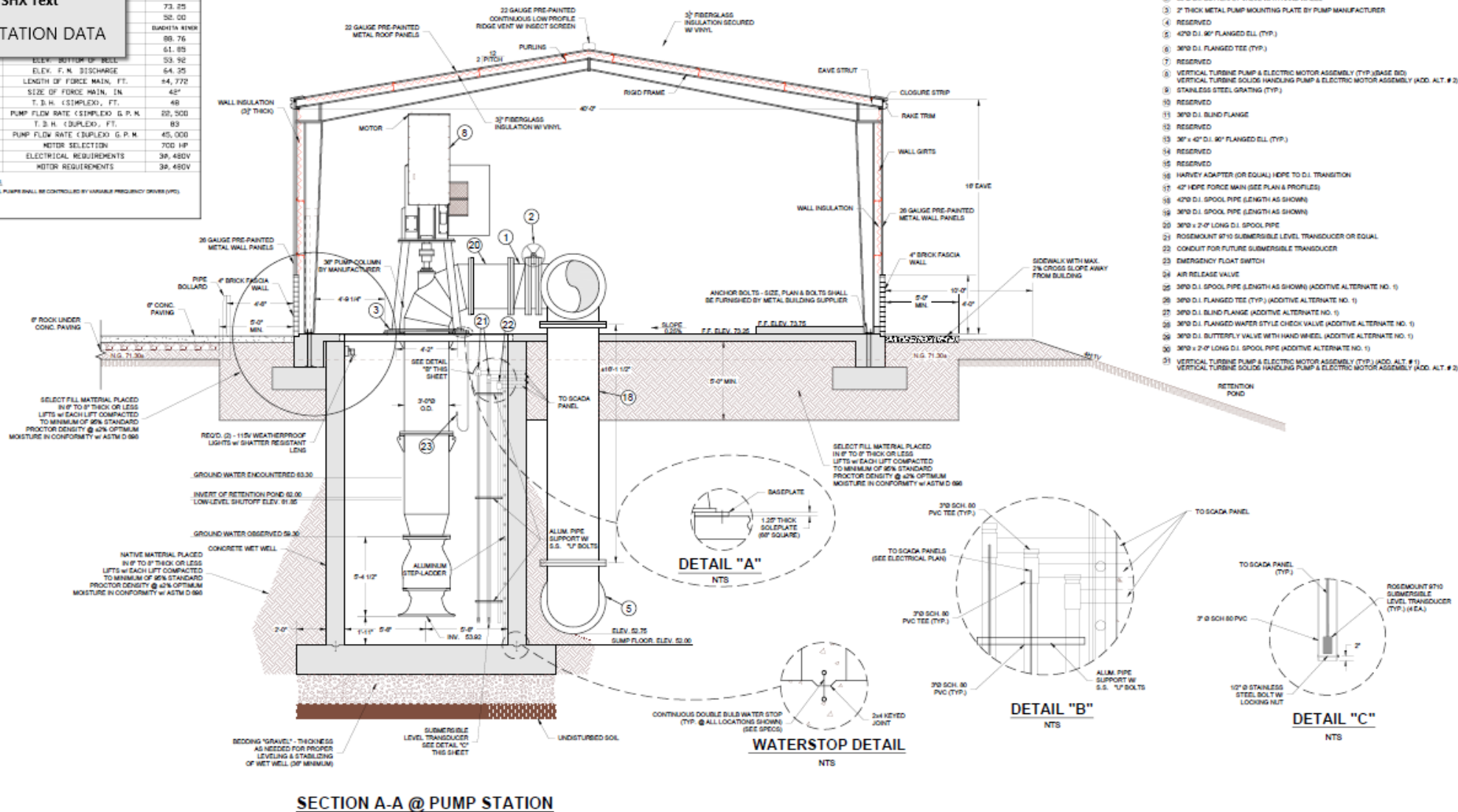
PROJECT NO. 12-01-07
FILE NAME: LANDSCAPING-D
SHEET NO.
7A

INFO.
VARIES
73.25
52.00
QUADRYN RIVER
88.76
61.85
53.92
64.35
\$4,772
42"
48
22,500
83
45,000
700 HP
3#, 480V
3#, 480V

MP STATION DATA

7	ELEV. BOTTOM OF WELL	53.92
8	ELEV. F.M. DISCHARGE	64.25
9	LENGTH OF FORCE MAIN, FT.	64,772
10	SIZE OF FORCE MAIN, IN.	48"
11	T. D. H. (SIMPLED), FT.	48
12	PUMP FLOW RATE (SIMPLED) G.P.M.	20,500
13	T. D. H. (DUPIED), FT.	83
14	PUMP FLOW RATE (DUPIED) G.P.M.	45,000
15	MOTOR SELECTION	700 HP
16	ELECTRICAL REQUIREMENTS	3P, 480V
17	MOTOR REQUIREMENTS	3P, 480V

1. ALL PUMPS SHALL BE CONTROLLED BY VARIABLE FREQUENCY DRIVES (VFD)



PIPING & FITTINGS LEGEND

- (1) 3/8" D.I. FLANGED WATER STYLE CHECK VALVE
- (2) 3/8" D.I. BUTTERFLY VALVE WITH HAND WHEEL
- (3) 7 THICK METAL PUMP MOUNTING PLATE BY PUMP MANUFACTURER
- (4) RESERVED
- (5) 4" D.I. 90° FLANGED ELB. (TYP.)
- (6) 3/8" D.I. FLANGED TEE (TYP.)
- (7) RESERVED
- (8) VERTICAL TURBINE PUMP & ELECTRIC MOTOR ASSEMBLY (TYP. (BASE BIC))
- (9) VERTICAL TURBINE SOLID HANDLING PUMP & ELECTRIC MOTOR ASSEMBLY (AOD. ALT. # 2)
- (10) STAINLESS STEEL GRATING (TYP.)
- (11) RESERVED
- (12) 3/8" D.I. BLIND FLANGE
- (13) RESERVED
- (14) 3/4" x 4" D.I. 90° FLANGED ELB. (TYP.)
- (15) RESERVED
- (16) RESERVED
- (17) HARVEY ADAPTER (OR EQUAL) HOPE TO D.I. TRANSITION
- (18) 4" HOPE FORCE MAIN (SEE PLAN & PROFILES)
- (19) 4" D.I. SPOOL PIPE (LENGTH AS SHOWN)
- (20) 3/8" D.I. SPOOL PIPE (LENGTH AS SHOWN)
- (21) 3/8" x 2' 4" LONG D.I. SPOOL PIPE
- (22) ROSEMOUNT #710 SUBMERSIBLE LEVEL TRANSDUCER OR EQUAL
- (23) CONDUIT FOR FUTURE SUBMERSIBLE TRANSDUCER
- (24) EMERGENCY FLOAT SWITCH
- (25) AIR RELEASE VALVE
- (26) 3/8" D.I. SPOOL PIPE (LENGTH AS SHOWN) (ADDITIVE ALTERNATE NO. 1)
- (27) 3/8" D.I. FLANGED TEE (TYP.) (ADDITIVE ALTERNATE NO. 1)
- (28) 3/8" D.I. BLIND FLANGE (ADDITIVE ALTERNATE NO. 1)
- (29) 3/8" D.I. FLANGED WATER STYLE CHECK VALVE (ADDITIVE ALTERNATE NO. 1)
- (30) 3/8" x 2' 4" LONG D.I. SPOOL PIPE (ADDITIVE ALTERNATE NO. 1)
- (31) VERTICAL TURBINE PUMP & ELECTRIC MOTOR ASSEMBLY (TYP. (AOD. ALT. # 1))
- (32) VERTICAL TURBINE SOLID HANDLING PUMP & ELECTRIC MOTOR ASSEMBLY (AOD. ALT. # 2)

[illegible]

DESIGNED BY:	CCP
DRAWN BY:	JWG
CHECKED BY:	CCP
SCALE:	1" = 3'
DATE:	JULY, 2019



**DENMON
ENGINEERING**
Engineers and Surveyors
P.O. Box 8460
Monroe, LA 71211-8460
Phone: 318-388-1422
FAX: 318-381-3036

CITY OF MONROE
STATEWIDE FLOOD CONTROL PROGRAM
FLOOD CONTROL FOR THE GEORGIA STREET -
WINNSBORO ROAD AREA OF MONROE

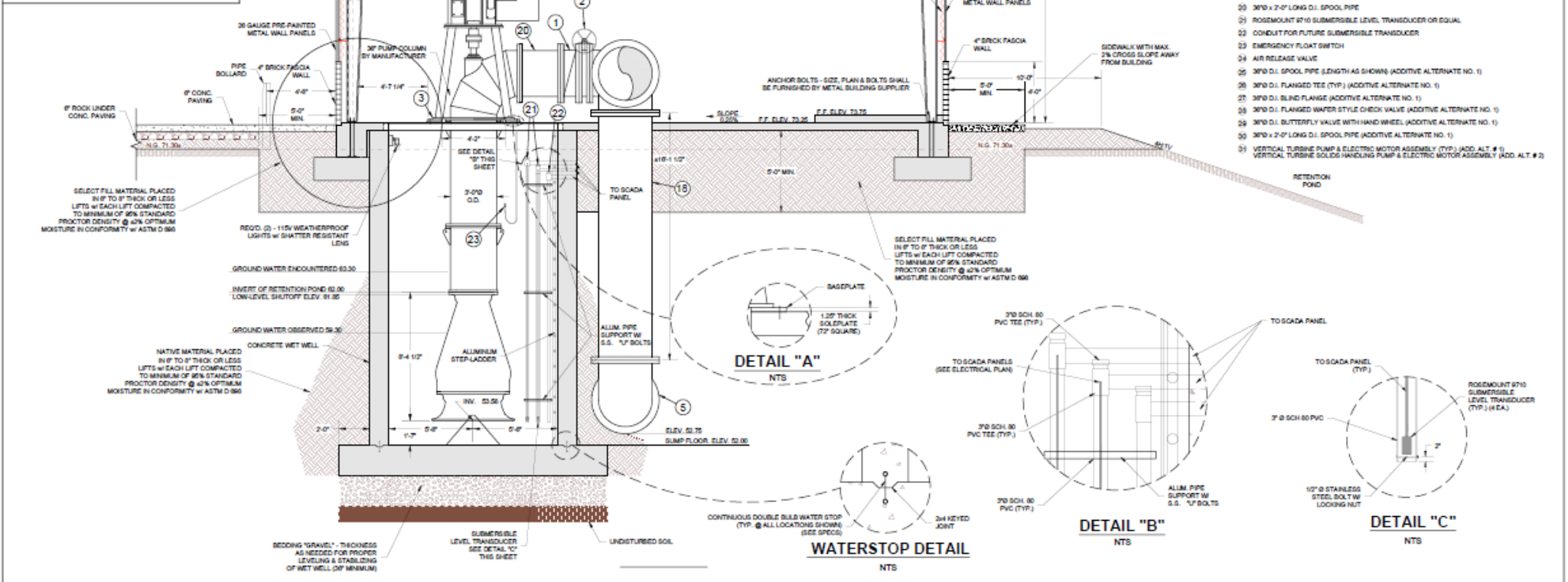
PUMP STATION DETAILS
(SHEET 1 OF 2)



PROJECT NO.	12-01-0
FILE NAME:	LS-01
SHEET NO.	
15	

PUMP STATION DATA		
ITEM	DESCRIPTION	INFO.
1	ELEV. GROUND SURFACE	VARIABLE
2	ELEV. TOP WET WELL	73.25
3	ELEV. BOTTOM OF WET WELL	52.00
4	RECEIVING FACILITY	BURKHEN KINER
5	TOP OF LEVER	80.76
6	LOW LEVEL SHUT-OFF	61.85
7	ELEV. BOTTOM OF BELL	53.92
8	ELEV. F. N. DISCHARGE	64.35
9	LENGTH OF FORCE MAIN, FT.	44.772
10	SIZE OF FORCE MAIN, IN.	42"
11	T. D. H. (SIMPLEX), FT.	48
12	PUMP FLOW RATE (SIMPLEX) G. P. H.	22,500
13	T. D. H. (DUPLEX), FT.	83
14	PUMP FLOW RATE (DUPLEX) G. P. H.	45,000
15	MOTOR SELECTION	600 HP
16	ELECTRICAL REQUIREMENTS	3Ø, 480V
17	MOTOR REQUIREMENTS	3Ø, 480V

NOTE:
1. ALL PUMPS SHALL BE CONTROLLED BY VARIABLE FREQUENCY DRIVE (VFD).



SECTION A-A @ PUMP STATION

- PIPING & FITTINGS LEGEND**
- 36" O.D. FLANGED WATER STYLE CHECK VALVE
 - 36" O.D. BUTTERFLY VALVE WITH HAND WHEEL
 - 2" THICK METAL PUMP MOUNTING PLATE BY PUMP MANUFACTURER
 - RESERVED
 - 42" O.D. 90° FLANGED ELL (TYP.)
 - 36" O.D. FLANGED TEE (TYP.)
 - RESERVED
 - VERTICAL TURBINE PUMP & ELECTRIC MOTOR ASSEMBLY (TYP.) (BASE BID)
 - VERTICAL TURBINE SOLIDS HANDLING PUMP & ELECTRIC MOTOR ASSEMBLY (ADD. ALT. # 2)
 - STAINLESS STEEL GRATING (TYP.)
 - RESERVED
 - 36" O.D. BLIND FLANGE
 - RESERVED
 - 36" x 42" O.D. 90° FLANGED ELL (TYP.)
 - RESERVED
 - RESERVED
 - HARVEY ADAPTER (OR EQUAL) HOPE TO O.D. TRANSITION
 - 42" HOPE FORCE MAIN (SEE PLAN & PROFILES)
 - 42" O.D. SPOOL PIPE (LENGTH AS SHOWN)
 - 36" O.D. SPOOL PIPE (LENGTH AS SHOWN)
 - 36" x 2-1/2" O.D. SPOOL PIPE
 - ROSEMOUNT #710 SUBMERSIBLE LEVEL TRANSDUCER OR EQUAL
 - CONDUIT FOR FUTURE SUBMERSIBLE TRANSDUCER
 - EMERGENCY FLOAT SWITCH
 - AIR RELEASE VALVE
 - 36" O.D. SPOOL PIPE (LENGTH AS SHOWN) (ADDITIVE ALTERNATE NO. 1)
 - 36" O.D. FLANGED TEE (TYP.) (ADDITIVE ALTERNATE NO. 1)
 - 36" O.D. BLIND FLANGE (ADDITIVE ALTERNATE NO. 1)
 - 36" O.D. FLANGED WATER STYLE CHECK VALVE (ADDITIVE ALTERNATE NO. 1)
 - 36" O.D. BUTTERFLY VALVE WITH HAND WHEEL (ADDITIVE ALTERNATE NO. 1)
 - 36" x 2-1/2" O.D. SPOOL PIPE (ADDITIVE ALTERNATE NO. 1)
 - VERTICAL TURBINE PUMP & ELECTRIC MOTOR ASSEMBLY (TYP.) (ADD. ALT. # 1)
 - VERTICAL TURBINE SOLIDS HANDLING PUMP & ELECTRIC MOTOR ASSEMBLY (ADD. ALT. # 2)

DETAIL "A"
NTS

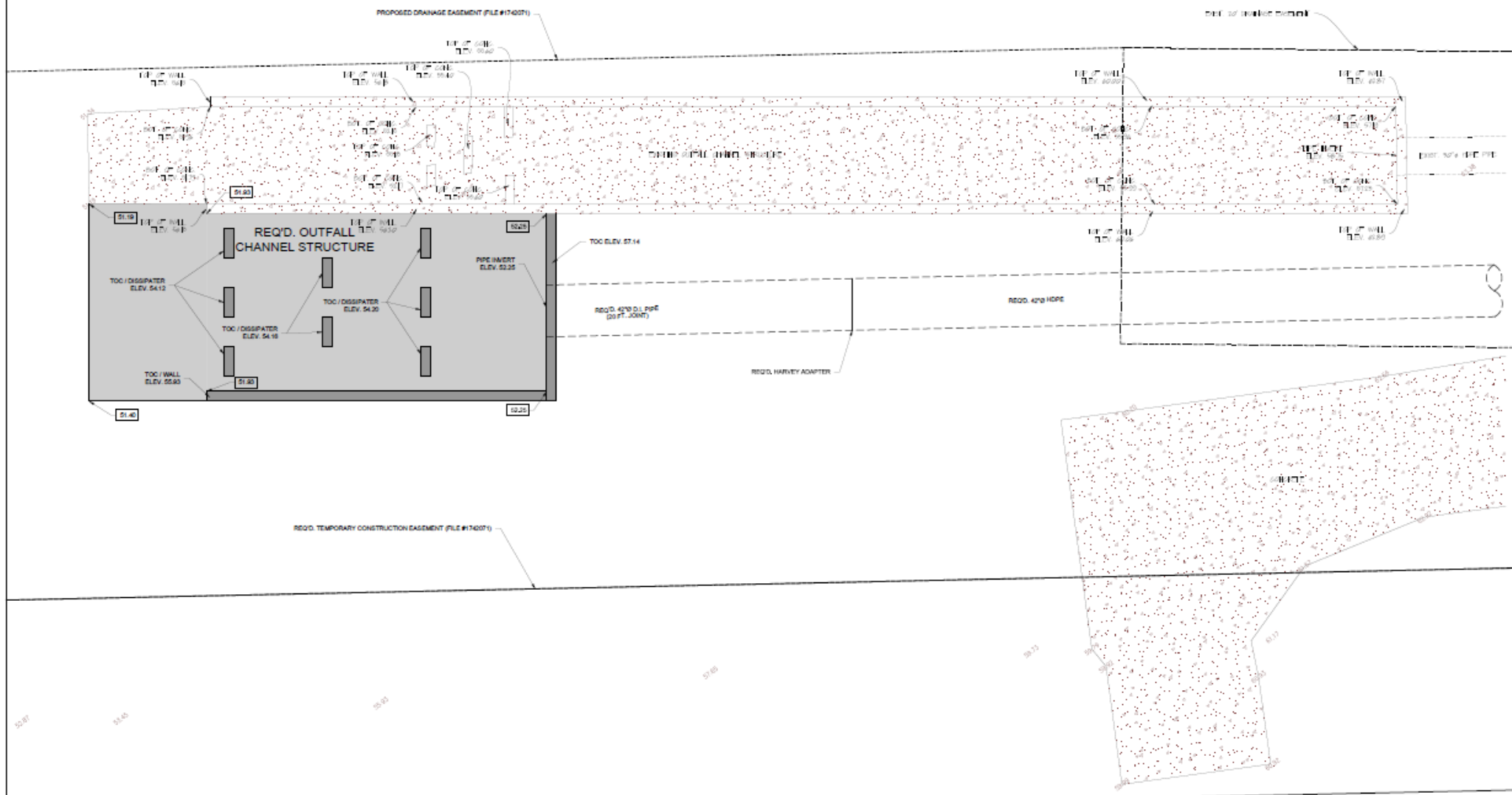
DETAIL "B"
NTS

DETAIL "C"
NTS

WATERSTOP DETAIL
NTS


(ADDITIVE ALTERNATE NO. 2)

					DESIGNED BY: CDP		DENMON ENGINEERING Engineers and Surveyors P.O. Box 5400 Monroe, LA 71211-8400 Phone: 318-388-1422 FAX: 318-381-0038	CITY OF MONROE STATEWIDE FLOOD CONTROL PROGRAM FLOOD CONTROL FOR THE GEORGIA STREET - WINNSBORO ROAD AREA OF MONROE	PUMP STATION DETAILS (SHEET 1 OF 2)		PROJECT NO. 12-01-07
					CHECKED BY: JWS						FILE NAME: LS-01
					SCALE: 1" = 3'						SHEET NO.
					DATE: JULY, 2019						15A
REV. NO.	DATE	BY	CHKD.	REMARKS							



REV	DATE	BY	CHKD	REMARKS


DESIGNED BY	CHKD
DRAWN BY	CHKD
CHECKED BY	
SCALE	1" = 3'
DATE	JULY, 2019



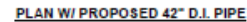
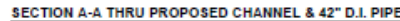
**DENMON
ENGINEERING**
REGISTERED PROFESSIONAL ENGINEERS
STATE OF LA. LICENSE NO. 1188
225-111-0110

CITY OF MONROE
STATEWIDE FLOOD CONTROL PROGRAM
FLOOD CONTROL FOR THE GEORGIA STREET -
WINNSBORO ROAD AREA OF MONROE

OUTFALL CHANNEL STRUCTURE
ENLARGED SITE PLAN



PROJECT NO. 12-01-07
FILE NAME HEADWALL-01
SHEET NO. **33**



-
- 12" LONG $\frac{1}{2}$ " SMOOTH DOWELS
 4" INTO EXIST. CHANNEL WALL
 @ 18" O.C. (TYP.)
- DISPATCHES
 (SHOWN HIDDEN
 FOR CLARITY)
- 24" H
 12" W
- 24" LONG $\frac{1}{2}$ " SMOOTH DOWELS
 1" INTO EXIST. CHANNEL
 SLAB @ 24" O.C. (TYP.)

PROJECT NO.	12-01-07
FILE NAME	HEADWALL-01
SHEET NO.	34

All excavation, trenching, and backfilling shall be in accordance with the applicable portions of Section I.

V-5 OBSTRUCTION OF STREETS, SIDEWALKS, ETC.:

All material excavated shall be placed so as to interfere as little as possible with public travel. In case the street is not wide enough to allow the backfill to be piled without blocking the sidewalk, the Contractor shall, at his own expense, maintain an open passageway not less than two and one-half feet (2 ½') wide on the sidewalk and shall keep this passageway free from mud and slush.

At such street crossings and other points as may be directed by the Engineer, the trenches shall be bridged in a proper and secure manner so as to prevent any serious interruption of travel upon the roadway or sidewalk and also to afford necessary access to particular public premises. The cost of all such work must be included in the prices bid for the various items on the Contract.

The Contractor will not be permitted under any circumstances to close to vehicular traffic on both sides of a double roadway (or neutral ground) street at the same time except by special permission of the Engineer for a specified period. Alternate streets crossing the work must always be kept open.

Special care must be taken to give free access at all times and to all fire hydrants, water valves, fire alarm boxes and Police Department and Fire Department driveways.

In case the Contractor shall fail to keep open streets, sidewalks, approaches to premises, etc., and shall refuse or neglect to open them within a reasonable period of time as determined by the Engineer after written notification by the Engineer; or shall the Contractor fail to afford proper and necessary access to fire hydrants, water valves, fire alarm boxes or Police Department driveways, and shall neglect or refuse to afford such access within one (1) hour of receiving either oral or written notice to do so, the Owner is hereby authorized to do this work and deduct the actual cost thereof from any money which may be due or may become due the Contractor.

V-6 SURFACE OBSTRUCTION:

The Contractor shall exercise extreme care during excavation, backfilling, pipe laying or other operation not to disturb or injure any other pipes, conducts, cables, structures, or other underground improvements without the written approval of the Engineer. The Contractor will be required to sling, brace or otherwise maintain any of these facilities in operation at his own expense. He shall repair any damage done in a manner satisfactory to the Engineer within a reasonable time; except that the Contractor is fully responsible for any ramification of any nature resulting from any such damage.

The Contractor shall give sufficient notice to the affected utility should it be necessary to remove or disturb any of their facilities. He shall also abide fully by their regulation governing such work. The Contractor shall immediately notify the proper authorities or

utility company should any damage to such facility occur during the prosecution of this work.

The Owner reserves the right to make any necessary repairs to damaged or disturbed facilities at the Contractor's expense or to allow the utility to make repairs for which the Contractor shall pay the Owner or utility the proper charges for such repairs.

The Owner or Engineer will not be liable for any claim arising based on underground obstructions being different than indicated on the plans or in the contract documents.

The Contractor shall be responsible for locating and uncovering underground obstructions sufficiently far enough in advance so that the method of avoiding may be determined before the pipe laying reaches the obstruction.

The Contractor will be governed by the instructions of the Engineer regarding pipe to be laid along state highways and the Engineer along with the applicable Highway Department will determine whether pipe shall be laid over, under or along the end of various drainage structures or facilities encountered.

V-7 SUBSURFACE OBSTRUCTIONS:

The Contractor shall exercise extreme care during excavation, backfilling, pipe laying or other operations not to disturb or injure any other pipes, conducts, cables, structures or other underground improvements without the written approval of the Engineer. The Contractor will be required to sling, brace or otherwise maintain any of these facilities in operation at his own expense. He shall repair any other damage done in a manner satisfactory to the Engineer within a reasonable time; except that the contractor is fully responsible for any such damage.

The Contractor shall give sufficient notice to the affected utility should it be necessary to remove or disturb any of their facilities. He shall also abide fully by their regulation governing such work. The Contractor shall immediately notify the proper authorities or utility company should any damage to such facility occur during the prosecution of this work.

The Owner reserves the right to make any necessary repairs to damaged or disturbed facilities at the Contractor's expense or to allow the utility to make repairs for which the contractor shall pay the Owner or utility the proper charges for such repairs.

The Owner or Engineer will not be liable for any claim arising based on underground obstruction being different than indicated on the plans or in the contract documents.

The Contractor shall be responsible for locating and uncovering underground obstructions sufficiently far enough in advance so that the method of avoiding may be determined before the pipe laying reached the obstruction.

V-8 ROAD, RAILROAD, CANAL, ETC., CROSSING:

**Georgia Street/Winnsboro Drive Pump Station and Force Main Project
Monroe, Ouachita Parish, Louisiana**

**Executive Order 11988 – Floodplain Management
Executive Order 11990 – Protection of Wetlands
Eight-Step Decision Process**

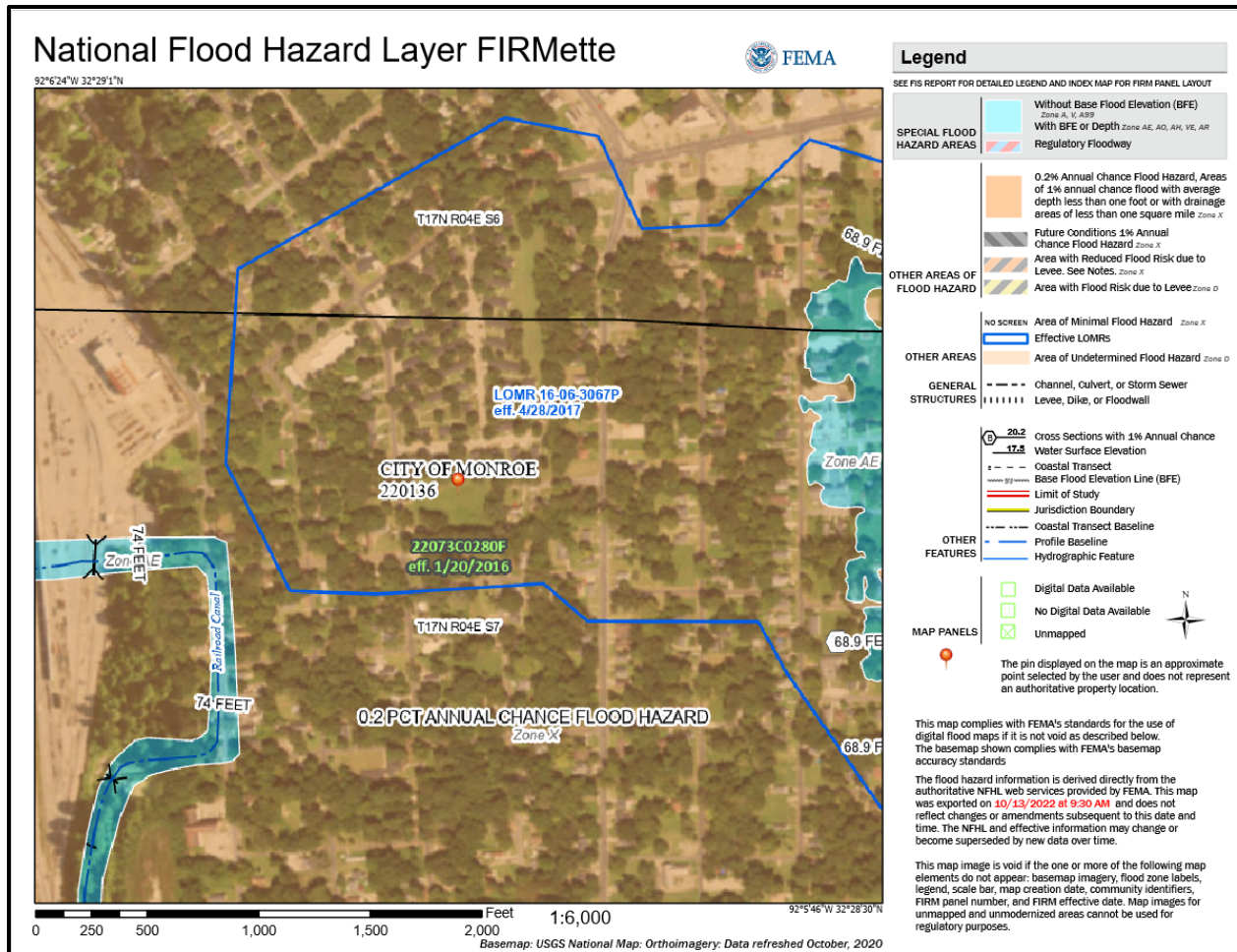
In compliance with FEMA policy implementing EO 11988, Floodplain Management, the proposed project was reviewed for possible impacts associated with occupancy or modification to a floodplain. To comply with EO 11988, Floodplain Management, FEMA is required to follow the procedure outlined in 44 CFR Part 9 to assure that alternatives to the action have been considered. This procedure is known as EO 11988 - Floodplain Management Eight-Step Decision Making Process. The proposed project is within the floodplain of the Ouachita River. In accordance with EO 11988, FEMA's Eight-Step Planning Process for Floodplains was applied to the proposed Georgia Street Pump Station and Force Main project to identify, minimize, and mitigate floodplain impacts.

FEMA has determined that the construction of the pump station and force main is a critical action, which is defined in 44 CFR Part 9 as "an action for which even a slight chance of flooding is too great." The minimum floodplain of concern for critical actions is the 500-year floodplain, area of .2 percent annual chance of flooding.

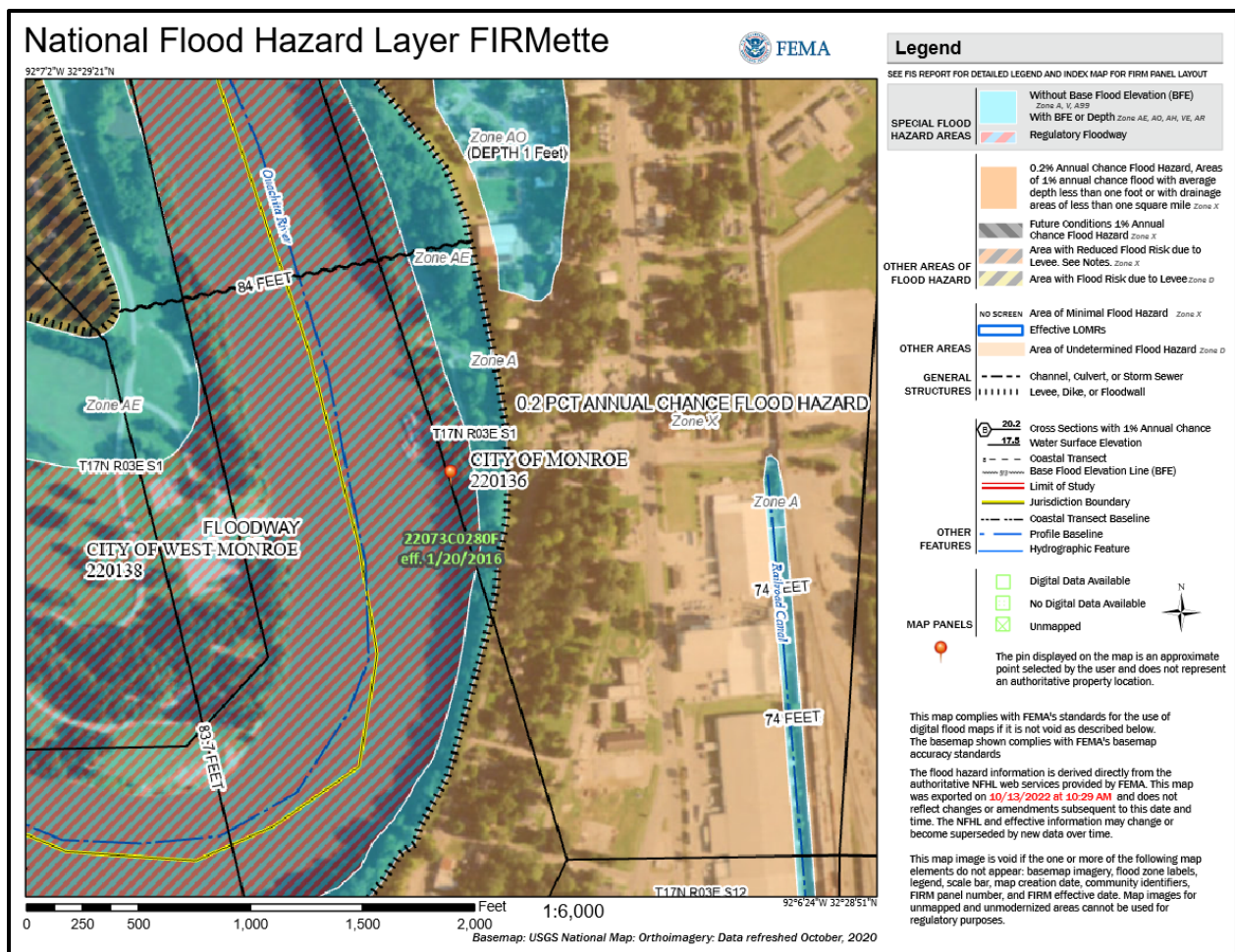
Step 1 – Determine if the proposed action is located in the Base Floodplain or Wetlands

Per Flood Insurance Rate Map (FIRM) panel 22073C0280F (1/20/2016) and Letter of Map Revision (LOMR) 16-06-3067P, dated 4/28/2017, the pump station and force main are located in the Shaded X zone, area of .2 percent annual chance of flooding. A small portion of the force main runs through the AE zone, area of 100-year flooding with base flood elevations (BFEs) determined, at the intersection of Plum Street and the railroad. The outfall structure is located in Zone AE and the Regulatory Floodway, areas of 100-year flooding, per FIRM panel 22073C0280F (1/20/2016).

The U.S. Fish & Wildlife Service (USFWS) National Wetlands Inventory (NWI) map did not indicate wetlands within the proposed project area. However, the outfall component of the Proposed Action is located within a non-wetland water of the United States that is subject to the jurisdiction of the U.S. Army Corps of Engineers (USACE) under the Clean Water Act. According to USACE's February 12, 2019, authorization of the Proposed Action, approximately 0.020-acre of non-wetland waters of the United States would be permanently impacted by fill. Because wetlands will not be impacted by the project, the 8-step review is not triggered for wetlands.



FIRM Panel 22073C0280F with Pump Station Marked. Source: <https://msc.fema.gov/>



FIRM Panel 22073C0280F with Outfall Marked. Source: <https://msc.fema.gov/>

Step 2 – Early public notice (Preliminary Notice)

FEMA published an initial disaster public notice for FEMA-DR-4263-LA “Louisiana Severe Storms and Flooding” in the Ouachita Citizen on May 5, 2016, which notified the public in the City of Monroe that FEMA would be funding activities in the floodplain under various programs including HMGP.

Step 3 – Identify and evaluate alternatives to locating in the Floodplain

An alternative to the Proposed Action is upgrading the existing drainage ditches in the area. An analysis of upgrading the existing ditch that bisects the Benefit Area and drains the Swayze School Canal was undertaken. The analysis determined that this alternative would not be as effective in transporting floodwaters and could increase downstream flooding because the existing ditch meanders through a high-density residential area where there is insufficient space. Additional right of way (ROW) would also be required. Additionally, the existing ditch flows under five city streets where bridges would have to be replaced to accommodate the increased ditch size and the headwater effects caused by these cross drains would not lower flood waters significantly. As such, the upgrade to existing drainage ditches alternative was determined to have little positive impact in lowering floodwaters and could increase flooding downstream. This alternative resulted in higher costs and increased adverse environmental and social impacts associated with residential relocations and multiple bridge replacements.

A large portion of the benefit area for the project is within 100- and 500-year floodplains, including residences and businesses. In order for the Proposed Action to achieve its designed function, constructing the pump station at a lower elevation to collect flood waters is required; therefore, relocating the proposed facility is not feasible for the project.

Alternatives consisting of locating the project outside the floodplain or the No Action Alternative are not practicable and would not meet the purpose and need for the project.

Step 4 – Identify impacts of Proposed Action associated with occupancy or modification of the floodplain

Per 44 CFR 9.10 FEMA must consider whether the proposed action will result in an increase in the useful life of any structure or facility in question, maintain the investment at risk and exposure of lives to the flood hazard, or forego an opportunity to restore the natural and beneficial values served by floodplains or wetlands. FEMA should specifically consider and evaluate impacts associated with modification of floodplains; additional impacts which may occur when certain types of actions may support subsequent action which have additional impacts of their own; adverse impacts of the proposed actions on lives and property and on natural and beneficial floodplain values; and these three categories of factors: flood hazard-related factors, natural values-related factors, and factors relevant to a proposed action's effects on the survival and quality of wetlands.

Per 44 CFR Part 9.7, flood hazard-related factors include velocity of floodwater, rate of rise, duration of flooding, warning and evacuation time and routes, and other site-specific special considerations.

Per 44 CFR Part 9.10, natural values-related factors include water resource values (natural moderation of floods, water quality maintenance, and ground water recharge); living resource values (fish and wildlife and biological productivity); cultural resource values (archaeological and historic sites, and open space recreation and green belts); and agricultural, aqua cultural and forestry resource values. Factors relevant to a proposed action's effects on the survival and quality of wetlands include public health, safety, and welfare, including water supply, quality, recharge and discharge; pollution; flood and storm hazards; and sediment and erosion; maintenance of natural systems, including conservation and long term productivity of existing flora and fauna, species and habitat diversity and stability, hydrologic utility, fish, wildlife, timber, and food and fiber resources; and other uses of wetlands in the public interest, including recreational, scientific, and cultural uses.

In September 2022, Denmon Engineering Company, Inc. released a Hydraulics and Hydrology (H&H) Report for the Georgia St. - Winnsboro Road Area of Monroe, LA. This H&H report is an addendum to several previous H&H studies prepared by the same engineering firm in 2012 and 2019. According to the most recent 2022 H&H, the construction of the Proposed Action would not result in any upstream or downstream adverse impacts. In addition, in an engineered stamped letter dated August 8, 2023, Randy Denmon, PE, stated that the additive alternates would not increase the hydraulics of the project or change any impact of the project upstream or downstream. The alternates do not increase pump capacity. These improvements would allow the pumps to pass more debris through to prevent pump blockage during a flood event.

According to the H&H, the Proposed Action would not alter any runoff patterns upstream of the project and hence would have no negative impacts upstream of the project. The project would reduce the flood flow downstream of the project by removing 120 cubic feet per second (cfs), or

about 20 percent of the FEMA flood profile for a 30-year event, thus reducing flooding downstream of the project. The pump station would pump 120 cfs to the Ouachita River. This water would eventually flow into the Ouachita River in the existing condition, but the pump station conveys the water to the Ouachita River faster. The 120 cfs constitutes 0.0015 of the typical flood flow on the Ouachita River and would have an unmeasurable impact on the River. Therefore, according to the H&H, this project does not have any upstream or downstream adverse impacts (Denmon Engineering, 2022).

Construction of the Pump Station in the floodplain would increase the risk of structural damage to the pump station and its ancillary components due to flooding. The Proposed Action would not result in an increased base discharge, nor should it increase the flood hazard potential to other structures. The purpose of this action is to reduce impacts of flooding in the project area. The addition of a pump station will strengthen future recovery and resiliency efforts through increased protection of life, safety, and infrastructure during a flood event. The addition of a new pump station is anticipated to extend the useful life of the surrounding infrastructure and will not encourage future development in the floodplain beyond the current conditions. The parcel does not offer suitable habitat for any federally listed species but could support common native plant and wildlife species if allowed to return to its native state.

The functions of the floodplain to provide flood storage and conveyance, filter nutrients and impurities from runoff, reduce flood velocities, reduce flood peaks, moderate temperature of water, reduce sedimentation, promote infiltration and aquifer recharge, and reduce frequency and duration of low surface flows will remain intact after the implementation of the project. Additional detention is being added at the pump station site with the construction of a .82-acre storage pond. The Proposed Action would improve flood water evacuation from the benefit area. The proposed pump station is intended to serve existing development that is currently at risk of flooding. The discharge piping, being underground, would not be affected by flood water and would improve the discharge rate of the rainfall and runoff during flood events. The project would improve drainage of flood waters during future rainfall events and would not increase water levels in the floodplain. According to the Louisiana Department of Natural Resources (LDNR) Strategic Online Natural Resources Information System (SONRIS) database, there are no groundwater areas of concern in the project vicinity. There is a potential for a short-term localized increase in sedimentation during construction; however, long term, post-construction runoff would not increase because the surface area would be similar to the pre-construction conditions along the force main, and runoff would be localized at the proposed detention pond and pump station facility.

Floodplains also provide services in the form of providing fish and wildlife habitat, breeding, and feeding grounds. These floodplain values will not be adversely impacted, and the overall integrity of the ecosystem will not be impacted. FEMA has determined that the Proposed Action will have no effect on the Red-cockaded Woodpecker and may affect but will not likely adversely affect the Northern Long-eared bat. USFWS concurrence with these determinations of effect was received October 6, 2022 (see Appendix B). No minimization measures were required by USFWS. The proposed action would have negligible impacts to native species and their habitats and population levels of native species would not be affected. Sufficient habitat would remain functional to maintain viability of all species.

Cultural resource values have been considered in the EA. In consultation with the State Historic Preservation Office and federally recognized tribes with interest in the project area, FEMA has determined that no historic properties will be affected by the federal Undertaking.

Step 5 – Minimize harm and restore and preserve natural and beneficial values

The Proposed Action is designed to minimize floodplain impacts.

In order to reduce the impacts identified in Step 4 of flooding on the proposed pump station, the structure will be elevated at or above the 500-year base flood elevation (BFE). The ground elevation at the pump station site is approximately 70.5 feet. The 500-year BFE for the pump station site is 69.5 feet according to the 2017 LOMR. The first-floor elevation of the pump station building is 73 feet, well above the 500-year BFE. The proposed force main piping would be buried such that the ground is returned to its original elevation.

The additive alternate includes the installation of a back-up generator. Should this portion of the additive alternate be included in the FEMA-funded action, it must be elevated at or above the 500-year BFE.

Ouachita Parish must coordinate with the local floodplain administrator and obtain required permits prior to initiating work, including any necessary certifications that encroachments within the adopted regulatory floodway would not result in any increase in flood levels within the community during the occurrence of the base flood discharge. Applicant must comply with any conditions of permit and all coordination pertaining to these activities should be retained as part of the project file in accordance with the respective grant program instructions.

Prior to construction, Ouachita Parish must coordinate with the LDEQ Water Permit Division to obtain any required stormwater permits for the proposed project. Ouachita Parish would be responsible for complying with all permit conditions. Best management practices would be implemented during pre- and post-construction activities and maintained until final stabilization is achieved. The intent is to perform the work during the dry season and periods of low flow, to the extent practical, to reduce the likelihood of sediment transport within the Ouachita River. Silt fencing should also be placed at various locations around the perimeter of the project area in a manner that would capture sediment during rain occurrences.

Ouachita Parish is responsible for coordinating with and obtaining any required Section 404 Permit(s) from the USACE 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.

Step 6 – Re-evaluate the Proposed Action

The Proposed Action would not facilitate development in the floodplains to any greater degree than any non-floodplain areas of the community. The project would improve drainage of flood waters during future rainfall events and would not result in adverse upstream or downstream impact.

There is no practicable alternative to locating the project in the 100- and 500-year floodplain of Ouachita River because:

1. The Beneficiary Area exists within the floodplains, with homes and business being subjected to flooding during future heavy rainfall events.
2. The location of the Pump Station within the 500-year floodplain is required because there is no practical alternative that would allow storm waters from the Beneficiary Area to be

discharged in a manner that effectively lowers the BFE.

3. The No Action Alternative would not resolve or improve the existing flood hazard in Monroe.

Step 7 – Findings and Public Explanation (Final Notification)

In accordance with 44 CFR Part 9.12, final notice will be accomplished through the publication of the Notice of Availability for the Draft Environmental Assessment that will be posted on FEMA's website at <https://www.fema.gov/emergency-managers/practitioners/environmental-historic/nepa-repository> and in the local newspaper.

Step 8 – Implement the Action

The Proposed Action would be constructed in accordance with applicable floodplain development requirements and adhere to the grant conditions outlined in the Environmental Assessment.

**HYDRAULICS AND HYDROLOGY REPORT
GEORGIA ST. – WINNSBORO ROAD AREA
OF MONROE, LA**

SEPTEMBER, 2022



✓
9/21/22

PROJECT HISTORY & EXECUTIVE SUMMARY

This project was conceived after an April, 2011 flash flood in Monroe, LA inundated hundreds of homes in the Georgia St. area. An initial H&H report was undertaken for that project that modeled the actual flood, and an application was made to the LADOTD Statewide Flood Control Program. Through four applications to that program and its cost benefit analysis, a project was selected that would add a 45,000 GPM pump station to the area to pump flood water to the Ouachita River.

This report augments the previous H&H report, to add two Frequency Floods, the 10 Year and 50 Year rainfall events to the modeling effort initially undertaken.

This study also determined that there will be no downstream or upstream impacts to adding the recommended pump and force main. The project is also in compliance with NFIP, local floodplain ordinances, state stormwater management requirements, DOTD requirements, USACE, levee district, and other federal including 44 CFR 65.3, state, and local laws as applicable, and this report evaluated a no-build and build alternative in its alternative analysis and the preferred alternative is the project as evaluated in this H&H report

INTRODUCTION

This report completed a Hydraulics and Hydrology analysis of the current flooding problems in the Georgia St. - Winnsboro Road Area of Monroe. During heavy rainfall events, residents in this area experience flooding with water levels rising to as much as 2' above house slabs, but with most flooding in the area less than 1' above house slabs. This study analyzed the area and made recommendations to reduce this flooding. See Picture 1 for houses in the area.



Picture 1: Neighborhood near Georgia St.

EXISTING CONDITIONS

The neighborhoods in the study area have experienced frequent flooding over recent years. Figures A-D plot the general area where flooding is occurring and plots the residents that reported flooding to the Ouachita Parish Office of Homeland Security during a flood event on April 27, 2011 when approximately 5 inches of rainfall fell on the area in a four hour period and raised water levels to 70'-74.0' in the area. During this storm, 226 residents reported house flooding, but it should be noted that this is only the number that reported. An analysis of the area using GIS data, and mapping the flooded houses indicates that approximately 600 houses flooded during this event, with many not reporting due to the regularity of flooding in the area. Most houses flooded by less 1'. Figure B presents the general topography of the watershed that is approximately 621 acres. As can be seen in Figure B, the flooding occurred in a low spot in the area where rainfall-runoff from surrounding areas is collected and causes flooding. Rainfall-runoff in

this area is collected in a combination of open ditches and underground drainage and conveyed to the Swayze School Canal. Naturally, this water would flow out of the area through the Swayze School Canal (a drainage ditch) and then into Young's Bayou, the major water body that drains south Monroe. The Swayze School Canal is a manmade ditch that is in parts an open ditch and in other places conveys water via underground drainage pipes.



Picture 2: Swayze School Canal

Figure F depicts the FEMA flood map for the area and the Appendix contains the FEMA flood profiles for the Swayze School Canal from FEMA's 2009 study. FEMA maps the 100 year flood elevation in the area as 70'. The FEMA mapping suggests that the flooding in the area is not occurring due to backwater effects from the Swayze School Canal or Young's Bayou, but likely due to inefficient conveyance of water to the Swayze School Canal and high tailwater levels in the area that prevent local rainfall-runoff from efficiently getting to the Swayze School Canal.

FLOOD MODELING

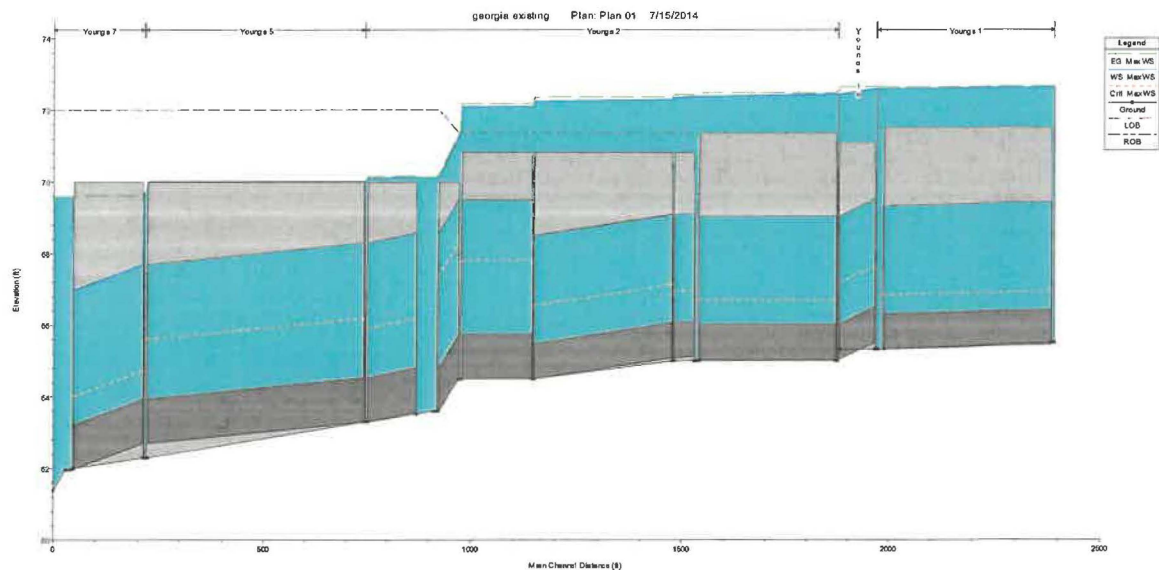
The Project Plan was derived from a hydrologic analysis of the April 27, 2011 storm. This storm produced approximately 5" of rainfall in a four hour period. Comparative analysis of this storm with the National Weather Service's Technical Paper 49, approximates this storm event as a 30 Year rainfall event. Included are the actual rainfall totals from five locations in the Monroe area.

APRIL 2011 FLOOD: ACTUAL RAINFALL AT LOCATIONS IN MONROE

Gage	Location	INCHES				
		Hour 1	Hour 2	Hour 3	Hour 4	Totals
KLAMONRO14	Pecan Bayou	0.19	2.9	0.98	0.78	4.85
KLAMONRO6	Lakeshore	0.25	3.28	1.32	1.15	6.00
KLAMONRO8	Delta Com. College	0.2	0.5	1.5	2.51	4.71
KLAWESTM2	Cheniere/Drew	0.8	1.2	1.58	0.4	3.98
MD7139	Logtown	1.81	1.6	1.23	0.74	5.38
Average		0.65	1.896	1.322	1.116	4.984

The Affected area is bisected by a system of pipes and ditches that collect runoff in the Area and routes this runoff to the Swayze School Canel to the east. Outside of this collection system, runoff finds its way into the collection system by a combination of overland flow, street gutters and a few small roadside ditches. See Figure B-1 for this collection system. This collection system was surveyed and input into a HEC-RAS model to model the existing conditions in the Affected Area. The watershed was broken into 10 sub-basins along the collection system, and hydrographs from these sub-basins were inputted into the HEC-RAS model along the collection line. See Figure B-2 for watershed sub-basins and reaches within the HEC-RAS model. To model the rainfall-runoff for the 2011 storm, the average of the rainfall totals was input into a HEC-HMS model. Variables for the basin were taken from USGS Topographic Quad maps, aerial photography, and a field investigation. See Attachment E for detailed runoff calculations. The FEMA 30 Year Flood Elevation of 69.84' was used for the tailwater elevation in the HEC-RAS Model. See Figure F for FEMA flood elevations in the area.

Included are the results of the HEC-RAS model for the existing conditions (only the main reach of the collection line).



HEC-RAS RESULTS, EXISTING CONDITIONS, MAXIMUM STAGE MAIN TRUCK LINE.

The results of the HEC-RAS model generally mimic the observed highwater levels from the 2011 storm as plotted in Figure B. Though there is some deviation, the observed high water levels in the 2011 storm ranged between 72'-73' in the headwater areas of the collection system, falling to 69.84'-71' in the tailwater areas. The HEC-RAS model produced maximum water levels in the headwater area of 72.63' that fell to 69.84' (the input tailwater condition) in the downstream area.

An analysis of the existing collection lines and the flooding in the impacted area indicates that improvements to the existing gathering lines will not likely solve the flooding problems in the impacted area. Currently, there is flooding occurring in the tailwater areas of the collection line near its confluence with Swayze School Canal. Upgrading the collection line would possibly only reduce flooding in one area of the Impacted area and increase it in another, and due to existing tailwater levels, may have very little positive impact overall. Secondly, the existing collection line bisects a residential area where additional right-of way for a concrete ditch or larger trunk line would be difficult to

acquire, especially for the level of upgrades likely required. Additionally, the collection line currently goes under 5 City Streets. Box Culverts under these streets would likely result in additional headwater.

Pumping and retention in the headwater area was analyzed for its flood reduction potential. This alternative will reduce the total runoff in the Benefitted Area, as opposed to more efficiently routing it downstream to other areas that are currently experiencing flooding. Picture 3 illustrates the flooding in the headwater areas of the collection system near Georgia St. during the 2011 storm. Field investigations and the testament of residents suggest this is the area where rainfall-runoff collects.

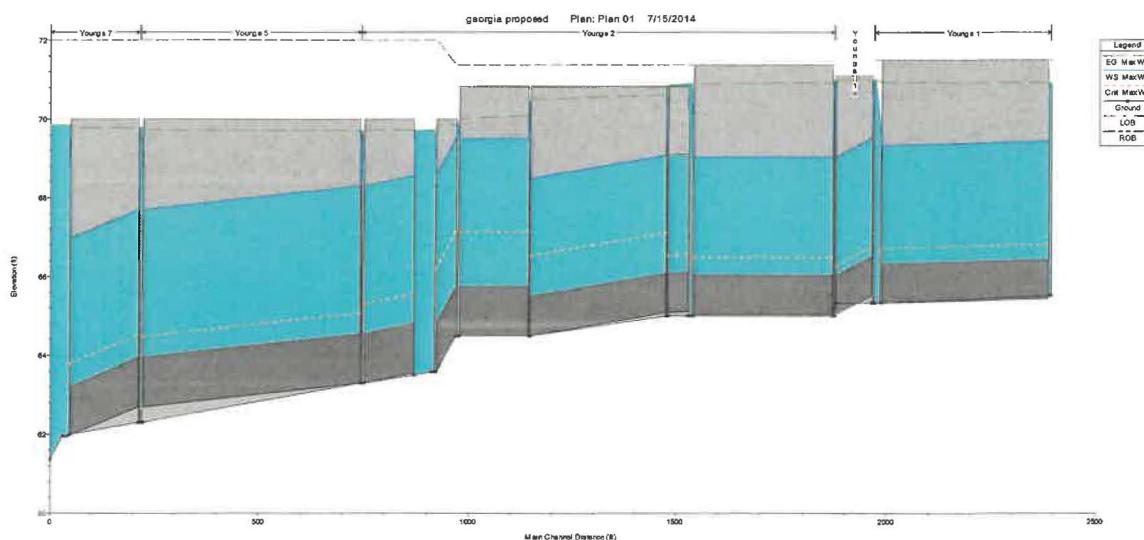


Picture 3: Flooding in the Georgia St Area in 2011.

The HEC-RAS model was updated to include pumping and retention in the upstream areas of the collection area where the rainfall runoff is collecting, also tying this pumping

and retention into the existing collection system. The City of Monroe has approximately 1.4 acres of idle land in the area available for retention and pumping. Trial and error analysis of the HEC-RAS model found that 45,000 GPM of pumping with 12.6 AC. FT. of retention reduced headwater levels in the Affected Area from 72.63' to 70.92', or a level that would prevent almost all flooding in the Affected area. Survey data of the area indicates the street elevations are at approximately 71.25' in the headwater area with slap levels typically 6" above this. The analysis suggests the pumping will keep flood levels below street levels and in the existing collection system. This pumping removed approximately 43 AC. FT of rainfall from the Affected area, thus reducing flooding downstream.

Attachment G calculates the approximate 30 Year flow in the Swayze School Canal at the downstream boundary condition of 545 cfs. The pumping capacity of the proposed pump station is 120 CFS, or approximately 20% of this peak flow. The 30 year downstream tailwater was adjusted to mimic and unsteady state based on the inflow hydrograph, with the peak water elevation remaining the same, but with the tailwater rising and falling. Included are the results of the HEC-RAS model for the proposed conditions (only the main reach of the collection line). Note that floodwaters have receded below natural ground.

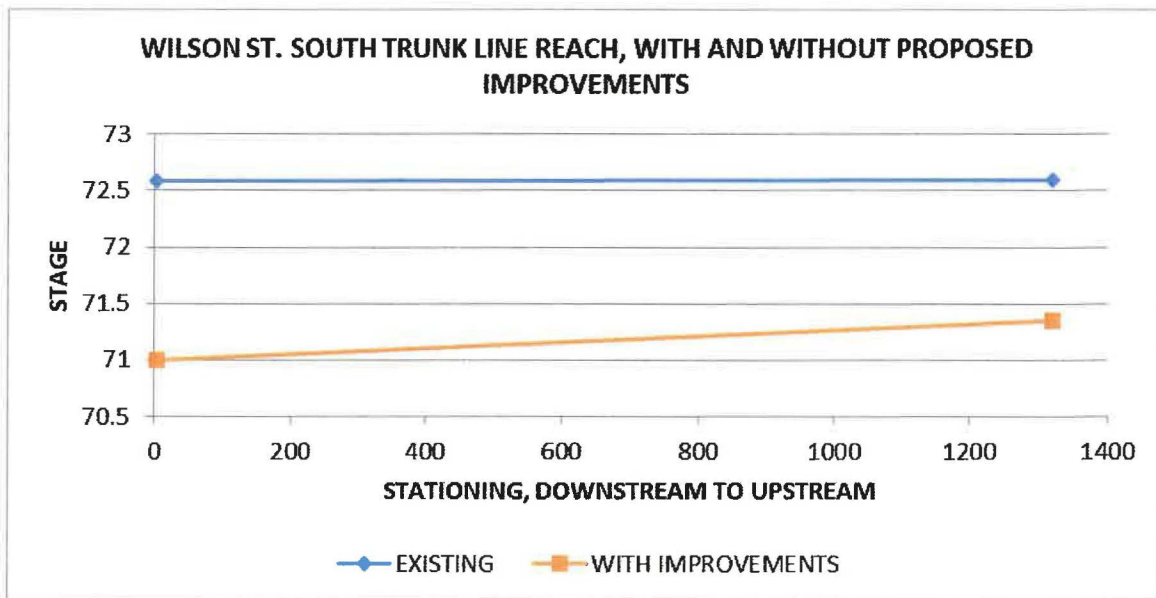
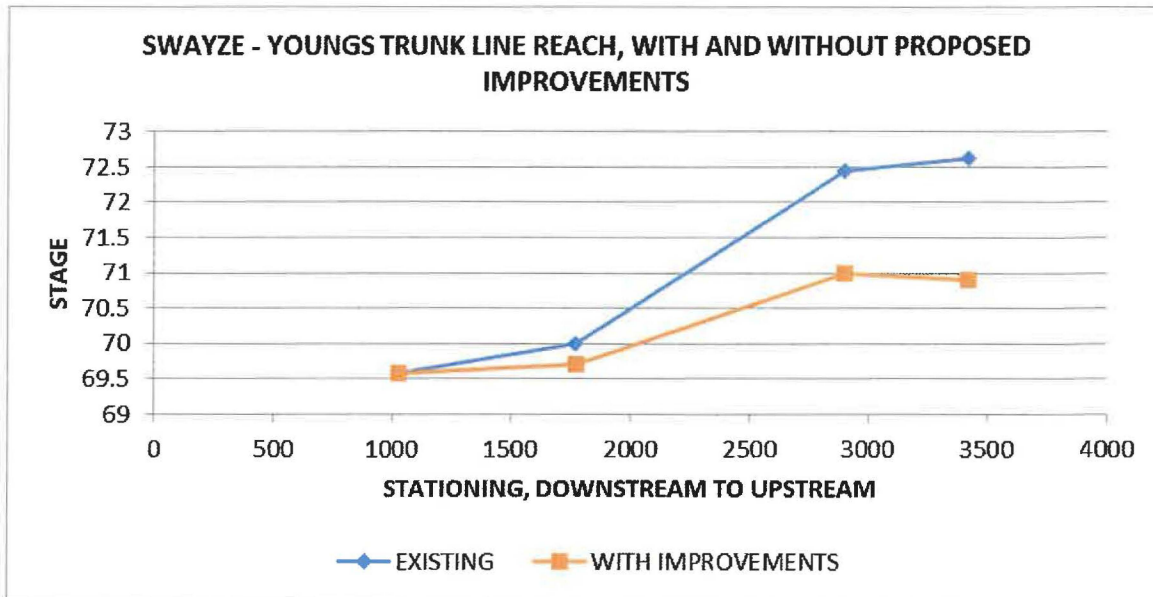


HEC-RAS RESULTS, PROPOSED CONDITIONS,
MAXIMUM STAGE MAIN TRUCK LINE.

Figure B-1 shows the reaches as modeled in the HEC-RAS Models. The HEC-RAS models were all utilized to analyze the adequacy of the existing collection system. The trunk-lines along Wilson St. (Wilson North and Wilson South reaches), as modeled in the HEC-RAS model for proposed conditions indicate water levels will be decreased 1.59'. HEC-RAS Modeling was completed in Version 3.0.

RESULTS OF FLOOD MODELING

Figure H plots the before and after results of the flood modeling. Water levels were reduced throughout the model between 1'-1.5', but more importantly the water levels in the project areas were lowered to levels below natural ground with all water routed through the existing piping or catch basins, thus this should reduce most all flooding. In all, based on the GIS mapping, 642 structures in the area would avoid flooding with the project. It reduced high water levels an average of 1.45' in the areas within a quarter mile of the project, with this highwater reduction reducing to significantly smaller amounts out to about a half mile of the pump station. Note that Station 1000 on the Swayze – Youngs Trunk is the model boundary condition at the edge of the project impact.



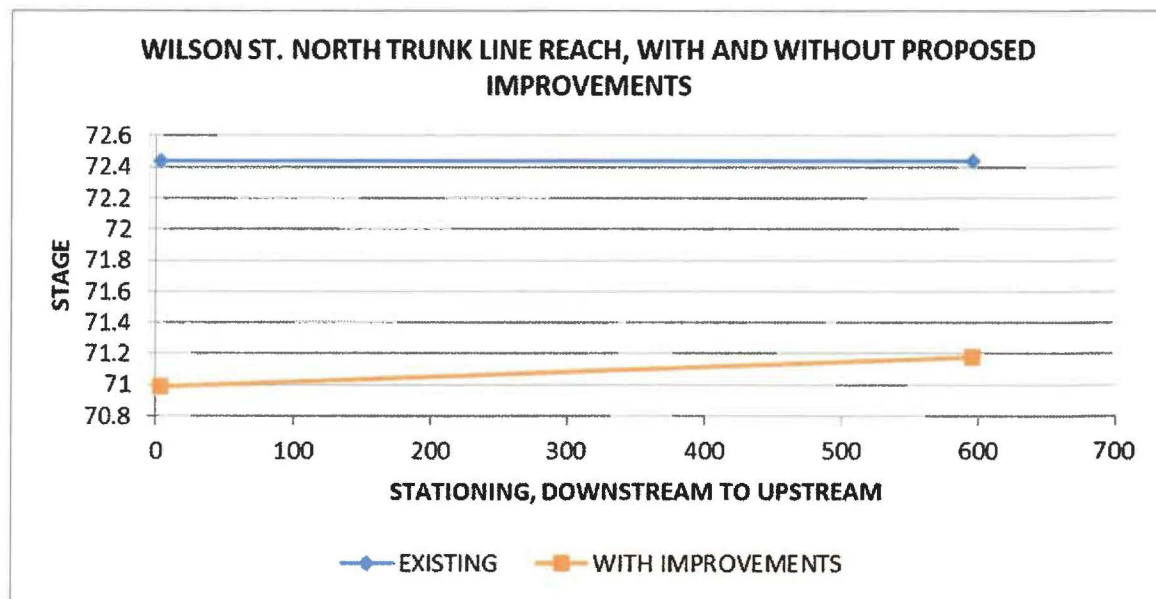


FIGURE H: MODEL RESULTS WITH AND WITHOUT THE PROJECT

PROJECT COMPONENTS

Pump Station

The pump station should be constructed to house three fully operational 22,500 gpm pumps all powered by diesel engines to ensure operation during power outages. Though only two pumps are included in the analysis, the third pump will serve as a backup. The pumps should be 500 HP pumps capable of producing 52' of pressure head. See Attachment I for pump calculations. The City of Monroe currently owns an approximately 1.4 acre parcel in a low spot and adjacent to the main collection line in the benefited area where the pump station will be constructed. The remainder of the parcel should be used for onsite storage consisting of a pond with an invert of 59', and 1H:1V concrete sides. The existing collection pipes in the area should be tied directly into the storage pond.

Force Main

The force main to the Ouachita River will be approximately 5250' in length and will require a 48" O.D. HDPE D.R. 21 pipe. See Attachment I for force main

calculations and pipe specifications. This pipe will be fusion welded in the field with no joints, and installed with the cut and cover method.

Outfall Structure

The force main will discharge into the Ouachita River utilizing the existing Plum St. Pump Station outfall structure. The Plum St. Pump Station outfall structure currently discharges water from the Plum St. Pump Station at the Plum St. Underpass via a 30" force main. The outfall structure itself will require some modifications. To model the structure, a HEC-RAS model of the existing structure was created. The model results in Attachment I indicate that the existing structure has the capacity to handle the flow of both force mains, but the additional flow will increase the flow velocity and depth in the outfall structure. Calculations of the existing outfall structure estimate the flow depth and velocity currently at the outfall structure's exit to be 0.71' and 4.03 ft./sec., respectively. Model results in Attachment I indicate that widening the structure from 8' to 18', and raising the headwall from 5.5' to 7' should increase the structure's capacity to adequate levels. With both pump stations working at full capacity, the water depth and flow in the modified structure will be 1.51' and 5.54 ft./sec., respectively. It is recommended that baffle blocks also be added to the structure. This flow rate should be adequate to prevent any erosion at the outfall structure.

10 AND 50 YEAR FLOODS

The 10 and 50 Year rainfall data was added to the existing HEC-HMS model, and these runoff values were input into the existing HEC-RAS model, and both frequency storms were routed through the basin. See Table for results at the Pump Station location.

	HIGH WATER EXISTING CONDITIONS	HIGH WATER WITH PROJECT	DIFFERENCE
2011	72.62	70.9	-1.72
10	72.72	71.43	-1.29

YEAR			
50 YEAR	73.09	72.36	-0.73

Table 1

It should be noted that though the total rainfall for the 2011 event over a four hour period was greater than the same period for a 10 Year Flood, the maximum 30 minute intensity for the 10 Year rainfall was greater resulting in slightly higher peak values for the 10 Year flood. Due to this, the pump did not pump as long in the 10 Year event as the 2011 event, but more water was pumped out of the area the during the 2011 event, hence the project had greater benefit in the downstream area. The project did lower levels on average 0.9' for a radius of a quarter mile from the pump station with this impact reducing up to distances of ½ mile from the pump station, but these results indicate that with the project most flooding in the area will be prevented, because the project lowers water levels below the house slabs in the area that are generally at or above 71.5'.

Both the peak high water during the existing condition and with the project were higher than the 2011 flood for the 50 Year Event. Water levels were reduced by 0.73' near the pump station and 0.6' on average within a quarter mile of the pump station. This will result in some of the lower homes near the pump station flooding, but an analysis of the model indicates water levels will be reduced to levels below natural ground in areas around Marx St. and east of Marx. St. that should prevent most flooding in this area. See Appendix for detailed results.

UPSTREAM AND DOWNSTREAM IMPACTS

This project will not alter any runoff patterns upstream of the project and hence will have no negative upstream of the project. The project will reduce the flood flow downstream of the project by removing 120 cfs, or about 20% of the FEMA flood profile for a 30 year event, thus reducing flooding downstream of the project. The pump station will pump 120 cfs to the Ouachita River. This water would eventually flow into the Ouachita River in the existing condition, but the pump station does convey the water to the Ouachita

River faster. It should be noted that the Ouachita River is isolated from the City of Monroe by a Federal Levee. The 120 cfs constitutes 0.0015 of the typical flood flow on the Ouachita River, and would have an unmeasurable impact on the River. Based on this, this project does not have any upstream or downstream impacts.

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APPENDIX D

CUMULATIVE IMPACTS TABLE

Cumulative Impacts

The CEQ's regulations state that cumulative impacts represent the "impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (Federal or non-Federal) or person undertakes such other actions." Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR § 1508.7).

Summarized below in **Table 1** is a list of local, state, and federal projects occurring, or that would occur or have occurred, at/near the same time as the proposed project. Information on these other past, present, and future projects was obtained through the City of Monroe's Engineering Department, interviews with the City of Monroe's Planning and Urban Development Department, and through the 2018-2022 Transportation Improvement Program (TIP) published by the Ouachita Council of Governments for the Monroe Metropolitan Planning Area.

The proposed project site is located in southern Monroe and east of the Ouachita River. The Georgia Street-Winnsboro Road area of Monroe is a low-lying residential area where rainfall-runoff from surrounding areas collect. The project area has a watershed of 285.6 acres. FEMA has determined that the larger 3,641-acre area encompassing the project area constitutes an appropriate resource study area for a cumulative impact analysis of the proposed action and alternatives. This resource study area, which is shown in Exhibit 5 of the EA document, coincides with the census tracts in the project area.

Cumulative impacts are analyzed in terms of the specific resource being affected. As wetland impacts are the only resource directly and adversely impacted by the proposed action, this is the only resource carried forward for cumulative impacts analysis. In accordance with NEPA, and to the extent reasonable and practicable, this EA considered the combined effects on wetlands of the Proposed Action (Alternative 2), as well as the other actions summarized in the below table. Based on information from the City of Monroe and the Monroe TIP, numerous projects have occurred, are occurring, or are reasonably foreseen to occur (developed with enough specificity to provide useful information to a decision maker and the interested public) to public utilities and roads. All federally funded actions are subject to various levels of environmental review as a requirement for the receipt of Federal funding. An applicant's failure to comply with any required environmental permitting or other condition is a serious violation which can result in the loss of Federal assistance and/or funding.

Based on the scope of work and specific location of the projects (if known), it has been determined that the incremental effects of the other infrastructure improvement projects are likely to be similar to the impacts and effects this EA has described for the present Proposed Action, such that the effects to socioeconomic resources are expected to be beneficial, and effects to wetlands are expected to be either non-existent or minimal and temporary. FEMA has further determined that the incremental impact of the present proposed project, when combined with the effects of other past, present, and reasonably foreseeable future projects, is neither cumulatively considerable nor significant.

Attachments:

- Table 1 of Other Actions
- Cumulative Impacts Questionnaire completed by City of Monroe Planner

Table 1: Other Past, Present, or Future Actions at/near the Proposed Project.

Project Name / Status	Funding Source	Location in Monroe	Description	Cumulative Impacts on Wetlands	Rationale
Parker Street Ditch Improvements / Completed 2015	Capital Infrastructure Funds	Parker St & Mississippi St	This project built a relief ditch on Parker Street to help carry rain waters from the Georgia Street area.	Minor	Project occurs along roadside ditch. Any wetlands present would be non-jurisdictional.
Repair & Repaint Water Storage Tanks / Completed 2015	Water Capital Funds	Ruffin Dr & Hadley St	This project provided enhancements to the Selman Field, Ruffin Drive and Thomas Avenue water storage tanks.	Negligible or Minor	No sizable new ground disturbance
Thomas Ave Water Storage Tank Site Improvements / Completed 2016	Water Capital Funds	SW of McGee St & Burg Jones Ln	This project did site grading, removal of existing manhole, installed a 12" & 15" storm drain pipe.	Negligible or Minor	Presumably no sizable new ground disturbance
Apple Street Pump Station Repairs / Completed 2017	Capital Infrastructure Funds & FEMA Reimbursement	Apple St & St John Dr	This project replaced the 48" slide gate and replaced the 48" outfall pipe, which were damaged by the great flood of March 2016.	Negligible or Minor	No sizable new ground disturbance
Plum Street Underpass Repairs / Completed 2017	Capital Infrastructure Funds & FEMA Reimbursement	Plum St & Railroad Ave	This project made permanent repairs and slope stabilization to prevent large items from getting into the storm drain pump station. Also, we upgraded the guardrails and safety arms to prevent vehicle traffic from getting trapped within the underpass area when the pump station is not working.	Negligible or Minor	Presumably no sizable new ground disturbance
Wastewater System Improvements Basin MR-04/05/07 (A) 2 Rehabilitation / Completed 2017	DEQ Loan Funds	S Grant St	Project rehabilitated approximately 10,500 L.F. of 6", 8", 10" and 12" using cured-in place pipe (CIPP) lining; replaced approximately 24,500 L.F. of 6" and 8" sanitary sewer using pipe bursting; replaced approximately 1,520 L.F. of 10" sanitary sewer using pipe bursting; replaced approximately 750 L.F. of 12" sanitary sewer using pipe bursting; installed 33 new manholes, performed open-cut replacement and point repairs; replaced existing active service laterals.	Minor	Project presumably occurs along existing ROW with minimal wetland impacts required.
Hadley Street Rehabilitation / Completed 2019	Federal and Ouachita Parish Police Jury	Hadley St btwn US 165 & Nutland Rd	Rehabilitation (overlay) of Hadley Street.	None or Negligible	No new ground disturbance

Project Name / Status	Funding Source	Location in Monroe	Description	Cumulative Impacts on Wetlands	Rationale
Pargoud Lift Station Force Main Relocation / Active	Capital Infrastructure Funds & DEQ Loan Funds	Pargoud Dr	This project will get the force main out of the way for a project the Corp of Engineers have scheduled to start in the fall to rehab the flood wall. It is also an opportunity to replace the degraded force main and reroute it into a section which has already been rehabbed.	Negligible or Minor	Presumably no sizable new ground disturbance
US Hwy 165 South Lighting Project / Active	Capital Infrastructure Funds 20%; LaDOTD Urban System Funds 80%	US 165	This project will install approximately thirty-eight (38) new street lighting poles on US 165 South from Century Blvd to Winnsboro Road.	None or Negligible	Minor nature of scope of work
Parkview & Ruffin Drive Water Main Improvements / Active	Water Capital Funds	Ruffin Dr	This project consists of installing roughly 2900 L.F. of new 8" main and roughly 200 L.F. of 6" main. The project will provide improved fire protection for the schools and some businesses in the area.	Minor	Project presumably occurs along existing ROW with minimal wetland impacts required.
South Grand Street (From Orange Street - Standifer Avenue / In Design	Capital Infrastructure Funds & LaDOTD (Urban Systems)	S Grand St	This project will cover the removal of the existing asphalt surface by cold planing, patching base failures and overlaying with asphalt.	None or Negligible	Minor nature of scope of work
Lee Avenue (From Jackson Street - Standifer Avenue) / In Design	Capital Infrastructure Funds & LaDOTD (Urban Systems)	Lee Ave (from Jackson St to Standifer Ave)	This project will cover the removal of the existing asphalt surface by cold plaing both sides of the boulevard, patching base failures and overlaying with asphalt.	None or Negligible	Minor nature of scope of work
City Street Striping Phase IV / In Design	Capital Infrastructure Funds	Multiple Locations within City	City street striping at 44 locations within City.	None or Negligible	Minor nature of scope of work
West Parkview Drainage Improvements / In Design	Capital Infrastructure Funds	Beauregard St & S 10 th St	This project includes engineering and construction of 3000 linear feet of 60 in. concrete drainage pipe with catch basin, utility relocation and road crossing.	Minor	Project presumably occurs along existing ROW with minimal wetland impacts required. Most if not all wetlands present would likely be non-jurisdictional.

Project Name / Status	Funding Source	Location in Monroe	Description	Cumulative Impacts on Wetlands	Rationale
Water Distribution System Improvements / In Design	Water Capital	McGee St, Parkview Dr, Oaklawn Dr, Hilton St, Jasmine St	This project consists of the replacement of existing water mains on five (5) streets: 1. McGee Street 2. Parkview Drive 3. Oaklawn Drive 4. Hilton Street 5. Jasmine Street	Negligible or Minor	Work will likely occur within existing ROW to replace existing features.
U.S. Hwy 165 South Business Connector (Zoo Connector) / In Design	TBD	US Hwy 165	This project will establish an arterial route connecting US Hwy 165 South & Hwy 165 Business Connector and will also facilitate direct access to Louisiana Purchase Gardens & Zoo from US Hwy 165 South.	Minor	Work will likely occur within existing ROW to replace existing features. Most if not all wetlands present would likely be non-jurisdictional.
Oregon Trail Protective Levee / In Design	Capital Infrastructure Funds & Hazard Mitigation Grant Funds	Nutland Rd and Perry Rd	This project will construct approximately 3000 ft of protective levee/floodwall to an elevation of 70' along Nutland Road, which is approximately 3'-4' above natural grade. The protective levee will protect the East Parkview Subdivision (AKA the Oregon Trail neighborhood). The Oregon Trail neighborhood completely flooded during the March of 2016 floods with 2'-3' of water. The Oregon Trail neighborhood is protected from flooding on Young's Bayou by an existing levee and pump station (the East Parkview Flood Protection Project), but backwater from Youngs Bayou and the Airport Canal to the east floods the neighborhood from the east. The flood barrier constructed for the project will be a combination of aluminum sheet pile floodwall and levee, together with raising Nutland Road and Perry Roads where they will cross the new levee-floodwall. The project will also install four flap gates on Nutland Road and along the perimeter of the existing East Parkview Levee to prevent flood water from circumventing the existing levee system.	Minor	Project primarily occurs along roadside ditch. Most if not all wetlands present would presumably be non-jurisdictional.

Indirect and Cumulative Impacts Questionnaire

Georgia Street Pump Station and Force Main
HMGP 4263-073-0035
FEMA DR 4263-013
Monroe, Ouachita Parish, Louisiana

Respondent Information

Date: June 2, 2020
Name: Joanne C. Poret, AICP
Organization/Title: City of Monroe. Planning & Zoning Director
Address: 3901 Jackson Street
Phone and Email: 318-329-2335 Joanne.poret@ci.monroe.la.us

Questions & Discussion Topics

- 1) What are the new major developments in your jurisdiction or planning area?
- 2) In your opinion, would the proposed project induce development in your area that would otherwise not occur?
- 3) In your opinion, would any redevelopment occur as a result of the proposed project? If so, where?
- 4) In your opinion, would the proposed project prohibit development in your jurisdiction or planning area and if so, why?
- 5) In your opinion, would the proposed project affect or change the type of development within your jurisdiction and if so, why?
- 6) Any additional developments in the future (out to 20-30 years) that are reasonably foreseeable?
- 7) What future development would you expect independent of the proposed project?
- 8) In your opinion, would the proposed project affect the rate and intensity of these developments discussed from the previous question? Please rate on a scale of 1 (no influence) to 5 (strong influence).

There are no new major developments in Monroe at this time.

TERMINOLOGY

Direct Impacts are caused by the action and occur at the same time and place (40 C.F.R. 1508.8).

Comparison of Direct and Indirect Impacts

Type of Effect	Direct Impacts	Indirect Impacts
Nature of Effect	Typical/Inevitable/Predictable	Reasonably Foreseeable/ Probable
Cause of Effect	Project Only	Project's Direct and Indirect Effects
Timing of Effect	Project Construction and Implementation	At Some Future Time other than Direct Effects
Location of Effect	At the Project Location	Within Boundaries of Systems Affected by the Proposed Project

Source: NCHRP Report 403, *Guidance for Estimating the Indirect Effects of Proposed Transportation Projects* (1989).

Indirect Impacts are caused by the action and are later in time and farther removed in distance, but are still reasonably foreseeable. Impacts may include growth-inducing effects and other effects related to induced changes in pattern of land use, population density or growth rate and related effects on air and water and other natural systems, including ecosystems (40 Code of Federal Regulations (C.F.R.) 1508.8).

Induced Growth Impacts are changes in the location, magnitude, or pace of future development that result from changes in accessibility caused by the project. An example of an induced growth effect is commercial development occurring around a new interchange and the environmental impacts associated with this development.

Reasonably foreseeable is an action that is probable, sufficiently likely to occur (excludes effects that are possible but not probable [e.g. "tabled" plans]). Impacts that are merely possible, or that are considered "speculative," are not reasonably foreseeable.

Cumulative Impacts are the impacts on the environment which results from the incremental impact of the proposed action when added to other past, present and reasonably foreseeable future actions (40 C.F.R. 1508.7). The purpose of a cumulative effects analysis is to view the direct and indirect impacts of the proposed project within the larger context of past, present, and future activities that are independent of the proposed project, but which are likely to affect the same resources in the future.

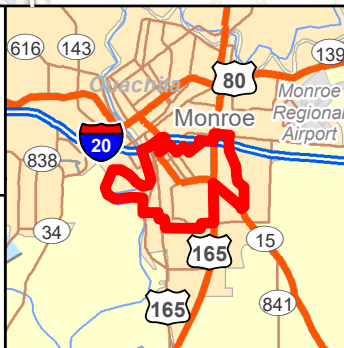
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Legend

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GEORGIA STREET PUMP STATION AND FORCE MAIN PROJECT OUACHITA PARISH, LOUISIANA

EXHIBIT 1 RESOURCE STUDY AREA FOR CUMULATIVE IMPACTS

**FEDERAL EMERGENCY MANAGEMENT AGENCY
PUBLIC NOTICE OF AVAILABILITY FOR THE
DRAFT ENVIRONMENTAL ASSESSMENT FOR THE OUACHITA PARISH
GEORGIA STREET/WINNSBORO ROAD PUMP STATION AND FORCE MAIN
PROJECT, MONROE, OUACHITA PARISH, LA, HMGP-4263-0013-LA**

Interested persons are hereby notified that Ouachita Parish has applied to the Federal Emergency Management Agency (FEMA), through the Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) for Hazard Mitigation Grant Program (HMGP) funding under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act. FEMA's HMGP provides grants to states, tribes, territories, and local governments to implement long-term hazard mitigation measures that reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster. This notice also serves as FEMA's final notice under Executive Order 11988 for Floodplain Management as the proposed action is located within the regulatory floodplain.

FEMA proposes to provide funding to Ouachita Parish to construct a new pump station with detention pond; construct a new force main; and upgrade an existing outfall into the Ouachita River to accommodate the flows from the new pump station. The proposed pump station measures approximately 320 feet (ft) by 120 ft and would be constructed on 1.4-acre property owned by City of Monroe and located on the east side of Georgia Street between Parker Street and Lock Drive (32.47909, -92.101934). The pump station would be constructed to house three 22,500 gallons per minute (gpm) pumps powered by diesel engines to ensure operation during power outages. The third pump would serve as a backup. The force main from the pump station to the Ouachita River would be approximately 5,250 ft in length and extends from the existing Plum Street outfall facility at the Ouachita River at South Ground St and Plum Street to near the intersection of Georgia Street and Parker Street. A 42-inch high density polyethylene (HDPE) force main pipe would discharge water collected at the pump station into the Ouachita River at the existing Plum Street outfall structure. Five roadway crossings would be required, and the force main would be buried under several private driveways that would be reconstructed. The crossing at the Union Pacific Railway would require a horizontal bore and steel casing. The force main construction would impact local utilities (e.g., water, sewer, gas and phone lines) in the existing ROW. The existing outfall structure itself would require some modifications to handle additional flow velocity and depth. The structure would be widened from 8 ft to 18 ft and the headwall would be raised from 5.5 ft to 7 ft. The proposed pump station and force main piping would collect and discharge floodwaters from the approximately 285-acre watershed area into the Ouachita River at a rate up to 45,000 gallons per minute.

The Proposed Action includes, and the Draft EA also considers, several additive alternate upgrades if there is enough available funding under the FEMA grant, which is dependent on materials and construction costs. Alternate upgrades include pump upgrades, increasing the pump motor size, adding structural support to accommodate additional weight, a backup generator, and a tower to support supervisory control and data acquisition (SCADA) equipment.

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; and (2) Proposed Action as described above.

The Draft EA is available for review and comment from **August X - September X**, 2023 at the Ouachita Parish Courthouse, 300 St John Street, Monroe, LA 71201, Monday- Friday 8:00 a.m. – 4:00 p.m CST and online at FEMA’s website <https://www.fema.gov/emergency-managers/practitioners/environmental-historic/nepa-repository>. An electronic or hard copy version of the Draft EA can also be requested from Dorothy Cook, FEMA Region 6, at fema-liro-ehp-hma@fema.dhs.gov.

The comment period will end 30 days from the initial notice publication date. Written comments on the Draft EA can be mailed or emailed to Dorothy Cook, Senior Environmental Protection Specialist, FEMA Region 6, 800 N Loop 288, Denton, TX 76209; Email: fema-liro-ehp-hma@fema.dhs.gov. If no substantive comments are received, the draft EA will become final and a Finding of No Significant Impact (FONSI) will be issued for the project. Substantive comments will be addressed as appropriate in the final documents.

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



FEMA

FINDING OF NO SIGNIFICANT IMPACT

OUACHITA PARISH GEORGIA STREET/WINNSBORO ROAD PUMP STATION AND FORCE MAIN PROJECT OUACHITA PARISH, LOUISIANA HMGP-4263-0013-LA HUD CDBG-MIT

BACKGROUND

In accordance with the Federal Emergency Management Agency's (FEMA) Instruction 108-1-1, an Environmental Assessment (EA) has been prepared pursuant to Section 102 of the National Environmental Policy Act (NEPA) of 1969, as implemented by the regulations promulgated by the President's Council on Environmental Quality (CEQ; 40 CFR Parts 1500-1508). The purpose of the proposed project is to protect the health and safety of residents and properties in the Georgia Street-Winnsboro Road area of Monroe, Ouachita Parish, Louisiana during future episodes of excessive rainfall. This EA informed FEMA's decision on whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

Ouachita Parish has applied for Hazard Mitigation Grant Program (HMGP) funding, through the Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) under HMGP-4263-0013-LA. Through HMGP, FEMA provides grants to state, local, tribal, and territorial governments to implement long-term hazard mitigation measures, including measures to address localized flooding. The purpose of HMGP is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster. HMGP is authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act).

Section 404 of the Stafford Act limits the amount of funding under the HMGP to not more than 75 percent of the eligible total project costs. In an effort to alleviate the financial burden of some projects, Global Match can be utilized to offset some or all of the non-federal cost share requirements. The use of HMGP Global Match allows the Applicant to utilize any cost share match that exceeds the minimum requirement (referred to as overmatch) from certain subawards to alleviate the financial burden on other projects. It also increases flexibility for the application of various cost share methods. The non-federal cost share can come from a variety of sources, including cash or donated resources for eligible project costs from the Applicant, subapplicant, or mitigation recipient. The Applicant administers the program and has discretion to implement Global Match.

For FEMA-4263-DR-LA, the State of Louisiana has identified projects funded by the Department of Housing and Urban Development's (HUD) Community Development Block Grant-Disaster Recovery (CDBG-DR) grant administered by the State's Office of Community Development (OCD) to provide overmatch for the disaster and offset the required non-federal cost share for other HMGP projects.

The Global Match process requires the applicant to submit a cost share strategy as part of its Administrative Plan for review and approval to FEMA. The Applicant must then submit applications for all Global Match projects to FEMA. FEMA will review the application(s) for all eligibility requirements, such as cost-effectiveness, technical feasibility, an approved hazard mitigation plan, and EHP considerations.

All other HMGP projects will generally be fully funded, with no additional cost share required from the subrecipient. The CDBG-DR projects will provide eligible overmatch projects that will offset the HMGP non-federal cost share. The Georgia Street/Winnsboro Road Pump Station and Force Main Project is one of the projects being fully funded by CDBG-DR to count as Global Match toward other FEMA-4263-DR-LA HMGP projects.

Two project alternatives were considered in this EA: 1) No Action; and 2) Proposed Action—Construction of Georgia Street-Winnsboro Road Pump Station, Force Main, and Outfall in Monroe, Louisiana. Ouachita Parish considered upgrading the existing drainage ditches in the area as another alternative to address flooding in the Georgia Street-Winnsboro Road area of Monroe. This alternative was dismissed from further analysis in the EA because it would not be as effective in transporting floodwaters, could increase downstream flooding, required additional right of way acquisitions, and required replacement of five bridges.

Under the No Action alternative, Ouachita Parish would not engage in flood protection activities in the Georgia Street-Winnsboro Road area of Monroe. Consequently, residential areas would continue to be susceptible to flooding from intense rainfall events. Storm water would overwhelm the existing drainage system and cause areas to flood, impacting numerous residences, properties, and other services in the area.

Under the Proposed Action, Ouachita Parish proposes to construct a pump station with detention pond; construct a new force main; and upgrade an existing outfall to accommodate the flows from the new pump station. The proposed pump station measures approximately 320 feet (ft) by 120 ft and would be constructed on 1.4-acre property owned by City of Monroe and located on the east side of Georgia Street between Parker Street and Lock Drive (32.47909, -92.101934). The pump station would be constructed to house three 22,500 gallons per minute (gpm) pumps powered by diesel engines to ensure operation during power outages. The third pump would serve as a backup. The pumps would be 500 horsepower (HP) and capable of producing 52 ft of pressure head. The proposed pump station and force main piping would collect and discharge floodwaters from the approximately 285-acre watershed area into the Ouachita River at a rate up to 45,000 gallons per minute. The pump station would be equipped with an overhead crane for maintenance and adequate parking for operation and maintenance. The remainder of the parcel would be used for onsite storage consisting of a detention pond with concrete sides measuring

approximately 0.82-acre. The existing collection pipes in the area would be tied directly into the storage pond. The entire facility would be enclosed with a chain link fence for security and safety purposes.

The force main from the pump station to the Ouachita River would be approximately 5,250 ft in length and extends from the existing Plum Street outfall facility at the Ouachita River at South Ground St and Plum Street to near the intersection of Georgia Street and Parker Street. A 42-inch high density polyethylene (HDPE) force main pipe would discharge water collected at the pump station into the Ouachita River at the existing Plum Street outfall structure. This pipe would be fusion welded in the field with no joints and buried with a minimum cover of 30 inches. The force main would be constructed in existing City of Monroe rights of way (ROW) with some additional ROW required near the Union Pacific (UP) Rail Yard and Plum Street underpass. Five roadway crossings would be required, and the force main would be buried under several private driveways that would be reconstructed. The crossing at the Union Pacific Railway would require a horizontal bore and steel casing. The force main construction would impact local utilities (e.g., water, sewer, gas and phone lines) in the existing ROW. Efforts would be made to minimize this impact, but some utilities would require relocation or lowering to make space available for construction. These specific utility impacts and easement agreements would be developed prior to construction.

The force main would discharge into the Ouachita River utilizing the existing Plum Street pump station outfall structure (32.48513, -92.11193). The existing outfall structure discharges water from the Plum Street pump station at the Plum Street Underpass via a 30-inch force main. The outfall structure would require some modification that includes removal of the existing levee crossing for the existing Plum Street force main and replacement with a 54-inch ductile iron pipe that would serve as a levee crossing for both pump stations. Prior to the levee crossing, a prefabricated manifold would be fabricated to tie the existing 30-inch force main and new 42-inch force main to the single 54-inch pipe for the levee crossing. The levee crossing would require that the new pipe be placed over the design grade of the levee with 1 ft of cover. This construction would be completed within existing ROW for the Plum Street pump station. A 12-inch combination siphon break air release valve with a concrete manhole would be required at the apex of the levee crossing. The existing outfall structure itself would require some modifications to handle additional flow velocity and depth. The structure would be widened from 8 ft to 18 ft and the headwall would be raised from 5.5 ft to 7 ft.

Additive Alternates

Various alternate upgrades would be included as part of the Proposed Action if there is enough available funding under the FEMA grant, which is dependent on materials and construction costs. If any of the alternate upgrades cannot be included due to rising costs, the outcome of the project would not be negatively affected. Alternate upgrades include pump upgrades, increasing the pump motor size, adding structural support to accommodate additional weight, a backup generator, and a tower to support supervisory control and data acquisition (SCADA) equipment. Under the alternate upgrades, the pumps would be changed to a 9"Ø Solids Handling Pump (2 pumps) and the two 500-horsepower baseline motors would be increased by 200 horsepower (for

a total of 700 horsepower). Additional support to accommodate the resultant increase in weight would be installed and would include additional or larger steel pump support beams and additional steel sheet piling as needed for construction of a deeper wet well. Due to the increased submergence depth of the upgraded pumps, the reinforced concrete wet well will go 4 feet deeper into the ground. A 1,500-kilowatt (kW) diesel generator with an automatic transfer switch would be installed on a concrete pad at the pump structure. A 96-foot-tall SCADA tower would be installed to the north of the pump station on the northwest corner of the proposed detention pond. The SCADA equipment includes software that would allow for gathering and transmittal of data in real time from remote locations in order to control the pump station equipment and operating conditions.

The EA and FONSI include the additive alternates as part of the NEPA analysis.

A public notice was posted in The News Star and on FEMA's website. The draft EA was made available for public comment at the Ouachita Parish Courthouse, 300 St John Street, Monroe, LA 71201 and on FEMA's website. No comments were received from the public during the comment period.

FINDING OF NO SIGNIFICANT IMPACT

The Proposed Action as described in the EA would not significantly adversely impact wetlands, floodplains, threatened or endangered species, critical habitat, historic properties, minority and low-income populations, hazardous materials. During construction, short-term, minor impacts to surface water quality, noise, and traffic and transportation are anticipated. Long-term beneficial impacts are expected to floodplains and public health and safety. No long-term adverse impacts are anticipated. All adverse impacts require conditions to minimize and mitigate impacts to the proposed project site and surrounding areas.

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.

- This review does not address all federal, state and local requirements. Acceptance of federal funding requires Ouachita Parish 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.
- Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.

- Best management practices must be implemented during pre- and post-construction activities and maintained until final stabilization is achieved. Silt fencing should also be placed at various locations around the perimeter of the project area in a manner that would capture sediment during rain occurrences.
- Ouachita Parish and its construction contractor are required to obtain Louisiana Pollutant Discharge Elimination System (LPDES) permit, if applicable, and implement a Storm Water Pollution Prevention Plan. The Louisiana Department of Environmental Quality (LDEQ) may require stormwater general permits for construction areas equal to or greater than one acre. The LDEQ Water Permit Division must be contacted to determine whether the proposed improvements require one of these permits. Ouachita Parish and its contractor must comply with any permit conditions.
- Hazardous materials associated with construction equipment must be handled according to local, state, and federal regulations in order to minimize the risk of spills and leaks and subsequent impacts to surface and groundwater resources.
- The Louisiana Department of Natural Resources (LDNR) Office of Conservation must be contacted if any unregistered drinking water wells are encountered during construction work.
- All work associated with the Proposed Action that is conducted on potable water systems must comply with applicable sections of the federal Safe Drinking Water Act and state regulations under Louisiana Title 51 Part XII (otherwise known as the Louisiana Public Health Sanitary code and related State Plumbing code).
- Ouachita Parish is responsible for coordinating with and obtaining any required Section 404 Permit(s) from the U.S. Army Corps of Engineers (USACE) 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.
- Ouachita Parish must coordinate with the local floodplain administrator and obtain required permits prior to initiating work, including any necessary certifications that encroachments within the adopted regulatory floodway would not result in any increase in flood levels within the community during the occurrence of the base flood discharge. Applicant must comply with any conditions of permit and all coordination pertaining to these activities should be retained as part of the project file in accordance with the respective grant program instructions.
- If the back-up generator is installed as part of the FEMA-funded additive alternate, it must be elevated at or above the 500-year base flood elevation per Flood Insurance Rate Map (FIRM) panel 22073C0280F and Letter of Map Revision (LOMR) 16-06-3067P, dated 4/28/2017.

- If during the course of work, archaeological artifacts (prehistoric or historic) are discovered, Ouachita Parish must stop work in the vicinity of the discovery and take all reasonable measures to avoid or minimize harm to the finds. Ouachita Parish must inform FEMA. The Applicant will not proceed with work until FEMA completes consultation with the SHPO, and others as appropriate.
- If human bone or unmarked grave(s) are present within the project area, compliance with the Louisiana Unmarked Human Burial Sites Preservation Act (R.S. 8:671 et seq.) is required. Ouachita Parish must notify the law enforcement agency of the jurisdiction where the remains are located within twenty-four hours of the discovery. Ouachita Parish must also notify FEMA and the Louisiana Division of Archaeology at 225-342-8170 within seventy-two hours of the discovery.
- If any solid or hazardous wastes, or soils and/or groundwater contaminated with hazardous constituents are encountered during the project, notification to LDEQ's Single-Point-of-Contact (SPOC) at (225) 219-3640 is required. Additionally, precautions should be taken to protect workers from these hazardous constituents.
- Unusable equipment, debris and material must be disposed of in an approved manner and location. In the event significant items (or evidence thereof) are discovered during implementation of the project, Ouachita Parish and its contractors must handle, manage, and dispose of petroleum products, hazardous materials and/or toxic waste in accordance with the requirements and to the satisfaction of the governing local, state and federal agencies.
- Ouachita Parish and its contractor are responsible for keeping all excavated areas periodically sprayed with water, all equipment maintained in good working order, and all construction vehicles would be limited to 15 mph to minimize pollution/fugitive dust.
- Noise levels for the project during construction and normal operations must comply with City of Monroe Code of Ordinance, Chapter 23, Sections 23-2 and 23-3.
- Construction traffic should be closely monitored and controlled as appropriate. All construction activities would be conducted in a safe manner in accordance with OSHA requirements. To alert motorists and pedestrians of project activities, appropriate signage and barriers should be used during construction. During construction activities, the construction site(s) would be fenced off to discourage trespassers. Traffic on affected streets would be controlled, as necessary, during construction and excavation 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 would 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 40 CFR Part 1501.6) and the proposed project as described in the attached EA may proceed.

APPROVAL AND ENDORSEMENT

Dorothy Cook
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FEMA Region 6

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FEMA Region 6