PARCELID	Parcel Address	Parcel City	Parcel Zip Code	Owner Name 1	Owner Name 2	Mailing Address 1	Mailing Address 2
025-000834	JOHNSTOWN RD	GAHANNA, OH	43230	CITY OF GAHANNA		200 S HAMILTON RD	GAHANNA OH 43230
025-000942	75 W JOHNSTOWN RD	GAHANNA, OH	43230	CITY OF GAHANNA		200 S HAMILTON RD	GAHANNA, OH 43230
025-006672	81 PRICE RD	GAHANNA, OH	43230	RESURRECTION POWER CHURCH OF GOD IN CHRIST		81 PRICE RD	COLUMBUS, OH 43230
025-012294	81 PRICE RD	GAHANNA, OH	43230	RESURRECTION POWER CHURCH OF GOD IN CHRIST		81 PRICE RD	COLUMBUS, OH 43230
025-012295	75 PRICE RD	GAHANNA, OH	43230	RESURRECTION POWER CHURCH OF GOD IN CHRIST		81 PRICE RD	COLUMBUS, OH 43230
025-000876	94 - 104 PRICE RD	GAHANNA, OH	43230	CITY OF GAHANNA		200 S HAMILTON RD	GAHANNA OH 43230
025-000965	406 JAMES RD	GAHANNA, OH	43230	HUNTER CHERYL A LE		406 JAMES RD	COLUMBUS, OH 43230
025-001040	95 PRICE RD	GAHANNA, OH	43230	BISANG MARK E TR	NEENAN JOHN WILLIAM, ET. AL.	6985 DOGWOOD DR	ATHENS, OH 45701
025-000841	424 JAMES RD	GAHANNA, OH	43230	BROSIUS JULIE E	NEENAN JOHN WILLIAM, ET. AL.	424 JAMES RD	GAHANNA, OH 43230
025-012061	PRICE RD	GAHANNA, OH	43230	CITY OF GAHANNA		200 S HAMILTON RD	COLUMBUS, OH 43230
025-000967	52 PRICE RD	GAHANNA, OH	43230	PRICE ROAD PROPERTIES LLC		462 HAMILTON CT	GAHANNA, OH 43230
025-002211	S ROCKY FORK DR	GAHANNA, OH	43230	SHEPHERD CHURCH OF NAZARENE		429 S HAMILTON RD	GAHANNA OH 43230
025-012951	N HAMILTON RD REAR	GAHANNA, OH	43230	CITY OF GAHANNA		200 S HAMILTON RD	COLUMBUS, OH 43230
025-000406	1501 N HAMILTON RD	GAHANNA, OH	43230	SHEPARD CHURCH OF NAZARENE		425 S HAMILTON RD	GAHANNA OH 43230-3474
025-010569	TAYLOR STATION RD	GAHANNA, OH	43230	CITY OF GAHANNA		200 S HAMILTON RD	GAHANNA OH 43230

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ohio Ecological Services Field Office
4625 Morse Road, Suite 104
Columbus, OH 43230-8355
Phone: (614) 416-8993 Fax: (614) 416-8994

In Reply Refer To: 06/01/2026 13:15:01 UTC
Project Code: 2026-0076882
Project Name: NCHP 3A

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.

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 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.

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. Requests for additional technical assistance or consultation from the Ohio Field Office should be submitted following guidance on the following page https://www.fws.gov/office/ohio-ecological-services/request-project-review. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

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

This species list is provided by:

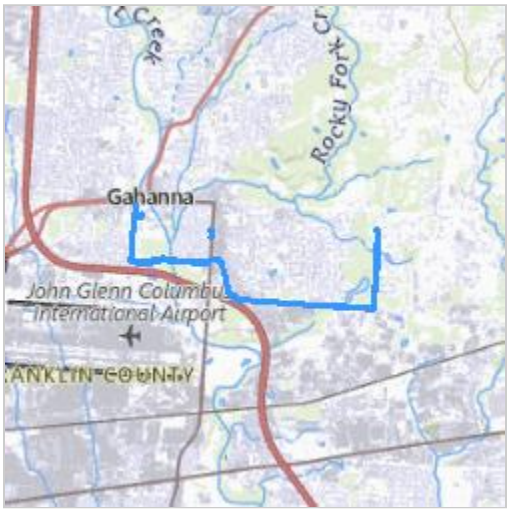
Ohio Ecological Services Field Office
4625 Morse Road, Suite 104
Columbus, OH 43230-8355
(614) 416-8993

PROJECT SUMMARY

Project Code: 2026-0076882
Project Name: NCHP 3A
Project Type: Pipeline - Onshore - Maintenance / Modification - Below Ground
Project Description: COH proposes replacing a segment of natural gas pipeline to provide better service and safety to the community. Project activities include excavation for removal of the old segments and replacement with a new segment through open trench and HDD. The center latitude and longitude coordinates for the project areas are 41.009102°N, -82.867274°W.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@40.01022285,-82.88303974964455,14z



Counties: Franklin County, Ohio

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

CLAMS

NAME	STATUS
Rayed Bean *Villosa fabalis* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5862	Endangered
Round Hickorynut *Obovaria subrotunda* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9879	Threatened
Salamander Mussel *Simpsonaias ambigua* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6208	Proposed Endangered

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

CRITICAL HABITATS

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

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

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Evan Myers
Address: 401 N College Ave,
City: Indianapolis
State: IN
Zip: 46202
Email emyers@keramida.com
Phone: 7248580792

ATTACHMENT E

Department of Natural Resources
ohiodnr.gov

Mike DeWine, *Governor*
Jim Tressel, *Lt. Governor*
Mary Mertz, *Director*

Office of Real Estate & Land Management
Tara Paciorek - Chief
2045 Morse Road – E-2
Columbus, Ohio 43229-6693

April 14, 2025

Evan Myers
KERAMIDA INC.
101 W Main Street, Suite 103
Carnegie, Pennsylvania 15106

Re: 25-0424 - NCHP Phase 3A

Project: The proposed project involves replacing a segment of natural gas pipeline to provide better service and safety to the community.

Location: The proposed project is located in Gahanna, Franklin County, Ohio.

The Ohio Department of Natural Resources (ODNR) has completed a review of the above referenced project. These comments were generated by an inter-disciplinary review within the Department. These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the National Environmental Policy Act, the Coastal Zone Management Act, Ohio Revised Code and other applicable laws and regulations. These comments are also based on ODNR's experience as the state natural resource management agency and do not supersede or replace the regulatory authority of any local, state, or federal agency nor relieve the applicant of the obligation to comply with any local, state, or federal laws or regulations.

Natural Heritage Database: The Natural Heritage Database has the following data at or within one mile of the project area:

Cypress-knee Sedge (*Carex decomposita*), E
Muskellunge (*Esox masquinongy*), SC
Tippecanoe Darter (*Etheostoma tippecanoe*), SC
Smooth Greensnake (*Opheodrys vernalis*), E
Elktoe (*Alasmidonta marginata*), SC
Wavy-rayed Lampmussel (*Lampsilis fasciola*), SC
Round Hickorynut (*Obovaria subrotunda*), E, FT
Kidneyshell (*Ptychobranchus fasciolaris*), SC
Rainbow (*Villosa iris*), SC
Breeding Amphibian Site
Stream gorge
Beech-sugar maple forest plant community

Conservation status abbreviations are as follows: E = state endangered; T = state threatened; P = state potentially threatened; SC = state species of concern; SI = state special interest; U = state status under

review; X = presumed extirpated in Ohio; FE = federally endangered, and FT = federally threatened. Records for high quality plant communities indicate the presence of sites that are in our inventory of the best remaining examples of Ohio's pre-settlement ecosystems.

The review was performed on the specified project area as well as an additional one-mile radius. Records searched date from 1980. Features searched include locations of rare and endangered plants and animals determined to be of value to the conservation of their species, high quality plant communities, animal breeding assemblages, and outstanding geological features.

Of the species and features listed above, Tippecanoe Darter, Wavy-rayed Lampmussel, Kidneyshell, and Rainbow are recorded within the boundaries of the specified project area. Please note that Ohio has not been completely surveyed, and we rely on receiving information from many sources. Therefore, a lack of records for an area is not a statement that rare species or unique features are absent from that area.

Fish and Wildlife: The Division of Wildlife (DOW) has the following comments.

The DOW recommends that impacts to streams, wetlands and other water resources be avoided and minimized to the fullest extent possible, and that Best Management Practices be utilized to minimize erosion and sedimentation.

The entire state of Ohio is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species, the northern long-eared bat (*Myotis septentrionalis*), a state endangered and federally endangered species, the little brown bat (*Myotis lucifugus*), a state endangered species, and the tricolored bat (*Perimyotis subflavus*), a state endangered species. During the spring and summer (April 1 through September 30), these species of bats predominately roost in trees behind loose, exfoliating bark, in crevices and cavities, or in the leaves. However, these species are also dependent on the forest structure surrounding roost trees. If trees are present within the project area, and trees must be cut, the DOW recommends cutting only occur from October 1 through March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with DBH ≥ 20 if possible. If trees are present within the project area, and trees must be cut during the summer months, the DOW recommends a mist net survey or acoustic survey be conducted from June 1 through August 15, prior to any cutting. Mist net and acoustic surveys should be conducted in accordance with the most recent version of the "*OHIO DIVISION OF WILDLIFE GUIDANCE FOR BAT SURVEYS AND TREE CLEARING*". If state listed bats are documented, DOW recommends cutting only occur from October 1 through March 31. However, limited summer tree cutting may be acceptable after consultation with the DOW (contact Eileen Wyza at Eileen.Wyza@dnr.ohio.gov).

The DOW also recommends that a desktop habitat assessment is conducted, followed by a field assessment if needed, to determine if a potential hibernaculum is present within the project area. Direction on how to conduct habitat assessments can be found in the current USFWS "*RANGE-WIDE INDIANA BAT & NORTHERN LONG-EARED BAT SURVEY GUIDELINES*." If a habitat assessment finds that a potential hibernaculum is present within 0.25 miles of the project area, please send this information to Eileen Wyza for project recommendations. If a potential or known hibernaculum is found, the DOW recommends a 0.25-mile tree cutting and subsurface disturbance buffer around the hibernaculum entrance, however, limited summer or winter tree cutting may be acceptable after consultation with the DOW. If no tree cutting or subsurface impacts to a hibernaculum are proposed, this project is not likely to impact these species.

The project is within the range of the following listed mussel species.

Federally Endangered
clubshell (*Pleurobema clava*)
rayed bean (*Villosa fabalis*)
northern riffleshell (*Epioblasma rangiana*)
snuffbox (*Epioblasma triquetra*)
purple cat's paw (*Epioblasma obliquata*)

Federally Threatened
rabbitsfoot (*Theliderma cylindrica*)

State Endangered
elephant-ear (*Elliptio crassidens crassidens*)
pocketbook (*Lampsilis ovata*)
long solid (*Fusconaia subrotunda*)
washboard (*Megalonaias nervosa*)
Ohio pigtoe (*Pleurobema cordatum*)

State Threatened
pondhorn (*Uniomerus tetralasmus*)
Salamander Mussel (*Simpsonaias ambigua*)

This project must not have an impact on native mussels. This applies to both listed and non-listed species, as all species of mussel are protected in Ohio. Per the Ohio Mussel Survey Protocol (2024), all Group 2, 3, and 4 streams (Appendix A) require a mussel survey. Per the Ohio Mussel Survey Protocol, Group 1 streams (Appendix A) and unlisted streams with a watershed of 5 square miles or larger above the point of impact should be assessed using the Reconnaissance Survey for Unionid Mussels (Appendix B) to determine if mussels are present. Mussel surveys may be recommended for these streams as well. Therefore, if in-water work is planned in any stream that meets any of the above criteria, the DOW recommends the applicant provide information to indicate no mussel impacts will occur. If this is not possible, the DOW recommends a professional malacologist conduct a mussel survey in the project area. If mussels that cannot be avoided are found in the project area, the DOW recommends a professional malacologist collect and relocate the mussels to suitable and similar habitat upstream of the project site. Mussel surveys and any subsequent mussel relocation should be done in accordance with the Ohio Mussel Survey Protocol. If there is no in-water work proposed, impacts to mussels are not likely.

The project is within the range of the following listed fish species.
State Endangered
goldeye (*Hiodon alosoides*)
shortnose gar (*Lepisosteus platostomus*)
Iowa darter (*Etheostoma exile*)
spotted darter (*Etheostoma maculatum*)
northern brook lamprey (*Ichthyomyzon fossor*)
tonguetied minnow (*Exoglossum laurae*)
popeye shiner (*Notropis ariommus*)

State Threatened
lake chubsucker (*Erimyzon sucetta*)
paddlefish (*Polyodon spathula*)

The DOW recommends no in-water work in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact these or other aquatic species.

The project is within the range of the sandhill crane (*Antigone canadensis*), a state threatened species. Sandhill cranes are primarily a wetland-dependent species. On their wintering grounds, they will utilize agricultural fields; however, they roost in shallow, standing water or moist bottomlands. On breeding grounds, they require a rather large tract of wet meadow, shallow marsh, or bog for nesting. If grassland, prairie, or wetland habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 1 through August 31. If this habitat will not be impacted, this project is not likely to have an impact on this species.

Due to the potential of impacts to federally listed species, as well as to state listed species, we recommend that this project be coordinated with the US Fish & Wildlife Service.

Natural Areas and Preserves: The Division of Natural Areas and Preserves has the following comments.

The ODNR Division of Natural Areas and Preserves staff have reviewed the proposed NCHP Phase 3A pipeline project. The project appears to fall along the boundary of the dedicated Gahanna Woods State Nature Preserve. To continue the high level of protection and conservation of the preserve, the Division asks for a meeting between Keramida, ODNR and the City of Gahanna, the manager of the property. New crossings on state dedicated nature preserve must undergo a thorough evaluation and if permitted, a real estate agreement and stringent best management practices must be in place before work commences. Please contact the Division of Natural Areas and Preserves Chief Botanist, Rick Gardner, at Richard.Gardner@dnr.ohio.gov or (614) 265-6419 for meeting coordination.

Water Resources: The Division of Water Resources has the following comment.

If the subject project is in a floodplain regulated by the Federal Emergency Management Agency (FEMA), the local floodplain administrator should be contacted concerning the possible need for any floodplain permits or approvals. The FEMA National Flood Hazard Layer (NHFL) Viewer website can be utilized to see if the project is in a FEMA regulated floodplain. If the project is not in a FEMA regulated floodplain, then no further action is required.

ODNR appreciates the opportunity to provide these comments. Please contact Mike Pettegrew (Environmental Services Administrator) at mike.pettegrew@dnr.ohio.gov if you have questions about these comments or need additional information.

Expiration: *ODNR Environmental Reviews are typically valid for 2 years from the issuance date. If the scope of work, project area, construction limits, and/or anticipated impacts to natural resources have changed significantly from the original project submittal, then a new Environmental Review request should be submitted.*

ATTACHMENT F

Inadvertent Release Contingency Plan

Gahanna NCHP Pipeline Replacement
City of Gahanna, Ohio

Campos EPC Project Number: 00026.2026.0603

Date: July 2, 2026

Table of Contents

1. Project Background

1.1 Project Description

The overall project consists of three horizontal directional drill (HDD) crossings. The first HDD is across Big Walnut Creek and an adjacent wetland, running west to east. The entry pit will be located within a privately owned forested parcel on the west side of Big Walnut Creek; the exit pit will be located within a privately owned parcel east of the Big Walnut Creek. This bore consist of a 24" steel pipeline approximately 1,231 feet long. The second HDD runs south to north along Taylor Station Road. The entry and exit pit will be located within the Taylor Station Road public Right-of-Way. This HDD will consist of a 24" steel pipeline approximately 1,694 feet long. The third HDD runs south to north also along Taylor Station Road, north of the second HDD. The entry and exit pit will be located within the Taylor Station Road public Right-of-Way. This HDD will consist of 24" steel pipeline approximately 2,198 feet long.

1.2 Environmentally Sensitive Resources

The Big Walnut Creek HDD is planned beneath a wetland classified as Palustrine Forested wetland (PFO). Potential inadvertent returns (IRs) to the surface from HDD construction activities could have an impact on this wetland. In addition, the bore will run directly adjacent to a Palustrine emergent wetland (PEM). Inadvertent returns may affect this wetland due to its proximity to the bore path. One additional bore will run under one small, unnamed stream; inadvertent returns may affect stream quality.

1.3 Environmental Inspection

While drilling or during any activities that may impact the wetland or water resource, Columbia Gas of Ohio ("Columbia") requires that an experienced Environmental Inspector be present on-site to monitor activities.

1.4 Drilling Fluid

One of the primary components of HDD installation is the drilling fluid. Drilling fluids vary, but generally consist of a base mixture of water and Wyoming bentonite products. This mixture is referred to as "mud" or "drilling fluid" and can contain many additional additives.
The drilling fluid enters the borehole through the drill bit and circulates back to either the entry or exit pit through the borehole. The primary functions of the drilling fluid in an HDD are:

- Hydraulic excavation – when drilling fluid leaves the bit at a high velocity it can excavate soil by erosion
- Transmission of hydraulic power – in rock, a mud motor is used and the drilling fluids transmit energy downhole to turn the mud motor and cut rock
- Transportation of soil and cuttings to the surface
- Cleaning and cooling drill bits and reamers
- Reduction of friction
- Borehole stabilization

As mentioned, drilling fluids primarily consist of water and bentonite clay. Bentonite clay is predominantly comprised of montmorillonite which is not listed as a hazardous material/substance as defined by U.S. Environmental Protection Agency's (USEPA) Emergency Planning and Community Right-to-know Act (EPCRA) or Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) regulatory criteria. If the product becomes a waste, it does not meet the criteria of a hazardous waste, as defined by the USEPA. Bentonite is non-toxic and commonly used in farming practices but has the potential to impact aquatic habitats and wildlife if discharged to waterways in significant quantities due to increases in localized turbidity.

The contractor may elect to use additives in their drilling fluid to adjust the behavior and properties of the fluid. Additives are supplementary to this mixture and often have more specialized properties for keeping positive balance within the bore. This balance is dictated by and tailored to the prevailing geology and the tooling used to perform the HDD.

It is imperative that the Material Safety Data Sheets for all additives provided to Columbia and the project team for pre-approval. If the Contractor intends to use a product that has not been pre-approved by Columbia and the project team, then the Contractor should submit the required documentation and wait for approval prior to using the product.

When conditions change within the geology, the fluid, fluid is not maintained, or pressures are not monitored and maintained; a loss in circulation may occur and drilling fluid can be released. This drilling fluid may be released to the formation or may inadvertently return to the surface.

It is recommended that the contractor provide the safety data sheets for all bentonite and additives (including polymers and surfactants) that are planned for or may be used during the duration of the HDD.

1.5 Plan Objectives

Numerous steps should be taken in the prevention, monitoring, and reacting to of inadvertent returns. Campos EPC has laid out the following guidelines or recommendations to minimize the risk of inadvertent releases of drilling fluid whilst drilling. This plan should be reviewed by the contractor prior to the beginning of installation and proposed modifications should be discussed by the project team.

1.6 Disposal Considerations

Excess drilling fluids and drill cuttings will need to be managed throughout all HDD construction efforts. The excess fluids and cutting should be disposed of offsite at an approved disposal facility.

2. Inadvertent Release Mitigation Efforts

2.1 Geotechnical Exploration

A geotechnical exploration program was undertaken, consisting of thirty seven (37) soil borings, to various depths, along the proposed alignment to determine the subsurface conditions, evaluate the engineering characteristics of the subsurface materials, and provide recommendations for the proposed improvements and design.

2.2 Bore Path Design

The bore path designs were developed referencing the geology identified in the geotechnical and geophysical analyses, and in consideration of the risks of an IR during installation. Typically, with increasing soil/rock cover the risk of having an IR decreases. With these factors in mind, the depth of cover was optimized for the design.

2.3 Hydrofracture Analysis

Hydrofracture occurs when the pressure of the drilling fluids in the bore hole exceeds the strength of the surrounding soils. The excess pressures fracture the soil around the bore hole allowing fluids to escape the bore hole and migrate into the surrounding soil. A hydraulic fracture analysis was performed to evaluate how the anticipated fluid pressure compares to the allowable drilling fluid pressures during construction. The results of this analysis were utilized in the development of the designed HDD plan and profile.

2.4 Site Preparation

The contractor is responsible for preparing the site prior to beginning any drilling, as well as maintaining the site during drilling. Preparation should follow environmental best management practices and consist of some number of thought out and well-placed environmental control devices. Upon arrival, the contractor shall walk the alignment and evaluate HDD entry and exit locations for evidence of areas that may have an increased potential for IRs. Some areas of concern may include: locations where water pools naturally, waterways, wetlands, areas of lower depth of cover, areas with transitions, surface areas loaded with cobbles and boulders, etc. This walk allows the contractor to identify areas that should be monitored more closely, evaluate readiness for managing an IR should it occur, regardless of access difficulty.

Within designated workspaces, containments should be set up around stationary equipment and erosion control devices (ECDs) and erosion control measures (ECMs) should be deployed downslope of potential areas of immediate impact.

While Campos EPC respects the means and methods of contractors, recommendations for ECDs/ECMs may include the following:

1. Storm drain inlets shall be secured by silt sock
2. Numerous rolls of vis-queen
3. Silt fence placed and dug-in downslope of heavy equipment or workspaces.
4. Containment areas, consisting of self-standing enviro-basin, or polyethylene sheeting that can be rolled over straw wattles or four-by-four boards to create a barrier.
5. Spill kits, to deal with other drilling fluid releases
6. IR kit, which may contain haybales, trash-bags, additional silt socks, additional silt fence, stakes, stake mallet, etc.
7. It is recommended that these materials be readily available in quantity to replace existing materials or respond to IRs.

3. Inadvertent Release Monitoring Plan

This section addresses monitoring approaches for early detection and mitigation when high risk circumstances present themselves onsite.

During HDD operations, the contractor shall maintain the drilling fluid monitoring equipment onsite. The contractor shall designate a qualified representative to monitor and control drilling fluid properties. The qualified representative shall be easily capable to perform the following activities to evaluate fluid properties and adjust improve stability, increase cutting return, and reduce risk of IR:

1. Communicate directly with the driller at the driller's console/chair to receive reports of annular pressure, mud-motor stalls, and changing conditions that can only be immediately felt by the driller.
2. Maintain fluids in the mud tank, check levels, charge pressure, and measure the rate of depletion in relation to the progression of new-bore.
3. Monitor the condition of drilling fluid at least three times a day, and once for every observed change in material:
    a. Take drilling fluid weight with approved test kit and include units in notes
    b. Take viscosity with marsh funnel and accurate durational measurement
    c. Take sand content measurement by the book to monitor content of superfines that slip through filtration. If the sand content gets too high, disposal and remixture should be considered.
    d. Take PH measurements to ensure that the platelet content of the drilling fluid stays high (platelets are the armor that coats the bore-wall in permeable conditions and often help prevent seep progression leading to IR, acidic conditions destroy the ability for drilling fluid to form platelets and lowers the viscosity)
4. Recommend which surfactants/polymers such as clay cutters for balling, stabilizers, etc., or natural remedies (ex. sawdust) should be used and recognize when deployment is necessary. Surfactants and polymers are extremely potent. It is critical to give particular attention to recommended mixing rations. Many requiring a ratio of 1 quart or less to 50 bags of bentonite
5. Monitor the return pit for solids content accumulation as it relates to proper suspension and carrying. A pit full of dense cuttings, not being reclaimed by the mud reclaiming pump may be an indication of conditions present in the borehole. This can result in an eventual build-up of down-hole material, which may cause annular pressure spikes.
6. A competent person should visually inspect the bore path at the completion of each joint; inspecting 100 feet upstream and downstream and if possible, laterally along alignment.
7. Ensure with the driller that annular pressures do not exceed calculated predicted pressure for hydraulic fracturing and that spikes are noted. Ensure steps taken to mitigate or reverse the rise in pressure. Steps can include tripping while rotating pipe, inspecting the degree of balling on tooling if it is suspected to be occurring, performing

a bottoms-up (circulating a volume of drilling fluid equivalent to the entire current borehole volume).

8. Inspect waterways and sites previously identified during the site walk as areas of concern. When inspecting waterways look for tan, brown, to gray levels of turbidity that stand out and are joining the flow of water. Often, in slower waters an IR will look like a cloud.
9. Contain all drilling fluids and cuttings for proper disposal at an approved facility and note the volume of cuttings in the spoils pit as it relates to drilled volume. The cutting volume should be within reasonable proximity of the drilled volume.
10. If possible, a vacuum truck with sufficient hoses to reach all areas along the bore alignment shall be staged prior to and during drilling activities. If a vacuum truck cannot be staged onsite, the truck shall be readily available. An interim pump shall be onsite to reach low areas and aid the vacuum truck. It is recommended that this resource be capable of departing and arriving onsite within one hour.

4. Inadvertent Release Contingency Plan

This section lays out the response if an IR were to occur.

4.1 Materials

The drilling contractor shall have the necessary fluid containment and clean-up provisions onsite and readily available at all times during drilling operations. Examples of materials that should be kept onsite include:

- Brooms, squeegees, and shovels
- Disposal bags and ties
- Vac trucks
- Spill kits
- Straw bales (weed and invasive free)
- Compost filter sock (12-inch diameter minimum)
- Weighted sediment tube
- Wooden stakes and mallet
- Sand bags
- Silt fence
- Plastic sheeting
- Trash pumps
- Turbidity curtain

The contractor should include a list of proposed inadvertent release response materials in their work plan for review by the project team. Quantities of one-time-use materials may need to be replenished if they are utilized during the course of work.

4.2 Loss of Fluid Returns to Entry Pit

A loss of fluid returns to the entry pit is often the first sign of an inadvertent fluid release. If a loss of fluid returns to the entry pit is observed, care should be taken to evaluate the next steps forward. It is recommended that the following steps be taken:

1. Stop drilling/pumping fluids as soon as a loss of returns is observed.
2. Walk the alignment to see if fluid has returned to the ground surface.
3. Restart mud pumps and trip rods back several joints until returns are re-established.
4. Re-drill the hole while advancing the drill bit paying close attention that fluid returns are maintained.

If this procedure does not re-establish returns, alternative approaches such as a complete trip out or enlarging the borehole may be considered.

4.3 Fluid Release Response

In the event of an IR to the surface, the following procedures should be implemented to document, communicate, contain, minimize, and potentially stop the IR:

1. Immediately and simultaneously kill charge pump and back trip (bottom-hole assembly) a full joint length off bottom (bore-face)
2. Get on location and characterize IR. Document location and proximity to centerline, size (volume), breadth, drilling conditions when IR occurred (hard/soft, rock/gravel, mud data, pressure data (over the last several joints), document setting (high grass, trees, marsh, waterway), and take pictures
3. Notify individuals whose contact information is listed within Section 4.4, and all appropriate personnel to include environmental inspector (EI) if onsite.
4. Inspect the return pit. This will be entry pit during pilot drilling, but during reaming could also be exit pit. Ensure volume in the pit is the same as before the IR. Next check mud recycler and confirm when the mud tank was last topped off. Proceed by conveying with driller and move to inspect the remainder of the right-of-way/centerline vicinity (generously).
5. Make the best possible concise statement with the available information of fluid released and fluid lost (ex. T:1530, BHA at release STA 1000 + 75, Release at STA 1000 + 50 / 20 ft off centerline, approx. 500 gal released, approx. 1,000 gal lost to formation, gravelly/discolored cuttings in returns, release amongst the pines and high-grass and accessible). Do NOT repeat hearsay.
6. Determine if potential threats exist to the health and safety of workers by initiating cleanup
7. Determine if any potential threats to the environment exist.
8. If environmental impacts are observed, remove and/or contain material to minimize affected area while minimizing disturbance to the area.
9. Consider countermeasure contingency simultaneously with consideration for what measures are necessary to monitor and control the potential continued release.
10. Once controls are in place, allow formation to rest before resuming.
11. When resuming or deploying loss circulation material (LCM), exercise extreme caution with flow rate and pressure. Check IR activity/dormancy as well as fluid returns in real-time.
12. Consider other measures such as tripping all the way out or installing a burp-hole to relieve overhead pressure within the borehole.(ex. bore is 5' below grade in entry pit, lengthen pit so bore begins 10' below grade, ex. dig pit where bore is 10' lower than at entry and lower reclaiming pump to 7' and pump reclaimed mud to recycler from newly created burp-hole), if tripping all the way out, note clay that may be clinging to tooling, take pictures, communicate with mud-engineer.
13. If in groundwater, consider the use of a containment structure, such as a piece of pile that can be placed over the IR and secured/driven, place pump, etc.
14. Inspect all IRs in the presence of all involved parties.
15. Request environmental monitors onsite if needed to ensure environmental requirements are met.

4.4 Notification Contact Information

The following individuals shall be immediately notified in the event of an inadvertent release being observed at the ground surface or within the river.

Name	Agency	Title	Phone No.
Scott Brown	N/A	NiSource Environmental Coordinator	412-676-0329
Steven Barker	N/A	NiSource Natural Resource Permitting Manager	219-246-7290
Brian Kortum	N/A	Director Environmental Permitting	219-776-3141

ATTACHMENTS

In reply refer to:
2026-FRA-68568

June 26, 2026

Evan Myers
Project Biologist, Energy & Utility Engineering
Keramida
101 W main St, Suite 103
Carnegie, PA 15106
Email: emyers@keramida.com

RE: **Section 106 Review: NCHP Phase 3A, Franklin County, Ohio**

Dear Mr. Myers:

This letter is in response to the correspondence received on June 10, 2026, concerning the above-referenced project in Franklin County, Ohio. We appreciate the opportunity to comment on this project. The comments of the State Historic Preservation Office (SHPO) are made in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended, (54 U.S.C. 306108 [36 CFR 800]).

The proposed project will replace a segment of natural gas pipeline. Project activities include excavation for removal of the old segments and replacement with a new segment through open trench and HDD. The project is comprised of work areas along the roadside and within maintained utility rights-of-way (ROW). The direct Area of Potential Effect (APE) includes all areas where ground disturbing activity will occur and is outlined as the Project Area in red in Figures 1&2 in the submission. The project area intersects several previously surveyed areas (NADB# 17884; 19036; 23171; 23232). According to our records, no historic properties, districts, or previously recorded archaeological sites are documented within the proposed work areas.

Based on the information provided, and a review of our database and records, it is the SHPO's opinion that, as proposed, the project will have no effect on historic properties. Therefore, no further coordination is required, unless the scope of work changes or cultural resources are discovered during the course of the project. In such a situation, this office should be contracted as required by 36 CFR § 800.13. If you have any questions concerning this review, please contact me via email at broddy@ohiohistory.org. Thank you for your cooperation.

Sincerely,

Bridget C. Roddy

Bridget C. Roddy, Project Reviews Manager-Archaeology
Resource Protection and Review
State Historic Preservation Office

RPR Serial No. 1114373

ATTACHMENT G

Ohio State Historic Preservation Office GIS Data

Date Exported: 4/1/2025 8:52 AM

- Approximate Project Area Boundary
- Search Area (1-mile buffer)
- National Register District Boundaries
- National Register Listings
- National Historic Landmark
- Removed from National Register
- SHPO Determinations of Eligibility
- Federal Tax Credit Projects
- Ohio Historic Inventory
- Ohio Archaeological Inventory
- Ohio Archaeological Inventory (pending review)
- OGS Cemeteries
- OAI Boundaries
- OAI Boundaries (pending review)
- Previously Surveyed Areas

NCHP Phase 3A

N

0 0.5 Miles

0 1 Kilometers