U.S. Department of Transportation
Pipeline and Hazardous Materials Safety Administration

Natural Gas Distribution Infrastructure Safety and Modernization Grant Program
City of Carencro, LA
Tier 2 Site Specific Environmental Assessment
NGDISM-FY22-EA-2023-19

PHMSA Approval:

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Overview:

The purpose of this Tier 2 Site Specific Environmental Assessment (Tier 2) is to; (1) document the proposed action (the Project) and the need for the action; (2) identify existing conditions; (3) assess the social, economic, and environmental effects using appropriate tools and agency coordination to comply with local, state, and federal environmental laws, regulations, and ordinances; (4) document applicable mitigation commitments that will avoid, minimize, or mitigate potential effects; and (5) seek comments from the public. This Tier 2 analysis informs Pipeline and Hazardous Materials Safety Administration's (PHMSA's) assessment as to whether the Project is consistent with the impacts described in the Tier 1 Nationwide Environmental Assessment for the Natural Gas Distribution Infrastructure Safety and Modernization Grant Program.[1]

As part of this Tier 2, PHMSA is soliciting public comments through a public comment period. This Tier 2 is available on PHMSA's website where comments can be submitted to the contact noted below. PHMSA will accept public comments for 30 days on this Tier 2. PHMSA will consider comments received and incorporate them in the decision-making process. Consultation with appropriate agencies on related processes, regulations, and permits is ongoing. Please submit all comments to: PHMSABILGrantNEPAComments@dot.gov and reference NGDISM-FY22-EA-2023-19 in your response.

At the conclusion of the EA process, PHMSA will either issue a "Finding of No Significant Impact," further supplement this EA with additional analysis, mitigation measures or prepare an Environmental Impact Statement.

I. Project Description/Proposed Action

Project Title	City of Carencro
Project Location	Carencro, Lafayette Parish, Louisiana

Project Description/Proposed Action:

The proposed action would replace 27,252 linear feet (LF) of 2-inch (in) cast iron pipe and 1,222 LF of 2-in bare steel pipe, totaling 28,474 LF of pipeline, and connecting service lines, fittings, valves, regulators and pressure relief valves with Polyethylene (PE) pipe, which would enhance safety, improve operations, and reduce methane emissions of natural gas of the City of Carencro's natural gas transmission system, including pipeline modernization and interim safety enhancement measures. The natural gas distribution system, located in the City of Carencro (Carencro) of Lafayette Parish, Louisiana, was installed in the 1950's. Due to the geographic distribution and varying scopes of the proposed actions, the project has been broken into three segments which are grouped by the type of activity: Segment 1 - Cast Iron Pipe Replacement; Segment 2 - Regulator Station Upgrades; and Segment 3 – pipe replacement at Water Crossings.

Segment 1 includes the replacement of approximately 26,627 LF of existing 2-in diameter cast iron natural gas main pipeline with PE pipe. Any previously unidentified cast iron pipelines, fittings, valves, joints, and/or service lines discovered during project implementation would also be replaced with updated PE materials. Most new main lines would be bored in close proximity to the existing cast iron mains and within the previously disturbed right-of-way (ROW) owned by Carencro. In order to reach existing gas meters, new

[1] https://www.federalregister.gov/documents/2022/11/09/2022-24378/pipeline-safety-notice-of-availability-of-the-tier-1-nationwide-environmental-assessment-for-the

service lines would extend outside of the existing ROW. In these cases, Carencro would obtain private property access agreements with existing customers to upgrade their service lines. Segment 1 implementation would involve limited and temporary ground disturbing activities including digging of trenches (typically 36-in by 36- to 48-in) for the boring of new PE mainline in the existing ROW; digging of trenches (typically 12-in by 12-in) to install new PE service lines running from existing customers' gas meters to the new main line; and digging of small pits within existing ROW to expose the new main line where the new service lines would be connected. The Tier 1 EA described that the majority of site-specific projects would utilize the insertion method of pipe replacement. As described in this document, Carencro would utilize an open trench method, which generally involves greater soil disturbance and use of heavy equipment and related impacts than the insertion method. In order to limit ground disturbance, existing cast iron piping would be abandoned in place, as opposed to being removed.

Segment 2 includes the replacement and/or installation of equipment including pressure regulators and pressure relief valves, required to achieve compliance with 49 CFR 192.199 at seven (7) existing regulator stations. Work would consist primarily of the replacement and/or installation of above ground regulator equipment, and when necessary, associated steel piping extending a few feet beneath the surface. Ground disturbance related to regulator station work would typically be limited to an area five (5) feet wide, twenty (20) feet long and five (5) feet deep. In some cases, the width may need to extend up to ten (10) feet. Approximately 112 LF of 2-in steel pipe would be replaced in Segment 2.

Segment 3 includes the removal and replacement of existing above-ground natural gas mains, which span drainage canals (coulees) at eight (8) different locations. This project would include installing crossings underground using directional boring methods to remedy safety concerns related to approximately 650 LF of exposed pipe. Water crossings would typically consist of one (1) excavated pit on each side of the water feature. Each pit would be roughly six (6) feet wide, eight (8) feet long, and four (4) feet deep. In some cases where existing mainlines may be deeper, the pits may extend up to ten (10) feet wide, for safety purposes. Approximately 625 LF of cast iron and 1,110 LF of bare steel, for a total of approximately 1,735 LF of new pipe, would be replaced in Segment 3. Borings would be conducted within the existing ROW.

No Action:

The No Action alternative, as required under NEPA, serves as a baseline, and is used to compare impacts resulting from the Proposed Action. Under the No Action alternative, PHMSA would not fund this pipeline replacement project. Additionally, PHMSA would not be able to reduce the inventory of methane leaks and reduce safety risks by replacing pipe prone to leakage. Under this alternative, the City of Carencro would continue to use legacy cast iron, bare steel, and other leak prone pipeline material, and conduct repairs or replacements in the future using non-federal sources of funding, and potentially on an emergency basis, when a pipeline fails. Impacts and benefits associated with replacing the leak prone pipeline within the City of Carencro, with updated material would not be seen in the near term. The safety risks and methane leaks would persist. The replacement pipeline activities would either not be taken or they would be undertaken at a later, uncertain date. Even if pipe replacement were to happen at some point in the future, environmental mitigation measures during such a replacement would be unknown. Furthermore, existing economic losses, and increased risk associated with prolonged gas leaks would continue.

Need for the Project:

The natural gas distribution system was installed in the 1950's and the existing pipelines are vulnerable to leaks. The project is needed to ensure the safe, reliable operation and delivery of energy to the community, replacing leak prone cast iron and steel, and reduce the likelihood of future leaks. The overall needs

addressed by this project would include (1) improving upon the safe delivery of energy by reducing the likelihood of incidents, as well as methane leaks; (2) avoiding economic losses caused by pipeline failures; and (3) protecting our environment and reducing climate impacts by remediating aged and failing pipelines and pipe prone to leakage.

Description of the Environmental Setting of the Project Area:

The proposed project takes place within a rural community, comprised mostly of residential housing, in the City of Carencro, within Lafayette Parish, Louisiana. Segment 1 is located entirely in the downtown Carencro area. Segment 2 is located along North University Avenue, starting just south of the downtown area and extending southward for approximately 2.2 miles. Segment 3 includes three (3) water crossings located in the downtown area, overlapping geographically with the Segment 1 study area, and five (5) water crossings located along Gloria Switch Road and North University Avenue, south of the City of Carencro. See Appendix A, Project Maps.

II. Resource Review

Air Quality and Greenhouse Gases (GHG)	
Question	**Information and Justification**
Is the project located in an area designated by the EPA as non-attainment or maintenance status for one or more of the National Ambient Air Quality Standards (NAAQS)?	No, based on review of the Environmental Protection Agency (EPA) Greenbook.[2]
Will the construction activities produce emissions that exceed de minimis thresholds (tons per year) described in the initial Tier 2 EA worksheet?	N/A
Will mitigation measures be used to capture blowdown[3]?	Yes, the applicant would flare methane during construction if feasible.
Does the system have the capability to reduce pressure on the segments to be replaced? If yes, what is the lowest psi your system can reach prior to venting?	No.
Will project proponent commit to reducing pressure on the line to this psi prior to venting? Please calculate venting emissions based on this commitment and also provide comparison figure of venting emissions volume without pressure reduction/drawdown using calculation methods identified in the initial Tier 2 EA worksheet.	Yes, based on the size of the existing pipe (2-in), 1.5 thousand cubic feet (MCF) or 46 kg of methane would be vented during construction. The existing system operates at both 20 pounds per square inch (PSI) and 40 PSI, depending on the segment.
Estimate the current leak rate per mile based on the type of pipeline material. Based on mileage of replacement and new pipeline material, estimate the total reduction of methane.	The existing leak rate is estimated to be 24,211 kg/year. Replacement would result in a new leak rate of approximately 155 kg/year or a reduction of 24,055 kg/yr.[4]

[2] https://www.epa.gov/green-book/green-book-national-area-and-county-level-multi-pollutant-information

[3] Blowdown refers to the venting of natural gas in current facilities, in order to begin rehabilitation, repair, or replacement activities.

[4] Leak rates are based on Pre-1990 Installation emission factors found in *Table 1 Average methane emission factors for natural gas pipelines (adopted from EPA GHG Inventory, Annex 3.6, Table 3.62)* in the November 9, 2022, PHMSA: Natural Gas Distribution Infrastructure Safety and Modernization Grant Program Programmatic Environmental Assessment, Tier 1 Nationwide Environmental Analysis.

Conclusion:

The project area is in Lafayette Parish Louisiana, which is designated as in attainment for all National Ambient Air Quality Standards (NAAQS).

No Action:

Under the No Action alternative, existing and planned pipeline activities, including construction and maintenance activities, would continue unchanged. The project proponent would continue to use leak prone cast iron and steel pipe material. Normal maintenance activities would occur, and pipes would be replaced under failed circumstances. The No Action alternative would result in the existing leak rate continuing, encompassing all areas of this project where pipeline would be replaced. See Appendix B for the methane leak rate calculations.

Proposed Action:

The Proposed Action alternative consists of replacing 28,474 linear feet of cast iron and steel pipe which would result in minor air quality impacts associated with construction activities, including the intentional venting of methane contained in the existing pipelines prior to replacement. Pipeline blowdowns are typically necessary to ensure that construction and maintenance work can be conducted safely on depressurized natural gas facilities and pipelines. Venting methane is required when service is switched from the existing line to the newly constructed line, but the volume of vented gas can depend on the ability to reduce pressure on the pipe segment or other mitigation actions. If feasible, during construction, methane would be flared which would reduce the amount of methane vented into the atmosphere. However, venting may be required where flaring is not feasible. Therefore, some methane may be vented into the atmosphere during construction. Based on an operating pressure between 20 and 40 PSI and a 2-inch pipe size, PHMSA estimates 1.5 MCF of methane (or 46 kg) would be vented into the atmosphere during construction if flaring is not utilized. See Appendix B for the methane blowdown calculations.

As described in the Tier 1 EA, methane leaks from 1950's natural gas distribution pipelines increase with age and are considerably higher for cast iron and steel pipelines, as compared with plastic. Replacing leak prone pipe with newer, more durable materials would reduce leaks and methane emissions. Based on the current leak rate of the existing pipe within the project area, this project would reduce overall emissions by 24,009 kg of methane in the first year (when considering the methane that would be released from blowdown that would occur during construction) and would reduce 24,055 kg of methane per year thereafter. This amounts to a reduction of 481,110 kg of methane over a 20-year time frame. See Appendix B for the methane reduction calculations. Therefore, it is PHMSA's assessment that the proposed project would have a net positive impact to air quality from the reduction of greenhouse gas emissions and that no indirect or cumulative impacts would result from the Proposed Action.

Mitigation Measures:

The City of Carencro shall implement the following mitigation measures:

- Flaring of methane will be utilized where feasible;
- Efficient use of on-road and non-road vehicles, by minimizing speeds and vehicles;
- Minimizing excavation to the greatest extent practical;
- Use of cleaner, newer, non-road equipment as practicable;

- Minimizing all vehicle idling and at minimum, conforming with local idling regulations;
- Ensuring that all vehicles and equipment are in proper operating condition
- On-road and non-road engines must meet EPA exhaust emission standards (40 CFR Parts 85, 86, and 89);
- Covering open-bodied trucks while transporting materials;
- Watering, or use of other approved dust suppressants, at construction sites and on unpaved roadways, as necessary; and
- Minimizing the area of soil disturbance to those necessary for construction.

Water Resources	
Question	**Information and Justification**
Are there water resources within the project area, such as wetlands, streams, rivers, or floodplains? If so, would the project temporarily or permanently impact wetlands or waterways?	Yes, according to United States Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) and Federal Emergency Management Agency (FEMA) National Flood Hazard Layer FIRMette maps.
Under the Clean Water Act, is a Section 401 State certification potentially required? If yes, describe anticipated permit and how project proponent will ensure permit compliance.	No.
Under the Clean Water Act, is a USACE Section 404 Permit required for the discharge of dredge and fill material? If yes, describe anticipated permit and how project proponent will ensure permit compliance.	No.
Under the Clean Water Act, is an EPA or State Section 402 permit required for the discharge of pollutants into the waters of the United States? Is a Stormwater Pollution Prevention Plan (SWPPP) required?	Yes, construction activities are anticipated to exceed soil disturbance thresholds and a 402 permit may be required prior to construction.
Will work activities take place within a FEMA designated floodplain? If so, describe any permanent or temporary impacts and the required coordination efforts with state or local floodplain regulatory agencies.	Yes, portions of the project are located within FEMA designated floodplains.
Will the proposed project activities potentially occur within a coastal zone[5] or affect any coastal use or natural resource of the coastal zone, requiring a Consistency Determination and Certification?	No, the project is not located within a coastal zone.
Conclusion: PHMSA reviewed USFWS NWI maps, FEMA National Flood Hazard Layer FIRMette maps, and maps provided by the City of Carencro to assist in identifying aquatic features and other water resources in or near the project area. Based on aerial photographs and a review of maps, water resources are present within the project area. Segment 1 includes a series of connected, channelized drainage ditches, locally referred to as coulees, which are classified as R4SBC (Riverine, Intermittent, Stream Bed, Seasonally Flooded). Segment 2 regulator stations #3 and #7 are located near water resources classified as R4SBC (Riverine, Intermittent, Stream Bed, Seasonally Flooded) and R5UBH (Riverine, Unknown Perennial, Unconsolidated Bottom, Permanently Flooded). Segment	

[5] The term "coastal zone" means the coastal waters (including the lands therein and thereunder) and the adjacent shorelands (including the waters therein and thereunder), strongly influenced by each other and in proximity to the shorelines of the several coastal states, and includes islands, transitional and intertidal areas, salt marshes, wetlands, and beaches.)

3 water crossings #1, 2, 3, 4, 6, and 7 are classified as R4SBC (Riverine, Intermittent, Stream Bed, Seasonally Flooded). Coulees at Segment 3 water crossings #5 and #8 are classified as R5UBH (Riverine, Unknown Perennial, Unconsolidated Bottom, Permanently Flooded). Wetland habitat was not identified in the NWI maps within the project limits.

FEMA's National Flood Hazard maps indicate the presence of special flood hazard areas (SFHA) designated as FEMA Zone AE within all segment areas, and Zone A within segment 2 and segment 3 areas. Zone A corresponds to the one percent annual chance of flood (100-year flood), where base flood elevations (BFE) are not provided. Zone A corresponds to the one percent annual chance of flood (100-year flood) where BFE are provided. See Appendix C, Water Resources.

No Action:

Under the No Action alternative, the existing pipeline would remain in the current location and normal maintenance activities would continue without any impact anticipated to water resources. Depending on the location of the activities, the work could be in close proximity to an aquatic resource where the City of Carencro would need to take precautions to avoid adverse impacts to these sensitive areas. Additionally, if work was to occur in an area identified as a special flood hazard area, prior coordination with the local Floodplain Manager may be required.

Proposed Action:

The new pipeline identified in Segment 1 would be installed within previously disturbed soil. No work within a waterway would occur within Segment 1. Segment 2 would consist primarily of the replacement and/or installation of above ground regulator equipment, and when necessary, associated steel piping extending a few feet beneath the surface. Ground disturbance related to regulator station work would typically be limited to an area five (5) feet wide, twenty (20) feet long and five (5) feet deep. In some cases, the width may need to extend up to ten (10) feet. All ground disturbance for Segment 2 would be conducted at least 100 feet from the waterways. Work near all stream crossings in Segment 3 would be conducted via directional boring, therefore there would be no direct impact to streams. All entry and exit pits and tie-ins would be excavated at least 100 feet from the waterways. Removal of the existing pipelines within Segment 3 would not result in impacts because the existing pipelines span over the waterway.

Portions of Segments 1, 2, and 3 would require excavation within a SFHA. The National Flood Insurance Program (NFIP) requires a permit before new construction or development begins within any SFHA to ensure that project development projects meet the requirements of the NFIP program and the local community's floodplain management ordinances. The proposed pipeline replacement is not considered new construction or development as pipes would be installed in existing, previously impacted ROW and all areas would be restored to their existing contours and condition. These activities would not affect the flood-holding capacity of the 100-year floodplain or cause any adverse impacts to the special flood hazard areas. There would be temporary impacts from trenching; however, all areas would be restored to pre-construction contours and conditions and there would be no permanent impacts. To ensure compliance with local floodplain ordinances, Carencro would coordinate with the local floodplain administrators to inquire and obtain all necessary permits, prior to construction. The pipeline placement and abandonment of the existing pipeline is not anticipated to cause any reasonably foreseeable indirect effects or cumulative effects to water resources. Therefore, it is PHMSA's assessment that there would be no adverse impacts to water resources.

Mitigation Measures:

The City of Carencro shall coordinate with the local floodplain administrator to obtain any necessary permits for conducting work in special flood hazard areas, prior to the commencement of work.

The City of Carencro shall avoid any direct impacts to open water canals or coulees by using directional bore methods, maintaining a distance of at least 100 feet for the excavation of entry and exit pits and tie-ins.

The City of Carencro shall utilize best management practices to control sediment and erosion during construction to prevent any migration of soil into adjacent waterways.

Groundwater and Hazardous Materials/Waste	
Question	**Information and Justification**
Does the project have potential to encounter and impact groundwater? If yes, describe potential impacts from construction activities.	Yes, groundwater is located between 10 to over 78 inches throughout the project area.
Will the project require boring or directional drilling that may require pits containing mud and inadvertent return fluids? If yes, describe measures that will be taken during construction activities to prevent impacts to groundwater resources.	Yes, all return fluids from boring would be contained in pits and disposed of properly.
Will the project potentially involve a site(s) contaminated by hazardous waste? Is there any indication that the pipeline was ever used to convey coal gas? If yes, PHMSA will work with the project proponent for required studies.	No.
Does the project have the potential to encounter or disturb lead pipes or asbestos?	No.

Conclusion:

PHMSA reviewed EPA's NEPAssist website to identify any brownfields properties, hazardous waste sites, and superfund sites. No brownfield or superfund sites were identified within or near the project area.[6] PHMSA used the USDA NRCS's web soil survey, which indicates the majority of soils within the project area are classified as hydric soils (udic and aquic) where the depth to the water table is found between 10 to over 78 inches throughout the project area.[7] See Appendix C, Water Resources.

No Action:

Under the No Action alternative, existing pipes would remain in their current location and ongoing and routine maintenance activities would occur. Pipes would be replaced under failed circumstances. While there are no adverse impacts to groundwater anticipated by the No Action alternative, increased methane emissions are likely to occur if the leak prone pipes remain (EPA, PRO Fact Sheet No. 402[8]) and the risk of failure is higher among these types of pipes. Therefore, under the no action alternative, PHMSA anticipates an increased risk

[6] https://nepassisttool.epa.gov/nepassist/nepamap.aspx?wherestr=Norwich+Ct
[7] https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx
[8] Insert Gas Main Flexible Liners at https://www.epa.gov/sites/default/files/2016-06/documents/insertgasmainflexibleliners.pdf#:~:text=Methane%20emissions%20reductions%20come%20from%20lower%20leakage%20rates,pipe%20and%20external%20corrosion%20in%20unprotected%20steel%20piping.

for the release of methane, both as leaks and during a pipeline failure, which could then result in ground disturbances from construction activities, potentially impacting groundwater.

Proposed Action:

The installation of all new main and service lines would be installed within areas previously disturbed, in close proximity to the existing natural gas lines. The existing gas lines would be abandoned, in accordance with PHMSA requirements, and would be purged of natural gas and sealed on each end. The new gas lines would be installed at a depth of 36 inches below grade and would be installed by either directional drilling or cut and cover (trenching). Boring and trenching activities may intersect the water table as most areas consist of poorly drained hydric soils. A small pit, typically less than 3 cubic yards, would be dug at entry and exit points for areas that would be directionally bored. Any water or mud used during the boring activities would be captured in pits and removed by a vacuum device and disposed of in an appropriate manner. All disturbed areas would be re-seeded (or paved as appropriate) and restored to pre-existing contours and conditions.

With the inclusion of mitigative measures to assist in the prevention of potential impacts, PHMSA's assessment is that there would be no adverse impacts to groundwater associated with the project. The proposed action may intercept groundwater, and the City of Carencro would use appropriate dewatering methods when necessary. Additionally, there are no hazardous waste, brownfield, or superfund sites identified in the area where work would occur. PHMSA has not identified any indirect or cumulative effects to groundwater or hazardous materials.

Mitigation Measures:

The City of Carencro shall use vacuum trucks to remove any return water from pits.

The City of Carencro shall not conduct boring/drilling, staging, or laydown areas within EPA superfund sites, brownfields, or areas containing known hazardous materials/waste.

Soils	
Will all bare soils be stabilized using methods using methods identified in the initial Tier 2 EA worksheet? Will additional measures be required?	Yes, erosion and sediment control would be utilized during the project. All impacted areas would be restored to pre-construction contours.
Will the project require unique impacts related to soils?	No.

Conclusion:

PHMSA used the USDA NRCS's web soil survey which indicates the soils within the project area are classified as hydric soils (udic and aquic) where the depth to the water table is found between 10 to over 78 inches throughout the project area.[9] See Appendix C, Water Resources, for a soils map.[10]

No Action:

Under the No Action alternative, the existing pipe would remain in the current location and soils would remain in their current state and condition. Normal maintenance activities would occur, and some soil disturbance would occur during maintenance activities. No adverse impacts to soils would be anticipated under the No

[9] https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx
[10] https://websoilsurvey.nrcs.usda.gov/app/HomePage.htm

Action alternative.

Proposed Action:

The pipelines would be installed approximately 36 inches deep and within strategically located trenches to reduce ground disturbance. Ground disturbance would involve the digging of trenches for the boring of new PE mainline in the existing ROW, digging of trenches to install new service lines to existing customers' gas meters, and digging of small pits within existing ROW to expose the new main for connection. Additionally, where the pipeline crosses waterways, a small pit (typically less than 3 cubic yards) would be dug at the entry point for the boring and any water or mud would be captured in the pit. A vacuum device would be employed to remove water from the pit. All areas would be restored to pre-construction contours and conditions. Therefore, PHMSA's assessment is that there would be no adverse impacts associated with soils resulting from the Proposed Action alternative. Additionally, there are no indirect or cumulative impacts anticipated as the City of Carencro would restore all areas to pre-construction conditions.

Mitigation Measures:

The City of Carencro shall implement erosion and sediment control measures as appropriate during construction which may include silt fencing, check dams, and promptly covering all bare areas.

The City of Carencro shall restore all impacted areas to pre- construction contours and conditions.

Biological Resources	
Question	**Information and Justification**
Based on review of IPaC and NOAA Fisheries database, are there any federally threatened or endangered species and/or critical habitat potentially occurring within the geographic range of the project area? If not, no further analysis is required.	Yes, based on a review of the USFWS's Information for Planning and Consultation (IPaC) and National Oceanic and Atmospheric Administration (NOAA) Fisheries website.[11] Additionally, the Louisiana Department of Wildlife and Fisheries website[12] was reviewed to identify potential state listed species.
Will the project impact any areas in or adjacent to habitat for Federally, listed threatened or endangered species or their critical habitat? If not, provide justification and avoidance measures. If yes, PHMSA will work with the project proponent to conduct necessary consultation with resource agencies.	No.

Conclusion:

The project area is in a rural area consisting of mostly residential areas along roadways. PHMSA requested an official species list through the USFWS's IPaC website to identify federally threatened or endangered species and their critical habitat. The proposed threatened alligator snapping turtle (*Macrochelys temminckii*) and the candidate species, monarch butterfly (*Danaus plexippus*), were identified as potentially occurring within the project area. There was no critical habitat identified within the project area for these federally listed species. See Appendix D, Biological Resources, for the IPaC species list.

Alligator snapping turtles are associated with deeper water (usually large rivers, major tributaries, bayous,

[11] https://ipac.ecosphere.fws.gov/ and https://www.fisheries.noaa.gov/species-directory/threatened-endangered
[12] https://www.wlf.louisiana.gov/

canals, swamps, lakes, ponds, and oxbows), with shallower water occupied in early summer and deeper depths in late summer and mid-winter, representing a thermoregulatory shift. Hatchlings and juveniles tend to occupy shallower water, in comparison. Alligator snapping turtles are also associated with structure (e.g., tree root masses, stumps, submerged trees, etc.), and may occupy areas with a high percentage of canopy cover or undercut stream banks.[13] No habitat for this species is located within the project area.

Monarch butterflies are found wherever suitable feeding, breeding, and overwintering habitat exists. As caterpillars, monarchs feed exclusively on the leaves of milkweed. As adults, monarchs feed on nectar from a wide range of blooming native plants, including milkweed.[14] No habitat for this species is located within the project area because of the disturbed nature of the road ROW.

Additionally, the Louisiana Department of Wildlife and Fisheries website was reviewed to assist in identifying potential species protected by the state. Several state listed threatened and endangered species were identified that were not included on the IPaC species list. The ringtail (*Bassariscus astutus*, restricted) and smalltooth sawfish (*Pritis pectinate,* endangered) were identified as potentially occurring within the geographic area of the proposed project. A list of state protected species can be found in Appendix D Biological Resources.

No Action:

Under the No Action alternative, existing conditions would remain, and normal maintenance activities would occur. The project area is in an urbanized environment and therefore has very limited biological resources present. Additionally, the project area does not contain suitable habitat for listed species, therefore no impacts to biological resources would occur under the No Action alternative.

Proposed Action:

The project area is in a rural environment where the areas of disturbance would be mainly within existing transportation corridors, along roadsides, and within residential yards. Because these areas have been impacted previously, the immediate project area has very limited biological resources present. Additionally, the project area does not contain suitable habitat for either federal or state listed species potentially occurring within the project area. Under Section 7(a)(4) of the Endangered Species Act (ESA), Federal agencies must confer with the USFWS if their action will jeopardize the continued existence of a proposed species. As a candidate species, the monarch butterfly receives no statutory protection under the ESA. The alligator snapping turtle is proposed for listing and the project is unlikely to jeopardize this species existence. PHMSA's assessment is that the project would have no adverse impacts to state listed species or other biological resources and that there are no indirect or cumulative impacts anticipated as no impacts to habitat or species would occur.

Mitigation Measures:

The City of Carencro shall abide by all applicable federal, state, and local regulations.

Cultural Resources	
Question	**Information and Justification**

[13] U.S. Fish and Wildlife Service. 2021. Species status assessment report for the alligator snapping turtle (Macrochelys temminckii), Version 1.2. March 2021. Atlanta, GA.
[14] https://ecos.fws.gov/ecp/species/9743

Does the project include any ground disturbing activities, modifications to buildings or structures, or construction or installation of any new aboveground components?	Yes, the project includes ground disturbing activities.
Is the project located within a previously identified local, state, or National Register historic district or adjacent to any locally or nationally recognized historic properties? This information can be gathered from the local government and/or State Historic Preservation Office.[15]	Yes, the project area is included in the Louisiana Division of Historic Preservation's (LDHP) historic standing structures survey collection.
Does the project or any part of the project take place on tribal lands or land where a tribal cultural interest may exist?[16]	No
Are there any nearby properties or resources that either appear to be or are documented to have been constructed more than 45 years ago?[17] Does there appear to be a group of properties of similar age, design, or method of construction? Any designed landscapes such as a park or cemetery? Please provide photographs to show the context of the project area and adjacent properties.	Yes, some structures within the project area may have been constructed more than 45 years ago.
Has the entire area and depth of construction for the project been previously disturbed by the original installation or other activities? If so, provide any documentation of prior ground disturbances.	Yes, the project is within the existing ROW which has been previously disturbed. However, in some areas of Segment 1, the new service line trenches would extend outside of public ROW to connect to existing meters.
Will project implementation require removal or disturbance of any stone or brick sidewalk, roadway, or landscape materials or other old or unique features? Please provide photos of the project area that include the roadway and sidewalk materials in the project and staging areas.	No
Conclusion: PHMSA must consider the impact of projects for which they provide funding on historic and archeological properties[18] in accordance with Section 106 of the National Historic Preservation Act (Section 106). Pursuant to 36 CFR 800.4(a)(1), the Area of Potential Effects (APE) is defined as the geographic area(s) within which the Undertaking may directly or indirectly affect historic resources. Based on the proposed scope of work, PHMSA has delineated the APE for this project to encompass the existing ROW and utility easements where the pipeline and service line replacements will take place in Segment 1 and the limits of disturbance for the regulator station and water crossing work in Segments 2 and 3. The APE includes various areas and segments	

[15] Many SHPOs have an online system at https://www.nps.gov/subjects/nationalregister/state-historic-preservation-offices.htm that can tell you previously identified historic properties in your project area. The National Register list at https://www.nps.gov/subjects/nationalregister/database-research.htm can also be accessed online.

[16] The SHPO may have information on areas of tribal interest, or a good source is the HUD TDAT website at https://egis.hud.gov/TDAT/.

[17] Local tax and property records or historic maps may indicate dates of construction.

[18] Historic property means any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (National Register) maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria.

around the City, which includes the limits of disturbance and any resources that may be particularly susceptible to any potential vibration or physical effects of the Undertaking. Appendix E, Cultural Resources, for the APE.

No Action:

Under the No Action alternative, existing conditions would remain, and normal maintenance activities would occur and pipes would be replaced under failed circumstances. These activities could result in ground disturbance that might affect historic resources. However, no federal funding would be applied and therefore Section 106 would not be required.

Proposed Action:

PHMSA staff identified properties based on available information on previously identified historic properties in the APE, including the National Register of Historic Places (NRHP) database and data received from the Louisianna Division of Historical Resources. PHMSA staff also conducted research to determine if there are any previously unidentified properties within the APE that are 45 years of age or older and may be eligible for the NRHP. The Louisiana Office of Cultural Development's Cultural Resources Map database was reviewed for the presence of previously recorded archaeological sites and previously conducted archaeological surveys within one quarter of a mile of the APE. The review revealed seven archaeological sites and five archaeological surveys within one quarter of a mile of the APE. Three archaeological sites and two previous survey areas intersect the APE. Due to the limited scope of work, previous disturbance of the APE, and lack of significant archaeological sites in the vicinity of the APE, there is low potential for intact significant archaeological resources within the APE, and an archaeological survey is not recommended at this time. See Appendix E, Cultural Resources for additional information about the APE and the properties identified.

There is one NRHP-listed above-ground resource within the APE: Our Lady of the Assumption School. A search in the Louisiana Historic Resource Inventory (LHRI) and Louisiana Office of Cultural Development's Cultural Resources database found no other known NRHP-listed or NRHP-eligible above-ground resources within the APE. Our Lady of the Assumption School is listed on the National Register of Historic Places (NRHP). Although a small portion of the Our Lady of the Assumption School boundary is located within the APE, the Undertaking is limited to the replacement of existing pipelines and service lines and will not alter any of the characteristics or contributing features of the school that qualify it as eligible for inclusion in the NRHP under Criterion A in a manner that would diminish its integrity. The Undertaking will not result in lasting physical, visual, or audible effects to the school. The Undertaking also does not include land acquisition, nor would it limit access to or change the use of the property. Furthermore, project work will take place within existing, previously disturbed ROW and utility easements, which demonstrate a low probability for intact significant archaeological resources. Therefore, in accordance with 36 CFR Part 800.4(d)(1), PHMSA's assessment is that the Undertaking would result in No Historic Properties Affected.

A letter was sent on January 24, 2024 to the Louisianna State Historic Preservation Officer (SHPO), federally recognized tribes with a potential interest in the project area, and all consulting parties outlining the Section 106 process, including a description of the undertaking, delineation and justification of the APE, identification of historic properties and an evaluation and proposed finding of no historic properties affected. See Appendix E, Cultural Resources, for additional information. PHMSA has requested comments on the Section 106 process, identification of historic properties, and proposed finding within 30 days of receipt of the letter. See Appendix E, Cultural Resources, for more information.

Mitigation Measures:

If, during project implementation, a previously undiscovered archaeological or cultural resource that is or could reasonably be a historic property is encountered or a previously known historic property will be affected in an unanticipated manner, all project activities in the vicinity of the discovery will cease and the City of Carencro will immediately notify PHMSA. This may include discovery of cultural features (e.g., foundations, water wells, trash pits, etc.) and/or artifacts (e.g., pottery, stone tools and flakes, animal bones, etc.) or damage to a historic property that was not anticipated. PHMSA will notify the State Historic Preservation Office and participating federally recognized tribes and conduct consultation as appropriate in accordance with 36 CFR § 800.13. Construction in the area of the discovery must not resume until PHMSA provides further direction.

In the event that unmarked human remains are encountered during permitted activities, all work shall halt and City of Carencro shall immediately contact PHMSA as well as the proper authorities in accordance with applicable state statutes to determine if the discovery is subject to a criminal investigation, of Native American origin, or associated with a potential archaeological resource. At all times human remains must be treated with the utmost dignity and respect. Human remains and associated artifacts will be left in place and not disturbed. No skeletal remains or materials associated with the remains will be photographed, collected, or removed until PHMSA has conducted the appropriate consultation and developed a plan of action. Project activities shall not resume until PHMSA provides further direction.

All work, material, equipment, and staging to remain within the road's existing right-of-way or utility easement or other staging areas as identified in the environmental documentation. If the scope of work changes in any way that may alter the effects to historic properties as described herein, the grant recipient must notify PHMSA, and consultation may be reopened under Section 106.

Staging areas for the Undertaking are currently unknown. Staging should be confined to paved areas; if staging cannot be confined to paved areas, geotextile fabric or other similar protective measures (such as pressure distributing mats) must be laid in any affected unpaved area to minimize ground disturbance, prevent soil compaction, and protect archaeological features and artifacts.

Section 4(f)	
Question	**Information and Justification**
Are there Section 4(f) properties within or immediately adjacent to the project area? If yes, provide a list of properties or as an attachment.	No.
Will any construction activities occur within the property boundaries of a Section 4(f) property? If so, please detail these activities and indicate if these are temporary or permanent uses of the Section 4(f) property. Further coordination with PHMSA is required for all projects that might impact a Section 4(f) property.	No.

Conclusion:

Section 4(f) of the US Department of Transportation (USDOT) Act of 1966 as amended (Section 4(f)) (49 U.S.C. § 303(c)); is a federal law that applies to transportation projects that require funding or other approvals by the USDOT. Section 4(f) prohibits the Secretary of Transportation from approving any program or project which

requires the use of any publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or any land from an historic site of national, state, or local significance unless:

- There is no feasible and prudent alternative to the use of the land;
- The program or project includes all possible planning to minimize harm to such park, recreational area, wildlife and waterfowl refuge, or historic site, resulting from such use.

PHMSA conducted a review of properties that are located within the Project Area to identify properties that potentially qualify as Section 4(f). No Section 4(f) properties are located within or immediately adjacent to the project area.

No Action:

Under the No Action alternative, there would be no change to existing pipeline infrastructure pursuant to federal funding or approval authorized by the Program. Therefore, there would be no use of Section 4(f) property under the No Action alternative.

Proposed Action:

Under the Proposed Action alternative, construction activities would not occur within or adjacent to 4(f) properties. Therefore, there would be no use of Section 4(f) resources.

Mitigation Measures:

There are no 4(f) resources identified in the project area and therefore, no mitigation measures are necessary.

Land Use and Transportation	
Question	**Information and Justification**
Will the full extent of the project boundaries remain within the existing right-of-way or easements? If not, please describe any right-of-way acquisitions or additional easements needed.	Yes, all work would occur within the existing ROW. All natural gas services would be installed from the main to the private property building/structure being served, with coordination, permission, and approval from the property owner.
Will the project result in detours, transportation restrictions, or other impacts to normal traffic flow or to existing transportation facilities during construction? Will there be any permanent change to existing transportation facilities? If so, what are the changes, and how would changes affect the public?	Yes, temporary interruptions to traffic flow may be encountered during construction in some isolated areas. The project would not result in a permanent change to existing transportation facilities.
Will the project interrupt or impede emergency response services from fire, police, ambulance or any other emergency or safety response providers? If so, describe any coordination that will occur with emergency response providers?	No, the project would not interrupt or impede emergency response services.
Conclusion:	
The project is located in a rural area comprised of mostly residential areas. New PE main lines would be	

replaced within the previously disturbed ROW owned by the City of Carencro. However, in many cases, new service lines would extend outside of the ROW in order to reach existing gas meters. This may require agreements with existing gas customers, typically obtained verbally, to access private property.

No Action:

Under the No Action alternative, leak prone pipes would remain in their current location. No changes to land use would occur. Normal maintenance activities would occur, and pipes would be replaced under failed circumstances.

Proposed Action:

PHMSA considered the cumulative effects of the proposed action with ongoing and planned transportation related construction projects that could cumulatively impact land use and transportation. During construction potential impacts include an increase in noise, dust, and transportation and pedestrian accessibility as a result of construction and staging. The main pipelines would be installed within the existing infrastructure ROW; however, service lines would extend outside of the ROW to connect to individual consumers. Carencro would coordinate with the residential property owners that may experience short-term impacts during service line connection. While unlikely, there may be minor and temporary traffic flow interruptions during construction in some isolated areas. These disruptions would occur typically for less than one day and affect no more than one or two blocks at any one time. The project does not include new pipelines to serve any additional areas and the area would be restored to pre-construction conditions. Additionally, there are no indirect impacts anticipated as land use remains the same. Therefore, PHMSA's assessment is that because the work consists of the replacement of existing pipeline, would not convert any new areas into a different use, and impacts would only occur during construction, impacts related to land use are considered minor and temporary.

Mitigation Measures:

The City of Carencro shall implement the following mitigation measures:

- Develop and implement a Traffic Control Plan, as needed;
- Coordinate with emergency services and other agencies;
- And advance door-to-door notification would be given to residents and business of any impacts to traffic flow, access or parking.

Noise and Vibration	
Question	**Information and Justification**
Will the project construction occur for longer than a month at a single project location?	No.
Will the project location be in proximity (less than 50-ft.) to noise sensitive receivers (residences, schools, houses of worship, etc.)? If so, what measures will be taken to reduce noise and vibration impacts to sensitive receptors?	Yes, construction activities would take place within fifty (50) feet of noise sensitive receivers.
Will the project require high-noise and vibration inducing construction methods? If so, please specify.	No, high-noise and vibration inducing construction methods are not required.
Will the project comply with state and local ordinances? If so, identify applicable ordinances and	Yes, construction would comply with the City of Carencro's noise ordinance found in Chapter 22,

limitations on noise/vibration times or sound levels.	Article III. – Noise, of the Carencro, Louisiana Code of Ordinances, dated September 6, 2023.
Will construction activities require large bulldozers, hoe ram, or other vibratory equipment within 20 ft of a structure?	No.

Conclusion:

The proposed project takes place within a rural community in the City of Carencro, Louisiana. The ambient noise in the project area consists of a combination of environmental noise from road traffic, construction, adjacent industry, residential neighborhoods and other sources. There are several sensitive noise receptors (residences, schools, etc.) located adjacent to the streets where work would occur.

No Action:

Under the No Action, the project would not move forward, and the pipelines identified for replacement would not be replaced at this time. It is likely that these pipelines would be repaired or replaced due to a leak under emergency conditions and only in the immediately affected areas. If replacement or repairs occur under emergency conditions, noise from construction equipment would add to that of the current ambient noise and would be of a shorter duration.

Proposed Action:

The proposed action would result in temporary construction noise impacts; however, no vibration impacts should occur. Excavators, dump trucks, and other similar construction equipment would be used to excavate a trench, lay pipe, compact soils and restore the area to pre-existing conditions and contours. The use of construction equipment would result in temporary noise impacts. Construction for the project is not anticipated to last any longer than one month at any single segment location. Construction activities would occur in close proximity (less than 50-ft.) to noise sensitive receivers (residences, schools, houses of worship, etc.). Specifically, the trenching of new PE service lines to connect existing gas meters to the new mainline may extend outside of the existing ROW and within fifty (50) ft. of residential structures. In those situations, special attention would be given to provide advance notification to affected residents. Further, trenching would be conducted during daylight hours, using equipment that is small enough to maneuver in small areas easily and safely, and which does not result in excessive noise or vibration. Construction would comply with the City of Carencro's noise ordinance found in Chapter 22, Article III. – Noise, of the Carencro, Louisiana Code of Ordinances, dated September 6, 2023. Allowable residential noise levels vary, but per the Ordinance, permissible sound levels fall within the following ranges: 60 dB(A) from 7 a.m. – 10 p.m., and 50 dB(A) from 10 p.m. – 7 a.m. Sensitive noise receptors are likely to experience temporary noise impacts while outdoors in the vicinity of the work; however, PHMSA's assessment is that the noise impacts would be minor and temporary and no adverse vibration impacts would result from the proposed work.

PHMSA considered the cumulative effects of this action with ongoing and planned transportation related construction projects that could cumulatively have an impact on the noise and vibration impacts within Carencro. While there would be a temporary increase in noise due to construction equipment, PHMSA's assessment is that these impacts would be minor and temporary. PHMSA considered the cumulative effects of this action with ongoing and planned transportation related construction projects that could cumulatively have an impact on the noise and vibration impacts within the City of Carencro. Adhering to state and local noise ordinances would ensure the project does not cause cumulatively more than minor adverse noise or vibration impacts.

Mitigation Measures:

The City of Carencro shall comply with the City of Carencro's noise ordinance found in Chapter 22, Article III. – Noise, of the Carencro, Louisiana Code of Ordinances, dated September 6, 2023.

The City of Carencro shall limit activities to occur only during normal weekday business hours, when noise restrictions are not in place.

Environmental Justice	
Question	**Information and Justification**
Using the EPA EJScreen or census data[19], is the project located in an area of minority and/or low-income individuals as defined by USDOT Order 5610.2(c)? If so, provide demographic data for minority and/or low-income individuals within ½ mile from the project area as a percentage of the total population.	Based on review of socioeconomic data using the EPA's EJScreen, the populations residing within the general project area contains 64% low income and 44% minority populations.
Will the project displace existing residents or workers from their homes and communities? If so, what is the expected duration?	No.
Will the project require service disruptions to homes and communities? If so, what is the expected communication and outreach plan to the residents and the duration of the outages?	Yes, disruption to natural gas service would be limited to the smallest area possible at any given time during construction. Typically, gas service would be disrupted for less than eight (8) hours. Affected customers would be notified at least twenty-four (24) hours in advance of disruption to their service.
Are there populations with Limited English Proficiency located in the project area? If so, what measures will be taken to provide communications in other languages?	Yes, 1% of the population in the project area have Limited English Proficiency. Information regarding any short-term service disruptions would be made available in languages other than English as applicable.

Conclusion:

Executive Order (E.O.) 14096—"Revitalizing Our Nation's Commitment to Environmental Justice for All" was enacted on April 21, 2023. E.O. 14096 on environmental justice does not rescind E.O. 12898 – "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," which has been in effect since February 11, 1994 and is currently implemented through DOT Order 5610.2C. This implementation would continue until further guidance is provided regarding the implementation of the new E.O. 14096 on environmental justice.

PHMSA reviewed socioeconomic data using the EPAs EJScreen and found the population residing within the project area of Carencro contains an average of 64% low income and 44% minority populations. The percentage of these populations are above the Lafayette Parish average.

No Action:

Under the No Action alternative, existing and planned pipeline activities, including construction and maintenance activities, would continue unchanged. The project proponent would continue to use leak prone

[19] https://www.census.gov/quickfacts/fact/table/US/PST045222

pipe material that could lead to safety incidents and service disruptions. Additionally, if a pipeline segment is not repaired or replaced prior to failure, it is likely to be associated with even more emissions under the No Action alternative. Thus, emissions benefits to the community associated with repairing or replacing existing pipelines with updated material would not be achieved and the incident risks and leaks would remain. There may be some degree of air pollution associated with construction activity for maintenance and repairs of existing pipelines under the No Action alternative, either through planned repair or replacement efforts or unplanned, emergency repairs or replacements.

Proposed Action:

Construction activities would result in minor temporary air quality impacts. Noise impacts associated with construction are anticipated to be minor. Traffic impacts would be temporary and only minor disruptions would occur. Disruption to natural gas service would be limited to the smallest area possible at any given time during construction. Typically, gas service would be disrupted for less than eight (8) hours. Affected customers would be notified at least twenty-four (24) hours in advance of disruption to their service. One percent (1%) of the population in the project area have Limited English Proficiency, therefore information regarding any short-term service disruptions would be made available in languages other than English, as applicable. However, removal of leak prone pipe would reduce leaks and the potential for incidents, resulting in an increase in pipeline safety across the system while also improving operation and reliability. Therefore, consistent with Executive Order 12898 and DOT Order 5610.2(c), PHMSA's assessment is that the project would not result in disproportionately high and adverse effects on minority or low-income populations, or other underserved and disadvantaged communities. The project would have an overall beneficial effect on environmental justice populations and would not result in indirect or cumulative impacts.

Mitigation Measures:

The City of Carencro provide advanced public notifications of service disruptions and construction schedules to all affected parties, including residents and businesses adjacent to the project area.

Safety	
Question	**Information and Justification**
Has a risk profile been developed to describe the condition of the current infrastructure and potential safety concerns?	Yes, as described in the Distribution Integrity Management Program (DIMP).
Has a public awareness program been developed and implemented that follows the guidance provided by the American Petroleum Institute (API) Recommended Practice (RP) 1162?	Yes, applicable notifications would be made in accordance with the City of Carencro's Public Awareness Program for Natural Gas Distribution System dated January 2023.
Does the project area include pipes prone to leakage?	Yes.
Will construction safety methods and procedures to protect human health and prevent/minimize hazardous materials releases during construction, including personal protection, workplace monitoring and site-specific health and safety plans, be utilized? If yes, document measures and reference appropriate safety plans.	Yes, construction safety measures would be implemented to protect health and minimize hazardous releases during construction.
Has an assessment of the project been performed to analyze the risk and benefits of implementation?	Yes, an assessment has been performed to analyze the risk and benefit of implementation.

Conclusion:

The proposed project would replace 1950s cast iron and steel pipelines with PE pipelines. Pipelines that are known to leak based on the material include cast iron, bare steel, wrought iron, and historic plastics with known issues (PIPES Act of 2020). PHMSA establishes safety regulations for all pipelines (49 CFR Parts 190-199). In 2011, following major natural gas pipeline incidents, DOT and PHMSA issued a Call to Action to accelerate the repair, rehabilitation, and replacement of the highest-risk pipeline infrastructure. Among other factors, pipeline age and material are significant risk indicators. Pipelines constructed of cast and wrought iron, as well as bare steel, are among the pipelines that pose the highest risk. PHMSA continues to encourage legacy pipeline repair or replacement to increase the safety of these segments of the gas distribution systems. Pipeline incidents can result in death, injury, property damage, and environmental damage.

No Action:

Under the No Action alternative, existing leak prone pipes would remain in their current condition. Normal maintenance activities would occur, and pipes would be replaced under failed circumstances. Safety risks resulting from existing leak prone pipes remaining in place would persist until the existing pipes are replaced.

Proposed Action:

The proposed project would replace 28,474 linear feet of cast iron and steel pipe, prone to leaks. This replacement is in alignment with the City of Carencro's DIMP plan, increasing the overall safety of the community.

The project would reduce the risk profile of existing pipeline systems prone to methane leakage and would also benefit disadvantaged rural and urban communities with the safe provision of natural gas. The project responds to the need to address the potentially unsafe condition of the natural gas distribution system of pipelines. The repair, rehabilitation, or replacement of pipelines would be constructed in accordance with industry best practices and would comply with all local, state, and federal regulations, including those for safety.

The abandonment of the existing pipeline would be conducted in accordance with PHMSA requirements found in 49 CRF 192.727 and 195.402(c)(10). These requirements include disconnecting pipelines from all sources and supplies of gas, purging all combustibles and sealing the facilities left in place. These requirements for purging and sealing abandoned pipelines would ensure that the abandoned pipelines are properly purged and cleaned and pose no risk to safety in their abandoned state. Therefore, PHMSA's assessment is that this replacement project would improve the overall safety of the City of Carencro's infrastructure.

Mitigation Measures:

The City of Carencro shall use standard construction safety methods and procedures; and conduct regular safety audits of crews performing work in the field and subsequent follow-up reporting and/or training, as required.

The City of Carencro shall ensure their DIMP procedures are updated as necessary, the work is constructed in accordance with industry best practices and the project would comply with all local, state, and federal regulations, including those for safety.

III. Public Involvement

On November 9, 2022, PHMSA published a Federal Register notice (87 FR 67748) with a 30-day comment period soliciting comments on the "Tier 1 Nationwide Environmental Assessment for the Natural Gas Distribution Infrastructure Safety and Modernization Grant Program." During the 30-day comment period, PHMSA received one comment letter from the APGA on various aspects of the program and air quality related analysis in the EA on December 9, 2022. This APGA letter is available for public review at the Docket No: PHMSA-2022-0123.[20] PHMSA reviewed the comment letter and determined the comments were not substantial and did not warrant further analysis. One comment provided by the APGA indicated that the majority of construction methods used for pipe replacements would be replacement by open trenching and that some may want to abandon the existing pipe rather than removing it for replacement. Any departures from methods described in the Tier 1 EA will require additional documentation from the project proponent, as reflected in this Tier 2.

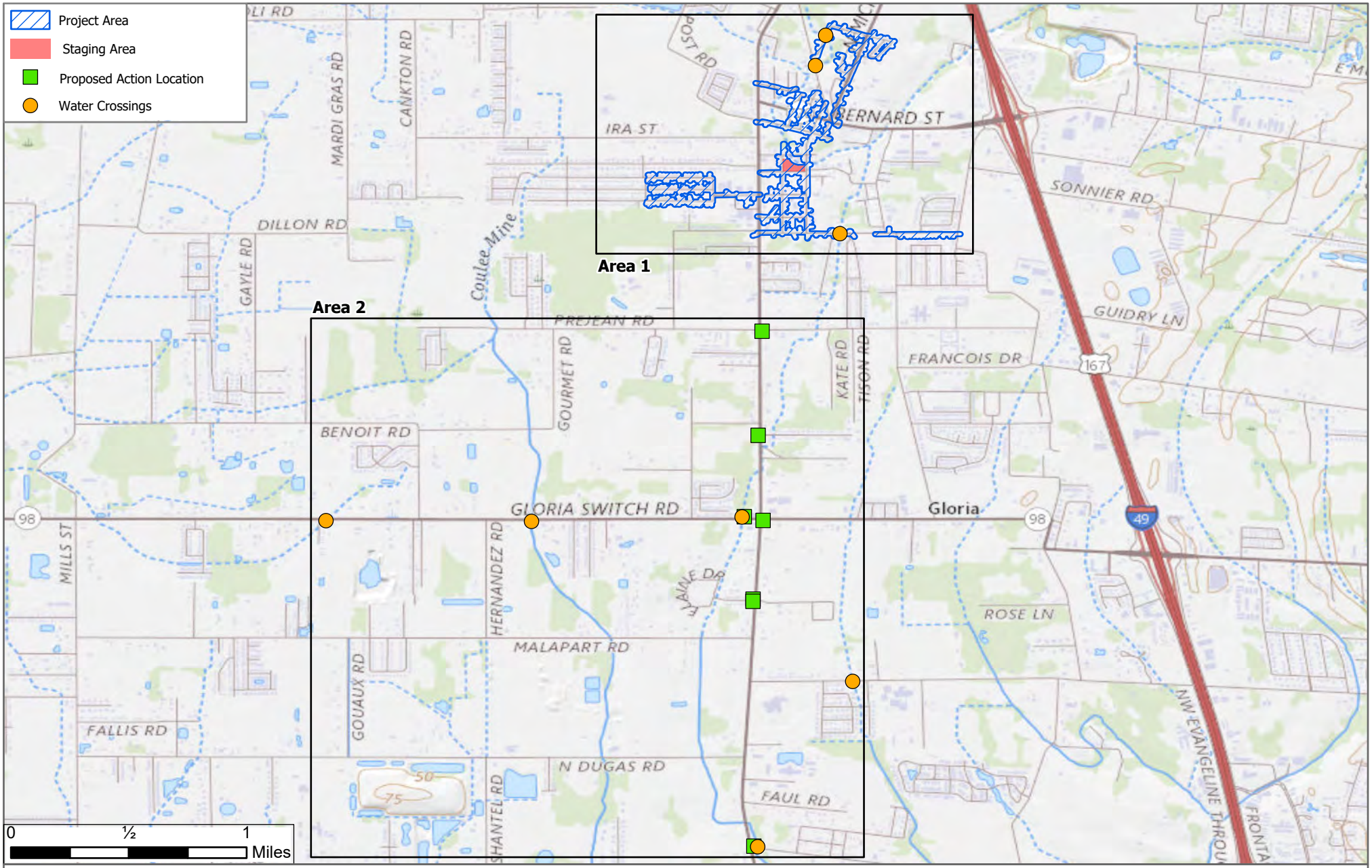
As part of this Tier 2, PHMSA is soliciting public comments through a public comment period. This Tier 2 is available on PHMSA's website where comments can be submitted to the contact noted below. PHMSA will accept public comments for 30 days on this Tier 2. PHMSA will consider comments received and incorporate them in the decision-making process. Consultation with appropriate agencies on related processes, regulations, and permits is ongoing. Please submit all comments to: PHMSABILGrantNEPAComments@dot.gov and reference NGDISM-FY22-EA-2023-19 in your response.

[20] https://www.regulations.gov/document/PHMSA-2022-0123-0002/comment

Appendix A

Project Map

Project Overview Map

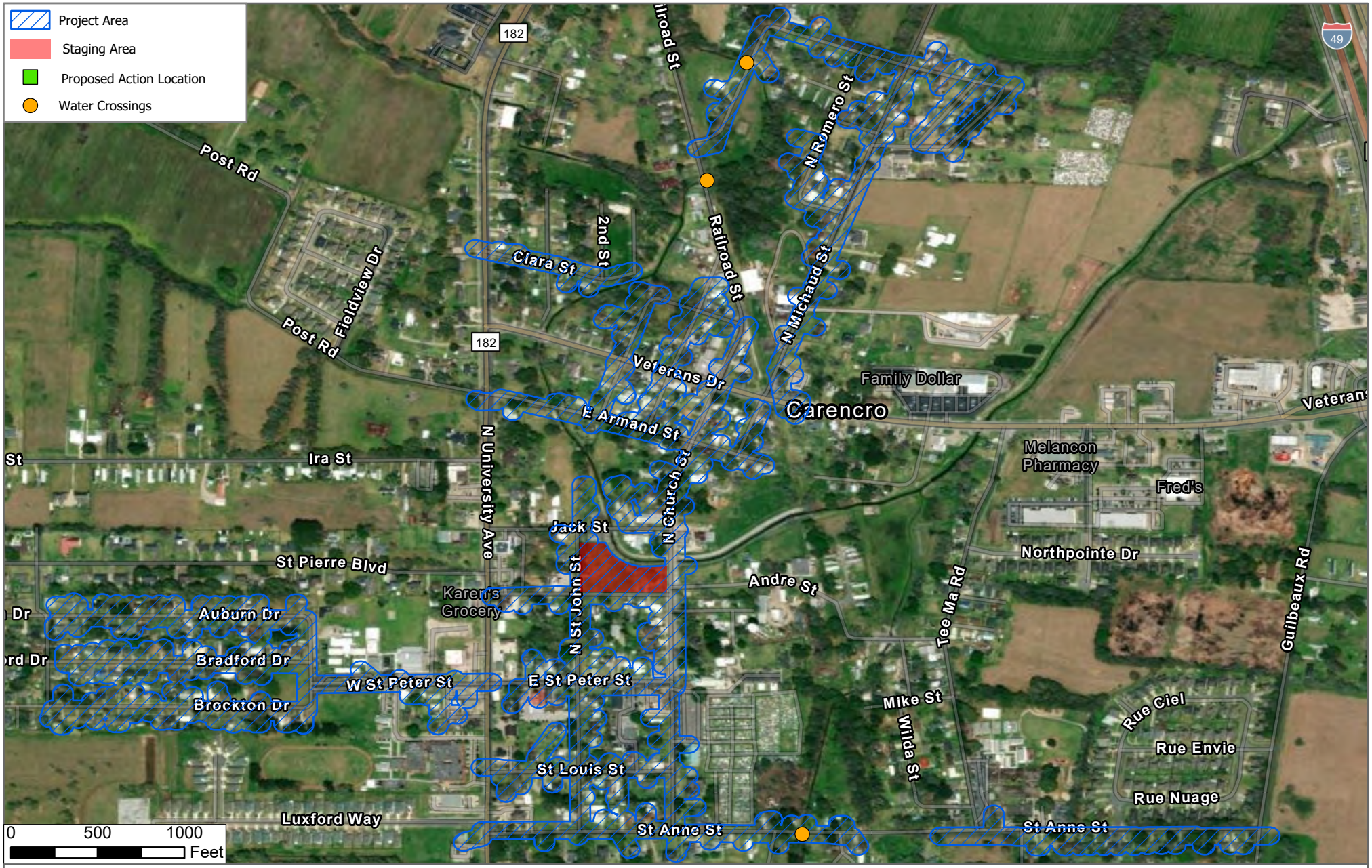


Name: Carencro, Louisiana Gas Line Replacement
Scale: 35,000
Total Acreage: 98.1
USGS Basemap: Carencro
Carencro, LA, Lafayette Parish

N

Service Layer Credits: USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road Data; Natural Earth Data; U.S. Department of State Humanitarian Information Unit; and NOAA National Centers for Environmental Information, U.S. Coastal Relief Model. Data refreshed April, 2023.

Project Overview Map

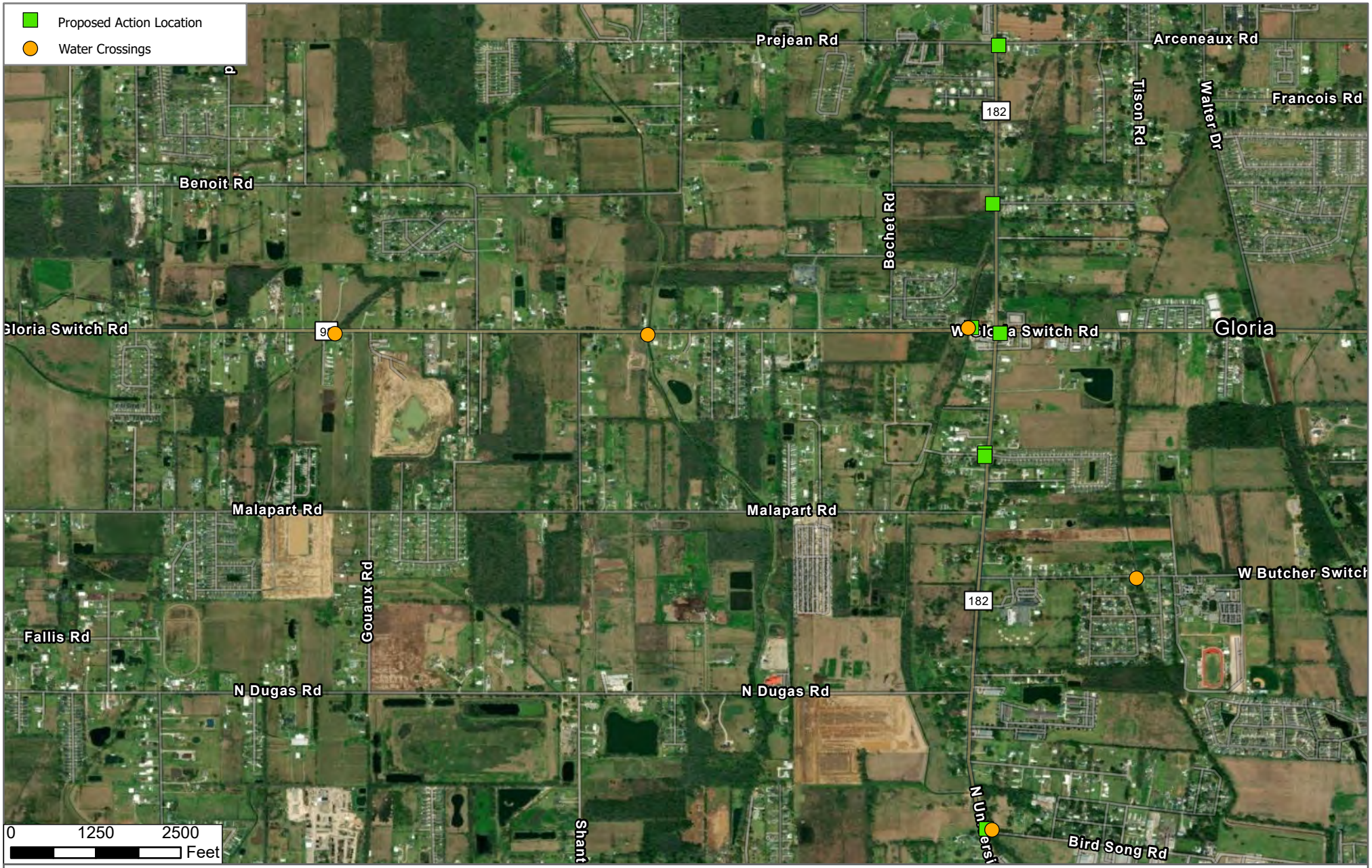


Name: Carencro, Louisiana Gas Line Replacement
Scale: 9,000
Total Acreage: 98.1
Carencro, LA, Lafayette Parish
Area 1

N

Service Layer Credits: Maxar, Microsoft, Esri Community Maps Contributors, Parish of Lafayette, LA, © OpenStreetMap, Microsoft, CONANP, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, Maxar

Project Overview Map



Name: Carencro, Louisiana Gas Line Replacement
Scale: 23,000
Total Acreage: 98.1
Carencro, LA, Lafayette Parish
Area 2

N

Service Layer Credits: CONANP, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, Maxar, Microsoft, Esri Community Maps Contributors, Parish of Lafayette, LA, © OpenStreetMap, Microsoft, CONANP, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, Maxar

Appendix B

Air Quality (Methane Calculations)

Table 1 Average methane emission factors for natural gas pipelines (adapted from EPA GHG Inventory, Annex 3.6, Table 3.6-2)

Pipeline Material	Pre-1990 Installation (kg/mile)	1990-2020 Installation (kg/mile)	Average Rate (kg/mile/year)
Cast Iron	4,597.40	1,157.30	2,877.35
Unprotected steel	2,122.30	861.3	1,491.80
Protected steel	59.1	96.7	77.90
Plastic	190.9	28.8	109.85

Table 2 No Action Leak Rate

Pipeline Material Type	Average Rate (kg/mile/year)	Miles	Current Methane Leak Rate (kg/year)
Cast Iron	4,597.4	5.2	23,723
Unprotected steel	2,122.3	0.2	488
Protected steel	59.1	0	0
Plastic	109.9	0	0
Total Methane Leak Rate			24,211
20-year Methan Emissions			484,214

Table 3 Proposed Action Leak Rate

Pipeline Material Type	Average Rate (kg/mile/year)	Miles	New Methane Leak Rate (kg/year)
Plastic	28.8	5.4	155
Year 1 Methane Reduction			24,009
Annual Methane Reduction			24,055
20-year Methan Reduction			481,110

Equation 1 was used to estimate blowdown emissions in MCF, assuming a pipeline diameter (d) and pressure (P) described in Table 3.

$$E_{blowdown} = V \times \frac{P_{pipe} + P_{atm}}{P_{atm}} \qquad (1)$$

Where the pipeline volume (V) is calculated by multiplying the cross-sectional area of the pipe by the length of pipeline (L):

$$V = \pi \times \frac{d^2}{4} \times L \qquad (2)$$

Table 4 Proposed Action - Methane Blowdown

Inputs	Segment 1	Segment 2	Segment 3 (crossings 1-3)	Segment 3 (crossings 4-8)
Inside Diameter (inches)	2	2	2	2
Blowdown Pressure (PSI)	20	40	20	40
Length of Blowdown (feet)	26,627	112	625	1110
Blowdown (MCF)	1.37	0.01	0.03	0.09
Blowdown (kg)	42.06	0.28	0.99	2.76

Appendix C

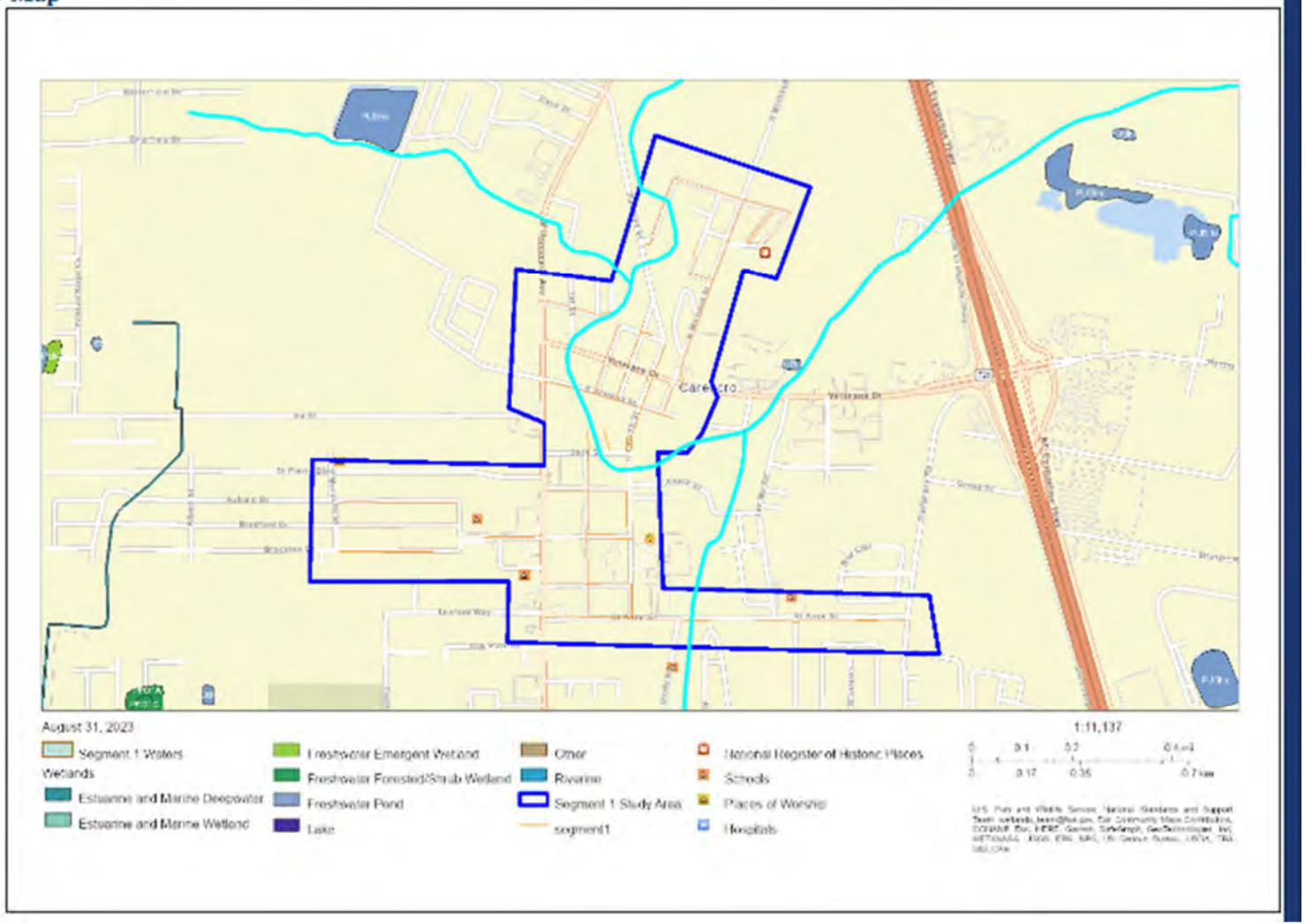
Water Resources

EPA NEPAssist

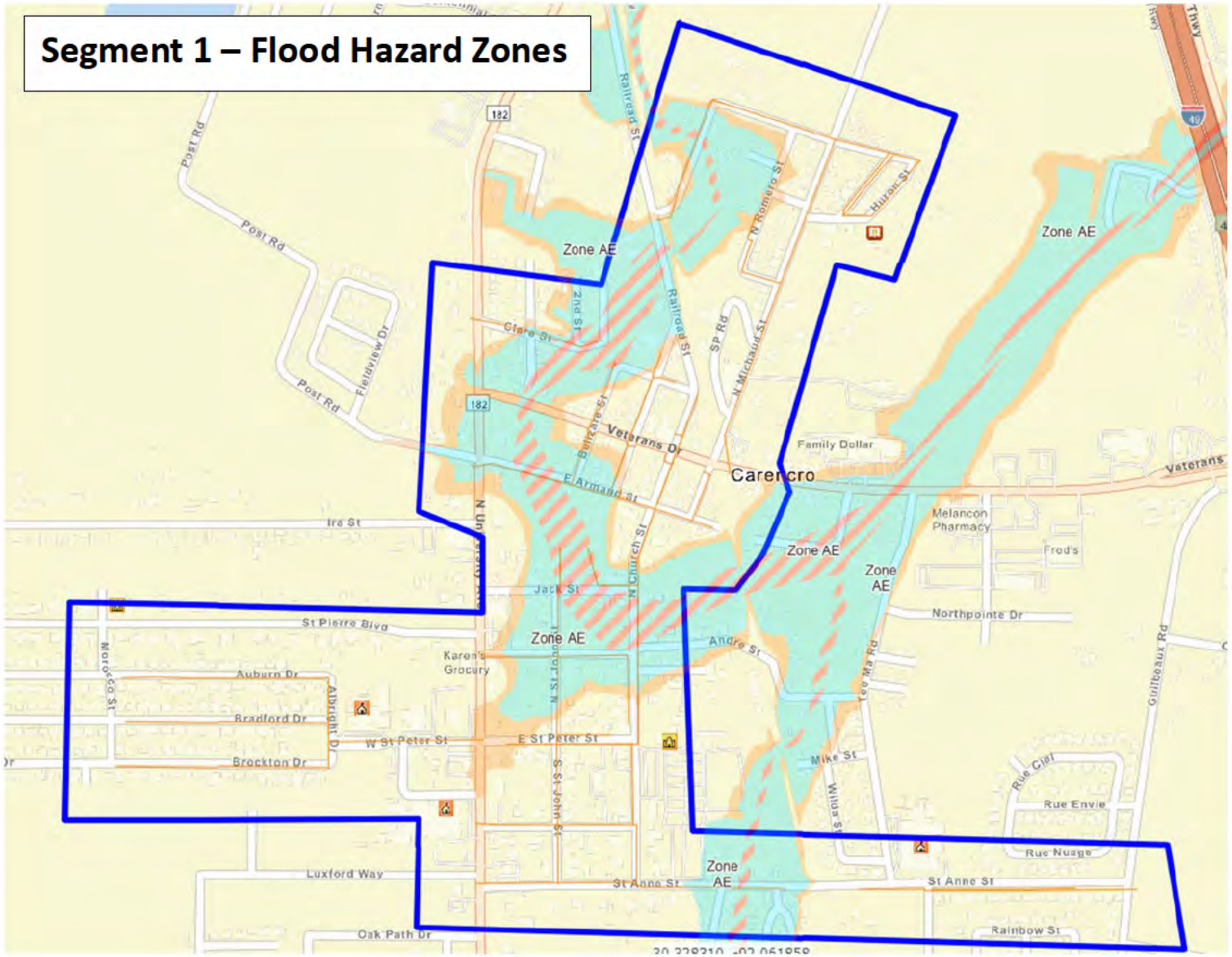
Home | Help

Segment 1 Waters

Map



Segment 1 – Flood Hazard Zones

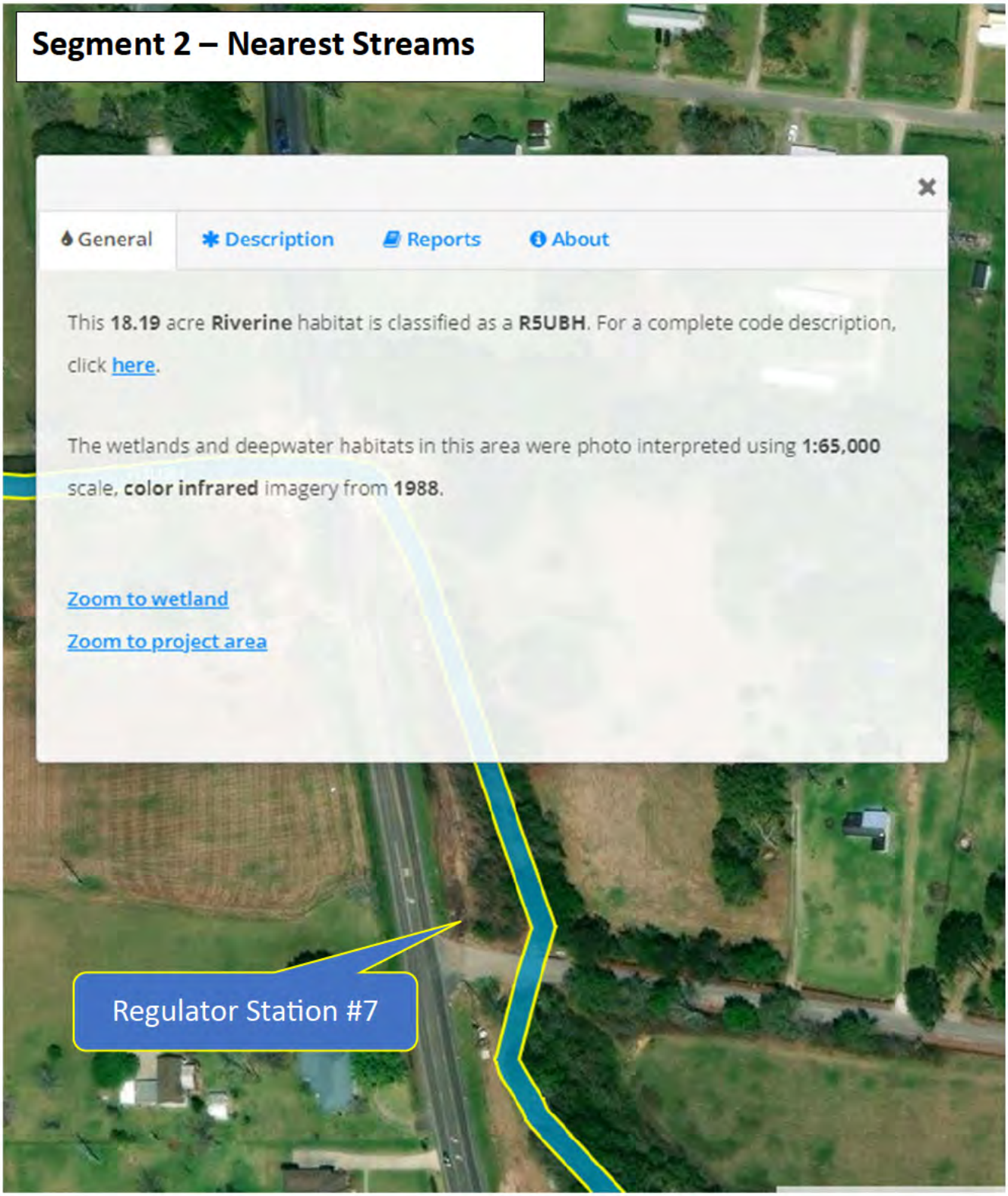


Natural Gas Distribution Infrastructure Safety and Modernization Grant Program

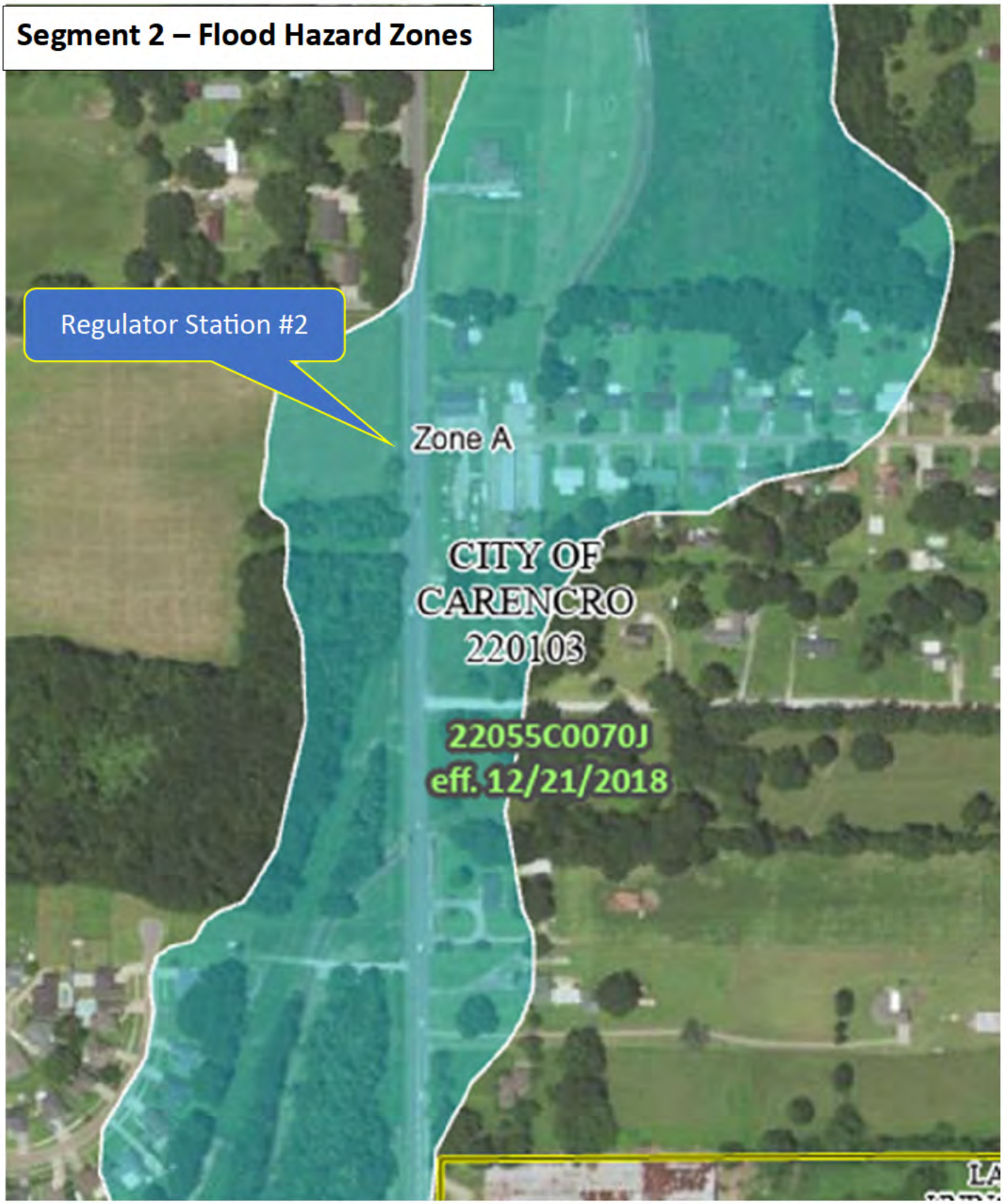
Tier 2 Site Specific Environmental Assessment for City of Carencro, LA

Segment 2 – Nearest Streams

Segment 2 – Nearest Streams



Segment 2 – Flood Hazard Zones

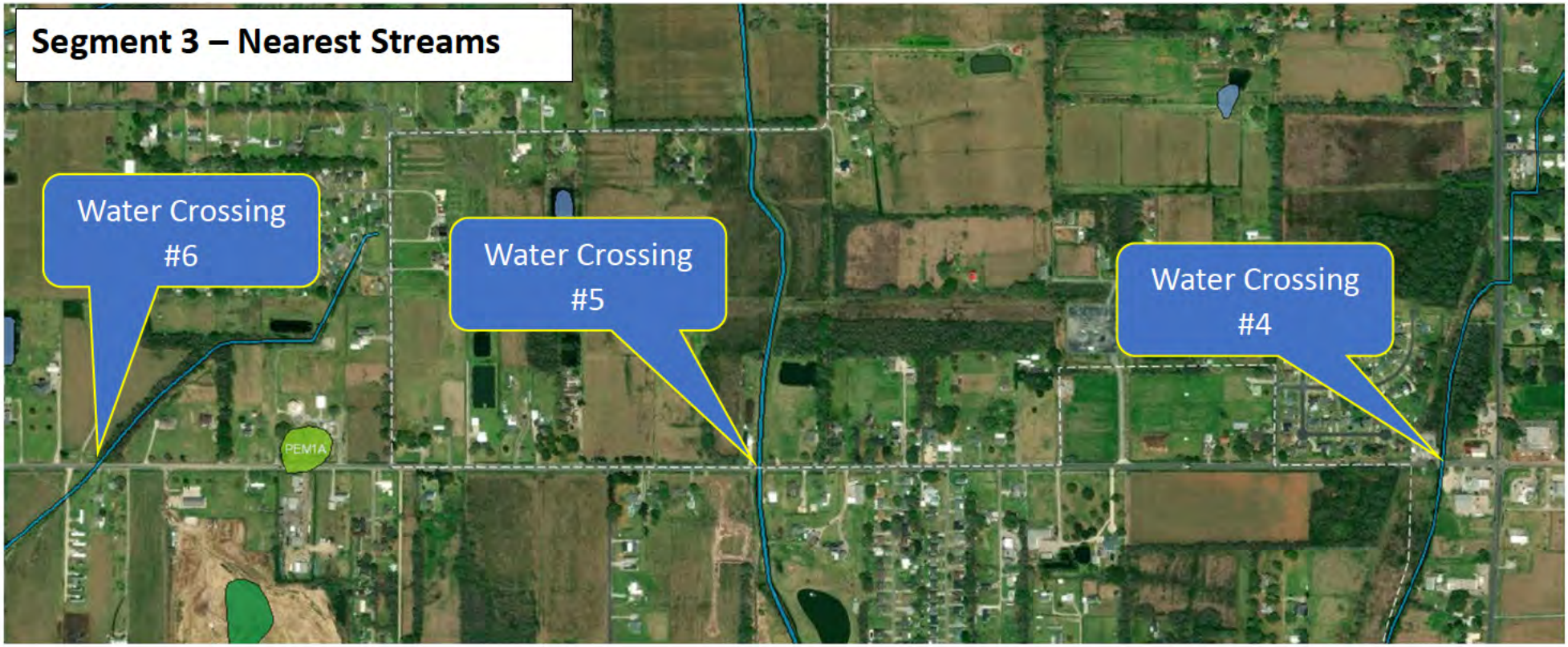


Segment 2 – Flood Hazard Zones

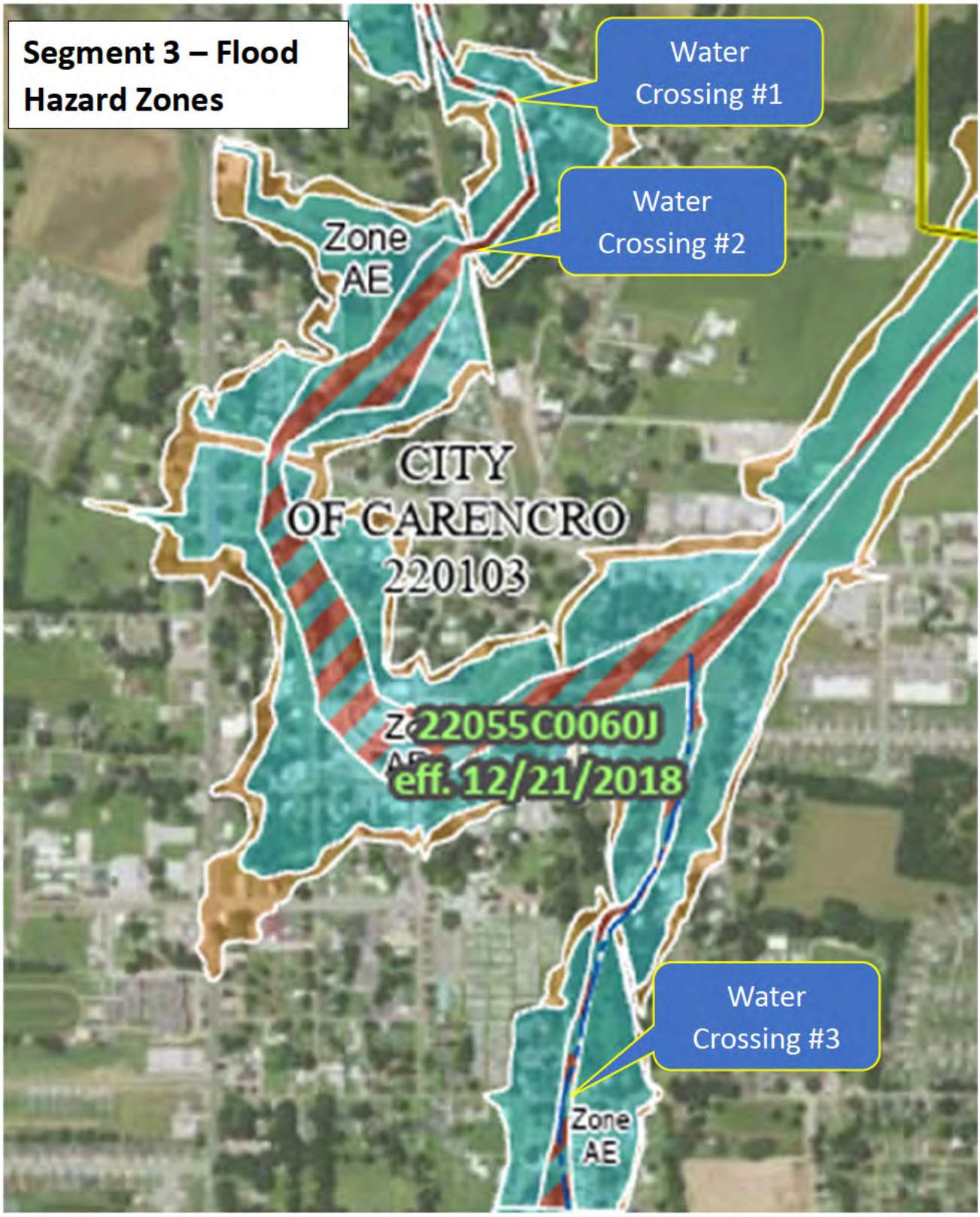
Segment 2 – Flood Hazard Zones

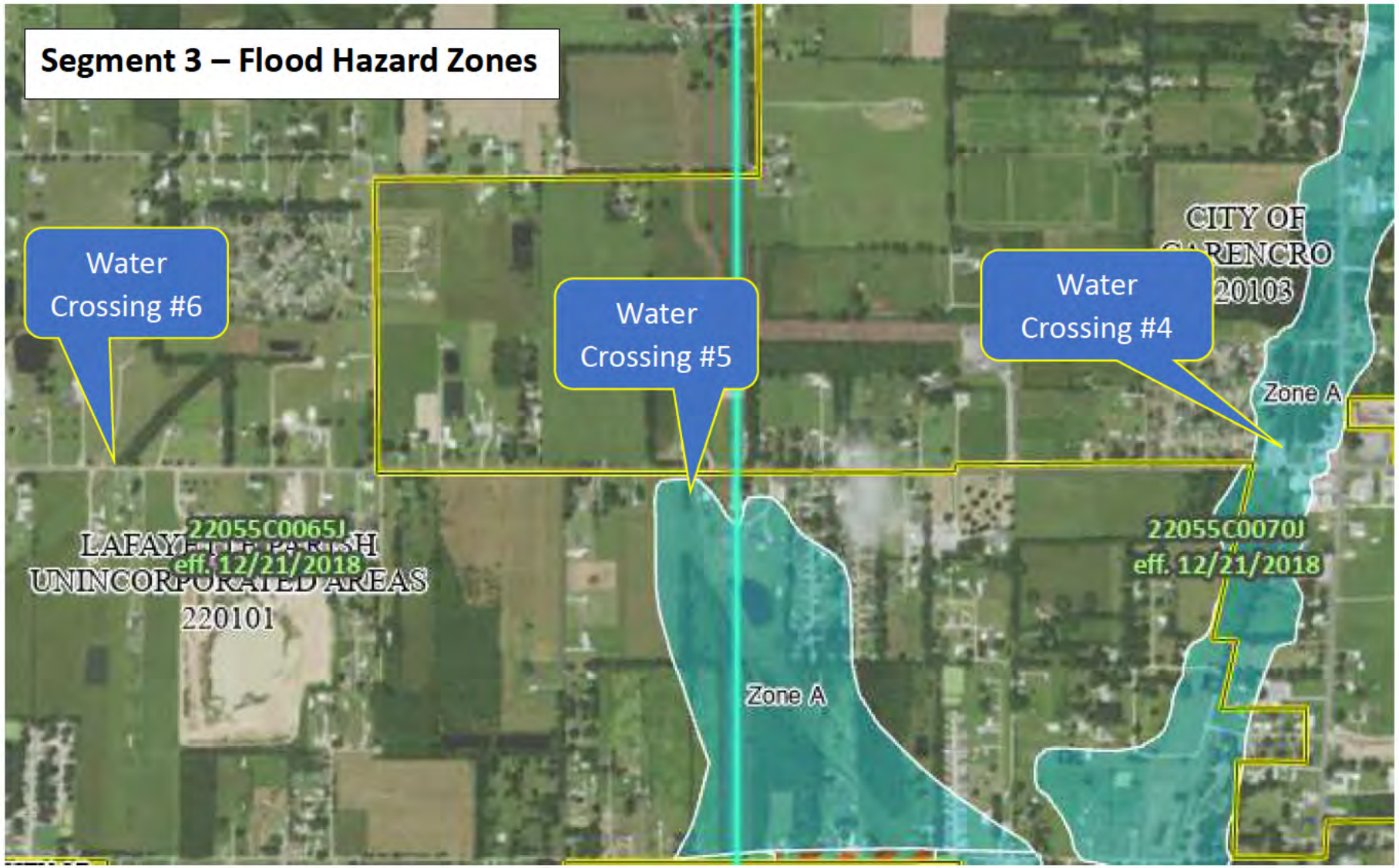
Segment 3 – Nearest Streams

Segment 3 – Nearest Streams



Segment 3 – Nearest Streams


Segment 3 – Flood Hazard Zones
Water Crossing #1
Water Crossing #2
Zone AE
CITY OF CARENCRO 220103
22055C0060J
eff. 12/21/2018
Water Crossing #3
Zone AE

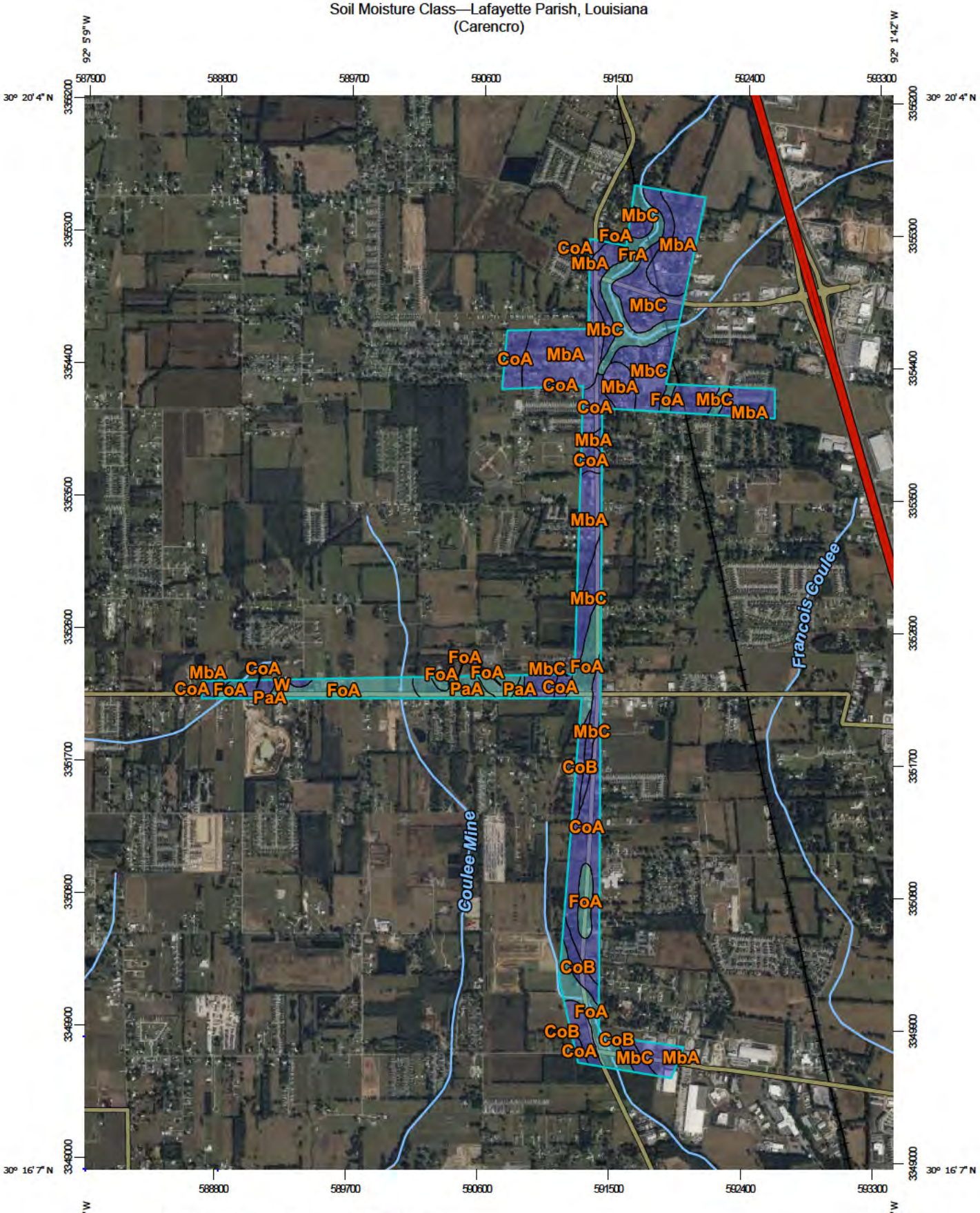


Natural Gas Distribution Infrastructure Safety and Modernization Grant Program

Tier 2 Site Specific Environmental Assessment for City of Carencro, LA

Segment 3 – Flood Hazard Zones

Soil Moisture Class—Lafayette Parish, Louisiana
(Carencro)



Map Scale: 1:35,600 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 500 1000 2000 3000

Feet
0 1500 3000 6000 9000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- Aquic
- Aridic (torric)
- Peraquic
- Perudic
- Udic
- Ustic
- Xeric
- Not rated or not available

Soil Rating Lines
- Aquic
- Aridic (torric)
- Peraquic
- Perudic
- Udic
- Ustic
- Xeric
- Not rated or not available

Soil Rating Points
- Aquic
- Aridic (torric)
- Peraquic
- Perudic
- Udic
- Ustic
- Xeric
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Lafayette Parish, Louisiana
Survey Area Data: Version 17, Sep 6, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 9, 2022—Nov 23, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Soil Moisture Class

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
CoA	Coteau silt loam, 0 to 1 percent slopes	Udic	113.3	18.0%
CoB	Coteau silt loam, 1 to 3 percent slopes	Udic	34.7	5.5%
FoA	Frost silt loam, 0 to 1 percent slopes	Aquic	108.0	17.2%
FrA	Frost silt loam, 0 to 1 percent slopes, occasionally flooded	Aquic	41.2	6.6%
MbA	Memphis silt loam, 0 to 1 percent slopes	Udic	165.3	26.3%
MbC	Memphis silt loam, 1 to 5 percent slopes	Udic	147.7	23.5%
PaA	Patoutville silt loam, 0 to 1 percent slopes	Aquic	17.4	2.8%
W	Water		0.3	0.1%
Totals for Area of Interest			**628.0**	**100.0%**

Description

The soil moisture class is the taxonomic moisture regime. The soil moisture regimes are defined in terms of the level of ground water and in terms of the seasonal presence or absence of water held at a tension of less than 1500 kPa in the moisture control section.

Complete definitions and criteria for soil moisture regimes are available in the references below.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2022. Keys to soil taxonomy. 13th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. (The soils in a given survey area may have been classified according to earlier editions of this publication.)

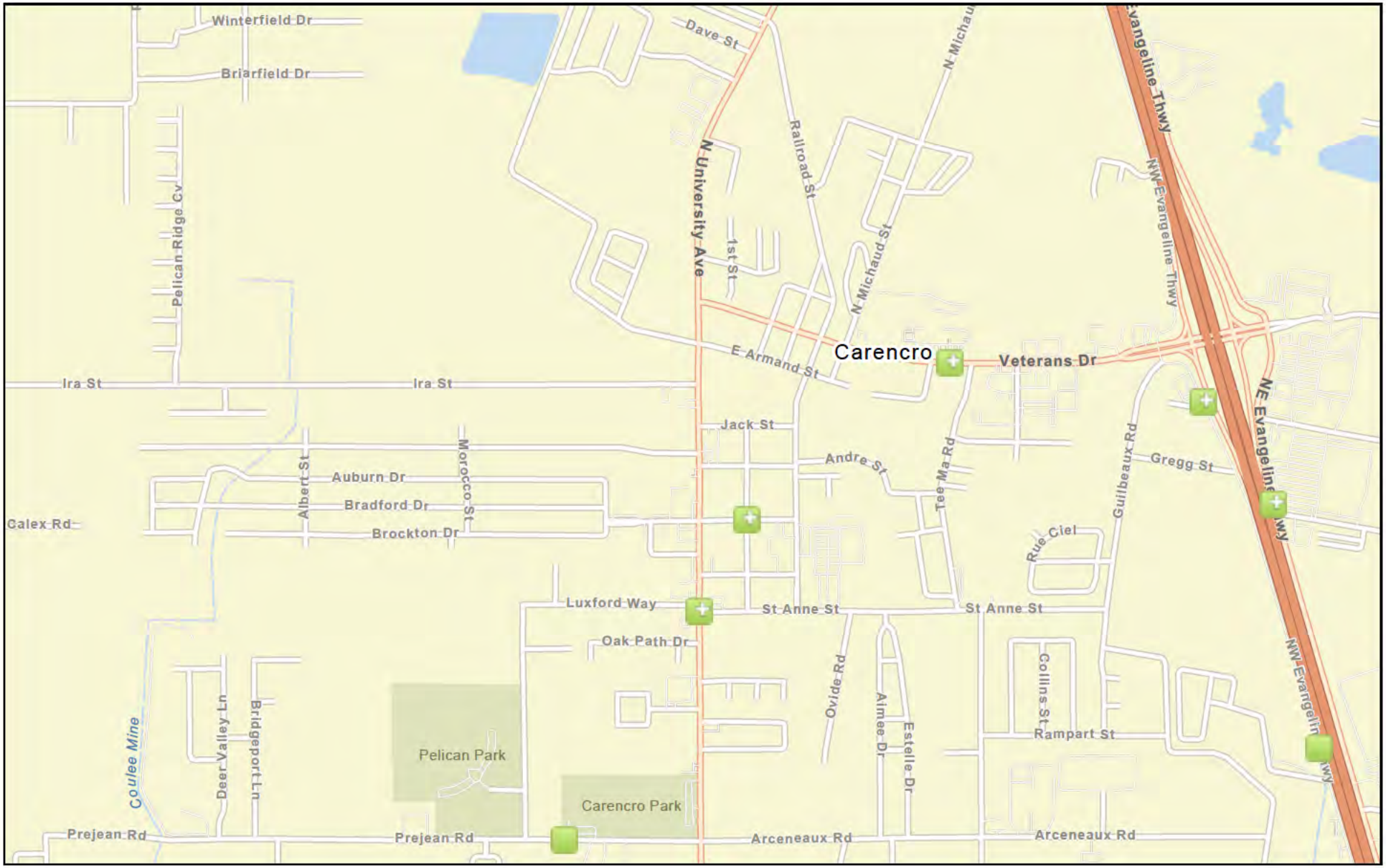
Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Carencro Segment 1



November 6, 2023

Hazardous Waste (RCRAInfo)

Hazardous Waste (RCRAInfo)

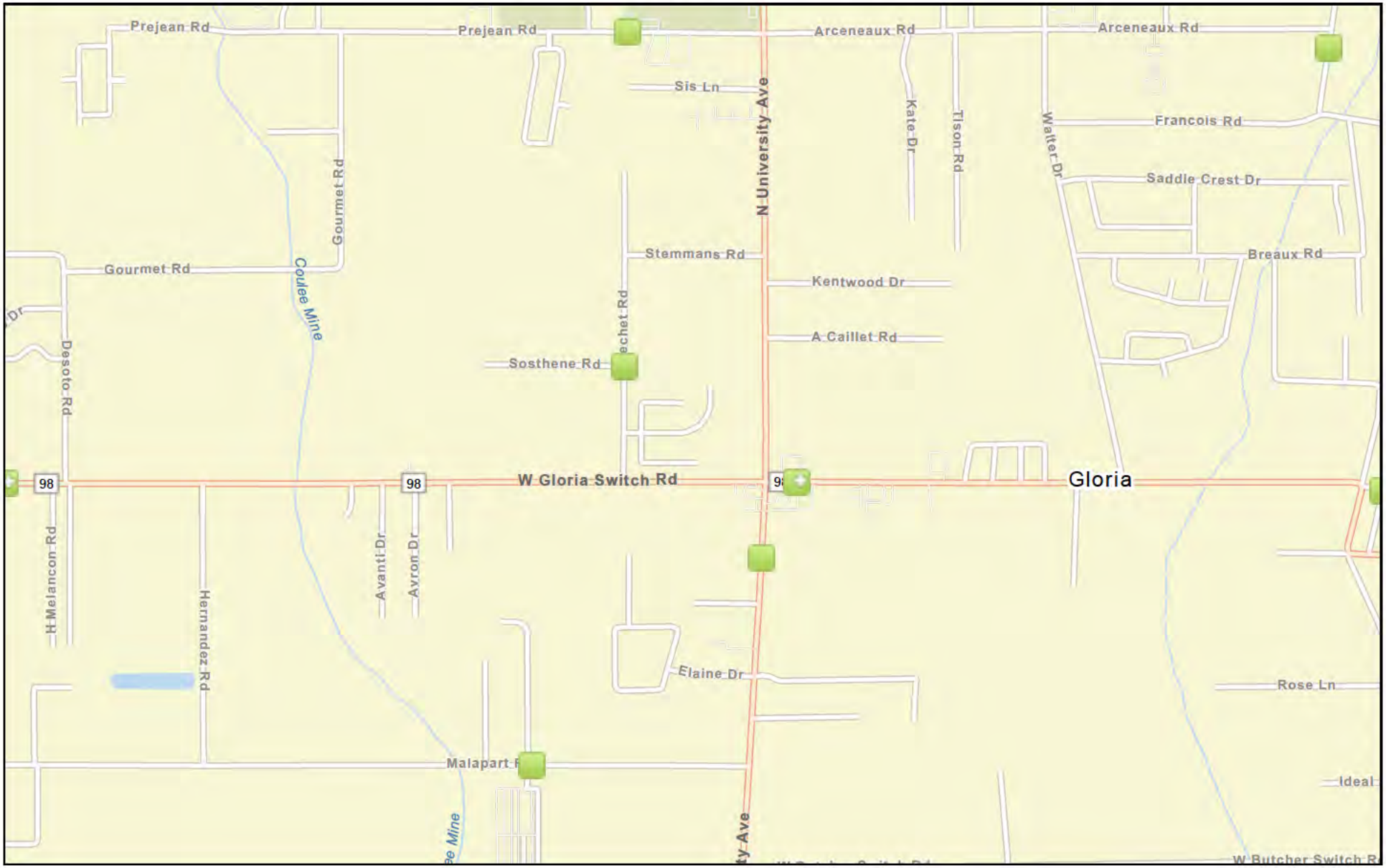
1:18,056

0 0.13 0.25 0.5 mi

0 0.2 0.4 0.8 km

Esri Community Maps Contributors, CONANP, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US

Carencro Segments 2 & 3



November 6, 2023

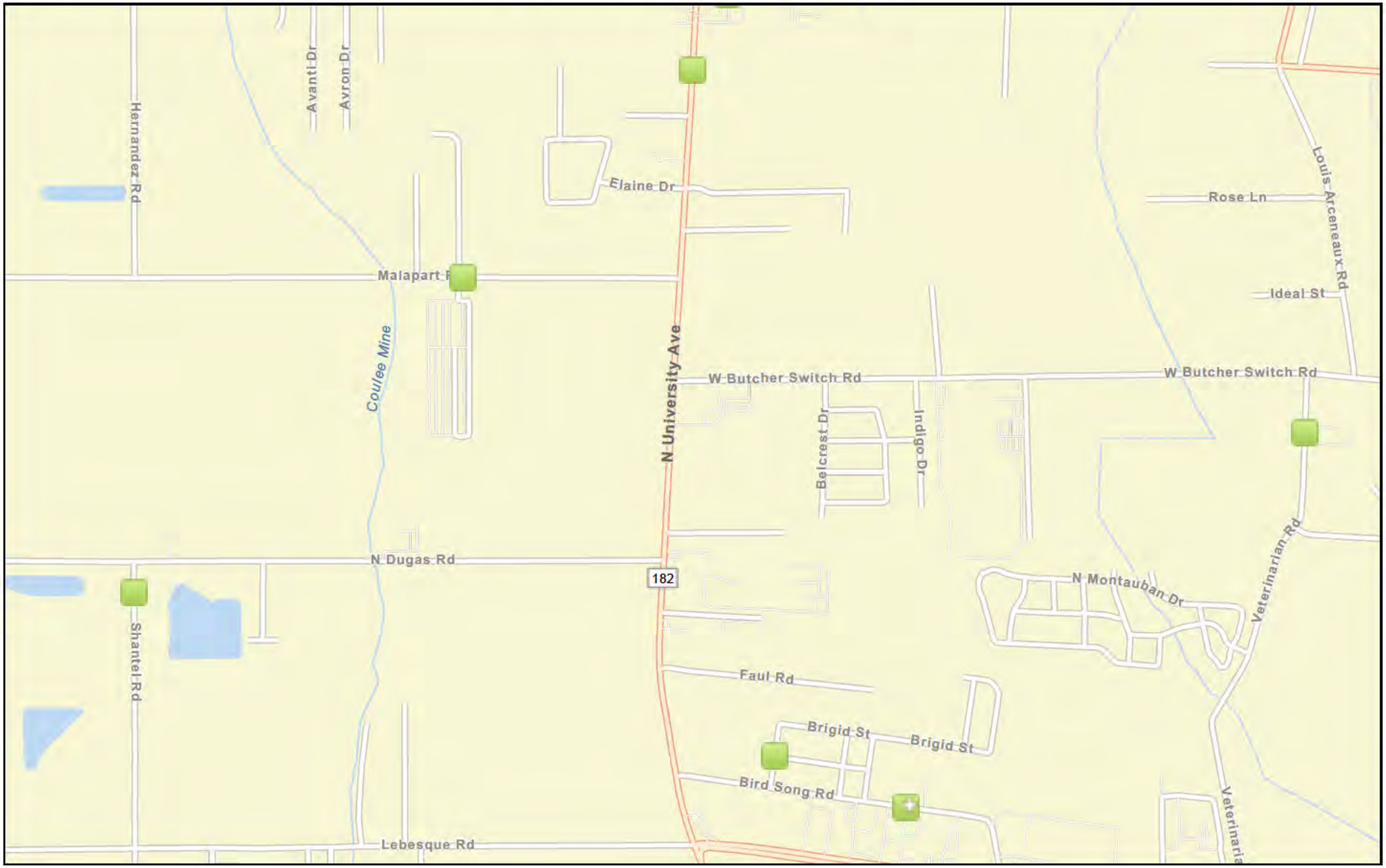
- Hazardous Waste (RCRAInfo)
- Hazardous Waste (RCRAInfo)

1:18,056

0 0.13 0.25 0.5 mi

0 0.2 0.4 0.8 km

Carencro Segments 2 & 3_b



November 6, 2023

Hazardous Waste (RCRAInfo)

Hazardous Waste (RCRAInfo)

1:18,056

0 0.13 0.25 0.5 mi

0 0.2 0.4 0.8 km

Appendix D

Biological Resources

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Louisiana Ecological Services Field Office
200 Dulles Drive
Lafayette, LA 70506
Phone: (337) 291-3100 Fax: (337) 291-3139

In Reply Refer To:
Project Code: 2024-0040895
Project Name: City of Carencro

January 25, 2024

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through IPaC by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see Migratory Bird Permit | What We Do | U.S. Fish & Wildlife Service (fws.gov).

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

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

This species list is provided by:

Louisiana Ecological Services Field Office
200 Dulles Drive
Lafayette, LA 70506
(337) 291-3100

PROJECT SUMMARY

Project Code: 2024-0040895
Project Name: City of Carencro
Project Type: Operations and Maintenance - Natural Gas Distribution Facilities
Project Description: Pipeline replacement in Carencro
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@30.30650295,-92.04995518407802,14z

Counties: Lafayette County, Louisiana

ENDANGERED SPECIES ACT SPECIES

There is a total of 2 threatened, endangered, or candidate species on this species list.

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

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

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

REPTILES

NAME	STATUS
Alligator Snapping Turtle *Macrochelys temminckii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4658	Proposed Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRITICAL HABITATS

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

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: Volpe DOT
Name:
Address: 220 Binney
City: Cambridge
State: MA
Zip: 02142
Email
Phone:

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Pipeline and Hazardous Materials Safety Administration

Rare Species and Natural Communities by Parish

RARE, THREATENED, AND ENDANGERED RANKS AND STATUSES

RARE ANIMALS TRACKING LIST (PDF)

RARE PLANTS TRACKING LIST (PDF)

RARE NATURAL COMMUNITIES TRACKING LIST (PDF)

RARE SPECIES AND NATURAL COMMUNITIES TRACKING LIST (PDF)

RARE ANIMAL SPECIES FACT SHEETS

RARE PLANT SPECIES FACT SHEETS

NATURAL COMMUNITIES FACT SHEETS

Filter by GLOBAL RANK

<Any>

Filter by STATE RANK

<Any>

Filter by FEDERAL STATUS

<Any>

Filter by STATE STATUS

<Any>

Filter by PARISH

Lafayette

Filter by FACT SHEET

<Any>

Filter by IMPERILED OR CRITICALLY IMPERILED

<Any>

Rare Species and Natural Communities by Parish

COMMON NAME	SCIENTIFIC NAME	ELEMENT TYPE	GLOBAL RANK	STATE RANK	FEDERAL STATUS	STATE STATUS	PARISH	FACT SHEET	IMPERIL OR CRITICA IMPERIL
Alligator Snapping Turtle	Macrochelys temminckii	Reptile	G3	S3	Proposed Threatened	Restricted	Acadia, Allen, Ascension, Avoyelles, Beauregard, Bienville, Bossier, Caddo, Calcasieu, Caldwell, Catahoula, Concordia, De Soto, East Baton Rouge, East Carroll, Franklin, Grant, Iberia, Iberville, Jefferson, La Salle, Lafayette, Lafourche, Livingston, Madison, Morehouse, Natchitoches, Ouachita, Rapides, Red River, Richland, Sabine, St. Charles, St. John the Baptist, St. Landry, St. Martin, St. Tammany, Tangipahoa, Tensas, Terrebonne, Union, Vernon, Washington, West Feliciana, Winn	Yes	Yes
Cryptic Flat Sedge	Cyperus cephalanthus	Plant	G3?Q	S2			Acadia, Jefferson Davis, Lafayette, Vermilion	Yes	Yes

Eastern Harvest Mouse	Reithrodontomys humulis	Mammal	G5	S3			Beauregard, Caddo, Calcasieu, East Baton Rouge, Jefferson Davis, Lafayette, St. Tammany, Vermilion, Vernon, Washington, West Baton Rouge		
Emerald Sleeper	Erotelis smaragdus	Fish	GNR	SU			Jefferson, Lafayette, St. Martin, Terrebonne, Vermilion		
Evening Rainlily	Cooperia drummondii	Plant	G5	S2			Acadia, Caddo, Calcasieu, De Soto, Jefferson Davis, Lafayette		Yes
Hackberry-American Elm-Green Ash Bottomland Forest	Hackberry-american elm-green ash forest	Natural Community	G4G5	S4			East Baton Rouge, Lafayette, Pointe Coupee, West Feliciana, Winn		
Hall's Pocket Moss	Fissidens amoenus	Plant	G2	S1			Acadia, Evangeline, Lafayette, Orleans, St. Landry, St. Martin, Vermilion, West Feliciana, Winn		Yes
Old Prairie Digger	Fallicambarus macneesei	Crustacean	G3	S2			Acadia, Allen, Calcasieu, Jefferson Davis, Lafayette, St. Landry		Yes
Powdery Thalia	Thalia dealbata	Plant	G4	S2S3			Acadia, Cameron, East Baton Rouge, Iberia, Iberville, Jefferson Davis, Lafayette, Morehouse, St. Landry, St. Martin, Vermilion, Vernon, West Baton Rouge	Yes	Yes

Pygmy Rattlesnake	Sistrurus miliarius	Reptile	G5	S2			Allen, Bienville, Bossier, Caddo, Catahoula, De Soto, East Baton Rouge, East Feliciana, Evangeline, Grant, Iberia, Jackson, Lafayette, Livington, Morehouse, Natchitoches, Orleans, Plaquemines, Rapides, Sabine, St. Bernard, St. Helena, St. Landry, St. Tammany, Tangipahoa, Union, Washington, Winn		Yes
Ringtail	Bassariscus astutus	Mammal	G5	S1		Restricted	Bossier, Caddo, Catahoula, Franklin, Lafayette		Yes
Saltmarsh Topminnow	Fundulus jenkinsi	Fish	G3	S3			Calcasieu, Cameron, Iberia, Jefferson, Lafayette, Lafourche, Orleans, Plaquemines, St. Bernard, St. Martin, St. Mary, St. Tammany, Terrebonne, Vermilion		
Six-banded Longhorn Beetle	Dryobius sexnotatus	Insect	GNR	S1			Acadia, Assumption, Avoyelles, Concordia, Evangeline, Iberia, Iberville, Lafayette, Pointe Coupee, St. Landry, St. Martin, St. Mary, West Baton Rouge, West Feliciana		Yes
Smalltooth Sawfish	Pristis pectinata	Fish	G1G3	S1	Endangered	Endangered	Lafayette, Plaquemines, St. Martin, Terrebonne, Vermilion		Yes
Three-lobed Coneflower	Rudbeckia triloba	Plant	G5	S3			Bossier, Caddo, De Soto, Iberia, Lafayette, Sabine, St. Martin, Vermilion	Yes	

Water-purslane	Didiplis diandra	Plant	G5	S2?			Avoyelles, East Feliciana, Jackson, Lafayette, Natchitoches, St. Helena, St. Martin		Yes

Louisiana Department of Wildlife and Fisheries
PO Box 98000
2000 Quail Drive
Baton Rouge, LA 70898
800.256.2749
225.765.2800
CONTACT US

Administration
- About Us
- Annual Reports
- Quarterly Litigation Reports
- Wildlife and Fisheries Foundation
- Employment
- Internships
- Public Records Request
- Site Disclaimer
- Legislative Auditor Fraud Hotline
- Federal Aid/Title VI

Commissions, Task Forces, & Councils
- Wildlife and Fisheries Commission
- Louisiana Outdoors Forever
- Crab Task Force
- Finfish Task Force
- Oyster Task Force
- Shrimp Task Force
- Artificial Reef Council
- Alligator Advisory Council
- Fur Advisory Council

Resources
- Research and Publications
- Louisiana Conservationist
- Species Field Guide
- Hunters for the Hungry
- News Archive
- LDWF in the News
- Photo Gallery
- Video Gallery
- Event Calendar

Appendix E

Cultural Resources

U.S. Department
of Transportation
**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

January 24, 2024

Kristin Sanders
State Historic Preservation Officer
Louisiana Office of Cultural Development
P.O. Box 44247
Baton Rouge, LA 70804-4241

Section 106 Consultation: PHMSA Pipeline Replacement Project in Carencro, Louisiana
Grant Recipient: City of Carencro
Project Location: City of Carencro, Lafayette Parish, Louisiana

Dear Kristin Sanders:

The Pipeline and Hazardous Materials Safety Administration (PHMSA) provides funds authorized under the Natural Gas Distribution Infrastructure Safety and Modernization Grant Program. PHMSA proposes to provide funds to the City of Carencro (City) for the replacement of pipelines (Undertaking). PHMSA is initiating consultation for the above referenced Undertaking in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended, and the associated implementing regulations, 36 CFR Part 800 (Section 106).

Project Description/Background

The Undertaking would replace 27,252 linear feet (LF) of 2-inch cast iron pipe and 1,222 LF of 2-inch bare steel pipe, totaling 28,474 LF of pipeline, and connecting service lines, fittings, valves, regulators and pressure relief valves with Polyethylene (PE) pipe. This work would enhance safety, improve operations, and reduce methane emissions of natural gas of the City's natural gas transmission system, including pipeline modernization and interim safety enhancement measures. The existing natural gas distribution system was installed in the 1950s. Due to the geographic distribution and varying scopes of the proposed actions, the Undertaking has been broken into three segments which are grouped by the type of activity: Segment 1 - Cast Iron Pipe Replacement; Segment 2 - Regulator Station Upgrades; and Segment 3 – pipe replacement at Water Crossings.

Segment 1 includes the replacement of approximately 26,627 LF of existing 2-inch diameter cast iron natural gas main pipeline with PE pipe. Any previously unidentified cast iron pipelines, fittings, valves, joints, and/or service lines discovered during project implementation would also be replaced with updated PE materials. Most new main lines would be bored in close proximity to the existing cast iron mains and within the previously disturbed City-owned right-of-way (ROW). In order to reach existing gas meters, new service lines would extend outside of the existing ROW. In these cases, the City would obtain private property access agreements with existing customers to upgrade their service lines. Segment 1 implementation would involve limited and temporary ground disturbing activities including digging of trenches (typically 36-inches by 36- to 48-inches) for the boring of new PE mainline in the existing ROW; digging of trenches (typically 12-inches by 12-inches) to install new PE service lines running from existing customers' gas meters to the new main line; and digging of small pits within existing ROW to expose the

new main line where the new service lines would be connected. In order to limit ground disturbance, existing cast iron piping would be abandoned in place, as opposed to being removed.

Segment 2 includes the replacement and/or installation of equipment including pressure regulators and pressure relief valves at seven existing regulator stations. Work would primarily consist of the replacement and/or installation of above ground regulator equipment, and when necessary, associated steel piping extending a few feet beneath the surface. Ground disturbance related to regulator station work would typically be limited to an area 5 feet wide, 20 feet long, and 5 feet deep. In some cases, the width may need to extend up to 10 feet. Approximately 112 LF of 2-inch steel pipe would be replaced in Segment 2.

Segment 3 includes the removal and replacement of existing above-ground natural gas mains, which span drainage canals (coulees) at eight different locations. This project would include installing crossings underground using directional boring methods to remedy safety concerns related to approximately 650 LF of exposed pipe. Water crossings would typically consist of one excavated pit on each side of the water feature. Each pit would be roughly 6 feet wide, 8 feet long, and 4 feet deep. In some cases where existing mainlines may be deeper, the pits may extend up to 10 feet wide, for safety purposes. Approximately 625 LF of cast iron and 1,110 LF of bare steel, for a total of approximately 1,735 LF of new pipe, would be replaced in Segment 3. Borings would be conducted within the existing ROW.

The staging area for the Undertaking would be a parcel at the northeast corner of the St. Charles Street and N. St. John Street intersection in the City. Project location maps are enclosed in **Attachment A**. Photographs showing the overall character of the project areas are included in **Attachment B**.

Area of Potential Effects (APE)

Pursuant to 36 CFR 800.4(a)(1), the Area of Potential Effects (APE) is defined as the geographic area(s) within which the Undertaking may directly or indirectly affect historic resources. Based on the proposed scope of work, PHMSA has delineated the APE for this Undertaking to encompass the existing ROW and utility easements where the pipeline and service line replacements will take place in Segment 1 and the limits of disturbance for the regulator station and water crossing work in Segments 2 and 3. The APE includes various areas and segments around the City, with the northernmost point of the APE at 30.32826, -92.04479 and the southernmost point at 30.27754, -92.04961. The APE includes the limits of disturbance and any resources that may be particularly susceptible to any potential vibration or physical effects of the Undertaking and extends to the depth of proposed ground disturbance of up to 5 feet. The Undertaking does not have the potential to cause audible effects after the completion of construction, and any above-ground activities will be minor and have limited potential to cause visual effects. The APE is shown on the map in **Attachment A**.

Identification and Evaluation

To identify historic properties in the APE, individuals who meet the Secretary of the Interior's (SOI) Professional Qualification Standards reviewed available information on previously identified historic properties in the APE, including the National Register of Historic Places (NRHP) database and data received from the Louisiana Division of Historic Preservation. Individuals who meet the SOI Professional Qualification Standards also conducted research to determine if there are any previously unidentified properties within the APE that are 45 years of age or older and may be eligible for the NRHP.

Historic Architecture

There is one NRHP-listed above-ground resource within the APE: Our Lady of the Assumption School. A search in the Louisiana Historic Resource Inventory (LHRI) and Louisiana Office of Cultural Development's Cultural Resources database found no other known NRHP-listed or NRHP-eligible above-ground resources within the APE.

Our Lady of the Assumption School, located at 410 Michaud Street, is a historic Black Catholic school complex that was constructed in 1934. It is significant under Criterion A in the areas of education, ethnic heritage, and Black American history as a representation of the Roman Catholic Church's role in the education of the African American community in rural southern Louisiana in the late-nineteenth and early-twentieth centuries. The school's period of significance extends from 1934 to 1951. Project work within and adjacent to the school's historic boundaries is limited to below-ground pipeline and service line replacements within the existing ROW and utility easements; no above-ground activities are anticipated at this location.

Due to the scale and nature of the Undertaking, which is limited to the replacement of pipelines and service lines within existing ROW and utility easements, the replacement and/or installation of equipment at existing regulator stations, and the removal and replacement of existing above-ground natural gas mains spanning drainage canals (coulees), the identification effort for above-ground resources focused on identifying properties that are susceptible to the vibration or physical effects of this work and could experience diminished integrity as a result of the Undertaking. The work will not have any lasting significant visual or audible effects. A review of the APE found no potentially significant above-ground resources that have the potential to be affected by the Undertaking. Although the Undertaking will involve work across drainage canals, research did not uncover any evidence that any of these canals are significant under any of the NRHP criteria. Furthermore, the Undertaking will be limited to the replacement of existing above-ground natural gas mains across these coulees and does not have the potential to diminish integrity. Therefore, there are no additional above-ground historic properties within the APE.

Archaeology

The Louisiana Office of Cultural Development's Cultural Resources Map database was reviewed for the presence of previously recorded archaeological sites and previously conducted archaeological surveys within one quarter of a mile of the APE. The review revealed seven archaeological sites and five archaeological surveys within one quarter of a mile of the APE (Tables 1 and 2). Three archaeological sites and two previous survey areas intersect the APE.

Table 1. Archaeological Sites within One Quarter of a Mile of the APE

Site Number	Type	NRHP	Citation
16LY122	Historic artifact scatter	Not Eligible	Tankersley et al. 2009
16LY123	Historic artifact scatter	Not Eligible	Tankersley et al. 2009
16LY124	Historic artifact scatter	Not Eligible	Tankersley et al. 2009
16LY125	*Historic artifact scatter*	*Not Eligible*	*Tankersley et al. 2009*
16LY126	Historic artifact scatter	Not Eligible	Tankersley et al. 2009
16LY127	*Historic railroad*	*Unknown*	*Tankersley et al. 2009*
16LY135	*Historic artifact scatter*	*Not Eligible*	*Rawls 2011*

**Italicized entries intersect the APE*

All the previously recorded archaeological sites within the search radius are historic-age sites. Site 16LY127, the abandoned South Pacific Railroad grade, was recorded as a "prominent landscape feature" in the City and the grade is intact. However, the grade has been disturbed in areas that intersect with the APE. The NRHP eligibility is listed as unknown. All other sites are not eligible for listing on the NRHP. Both previous surveys that intersect the APE were contracted by the US Army Corps of Engineers for flood control along Beau Basin Coulee in the City. Additionally, both surveys are responsible for identifying all of the previously recorded archaeological sites in Table 1 indicating a high probability for historic-age archaeological sites within the APE.

Table 2. Archaeological Surveys within One Quarter of a Mile of the APE

Report	Citation	Report Number
A Phase I Cultural Resource Survey for the Proposed Ambassador Caffery Extension North and Phase II Archaeological Testing at 16LY120, Lafayette Parish, Louisiana	Hahn and Ryan 2010	22-3111
Phase I Cultural Resource Investigation, Carencro Flood Damage Control Cap Project, Lafayette Parish, Louisiana	*Tankersley et al. 2009*	*22-3217*
Phase I Cultural Resource Investigation – Proposed Air Products and Chemicals, Inc., Gulf Coast Connection Project, Calcasieu, Jefferson Davis, Acadia, St. Landry, Lafayette, St. Martin, Iberville, and West Baton Rouge Parishes, Louisiana	Handly et al. 2018	22-3760
Phase I Cultural Resources Survey of Two Proposed Holding Ponds and One Layover Area in Carencro, Lafayette Parish, Louisiana	*Rawls 2011*	*22-3791*

**Italicized entries intersect the APE*

The Louisiana Office of Cultural Development's map database, the Find a Grave online database, and historic topographic maps were also examined to identify the presence of any historic-age cemeteries within the APE. The St. Peter Roman Catholic Church and Cemetery was identified as intersecting with the APE. Other cemeteries were noted but are recorded as being outside of the APE. The St. Peter Roman Catholic Cemetery contains over 4,000 marked burials. The earliest interments date to the mid to late nineteenth century, and it is currently an active cemetery. Portions of the property along South Church Street and St Anne Street overlaps the APE slightly.

An examination of Web Soil Survey data reveals 5 soil types within the APE. These types, along with their drainage class, slope, and APE percentage are detailed in Table 3. Well drained and moderately well drained soils can be indicative of human habitation during both the precontact and historic periods. Approximately 80 percent of the soil types within the APE are well drained soils. Typically slopes greater than 15 percent are not suitable for human occupation, and soil types within the APE vary from 0 to 5 percent slope. The APE is comprised of predominantly well drained soils and entirely of soils with little to no slope, indicating suitable conditions for human habitation in both the pre-contact and historic periods. Additionally, topographic maps reveal that the APE is located on a terrace west of the Vermilion River with several drainages crossing the APE. Proximity to major waterways generally indicates a suitable environment for both precontact and historic human activity.

Table 3. Soil Types within the APE

Soil Type	Drainage Class	Slope	Percent of APE
Coteau silt loam	Somewhat poorly drained	0 to 1 percent	10.5
Frost silt loam	Poorly drained	0 to 1 percent	1.7
Frost silt loam, occasionally flooded	Poorly drained	0 to 1 percent	10.3
Memphis silt loam	Well drained	0 to 1 percent	45.5
Memphis silt loam	Well drained	1 to 5 percent	32.0

Historic topographic maps and historic aerial photographs were examined for archaeological resource sensitivity within the APE. The presence of structures on historic maps and aerial photography may indicate the likelihood of historic period archaeological deposits associated with the occupation of these structures.

The APE is comprised of the City and rural development along US 167 (now SR 182) and the associated cross streets. The 1957 topographic quadrangle shows the City much as it appears today. The St. Peter Roman Catholic Church Cemetery is visible as well as a cemetery east of the Our Lady of Assumption School. Project work at both these locations will be limited to the replacement of pipelines and/or service lines within existing ROW or utility easements. The 1970 topographic quadrangle shows a few new residential developments in the City and there are some additional buildings in the areas outside of the City. Aerial imagery from 1958 shows the development of the City and the surrounding area seen in the topographic maps. The rural areas show a regular pattern of agricultural fields within one quarter of a mile of the APE with buildings found along the roadways. The 1952 imagery also shows the cemetery at St. Peter's to extend approximately to St Louis Street. By the early 1980s the cemetery encompassed the area south to St Anne Street. The area around the Our Lady of Assumption School remains mostly unchanged since the 1958 aerial photograph. There has been infill development in the area, but the school area remains intact.

Background research revealed three archaeological sites and two archaeological surveys intersecting the APE. The presence of archaeological sites within the APE indicates a moderate to high potential for archaeological deposits to exist within the APE. Soil types within the APE also indicate a suitable environment for precontact and historic habitation in most portions of the APE. Topographic maps and aerial imagery reveal considerable historical development within the APE.

The proposed project will include replacing over 5 miles of pipeline within the existing ROW, replacing service lines within existing utility easements, as well as upgrades to seven regulator stations and the replacement of eight above-ground gas mains that span drainage canals. Most ground disturbing activities will occur adjacent to the original pipeline that will be abandoned in place once the new pipeline is operational. Per the project description, the proposed Undertaking is expected to occur in the previously disturbed existing ROW and utility easements that contain numerous other underground utilities. Modern aerial imagery indicates the proposed pipeline installation will occur in areas nearest the roadway in moderate to heavily disturbed areas. While only a small portion of the APE has been archaeologically surveyed and there is moderate to high potential for archaeological deposits within the APE, the ground disturbance caused by previous utility installation and road and sidewalk construction has likely compromised the integrity and context of any previously intact archaeological deposits that may exist within the APE.

Although the APE slightly extends into limited portions of the St. Peter Roman Catholic Church Cemetery and the NRHP-listed Our Lady of Assumption School boundaries, work within and immediately adjacent to these boundaries is limited to the replacement of pipelines and service lines within the existing, pre-disturbed ROW and utility easements. Additionally, according to aerial images, burials at the St. Peter Roman Catholic Church Cemetery are separated from the roadway by buildings and a parking lot and are located outside the APE. Furthermore, although the unevaluated site 16LY127 is partially located within the APE, the portions of the site that intersect with the APE have likely been compromised from previous disturbance within the existing ROW. Therefore, due to the limited scope of work, previous disturbance of the APE, and lack of significant archaeological sites in the vicinity of the APE, there is low potential for intact significant archaeological resources within the APE, and an archaeological survey is not recommended at this time. However, all cemeteries are subject to Louisiana state burial laws, including the Unmarked Human Burial Sites Preservation Act (R. S. 8:671-681) and the Louisiana Historic Cemetery Preservation Act (R.S. 25:931-943).

Determination of Effect

Based on the aforementioned identification and evaluation, PHMSA finds that there is one historic property as defined in 36 CFR 800.16(l) within the APE: the NRHP-listed Our Lady of the Assumption School.

Although a small portion of the Our Lady of the Assumption School boundary is located within the APE, the Undertaking is limited to the replacement of existing pipelines and service lines and will not alter any of the characteristics or contributing features of the school that qualify it as eligible for inclusion in the NRHP under Criterion A in a manner that would diminish its integrity. The Undertaking will not result in lasting physical, visual, or audible effects to the school. The Undertaking also does not include land acquisition, nor would it limit access to or change the use of the property. Furthermore, project work will take place within existing, previously disturbed ROW and utility easements, which demonstrate a low probability for intact significant archaeological resources.

Therefore, in accordance with 36 CFR Part 800.5, PHMSA has determined the Undertaking will result in No Adverse Effect to Historic Properties.

Consulting Party Outreach

PHMSA identified parties that may be interested in the Project and its effects on historic properties. PHMSA invites the individuals/organizations copied on this letter to participate as Section 106 consulting parties. Invited parties should indicate their willingness to participate as a consulting party and provide comments on the enclosed form (**Attachment C**) within 30 calendar days from the date on this letter. Note that a non-response is considered to be a declination to participate; however, interested parties can request to join consultation at any time in the process. If any invited party expresses concerns about the Project's potential effects to historic properties, PHMSA will consult with the party to resolve those concerns prior to project implementation.

PHMSA will also invite the following federally recognized tribes to participate in consultation by separate letter:

- Apache Tribe of Oklahoma
- Chitimacha Tribe of Louisiana
- Coushatta Tribe of Louisiana
- Jena Band of Choctaw Indians
- Mississippi Band of Choctaw Indians

Request for Section 106 Concurrence

Based on the information presented above, PHMSA finds that the Undertaking will result in No Adverse Effect to Historic Properties. PHMSA is submitting this Undertaking to your office for your review and comment. PHMSA requests your concurrence with this determination of effect within 30 calendar days of the date of this letter. Should you need additional information, please contact Amy Hootman, Section 106 specialist, at PHMSASection106@dot.gov or 857-998-9981.

Sincerely,

Matt Fuller
Senior Environmental Protection Specialist

MF/ah

cc: Shelby Hanchera, Environmental Protection Specialist, USDOT Volpe Center
Dana White, PHMSA Grant Coordinator
Purvis Morrison, City of Carencro
St. Pierre Genealogical Society

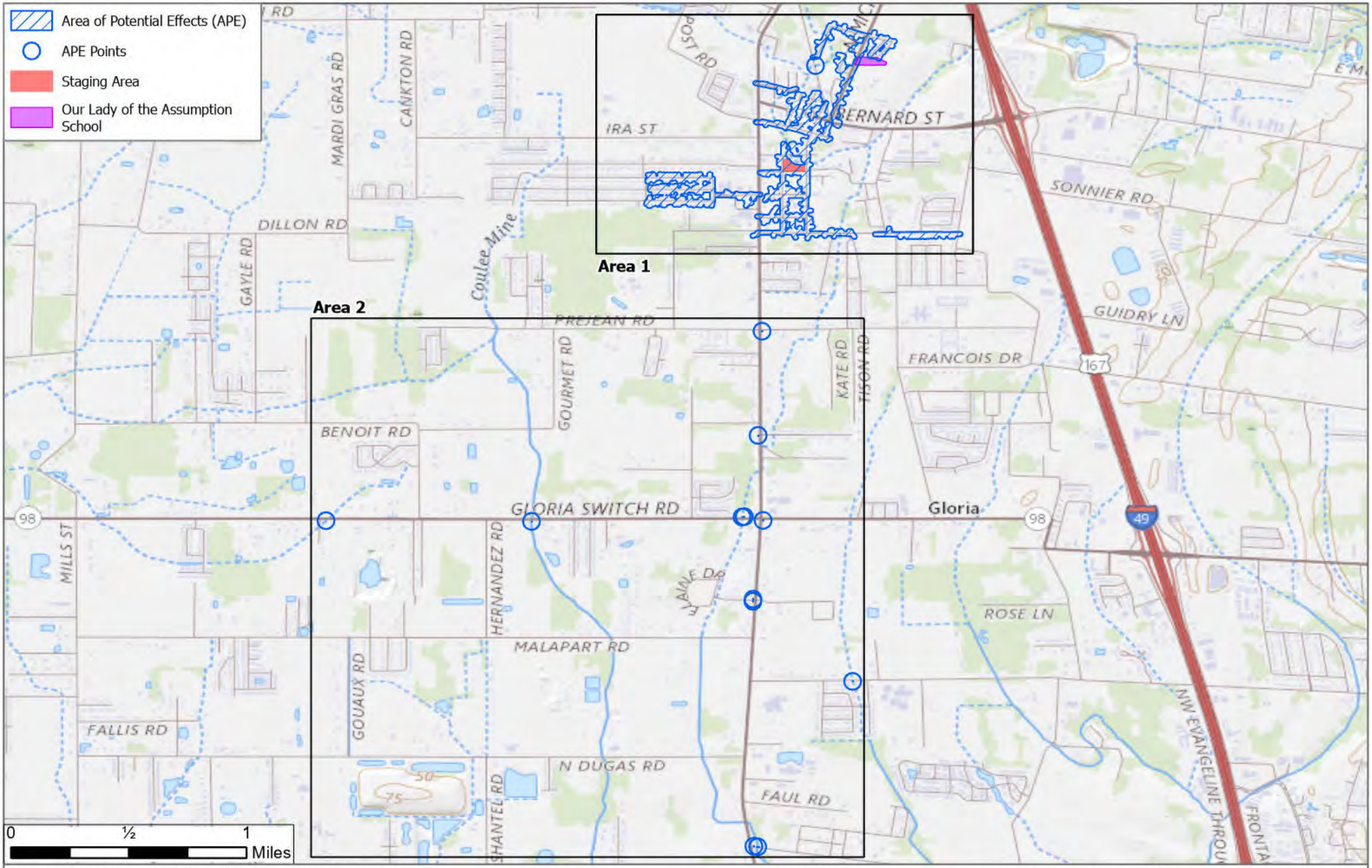
Enclosures:

Attachment A: Project Location and APE Maps
Attachment B: Project Area Photographs
Attachment C: Consulting Party Response Form

ATTACHMENT A

Project Location and APE Maps

Area of Potential Effects Map

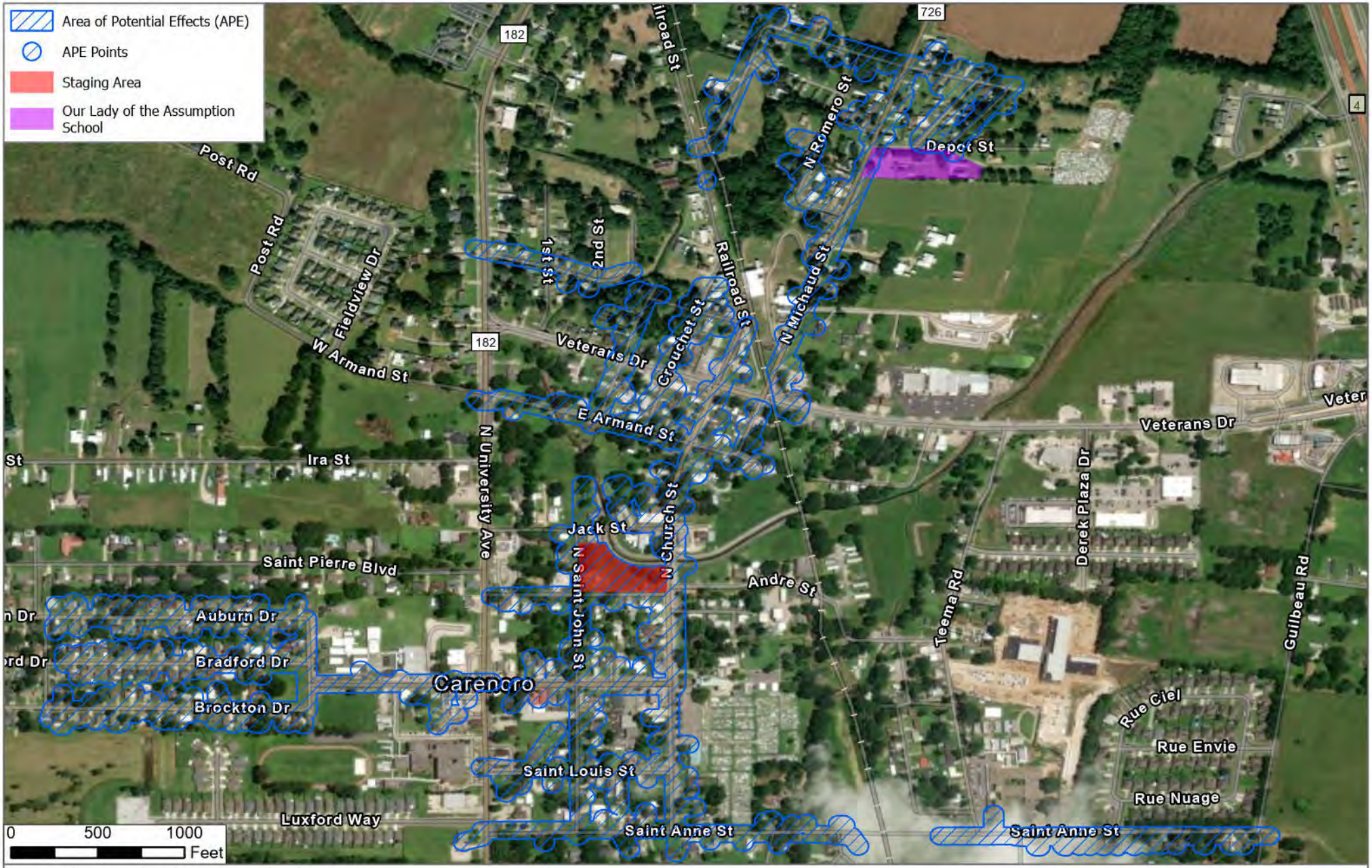


Name: Carencro, Louisiana Gas Line Replacement
Scale: 35,000
Total Acreage: 98.1
USGS Basemap: Carencro
Carencro, LA, Lafayette Parish

N

Service Layer Credits: USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road Data; Natural Earth Data; U.S. Department of State Humanitarian Information Unit; and NOAA National Centers for Environmental Information, U.S. Coastal Relief Model. Data refreshed April, 2023.

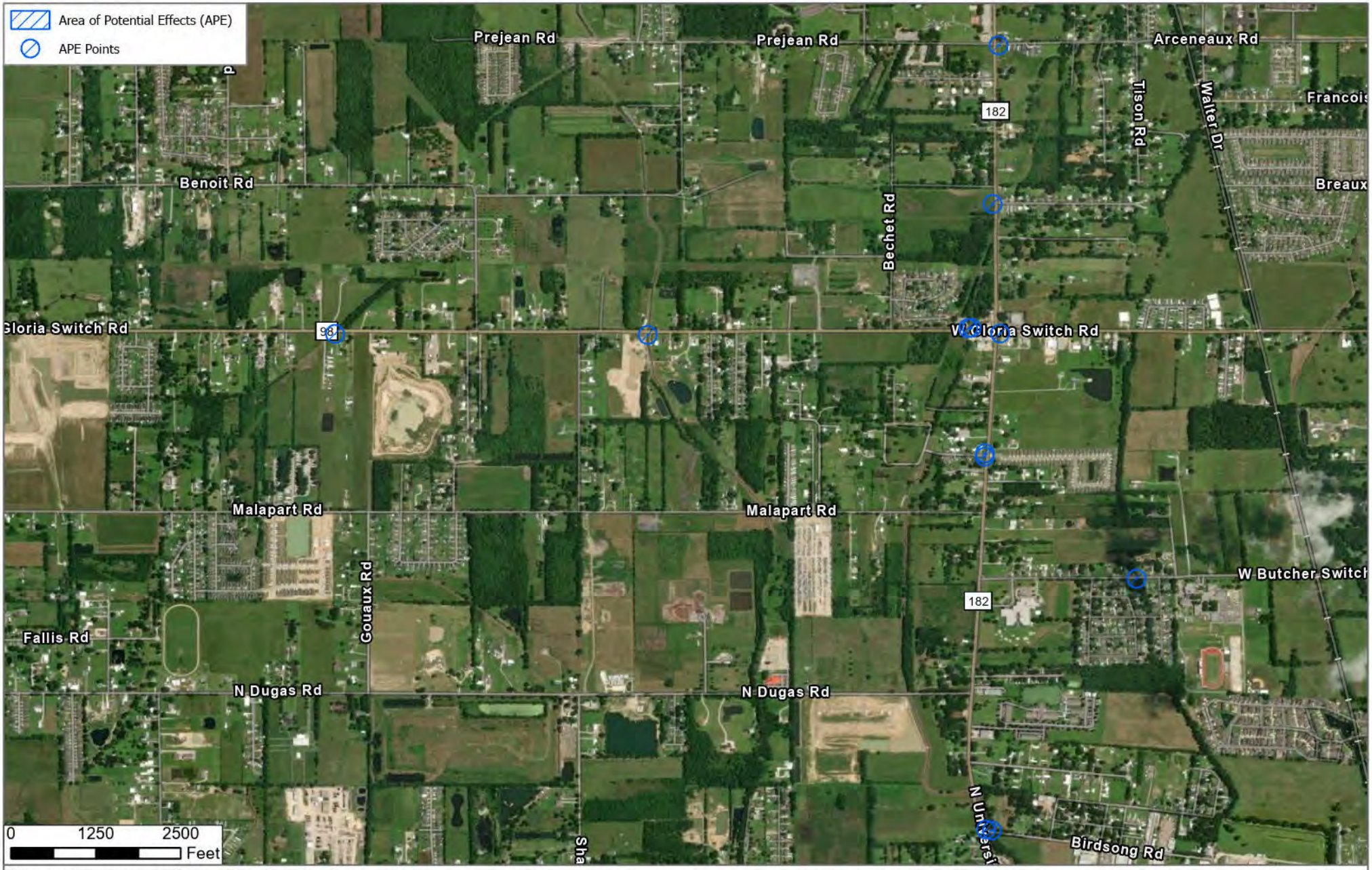
Area of Potential Effects Map



Name: Carencro, Louisiana Gas Line Replacement
Scale: 9,000
Total Acreage: 98.1
Carencro, LA, Lafayette Parish
Area 1

N

Area of Potential Effects Map



Name: Carencro, Louisiana Gas Line Replacement
Scale: 23,000
Total Acreage: 98.1
Carencro, LA, Lafayette Parish
Area 2

N

ATTACHMENT B

Project Area Photographs

Photo 1. Representative photo showing new PE service line connection to residential meter.

Photo 2. Staging area at northeast corner of St. Charles Street and N. St. John Street intersection.

Photo 3. Representative photo showing regulator station within the APE.

Photo 4. Representative photo showing exposed piping over a water (coulee) crossing within the APE.

Photo 5. APE along N. Church Street, view facing north.

Photo 6. APE along N. Church Street, view facing northeast.

Photo 7. APE along N. Church Street, view facing northwest.

Photo 8. APE at N. Church Street and Veterans Drive intersection, view facing southwest.

ATTACHMENT C

Consulting Party Response Form

Section 106 Consulting Party Response Form

Pipeline and Hazardous Materials Safety Administration (PHMSA)

Natural Gas Distribution Infrastructure Safety and Modernization Grant Program

Project Name/Location:

Date: _____

Organization: _____

Name: _____

Affiliation: _____

Address: _____

_____

_____

Phone Number: _____

E-mail: _____

Please check one of the following:

○ **Yes,** I, or my organization, would like to participate in consultation on the project's potential effects to historic properties. I, or my organization, has a legal or economic relation to the project or affected properties or have a concern with the project's effects on historic properties.

○ **No,** I, or my organization, do(es) not wish to participate as a consulting party for the project.

Do you know of any other potential consulting parties that should be contacted? If so, please list the name, email, or other contact information below.

_____

_____

_____

Comments: _____

_____

_____

_____

Please return by:

Please return to: Kathering Giraldo
USDOT Volpe Center
220 Binney Street, Cambridge, MA
E-mail: PHMSASection106@dot.gov

U.S. Department
of Transportation
**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

January 24, 2024

Wamblee Smith
Acting Environmental Director
Apache Tribe of Oklahoma
PO Box 1330
Anadarko, OK 73005

Section 106 Consultation: PHMSA Pipeline Replacement Project in Carencro, Louisiana
Grant Recipient: City of Carencro
Project Location: City of Carencro, Lafayette Parish, Louisiana

Dear Director Smith:

The Pipeline and Hazardous Materials Safety Administration (PHMSA) provides funds authorized under the Natural Gas Distribution Infrastructure Safety and Modernization Grant Program. PHMSA proposes to provide funds to the City of Carencro (City) for the replacement of pipelines (Undertaking). PHMSA is initiating consultation for the above referenced Undertaking in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended, and the associated implementing regulations, 36 CFR Part 800 (Section 106). The purpose of this letter is to initiate Section 106 consultation for the Project to determine if there are historic properties of cultural or religious significance to your Tribe that may be affected by the Project, to determine if you want to be a consulting party, and to notify your Tribe of PHMSA's intention to make a finding of No Adverse Effect to Historic Properties. PHMSA is also available for Government-to-Government consultation on this Program.

Project Description/Background

The Undertaking would replace 27,252 linear feet (LF) of 2-inch cast iron pipe and 1,222 LF of 2-inch bare steel pipe, totaling 28,474 LF of pipeline, and connecting service lines, fittings, valves, regulators and pressure relief valves with Polyethylene (PE) pipe. This work would enhance safety, improve operations, and reduce methane emissions of natural gas of the City's natural gas transmission system, including pipeline modernization and interim safety enhancement measures. The existing natural gas distribution system was installed in the 1950s. Due to the geographic distribution and varying scopes of the proposed actions, the Undertaking has been broken into three segments which are grouped by the type of activity: Segment 1 - Cast Iron Pipe Replacement; Segment 2 - Regulator Station Upgrades; and Segment 3 – pipe replacement at Water Crossings.

Segment 1 includes the replacement of approximately 26,627 LF of existing 2-inch diameter cast iron natural gas main pipeline with PE pipe. Any previously unidentified cast iron pipelines, fittings, valves, joints, and/or service lines discovered during project implementation would also be replaced with updated PE materials. Most new main lines would be bored in close proximity to the existing cast iron mains and within the previously disturbed City-owned right-of-way (ROW). In order to reach existing gas meters, new service lines would extend outside of the existing ROW. In these cases, the City would obtain private property access agreements with existing customers to upgrade their service lines. Segment 1

implementation would involve limited and temporary ground disturbing activities including digging of trenches (typically 36-inches by 36- to 48-inches) for the boring of new PE mainline in the existing ROW; digging of trenches (typically 12-inches by 12-inches) to install new PE service lines running from existing customers' gas meters to the new main line; and digging of small pits within existing ROW to expose the new main line where the new service lines would be connected. In order to limit ground disturbance, existing cast iron piping would be abandoned in place, as opposed to being removed.

Segment 2 includes the replacement and/or installation of equipment including pressure regulators and pressure relief valves at seven existing regulator stations. Work would primarily consist of the replacement and/or installation of above ground regulator equipment, and when necessary, associated steel piping extending a few feet beneath the surface. Ground disturbance related to regulator station work would typically be limited to an area 5 feet wide, 20 feet long, and 5 feet deep. In some cases, the width may need to extend up to 10 feet. Approximately 112 LF of 2-inch steel pipe would be replaced in Segment 2.

Segment 3 includes the removal and replacement of existing above-ground natural gas mains, which span drainage canals (coulees) at eight different locations. This project would include installing crossings underground using directional boring methods to remedy safety concerns related to approximately 650 LF of exposed pipe. Water crossings would typically consist of one excavated pit on each side of the water feature. Each pit would be roughly 6 feet wide, 8 feet long, and 4 feet deep. In some cases where existing mainlines may be deeper, the pits may extend up to 10 feet wide, for safety purposes. Approximately 625 LF of cast iron and 1,110 LF of bare steel, for a total of approximately 1,735 LF of new pipe, would be replaced in Segment 3. Borings would be conducted within the existing ROW.

The staging area for the Undertaking would be a parcel at the northeast corner of the St. Charles Street and N. St. John Street intersection in the City. Project location maps are enclosed in **Attachment A**. Photographs showing the overall character of the project areas are included in **Attachment B**.

Area of Potential Effects (APE)

Pursuant to 36 CFR 800.4(a)(1), the Area of Potential Effects (APE) is defined as the geographic area(s) within which the Undertaking may directly or indirectly affect historic resources. Based on the proposed scope of work, PHMSA has delineated the APE for this Undertaking to encompass the existing ROW and utility easements where the pipeline and service line replacements will take place in Segment 1 and the limits of disturbance for the regulator station and water crossing work in Segments 2 and 3. The APE includes various areas and segments around the City, with the northernmost point of the APE at 30.32826, -92.04479 and the southernmost point at 30.27754, -92.04961. The APE includes the limits of disturbance and any resources that may be particularly susceptible to any potential vibration or physical effects of the Undertaking and extends to the depth of proposed ground disturbance of up to 5 feet. The Undertaking does not have the potential to cause audible effects after the completion of construction, and any above-ground activities will be minor and have limited potential to cause visual effects. The APE is shown on the map in **Attachment A**.

Identification and Evaluation

To identify historic properties in the APE, individuals who meet the Secretary of the Interior's (SOI) Professional Qualification Standards reviewed available information on previously identified historic properties in the APE, including the National Register of Historic Places (NRHP) database and data received from the Louisiana Division of Historic Preservation. Individuals who meet the SOI Professional Qualification Standards also conducted research to determine if there are any previously unidentified properties within the APE that are 45 years of age or older and may be eligible for the NRHP.

Historic Architecture

There is one NRHP-listed above-ground resource within the APE: Our Lady of the Assumption School. A search in the Louisiana Historic Resource Inventory (LHRI) and Louisiana Office of Cultural Development's Cultural Resources database found no other known NRHP-listed or NRHP-eligible above-ground resources within the APE.

Our Lady of the Assumption School, located at 410 Michaud Street, is a historic Black Catholic school complex that was constructed in 1934. It is significant under Criterion A in the areas of education, ethnic heritage, and Black American history as a representation of the Roman Catholic Church's role in the education of the African American community in rural southern Louisiana in the late-nineteenth and early-twentieth centuries. The school's period of significance extends from 1934 to 1951. Project work within and adjacent to the school's historic boundaries is limited to below-ground pipeline and service line replacements within the existing ROW and utility easements; no above-ground activities are anticipated at this location.

Due to the scale and nature of the Undertaking, which is limited to the replacement of pipelines and service lines within existing ROW and utility easements, the replacement and/or installation of equipment at existing regulator stations, and the removal and replacement of existing above-ground natural gas mains spanning drainage canals (coulees), the identification effort for above-ground resources focused on identifying properties that are susceptible to the vibration or physical effects of this work and could experience diminished integrity as a result of the Undertaking. The work will not have any lasting significant visual or audible effects. A review of the APE found no potentially significant above-ground resources that have the potential to be affected by the Undertaking. Although the Undertaking will involve work across drainage canals, research did not uncover any evidence that any of these canals are significant under any of the NRHP criteria. Furthermore, the Undertaking will be limited to the replacement of existing above-ground natural gas mains across these coulees and does not have the potential to diminish integrity. Therefore, there are no additional above-ground historic properties within the APE.

Archaeology

The Louisiana Office of Cultural Development's Cultural Resources Map database was reviewed for the presence of previously recorded archaeological sites and previously conducted archaeological surveys within one quarter of a mile of the APE. The review revealed seven archaeological sites and five archaeological surveys within one quarter of a mile of the APE (Tables 1 and 2). Three archaeological sites and two previous survey areas intersect the APE.

Table 1. Archaeological Sites within One Quarter of a Mile of the APE

Site Number	Type	NRHP	Citation
16LY122	Historic artifact scatter	Not Eligible	Tankersley et al. 2009
16LY123	Historic artifact scatter	Not Eligible	Tankersley et al. 2009
16LY124	Historic artifact scatter	Not Eligible	Tankersley et al. 2009
16LY125	*Historic artifact scatter*	*Not Eligible*	*Tankersley et al. 2009*
16LY126	Historic artifact scatter	Not Eligible	Tankersley et al. 2009
16LY127	*Historic railroad*	*Unknown*	*Tankersley et al. 2009*
16LY135	*Historic artifact scatter*	*Not Eligible*	*Rawls 2011*

**Italicized entries intersect the APE*

All the previously recorded archaeological sites within the search radius are historic-age sites. Site 16LY127, the abandoned South Pacific Railroad grade, was recorded as a "prominent landscape feature" in the City and the grade is intact. However, the grade has been disturbed in areas that intersect with the APE. The NRHP eligibility is listed as unknown. All other sites are not eligible for listing on the NRHP.

Both previous surveys that intersect the APE were contracted by the US Army Corps of Engineers for flood control along Beau Basin Coulee in the City. Additionally, both surveys are responsible for identifying all of the previously recorded archaeological sites in Table 1 indicating a high probability for historic-age archaeological sites within the APE.

Table 2. Archaeological Surveys within One Quarter of a Mile of the APE

Report	**Citation**	**Report Number**
A Phase I Cultural Resource Survey for the Proposed Ambassador Caffery Extension North and Phase II Archaeological Testing at 16LY120, Lafayette Parish, Louisiana	Hahn and Ryan 2010	22-3111
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Phase I Cultural Resources Survey of Two Proposed Holding Ponds and One Layover Area in Carencro, Lafayette Parish, Louisiana	*Rawls 2011*	*22-3791*

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The Louisiana Office of Cultural Development's map database, the Find a Grave online database, and historic topographic maps were also examined to identify the presence of any historic-age cemeteries within the APE. The St. Peter Roman Catholic Church and Cemetery was identified as intersecting with the APE. Other cemeteries were noted but are recorded as being outside of the APE. The St. Peter Roman Catholic Cemetery contains over 4,000 marked burials. The earliest interments date to the mid to late nineteenth century, and it is currently an active cemetery. Portions of the property along South Church Street and St Anne Street overlaps the APE slightly.

An examination of Web Soil Survey data reveals 5 soil types within the APE. These types, along with their drainage class, slope, and APE percentage are detailed in Table 3. Well drained and moderately well drained soils can be indicative of human habitation during both the precontact and historic periods. Approximately 80 percent of the soil types within the APE are well drained soils. Typically slopes greater than 15 percent are not suitable for human occupation, and soil types within the APE vary from 0 to 5 percent slope. The APE is comprised of predominantly well drained soils and entirely of soils with little to no slope, indicating suitable conditions for human habitation in both the pre-contact and historic periods. Additionally, topographic maps reveal that the APE is located on a terrace west of the Vermilion River with several drainages crossing the APE. Proximity to major waterways generally indicates a suitable environment for both precontact and historic human activity.

Table 3. Soil Types within the APE

Soil Type	**Drainage Class**	**Slope**	**Percent of APE**
Coteau silt loam	Somewhat poorly drained	0 to 1 percent	10.5
Frost silt loam	Poorly drained	0 to 1 percent	1.7
Frost silt loam, occasionally flooded	Poorly drained	0 to 1 percent	10.3
Memphis silt loam	Well drained	0 to 1 percent	45.5

Soil Type	Drainage Class	Slope	Percent of APE
Memphis silt loam	Well drained	1 to 5 percent	32.0

Historic topographic maps and historic aerial photographs were examined for archaeological resource sensitivity within the APE. The presence of structures on historic maps and aerial photography may indicate the likelihood of historic period archaeological deposits associated with the occupation of these structures. The APE is comprised of the City and rural development along US 167 (now SR 182) and the associated cross streets. The 1957 topographic quadrangle shows the City much as it appears today. The St. Peter Roman Catholic Church Cemetery is visible as well as a cemetery east of the Our Lady of Assumption School. Project work at both these locations will be limited to the replacement of pipelines and/or service lines within existing ROW or utility easements. The 1970 topographic quadrangle shows a few new residential developments in the City and there are some additional buildings in the areas outside of the City. Aerial imagery from 1958 shows the development of the City and the surrounding area seen in the topographic maps. The rural areas show a regular pattern of agricultural fields within one quarter of a mile of the APE with buildings found along the roadways. The 1952 imagery also shows the cemetery at St. Peter's to extend approximately to St Louis Street. By the early 1980s the cemetery encompassed the area south to St Anne Street. The area around the Our Lady of Assumption School remains mostly unchanged since the 1958 aerial photograph. There has been infill development in the area, but the school area remains intact.

Background research revealed three archaeological sites and two archaeological surveys intersecting the APE. The presence of archaeological sites within the APE indicates a moderate to high potential for archaeological deposits to exist within the APE. Soil types within the APE also indicate a suitable environment for precontact and historic habitation in most portions of the APE. Topographic maps and aerial imagery reveal considerable historical development within the APE.

The proposed project will include replacing over 5 miles of pipeline within the existing ROW, replacing service lines within existing utility easements, as well as upgrades to seven regulator stations and the replacement of eight above-ground gas mains that span drainage canals. Most ground disturbing activities will occur adjacent to the original pipeline that will be abandoned in place once the new pipeline is operational. Per the project description, the proposed Undertaking is expected to occur in the previously disturbed existing ROW and utility easements that contain numerous other underground utilities. Modern aerial imagery indicates the proposed pipeline installation will occur in areas nearest the roadway in moderate to heavily disturbed areas. While only a small portion of the APE has been archaeologically surveyed and there is moderate to high potential for archaeological deposits within the APE, the ground disturbance caused by previous utility installation and road and sidewalk construction has likely compromised the integrity and context of any previously intact archaeological deposits that may exist within the APE.

Although the APE slightly extends into limited portions of the St. Peter Roman Catholic Church Cemetery and the NRHP-listed Our Lady of Assumption School boundaries, work within and immediately adjacent to these boundaries is limited to the replacement of pipelines and service lines within the existing, pre-disturbed ROW and utility easements. Additionally, according to aerial images, burials at the St. Peter Roman Catholic Church Cemetery are separated from the roadway by buildings and a parking lot and are located outside the APE. Furthermore, although the unevaluated site 16LY127 is partially located within the APE, the portions of the site that intersect with the APE have likely been compromised from previous disturbance within the existing ROW. Therefore, due to the limited scope of work, previous disturbance of the APE, and lack of significant archaeological sites in the vicinity of the APE, there is low potential for intact significant archaeological resources within the APE, and an archaeological survey is not recommended at this time. However, all cemeteries are subject to Louisiana state burial laws, including the Unmarked Human Burial Sites Preservation Act (R. S. 8:671-681) and the Louisiana Historic Cemetery Preservation Act (R.S. 25:931-943).

Determination of Effect

Based on the aforementioned identification and evaluation, PHMSA finds that there is one historic property as defined in 36 CFR 800.16(l) within the APE: the NRHP-listed Our Lady of the Assumption School.

Although a small portion of the Our Lady of the Assumption School boundary is located within the APE, the Undertaking is limited to the replacement of existing pipelines and service lines and will not alter any of the characteristics or contributing features of the school that qualify it as eligible for inclusion in the NRHP under Criterion A in a manner that would diminish its integrity. The Undertaking will not result in lasting physical, visual, or audible effects to the school. The Undertaking also does not include land acquisition, nor would it limit access to or change the use of the property. Furthermore, project work will take place within existing, previously disturbed ROW and utility easements, which demonstrate a low probability for intact significant archaeological resources.

Therefore, in accordance with 36 CFR Part 800.5, PHMSA has determined the Undertaking will result in No Adverse Effect to Historic Properties.

Request for Information and Comments

PHMSA requests that you provide any information you have regarding historic properties of religious or cultural significance to your Tribe that may be present in the APE and affected by the Undertaking. If your Tribe is unaware of any historic properties beyond what we have identified to date, PHMSA is notifying your Tribe of our intention to make a No Adverse Effect to Historic Properties finding. Please notify us within 30 days from the date of receipt of this letter if you have any concerns about the project's effects to historic properties. Should you need additional information please contact Amy Hootman, Section 106 specialist, at PHMSASection106@dot.gov or 857-998-9981.

Sincerely,

Matt Fuller
Senior Environmental Protection Specialist

MF/ah

cc: Shelby Hanchera, Environmental Protection Specialist, USDOT Volpe Center
Dana White, PHMSA Grant Coordinator

Enclosures:
Attachment A: Project Location and APE Maps
Attachment B: Project Area Photographs

U.S. Department
of Transportation
**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

January 24, 2024

Melissa Darden
Chairman
Chitimacha Tribe of Louisiana
155 Chitimacha Loop
Charenton, LA 70523

Section 106 Consultation: PHMSA Pipeline Replacement Project in Carencro, Louisiana
Grant Recipient: City of Carencro
Project Location: City of Carencro, Lafayette Parish, Louisiana

Dear Chairman Darden:

The Pipeline and Hazardous Materials Safety Administration (PHMSA) provides funds authorized under the Natural Gas Distribution Infrastructure Safety and Modernization Grant Program. PHMSA proposes to provide funds to the City of Carencro (City) for the replacement of pipelines (Undertaking). PHMSA is initiating consultation for the above referenced Undertaking in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended, and the associated implementing regulations, 36 CFR Part 800 (Section 106). The purpose of this letter is to initiate Section 106 consultation for the Project to determine if there are historic properties of cultural or religious significance to your Tribe that may be affected by the Project, to determine if you want to be a consulting party, and to notify your Tribe of PHMSA's intention to make a finding of No Adverse Effect to Historic Properties. PHMSA is also available for Government-to-Government consultation on this Program.

Project Description/Background

The Undertaking would replace 27,252 linear feet (LF) of 2-inch cast iron pipe and 1,222 LF of 2-inch bare steel pipe, totaling 28,474 LF of pipeline, and connecting service lines, fittings, valves, regulators and pressure relief valves with Polyethylene (PE) pipe. This work would enhance safety, improve operations, and reduce methane emissions of natural gas of the City's natural gas transmission system, including pipeline modernization and interim safety enhancement measures. The existing natural gas distribution system was installed in the 1950s. Due to the geographic distribution and varying scopes of the proposed actions, the Undertaking has been broken into three segments which are grouped by the type of activity: Segment 1 - Cast Iron Pipe Replacement; Segment 2 - Regulator Station Upgrades; and Segment 3 – pipe replacement at Water Crossings.

Segment 1 includes the replacement of approximately 26,627 LF of existing 2-inch diameter cast iron natural gas main pipeline with PE pipe. Any previously unidentified cast iron pipelines, fittings, valves, joints, and/or service lines discovered during project implementation would also be replaced with updated PE materials. Most new main lines would be bored in close proximity to the existing cast iron mains and within the previously disturbed City-owned right-of-way (ROW). In order to reach existing gas meters, new service lines would extend outside of the existing ROW. In these cases, the City would obtain private property access agreements with existing customers to upgrade their service lines. Segment 1

implementation would involve limited and temporary ground disturbing activities including digging of trenches (typically 36-inches by 36- to 48-inches) for the boring of new PE mainline in the existing ROW; digging of trenches (typically 12-inches by 12-inches) to install new PE service lines running from existing customers' gas meters to the new main line; and digging of small pits within existing ROW to expose the new main line where the new service lines would be connected. In order to limit ground disturbance, existing cast iron piping would be abandoned in place, as opposed to being removed.

Segment 2 includes the replacement and/or installation of equipment including pressure regulators and pressure relief valves at seven existing regulator stations. Work would primarily consist of the replacement and/or installation of above ground regulator equipment, and when necessary, associated steel piping extending a few feet beneath the surface. Ground disturbance related to regulator station work would typically be limited to an area 5 feet wide, 20 feet long, and 5 feet deep. In some cases, the width may need to extend up to 10 feet. Approximately 112 LF of 2-inch steel pipe would be replaced in Segment 2.

Segment 3 includes the removal and replacement of existing above-ground natural gas mains, which span drainage canals (coulees) at eight different locations. This project would include installing crossings underground using directional boring methods to remedy safety concerns related to approximately 650 LF of exposed pipe. Water crossings would typically consist of one excavated pit on each side of the water feature. Each pit would be roughly 6 feet wide, 8 feet long, and 4 feet deep. In some cases where existing mainlines may be deeper, the pits may extend up to 10 feet wide, for safety purposes. Approximately 625 LF of cast iron and 1,110 LF of bare steel, for a total of approximately 1,735 LF of new pipe, would be replaced in Segment 3. Borings would be conducted within the existing ROW.

The staging area for the Undertaking would be a parcel at the northeast corner of the St. Charles Street and N. St. John Street intersection in the City. Project location maps are enclosed in **Attachment A**. Photographs showing the overall character of the project areas are included in **Attachment B**.

Area of Potential Effects (APE)

Pursuant to 36 CFR 800.4(a)(1), the Area of Potential Effects (APE) is defined as the geographic area(s) within which the Undertaking may directly or indirectly affect historic resources. Based on the proposed scope of work, PHMSA has delineated the APE for this Undertaking to encompass the existing ROW and utility easements where the pipeline and service line replacements will take place in Segment 1 and the limits of disturbance for the regulator station and water crossing work in Segments 2 and 3. The APE includes various areas and segments around the City, with the northernmost point of the APE at 30.32826, -92.04479 and the southernmost point at 30.27754, -92.04961. The APE includes the limits of disturbance and any resources that may be particularly susceptible to any potential vibration or physical effects of the Undertaking and extends to the depth of proposed ground disturbance of up to 5 feet. The Undertaking does not have the potential to cause audible effects after the completion of construction, and any above-ground activities will be minor and have limited potential to cause visual effects. The APE is shown on the map in **Attachment A**.

Identification and Evaluation

To identify historic properties in the APE, individuals who meet the Secretary of the Interior's (SOI) Professional Qualification Standards reviewed available information on previously identified historic properties in the APE, including the National Register of Historic Places (NRHP) database and data received from the Louisiana Division of Historic Preservation. Individuals who meet the SOI Professional Qualification Standards also conducted research to determine if there are any previously unidentified properties within the APE that are 45 years of age or older and may be eligible for the NRHP.

Historic Architecture

There is one NRHP-listed above-ground resource within the APE: Our Lady of the Assumption School. A search in the Louisiana Historic Resource Inventory (LHRI) and Louisiana Office of Cultural Development's Cultural Resources database found no other known NRHP-listed or NRHP-eligible above-ground resources within the APE.

Our Lady of the Assumption School, located at 410 Michaud Street, is a historic Black Catholic school complex that was constructed in 1934. It is significant under Criterion A in the areas of education, ethnic heritage, and Black American history as a representation of the Roman Catholic Church's role in the education of the African American community in rural southern Louisiana in the late-nineteenth and early-twentieth centuries. The school's period of significance extends from 1934 to 1951. Project work within and adjacent to the school's historic boundaries is limited to below-ground pipeline and service line replacements within the existing ROW and utility easements; no above-ground activities are anticipated at this location.

Due to the scale and nature of the Undertaking, which is limited to the replacement of pipelines and service lines within existing ROW and utility easements, the replacement and/or installation of equipment at existing regulator stations, and the removal and replacement of existing above-ground natural gas mains spanning drainage canals (coulees), the identification effort for above-ground resources focused on identifying properties that are susceptible to the vibration or physical effects of this work and could experience diminished integrity as a result of the Undertaking. The work will not have any lasting significant visual or audible effects. A review of the APE found no potentially significant above-ground resources that have the potential to be affected by the Undertaking. Although the Undertaking will involve work across drainage canals, research did not uncover any evidence that any of these canals are significant under any of the NRHP criteria. Furthermore, the Undertaking will be limited to the replacement of existing above-ground natural gas mains across these coulees and does not have the potential to diminish integrity. Therefore, there are no additional above-ground historic properties within the APE.

Archaeology

The Louisiana Office of Cultural Development's Cultural Resources Map database was reviewed for the presence of previously recorded archaeological sites and previously conducted archaeological surveys within one quarter of a mile of the APE. The review revealed seven archaeological sites and five archaeological surveys within one quarter of a mile of the APE (Tables 1 and 2). Three archaeological sites and two previous survey areas intersect the APE.

Table 1. Archaeological Sites within One Quarter of a Mile of the APE

Site Number	Type	NRHP	Citation
16LY122	Historic artifact scatter	Not Eligible	Tankersley et al. 2009
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16LY126	Historic artifact scatter	Not Eligible	Tankersley et al. 2009
16LY127	*Historic railroad*	*Unknown*	*Tankersley et al. 2009*
16LY135	*Historic artifact scatter*	*Not Eligible*	*Rawls 2011*

**Italicized entries intersect the APE*

All the previously recorded archaeological sites within the search radius are historic-age sites. Site 16LY127, the abandoned South Pacific Railroad grade, was recorded as a "prominent landscape feature" in the City and the grade is intact. However, the grade has been disturbed in areas that intersect with the APE. The NRHP eligibility is listed as unknown. All other sites are not eligible for listing on the NRHP.

Both previous surveys that intersect the APE were contracted by the US Army Corps of Engineers for flood control along Beau Basin Coulee in the City. Additionally, both surveys are responsible for identifying all of the previously recorded archaeological sites in Table 1 indicating a high probability for historic-age archaeological sites within the APE.

Table 2. Archaeological Surveys within One Quarter of a Mile of the APE

Report	**Citation**	**Report Number**
A Phase I Cultural Resource Survey for the Proposed Ambassador Caffery Extension North and Phase II Archaeological Testing at 16LY120, Lafayette Parish, Louisiana	Hahn and Ryan 2010	22-3111
Phase I Cultural Resource Investigation, Carencro Flood Damage Control Cap Project, Lafayette Parish, Louisiana	*Tankersley et al. 2009*	*22-3217*
Phase I Cultural Resource Investigation – Proposed Air Products and Chemicals, Inc., Gulf Coast Connection Project, Calcasieu, Jefferson Davis, Acadia, St. Landry, Lafayette, St. Martin, Iberville, and West Baton Rouge Parishes, Louisiana	Handly et al. 2018	22-3760
Phase I Cultural Resources Survey of Two Proposed Holding Ponds and One Layover Area in Carencro, Lafayette Parish, Louisiana	*Rawls 2011*	*22-3791*

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The Louisiana Office of Cultural Development's map database, the Find a Grave online database, and historic topographic maps were also examined to identify the presence of any historic-age cemeteries within the APE. The St. Peter Roman Catholic Church and Cemetery was identified as intersecting with the APE. Other cemeteries were noted but are recorded as being outside of the APE. The St. Peter Roman Catholic Cemetery contains over 4,000 marked burials. The earliest interments date to the mid to late nineteenth century, and it is currently an active cemetery. Portions of the property along South Church Street and St Anne Street overlaps the APE slightly.

An examination of Web Soil Survey data reveals 5 soil types within the APE. These types, along with their drainage class, slope, and APE percentage are detailed in Table 3. Well drained and moderately well drained soils can be indicative of human habitation during both the precontact and historic periods. Approximately 80 percent of the soil types within the APE are well drained soils. Typically slopes greater than 15 percent are not suitable for human occupation, and soil types within the APE vary from 0 to 5 percent slope. The APE is comprised of predominantly well drained soils and entirely of soils with little to no slope, indicating suitable conditions for human habitation in both the pre-contact and historic periods. Additionally, topographic maps reveal that the APE is located on a terrace west of the Vermilion River with several drainages crossing the APE. Proximity to major waterways generally indicates a suitable environment for both precontact and historic human activity.

Table 3. Soil Types within the APE

Soil Type	**Drainage Class**	**Slope**	**Percent of APE**
Coteau silt loam	Somewhat poorly drained	0 to 1 percent	10.5
Frost silt loam	Poorly drained	0 to 1 percent	1.7
Frost silt loam, occasionally flooded	Poorly drained	0 to 1 percent	10.3
Memphis silt loam	Well drained	0 to 1 percent	45.5

Soil Type	Drainage Class	Slope	Percent of APE
Memphis silt loam	Well drained	1 to 5 percent	32.0

Historic topographic maps and historic aerial photographs were examined for archaeological resource sensitivity within the APE. The presence of structures on historic maps and aerial photography may indicate the likelihood of historic period archaeological deposits associated with the occupation of these structures. The APE is comprised of the City and rural development along US 167 (now SR 182) and the associated cross streets. The 1957 topographic quadrangle shows the City much as it appears today. The St. Peter Roman Catholic Church Cemetery is visible as well as a cemetery east of the Our Lady of Assumption School. Project work at both these locations will be limited to the replacement of pipelines and/or service lines within existing ROW or utility easements. The 1970 topographic quadrangle shows a few new residential developments in the City and there are some additional buildings in the areas outside of the City. Aerial imagery from 1958 shows the development of the City and the surrounding area seen in the topographic maps. The rural areas show a regular pattern of agricultural fields within one quarter of a mile of the APE with buildings found along the roadways. The 1952 imagery also shows the cemetery at St. Peter's to extend approximately to St Louis Street. By the early 1980s the cemetery encompassed the area south to St Anne Street. The area around the Our Lady of Assumption School remains mostly unchanged since the 1958 aerial photograph. There has been infill development in the area, but the school area remains intact.

Background research revealed three archaeological sites and two archaeological surveys intersecting the APE. The presence of archaeological sites within the APE indicates a moderate to high potential for archaeological deposits to exist within the APE. Soil types within the APE also indicate a suitable environment for precontact and historic habitation in most portions of the APE. Topographic maps and aerial imagery reveal considerable historical development within the APE.

The proposed project will include replacing over 5 miles of pipeline within the existing ROW, replacing service lines within existing utility easements, as well as upgrades to seven regulator stations and the replacement of eight above-ground gas mains that span drainage canals. Most ground disturbing activities will occur adjacent to the original pipeline that will be abandoned in place once the new pipeline is operational. Per the project description, the proposed Undertaking is expected to occur in the previously disturbed existing ROW and utility easements that contain numerous other underground utilities. Modern aerial imagery indicates the proposed pipeline installation will occur in areas nearest the roadway in moderate to heavily disturbed areas. While only a small portion of the APE has been archaeologically surveyed and there is moderate to high potential for archaeological deposits within the APE, the ground disturbance caused by previous utility installation and road and sidewalk construction has likely compromised the integrity and context of any previously intact archaeological deposits that may exist within the APE.

Although the APE slightly extends into limited portions of the St. Peter Roman Catholic Church Cemetery and the NRHP-listed Our Lady of Assumption School boundaries, work within and immediately adjacent to these boundaries is limited to the replacement of pipelines and service lines within the existing, pre-disturbed ROW and utility easements. Additionally, according to aerial images, burials at the St. Peter Roman Catholic Church Cemetery are separated from the roadway by buildings and a parking lot and are located outside the APE. Furthermore, although the unevaluated site 16LY127 is partially located within the APE, the portions of the site that intersect with the APE have likely been compromised from previous disturbance within the existing ROW. Therefore, due to the limited scope of work, previous disturbance of the APE, and lack of significant archaeological sites in the vicinity of the APE, there is low potential for intact significant archaeological resources within the APE, and an archaeological survey is not recommended at this time. However, all cemeteries are subject to Louisiana state burial laws, including the Unmarked Human Burial Sites Preservation Act (R. S. 8:671-681) and the Louisiana Historic Cemetery Preservation Act (R.S. 25:931-943).

Determination of Effect

Based on the aforementioned identification and evaluation, PHMSA finds that there is one historic property as defined in 36 CFR 800.16(l) within the APE: the NRHP-listed Our Lady of the Assumption School.

Although a small portion of the Our Lady of the Assumption School boundary is located within the APE, the Undertaking is limited to the replacement of existing pipelines and service lines and will not alter any of the characteristics or contributing features of the school that qualify it as eligible for inclusion in the NRHP under Criterion A in a manner that would diminish its integrity. The Undertaking will not result in lasting physical, visual, or audible effects to the school. The Undertaking also does not include land acquisition, nor would it limit access to or change the use of the property. Furthermore, project work will take place within existing, previously disturbed ROW and utility easements, which demonstrate a low probability for intact significant archaeological resources.

Therefore, in accordance with 36 CFR Part 800.5, PHMSA has determined the Undertaking will result in No Adverse Effect to Historic Properties.

Request for Information and Comments

PHMSA requests that you provide any information you have regarding historic properties of religious or cultural significance to your Tribe that may be present in the APE and affected by the Undertaking. If your Tribe is unaware of any historic properties beyond what we have identified to date, PHMSA is notifying your Tribe of our intention to make a No Adverse Effect to Historic Properties finding. Please notify us within 30 days from the date of receipt of this letter if you have any concerns about the project's effects to historic properties. Should you need additional information please contact Amy Hootman, Section 106 specialist, at PHMSASection106@dot.gov or 857-998-9981.

Sincerely,

Matt Fuller
Senior Environmental Protection Specialist

MF/ah

cc: Shelby Hanchera, Environmental Protection Specialist, USDOT Volpe Center
Dana White, PHMSA Grant Coordinator
Kimberly Walden, Tribal Historic Preservation Officer

Enclosures:
Attachment A: Project Location and APE Maps
Attachment B: Project Area Photographs

U.S. Department
of Transportation
**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

January 24, 2024

Jonathan Cernek
Chairman
Coushatta Tribe of Louisiana
1940 C.C. Bel Road
Elton, LA 70532

Section 106 Consultation: PHMSA Pipeline Replacement Project in Carencro, Louisiana
Grant Recipient: City of Carencro
Project Location: City of Carencro, Lafayette Parish, Louisiana

Dear Chairman Cernek:

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**Italicized entries intersect the APE*

All the previously recorded archaeological sites within the search radius are historic-age sites. Site 16LY127, the abandoned South Pacific Railroad grade, was recorded as a "prominent landscape feature" in the City and the grade is intact. However, the grade has been disturbed in areas that intersect with the APE. The NRHP eligibility is listed as unknown. All other sites are not eligible for listing on the NRHP.

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Table 3. Soil Types within the APE

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Background research revealed three archaeological sites and two archaeological surveys intersecting the APE. The presence of archaeological sites within the APE indicates a moderate to high potential for archaeological deposits to exist within the APE. Soil types within the APE also indicate a suitable environment for precontact and historic habitation in most portions of the APE. Topographic maps and aerial imagery reveal considerable historical development within the APE.

The proposed project will include replacing over 5 miles of pipeline within the existing ROW, replacing service lines within existing utility easements, as well as upgrades to seven regulator stations and the replacement of eight above-ground gas mains that span drainage canals. Most ground disturbing activities will occur adjacent to the original pipeline that will be abandoned in place once the new pipeline is operational. Per the project description, the proposed Undertaking is expected to occur in the previously disturbed existing ROW and utility easements that contain numerous other underground utilities. Modern aerial imagery indicates the proposed pipeline installation will occur in areas nearest the roadway in moderate to heavily disturbed areas. While only a small portion of the APE has been archaeologically surveyed and there is moderate to high potential for archaeological deposits within the APE, the ground disturbance caused by previous utility installation and road and sidewalk construction has likely compromised the integrity and context of any previously intact archaeological deposits that may exist within the APE.

Although the APE slightly extends into limited portions of the St. Peter Roman Catholic Church Cemetery and the NRHP-listed Our Lady of Assumption School boundaries, work within and immediately adjacent to these boundaries is limited to the replacement of pipelines and service lines within the existing, pre-disturbed ROW and utility easements. Additionally, according to aerial images, burials at the St. Peter Roman Catholic Church Cemetery are separated from the roadway by buildings and a parking lot and are located outside the APE. Furthermore, although the unevaluated site 16LY127 is partially located within the APE, the portions of the site that intersect with the APE have likely been compromised from previous disturbance within the existing ROW. Therefore, due to the limited scope of work, previous disturbance of the APE, and lack of significant archaeological sites in the vicinity of the APE, there is low potential for intact significant archaeological resources within the APE, and an archaeological survey is not recommended at this time. However, all cemeteries are subject to Louisiana state burial laws, including the Unmarked Human Burial Sites Preservation Act (R. S. 8:671-681) and the Louisiana Historic Cemetery Preservation Act (R.S. 25:931-943).

Determination of Effect

Based on the aforementioned identification and evaluation, PHMSA finds that there is one historic property as defined in 36 CFR 800.16(l) within the APE: the NRHP-listed Our Lady of the Assumption School.

Although a small portion of the Our Lady of the Assumption School boundary is located within the APE, the Undertaking is limited to the replacement of existing pipelines and service lines and will not alter any of the characteristics or contributing features of the school that qualify it as eligible for inclusion in the NRHP under Criterion A in a manner that would diminish its integrity. The Undertaking will not result in lasting physical, visual, or audible effects to the school. The Undertaking also does not include land acquisition, nor would it limit access to or change the use of the property. Furthermore, project work will take place within existing, previously disturbed ROW and utility easements, which demonstrate a low probability for intact significant archaeological resources.

Therefore, in accordance with 36 CFR Part 800.5, PHMSA has determined the Undertaking will result in No Adverse Effect to Historic Properties.

Request for Information and Comments

PHMSA requests that you provide any information you have regarding historic properties of religious or cultural significance to your Tribe that may be present in the APE and affected by the Undertaking. If your Tribe is unaware of any historic properties beyond what we have identified to date, PHMSA is notifying your Tribe of our intention to make a No Adverse Effect to Historic Properties finding. Please notify us within 30 days from the date of receipt of this letter if you have any concerns about the project's effects to historic properties. Should you need additional information please contact Amy Hootman, Section 106 specialist, at PHMSASection106@dot.gov or 857-998-9981.

Sincerely,

Matt Fuller
Senior Environmental Protection Specialist

MF/ah

cc: Shelby Hanchera, Environmental Protection Specialist, USDOT Volpe Center
Dana White, PHMSA Grant Coordinator
Kristian Poncho, Tribal Historic Preservation Officer

Enclosures:
Attachment A: Project Location and APE Maps
Attachment B: Project Area Photographs

U.S. Department
of Transportation
**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

January 24, 2024

Libby Rogers
Tribal Chief
Jena Band of Choctaw Indians
1052 Chanaha Hina Street
Trout, LA 71371

Section 106 Consultation: PHMSA Pipeline Replacement Project in Carencro, Louisiana
Grant Recipient: City of Carencro
Project Location: City of Carencro, Lafayette Parish, Louisiana

Dear Tribal Chief Rogers:

The Pipeline and Hazardous Materials Safety Administration (PHMSA) provides funds authorized under the Natural Gas Distribution Infrastructure Safety and Modernization Grant Program. PHMSA proposes to provide funds to the City of Carencro (City) for the replacement of pipelines (Undertaking). PHMSA is initiating consultation for the above referenced Undertaking in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended, and the associated implementing regulations, 36 CFR Part 800 (Section 106). The purpose of this letter is to initiate Section 106 consultation for the Project to determine if there are historic properties of cultural or religious significance to your Tribe that may be affected by the Project, to determine if you want to be a consulting party, and to notify your Tribe of PHMSA's intention to make a finding of No Adverse Effect to Historic Properties. PHMSA is also available for Government-to-Government consultation on this Program.

Project Description/Background

The Undertaking would replace 27,252 linear feet (LF) of 2-inch cast iron pipe and 1,222 LF of 2-inch bare steel pipe, totaling 28,474 LF of pipeline, and connecting service lines, fittings, valves, regulators and pressure relief valves with Polyethylene (PE) pipe. This work would enhance safety, improve operations, and reduce methane emissions of natural gas of the City's natural gas transmission system, including pipeline modernization and interim safety enhancement measures. The existing natural gas distribution system was installed in the 1950s. Due to the geographic distribution and varying scopes of the proposed actions, the Undertaking has been broken into three segments which are grouped by the type of activity: Segment 1 - Cast Iron Pipe Replacement; Segment 2 - Regulator Station Upgrades; and Segment 3 – pipe replacement at Water Crossings.

Segment 1 includes the replacement of approximately 26,627 LF of existing 2-inch diameter cast iron natural gas main pipeline with PE pipe. Any previously unidentified cast iron pipelines, fittings, valves, joints, and/or service lines discovered during project implementation would also be replaced with updated PE materials. Most new main lines would be bored in close proximity to the existing cast iron mains and within the previously disturbed City-owned right-of-way (ROW). In order to reach existing gas meters, new service lines would extend outside of the existing ROW. In these cases, the City would obtain private property access agreements with existing customers to upgrade their service lines. Segment 1

implementation would involve limited and temporary ground disturbing activities including digging of trenches (typically 36-inches by 36- to 48-inches) for the boring of new PE mainline in the existing ROW; digging of trenches (typically 12-inches by 12-inches) to install new PE service lines running from existing customers' gas meters to the new main line; and digging of small pits within existing ROW to expose the new main line where the new service lines would be connected. In order to limit ground disturbance, existing cast iron piping would be abandoned in place, as opposed to being removed.

Segment 2 includes the replacement and/or installation of equipment including pressure regulators and pressure relief valves at seven existing regulator stations. Work would primarily consist of the replacement and/or installation of above ground regulator equipment, and when necessary, associated steel piping extending a few feet beneath the surface. Ground disturbance related to regulator station work would typically be limited to an area 5 feet wide, 20 feet long, and 5 feet deep. In some cases, the width may need to extend up to 10 feet. Approximately 112 LF of 2-inch steel pipe would be replaced in Segment 2.

Segment 3 includes the removal and replacement of existing above-ground natural gas mains, which span drainage canals (coulees) at eight different locations. This project would include installing crossings underground using directional boring methods to remedy safety concerns related to approximately 650 LF of exposed pipe. Water crossings would typically consist of one excavated pit on each side of the water feature. Each pit would be roughly 6 feet wide, 8 feet long, and 4 feet deep. In some cases where existing mainlines may be deeper, the pits may extend up to 10 feet wide, for safety purposes. Approximately 625 LF of cast iron and 1,110 LF of bare steel, for a total of approximately 1,735 LF of new pipe, would be replaced in Segment 3. Borings would be conducted within the existing ROW.

The staging area for the Undertaking would be a parcel at the northeast corner of the St. Charles Street and N. St. John Street intersection in the City. Project location maps are enclosed in **Attachment A**. Photographs showing the overall character of the project areas are included in **Attachment B**.

Area of Potential Effects (APE)

Pursuant to 36 CFR 800.4(a)(1), the Area of Potential Effects (APE) is defined as the geographic area(s) within which the Undertaking may directly or indirectly affect historic resources. Based on the proposed scope of work, PHMSA has delineated the APE for this Undertaking to encompass the existing ROW and utility easements where the pipeline and service line replacements will take place in Segment 1 and the limits of disturbance for the regulator station and water crossing work in Segments 2 and 3. The APE includes various areas and segments around the City, with the northernmost point of the APE at 30.32826, -92.04479 and the southernmost point at 30.27754, -92.04961. The APE includes the limits of disturbance and any resources that may be particularly susceptible to any potential vibration or physical effects of the Undertaking and extends to the depth of proposed ground disturbance of up to 5 feet. The Undertaking does not have the potential to cause audible effects after the completion of construction, and any above-ground activities will be minor and have limited potential to cause visual effects. The APE is shown on the map in **Attachment A**.

Identification and Evaluation

To identify historic properties in the APE, individuals who meet the Secretary of the Interior's (SOI) Professional Qualification Standards reviewed available information on previously identified historic properties in the APE, including the National Register of Historic Places (NRHP) database and data received from the Louisiana Division of Historic Preservation. Individuals who meet the SOI Professional Qualification Standards also conducted research to determine if there are any previously unidentified properties within the APE that are 45 years of age or older and may be eligible for the NRHP.

Historic Architecture

There is one NRHP-listed above-ground resource within the APE: Our Lady of the Assumption School. A search in the Louisiana Historic Resource Inventory (LHRI) and Louisiana Office of Cultural Development's Cultural Resources database found no other known NRHP-listed or NRHP-eligible above-ground resources within the APE.

Our Lady of the Assumption School, located at 410 Michaud Street, is a historic Black Catholic school complex that was constructed in 1934. It is significant under Criterion A in the areas of education, ethnic heritage, and Black American history as a representation of the Roman Catholic Church's role in the education of the African American community in rural southern Louisiana in the late-nineteenth and early-twentieth centuries. The school's period of significance extends from 1934 to 1951. Project work within and adjacent to the school's historic boundaries is limited to below-ground pipeline and service line replacements within the existing ROW and utility easements; no above-ground activities are anticipated at this location.

Due to the scale and nature of the Undertaking, which is limited to the replacement of pipelines and service lines within existing ROW and utility easements, the replacement and/or installation of equipment at existing regulator stations, and the removal and replacement of existing above-ground natural gas mains spanning drainage canals (coulees), the identification effort for above-ground resources focused on identifying properties that are susceptible to the vibration or physical effects of this work and could experience diminished integrity as a result of the Undertaking. The work will not have any lasting significant visual or audible effects. A review of the APE found no potentially significant above-ground resources that have the potential to be affected by the Undertaking. Although the Undertaking will involve work across drainage canals, research did not uncover any evidence that any of these canals are significant under any of the NRHP criteria. Furthermore, the Undertaking will be limited to the replacement of existing above-ground natural gas mains across these coulees and does not have the potential to diminish integrity. Therefore, there are no additional above-ground historic properties within the APE.

Archaeology

The Louisiana Office of Cultural Development's Cultural Resources Map database was reviewed for the presence of previously recorded archaeological sites and previously conducted archaeological surveys within one quarter of a mile of the APE. The review revealed seven archaeological sites and five archaeological surveys within one quarter of a mile of the APE (Tables 1 and 2). Three archaeological sites and two previous survey areas intersect the APE.

Table 1. Archaeological Sites within One Quarter of a Mile of the APE

Site Number	Type	NRHP	Citation
16LY122	Historic artifact scatter	Not Eligible	Tankersley et al. 2009
16LY123	Historic artifact scatter	Not Eligible	Tankersley et al. 2009
16LY124	Historic artifact scatter	Not Eligible	Tankersley et al. 2009
16LY125	*Historic artifact scatter*	*Not Eligible*	*Tankersley et al. 2009*
16LY126	Historic artifact scatter	Not Eligible	Tankersley et al. 2009
16LY127	*Historic railroad*	*Unknown*	*Tankersley et al. 2009*
16LY135	*Historic artifact scatter*	*Not Eligible*	*Rawls 2011*

**Italicized entries intersect the APE*

All the previously recorded archaeological sites within the search radius are historic-age sites. Site 16LY127, the abandoned South Pacific Railroad grade, was recorded as a "prominent landscape feature" in the City and the grade is intact. However, the grade has been disturbed in areas that intersect with the APE. The NRHP eligibility is listed as unknown. All other sites are not eligible for listing on the NRHP.

Both previous surveys that intersect the APE were contracted by the US Army Corps of Engineers for flood control along Beau Basin Coulee in the City. Additionally, both surveys are responsible for identifying all of the previously recorded archaeological sites in Table 1 indicating a high probability for historic-age archaeological sites within the APE.

Table 2. Archaeological Surveys within One Quarter of a Mile of the APE

Report	**Citation**	**Report Number**
A Phase I Cultural Resource Survey for the Proposed Ambassador Caffery Extension North and Phase II Archaeological Testing at 16LY120, Lafayette Parish, Louisiana	Hahn and Ryan 2010	22-3111
Phase I Cultural Resource Investigation, Carencro Flood Damage Control Cap Project, Lafayette Parish, Louisiana	*Tankersley et al. 2009*	*22-3217*
Phase I Cultural Resource Investigation – Proposed Air Products and Chemicals, Inc., Gulf Coast Connection Project, Calcasieu, Jefferson Davis, Acadia, St. Landry, Lafayette, St. Martin, Iberville, and West Baton Rouge Parishes, Louisiana	Handly et al. 2018	22-3760
Phase I Cultural Resources Survey of Two Proposed Holding Ponds and One Layover Area in Carencro, Lafayette Parish, Louisiana	*Rawls 2011*	*22-3791*

**Italicized entries intersect the APE*

The Louisiana Office of Cultural Development's map database, the Find a Grave online database, and historic topographic maps were also examined to identify the presence of any historic-age cemeteries within the APE. The St. Peter Roman Catholic Church and Cemetery was identified as intersecting with the APE. Other cemeteries were noted but are recorded as being outside of the APE. The St. Peter Roman Catholic Cemetery contains over 4,000 marked burials. The earliest interments date to the mid to late nineteenth century, and it is currently an active cemetery. Portions of the property along South Church Street and St Anne Street overlaps the APE slightly.

An examination of Web Soil Survey data reveals 5 soil types within the APE. These types, along with their drainage class, slope, and APE percentage are detailed in Table 3. Well drained and moderately well drained soils can be indicative of human habitation during both the precontact and historic periods. Approximately 80 percent of the soil types within the APE are well drained soils. Typically slopes greater than 15 percent are not suitable for human occupation, and soil types within the APE vary from 0 to 5 percent slope. The APE is comprised of predominantly well drained soils and entirely of soils with little to no slope, indicating suitable conditions for human habitation in both the pre-contact and historic periods. Additionally, topographic maps reveal that the APE is located on a terrace west of the Vermilion River with several drainages crossing the APE. Proximity to major waterways generally indicates a suitable environment for both precontact and historic human activity.

Table 3. Soil Types within the APE

Soil Type	**Drainage Class**	**Slope**	**Percent of APE**
Coteau silt loam	Somewhat poorly drained	0 to 1 percent	10.5
Frost silt loam	Poorly drained	0 to 1 percent	1.7
Frost silt loam, occasionally flooded	Poorly drained	0 to 1 percent	10.3
Memphis silt loam	Well drained	0 to 1 percent	45.5

Soil Type	Drainage Class	Slope	Percent of APE
Memphis silt loam	Well drained	1 to 5 percent	32.0

Historic topographic maps and historic aerial photographs were examined for archaeological resource sensitivity within the APE. The presence of structures on historic maps and aerial photography may indicate the likelihood of historic period archaeological deposits associated with the occupation of these structures. The APE is comprised of the City and rural development along US 167 (now SR 182) and the associated cross streets. The 1957 topographic quadrangle shows the City much as it appears today. The St. Peter Roman Catholic Church Cemetery is visible as well as a cemetery east of the Our Lady of Assumption School. Project work at both these locations will be limited to the replacement of pipelines and/or service lines within existing ROW or utility easements. The 1970 topographic quadrangle shows a few new residential developments in the City and there are some additional buildings in the areas outside of the City. Aerial imagery from 1958 shows the development of the City and the surrounding area seen in the topographic maps. The rural areas show a regular pattern of agricultural fields within one quarter of a mile of the APE with buildings found along the roadways. The 1952 imagery also shows the cemetery at St. Peter's to extend approximately to St Louis Street. By the early 1980s the cemetery encompassed the area south to St Anne Street. The area around the Our Lady of Assumption School remains mostly unchanged since the 1958 aerial photograph. There has been infill development in the area, but the school area remains intact.

Background research revealed three archaeological sites and two archaeological surveys intersecting the APE. The presence of archaeological sites within the APE indicates a moderate to high potential for archaeological deposits to exist within the APE. Soil types within the APE also indicate a suitable environment for precontact and historic habitation in most portions of the APE. Topographic maps and aerial imagery reveal considerable historical development within the APE.

The proposed project will include replacing over 5 miles of pipeline within the existing ROW, replacing service lines within existing utility easements, as well as upgrades to seven regulator stations and the replacement of eight above-ground gas mains that span drainage canals. Most ground disturbing activities will occur adjacent to the original pipeline that will be abandoned in place once the new pipeline is operational. Per the project description, the proposed Undertaking is expected to occur in the previously disturbed existing ROW and utility easements that contain numerous other underground utilities. Modern aerial imagery indicates the proposed pipeline installation will occur in areas nearest the roadway in moderate to heavily disturbed areas. While only a small portion of the APE has been archaeologically surveyed and there is moderate to high potential for archaeological deposits within the APE, the ground disturbance caused by previous utility installation and road and sidewalk construction has likely compromised the integrity and context of any previously intact archaeological deposits that may exist within the APE.

Although the APE slightly extends into limited portions of the St. Peter Roman Catholic Church Cemetery and the NRHP-listed Our Lady of Assumption School boundaries, work within and immediately adjacent to these boundaries is limited to the replacement of pipelines and service lines within the existing, pre-disturbed ROW and utility easements. Additionally, according to aerial images, burials at the St. Peter Roman Catholic Church Cemetery are separated from the roadway by buildings and a parking lot and are located outside the APE. Furthermore, although the unevaluated site 16LY127 is partially located within the APE, the portions of the site that intersect with the APE have likely been compromised from previous disturbance within the existing ROW. Therefore, due to the limited scope of work, previous disturbance of the APE, and lack of significant archaeological sites in the vicinity of the APE, there is low potential for intact significant archaeological resources within the APE, and an archaeological survey is not recommended at this time. However, all cemeteries are subject to Louisiana state burial laws, including the Unmarked Human Burial Sites Preservation Act (R. S. 8:671-681) and the Louisiana Historic Cemetery Preservation Act (R.S. 25:931-943).

Determination of Effect

Based on the aforementioned identification and evaluation, PHMSA finds that there is one historic property as defined in 36 CFR 800.16(l) within the APE: the NRHP-listed Our Lady of the Assumption School.

Although a small portion of the Our Lady of the Assumption School boundary is located within the APE, the Undertaking is limited to the replacement of existing pipelines and service lines and will not alter any of the characteristics or contributing features of the school that qualify it as eligible for inclusion in the NRHP under Criterion A in a manner that would diminish its integrity. The Undertaking will not result in lasting physical, visual, or audible effects to the school. The Undertaking also does not include land acquisition, nor would it limit access to or change the use of the property. Furthermore, project work will take place within existing, previously disturbed ROW and utility easements, which demonstrate a low probability for intact significant archaeological resources.

Therefore, in accordance with 36 CFR Part 800.5, PHMSA has determined the Undertaking will result in No Adverse Effect to Historic Properties.

Request for Information and Comments

PHMSA requests that you provide any information you have regarding historic properties of religious or cultural significance to your Tribe that may be present in the APE and affected by the Undertaking. If your Tribe is unaware of any historic properties beyond what we have identified to date, PHMSA is notifying your Tribe of our intention to make a No Adverse Effect to Historic Properties finding. Please notify us within 30 days from the date of receipt of this letter if you have any concerns about the project's effects to historic properties. Should you need additional information please contact Amy Hootman, Section 106 specialist, at PHMSASection106@dot.gov or 857-998-9981.

Sincerely,

Matt Fuller
Senior Environmental Protection Specialist

MF/ah

cc: Shelby Hanchera, Environmental Protection Specialist, USDOT Volpe Center
Dana White, PHMSA Grant Coordinator
Johnna Flynn, Acting Tribal Historic Preservation Officer

Enclosures:
Attachment A: Project Location and APE Maps
Attachment B: Project Area Photographs

U.S. Department
of Transportation
**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

January 24, 2024

Cyrus Ben
Chief
Mississippi Band of Choctaw Indians
101 Industrial Road
Choctaw, MS 39350

Section 106 Consultation: PHMSA Pipeline Replacement Project in Carencro, Louisiana
Grant Recipient: City of Carencro
Project Location: City of Carencro, Lafayette Parish, Louisiana

Dear Chief Ben:

The Pipeline and Hazardous Materials Safety Administration (PHMSA) provides funds authorized under the Natural Gas Distribution Infrastructure Safety and Modernization Grant Program. PHMSA proposes to provide funds to the City of Carencro (City) for the replacement of pipelines (Undertaking). PHMSA is initiating consultation for the above referenced Undertaking in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended, and the associated implementing regulations, 36 CFR Part 800 (Section 106). The purpose of this letter is to initiate Section 106 consultation for the Project to determine if there are historic properties of cultural or religious significance to your Tribe that may be affected by the Project, to determine if you want to be a consulting party, and to notify your Tribe of PHMSA's intention to make a finding of No Adverse Effect to Historic Properties. PHMSA is also available for Government-to-Government consultation on this Program.

Project Description/Background

The Undertaking would replace 27,252 linear feet (LF) of 2-inch cast iron pipe and 1,222 LF of 2-inch bare steel pipe, totaling 28,474 LF of pipeline, and connecting service lines, fittings, valves, regulators and pressure relief valves with Polyethylene (PE) pipe. This work would enhance safety, improve operations, and reduce methane emissions of natural gas of the City's natural gas transmission system, including pipeline modernization and interim safety enhancement measures. The existing natural gas distribution system was installed in the 1950s. Due to the geographic distribution and varying scopes of the proposed actions, the Undertaking has been broken into three segments which are grouped by the type of activity: Segment 1 - Cast Iron Pipe Replacement; Segment 2 - Regulator Station Upgrades; and Segment 3 – pipe replacement at Water Crossings.

Segment 1 includes the replacement of approximately 26,627 LF of existing 2-inch diameter cast iron natural gas main pipeline with PE pipe. Any previously unidentified cast iron pipelines, fittings, valves, joints, and/or service lines discovered during project implementation would also be replaced with updated PE materials. Most new main lines would be bored in close proximity to the existing cast iron mains and within the previously disturbed City-owned right-of-way (ROW). In order to reach existing gas meters, new service lines would extend outside of the existing ROW. In these cases, the City would obtain private property access agreements with existing customers to upgrade their service lines. Segment 1

implementation would involve limited and temporary ground disturbing activities including digging of trenches (typically 36-inches by 36- to 48-inches) for the boring of new PE mainline in the existing ROW; digging of trenches (typically 12-inches by 12-inches) to install new PE service lines running from existing customers' gas meters to the new main line; and digging of small pits within existing ROW to expose the new main line where the new service lines would be connected. In order to limit ground disturbance, existing cast iron piping would be abandoned in place, as opposed to being removed.

Segment 2 includes the replacement and/or installation of equipment including pressure regulators and pressure relief valves at seven existing regulator stations. Work would primarily consist of the replacement and/or installation of above ground regulator equipment, and when necessary, associated steel piping extending a few feet beneath the surface. Ground disturbance related to regulator station work would typically be limited to an area 5 feet wide, 20 feet long, and 5 feet deep. In some cases, the width may need to extend up to 10 feet. Approximately 112 LF of 2-inch steel pipe would be replaced in Segment 2.

Segment 3 includes the removal and replacement of existing above-ground natural gas mains, which span drainage canals (coulees) at eight different locations. This project would include installing crossings underground using directional boring methods to remedy safety concerns related to approximately 650 LF of exposed pipe. Water crossings would typically consist of one excavated pit on each side of the water feature. Each pit would be roughly 6 feet wide, 8 feet long, and 4 feet deep. In some cases where existing mainlines may be deeper, the pits may extend up to 10 feet wide, for safety purposes. Approximately 625 LF of cast iron and 1,110 LF of bare steel, for a total of approximately 1,735 LF of new pipe, would be replaced in Segment 3. Borings would be conducted within the existing ROW.

The staging area for the Undertaking would be a parcel at the northeast corner of the St. Charles Street and N. St. John Street intersection in the City. Project location maps are enclosed in **Attachment A**. Photographs showing the overall character of the project areas are included in **Attachment B**.

Area of Potential Effects (APE)

Pursuant to 36 CFR 800.4(a)(1), the Area of Potential Effects (APE) is defined as the geographic area(s) within which the Undertaking may directly or indirectly affect historic resources. Based on the proposed scope of work, PHMSA has delineated the APE for this Undertaking to encompass the existing ROW and utility easements where the pipeline and service line replacements will take place in Segment 1 and the limits of disturbance for the regulator station and water crossing work in Segments 2 and 3. The APE includes various areas and segments around the City, with the northernmost point of the APE at 30.32826, -92.04479 and the southernmost point at 30.27754, -92.04961. The APE includes the limits of disturbance and any resources that may be particularly susceptible to any potential vibration or physical effects of the Undertaking and extends to the depth of proposed ground disturbance of up to 5 feet. The Undertaking does not have the potential to cause audible effects after the completion of construction, and any above-ground activities will be minor and have limited potential to cause visual effects. The APE is shown on the map in **Attachment A**.

Identification and Evaluation

To identify historic properties in the APE, individuals who meet the Secretary of the Interior's (SOI) Professional Qualification Standards reviewed available information on previously identified historic properties in the APE, including the National Register of Historic Places (NRHP) database and data received from the Louisiana Division of Historic Preservation. Individuals who meet the SOI Professional Qualification Standards also conducted research to determine if there are any previously unidentified properties within the APE that are 45 years of age or older and may be eligible for the NRHP.

Historic Architecture

There is one NRHP-listed above-ground resource within the APE: Our Lady of the Assumption School. A search in the Louisiana Historic Resource Inventory (LHRI) and Louisiana Office of Cultural Development's Cultural Resources database found no other known NRHP-listed or NRHP-eligible above-ground resources within the APE.

Our Lady of the Assumption School, located at 410 Michaud Street, is a historic Black Catholic school complex that was constructed in 1934. It is significant under Criterion A in the areas of education, ethnic heritage, and Black American history as a representation of the Roman Catholic Church's role in the education of the African American community in rural southern Louisiana in the late-nineteenth and early-twentieth centuries. The school's period of significance extends from 1934 to 1951. Project work within and adjacent to the school's historic boundaries is limited to below-ground pipeline and service line replacements within the existing ROW and utility easements; no above-ground activities are anticipated at this location.

Due to the scale and nature of the Undertaking, which is limited to the replacement of pipelines and service lines within existing ROW and utility easements, the replacement and/or installation of equipment at existing regulator stations, and the removal and replacement of existing above-ground natural gas mains spanning drainage canals (coulees), the identification effort for above-ground resources focused on identifying properties that are susceptible to the vibration or physical effects of this work and could experience diminished integrity as a result of the Undertaking. The work will not have any lasting significant visual or audible effects. A review of the APE found no potentially significant above-ground resources that have the potential to be affected by the Undertaking. Although the Undertaking will involve work across drainage canals, research did not uncover any evidence that any of these canals are significant under any of the NRHP criteria. Furthermore, the Undertaking will be limited to the replacement of existing above-ground natural gas mains across these coulees and does not have the potential to diminish integrity. Therefore, there are no additional above-ground historic properties within the APE.

Archaeology

The Louisiana Office of Cultural Development's Cultural Resources Map database was reviewed for the presence of previously recorded archaeological sites and previously conducted archaeological surveys within one quarter of a mile of the APE. The review revealed seven archaeological sites and five archaeological surveys within one quarter of a mile of the APE (Tables 1 and 2). Three archaeological sites and two previous survey areas intersect the APE.

Table 1. Archaeological Sites within One Quarter of a Mile of the APE

Site Number	Type	NRHP	Citation
16LY122	Historic artifact scatter	Not Eligible	Tankersley et al. 2009
16LY123	Historic artifact scatter	Not Eligible	Tankersley et al. 2009
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16LY125	*Historic artifact scatter*	*Not Eligible*	*Tankersley et al. 2009*
16LY126	Historic artifact scatter	Not Eligible	Tankersley et al. 2009
16LY127	*Historic railroad*	*Unknown*	*Tankersley et al. 2009*
16LY135	*Historic artifact scatter*	*Not Eligible*	*Rawls 2011*

**Italicized entries intersect the APE*

All the previously recorded archaeological sites within the search radius are historic-age sites. Site 16LY127, the abandoned South Pacific Railroad grade, was recorded as a "prominent landscape feature" in the City and the grade is intact. However, the grade has been disturbed in areas that intersect with the APE. The NRHP eligibility is listed as unknown. All other sites are not eligible for listing on the NRHP.

Both previous surveys that intersect the APE were contracted by the US Army Corps of Engineers for flood control along Beau Basin Coulee in the City. Additionally, both surveys are responsible for identifying all of the previously recorded archaeological sites in Table 1 indicating a high probability for historic-age archaeological sites within the APE.

Table 2. Archaeological Surveys within One Quarter of a Mile of the APE

Report	**Citation**	**Report Number**
A Phase I Cultural Resource Survey for the Proposed Ambassador Caffery Extension North and Phase II Archaeological Testing at 16LY120, Lafayette Parish, Louisiana	Hahn and Ryan 2010	22-3111
Phase I Cultural Resource Investigation, Carencro Flood Damage Control Cap Project, Lafayette Parish, Louisiana	*Tankersley et al. 2009*	*22-3217*
Phase I Cultural Resource Investigation – Proposed Air Products and Chemicals, Inc., Gulf Coast Connection Project, Calcasieu, Jefferson Davis, Acadia, St. Landry, Lafayette, St. Martin, Iberville, and West Baton Rouge Parishes, Louisiana	Handly et al. 2018	22-3760
Phase I Cultural Resources Survey of Two Proposed Holding Ponds and One Layover Area in Carencro, Lafayette Parish, Louisiana	*Rawls 2011*	*22-3791*

**Italicized entries intersect the APE*

The Louisiana Office of Cultural Development's map database, the Find a Grave online database, and historic topographic maps were also examined to identify the presence of any historic-age cemeteries within the APE. The St. Peter Roman Catholic Church and Cemetery was identified as intersecting with the APE. Other cemeteries were noted but are recorded as being outside of the APE. The St. Peter Roman Catholic Cemetery contains over 4,000 marked burials. The earliest interments date to the mid to late nineteenth century, and it is currently an active cemetery. Portions of the property along South Church Street and St Anne Street overlaps the APE slightly.

An examination of Web Soil Survey data reveals 5 soil types within the APE. These types, along with their drainage class, slope, and APE percentage are detailed in Table 3. Well drained and moderately well drained soils can be indicative of human habitation during both the precontact and historic periods. Approximately 80 percent of the soil types within the APE are well drained soils. Typically slopes greater than 15 percent are not suitable for human occupation, and soil types within the APE vary from 0 to 5 percent slope. The APE is comprised of predominantly well drained soils and entirely of soils with little to no slope, indicating suitable conditions for human habitation in both the pre-contact and historic periods. Additionally, topographic maps reveal that the APE is located on a terrace west of the Vermilion River with several drainages crossing the APE. Proximity to major waterways generally indicates a suitable environment for both precontact and historic human activity.

Table 3. Soil Types within the APE

Soil Type	**Drainage Class**	**Slope**	**Percent of APE**
Coteau silt loam	Somewhat poorly drained	0 to 1 percent	10.5
Frost silt loam	Poorly drained	0 to 1 percent	1.7
Frost silt loam, occasionally flooded	Poorly drained	0 to 1 percent	10.3
Memphis silt loam	Well drained	0 to 1 percent	45.5

Soil Type	Drainage Class	Slope	Percent of APE
Memphis silt loam	Well drained	1 to 5 percent	32.0

Historic topographic maps and historic aerial photographs were examined for archaeological resource sensitivity within the APE. The presence of structures on historic maps and aerial photography may indicate the likelihood of historic period archaeological deposits associated with the occupation of these structures. The APE is comprised of the City and rural development along US 167 (now SR 182) and the associated cross streets. The 1957 topographic quadrangle shows the City much as it appears today. The St. Peter Roman Catholic Church Cemetery is visible as well as a cemetery east of the Our Lady of Assumption School. Project work at both these locations will be limited to the replacement of pipelines and/or service lines within existing ROW or utility easements. The 1970 topographic quadrangle shows a few new residential developments in the City and there are some additional buildings in the areas outside of the City. Aerial imagery from 1958 shows the development of the City and the surrounding area seen in the topographic maps. The rural areas show a regular pattern of agricultural fields within one quarter of a mile of the APE with buildings found along the roadways. The 1952 imagery also shows the cemetery at St. Peter's to extend approximately to St Louis Street. By the early 1980s the cemetery encompassed the area south to St Anne Street. The area around the Our Lady of Assumption School remains mostly unchanged since the 1958 aerial photograph. There has been infill development in the area, but the school area remains intact.

Background research revealed three archaeological sites and two archaeological surveys intersecting the APE. The presence of archaeological sites within the APE indicates a moderate to high potential for archaeological deposits to exist within the APE. Soil types within the APE also indicate a suitable environment for precontact and historic habitation in most portions of the APE. Topographic maps and aerial imagery reveal considerable historical development within the APE.

The proposed project will include replacing over 5 miles of pipeline within the existing ROW, replacing service lines within existing utility easements, as well as upgrades to seven regulator stations and the replacement of eight above-ground gas mains that span drainage canals. Most ground disturbing activities will occur adjacent to the original pipeline that will be abandoned in place once the new pipeline is operational. Per the project description, the proposed Undertaking is expected to occur in the previously disturbed existing ROW and utility easements that contain numerous other underground utilities. Modern aerial imagery indicates the proposed pipeline installation will occur in areas nearest the roadway in moderate to heavily disturbed areas. While only a small portion of the APE has been archaeologically surveyed and there is moderate to high potential for archaeological deposits within the APE, the ground disturbance caused by previous utility installation and road and sidewalk construction has likely compromised the integrity and context of any previously intact archaeological deposits that may exist within the APE.

Although the APE slightly extends into limited portions of the St. Peter Roman Catholic Church Cemetery and the NRHP-listed Our Lady of Assumption School boundaries, work within and immediately adjacent to these boundaries is limited to the replacement of pipelines and service lines within the existing, pre-disturbed ROW and utility easements. Additionally, according to aerial images, burials at the St. Peter Roman Catholic Church Cemetery are separated from the roadway by buildings and a parking lot and are located outside the APE. Furthermore, although the unevaluated site 16LY127 is partially located within the APE, the portions of the site that intersect with the APE have likely been compromised from previous disturbance within the existing ROW. Therefore, due to the limited scope of work, previous disturbance of the APE, and lack of significant archaeological sites in the vicinity of the APE, there is low potential for intact significant archaeological resources within the APE, and an archaeological survey is not recommended at this time. However, all cemeteries are subject to Louisiana state burial laws, including the Unmarked Human Burial Sites Preservation Act (R. S. 8:671-681) and the Louisiana Historic Cemetery Preservation Act (R.S. 25:931-943).

Determination of Effect

Based on the aforementioned identification and evaluation, PHMSA finds that there is one historic property as defined in 36 CFR 800.16(l) within the APE: the NRHP-listed Our Lady of the Assumption School.

Although a small portion of the Our Lady of the Assumption School boundary is located within the APE, the Undertaking is limited to the replacement of existing pipelines and service lines and will not alter any of the characteristics or contributing features of the school that qualify it as eligible for inclusion in the NRHP under Criterion A in a manner that would diminish its integrity. The Undertaking will not result in lasting physical, visual, or audible effects to the school. The Undertaking also does not include land acquisition, nor would it limit access to or change the use of the property. Furthermore, project work will take place within existing, previously disturbed ROW and utility easements, which demonstrate a low probability for intact significant archaeological resources.

Therefore, in accordance with 36 CFR Part 800.5, PHMSA has determined the Undertaking will result in No Adverse Effect to Historic Properties.

Request for Information and Comments

PHMSA requests that you provide any information you have regarding historic properties of religious or cultural significance to your Tribe that may be present in the APE and affected by the Undertaking. If your Tribe is unaware of any historic properties beyond what we have identified to date, PHMSA is notifying your Tribe of our intention to make a No Adverse Effect to Historic Properties finding. Please notify us within 30 days from the date of receipt of this letter if you have any concerns about the project's effects to historic properties. Should you need additional information please contact Amy Hootman, Section 106 specialist, at PHMSASection106@dot.gov or 857-998-9981.

Sincerely,

Matt Fuller
Senior Environmental Protection Specialist

MF/ah

cc: Shelby Hanchera, Environmental Protection Specialist, USDOT Volpe Center
Dana White, PHMSA Grant Coordinator

Enclosures:
Attachment A: Project Location and APE Maps
Attachment B: Project Area Photographs

Appendix F

Environmental Justice

EJScreen Community Report

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

Lafayette Parish, LA

County: Lafayette Parish
Population: 241,173
Area in square miles: 269.27

A3 Landscape

LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	91%
Spanish	3%
French, Haitian, or Cajun	4%
Other Indo-European	1%
Vietnamese	1%
Total Non-English	9%

COMMUNITY INFORMATION

- Low income: 33 percent
- People of color: 35 percent
- Less than high school education: 11 percent
- Limited English households: 2 percent
- Unemployment: 5 percent
- Persons with disabilities: 12 percent
- Male: 49 percent
- Female: 51 percent
- 76 years — Average life expectancy
- $35,485 — Per capita income
- Number of households: 95,607
- Owner occupied: 66 percent

BREAKDOWN BY RACE

- White: 65%
- Black: 26%
- American Indian: 0%
- Asian: 2%
- Hawaiian/Pacific Islander: 0%
- Other race: 0%
- Two or more races: 3%
- Hispanic: 5%

BREAKDOWN BY AGE

From Ages 1 to 4	7%
From Ages 1 to 18	24%
From Ages 18 and up	76%
From Ages 65 and up	13%

LIMITED ENGLISH SPEAKING BREAKDOWN

Speak Spanish	57%
Speak Other Indo-European Languages	17%
Speak Asian-Pacific Island Languages	24%
Speak Other Languages	2%

Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race.
Source: U.S. Census Bureau, American Community Survey (ACS) 2017 -2021. Life expectancy data comes from the Centers for Disease Control.

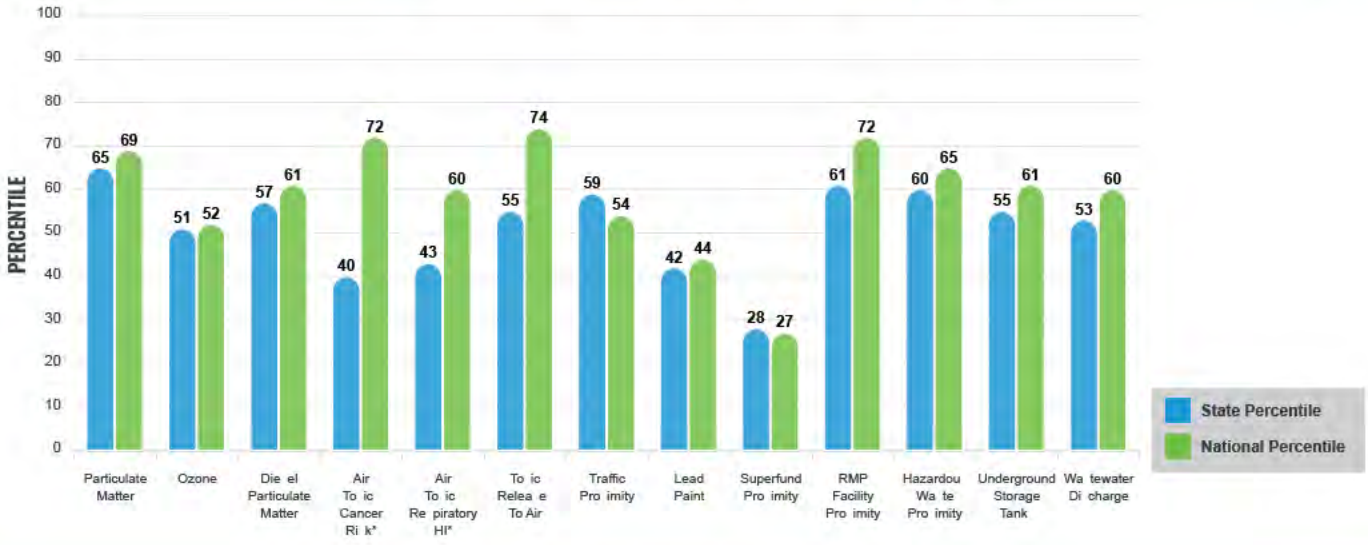
Environmental Justice & Supplemental Indexes

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the EJScreen website.

EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

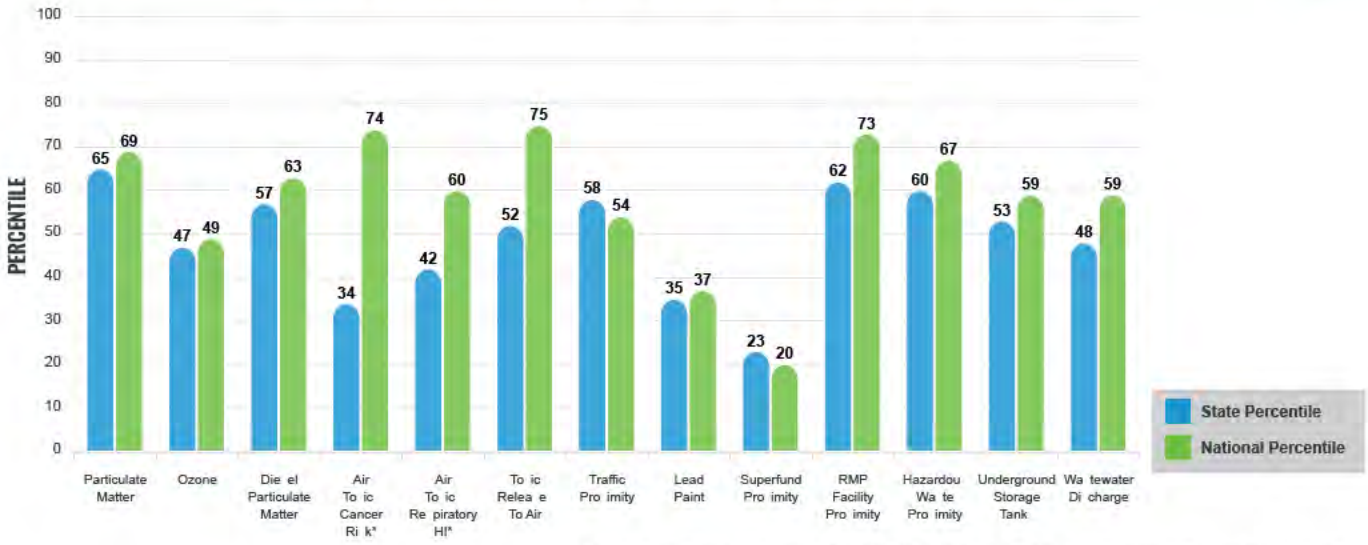
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

Report for County: Lafayette Parish

EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
Particulate Matter (µg/m^3)	8.63	8.62	65	8.08	62
Ozone (ppb)	59.6	59.8	43	61.6	36
Diesel Particulate Matter (µg/m^3)	0.217	0.247	54	0.261	50
Air Toxics Cancer Risk* (lifetime risk per million)	30	32	0	25	5
Air Toxics Respiratory HI*	0.31	0.38	1	0.31	31
Toxic Releases to Air	2,700	15,000	55	4,600	77
Traffic Proximity (daily traffic count/distance to road)	73	86	70	210	48
Lead Paint (% Pre-1960 Housing)	0.12	0.22	47	0.3	38
Superfund Proximity (site count/km distance)	0.018	0.076	23	0.13	15
RMP Facility Proximity (facility count/km distance)	0.75	0.62	72	0.43	83
Hazardous Waste Proximity (facility count/km distance)	1	1.1	63	1.9	62
Underground Storage Tanks (count/km^2)	2.5	2.2	70	3.9	63
Wastewater Discharge (toxicity-weighted concentration/m distance)	18	49	97	22	97
SOCIOECONOMIC INDICATORS					
Demographic Index	34%	41%	46	35%	57
Supplemental Demographic Index	14%	17%	39	14%	57
People of Color	35%	43%	48	39%	54
Low Income	33%	40%	42	31%	60
Unemployment Rate	5%	7%	56	6%	60
Limited English Speaking Households	2%	2%	81	5%	64
Less Than High School Education	11%	15%	45	12%	60
Under Age 5	7%	6%	63	6%	66
Over Age 64	13%	17%	41	17%	41
Low Life Expectancy	18%	22%	12	20%	37

*Diesel particulate matter air toxics cancer risk and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update which is the Agency's ongoing comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update.

Sites reporting to EPA within defined area:

Superfund	0
Hazardous Waste, Treatment, Storage, and Disposal Facilities	18
Water Dischargers	1653
Air Pollution	115
Brownfields	14
Toxic Release Inventory	32

Other community features within defined area:

Schools	50
Hospitals	26
Places of Worship	133

Other environmental data:

Air Non-attainment	No
Impaired Waters	Yes

Selected location contains American Indian Reservation Lands*	No
Selected location contains a "Justice40 (CEJST)" disadvantaged community	Yes
Selected location contains an EPA IRA disadvantaged community	Yes

Report for County: Lafayette Parish

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS

INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	18%	22%	12	20%	37
Heart Disease	5.7	7	22	6.1	44
Asthma	9.2	9.9	31	10	27
Cancer	5.4	5.9	27	6.1	33
Persons with Disabilities	11.5%	15.9%	23	13.4%	43

CLIMATE INDICATORS

INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	21%	25%	61	12%	86
Wildfire Risk	0%	7%	0	14%	0

CRITICAL SERVICE GAPS

INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	12%	20%	38	14%	54
Lack of Health Insurance	8%	8%	52	9%	58
Housing Burden	Yes	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	Yes	N/A	N/A	N/A	N/A

Footnotes

Report for County Lafayette Parish

EJScreen Community Report

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

Carencro, LA

the User Specified Area
Population: 1,197
Area in square miles: 1.36

A3 Landscape

LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	91%
French, Haitian, or Cajun	8%
German or other West Germanic	1%
Total Non-English	9%

COMMUNITY INFORMATION

- Low income: 64 percent
- People of color: 44 percent
- Less than high school education: 16 percent
- Limited English households: 5 percent
- Unemployment: 4 percent
- Persons with disabilities: 11 percent
- Male: 43 percent
- Female: 57 percent
- 77 years — Average life expectancy
- $29,806 — Per capita income
- Number of households: 447
- Owner occupied: 63 percent

BREAKDOWN BY RACE

- White: 56%
- Black: 31%
- American Indian: 0%
- Asian: 0%
- Hawaiian/Pacific Islander: 0%
- Other race: 0%
- Two or more races: 5%
- Hispanic: 7%

BREAKDOWN BY AGE

From Ages 1 to 4	1%
From Ages 1 to 18	33%
From Ages 18 and up	67%
From Ages 65 and up	27%

LIMITED ENGLISH SPEAKING BREAKDOWN

Speak Spanish	100%
Speak Other Indo-European Languages	0%
Speak Asian-Pacific Island Languages	0%
Speak Other Languages	0%

Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race.
Source: U.S. Census Bureau, American Community Survey (ACS) 2017 -2021. Life expectancy data comes from the Centers for Disease Control.

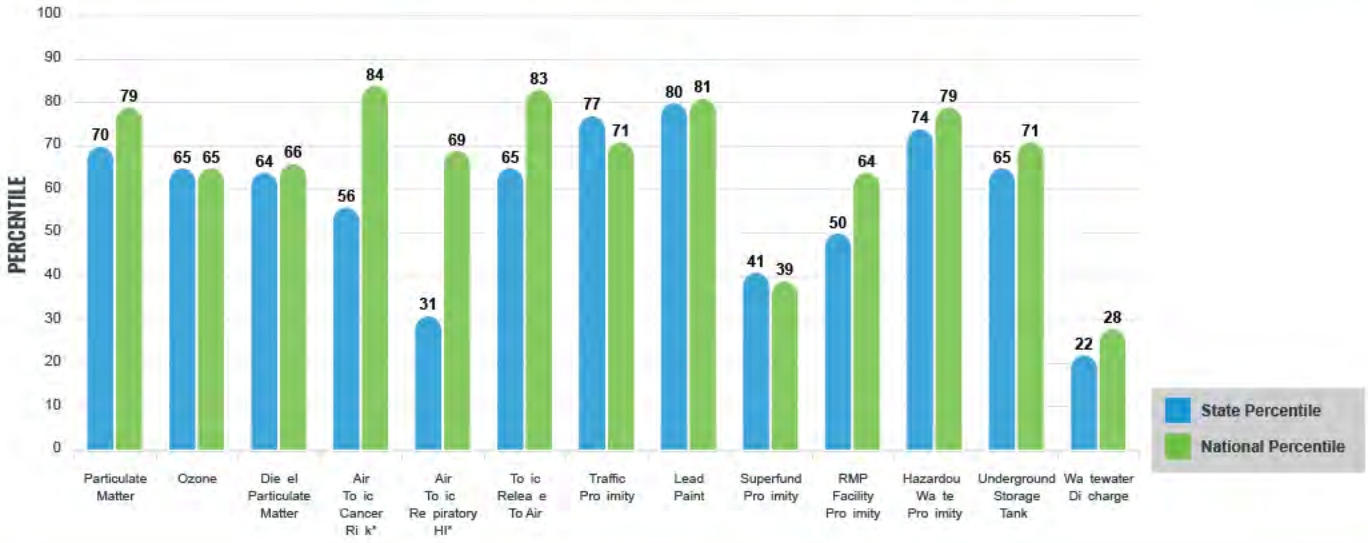
Environmental Justice & Supplemental Indexes

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the EJScreen website.

EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

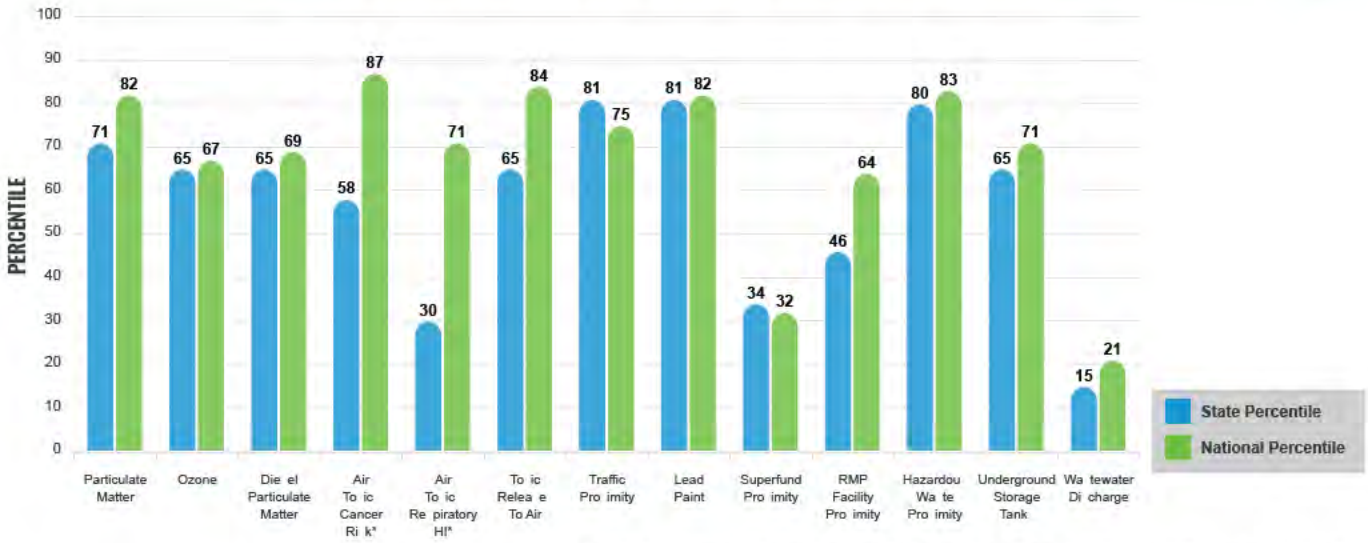
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

Report for the User Specified Area

EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
Particulate Matter (µg/m^3)	8.49	8.62	50	8.08	58
Ozone (ppb)	59.6	59.8	43	61.6	36
Diesel Particulate Matter (µg/m^3)	0.181	0.247	45	0.261	40
Air Toxics Cancer Risk* (lifetime risk per million)	30	32	10	25	52
Air Toxics Respiratory HI*	0.3	0.38	1	0.31	31
Toxic Releases to Air	1,100	15,000	44	4,600	61
Traffic Proximity (daily traffic count/distance to road)	70	86	69	210	47
Lead Paint (% Pre-1960 Housing)	0.33	0.22	75	0.3	60
Superfund Proximity (site count/km distance)	0.018	0.076	22	0.13	15
RMP Facility Proximity (facility count/km distance)	0.12	0.62	28	0.43	37
Hazardous Waste Proximity (facility count/km distance)	1.1	1.1	64	1.9	63
Underground Storage Tanks (count/km^2)	1	2.2	51	3.9	48
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.0064	49	66	22	64
SOCIOECONOMIC INDICATORS					
Demographic Index	54%	41%	68	35%	78
Supplemental Demographic Index	22%	17%	72	14%	83
People of Color	44%	43%	56	39%	61
Low Income	64%	40%	82	31%	91
Unemployment Rate	4%	7%	49	6%	48
Limited English Speaking Households	5%	2%	88	5%	74
Less Than High School Education	16%	15%	62	12%	74
Under Age 5	1%	6%	20	6%	13
Over Age 64	27%	17%	84	17%	84
Low Life Expectancy	21%	22%	33	20%	65

*Diesel particulate matter air toxics cancer risk and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update which is the Agency's ongoing comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update.

Sites reporting to EPA within defined area:

Superfund 0
Hazardous Waste, Treatment, Storage, and Disposal Facilities 0
Water Dischargers 21
Air Pollution 1
Brownfields 0
Toxic Release Inventory 0

Other community features within defined area:

Schools 1
Hospitals 0
Places of Worship 2

Other environmental data:

Air Non-attainment ..... No
Impaired Waters ..... Yes

Selected location contains American Indian Reservation Lands* ..... No
Selected location contains a "Justice40 (CEJST)" disadvantaged community ..... Yes
Selected location contains an EPA IRA disadvantaged community ..... Yes

Report for the User Specified Area

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS

INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	21%	22%	33	20%	65
Heart Disease	5.5	7	19	6.1	39
Asthma	9.3	9.9	37	10	33
Cancer	5.2	5.9	20	6.1	27
Persons with Disabilities	11.5%	15.9%	23	13.4%	43

CLIMATE INDICATORS

INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	22%	25%	63	12%	87
Wildfire Risk	0%	7%	0	14%	0

CRITICAL SERVICE GAPS

INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	24%	20%	65	14%	82
Lack of Health Insurance	6%	8%	35	9%	44
Housing Burden	No	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	Yes	N/A	N/A	N/A	N/A

Footnotes

Report for the User Specified Area