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

Natural Gas Distribution Infrastructure Safety and Modernization Grant Program
Citizens Gas and Coke Utility
Indianapolis, IN
Tier 2 Site Specific Environmental Assessment
NGDISM-FY22-EA-2023-14

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 would avoid, minimize, or mitigate potential effects; and (5) seek comments from the public. This Tier 2 analysis informs the Pipeline and Hazardous Materials Safety Administration's (PHMSA) 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-2023-14 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	Citizens Gas and Coke Utility Pipeline Replacement
Project Location	City of Indianapolis, Marion County, Indiana

Project Description/Proposed Action:

The proposed action would replace 4.7 miles of cast iron pipe in Indianapolis, Indiana that was installed during the 1950s with polyethylene (PE) pipe. The project consists of six segments with approximately 3.1 miles of 24-inch and 1.6 miles of 16-inch cast iron pipe. Segments A - D would replace 3.1 miles of cast-iron pipe in the existing right-of-way (ROW) along North Rural Street corridor from East Fall Creek Parkway Drive to East Michigan Street. Projects E and F replace 1.7 miles of cast-iron pipe in the ROW along East 42nd Street from Lesly Avenue to Pendelton Pike. The proposed action would not require new ROW or easements. The existing ROW encompasses various roads, sidewalks, and grassy areas throughout the City of Indianapolis. See Appendix A, Project Maps.

The project would use insertion construction methods for the majority of work, which consists of the replacement pipe being installed inside the existing pipeline, for all project segments except where pipeline would be replaced under Fall Creek. Pipeline near Fall Creek would be installed using horizontal directional boring (HDD) methods where the pipeline would be within approximately 10 feet of the existing pipe segment under Fall Creek, likely below the existing pipe. 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, Citizens Gas and Coke Utility (Citizens) would utilize these methods for the majority of work, with the exception of the Fall

[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

Creek segment where an HDD construction method would be used. These construction methods would result in similar impacts when compared to the insertion method.

Where new pipe is installed adjacent to the existing line, the existing pipeline would be abandoned in place. Abandonment of the existing pipeline (versus excavation and removal) would minimize ground disturbance and facilitate the replacement process in a more efficient manner. PHMSA has specific requirements for gas and hazardous liquid pipeline abandonment, 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. By complying with PHMSA requirements for purging and sealing abandoned pipelines, Citizens would ensure that the abandoned pipelines pose no risk to safety in their abandoned state.

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, Citizens would continue to use legacy cast iron pipeline materials 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 Indianapolis, 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 project is needed to ensure the safe, reliable operation and delivery of energy to the community, replacing leak prone cast iron natural gas pipelines with PE pipelines. 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 highly developed urbanized area with a mix of residential and commercial properties. Portions of the project traverse through several city owned parks consisting of natural areas, walking trails, and sports fields.

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 in non-attainment or maintenance status for one or more of the National Ambient Air Quality Standards (NAAQS)?	No, based on review of the EPA Greenbook.[2]
Will the construction activities produce emissions that exceed de minimis thresholds (tons per year)?	N/A
Will mitigation measures be used to capture blowdown?[3]	Yes
Does the system have the capability to reduce pressure on the segments to be replaced? If yes, what is the lowest psi the system can reach prior to venting?	No
Will Citizens commit to reducing pressure prior to venting? Please calculate venting emissions based on this commitment and also provide comparison figure of venting emissions volume without pressure reduction/drawdown based on the calculation methods provide in the initial Tier 2 EA worksheet.	Cross-compression technology would be used to capture blowdown emissions and return them to the natural gas distribution system.
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 21,608 kg/year. Replacement would result in a leak rate of 135 kg/year or a reduction of 21,472 kg/year. [4]

Conclusion:

The project area is located within Marion County, Indiana which is designated by the EPA as in attainment for all National Ambient Air Quality Standards (NAAQS). The existing mains within the project area consist of leak prone cast iron natural gas mains that were installed during the 1950s.

No Action:

Under the No Action alternative, existing and planned pipeline activities, including construction and maintenance activities, would continue unchanged. Citizens would continue to use cast iron leak prone pipe material. The No Action alternative would result in the existing leak rate continuing, which is estimated at 21,608 kg/year. This amounts to 432,156 kg of methane over a 20-year time frame. See Appendix B, Methane Calculations for the methane leak rate calculations.

Proposed Action:

The Proposed Action alternative consists of replacing 4.7 miles of cast iron pipe which would result in minor air quality impacts associated with construction activities. 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

[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, 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.

mitigation actions. Citizens would utilize cross compression technology, which transfers gas from abandoned mains to the new mains to prevent the release of methane into the atmosphere. Without methane capture measures, PHMSA estimates 707 MCF of methane (21,710 kg) would be vented into the atmosphere during construction.

As described in the Tier 1 EA, methane leaks from 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 pipes within the project area, this project would reduce overall emissions by 21,472 kg each year. The total reduction in methane emissions resulting from the conversion to plastic pipeline would be approximately 429,448 kg over a 20-year span post construction. See Appendix B, Methane Calculations for the methane reduction calculations. Therefore, it is PHMSA's assessment that the proposed project would provide a net benefit to air quality from the overall reduction of greenhouse gas emissions.

Mitigation Measures:

Citizens Gas and Coke Utility shall implement the following mitigation measures:

- Efficient use of on-road and non-road vehicles, by minimizing speeds and vehicles.
- Minimize excavation to the greatest extent practical.
- Use cleaner, newer, non-road equipment as practicable.
- Minimize all vehicle idling and at minimum, conform with local idling regulations.
- Ensure all vehicles and equipment are in proper operating condition.
- Ensure on-road and non-road engines meet EPA exhaust emission standards (40 CFR Parts 85, 86, and 89).
- Cover open-bodied trucks while transporting materials.
- Conduct watering, or use of other approved dust suppressants, at construction sites and on unpaved roadways, as necessary.
- Minimize the area of soil disturbance to those necessary for construction.
- Minimize construction site traffic by the use of offsite parking and shuttle buses, as necessary.
- Cross-compression technology will be used to capture methane.

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 U.S. 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	No, there would be no discharge of dredge or fill material into waters of the US, as a result of the

material? If yes, describe anticipated permit and how project proponent will ensure permit compliance.	project.
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 would occur within a Special Flood Hazard Area (SFHA).
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 NWI maps, as well as the FEMA National Flood Hazard Layer FIRMette map to assist in identifying aquatic features and other water resources in or near the project area. There are two, open water channelized streams that fall within the project area. Fall Creek is a channelized stream located in Segment A south of the intersection of East Fall Creek Parkway North Drive and Lakeway Drive. Pogues Run is a smaller stream located in Segments C and D located south of the intersection of East Brookside Parkway and North Rural Street. A third tributary was identified on NWI maps as potentially a piped tributary crossing under North Rural Street, south of East 34th Street.

FEMA's National Flood Hazard maps indicate Fall Creek as a regulated floodway and a corresponding SFHA designated as FEMA Zone AE. Zone AE corresponds to the one percent annual chance of flood (100-year flood). 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 Citizens 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:

As noted above, there are several water resources identified in the project area, near where the work would occur. At Fall Creek, the new pipe would be installed via horizontal directional boring construction methods; therefore, there would be no direct impact to the Creek. The bore pit for the directional bore on the north side of Fall Creek would take place within a SFHA. The impacted areas would be restored to preconstruction contours and would therefore not affect the flood-holding capacity of the floodplain or cause any adverse impacts to the

[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.)

SFHA. Furthermore, the work should qualify under the general license in Indiana Administrative Code 312 IAC 10-5-4. PHMSA is including a mitigative measure to ensure Citizens would obtain and/or comply with any necessary Indiana Department of Natural Resources' approvals or permits for construction activities located in the regulated flood hazard areas.

The existing pipeline located under Pogues Run was installed in 2013 and is not included in the replacement activities. Additionally, no pipeline replacement would occur near the identified unnamed tributary crossing under North Rural Street, south of East 34th Street. Therefore, no impacts would occur to these aquatic resources. Additionally, 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 is that there would be no adverse impacts to water resources.

Mitigation Measures:

Citizens Gas and Coke Utility shall avoid staging in areas within or near aquatic resources.

Citizens Gas and Coke Utility shall ensure all preconstruction contours are restored, natural areas are reseeded, and BMPs are used during construction to control sediment and erosion and prevent pollutants from entering waterways.

Citizens Gas and Coke Utility shall avoid any direct impacts to open Fall Creek by using directional bore methods and complying with their frac-out plan.

Citizens shall obtain and/or comply with any necessary Indiana Department of Natural Resources' approvals or permits for construction activities located in the regulated flood hazard areas.

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 could be encountered near the Fall Creek bore pits. Citizens would follow their Frac-Out Plan, including all BMPs.
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. BMPs would be used to control any runoff from the project area.
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.	Yes, excavation is planned near leaking underground storage tanks. Segment C - Intersection of Brookside Avenue and North Rural Avenue. Segment D - Intersection of North Rural Street and East 10th Street and north of the intersection of North Rural Street and East Michigan Street.

	Yes, Citizens conveyed coal gas through the gas distribution system until late 1998. The pipeline was cleaned after the use of coal gas was ended.
Does the project have the potential to encounter or disturb lead pipes or asbestos?	Yes, lead service lines may be encountered.

Conclusion:

PHMSA reviewed EPA's NEPAssist website to identify any brownfield properties, leaking underground storage tanks, and superfund sites (See Appendix D, Hazardous Materials). Three leaking underground storage tanks are within the project area located in Segment C at the intersection of Brookside Avenue and North Rural Avenue, in Segment D at the intersection of North Rural Street and East 10th Street and north of the intersection of North Rural Street and East Michigan Street.[6]

Lead water lines occur throughout the project area in close proximity to the existing pipeline. Additionally, Citizens conveyed coal gas through its gas distribution system until late 1998. The pipeline was cleaned after the use of coal gas was ended.

PHMSA used the USDA NRCS Web Soil Survey to identify soils in the project area[7]. The majority of soils identified within the project area are somewhat poorly drained soils where the depth to the water table is found between 6 to 24 inches.

No Action:

Under the No Action alternative, the cast iron 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 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:

Under the Proposed Action Alternative, Citizens would replace 4.7 miles of existing pipelines within the existing ROW in Marion County, Indiana. The majority of the new gas lines would be inserted into the existing gas lines. Entry and exit pits would be excavated throughout the project area to tie into the existing lines. All disturbed areas would be re-seeded or paved (as appropriate) and restored to preexisting conditions. All utilities would be located prior to excavation activities and disturbance of the lead service lines would be avoided to the extent practicable.

This project would involve HDD under Fall Creek where groundwater could be encountered, depending on groundwater levels at the time of construction. Citizens would make every effort to minimize impacts to groundwater for this segment of the project. Excavation depth is not anticipated to exceed 7' in depth and Citizens would comply with their frac-out plan which identifies specific BMPs and procedures to prevent

[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.

impacts to adjacent waters. Containment of boring fluids in pits would be properly disposed of to ensure there would be no adverse impacts to groundwater associated with the project.

As noted above, there were sites where leaking underground storage tanks were identified in areas of proposed excavation and therefore, it is possible that the migration of petroleum related products may be encountered during the replacement of the natural gas pipelines. Additionally, there is the possibility of encountering lead service lines. Citizens would locate all existing lead service lines and conduct soil sampling prior to excavation activities. If working in contaminated areas cannot be avoided, Citizens would develop a Soil Management Plan to implement prior to commencing construction activities in contaminated areas. If, during construction activities, environmental liabilities are encountered (i.e. stained soils, sheen on groundwater, petroleum odors in soil and groundwater, etc.), Citizens would cease all activities in that area, and notify the appropriate regulatory agency (i.e. ADEM or EPA) and implement the proper mitigation measures. To ensure compliance with this commitment and identify proper protocol that would ensure there is no migration of contaminants (if encountered), PHMSA would include a mitigative measure. See Appendix D, Hazardous Materials. 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. Trenching and/or directional drilling work is not likely to intercept groundwater but if this occurs, Citizens would use appropriate dewatering methods. Additionally, because hazardous materials have been identified near the areas where work would occur, and there is the potential for construction activities to encounter contaminated materials, mitigation measures have been included to ensure there would be no adverse impacts associated with the project. Additionally, PHMSA has not identified any indirect or cumulative effects to groundwater or hazardous materials.

Groundwater and Hazardous Materials/Waste

Mitigation Measures:

In the event of a release of hazardous materials/waste into the environment during construction, Citizens shall notify the appropriate emergency response agencies, potentially impacted residents, and regulatory agencies of the release or exposure.

Citizens Gas and Coke Utility shall utilize a Stormwater Pollution Prevention Plan which would identify appropriate construction and restoration activities to minimize the potential impacts to groundwater. All impacted areas would be restored to pre-construction conditions.

Prior to the commencement of work in areas potentially containing hazardous materials, Citizens Gas and Coke Utility shall conduct soil sampling to determine if any contaminants exist. Should contaminated soils be found and work in the area cannot be avoided, Citizens Gas and Coke Utility shall develop a Soil Management Plan to include soil screening requirements, the oversight or monitoring of soil moving activities, contingency plans for the handling, removing, temporarily storing, characterizing, disposing of contaminated or unsuitable materials, and measures for containing, treating, and disposing of stormwater that may contact exposed soils.

If, during construction activities, environmental liabilities are encountered (i.e. stained soils, sheen on groundwater, petroleum odors in soil and groundwater, etc.), Citizens would cease all activities in that area, and notify the appropriate regulatory agency (i.e. ADEM or EPA) and implement the proper mitigation measures.

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, the contractor would utilize erosion and sediment control while trenching/ open cutting.
Will the project require unique impacts related to soils?	No

Conclusion:

PHMSA used the USDA NRCS Web Soil Survey to identify soils in the project area[9]. The majority of soils identified within the project area are somewhat poorly drained soils where the depth to the water table is found between 6 to 24 inches. It is noted that the project area is an urban residential area where ground disturbance activities have already occurred and there are very few areas, if any, that remain in a natural state. Therefore, while the soils report provides valuable information, the soils have been disturbed and likely contain some degree of fill material brought in as a suitable base for construction. See Appendix E, Soils Report

No Action:

Under the No Action alternative, the cast iron and steel pipes would remain in their current location and soils would remain in their current state and condition. Normal maintenance activities would occur, and pipes would be replaced under failed circumstances. Some soil disturbance would occur during emergency repairs and the affected areas would be restored upon completion. Under either scenario, no adverse impacts to soils would be anticipated under the No Action alternative.

Proposed Action:

Citizens would replace 4.7 miles (24,816 LF) of cast iron as within the existing ROW. The pipeline would be inserted into the existing cast iron pipe limiting the amount of soil disturbance. Where trenching is required to tie into the existing pipeline, the trench would be backfilled daily. All disturbed areas would be re-seeded or paved (as appropriate) and restored to pre-existing conditions. Therefore, PHMSA's assessment is that there would be no adverse impact to soils resulting from the Proposed Action alternative. Additionally, there are no indirect or cumulative impacts anticipated as Citizens would restore all areas to pre-construction conditions.

Mitigation Measures:

Citizens Gas and Coke Utility shall utilize best management practices, as appropriate, to control sediment and erosion during construction which may include silt fencing, check dams, and promptly covering all bare areas. All impacted areas shall be restored to pre-construction 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?[10] If no,	Yes, based on review of the USFWS's Information for Planning and Consultation (IPaC). Indiana state resources were reviewed to identify potential state

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

[10] https://ipac.ecosphere.fws.gov/, https://www.fisheries.noaa.gov/species-directory/threatened-endangered, and https://www.in.gov/dnr/nature-preserves/files/np_marion.pdf

no further analysis is required.	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 no, provide justification and avoidance measures. If yes, PHMSA will work with the project proponent to conduct necessary consultation with resource agencies.	No

Conclusion:

PHMSA requested an official species list through the USFWS's IPaC website. See Appendix F, Biological Resources, for the IPaC species list. The following species were identified as federally listed species within the geographical range of the project.

- Indiana bat (*Myotis sodalis*) - Endangered
- Northern long-eared bat (*Myotis septentrionalis*) - Endangered
- Tricolored Bat (*Perimyotis subflavus*) – Proposed Endangered
- Monarch butterfly (*Danaus plexippus*) - Candidate
- Whooping Crane (*Grus americana*) – Experimental population, non-essential

There is no designated critical habitat within the project area.

Additionally, the Indiana Department of Natural Resources (DNR) database was reviewed to assist in identifying potential species protected by the state and under the jurisdiction of the DNR. A list of state protected species can be found in Appendix F, 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 highly urbanized environment where the areas of disturbance would be mainly under paved streets, sidewalks, and along mowed or maintained roadways. Limited habitat does occur within the project area near Fall Creek, Washington Park, and Brookside Park as shown in Appendix A, Project Maps. However, the construction method of inserting a new pipe into the existing pipe would limit ground disturbance to the excavation of small (approximately 10 feet square and a depth to the existing pipe) entry and exit bore pits shown in Appendix A, Project Maps. The location of these excavation pits are on top of the existing pipeline within paved or otherwise previously disturbed areas. Where the pipeline crosses Fall Creek, directional boring construction methods would be utilized with entry and exit pits located within paved areas on top of the existing pipeline, at least 100 feet from Fall Creek. No tree clearing or other habitat disturbance would be required.

Therefore, in accordance with Section 7 of the Endangered Species Act[11] PHMSA's assessment is that the project would have no effect to federally threatened or endangered species Under Section 7(a)(4) of the Endangered Species Act (ESA), Federal agencies must confer with the USFWS if their action would jeopardize the continued existence of a proposed species. As a candidate species, the monarch butterfly receives no statutory protection under the ESA. The tricolored bat 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: Citizens Gas and Coke Utility is responsible for abiding by all applicable federal, state, and local regulations.

Cultural Resources	
Question	**Information and Justification**
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 would include ground disturbing activities, mainly focused on excavation of bore pits. The project would not disturb buildings or structures.
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.[12]	Yes, a portion of the project would take place within the Indianapolis Park & Boulevard System historical district.
Does the project or any part of the project take place on tribal lands or land where a tribal cultural interest may exist?[13]	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?[14] 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, many structures were constructed over 45 years ago. Yes, through a visual examination, it was determined that some of the buildings appear to be designed and constructed in a similar manner and time.
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

[11] 50 CFR § 402.02

[12] 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.

[13] 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/.

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

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[15] 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, which includes the limits of disturbance and any staging or access areas. See Appendix G, Cultural Resources, for the APE.

No Action:

Under the No Action alternative, existing conditions would remain, and normal maintenance activities would occur. 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 Indiana Department of Natural 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 Indianapolis Park & Boulevard System Historic District (District) is the only NRHP-listed historic property within the APE. There are no known archeological sites in the APE and based on the evaluation, there is low potential for intact significant resources in the APE and no additional survey is needed. See Appendix G, Cultural Resources, for additional information about the APE and the properties identified.

PHMSA's assessment is that the Proposed Project would not alter any of the characteristics or contributing features of the District that qualify it for inclusion in the NRHP. Project work is limited to the replacement of existing pipelines. The Undertaking would not result in lasting physical, visual, or audible effects to the District. In accordance with 36 CFR Part 800.5, PHMSA's assessment is that the Undertaking would have No Adverse Effect on historic properties.

A letter was sent on January 26, 2024, to the Indiana 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 adverse effects. 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 G, Cultural Resources, for more information.

[15] 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.

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 Citizens Gas and Coke Utility 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 Citizens Gas and Coke Utility 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.

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.	Yes, Fall Creek Trail, Washington Park, and Brookside Park occur within the project area.
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.	Yes, minor temporary construction impacts may occur. No permanent impacts to park facilities would result from the proposed project.

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 qualify as Section 4(f). Fall Creek Trail, Washington Park, and Brookside Park were identified within the project area as 4(f) properties (See Appendix H). These are all owned by the City of Indianapolis, open to the public and their primary function is recreational use.

When a proposed project would result in temporary impacts, PHMSA may determine that a transportation program or project will have a *de minimis* impact on that publicly owned park only if the Secretary has determined, after public notice and opportunity for public review and comment, that the transportation program or project would not adversely affect the activities, features, and attributes of the park, recreation area, or wildlife or waterfowl refuge eligible for protection under this section; and the finding has received concurrence from the Officials with Jurisdiction (OWJ) over the park.

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 occur within and adjacent to Fall Creek Trail, Washington Park, and Brookside Park. Proposed construction activities for the three properties are as follows.

<u>Fall Creek Trail</u>

Installation of the natural gas lines and bore pit excavation would occur in the Fall Creek Greenway area near the Fall Creek Corridor parking lot, adjacent to East Fall Creek Parkway Drive. The replacement natural gas line would be bored under Fall Creek to a bore receiver pit near East 42nd and North Oxford Street. The bore pits would be approximately 10 feet by 10 feet and allow for boring and pipeline insertion. One entry pit would be excavated adjacent to the parking lot within a currently mowed turf grass area within the boundaries of the Fall Creek Trail Greenway. Construction activities would require closure of the eastern entry to the Fall Creek Trail parking lot and use two of the approximately 50 parking spaces for staging during the project. Project activities would take less than one week. The trail would remain open throughout the duration of the proposed project. All impacts would be temporary, and all disturbed areas would be returned to existing conditions.

<u>Washington Park</u>

Installation of the natural gas line and bore pit excavation would occur in three locations along North Rural Street. The bore pits would be approximately 10 feet by 10 feet and allow for boring and pipeline insertion. Two insertion pits would be located immediately adjacent to the boundary of the park near the Washington Park Basketball Court and parking lots. One pit would be excavated north of the Washington Park Basketball Court and one insertion pit would be located immediately south of the parking lot. Another bore pit would be excavated at the

intersection of North Rural Street and E 30th Street adjacent to an area of the park that is currently wooded. Construction activities would not impact access to the parking lots. The trail that traverses across North Rural Street would remain open throughout the duration of the project. Project activities would take less than one week. All impacts would be temporary, and all disturbed areas would be returned to existing conditions.

Brookside Park

Installation of natural gas line and bore pit excavation would occur in one location along North Rural Street between East Brookside Parkway North Drive and East Brookside Parkway South Drive, at the western edge of Brookside Park. The bore pits would be approximately 10 feet by 10 feet and allow for boring and pipeline insertion. The eastern sidewalk which is part of the transportation facility and not subject to Section 4(f) location would need to be detoured. Construction equipment may need to be staged within the park ROW. No impacts to park facilities would result from the proposed project. All impacts would be temporary, and all disturbed areas would be returned to existing conditions.

Section 4(f) Recommended Finding

Access to Fall Creek Trail, Washington Park, and Brookside Park would remain open throughout the duration of construction and no physical use of the parks would occur. In addition, as described in the Noise section of this Tier 2 EA, no adverse impacts associated with construction noise have been identified that could affect the use of these properties. Therefore, PHMSA intends to issue a *De Minimis* use of Section 4(f) resources. PHMSA is seeking public comment on this finding during the public comment period on this Environmental Assessment. Following public review, PHMSA will coordinate with the Section 4(f) property's Official with Jurisdiction.

Mitigation Measures:

Citizens Gas and Coke Utility shall ensure that full public access to, and use of Fall Creek Trail, Washington Park, and Brookside Park is maintained during construction.

Citizens Gas and Coke Utility shall utilize HDD methods to directionally bore the replacement pipeline under the Fall Creek Trail in all areas where the project intersects the Fall Creek Trail.

Citizens Gas and Coke Utility shall coordinate with park officials when implementing a traffic management plan to ensure access to the park facilities are maintained prior to construction.

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 no, please describe any right-of-way acquisitions or additional easements needed.	Yes, all work on mains would take place within the existing ROW.
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,	Yes, temporary traffic impacts may consist of traffic congestion and minor disruptions to parking at bore pit locations. The project would not result in a permanent change to existing transportation facilities.

and how would changes affect the public?	
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

Conclusion:

The project is located in the City of Indianapolis, Indiana, which is an urbanized area consisting of commercial and residential areas.

No Action:

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

Proposed Action:

Citizens is proposing to replace pipeline infrastructure within the existing ROW and would not include adding pipeline to serve new areas. During construction, there may be short-term impacts to adjacent residences, businesses and normal traffic patterns. Potential impacts include an increase in noise, dust, and transportation accessibility, as a result of construction and construction staging. Local and state regulations guide the transport of machinery, equipment, and automobiles around the construction areas. Temporary traffic impacts may occur on the local road network and adjacent pedestrian routes. The project may result in detours. Consideration of emergency response vehicles, travel restrictions, and other impacts to local transportation are anticipated to be temporary and would only last for the duration of construction. Minor disruptions to on-street parking may occur, but access to existing residences would not be restricted. Citizens would coordinate with the appropriate local and state agencies regarding interruptions to traffic and detours and appropriate protocol would be used where traffic would be temporarily diverted to one-lane. Normal traffic flow would be maintained to the extent possible. Citizens would notify emergency services of the scheduled work and traffic implications of the work that would be conducted and would use various methods of communication to notify any potentially impacted residents, business owners, and the general public. Therefore, 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, PHMSA has determined that there would be no impact to land use.

PHMSA considered the cumulative effects of this action with ongoing and planned transportation related construction projects that could cumulatively impact land use and transportation. Citizens has various maintenance, drainage improvement, and other projects on going within or near the project area. All municipalities and businesses must abide by the same requirements and coordinate with state and local agencies on any disruptions to normal traffic patterns. Through this coordination, the overall cumulative effects of multiple projects occurring would be minimized by planning and scheduling efforts with responsible agency oversight. Land use changes are not anticipated as the projects are occurring in an urbanized area that is built out and therefore would not change the existing residential or commercial use.

Mitigation Measures:

Citizens Gas and Coke Utility shall maintain traffic flows to the extent possible and use traffic control measures to assist traffic negotiating through construction areas, as needed.

Citizens Gas and Coke Utility shall coordinate with state and local agencies regarding detours and/or routing adjustments during construction and would notify any potentially impacted residents and/or business owners.

Citizens Gas and Coke Utility shall have a traffic control plan in place, prior to construction, and coordinate with the appropriate agency well in advance of any impacted emergency services or essential agency functions.

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. The project would adhere to state and local noise regulations, limit construction activities to normal weekday business hours, and make sure equipment mufflers have proper maintenance.
Will the project require high-noise and vibration inducing construction methods? If so, please specify.	Yes, directional drills and trenching equipment.
Will the project comply with state and local ordinances? If so, identify applicable ordinances and limitations on noise/vibration times or sound levels.	Yes, Indianapolis – Marion County Title II public Order Chapter 391 Article III Sec. 391-302
Will construction activities require large bulldozers, hoe ram, or other vibratory equipment within 20 feet of a structure?	No

Conclusion:

The project is located in Indianapolis, Indiana. The ambient noise in the project area consists of a combination of environmental noise from road traffic, construction, industry, the built environment, population density 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 along the designated streets in the project area would not be replaced at this time, and likely would not be replaced all at once. It is likely that these pipelines would be repaired or replaced due to a leak under emergency conditions. 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:

Excavators, dump trucks, skid steers, rollers, pavers, and other similar construction equipment would be used to

excavate entry and exit pits, insert pipeline into existing pipes, excavate trenches, lay pipe, compact soils and re-pave affected areas. Pipeline installed under Fall Creek would use directional bore methods where drill rigs, excavators, reamers, and similar equipment would be used to install pipeline by horizontal directional drilling. Sensitive noise receptors are likely to experience temporary noise impacts while outdoors in the vicinity of the work; however, Citizens would limit project activities to normal weekday business hours, as practicable, minimize the use of loud equipment as much as possible, and adhere to Indianapolis, Marion County, Indiana Municipal Code of Ordinances, Chapter 391, Article III, Noise. Therefore, PHMSA has determined 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 the City of Indianapolis. Rural areas often have paving, drainage improvement, and other construction or maintenance projects on going which could occur within or near the project area which would contribute to increased noise. These construction and maintenance projects could occur at the same time as the Proposed Action alternative and would contribute to an increase in cumulative noise effects during construction. However, 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: Citizens Gas and Coke Utility would adhere to Indianapolis, Municipal Code of Ordinances, Chapter 391, Article III, Noise.

Environmental Justice	
Question	**Information and Justification**
Using the EPA EJScreen or census data[16], 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.	Yes. Based on review of socioeconomic data using the EPAs EJScreen, the population residing within the general project area contains 57% low income and 74% 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?	No, minor service disruptions may be required to connect businesses and residences to the new pipeline. These disruptions would be of short duration lasting less than 1 hour
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, this area has 3% limited English-speaking households. Citizens would post communications in the languages of the area as well as in letter form once the language is identified.
Conclusion: Executive Order (E.O.) 14096—"Revitalizing Our Nation's Commitment to Environmental Justice for All" was	

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

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 contains 57% low income and 74% minority populations. The percentage of these populations is above the Marion County average of 36 % low income and 47 % minority populations. See Appendix I, Environmental Justice, for socioeconomic data.

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 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:

The Proposed Action alternative would result in an overall reduction in GHG emissions. 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. 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:

Citizens Gas and Coke Utility shall provide advanced public notifications of 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	Yes. A public awareness program would be implemented according to the API recommended

American Petroleum Institute (API) Recommended Practice (RP) 1162?	practice 1162.
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. Safety would include personal protection, site monitoring, and site-specific safety plans.
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 vintage cast iron pipes. 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, the cast iron pipes would remain in their current location, state, and 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 leak-prone pipes are replaced.

Proposed Action:

The proposed project is necessary to replace leak prone pipes. This replacement is in alignment with Citizens' 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 in the Fall Creek area 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 has determined this replacement project would improve the overall safety of Citizens' infrastructure.

Safety
Mitigation Measures: Citizens Gas and Coke Utility 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. Citizens Gas and Coke Utility 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.[17] 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.

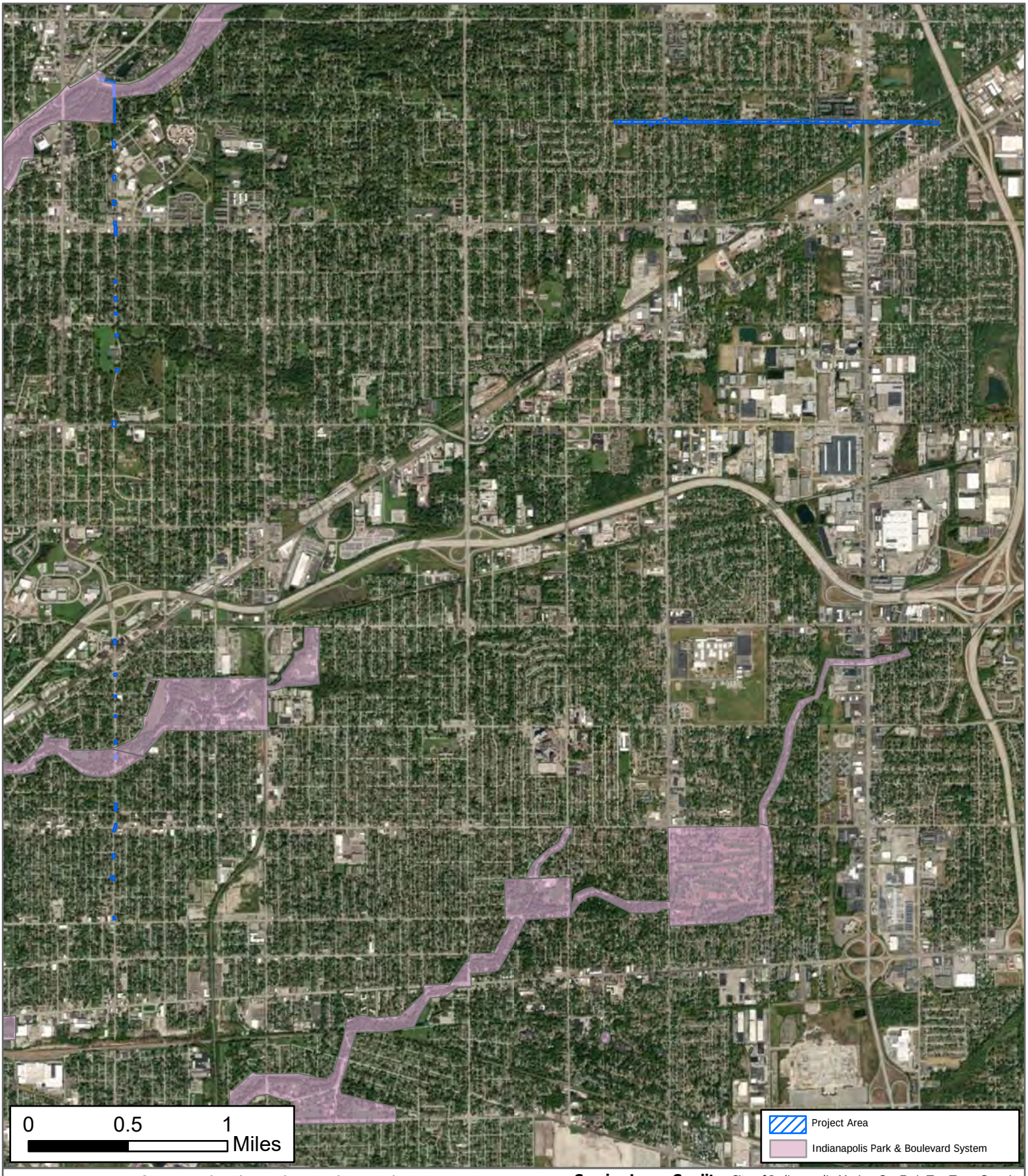
As part of this Tier 2 EA, PHMSA is soliciting public comments through a public comment period. This Tier 2 EA is available on PHMSA's website where comments can be submitted to the contact noted below. PHMSA will accept public comments for 30 days on this Tier 2 EA. PHMSA will consider comments received 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-2023-14 in your response.

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

Appendix A

Project Maps

Project Area Map

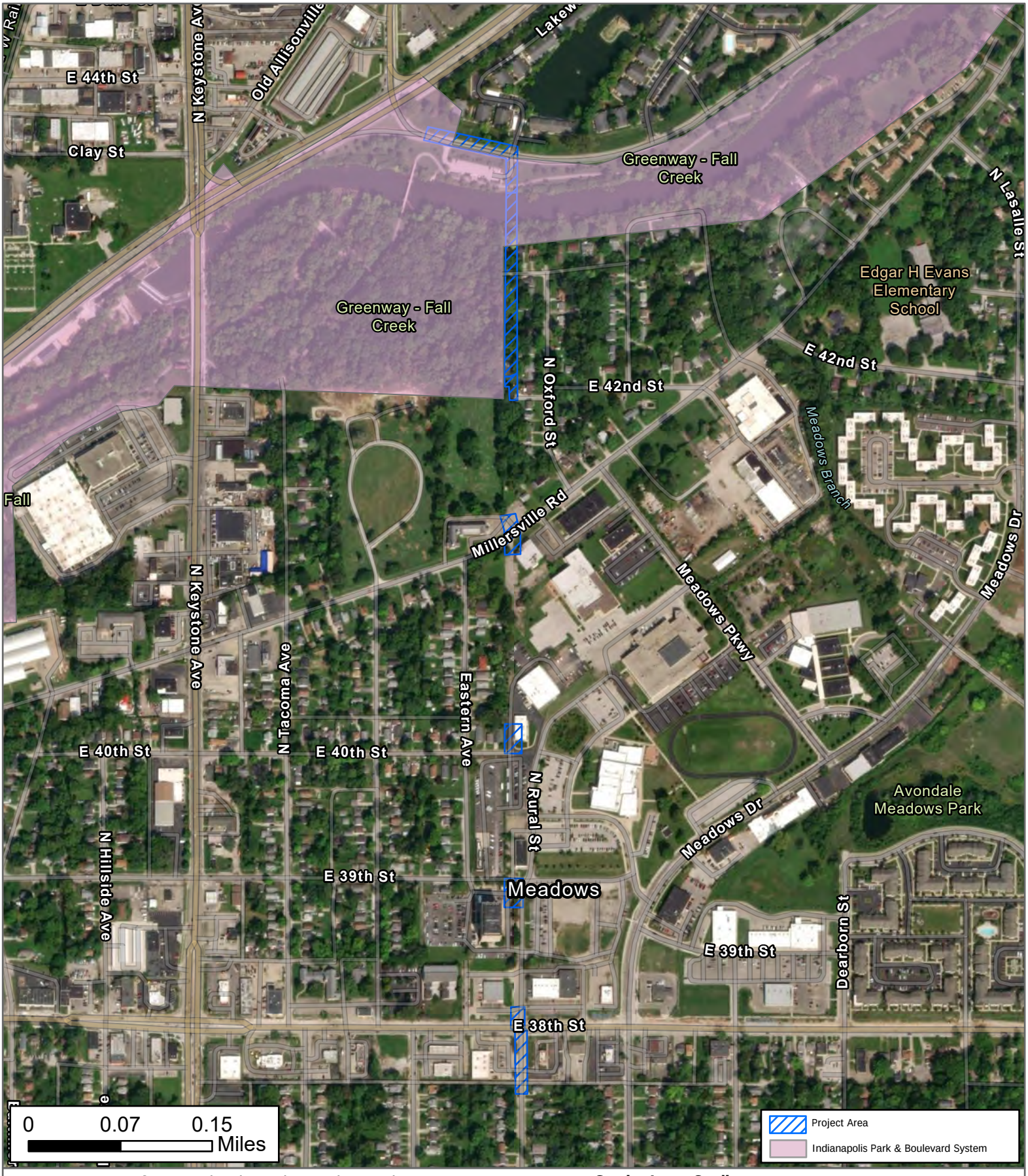


Name: Citizens of Gas and Coke Utility, Indianapolis Pipeline Replacement
Scale: 40,000
Total Acreage: 21.5
Indianapolis, Marion County, Indiana

N

Service Layer Credits: City of Indianapolis Marion Co, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS, Maxar

Project Area Map



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Scale: 6,500
Total Acreage: 21.5
Indianapolis, Marion County, Indiana

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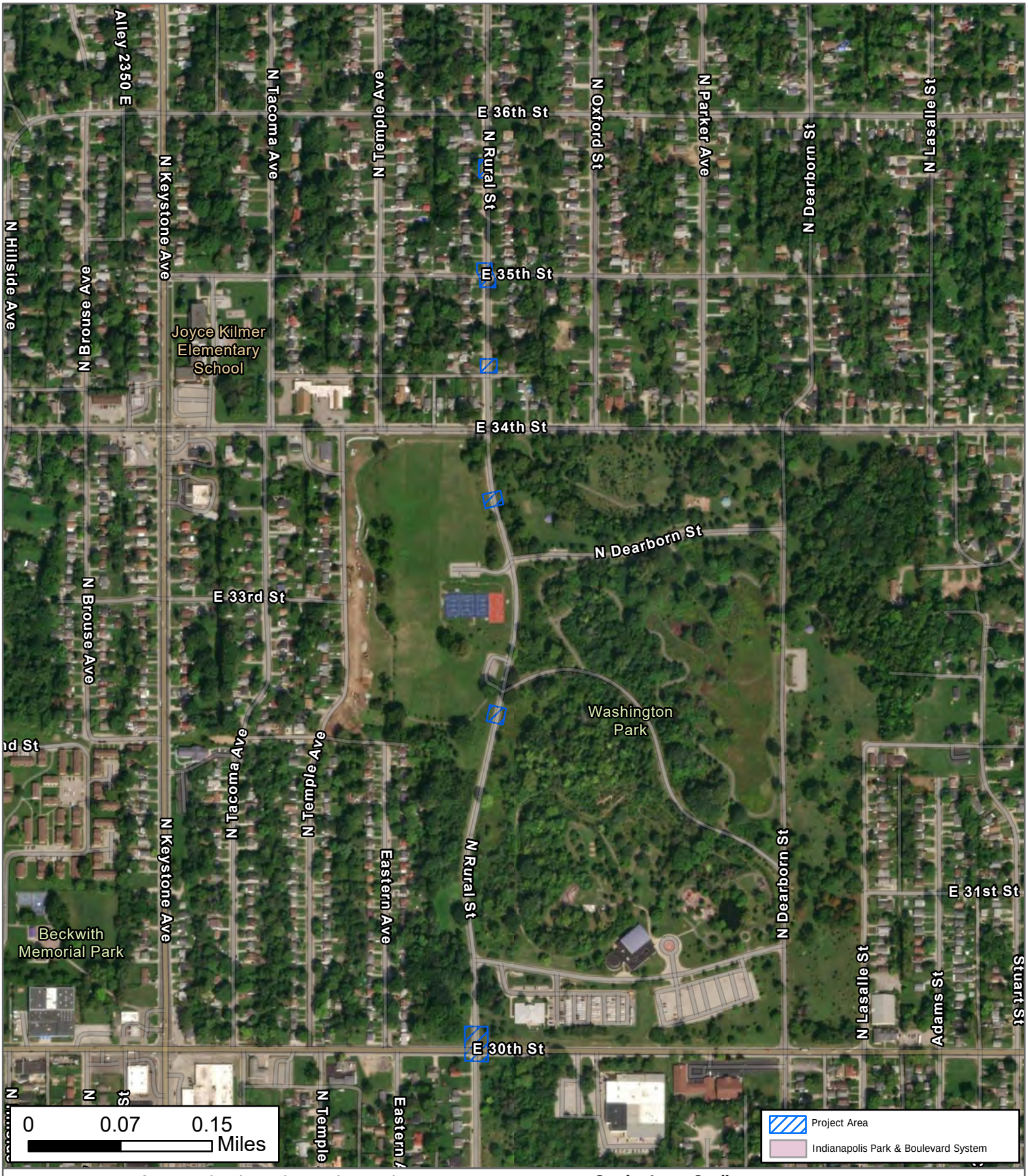
Service Layer Credits: Maxar, Esri Community Maps Contributors, City of Indianapolis Marion Co, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

Project Area Map

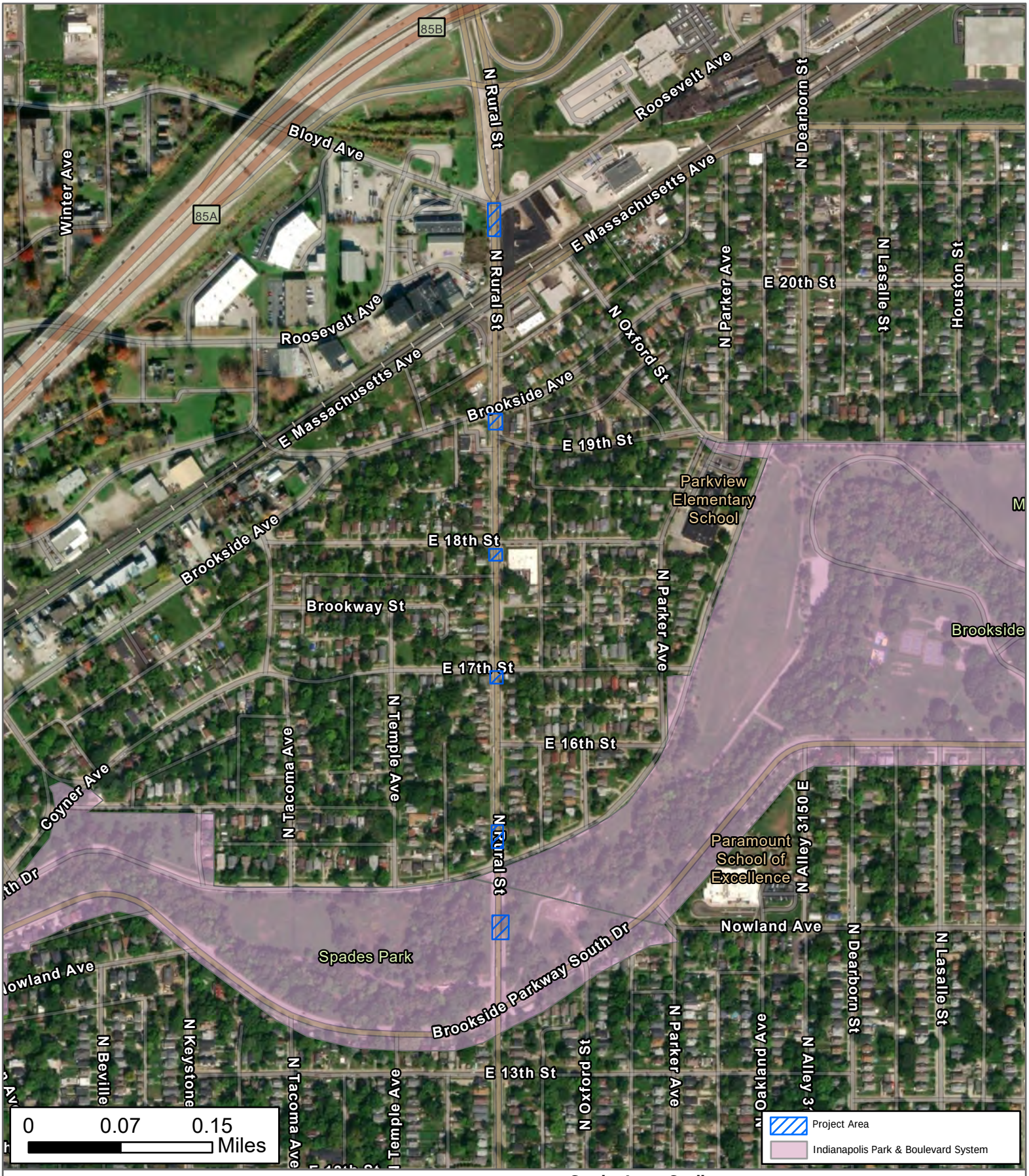


Name: Citizens of Gas and Coke Utility, Indianapolis Pipeline Replacement
Scale: 6,500
Total Acreage: 21.5
Indianapolis, Marion County, Indiana

N

Service Layer Credits: Maxar, Esri Community Maps Contributors, City of Indianapolis Marion Co, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

Project Area Map

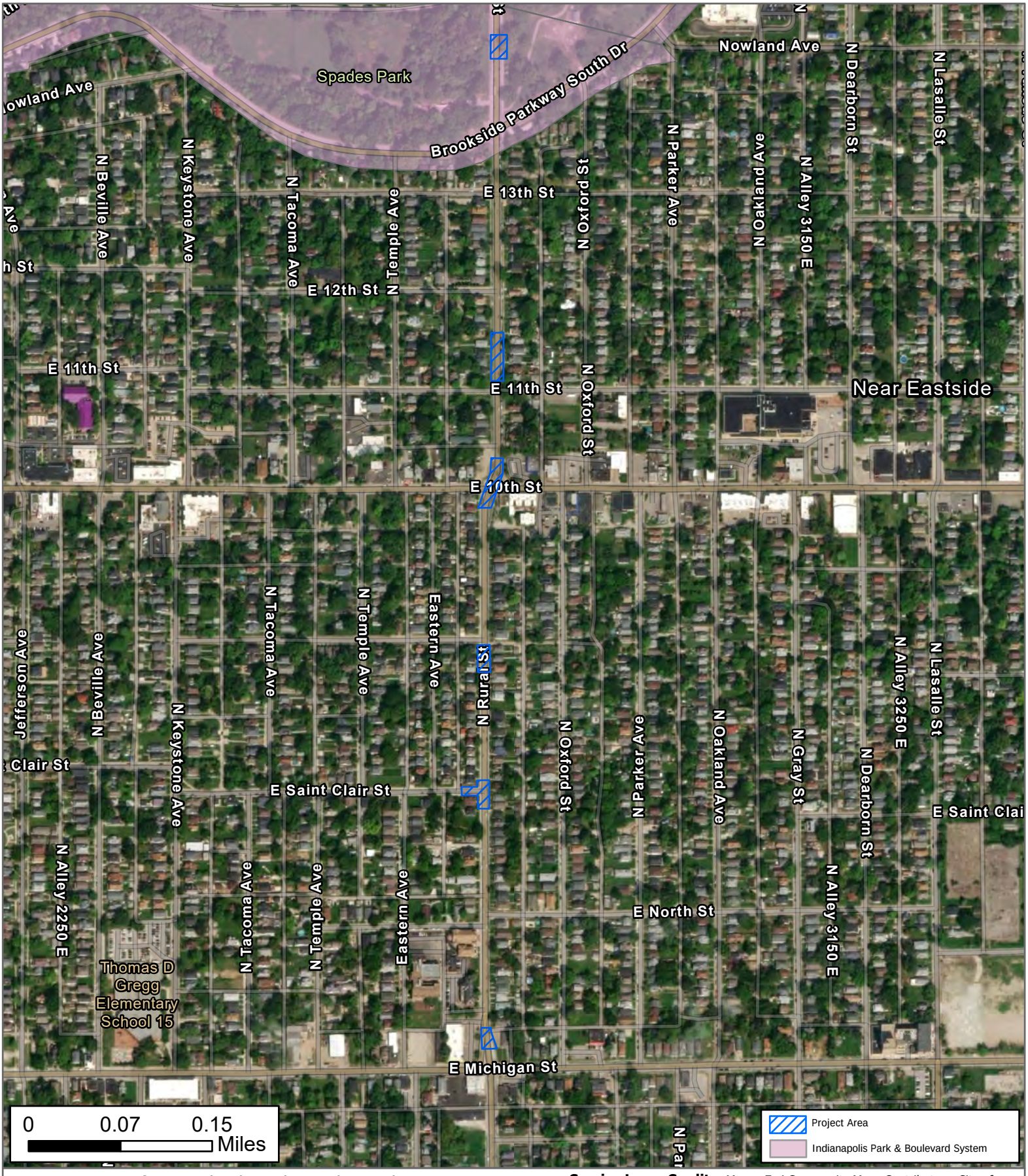


Name: Citizens of Gas and Coke Utility, Indianapolis Pipeline Replacement
Scale: 6,500
Total Acreage: 21.5
Indianapolis, Marion County, Indiana

N

Service Layer Credits: Maxar, Esri Community Maps Contributors, City of Indianapolis Marion Co, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

Project Area Map

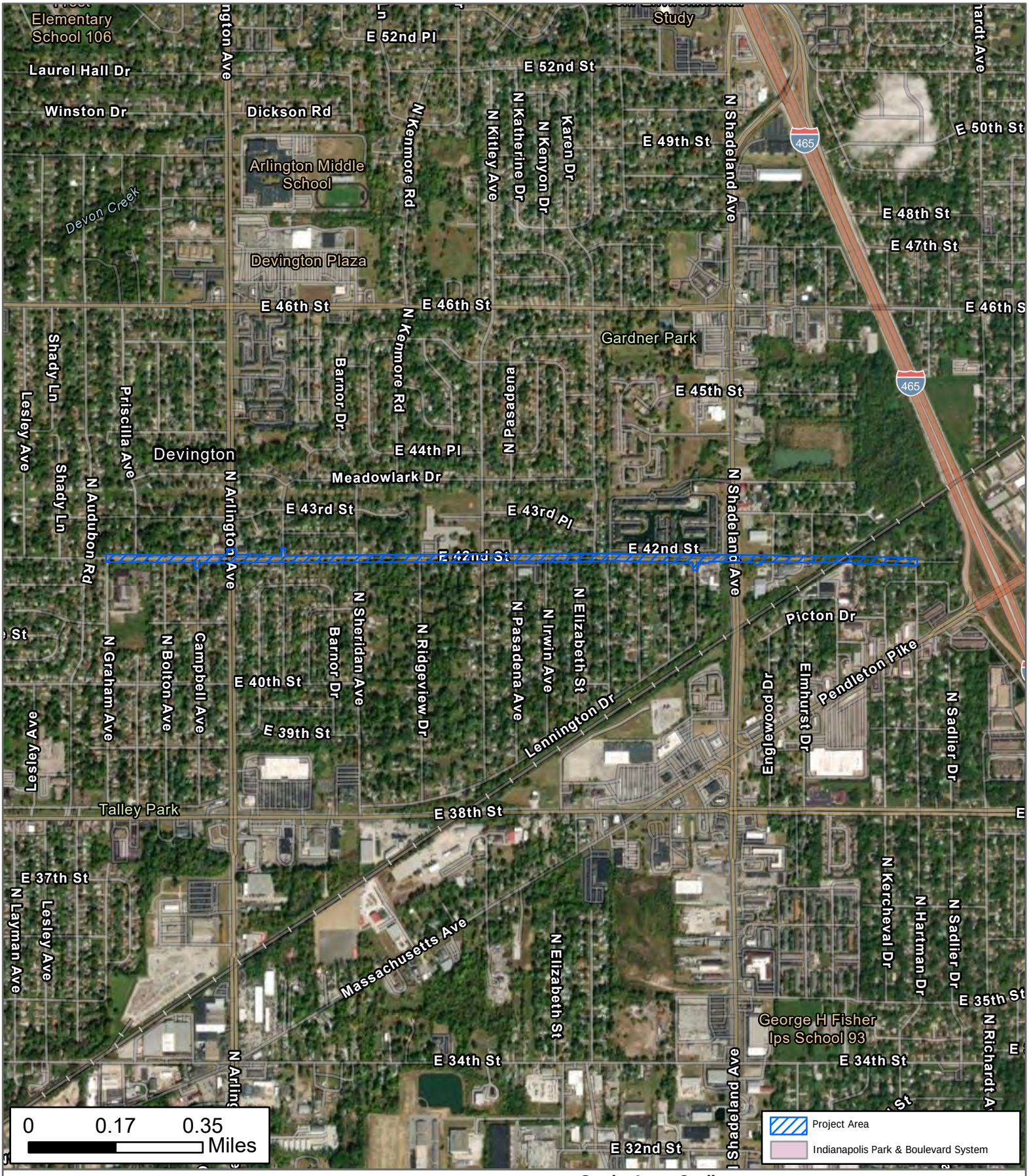


Name: Citizens of Gas and Coke Utility, Indianapolis Pipeline Replacement
Scale: 6,500
Total Acreage: 21.5
Indianapolis, Marion County, Indiana

N

Service Layer Credits: Maxar, Esri Community Maps Contributors, City of Indianapolis Marion Co, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

Project Area Map



Name: Citizens of Gas and Coke Utility, Indianapolis Pipeline Replacement
Scale: 16,000
Total Acreage: 21.5
Indianapolis, Marion County, Indiana

N

Service Layer Credits: Esri Community Maps Contributors, City of Indianapolis Marion Co, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS, Maxar

Appendix B

Air Quality

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	4,597.40	4.7	21,608
Unprotected steel	2,122.30	0	0
Protected steel	59.1	0	0
Plastic	190.9	0	0
Total Annual Methane Leak Rate			21,608
20-year Methane Emissions			432,156

Table 3: Proposed Action Leak Rate

Pipeline Material Type	Average Rate (kg/mile/year)	Miles	New Methane Leak Rate (kg/year)
Plastic	28.8	4.7	135
Annual Methane Reduction			21,472
20-year Methane Reduction			429,448

PHMSA estimated methane emissions from pipeline blowdowns, which are typically necessary to ensure that construction and maintenance work Equation 1 was used to estimate blowdown emissions in MCF, assuming a pipeline diameter (d) and pressure (P).

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

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

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

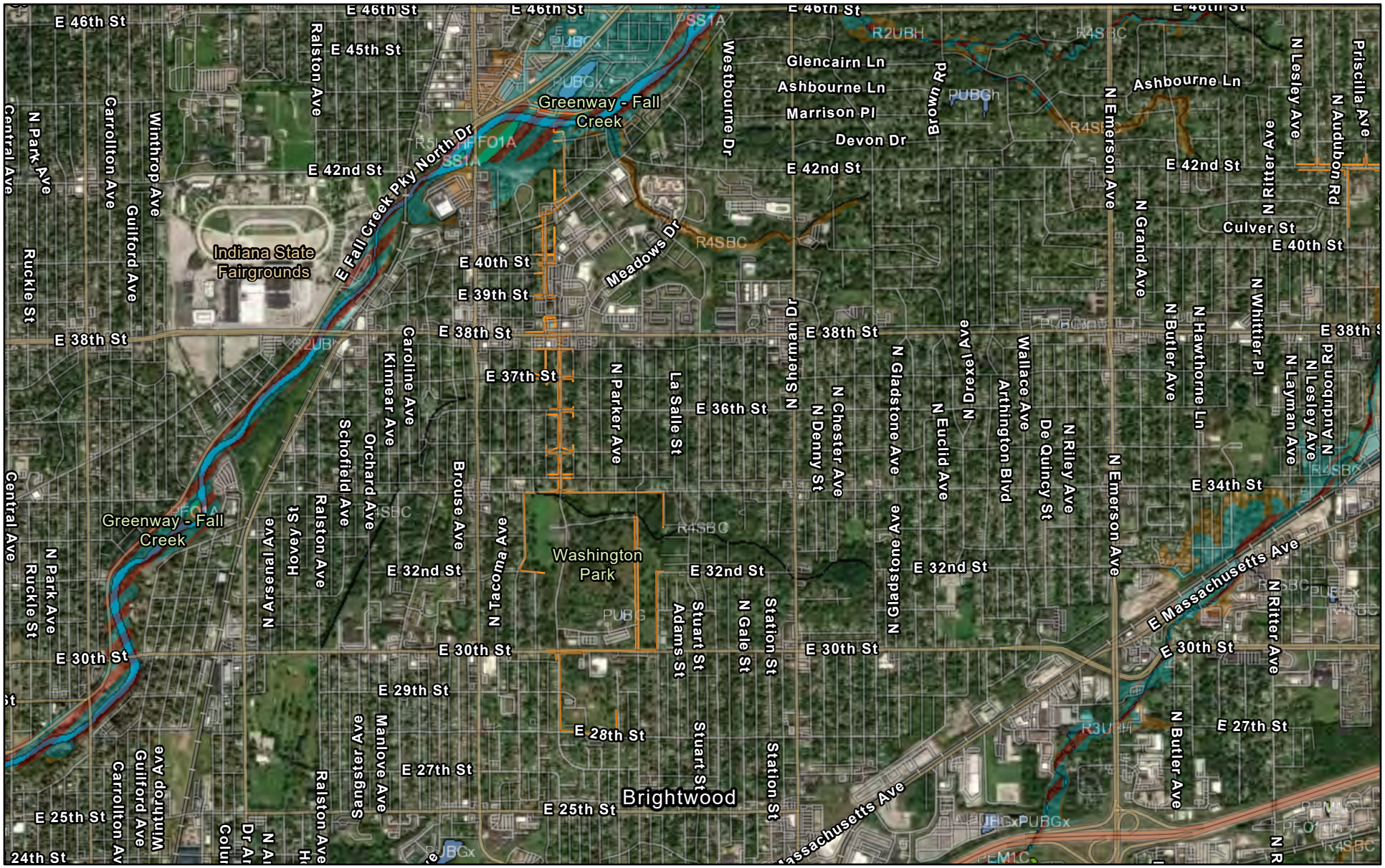
Table 4 Proposed Action - Methane Blowdown

Equation Inputs	Segment 1	Segment 2
Diameter (inches)	24	16
Blowdown Pressure	150	150
Length of Blowdown (feet)	16368	8448
Blowdown (MCF)	575.06	131.91
Total MCF		707
Total kg		21710

Appendix C

Water Resources

Citizens Gas and Coke - Fall Creek Water Resources



December 11, 2023

Flood Hazard Zones
- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee
- Area with Risk Due to Levee

Wetlands
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine
- Project Area

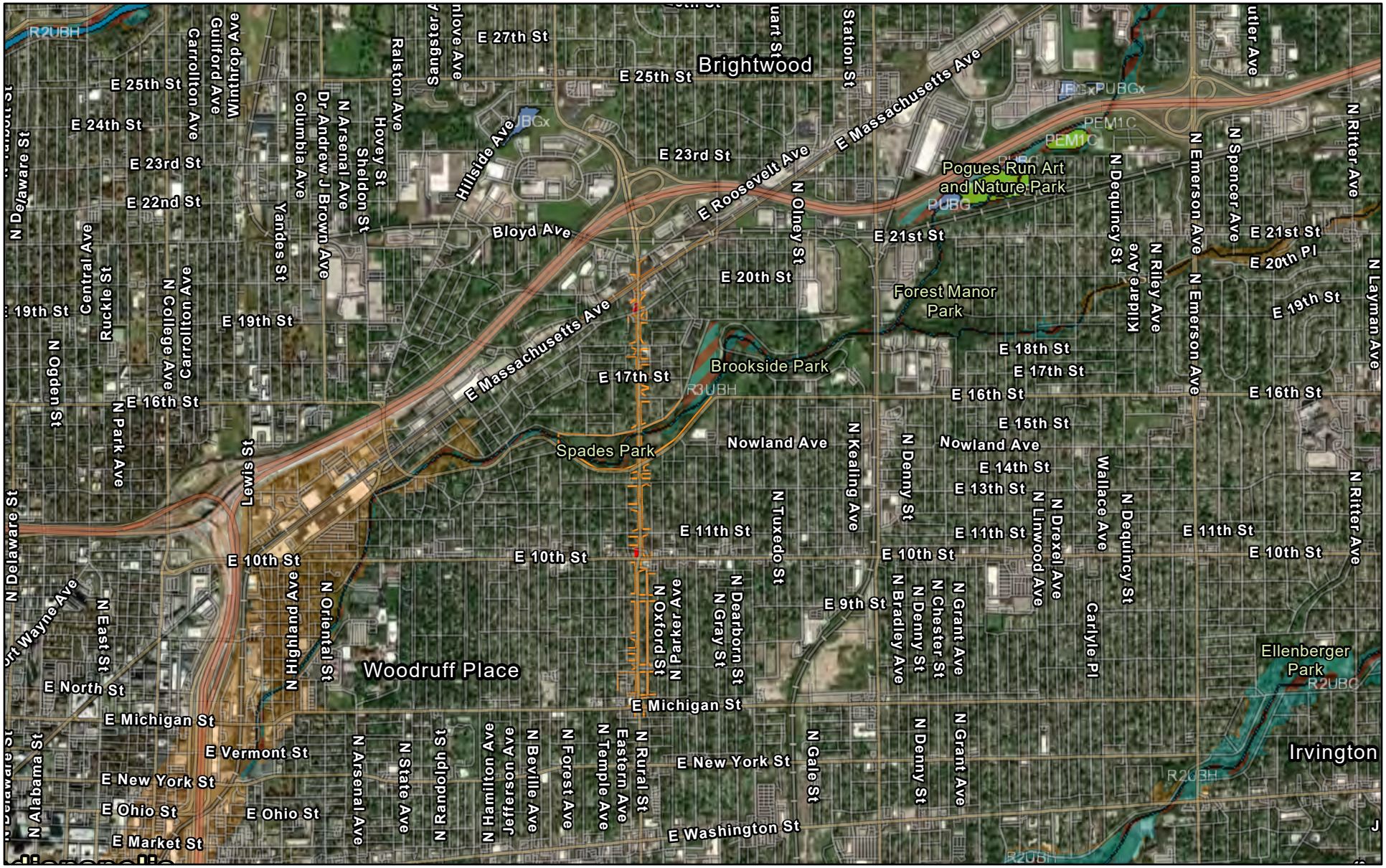
1:36,112

0 0.23 0.45 0.9 mi

0 0.38 0.75 1.5 km

U.S. Fish and Wildlife Service, National Standards and Support Team, wetlands_team@fws.gov, City of Indianapolis Marion Co, Esri, HERE,

Citizens Gas and Coke - Pogues Run Water Resources



December 11, 2023

Wetlands
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

Flood Hazard Zones
- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee
- Area with Risk Due to Levee
- Project Area

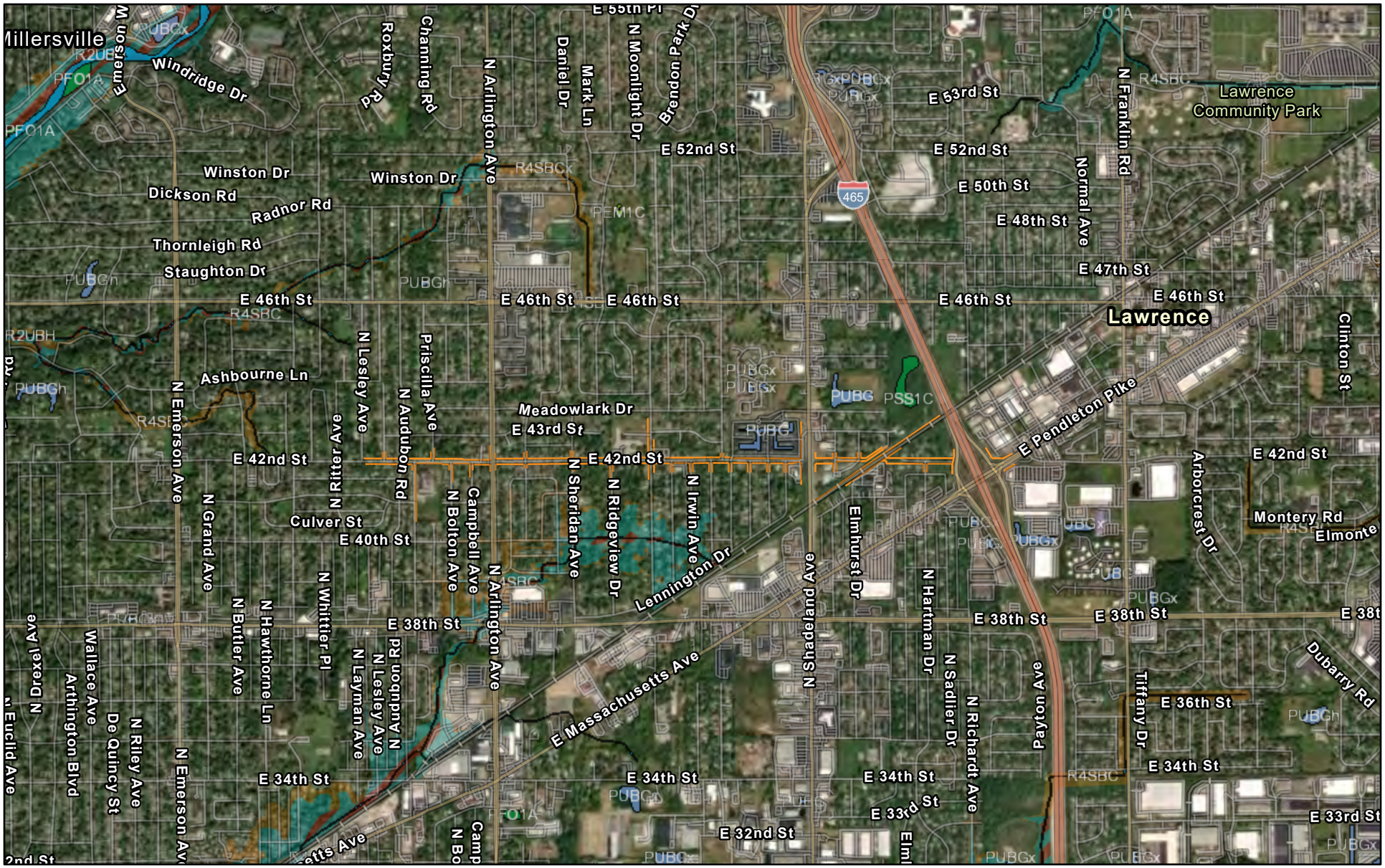
1:36,112

0 0.23 0.45 0.9 mi

0 0.38 0.75 1.5 km

U.S. Fish and Wildlife Service, National Standards and Support Team, wetlands_team@fws.gov, City of Indianapolis Marion Co, Esri, HERE,

Citizens Gas and Coke - East 42nd Street Water Resources



December 11, 2023

Wetlands
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
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- Lake
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- Riverine

Flood Hazard Zones
- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee
- Area with Risk Due to Levee
- Project Area

1:36,112

0 0.23 0.45 0.9 mi

0 0.38 0.75 1.5 km

U.S. Fish and Wildlife Service, National Standards and Support Team, wetlands_team@fws.gov, City of Indianapolis Marion Co, Esri, HERE,

Appendix C
Citizens Energy Group
Frac-out Plan

Citizens Energy Distribution Construction Fraction Mitigation Contingency Plan for Directional Drilling (HDD)

Description of Work

Drilling operations will be halted by the drill rig operator immediately upon detection of a drop-in drilling fluid pressure or other evidence of a frac-out. The clean-up of all spills begins immediately. The Construction Field Coordinator shall be notified immediately of any spills and shall be consulted regarding clean-up procedures. A vacuum truck and containment materials, such as straw bales, shall be available before and during all drilling operations. In the event of a frac-out, the Construction Field Coordinator and the Project Foreman will conduct an evaluation of the situation and direct recommended mitigation actions, based on the following guidelines:

- If the frac-out is minor, easily contained, has not reached the surface, and is not threatening sensitive resources, drilling operations may resume after use of a leak stopping compound or redirecting of the bore.
- If the frac-out has reached the surface, any material contaminated with Bentonite shall be contained, removed, and properly disposed of, as required by State and local laws.
- The drilling contractor shall be responsible for ensuring that the bentonite slurry is either adequately disposed of at a Citizens Energy Group approved disposal facility or recycled correctly in an authorized manner.
- The Construction Filed Coordinator shall notify and take any necessary follow-up response actions in coordination with Citizens Energy Group Environmental Stewardship representation.
- The Project Foreman will coordinate the mobilization of equipment stored at off-site locations (e.g., vacuum trucks) on an as-needed basis.

Construction Field Coordinator Responsibilities

The Construction Field Coordinator (CFC) has overall responsibility for implementing this Plan. The CFC will ensure the Drill contractor has trained all of its employees to this plan before drilling. The CFC shall be notified immediately when a frac-out is detected. The CFC will be responsible for the coordination of personnel, response, clean-up, disposal of recovered material, and ensuring the Citizens Environmental Stewardship is aware of the frac-out to provide the proper and timely reporting of the incident, if required, to all regulatory agencies involved.

Project Foreman

The Project Forman shall be familiar with all aspects of the drilling activities, the contents of this Plan, and the conditions of approval under which the operation is permitted to take place. The Project Foreman shall be notified immediately when a frac-out is detected. Project Foreman shall have the authority to stop work and commit the resources (personnel and equipment) necessary to implement this Plan. The Project Foreman shall assure that a copy of this Plan is available (onsite), accessible to all

construction personnel. That all construction and drilling personnel have reviewed and been trained to this Plan before drilling.

Equipment

The Project Foreman shall ensure that:

- All equipment and support vehicles are checked and maintained daily to prevent leaks of hazardous materials
- Spill containment materials are always available on-site and that the equipment is in good working condition.
- Any equipment required to contain and clean-up a frac-out release will either be available at the worksite or readily available at an offsite location within 20 minutes of the bore site.
- Equipment required to operate near a riverbed, creek, stream, or drainage ditch line that absorbent pads and plastic sheeting for placement beneath motorized equipment to protect from a release of engine fluids.
- Excavations/vacuum relief pits are to be located on each side of the river/stream crossing to channel liquids in a controlled manner.

Training

Before the start of construction/drilling activities, the Construction Field Coordinator and the Project Foreman shall ensure that all crew members receive training in the following:

- All crew members involved in the drill operations are Operator Qualified (OQ) for their defined tasks.
- This mitigation plan has thoroughly been reviewed and is available on-site during operations.
- Equipment maintenance, on-site permitting issues, and monitoring requirements are covered.
- Review the crew member’s responsibility to immediately stop the drilling operation upon the first evidence of the occurrence of a frac-out and all crew member's duties in the event of a product release or frac-out on the site.
- Review operations of release prevention measures, the control materials, equipment, and their locations, as necessary and appropriate.
- Review the Protocols for communication with Citizens Energy Groups Environmental Stewardship, State, and Local agencies who might be on-site during any clean-up efforts.
- Provide availability to all MSDS Drilling Fluids on-site daily.

Drilling Procedures

The Project Foreman shall be on-site at any time that drilling is occurring or is planned to occur. Drilling pressures shall be closely monitored by the drill operator, so they do not exceed those needed to penetrate the soil formation.

Entry and exit pits shall be enclosed by silt fences and straw bales if left open for more than five (5) days. A vacuum truck shall be readily available on-site during all drilling operations. Containment materials (straw, silt fencing, sandbags, spill kits, other equipment) shall be staged on-site at readily available locations for immediate use in the event of an accidental release of drilling mud or frac-out. If necessary, barriers (straw bales and silt fencing) may be placed between the bore site and the edge of the water source before drilling to prevent an accidental release of fluids.

The HDD method has the potential for loss or seepage of drilling mud into the geologic formation through which the drill passes. All construction crew members will be responsible for the monitoring and detection of frac-outs. The most obvious signs of a frac-out are the visible pooling of drilling mud on the surface, a sudden decrease in mud volume returns during drilling operations, or loss in drilling mud pump pressure. Drilling and mud system personnel will observe the volume of drilling fluid return and immediately report reductions to the Drill Foreman and the Project Foreman. The mud system operator will monitor actual drilling fluid volumes from the pumps and the return flow from the borehole. The operator will alert the Drill Foreman and the Project Foreman if there is significant variance.

In the event of partial circulation loss, the pumping of drilling fluid may be lowered to reduce the pressure applied to the native formation materials. In some cases, the drilling fluid may be forced to the surface resulting in an inadvertent return. In some cases, an inadvertent return of drilling fluid can be caused by existing conditions in the geologic materials (e.g., fractures or very soft sands) even if the down-hole pressures are low.

If seepage occurs in a stream, creek, or river, there may be a visible plume. Minor seepage may be challenging to detect due to the natural turbidity of a river and the high specific gravity of bentonite clay-based drilling fluid, which causes it to remain low in the water column. Once seepage is detected and drilling fluid pumps are stopped, there will be minimal disturbance to river sediment. There will be very little pressure to disturb surface sediment because of the distance that the drilling fluid must travel to reach the river bottom. The composition of the drilling fluid is primarily water and bentonite clay. If a small amount is released into a river, the rivers' current usually quickly dissipates it. To have early detection of possible seepages within the Project, the bore crew will closely monitor the drill operation as the bore progresses.

If the inadvertent return occurs below the water, the operator will momentarily stop the activity. The pressure of the water above the pipe will mitigate the seepage of excess mud. If the drilling mud congeals, bentonite will usually harden and seal any subsurface pathways. The bore crew may install sandbags for contaminants if the drilling mud does not coagulate. Appropriate parties will be notified.

Detection of a drilling fluid seepage includes identifying those conditions that may indicate a loss of pressure containment within the drill hole. It will also be based on visible signs that surface seepage has occurred. Horizontal directional drilling is a technically advanced process. The detection of drilling fluid seepage occurring is highly dependent upon the skills and experience of the drilling crew. Each drilling situation is unique in that the behavior of the subsurface material is highly variable and can be difficult to predict. There is no in-hole monitoring equipment that can detect drilling fluid seepage; therefore, a combination of factors such as those listed below must be appropriately interpreted to assess conditions that may have the potential of causing drilling fluid seepage. A seep occurs when there is a failure to maintain pressure in the hole.

The most obvious signs of a drilling fluid seepage are surface seepage or loss of circulation of the drilling fluid. One of the functions of the drilling fluid is to seal the hole to maintain the downhole pressure. The loss of returning drilling fluid is a sign that pressure is not being kept in the drill hole, and seepage is possibly occurring. If there is a reduction in the quantity of drilling fluid returning to the drill site (loss of circulation), this could be a warning sign.

However, some loss of drilling fluid is also standard in the drilling process. During the drilling process, a loose sand or gravel layer may be encountered, which would require additional drilling fluids to fill in the voids in the substrate. Consequently, drilling fluid loss itself is not an indication of a potential seepage condition. It is the loss of drilling fluid in combination with other factors that may indicate a potential seepage condition. For example, if there is a loss of drilling fluid and the return cuttings do not show a large quantity of gravel, then this could indicate a loss of containment pressure within the borehole. Once surface seepage of drilling fluid is detected, the drilling crew will take immediate corrective action.

The primary factor causing the surface seepage to occur is pressure from the drilling fluid pumps. Therefore, the most direct corrective action is to stop the rig pumps. By halting the pumps, the pressure in the hole will quickly bleed off. With no pressure in the hole, the surface seepage will stop. Stopping the pumps will be done as soon as surface seepage is detected or if such seepage is suspected.

There is a more significant potential for drilling fluid seepage at the entry and exit locations of the crossing, due to shallow profile depth and loose near-surface soils. The entry and exit locations have dry land segments where drilling fluid seepage can be easily detected and contained.

In order to isolate and contain potential drilling fluid seepage at the drill site, a berm can be constructed around the drilling site to separate it from the Project. Straw bales or silt fence can also be part of the berm on the waterside of the drilling area. There will be earth moving equipment, portable pumps, sandbags, and straw bales available on-site to contain and control drilling fluid seepage on land. Any drilling fluid seepage will first be contained and isolated using dirt berms, straw bales, or silt fencing. The area will then be immediately cleaned up using vacuum trucks, and the drilling fluid will be hauled to Citizens' designated disposal site.

In the event of seepage on land, it may only be necessary to reduce the downhole pressure to ensure the containment of the fluid. Upon containment and establishment of controls to contain further seepage, downhole pressure may be increased to original levels at the discretion of the Citizens Construction Field Coordinator and the Miller drill Foreman.

The location of the seepage will be monitored for any significant condition changes. After the drilling fluid seepage has been contained, the Construction Field Coordinator and the drill crew will make every effort to determine why the seepage occurred. Once the Construction Field Coordinator and the drill crew have established the cause of the seepage, measures will be developed to control the factors causing the seepage and to minimize the chance of recurrence.

Close-out Procedures

When the frac-out or release of fluid has been contained and cleaned-up, response closeout activities will be conducted at the direction of the Construction Field Coordinator or Project Foreman and shall include but not limited to the following:

- The recovered drilling fluid will either be recycled or hauled to a Citizens Energy Group approved disposal facility.
- All frac-out excavations and clean-up areas will be restored to pre-project contours using clean fill as necessary.
- All containment measures (fiber rolls, straw bales, silt fencing) shall be removed unless restoration efforts are delayed by weather or at the Project Foreman’s request.

Bore Abandonment

In some cases, the corrective measure may involve a determination that the existing borehole encountered a void that could be bypassed with a slight change in the profile. In other cases, it may be determined that the existing hole encountered a zone of unsatisfactory soil material, and the hole would then have to be abandoned. If the hole is abandoned, it can be filled with drilling slurry (bentonite).

Notification

In the event of a frac-out reached a water source, the Construction Field Coordinator will notify the Citizens Environmental Stewardship department for assistance. This notification will occur within 24 hours of the incident, and the following information will be provided:

- The name and the contact number of the person reporting.
- The location of the release
- The date and the time of the release
- Type and quantity released or estimated size and impact area
- The kind of activity that was occurring around the area of the frac-out
- How the release occurred
- Description of any sensitive areas, and their location concerning the frac-out
- Description of the methods used to clean up or secure the site
- Listing of the current permits obtained for the project

Communicating with Regulatory agency Personnel

All employees and subcontractors will adhere to the following protocols when permitting Regulatory Agency personnel arrive on-site:

- Only the Construction Field Coordinator and the Environmental Steward are to coordinate communication with regulatory agency personnel.
- All Regulatory staff will be required to comply with Citizens Energy Group safety rules while on-site

Documentation

The Project Foreman shall record the frac-out event in their daily log and on Citizens Energy Group Property Damage (PD) report with the following information:

- Details of the release event including an estimate of the amount of drill fluid released
- The location of the release
- The date and the time of the release
- Type and quantity released or estimated size and impact area
- The kind of activity that was occurring around the area of the frac-out
- How the release occurred
- Description of any sensitive areas, and their location concerning the frac-out
- Description of the methods used to clean up or secure the site

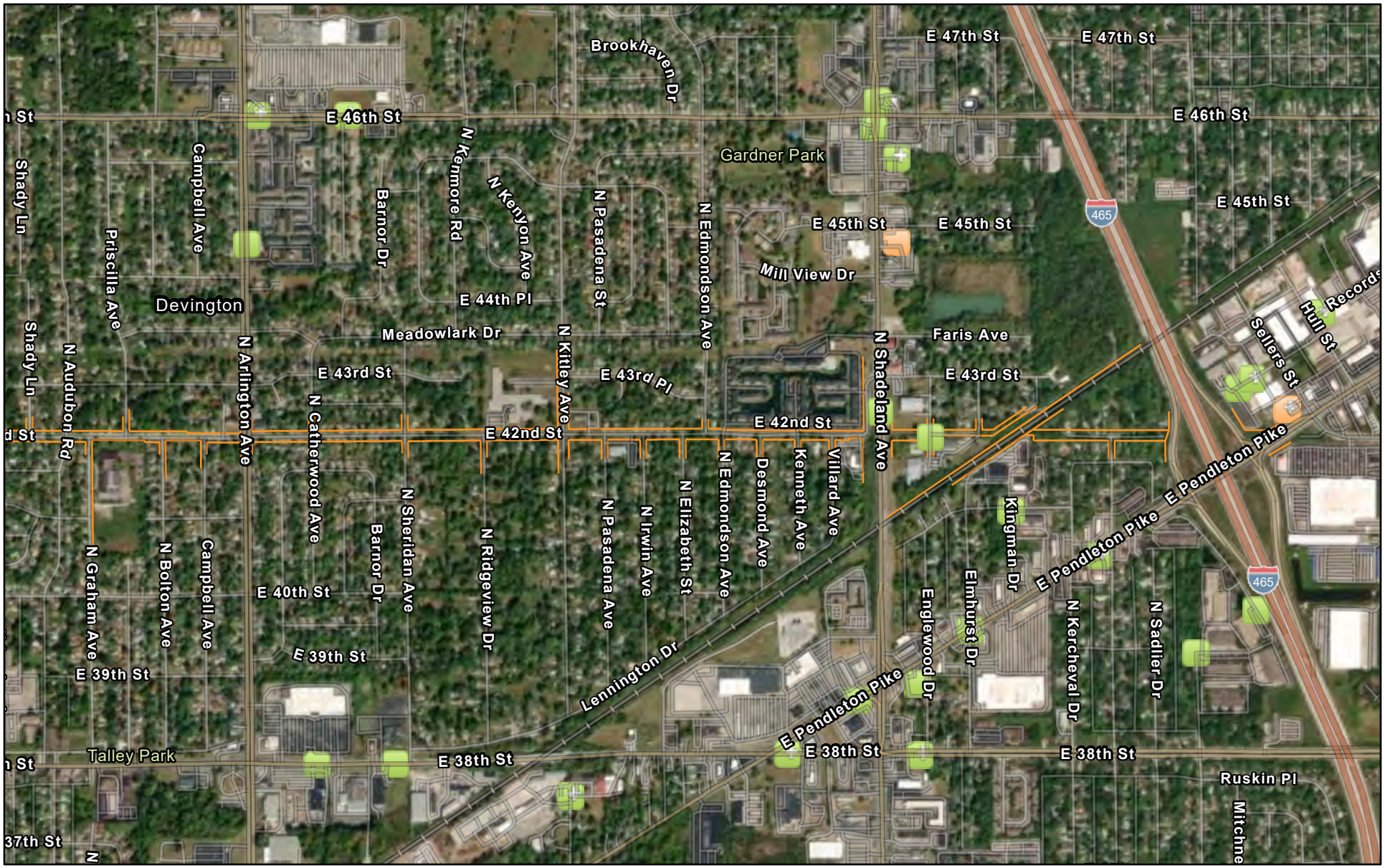
Project Completion and Clean-up

- The recovered drilling fluid will either be recycled or hauled to a Citizens Energy Group approved disposal facility.
- All excavations, sump pits, entry, and exit holes will be restored to pre-project conditions using clean fill as necessary.
- All containment measures (fiber rolls, straw bales, silt fencing) shall be removed unless restoration efforts are delayed by weather or at the Construction Field Coordinators request.

Appendix D

Hazardous Materials

Citizens Gas and Coke Utility



December 4, 2023

- Hazardous Waste (RCRAInfo)
- Hazardous Waste (RCRAInfo)
- Brownfields (ACRES)
- Brownfields (ACRES)
- Project Area

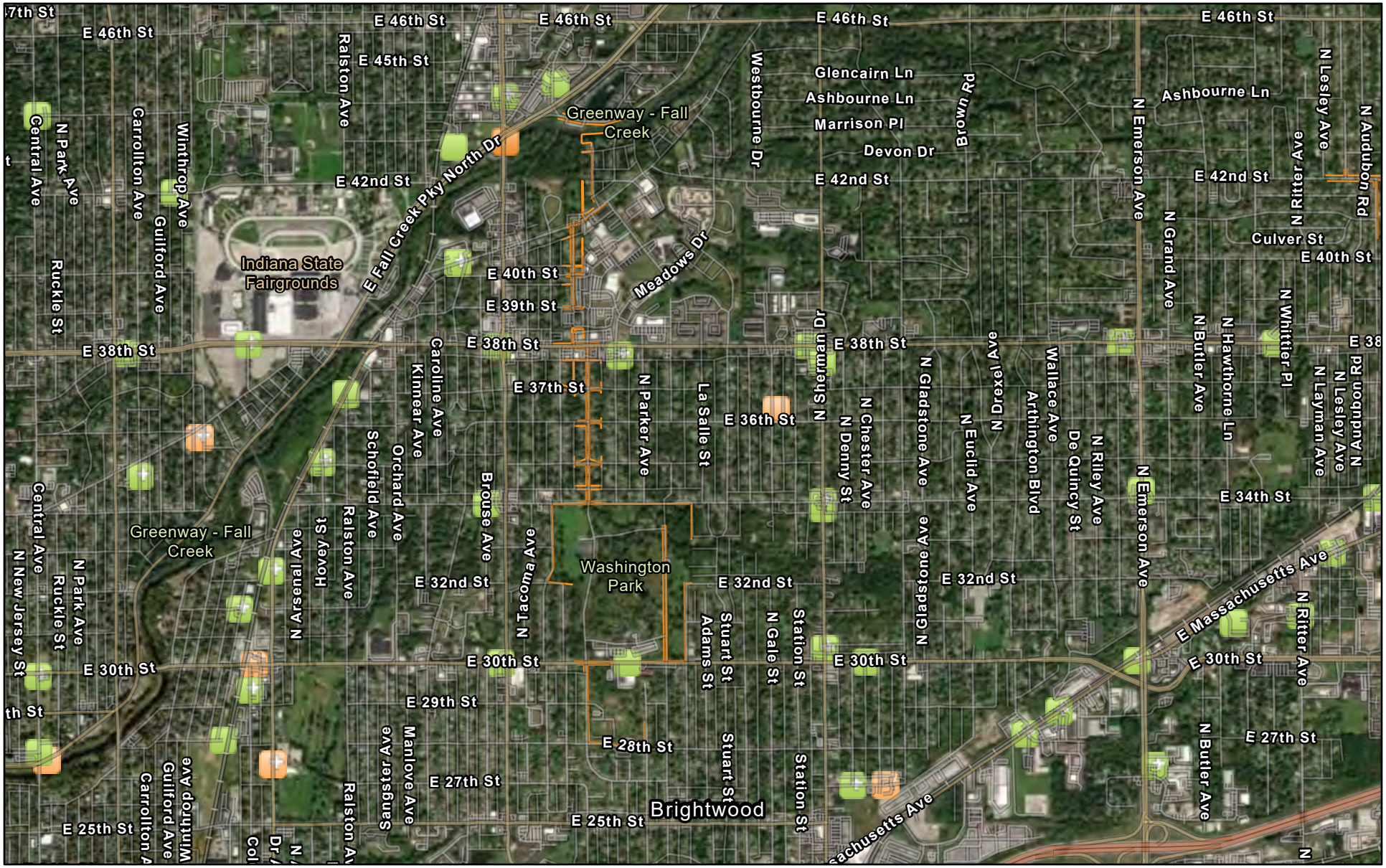
1:18,056

0 0.1 0.2 0.4 mi

0 0.17 0.35 0.7 km

Esri Community Maps Contributors, City of Indianapolis Marion Co, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA,

Citizens Gas and Coke Utility 2



December 4, 2023

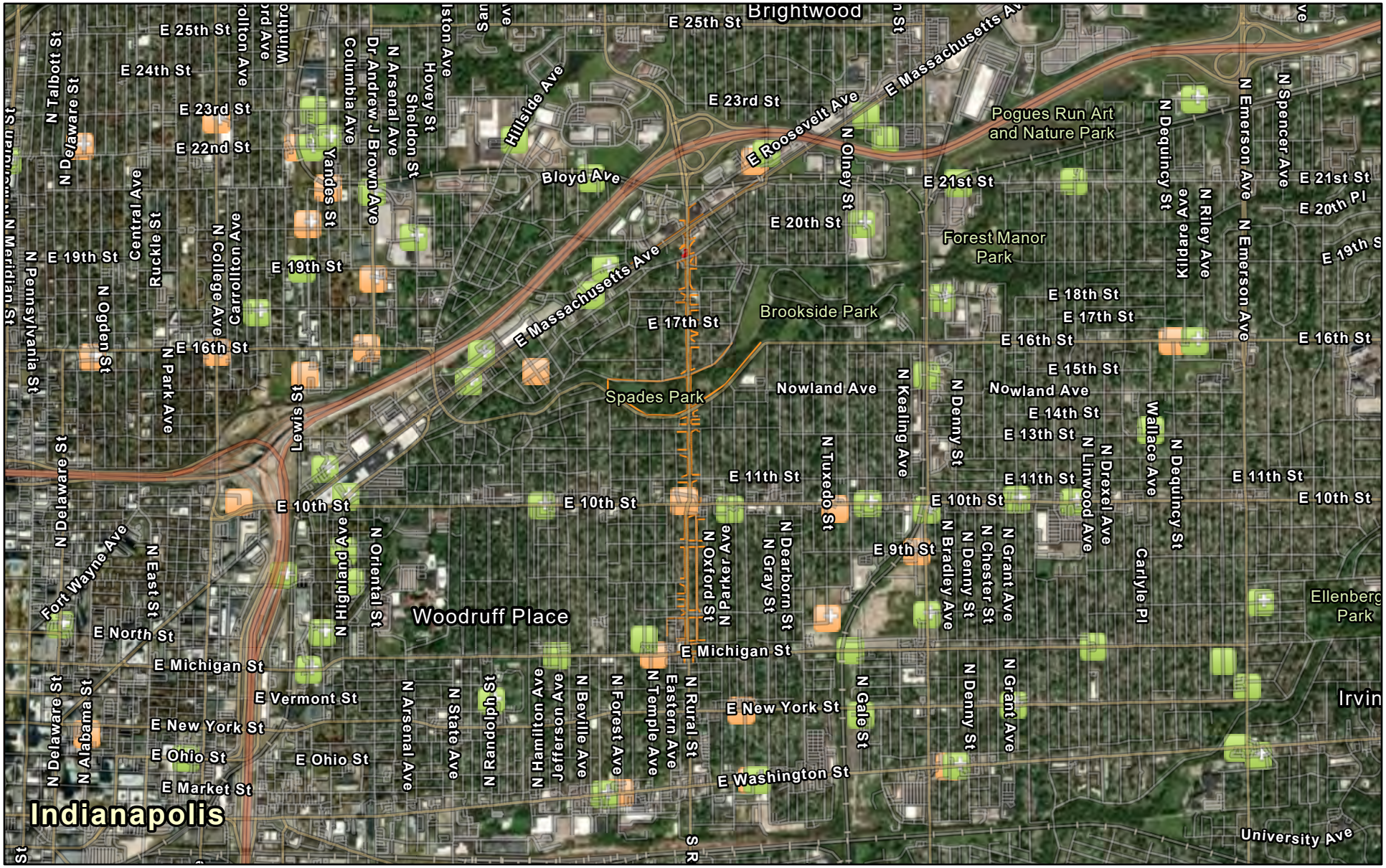
1:36,112

0 0.23 0.45 0.9 mi

0 0.38 0.75 1.5 km

- Hazardous Waste (RCRAInfo)
- Hazardous Waste (RCRAInfo)
- Brownfields (ACRES)
- Brownfields (ACRES)
- Superfund (NPL)
- Project Area

Citizens Gas and Coke Utility 3



December 4, 2023

Hazardous Waste (RCRAInfo)

Hazardous Waste (RCRAInfo)

Brownfields (ACRES)

Brownfields (ACRES)

Project Area

1:36,112

0 0.23 0.45 0.9 mi

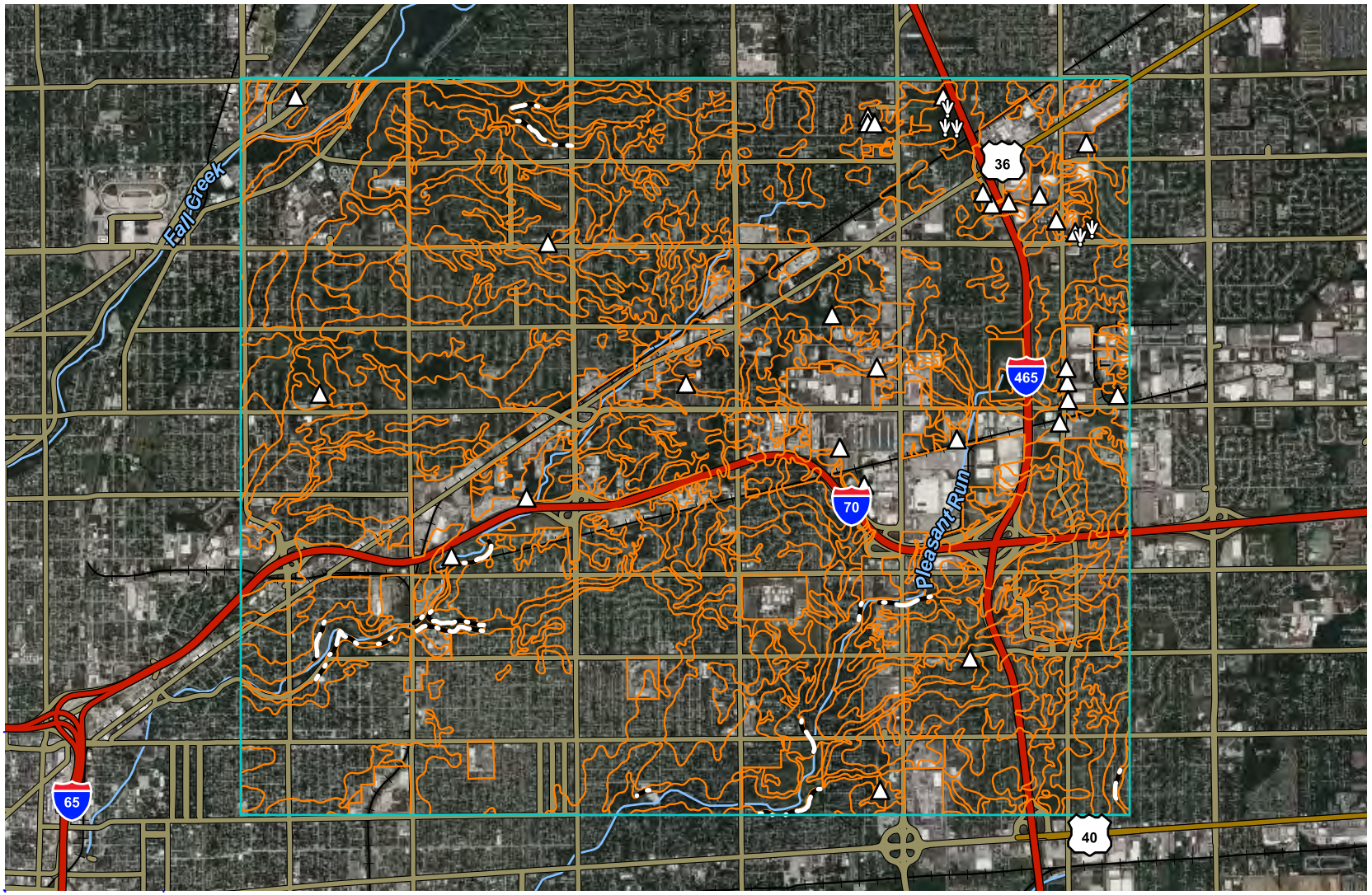
0 0.38 0.75 1.5 km

City of Indianapolis Marion Co, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau,

Appendix E: Soil Map

Soil Map—Marion County, Indiana
(Citizens Gas Pipeline Replacement)

86° 8' 57" W
85° 59' 30" W
39° 50' 49" N
39° 46' 5" N



Map Scale: 1:61,700 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 500 1000 2000 3000

Feet
0 2500 5000 10000 15000

Map projection: Web Mercator Corner coordinates: WGS84

MAP LEGEND

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

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

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 1:15,800.

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: Marion County, Indiana
Survey Area Data: Version 28, Sep 1, 2023

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

Date(s) aerial images were photographed: Jun 15, 2022—Jun 21, 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.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CrA	Crosby silt loam, fine-loamy subsoil, 0 to 2 percent slopes	7.2	0.0%
FxC2	Fox complex, 6 to 15 percent slopes, eroded	0.2	0.0%
Ge	Gessie silt loam, 0 to 2 percent slopes, frequently flooded, brief duration	47.5	0.3%
MmB2	Miami silt loam, 2 to 6 percent slopes, eroded	34.8	0.2%
MmC2	Miami silt loam, 6 to 12 percent slopes, eroded	16.9	0.1%
OcA	Ockley silt loam, 0 to 2 percent slopes	0.1	0.0%
ThrA	Treaty silty clay loam, 0 to 1 percent slopes	3.6	0.0%
Ua	Udorthents, cut and filled	1,404.1	8.8%
UbaA	Urban land-Brookston complex, 0 to 2 percent slopes	298.6	1.9%
UcfA	Urban land-Crosby silt loam complex, fine-loamy subsoil, 0 to 2 percent slopes	278.4	1.8%
UcmB2	Urban land-Crosby-Miami silt loams complex, 2 to 4 percent slopes, eroded	8.7	0.1%
UfC	Urban land-Fox complex, 6 to 12 percent slopes	18.7	0.1%
UfnA	Urban land-Crosby-Treaty complex, fine loamy subsoil, 0 to 2 percent slopes	797.8	5.0%
UkbB2	Urban land-Miami silt loam complex, 2 to 6 percent slopes, eroded	61.0	0.4%
UmiB	Urban land-Miami complex, 0 to 6 percent slopes	66.6	0.4%
UweA	Urban land-Westland complex, 0 to 2 percent slopes	15.0	0.1%
W	Water	52.5	0.3%
YbcA	Brookston-Urban land complex, 0 to 2 percent slopes	844.3	5.3%
YbvA	Brookston silty clay loam-Urban land complex, 0 to 2 percent slopes	1,482.6	9.3%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
YclA	Crosby silt loam, fine-loamy subsoil-Urban land complex, 0 to 2 percent slopes	2,790.0	17.6%
YcmB2	Crosby-Urban land-Miami silt loams complex, 2 to 4 percent slopes, eroded	18.3	0.1%
YctA	Crosby-Urban land-Treaty complex, fine-loamy subsoil, 0 to 2 percent slopes	4,147.6	26.1%
YelAH	Eel silt loam-Urban land complex, 0 to 2 percent slopes, frequently flooded, brief duration	23.8	0.2%
YfhC2	Fox-Urban land complex, 6 to 12 percent slopes, eroded	22.3	0.1%
YfoC2	Fox-Urban land complex, 6 to 15 percent slopes, eroded	0.4	0.0%
YfxA	Fox-Urban land complex, 0 to 3 percent slopes	434.1	2.7%
YgbAH	Gessie silt loam-Urban land complex, 0 to 2 percent slopes, frequently flooded, brief duration	49.9	0.3%
YguAH	Genesee-Urban land complex, 0 to 2 percent slopes, frequently flooded, brief duration	288.7	1.8%
YheF	Hennepin loam-Urban land complex, 25 to 50 percent slopes	0.6	0.0%
YmaB	Miami-Urban land complex, 0 to 6 percent slopes	1,325.7	8.3%
YmcD2	Miami-Urban land complex, 12 to 18 percent slopes, severely eroded	84.5	0.5%
YmmC2	Miami-Urban land complex, 6 to 12 percent slopes, eroded (Boone)	326.1	2.1%
YmsB2	Miami silt loam-Urban land complex, 2 to 6 percent slopes, eroded	643.2	4.0%
YmsC2	Miami silt loam-Urban land complex, 6 to 12 percent slopes, eroded	43.1	0.3%
YoxA	Ockley silt loam-Urban land complex, 0 to 2 percent slopes	5.1	0.0%
YsmAH	Sloan silt loam-Urban land complex, 0 to 2 percent slopes, frequently flooded, brief duration	52.3	0.3%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
YwcA	Westland clay loam-Urban land complex, 0 to 1 percent slopes	0.7	0.0%
YweA	Westland-Urban land complex, 0 to 2 percent slopes	192.3	1.2%
Totals for Area of Interest		**15,889.0**	**100.0%**

Appendix F

Biological Resources

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Indiana Ecological Services Field Office
620 South Walker Street
Bloomington, IN 47403-2121
Phone: (812) 334-4261 Fax: (812) 334-4273

In Reply Refer To:
Project Code: 2024-0010829
Project Name: Citizens Pipeline Replacement

October 31, 2023

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 the IPaC system 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.

Please use the species list provided and visit the U.S. Fish and Wildlife Service's Region 3 Section 7 Technical Assistance website at - http://www.fws.gov/midwest/endangered/section7/s7process/index.html. This website contains step-by-step instructions which will help you

determine if your project will have an adverse effect on listed species and will help lead you through the Section 7 process. For all **wind energy projects** and **projects that include installing towers that use guy wires or are over 200 feet in height**, please contact this field office directly for assistance, even if no federally listed plants, animals or critical habitat are present within your proposed project or may be affected by your proposed project.

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 https://www.fws.gov/program/migratory-bird-permit/what-we-do.

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
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

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:

Indiana Ecological Services Field Office
620 South Walker Street
Bloomington, IN 47403-2121
(812) 334-4261

PROJECT SUMMARY

Project Code: 2024-0010829
Project Name: Citizens Pipeline Replacement
Project Type: Pipeline - Onshore - Maintenance / Modification - Below Ground
Project Description: The proposed project would repair 4.7 miles of cast iron natural gas pipe in Indianapolis, Indiana in six segments located throughout the city.
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@39.8157146,-86.08983388278816,14z

Counties: Marion County, Indiana

ENDANGERED SPECIES ACT SPECIES

There is a total of 5 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.

MAMMALS

NAME	STATUS
Indiana Bat *Myotis sodalis* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered
Tricolored Bat *Perimyotis subflavus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

BIRDS

NAME	STATUS
Whooping Crane *Grus americana* Population: U.S.A. (AL, AR, CO, FL, GA, ID, IL, IN, IA, KY, LA, MI, MN, MS, MO, NC, NM, OH, SC, TN, UT, VA, WI, WV, western half of WY) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/758	Experimental Population, Non-Essential

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.

BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act[1] and the Migratory Bird Treaty Act[2].

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

---

1. The Bald and Golden Eagle Protection Act of 1940.
2. The Migratory Birds Treaty Act of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are bald and/or golden eagles in your project area.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds elsewhere

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read the supplemental information and specifically the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

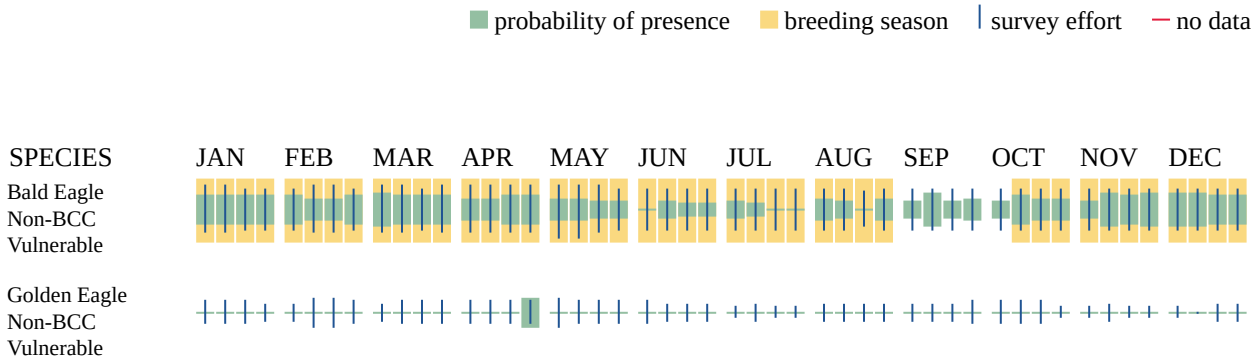
Probability of Presence (▪)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (▪)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Managment https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

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1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31
Black-billed Cuckoo *Coccyzus erythropthalmus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9399	Breeds May 15 to Oct 10
Bobolink *Dolichonyx oryzivorus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9454	Breeds May 20 to Jul 31
Cerulean Warbler *Dendroica cerulea* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/2974	Breeds Apr 21 to Jul 20
Chimney Swift *Chaetura pelagica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25

NAME	BREEDING SEASON
Eastern Whip-poor-will *Antrostomus vociferus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10678	Breeds May 1 to Aug 20
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds elsewhere
Kentucky Warbler *Oporornis formosus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9443	Breeds Apr 20 to Aug 20
Lesser Yellowlegs *Tringa flavipes* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Pectoral Sandpiper *Calidris melanotos* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9561	Breeds elsewhere
Prothonotary Warbler *Protonotaria citrea* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9439	Breeds Apr 1 to Jul 31
Red-headed Woodpecker *Melanerpes erythrocephalus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10
Rusty Blackbird *Euphagus carolinus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9478	Breeds elsewhere
Wood Thrush *Hylocichla mustelina* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9431	Breeds May 10 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read the supplemental

information and specifically the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

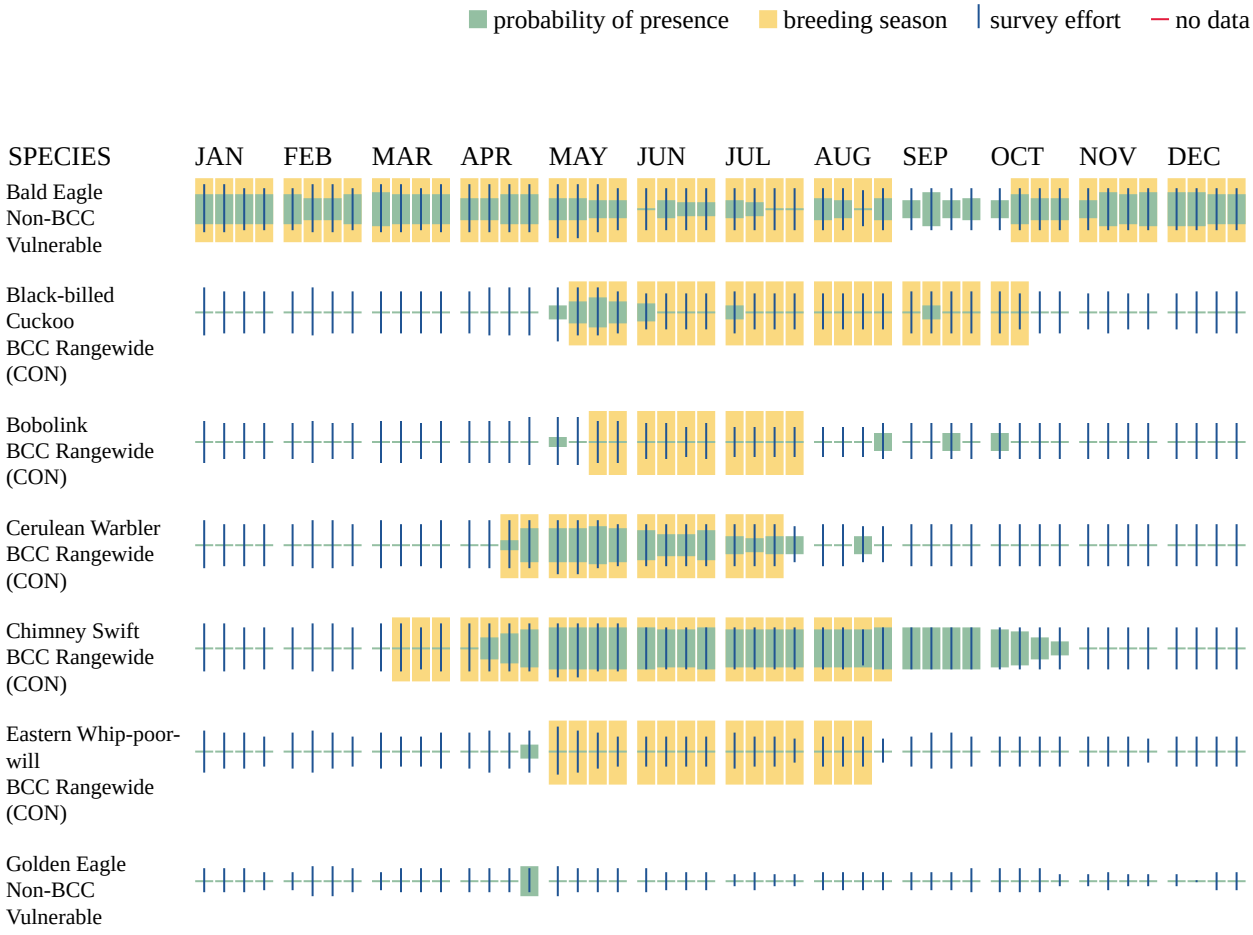
Probability of Presence (■)

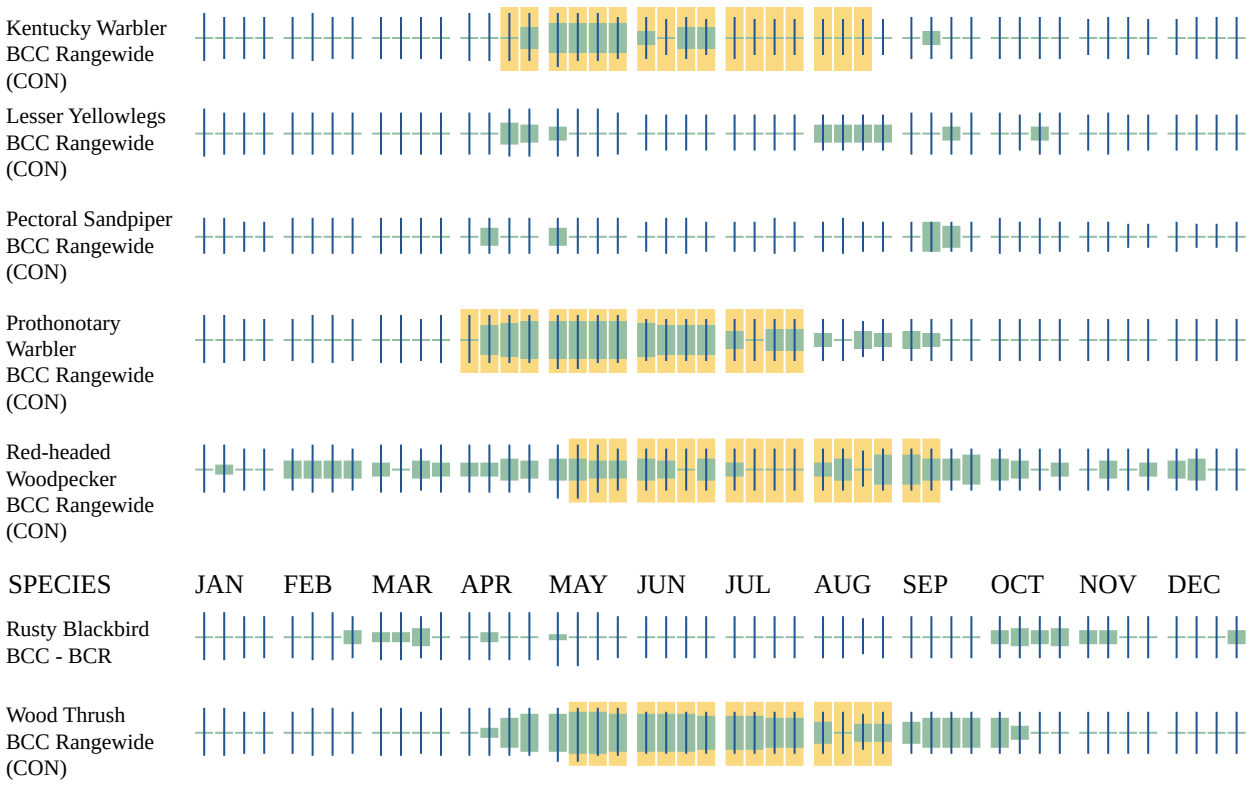
Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.





Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

WETLANDS

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

FRESHWATER FORESTED/SHRUB WETLAND

- PSS1A
- PFO1A
- PSS1C

RIVERINE

- R3UBH
- R4SBC
- R4SBCx
- R2UBH

FRESHWATER POND

- PUBGh
- PUBGx
- PUBG

FRESHWATER EMERGENT WETLAND

- PEM1C

IPAC USER CONTACT INFORMATION

Agency: Department of Transportation
Name: Travis Mast
Address: 55 Broadway
City: Cambridge
State: MA
Zip: 01452
Email travis.mast@dot.gov
Phone: 6174943782

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Pipeline and Hazardous Materials Safety Administration

01/13/2023

Indiana County Endangered, Threatened and Rare Species List

Indiana Department of Natural Resources

Species Name	Common Name	FED	STATE	GRANK	SRANK
Marion					
Mollusk: Bivalvia (Mussels)					
Alasmidonta viridis	slippershell mussel		SSC	G4G5	S3
Cyprogenia stegaria	Eastern Fanshell Pearlymussel	E	SE	G1	S1
Epioblasma perobliqua	white catspaw	E	SE	G1	SX
Epioblasma rangiana	northern riffleshell	E	SE	G1	S1
Epioblasma triquetra	Snuffbox	E	SE	G3	S1
Eurynia dilatata	spike		SSC	G5	S4
Fusconaia subrotunda	Longsolid	PT	SX	G3	SX
Lampsilis fasciola	wavyrayed lampmussel		SSC	G5	S3
Obovaria subrotunda	round hickorynut	PT	SE	G4	S1
Plethobasus cicatricosus	White Wartyback	E	SX	G1	SX
Plethobasus cooperianus	Orangefoot Pimpleback	E	SX	G1	SX
Plethobasus cyphyus	Sheepnose	E	SE	G3	S1
Pleurobema clava	Clubshell	E	SE	G1G2	S1
Pleurobema plenum	Rough Pigtoe	E	SE	G1	S1
Pleurobema rubrum	Pyramid Pigtoe		SX	G2G3	SX
Ptychobranchus fasciolaris	Kidneyshell		SSC	G4G5	S2
Theliderma cylindrica	Rabbitsfoot	T	SE	G3G4	S1
Toxolasma lividus	Purple Lilliput		SSC	G3	S2
Venustaconcha ellipsiformis	Ellipse			G4	S2
Villosa iris	Rainbow		SSC	G5	S3
Villosa lienosa	Little Spectaclecase		SSC	G5	S3
Insect: Hymenoptera					
Bombus affinis	Rusty-patched Bumble Bee	E	SE	G2	S1
Insect: Neuroptera					
Sisyra sp. 1	Indiana Spongilla Fly		ST	GNR	S2
Arachnida					
Castianeira alata	an antmimic spider		SE	GNR	S1
Cicurina arcuata	A Funnel-web Weaver			G5	S1
Goneatara platyrhinus	a money spider		WL	GNR	S3S4
Phrurolithus goodnighti	an antmimic spider		SE	GNR	S1
Thymoites unimaculatus	spotted cobweaver		WL	GNR	S3S4
Fish					
Percina evides	Gilt Darter		SE	G4	S1
Amphibian					
Necturus maculosus	common mudpuppy		SSC	G5	S3
Reptile					
Clemmys guttata	spotted turtle	C	SE	G5	S2
Clonophis kirtlandii	Kirtland's snake		SE	G2	S3

Indiana Natural Heritage Data Center
Division of Nature Preserves
Indiana Department of Natural Resources
This data is not the result of comprehensive county surveys.

Fed: E = Endangered; T = Threatened; C = candidate; PDL = proposed for delisting

State: SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern; SX = state extirpated; SG = state significant; WL = watch list

GRANK: Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon globally; G4 = widespread and abundant globally but with long-term concerns; G5 = widespread and abundant globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank

SRANK: State Heritage Rank: S1 = critically imperiled in state; S2 = imperiled in state; S3 = rare or uncommon in state; S4 = widespread and abundant in state but with long-term concern; SG = state significant; SH = historical in state; SX = state extirpated; B = breeding status; S? = unranked; SNR = unranked; SNA = nonbreeding status unranked

Indiana County Endangered, Threatened and Rare Species List

Indiana Department of Natural Resources

Species Name	Common Name	FED	STATE	GRANK	SRANK
Emydoidea blandingii	Blanding's turtle	C	SE	G4	S2
Pseudemys concinna concinna	eastern river cooter		SE	G5T5	S1
Thamnophis butleri	Butler's garter snake		SE	G4	S1
Bird					
Ardea alba	Great Egret		SSC	G5	S1B
Bartramia longicauda	Upland Sandpiper		SE	G5	S3B
Botaurus lentiginosus	American Bittern		SE	G5	S2B
Buteo platypterus	Broad-winged Hawk		SSC	G5	S3B
Certhia americana	Brown Creeper			G5	S2B
Chordeiles minor	Common Nighthawk		SSC	G5	S4B
Falco peregrinus	Peregrine Falcon		SSC	G4	S2B
Haliaeetus leucocephalus	bald eagle			G5	S3
Helmitheros vermivorus	worm-eating warbler		SSC	G5	S3B
Ixobrychus exilis	Least Bittern		SE	G4G5	S3B
Lanius ludovicianus	loggerhead shrike		SE	G4	S2B
Mniotilta varia	Black-and-white Warbler		SSC	G5	S1S2B
Nycticorax nycticorax	Black-crowned Night-heron		SE	G5	S1B
Pandion haliaetus	Osprey		SSC	G5	S1B
Peucaea aestivalis	Bachman's Sparrow			G3	SXB
Rallus elegans	King Rail		SE	G4	S1B
Setophaga cerulea	Cerulean Warbler		SE	G4	S3B
Setophaga citrina	Hooded Warbler		SSC	G5	S3B
Sitta canadensis	Red-breasted Nuthatch			G5	S1B
Mammal					
Lasiurus borealis	Eastern red bat		SSC	G3G4	S4
Myotis lucifugus	little brown myotis	C	SE	G3G4	S2
Myotis septentrionalis	Northern Long Eared Bat	T; PE	SE	G2G3	S2S3
Myotis sodalis	Indiana Bat	E	SE	G2	S1
Taxidea taxus	American Badger		SSC	G5	S2
Vascular Plant					
Chelone obliqua var. speciosa	rose turtlehead		WL	G4T3	S3
Deschampsia cespitosa	tufted hairgrass		ST	G5	S3
Hydrastis canadensis	golden seal		WL	G3G4	S3
Juglans cinerea	butternut		ST	G3	S2
Panax quinquefolius	American ginseng		WL	G3G4	S3
Poa wolfii	Wolf's bluegrass		ST	G4	S3
Rubus odoratus	purple flowering raspberry		ST	G5	S2
Trifolium stoloniferum	running buffalo clover		SE	G3	S1
Veratrum virginicum	Virginia bunchflower		SE	G5	S1

Indiana Natural Heritage Data Center
Division of Nature Preserves
Indiana Department of Natural Resources
This data is not the result of comprehensive county surveys.

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01/13/2023

Indiana County Endangered, Threatened and Rare Species List

Indiana Department of Natural Resources

Species Name	Common Name	FED	STATE	GRANK	SRANK
High Quality Natural Community					
Forest - flatwoods central till plain	Central Till Plain Flatwoods		SG	G3	S2
Forest - floodplain mesic	Mesic Floodplain Forest		SG	G3?	S1
Forest - floodplain wet	Wet Floodplain Forest		SG	G3?	S3
Forest - floodplain wet-mesic	Wet-mesic Floodplain Forest		SG	G3?	S3
Forest - upland dry-mesic Central Till Plain	Central Till Plain Dry-mesic Upland Forest		SG	GNR	S2
Forest - upland mesic Central Till Plain	Central Till Plain Mesic Upland Forest		SG	GNR	S3
Wetland - fen	Fen		SG	G3	S3
Wetland - marsh	Marsh		SG	GU	S4
Wetland - seep circumneutral	Circumneutral Seep		SG	GU	S1

Indiana Natural Heritage Data Center
Division of Nature Preserves
Indiana Department of Natural Resources
This data is not the result of comprehensive county surveys.

Fed: E = Endangered; T = Threatened; C = candidate; PDL = proposed for delisting

State: SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern; SX = state extirpated; SG = state significant; WL = watch list

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SRANK: State Heritage Rank: S1 = critically imperiled in state; S2 = imperiled in state; S3 = rare or uncommon in state; S4 = widespread and abundant in state but with long-term concern; SG = state significant; SH = historical in state; SX = state extirpated; B = breeding status; S? = unranked; SNR = unranked; SNA = nonbreeding status unranked

Appendix G

Cultural Resources

January 26, 2024

Daniel W. Bortner
State Historic Preservation Officer
Department of Natural Resources
Indiana Government Center South – Room W256
402 West Washington Street
Indianapolis, IN 46204

Section 106 Consultation: PHMSA Pipeline Replacement Project in Indianapolis, Indiana
Grant Recipient: Citizens Gas Coke and Utility
Project Location: City of Indianapolis, Marion County, Indiana

Dear Daniel W. Bortner:

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 Citizens Gas Coke and Utility (Grant Recipient) 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 Grant Recipient proposes to replace 4.7 miles of cast iron pipe in the City of Indianapolis (City), Indiana, that was installed during the 1950s with polyethylene (PE) pipe. The Undertaking consists of six segments with approximately 3.1 miles of 24-inch and 1.6 miles of 16-inch cast iron pipe. The vulnerable pipeline to be replaced is located within the existing right-of-way (ROW). The proposed action would not require new ROW or easements. The existing ROW encompasses various roads, sidewalks, and grassy areas throughout the City.

The Grant Recipient will use insertion as its method for the Undertaking. The replacement PE pipe will be installed inside the existing cast iron pipeline for all project segments except the segment under Fall Creek, which will be installed using horizontal directional drilling (HDD). No trenching will be required for this work, but small segments of the main will be exposed at the insertion and retrieval pits to support the slip lining. The 10-foot by 10-foot excavation pits will be on top of the existing pipeline within paved or otherwise previously disturbed areas; ground disturbance at these locations will not go below the existing pipelines.

Where the pipeline crosses Fall Creek, HDD construction methods would be utilized with entry and exit pits located within paved and unpaved areas, on top of the existing pipeline, at least 100 feet from Fall Creek. Excavation depth at these locations is not anticipated to exceed 7 feet. No tree clearing or other habitat disturbance will be required. The replacement pipeline at Fall Creek will be installed within approximately 10 feet of the existing pipeline, likely below the existing pipeline. The existing pipeline will

then be abandoned in place. Following the completion of construction, site restoration will be completed to ensure that all areas of ground disturbance are filled and reseeded to existing conditions.

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 where ground disturbance for the pipeline replacements will take place, which generally includes the paved roads, sidewalks, and grassy areas. A portion of the APE also extends beneath Fall Creek. The APE includes the limits of disturbance and extends to the depths of proposed ground disturbance for each location. The Undertaking does not have the potential to cause visual or audible effects after the completion of construction. The APE is shown on the map in **Attachment A**.

Identification and Evaluation

To identify historic properties in the APE, U.S. Department of Transportation (U.S. DOT) staff 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; the Indiana Historic Buildings, Bridges, and Cemeteries Map; and the Indiana State Historic Architectural and Archaeological Research Database (SHAARD). U.S. DOT staff also conducted research to determine if there are any previously unidentified properties that are 45 years of age or older within the APE that may be eligible for listing in the NRHP.

Historic Architecture

There is one NRHP-listed above-ground resource within the APE: the Indianapolis Park & Boulevard System (NR-1711). The Indianapolis Park & Boulevard System is an NRHP-listed district that encompasses portions of the primary riverine system in Marion County, Indiana and three property types: 12 parks, 6 parkways, and 2 boulevards. The district is listed in the NRHP under Criterion A in the areas of landscape architecture, community planning and conservation, health/medicine, entertainment/recreation, and transportation as an example of the trend to regulate growth and improve health and welfare in cities in the early-twentieth century. It is also listed under Criterion C in the areas of landscape architecture and engineering as an example of the work of George Edward Kessler, a master landscape architect, and as an embodiment of the distinctive design characteristics in response to the urban conditions of the early-twentieth century. The district's period of significance is from 1873 to 1952.

The APE overlaps with two portions of the Indianapolis Park & Boulevard System: Fall Creek Greenway and Spades Park. The Undertaking involves the replacement of pipeline in these areas. At the Fall Creek Greenway location, HDD construction methods would be utilized with entry and exit pits located on top of the existing pipeline, and no tree clearing or other habitat disturbance will be required. At the Spades Park location, insertion methods will be utilized along with insertion and retrieval pits along N. Rural Street. No construction work will take place on or immediately adjacent to the contributing bridge (HB-2609) at this location.

A search of the Indiana Historic Buildings, Bridges, and Cemeteries Map found no other above-ground resources that have been listed or determined eligible within the APE. Due to the scale and nature of the Undertaking, which is limited to the replacement of pipelines within the existing ROW, the identification effort for above-ground resources focused on identifying properties that are susceptible to the effects of pipeline replacement and could experience diminished integrity as a result of the Undertaking. No lasting

audible or visual effects from the Undertaking are anticipated. A review of the APE found no above-ground potentially significant resources that have the potential to be affected by the Undertaking.

Archaeology

SHAARD was examined to identify the presence of previously recorded archaeological sites and previously conducted archaeological surveys within the APE. A one-half mile search radius was also examined for previously recorded archaeological sites and surveys (see Tables 1 and 2). Within one half of a mile of the APE, 17 archaeological surveys have been conducted and four archaeological sites have been recorded. Two of these sites (12-Ma-1018 and 12-Ma-1066) have been determined not eligible for listing in the NRHP, and the other two sites (12-Ma-0164 and 12-Ma-0341) have not been evaluated. No archaeological sites or surveys were identified within the APE.

Table 1. Previously Recorded Archaeological Sites within One Half of a Mile of the APE

Archaeological Site	**Site Type**	**NRHP Eligibility**	**Relation to APE**
12-Ma-0164	Surface material found by survey: wood	Unknown	Outside APE
12-Ma-1018	Historic and pre-historic Artifact Scatter	Not Eligible	Outside APE
12-Ma-1066	Historic Artifact Scatter	Not Eligible	Outside APE
12-Ma-0341	Unknown	Unknown	Outside APE

Table 2. Previously Conducted Archaeological Surveys within One Half of a Mile of the APE

Report	**Citation**
AR-49-00791 Phase I Investigation DigIndy Deep Tunnel Project Combined Sewer Overflow Abatement Additional Investigations 12-Ma-1018 Part of Upper Pogues Run Line (7/25/18)	Kathleen Settle, Veronica Parsell, Duane Simpson
AR-49-01232 Phase Ia Archaeo Survey George Washington Park and Minnie Creek Stormwater Improvement Project, Indianapolis	Samuel P. Snell
AR-49-01058 Cultural Resources Survey of the GN Indy 1379 - A Telecommunication Small Cell Node, Raw Land site, Indianapolis	Melissa Metzger
AR-49-01088 Cultural Resource Inventory Survey: Proposed Small Cell Telecommunications Site - GN Indy 1352 - 3726 Vermont Street, Indianapolis, Marion County	Mark C. Branstner
AR-49-01141 Cultural Resource Inventory Survey: Proposed Small Cell Telecommunications Site - GN INDY 1481 -A- 2423 E. New York St, Indianapolis, Marion County	Mark C. Branstner
AR-49-00692 Phase Ia Archaeological Records Review and Reconnaissance DigIndy Wastewater Storage Tank at Brookside Park, Indianapolis, Marion County, Indiana	Veronica Parsell, Kathleen Settle
AR-49-01204 Phase I Cultural Resources Survey: Proposed 31-Foot (Overall Height) Pole Telecommunications Support Structure, AT&T Site IND25_07 FA#14841606	Joshua Wackett
AR-49-00720 Phase Ia Archaeo Investigation Viewshed Study Proposed North Sherman Drive Telecommunications Tower Site (US-IN 5081) City of Indianapolis	Christopher Jackson

Report	Citation
AR-49-00690 Cultural Resource Survey 9INB001497 Trileaf #632152 Station Street and 30th Street Indianapolis, IN 46218	Cori Rich
AR-49-00242 Arch Feld Recon: 38th Street Improvements, Marion Co., IN	Jeanette Buehrig
AR-49-00241 Arch Records Rev: 38th Street Improvements, Marion Co., IN	Lisa Maust
AR-49-00003 Phase Ia Archaeological Survey for the Keystone Avenue Bridge No. 1807F over Fall Creek (Des. No. 1173063) in Indianapolis, Washington Township, Mar	Jon Criss
AR-49-00238 An ArchRecon of Proposed Improvements to the Fall Creek Corridor in Indpls., Marion Co., IN	Robert G. McCullough
AR-49-00766 Indiana Archaeo Short Report Binford Boulevard/Fall Creek Parkway Corridor Safety Improvements Lawrence Des. No.: 1401015	Jason Goldbach
AR-49-00804 Supplemental Phase Ia Archaeological Records Check and Reconnaissance Survey for the Proposed IndyGo Bus Rapid Transit Purple Line Route in the City of Indianapolis	Sean Coughlin
AR-49-01294 2nd Addendum to: PhIA Survey for the Proposed IndyGo Bus Rapid Transit Purple Line Route in Marion Co	Chuck Mustain, David Klinge
AR-49-00903 Phase Ia Archaeo Recon Prop CRAN_RIND_IND14_NODE 20 Telecommunications Facility	Kevin McGowan

An examination of Web Soil Survey data within the APE reveals ten soil classes including several Urban Land soil types (see Table 3). Well drained and moderately well drained soils can be indicative of human habitation during both the pre-contact and historic periods. Well drained soils within the APE include Fox-Urban land, Genesee-Urban land complex, and Miami-Urban land complex types. Typically slopes greater than 15 percent are not suitable for human occupation, and soil types within the APE vary from 0 to 12 percent slope. The composition of soils indicates that most of the APE is within somewhat poorly drained soils, which suggests poor conditions for human habitation in both the pre-contact and historic periods. Proximity to major waterways generally indicates a suitable environment for both precontact and historic human activity; Fall Creek, which drains into the Upper White River, is within the APE.

Table 3. Soil Types within the APE

Map Unit Name	Drainage Class	Slope	Percent of APE
Urban land-Crosby-Treaty complex, fine loamy subsoil	Somewhat poorly drained	0-2%	0.8%
Brookston silty clay loam-Urban land complex	Poorly drained	0-2%	2.5%
Crosby silt loam, fine-loamy subsoil-Urban land complex	Somewhat poorly drained	0-2%	69.5%
Crosby-Urban land-Miami silt loams complex	Somewhat poorly drained	2-4%	2.5%
Crosby-Urban land-Treaty complex, fine-loamy subsoil	Somewhat poorly drained	0-2%	4.5%

Map Unit Name	Drainage Class	Slope	Percent of APE
Fox-Urban land complex	Well drained	6-12%	1.6%
Fox-Urban land complex	Well drained	0-3%	7.7%
Genesee-Urban land complex, frequently flooded, brief duration	Well drained	0-2%	5.9%
Miami-Urban land complex	Moderately well drained	0-6%	1.6%
Miami-Urban land complex, (Boone)	Moderately well drained	6-12%	1.6%
Westland-Urban land complex	Poorly drained	0-2%	1.1%

Historic topographic maps from 1948, 1961, and 1970 and historic aerial photographs from 1941 and 1958 were examined for archaeological resource potential 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. Historic maps and aerial photography may also illustrate land use of the APE historically. The APE is comprised of the urban landscape of the City of Indianapolis. A topographic map from 1948 shows George Washington Park as located within a dense cluster of streets. The 1961 and 1970 topographic map shows considerable development in contrast to the 1948 map, especially in the APE closest to Fall Creek where a shopping center was constructed. Historic aerial imagery shows the APE as largely developed for residential and commercial purposes. Historic topographic maps and the Find a Grave online database were also examined to identify any known historic cemeteries within the APE. No known cemeteries were noted within the APE. Although the Historic Ebenezer Lutheran Church Cemetery is adjacent to the APE, no work will occur within the cemetery.

As noted above, background research revealed four archaeological sites and 17 surveys within one half of a mile of the APE. No archaeological sites or surveys were identified within the APE. An examination of soils indicates poor conditions for human habitation, and a review of mid-20th century historic maps and aerials reveals that the APE has been heavily developed with residential and commercial development, as well as churches and municipal buildings. While these factors may indicate some potential for archaeological deposits, it is unlikely that archaeological deposits would contain the subsurface integrity needed for NRHP consideration due to the heavily modified nature of the APE.

The APE consists of heavily developed residential and commercial areas within the urban center of Indianapolis. All ground disturbance will take place within the existing ROW, and the segment under Fall Creek will be installed using HDD methods, which minimizes ground disturbance. The entry and exit pits for the Fall Creek segment will be located within existing road ROW and utility easements, which have been previously disturbed by utility construction and the installation of the existing pipeline; soils in these areas are classified as urban land. Furthermore, the rest of the APE has likely been heavily disturbed by road and sidewalk construction, utility installation, and building construction in the dense urban environment. Due to the scope of work, lack of significant archaeological sites in the vicinity of the APE, and the heavily disturbed nature of the APE, a Phase I archaeological survey is not recommended at this time.

Determination of Effect

Based on the aforementioned identification and evaluation, PHMSA has determined that there is one historic property as defined in 36 CFR 800.16(l) within the APE: the NRHP-listed Indianapolis Park & Boulevard System.

While the Undertaking is partially located within the Indianapolis Park & Boulevard System, it will not alter any of the characteristics or contributing features of the district that qualify it for inclusion in the NRHP under Criteria A or C in a manner that would diminish its integrity. Project work is limited to the replacement of existing pipelines using insertion and HDD construction methods and will not result in any lasting physical, visual, or audible effects to the district. No tree or shrub clearing will be required,

and site restoration will be completed following the completion of construction to ensure that all areas of ground disturbance are filled and reseeded to existing conditions. The Undertaking also does not include land acquisition, nor would it limit access to or change the use of the district.

Furthermore, project work is limited to the replacement of existing pipelines in areas that demonstrate a low probability for intact significant archaeological resources. All work will be confined to the ROW and construction methods will reduce the amount of ground disturbance in general.

While the exact 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 potential archaeological features and artifacts.

Therefore, in accordance with 36 CFR Part 800.5, PHMSA finds that 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 concern 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:

- Delaware Nation, Oklahoma
- Miami Tribe of Oklahoma
- Seneca-Cayuga Nation

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

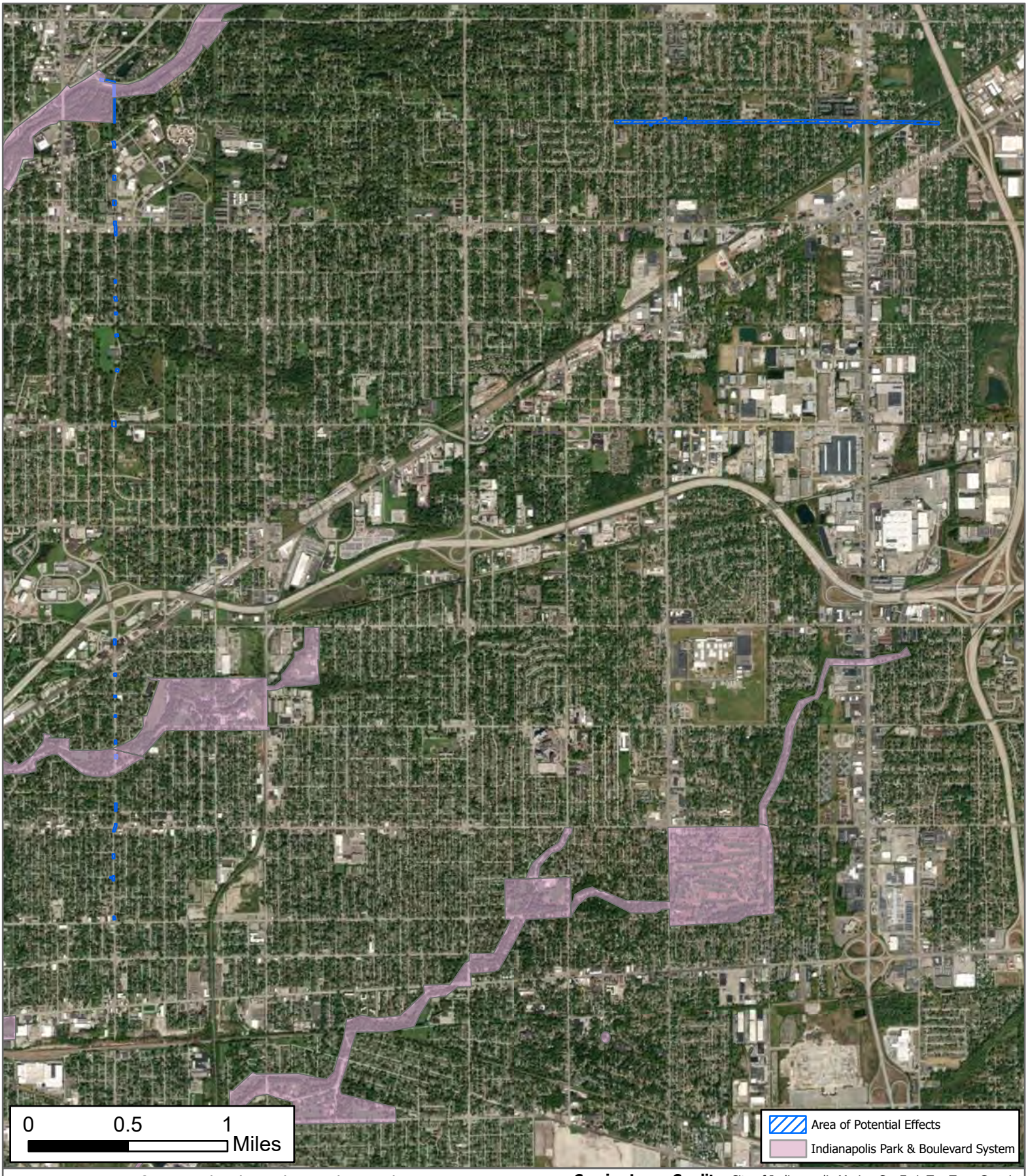
cc: Jason Holloman, Environmental Protection Specialist, USDOT Volpe Center
Jasmine Carr, PHMSA Grant Specialist
Susan Anderson, PHMSA Grant Specialist
Ben Warren, Citizens Energy Group
Don Colvin, Deputy Director of Planning and Construction, Indy Parks and Recreation
William A. Browne Jr., President, Indianapolis Historic Preservation Commission
Steve Barnett, Marion County Historian, Marion County Historical Society
Jody Blankenship, President and CEO, Indiana Historical Society

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

ATTACHMENT A

Project Location and APE Maps

Area of Potential Effects Map



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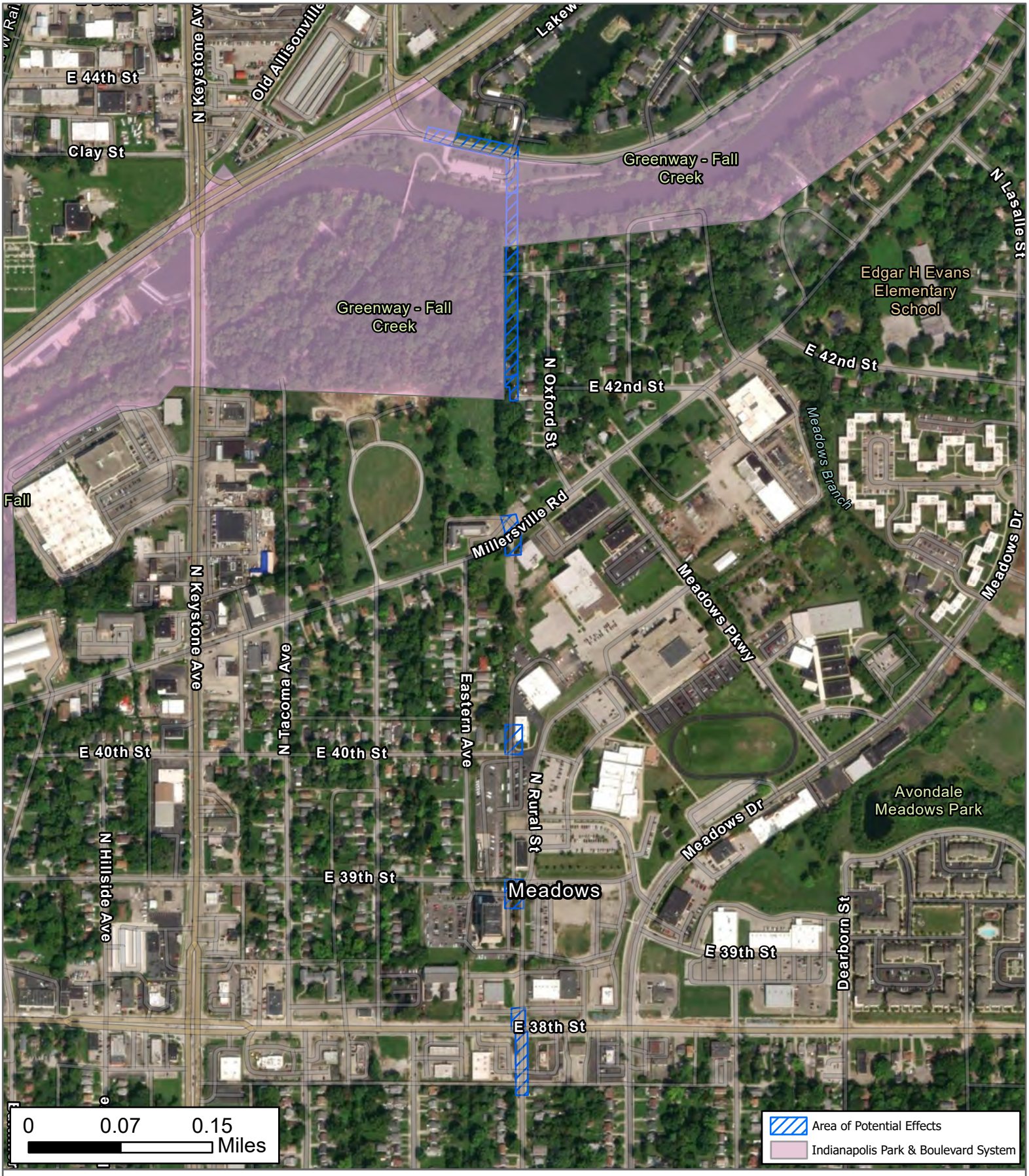
Total Acreage: 21.5
Indianapolis, Marion County, Indiana

N

Service Layer Credits: City of Indianapolis Marion Co, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS, Maxar

Area of Potential Effects Map



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Indianapolis, Marion County, Indiana

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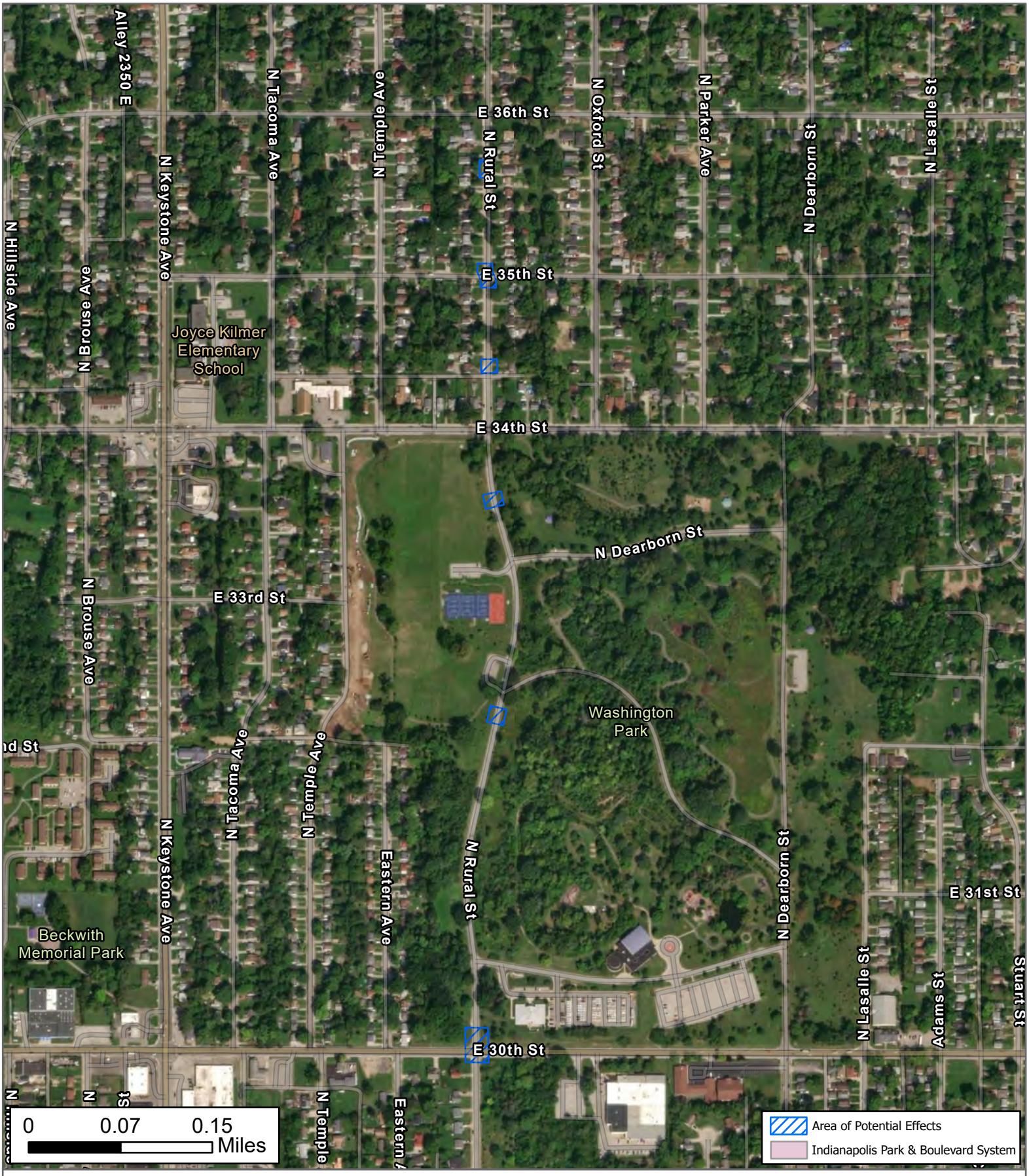
Area of Potential Effects Map



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Scale: 6,500
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Indianapolis, Marion County, Indiana

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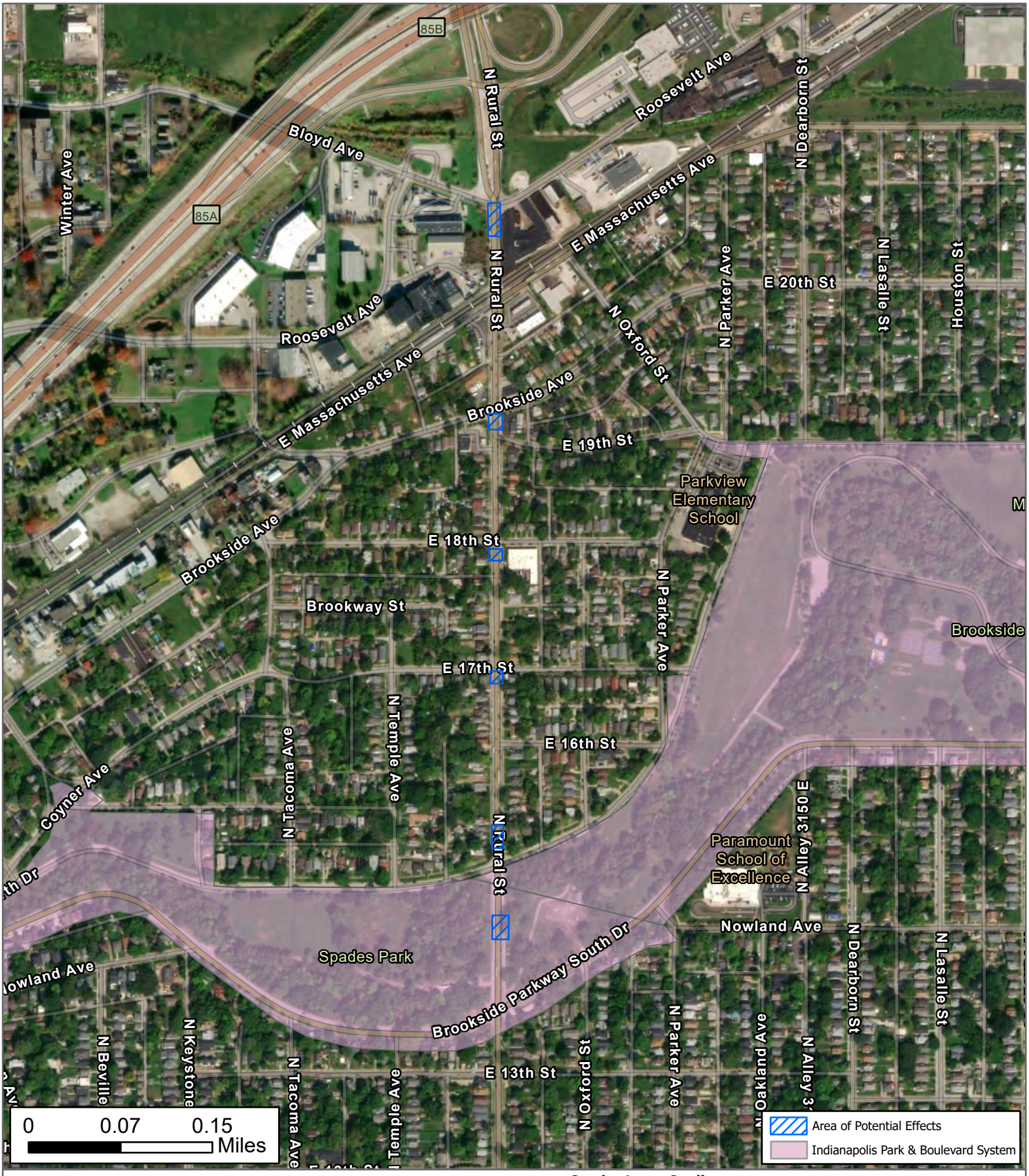
Service Layer Credits: Maxar, Esri Community Maps Contributors, City of Indianapolis Marion Co, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

Area of Potential Effects Map



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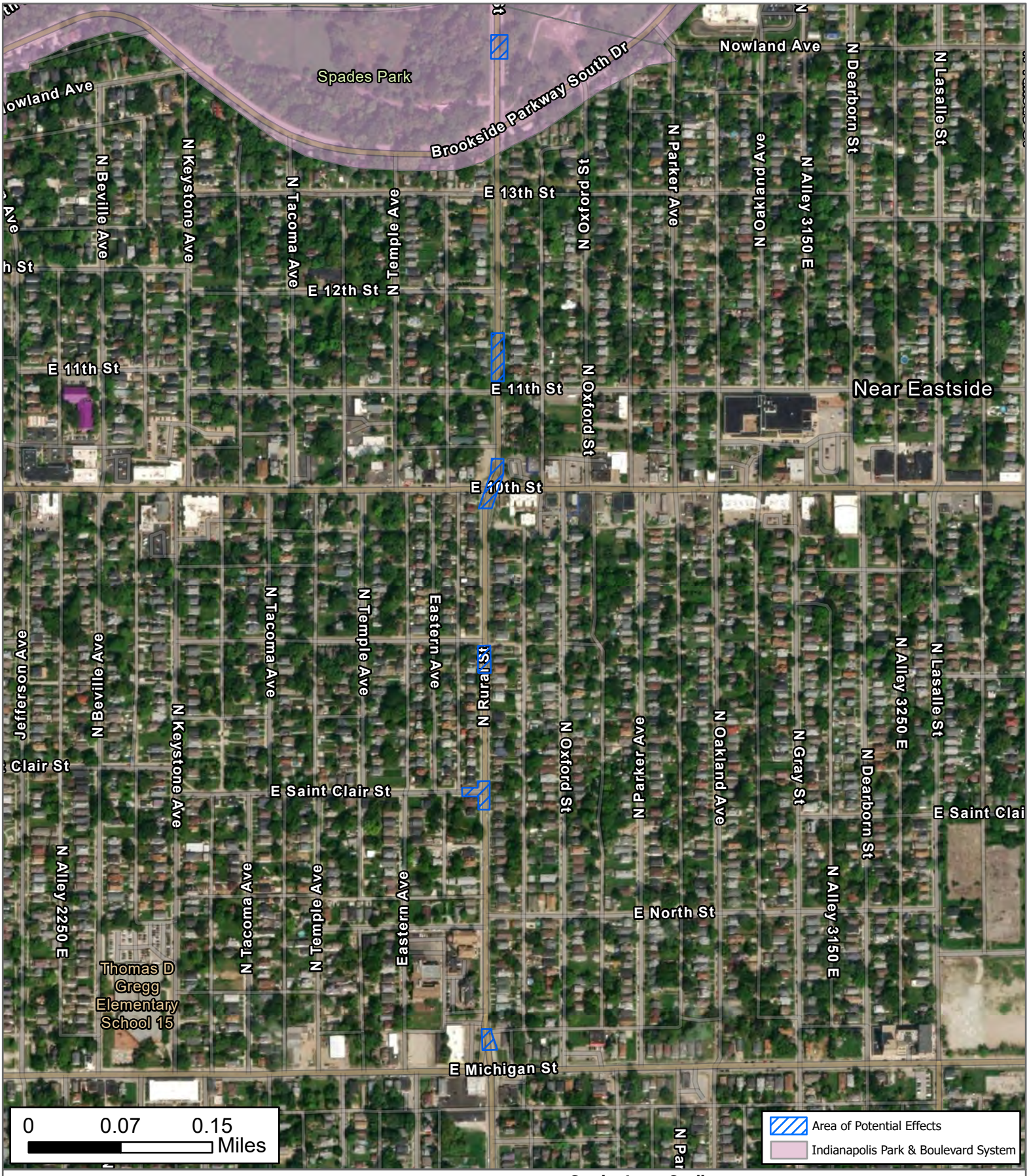
Scale: 6,500
Total Acreage: 21.5
Indianapolis, Marion County, Indiana

N

Service Layer Credits: Maxar, Esri Community Maps Contributors, City of Indianapolis Marion Co, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

Area of Potential Effects Map



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Scale: 6,500
Total Acreage: 21.5
Indianapolis, Marion County, Indiana

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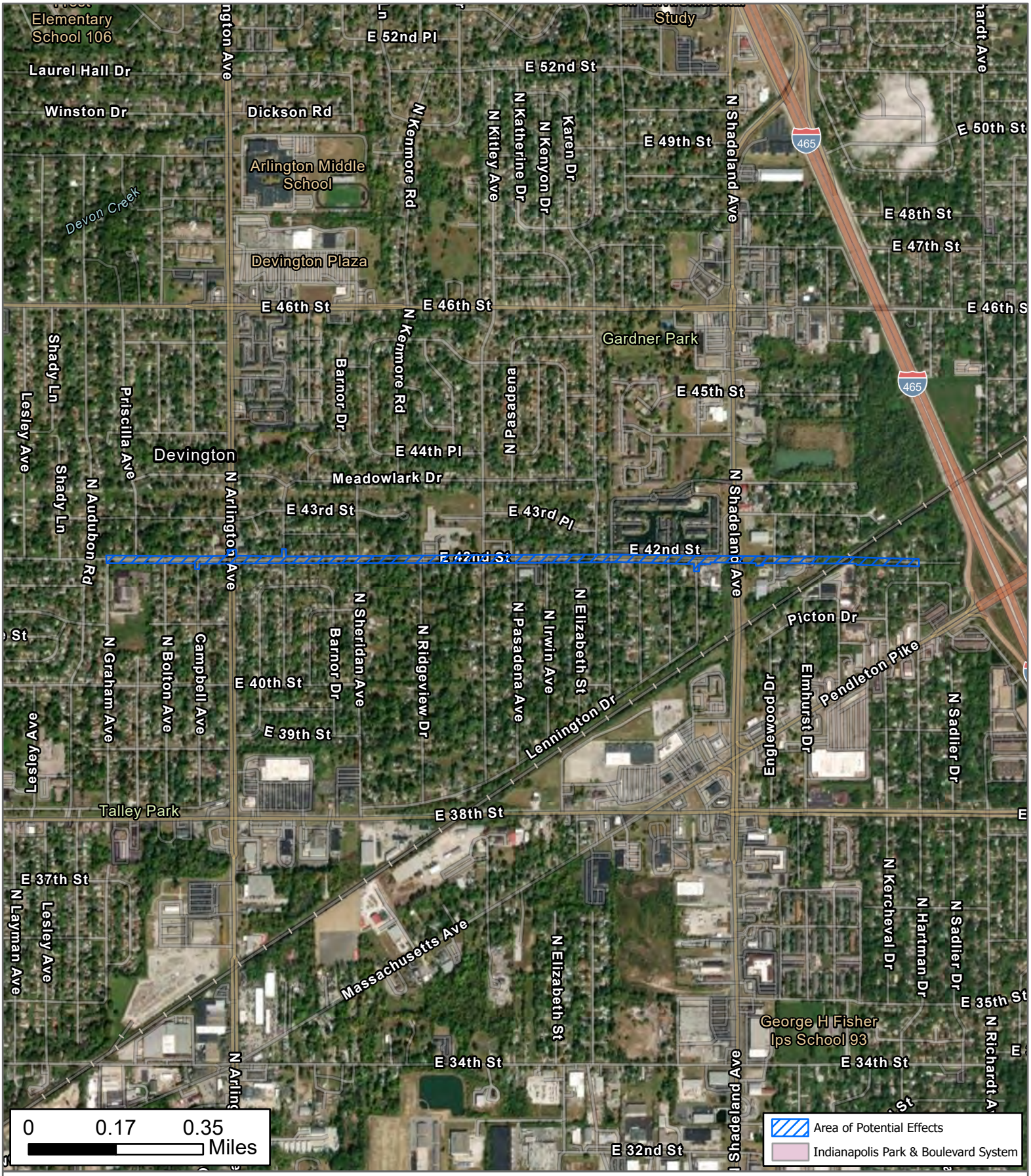
Service Layer Credits: Maxar, Esri Community Maps Contributors, City of Indianapolis Marion Co, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

Area of Potential Effects Map



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Indianapolis, Marion County, Indiana

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Service Layer Credits: Esri Community Maps Contributors, City of Indianapolis Marion Co, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS, Maxar

ATTACHMENT B

Project Area Photographs

Photo 1. APE along north side of E. Fall Creek Parkway N. Drive, view facing east.

Photo 2. APE along E. Fall Creek Parkway N. Drive, view facing southeast.

Photo 3. APE on south side of E. Fall Creek Parkway N. Drive, view facing south.

Photo 4. APE south of Fall Creek along the east side of Fall Creek Greenway, view facing south.

Photo 5. APE at Millersville Road, view facing north.

Photo 6. APE along N. Rural Street near E. 38th Street intersection, view facing south.

Photo 7. APE along N. Rural Street at E. 35th Street intersection, view facing north.

Photo 8. APE along N. Rural Street through Washington Park, view facing north.

Photo 9. APE along N. Rural Street at E. 30th Street intersection, view facing north.

Photo 10. APE along N. Rural Street near E. 18th Street intersection, view facing north.

Photo 11. APE along N. Rural Street through Spades Park/Brookside Park, view facing north.

Photo 12. APE along N. Rural Street near 10th Street intersection, view facing south.

Photo 13. APE along E. 42nd Street near Arlington Avenue intersection, view facing east.

Photo 14. APE along E. 42nd Street near Sheridan Avenue, view facing east.

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: _____

_____

_____

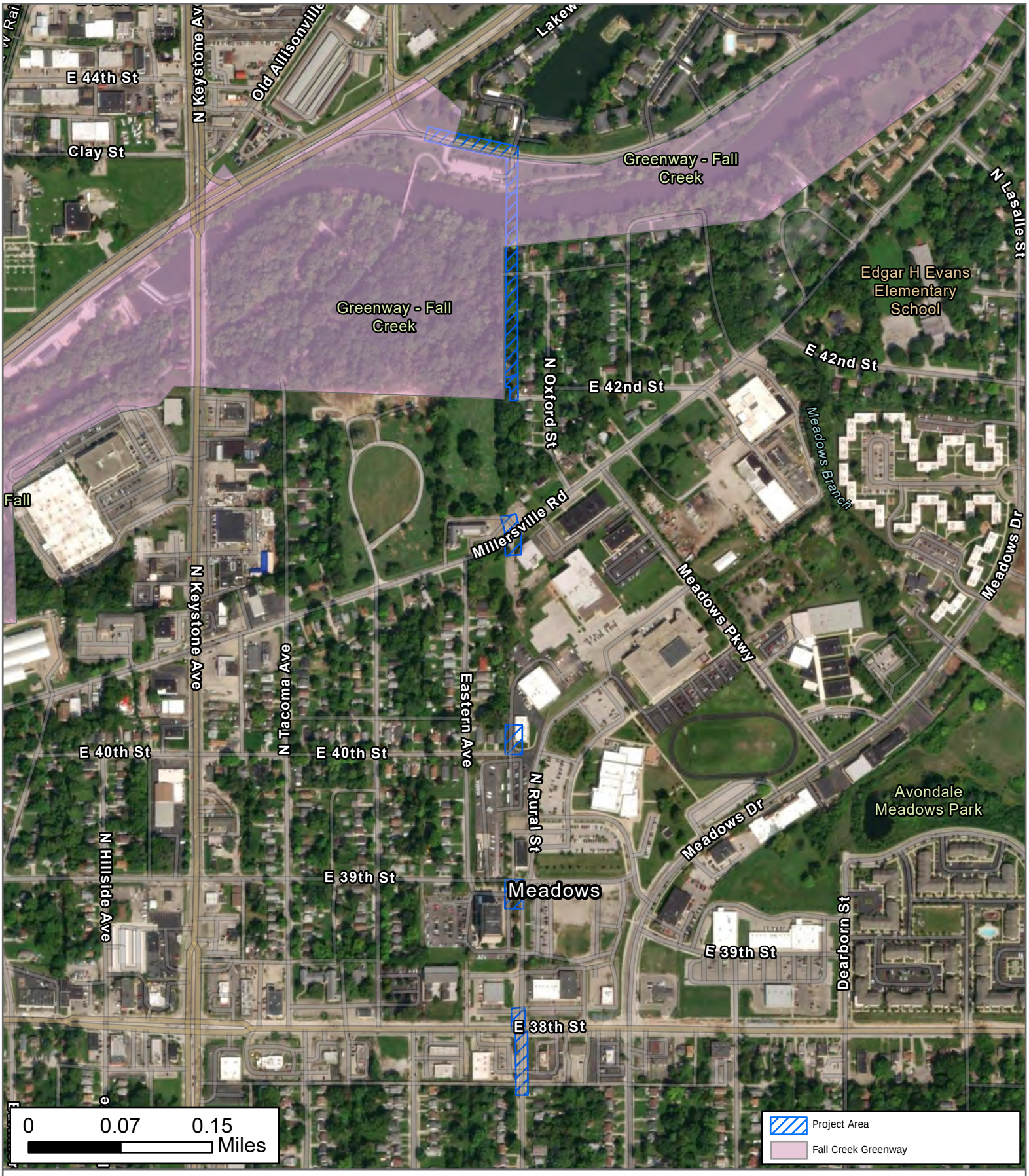
_____

Please return by:

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

Appendix H

4(f) Resources



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Scale: 6,500
Total Acreage: 21.5
Indianapolis, Marion County, Indiana

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Service Layer Credits: Maxar, Esri Community Maps Contributors, City of Indianapolis Marion Co, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

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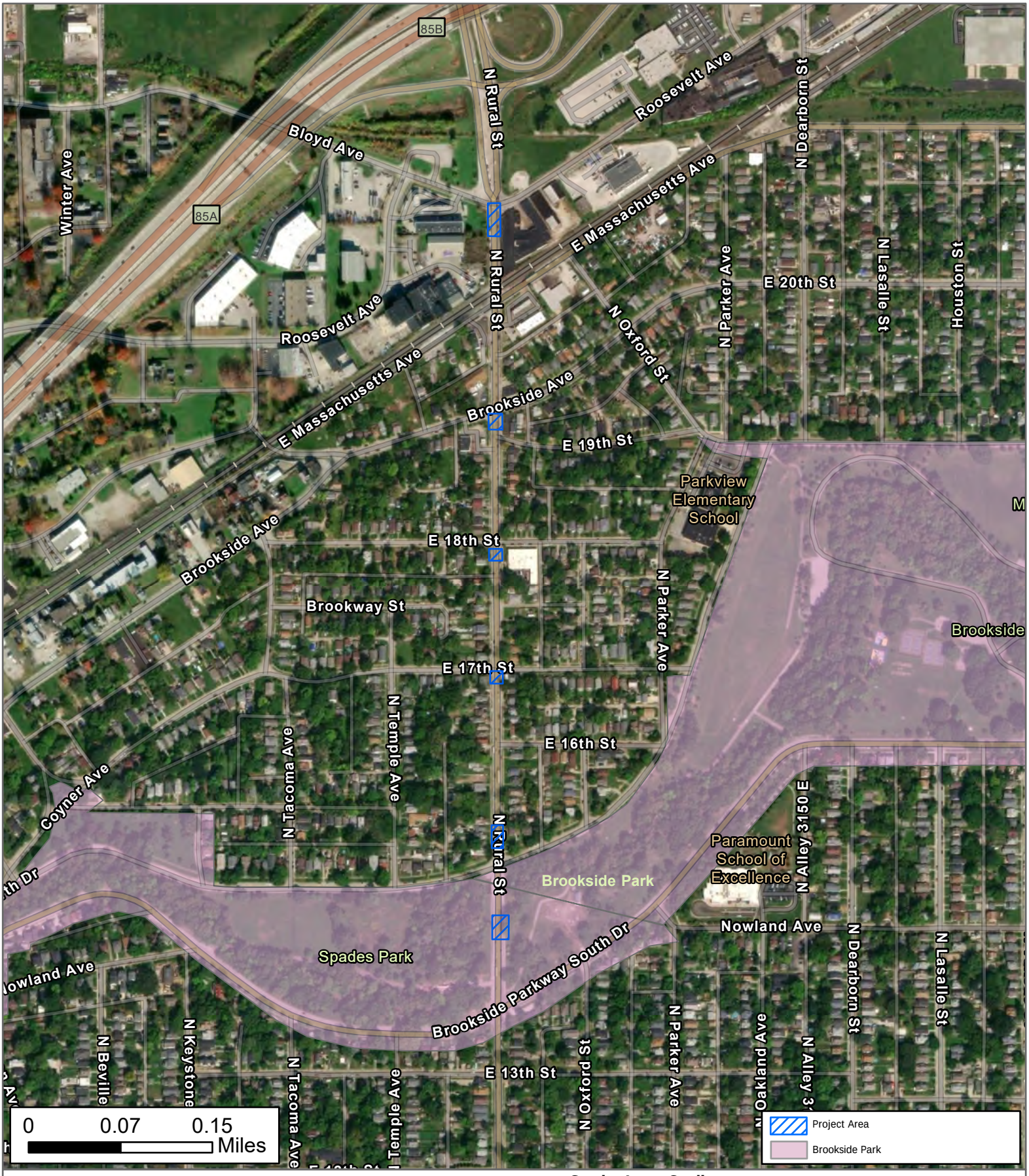

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Appendix I: Environmental Justice

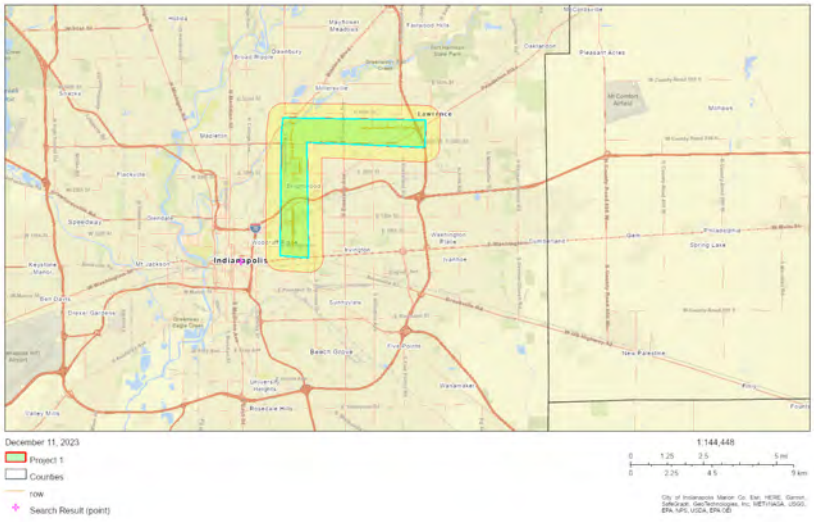
EJScreen Community Report

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

Indianapolis, IN

.5 miles Ring around the Area
Population: 67,768
Area in square miles: 18.40

A3 Landscape



LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	89%
Spanish	9%
Total Non-English	11%

COMMUNITY INFORMATION

- Low income: 57 percent
- People of color: 74 percent
- Less than high school education: 24 percent
- Limited English households: 3 percent
- Unemployment: 12 percent
- Persons with disabilities: 21 percent
- Male: 47 percent
- Female: 53 percent
- 69 years — Average life expectancy
- $21,568 — Per capita income
- Number of households: 29,491
- Owner occupied: 41 percent

BREAKDOWN BY RACE

- White: 26%
- Black: 56%
- American Indian: 0%
- Asian: 1%
- Hawaiian/Pacific Islander: 0%
- Other race: 1%
- Two or more races: 3%
- Hispanic: 13%

BREAKDOWN BY AGE

From Ages 1 to 4	8%
From Ages 1 to 18	27%
From Ages 18 and up	73%
From Ages 65 and up	13%

LIMITED ENGLISH SPEAKING BREAKDOWN

Speak Spanish	81%
Speak Other Indo-European Languages	6%
Speak Asian-Paci c Island Languages	7%
Speak Other Languages	6%

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.

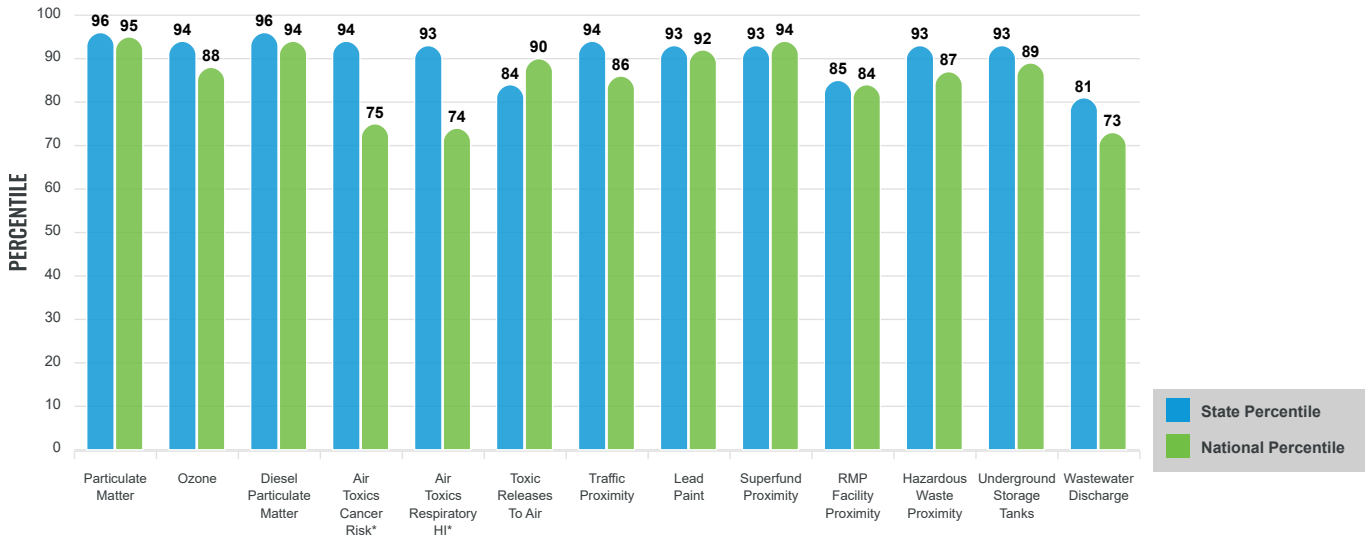
Environmental Justice & Supplemental Indexes

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen re ecting 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.

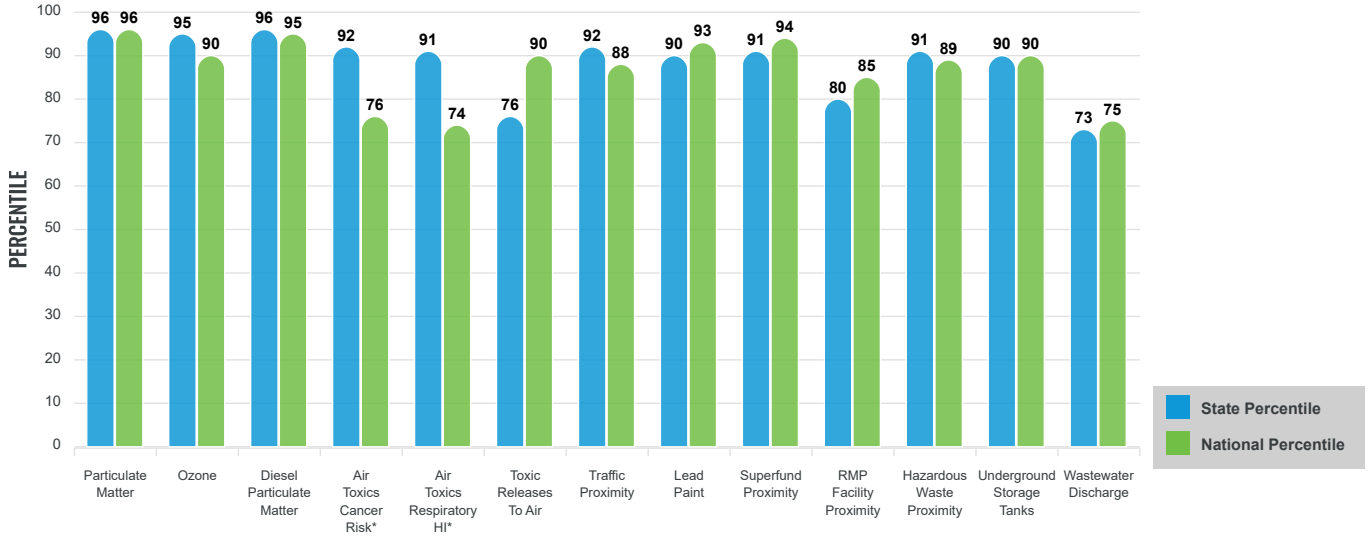
EJ INDEXES FOR THE SELECTED LOCATION



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 .5 miles Ring around the 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)	10.2	8.98	94	8.08	93
Ozone (ppb)	63.4	61.4	80	61.6	66
Diesel Particulate Matter (µg/m^3)	0.486	0.259	96	0.261	90
Air Toxics Cancer Risk* (lifetime risk per million)	25	21	0	25	5
Air Toxics Respiratory HI*	0.3	0.25	53	0.31	31
Toxic Releases to Air	1,800	16,000	47	4,600	70
Tra c Proximity (daily tra c count/distance to road)	230	96	90	210	77
Lead Paint (% Pre-1960 Housing)	0.63	0.38	78	0.3	82
Superfund Proximity (site count/km distance)	0.33	0.17	88	0.13	92
RMP Facility Proximity (facility count/km distance)	0.37	0.51	64	0.43	71
Hazardous Waste Proximity (facility count/km distance)	1.8	1	81	1.9	72
Underground Storage Tanks (count/km^2)	7.1	3.2	84	3.9	83
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.014	200	69	22	70
SOCIOECONOMIC INDICATORS					
Demographic Index	65%	27%	93	35%	87
Supplemental Demographic Index	25%	14%	90	14%	88
People of Color	74%	22%	92	39%	80
Low Income	57%	32%	86	31%	86
Unemployment Rate	12%	5%	88	6%	86
Limited English Speaking Households	3%	2%	84	5%	69
Less Than High School Education	24%	11%	88	12%	85
Under Age 5	8%	6%	71	6%	74
Over Age 64	13%	17%	38	17%	38
Low Life Expectancy	26%	21%	88	20%	94

*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	1
Hazardous Waste, Treatment, Storage, and Disposal Facilities	0
Water Dischargers	82
Air Pollution	16
Brown elds	32
Toxic Release Inventory	16

Other community features within defined area:

Schools	23
Hospitals	1
Places of Worship	81

Other environmental data:

Air Non-attainment	Yes
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 .5 miles Ring around the Area

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS

INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	26%	21%	88	20%	94
Heart Disease	8	6.8	81	6.1	84
Asthma	13.4	10.4	95	10	97
Cancer	5.3	6.4	18	6.1	31
Persons with Disabilities	19.3%	14.5%	82	13.4%	84

CLIMATE INDICATORS

INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	7%	9%	54	12%	53
Wild re Risk	0%	2%	0	14%	0

CRITICAL SERVICE GAPS

INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	33%	16%	90	14%	91
Lack of Health Insurance	15%	8%	90	9%	85
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 .5 miles Ring around the Area