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

Natural Gas Distribution Infrastructure Safety and Modernization Grant Program
Norwich Department of Public Utilities, Connecticut
Categorical Exclusion Documentation
NGDISM-FY23-CE-2024-34

PHMSA Office of Planning and Analytics
Environmental Analysis and Compliance Division
Amanda Murphy
Amanda.L.Murphy@dot.gov

Norwich Department of Public Utilities
Barry Ellison
barryellison@npumail.com

1. Overview

This document serves as the Pipeline and Hazardous Materials Safety Administration's (PHMSA) determination of applicability of the Department of Energy's (DOE) B5.4 categorical exclusion (CE) for repair or replacement of pipelines for the project identified below. Effective July 3, 2024, PHMSA adopted DOE's CE in accordance with the Section 109 of the National Environmental Policy Act, enacted as part of the Fiscal Responsibility Act of 2023, which allows a federal agency to ''adopt'' another federal agency's CEs for proposed actions.

For projects that PHMSA determines DOE CE B5.4 is applicable, it must: (1) consider the presence of any integral elements at 10 CFR Part 1021, subpart D, appendix B (1)-(5); and, (2) evaluate the proposed action for extraordinary circumstances in which a normally excluded action may have a significant effect. If an extraordinary circumstance is present, the agency nevertheless may categorically exclude the proposed action if the agency determines that there are circumstances that lessen the impacts or other conditions sufficient to avoid significant effects.

The project identified below was provisionally awarded federal funding through PHMSA's Natural Gas Distribution Infrastructure Safety and Modernization (NGDISM) grant program. This document describes the proposed action, the anticipated impacts of that action, any circumstances or conditions that must be implemented to ensure significant effects are avoided, and documents the approval of the project as a categorical exclusion.

2. Project Description/Proposed Action

Project Title	Norwich Department of Public Utilities Natural Gas Pipeline Project
Project Location	Norwich, Connecticut

Project Description/Proposed Action:

The project proposes to abandon 5.62 miles of higher leak risk gas mains and replacing with 4.70 miles of new high density polyethylene (HDPE) gas mains (See Appendix A). All non-HDPE gas services within the project areas will also be replaced with HDPE and all services with an inside meter location will be relocated to outdoor locations. Of the 5.62 miles to be abandoned, 4.5 miles are cast iron, 0.7 miles are bare steel, and 0.4 miles are coated steel mains that operated for decades without cathodic protection. All ground disturbance activities proposed are associated with typical cut and cover (trenching) pipe installation. For main installations the typical trench width is 24 inches. Gas mains are typically installed to a depth of 36 inches below grade. The approximate number of services that will require cut and cover installation is 165. With an average trench width of 12 inches for service installations and an average length of 50 feet per service. All new gas mains will be installed under existing roadways within existing State of Connecticut or City of Norwich right of ways as close to existing gas mains as possible while maintaining appropriate separation distances to other existing utilities. The overall project is expected to take 2.5 years to complete. However, construction activities impacting individual properties or businesses are only expected to last 1 to 2 days during the installation of gas mains, 1 day to install the service, and 1 to 2 days to

resurface the roadway upon completion of all work.

Question	Information
Describe the location and dimensions of all ground disturbing activities and provide a map depicting the location(s) where ground disturbance would occur. (*e.g.*, width and depth of trenching or excavation for borings, location of regulator stations, etc.)	All ground disturbance activities proposed are associated with typical cut and cover (trenching) pipe installation. For main installations the typical trench width is 24 inches. With 4.70 miles of new gas main proposed, the total area of ground disturbance gas main installations is approximately 1.14 acres, spread out over three Northeast construction seasons (April - December). Gas mains are typically installed to a depth of 36 inches below grade. The approximate number of services that will require cut and cover installation is 165. With an average trench width of 12 inches for service installations and an average length of 50 feet per service, the total area of ground disturbance for all service installations is approximately 0.19 acres. The total approximate area of all ground disturbance or the entire project is 1.33 acres.
If the exact location where new pipe would be installed or where other work would occur, provide the width of the ROW or the general area encompassing the footprint where all work would occur. Include the anticipated footprint and depth of new pipe installation.	All new gas mains will be installed under existing roadways within existing State of Connecticut or City of Norwich right of ways as close to existing gas mains as possible while maintaining appropriate separation distances to other existing utilities. There are no easements or off road installations proposed for main installations. All new gas services will be installed within the property limits of the property being served. Any acquisition of new right of way or easement would adhere to the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.

Will service lines be replaced?	Yes.
Will meters or other equipment be replaced? If so, provide a description detailing what meter components, etc. will be replaced and indicate if this will require ground disturbance, if the equipment will be attached to existing structures, etc.	This project does not propose to replace existing meters. If a service within the project area has in indoor meter location the meter will be relocated to the exterior of the building being served, and attached to the building.
What portions of the pipeline will be abandoned? What portions of the pipeline will be removed?	The project proposes to abandon in place all gas mains and services being replaced. No pipelines are proposed to be removed as part of this project.

Question	**Information**
What construction methods will be used?	Cut and cover (trenching), Replacement adjacent to existing pipe, Abandonment of an existing pipe for a new location
Does the project require a new right-of-way not currently in the ownership of the utility? If new ROW will occur, please provide a description of the property to be acquired (existing condition and land use).	No new right-of-way or easement needed
How many linear feet of pipe will be replaced or repaired?	29,660.00 linear feet

2.1. Proposed Pipeline Replacement Details

Existing Pipeline Length in feet	**Pipeline Diameter in inches**	**Pipeline Material (cast iron, bare steel, coated steel, PVC)**	**Operating Pressure (PSI)**	**Reduced Pressure if Possible (PSI)**	**Year installed if known.**
13,860.00 feet	8.00	Cast iron	2.50	2.50	8 pipe segments

					ranging from 1913 to 1938
6,850.00 feet	6.00	Cast iron	2.50	2.50	7 pipe segments ranging from 1921 to 1930
1,800.00 feet	6.00	Coated steel	2.50	2.50	1 pipe segment installed in 1943
2,960.00 feet	4.00	Cast iron	2.50	2.50	3 pipe segments ranging from 1924 to 1937
2,610.00 feet	4.00	Bare steel	2.50	2.50	2 pipe segments ranging from 1930 to 1959
510.00 feet	4.00	Coated steel	2.50	2.50	2 pipe segments ranging from 1962 to 1964
1,070.00 feet	2.00	Bare steel	2.50	2.50	1 pipe segment installed in 1935

3. Resource Review

The following information represents questions posed to the project proponent identified on the cover page of this document regarding the project that was provisionally awarded grant funds under PHMSA's NGDISM program. The information and justification section includes the applicant's response. PHMSA's conclusions are based on applicant provided information, independently reviewed by PHMSA. The mitigation measures were reviewed and confirmed by the project proponent.

Air Quality	
Question	**Information and Justification**
Is the project located in an area designated by the EPA as non-attainment or maintenance status for one or more of the National Ambient Air Quality Standards (NAAQS)[1]?	Yes, based on review of the EPA Greenbook.
Will the construction activities produce emissions that exceed de minimis thresholds (tons per year)?	No.
Will mitigation measures be used to capture blowdown[2]?	No.
Will project proponent commit to reducing pressure on the segments/lines to be replaced, prior to venting?	No.
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 natural gas leakage.	The existing leak rate is estimated to be 22,174 kilograms (kg)/year(yr). Replacement of pipelines would result in a leak rate of approximately 135 kg/yr or a reduction of approximately 440,516 kg over a 20-yr timeframe.
Is there any other information relevant to the project area or the proposed work as it pertains to Air Quality?	No.

[1] Criteria Air Pollutants | US EPA

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

Conclusion:

The project area is located within Norwich, New London County, CT. Based on EPA's Greenbook, the project area falls within a non-attainment area for the 8-hour ozone (2008 standard) and 8-hour ozone (2015 standard) national ambient air quality standard (NAAQS). Therefore, PHMSA must ensure that the project would not interfere with the state's plan to maintain national standards for air quality. The proposed project would result in minor air quality impacts associated with construction activities, including the intentional venting of natural gas contained in the existing pipelines prior to replacement. Pipeline blowdowns are typically necessary to ensure that construction and maintenance work can be conducted safely on depressurized natural gas facilities and pipelines. Venting natural gas is required when service is switched from the existing line to the newly constructed line, but the volume of vented gas can depend on the ability to reduce pressure on the pipe segment or other mitigation actions. PHMSA reviewed information provided by the applicant and estimated the emissions that would likely be produced by the construction equipment used to install pipelines. This information was used in conjunction with EPA's MOVES model to determine if the project would exceed EPA's thresholds for NAAQS. PHMSA's assessment is that due to the relatively minor scope of the proposed project, impacts on local air quality resulting from construction activities, such as dust and exhaust from construction equipment, would be temporary and considered de minimis. Thus, the proposed project does not require a General Conformity Analysis under Section 176(c)(4) of the Clean Air Act at the proposed project sites. Therefore, it is PHMSA's assessment that the proposed project would provide a net benefit to air quality from the overall reduction of leaking natural gas and that no adverse indirect or cumulative impacts would result from the project.

Mitigation Measures:

- Use on-road and non-road vehicles efficiently by minimizing speeds and the number of vehicles;
- Minimize excavation to the greatest extent practical;
- Use cleaner, newer, non-road equipment as much as practicable;
- Minimize all vehicle idling and at minimum, conforming with local idling regulations;
- Ensure that all vehicles and equipment are in proper operating condition;
- On-road and non-road engines must meet EPA exhaust emission standards (40 CFR Parts 85, 86, and 89);
- Cover open-bodied trucks while transporting materials;
- Use water or other approved dust suppressants at construction sites and on unpaved roadways, as necessary;
- Minimize the area of soil disturbance to that necessary for construction;
- Minimize construction site traffic by using offsite parking and shuttle buses, as necessary; and
- Minimize the idling of equipment.

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? If water resources are present but will not be impacted, please describe how these impacts will be avoided (*e.g.* directional boring under the resource, etc.)	Yes, according to United States Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI), there are wetlands in the project area. Federal Emergency Management Agency (FEMA) maps show that there are special flood hazard areas within the project area. Norwichtown Brook, Bobbin Mill Brook, Hunter Brook and two unnamed tributaries of the Thames River occur within the project area. An Area designated as Special Flood Hazard Zone AE occur in the project area as well. Pipelines will only be installed under existing roadways and those roadways will be restored to their original grade and surface material at the end of each day, therefore there will be no impact to floodplain storage capabilities. Therefore, there would be no impacts to open water resources or Special Flood Hazard Zones.
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.	Yes. For a project of this size and scope the State of Connecticut Department of Energy and Environmental Protection (DEEP) will serve as the regulatory authority assuring Section 401 compliance. DEEP will assure compliance through its General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. For disturbances between 1 and 5 acres, which this project falls under, DEEP's General Permit allows municipal land-use commission approval. NPU will seek local land-use commission approval for the project, which we believe satisfies Section 401 certification requirements.
Under the Clean Water Act, is a USACE Section 404 Permit required for the discharge of dredge and fill material? If yes, describe anticipated permit and how project proponent will ensure permit compliance.	No.

Under the Clean Water Act, is an EPA or State Section 402 permit required for the discharge of pollutants into the waters of the United States? Is a Stormwater Pollution Prevention Plan (SWPPP) required? If yes, describe how project proponent will ensure permit compliance.	Yes. For a project of this size and scope the State of Connecticut Department of Energy and Environmental Protection (DEEP) will serve as the regulatory authority assuring Section 402 compliance. DEEP will assure compliance through its General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. For disturbances between 1 and 5 acres, which this project falls under, DEEP's General Permit allows municipal land-use commission approval. NPU will seek local land-use commission approval for the project, which we believe satisfies Section 402 permit requirements. Yes. A detailed Erosion and Sedimentation Control Plan will be developed to mitigate potential stormwater pollution. Measures such as "silt sacks" installed in catch basins, daily sweeping and collection of construction dust and debris, daily paving of pipe trenches, the placement of haybales/woodchips/silt fencing around soil stockpile areas are among the several mitigation measures that will be specified in the E&S Control Plan and approved by the local land-use commission.

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.	FEMA's flood maps[3] indicate the project area is located in FEMA Flood Zone AE. Areas designated as Zone AE are considered Special Flood Hazard Areas and correspond to the one percent annual chance of flooding (100-year floodplain). All gas mains will be installed under existing roadways within the City of Norwich. Some of these roadways are within existing floodplain areas. The project will not alter in any way the existing storage capacity of any floodplain, as all disturbed roadways will be returned to their original finish grade and surface material (asphalt) at the end of each day. Local land-use commission approval will be obtained for the project and any additional floodplain management/mitigation measures required through that process will be implemented.
Is the project located in a Coastal Zone? Will the proposed project activities affect any coastal use or natural resource of the coastal zone, requiring a Consistency Determination and Certification? Please provide any relevant information regarding how the project proponent normally coordinates with the applicable state's coastal zone management agency.	Yes. The proposed project activities would not affect any coastal use natural resource of the coastal zone, requiring a Consistency Determination and Certification.
Is there any other information relevant to the project area or the proposed work as it pertains to Water Resources.	No.

[3] FEMA Flood Map Service Center | Welcome!

Conclusion:

PHMSA reviewed NWI maps, as well as the FEMA national flood hazard maps. Norwichtown Brook, Bobbin Mill Brook, Hunter Brook and two unnamed tributaries of the Thames River occur within the project area. Areas within the streams are classified by the NWI as Riverine and areas adjacent to the project area on Hunter Road are classified as Freshwater Pond. Portions of the project area occur in FEMA Flood Zone AE. Pipelines will only be installed under existing roadways and those roadways will be restored to their original grade and surface material at the end of each day, therefore there will be no impact to floodplain storage capabilities. All areas would be restored to pre-construction contours and conditions and there would be no permanent impacts. The project is located in New London County, Connecticut, which is considered a Coastal Zone and is subject to a Coastal Zone Management Act. The Project activities consist entirely of in-kind replacement of existing infrastructure and do not constitute new development. The proposed project activities would not affect any coastal use natural resource of the coastal zone, requiring a Consistency Determination and Certification. By avoiding direct impacts to aquatic resources and implementing best management practices during construction, PHMSA does not anticipate any adverse impacts to water resources.

Mitigation Measures:

- Avoid staging and laydown areas in wetlands or floodplains;
- Reseed disturbed areas with native plant species;
- Restore disturbed areas to pre-construction contours;
- Adhere to additional mitigation measures in accordance with applicable permits;
- Use Best Management Practices during construction to control sediment and erosion and prevent pollutants from entering adjacent waterways; and
- Coordinate with the appropriate FEMA representative or local floodplain coordinator when work will occur in FEMA designated special flood hazard areas, as needed.

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, due to ground disturbance activities, there is a potential to encounter groundwater during excavation. No impact is expected as no hazardous materials would be in contact with the groundwater.

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. If boring or directional drilling will not require pits, please describe why these will not be required and how fluids will be contained.	No.
Will the project potentially involve a site(s) contaminated by hazardous waste? Sites identified as containing hazardous waste/materials can be identified through EPA's NEPAssist tool https://nepassisttool.epa.gov/nepassist/nepamap.aspx or local databases identifying Superfund, Brownfields, etc. If hazmat sites are identified in or near areas where work will occur, describe how the proposed work poses no risk or what mitigative measures will be used to avoid identified sites.	No. Based on review of EPA's NEPAssist tool, numerous hazardous waste sites were identified near the project area, but no Brownfield or Superfund sites were identified within the project area.
Is there any indication that the pipeline was ever used to convey coal gas? If yes, PHMSA will work with the project proponent for required studies.	No.
Does the project have the potential to encounter or disturb lead pipes or asbestos?	No. Given the shallow depth of placement for gas main pipes compared to that of other utilities it is not likely that asbestos or lead pipes will be encountered during construction.
Is there any other information relevant to the project area or the proposed work as it pertains to Groundwater and hazardous materials/waste.	No.
Conclusion: PHMSA reviewed EPA's NEPAssist to identify any brownfield properties, hazardous waste sites, and superfund sites. There were numerous hazardous waste sites identified near the project area; however, there were no Brownfields sites or Superfund sites identified in the project area. Hazardous waste information is identified in the Resource Conservation and Recovery Act Information (RCRAInfo), which is a national program that includes an inventory of all generators, transporters, treaters, storers, and disposers of hazardous waste that are required to provide information about their activities to state environmental agencies.	

Mitigation Measures:

- Develop and adhere to a Stormwater Pollution Prevention Plan;
- Avoid boring/drilling, staging and laydown areas within EPA superfund sites or areas containing known waste; and
- Adhere to applicable groundwater and/or soil management plans;

Biological Resources	
Question	**Information and Justification**
Based on review of IPaC and NOAA Fisheries database, are there any federally threatened or endangered species or critical habitat potentially occurring within the geographic range of the project area?	Yes, based on review of the USFWS's Information for Planning and Consultation (IPaC). In addition, state listed species threatened or endangered species or critical habitat were found to potentially occur based on a review of State of Connecticut Department of Energy and Environmental Protection state resources.
Are there any known State or Federally, listed threatened or endangered species or habitat areas for State or Federally listed species present in or immediately adjacent to areas where work will occur? If yes, describe how project proponent will avoid impacts to listed species or habitat. If there are potential impacts to federally listed species or critical habitat, PHMSA will work with the project proponent to conduct necessary consultation with resource agencies.	No. Due to the nature of construction no impacts are expected. Shallow excavation will be conducted in previously disturbed and developed areas.
Will there be any tree clearing or removal of woody vegetation involved with the proposed work?	Only minimal trimming of trees will be performed to give the contractor better access. There are no plans to remove trees.
Is there any other information relevant to the project area or the proposed work as it pertains to Biological Resources?	No.

Conclusion:

The project area is built out and is comprised of previously disturbed developed and residential areas. PHMSA requested an official species list through the USFWS's IPaC website. The following species were identified as potentially occurring in the project area:

- Tricolored bat (*Perimyotis subflavus*) proposed endangered
- Monarch butterfly (*Danaus plexippus*) proposed threatened

There was no critical habitat identified within the project area.

Several state-listed species also occur within the geographical range, however based on the disturbed nature of the project area, no habitat is present for these species.

The work would occur within existing ROW where the footprint of the proposed work has already been disturbed and is maintained. Because these areas are within ROW that has been previously impacted (pipeline laid in the ground in close proximity to the location where new pipes would be laid and subsequently paved), the immediate project area has very limited biological resources present. Under Section 7(a)(4) of the ESA, federal agencies must confer with the USFWS if their action would jeopardize the continued existence of a proposed species; therefore, PHMSA's assessment is that the project is unlikely to jeopardize the continued existence of the tricolored bat or monarch butterfly. PHMSA's assessment is that the project would have no adverse impacts to state-listed species and would not cause more than minor adverse impacts to other biological resources in the project area.

Mitigation Measures:

No mitigation measures needed.

Cultural Resources	
Question	**Information and Justification**
Please describe all ground disturbing activities associated with the project (including pipeline installation, service line installation, gas meter replacements, metering station construction or demolition, etc.). What is the maximum depth, width and length of excavations for each activity involving ground disturbance?	All ground disturbance activities proposed are associated with typical cut and cover (trenching) pipe installation. For main installations the typical trench width is 24 inches. With 4.70 miles of new gas main proposed, the total area of ground disturbance gas main installations is approximately 1.14 acres, spread out over three Northeast construction seasons (April - December). Gas mains are typically installed to a depth of 36 inches below grade. The approximate number of services that will require cut and cover installation is 165. With an average trench width of 12 inches for service installations and an average length of 50 feet per service, the total area of ground disturbance for all service installations is approximately 0.19 acres. The total approximate area of all ground disturbance or the entire project is 1.33 acres.
Will ground disturbance take place entirely in existing ROW or utility easements? Will it be restricted entirely to paved areas or will some disturbance take place in grassy, undisturbed, or natural areas?	Yes. All proposed gas mains will be installed under existing paved roadways within existing State of Connecticut or City of Norwich rights of ways. All proposed service lines will be installed in existing State of Connecticut or City of Norwich rights of ways and within the limits of the property being served, with prior permission and coordination of the property owner. No. All proposed gas mains will be installed under existing paved roadways within existing State of Connecticut or City of Norwich rights of ways. Gas service lines will be installed under pavement and under lawn areas of the property being served.

Has the entire project area (width, length and depth) been previously disturbed by the original installation or other activities? If so, provide documentation or a description of prior ground disturbances, such as road or utility cross sections, plans or as-builts. If documentation is not available provide justification for how the ground was previously disturbed.	Yes. All work proposed will replace existing aging gas pipeline infrastructure already in place. There are no new gas mains or services proposed where gas service doesn't currently exist.
Does the project involve any physical impacts to buildings or structures? Please provide a description of the work that may affect buildings or structures and provide addresses and a map showing the locations.	No.
Please describe the project area and provide several photographs to show the character of the project area and surrounding properties. Is it a residential or commercial area? Are the nearby properties old or modern? Streetscapes and views looking down the ROW to show flanking properties are preferred. Please provide a photo key or captions to identify where the photos were taken and what they are showing.	The City of Norwich was incorporated in 1659 and is considered locally as an "old New England mill town." As such, much of the housing stock is old. Of the 24,790 linear feet of gas main proposed to be replaced, 21,270 linear feet was installed prior to 1940. The various project areas are mostly residential but there are a few commercial areas included as well.
Does the project involve construction or installation of any new aboveground components? If so, describe the components, identify their location and provide representative images of the components.	Yes. Gas service meters will be installed above ground adjacent to the building being served.

Are there any nearby properties or resources that either appear to be or are documented to have been constructed more than 45 years ago?[4] Does there appear to be a group of properties of similar age, design, or method of construction? Or are there any designed landscapes such as a park or cemetery? Please provide photographs of any properties that may be more than 45 years in age and would have the potential to be affected by the project (such as properties that include meter replacements, service line replacements or buildings within 10 feet of the areas proposed for pipeline main replacement under pavement). Multiple properties may be photographed together in a streetscape view and if there are many properties over 45 years in age, representative photos may be provided of a neighborhood rather than individual photos of each property.	Yes. NRHP-listed historic properties located within the APE include the Norwichtown Historic District, the Bean Hill Historic District, the Taftville/Ponemah Mill Historic District, and the Laurel Hill Historic District. No, there is a great variety of property types throughout the several project areas. No, there are no designed landscapes or parks in are near the project area.
Will project implementation require removal or disturbance of any stone or brick sidewalk, roadway, or landscape materials or other potentially old or unique features? Please provide a handful of representative photos of the project area to show the character of the roadway and sidewalk materials in the project and staging areas. Include a photo key or captions of what the photos are showing and where they were taken.	No.
Is there any other information relevant to the project area or the proposed work as it pertains to Cultural Resources?	No.

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

Conclusion:

PHMSA 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 Connecticut State Historic Preservation Office. PHMSA 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.

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. The Undertaking also does not include land acquisition, nor would it limit access to or change the use of the District. In accordance with 36 CFR Part 800.5, PHMSA's assessment is that the project would have No Adverse Effect on historic properties.

A letter was sent on April 4, 2025, to the Connecticut State Historic Preservation Officer (SHPO) 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 effects. Based on this consultation, PHMSA proposed a finding that the Proposed Action would not adversely affect historic properties. PHMSA has requested comments on the Section 106 process, identification of historic properties, and proposed finding within 30 days of receipt of the letter.

PHMSA also invited the following federally recognized tribes to participate in consultation by separate letter on April 4, 2025:

- Mashantucket Pequot Indian Tribe
- Mohegan Tribe of Indians of Connecticut
- Narragansett Indian Tribe

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 Norwich Department of Public Utilities will immediately notify PHMSA. This may include discovery of cultural features (e.g., foundations, water wells, trash pits, etc.) 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. Norwich Department of Public Utilities will strictly adhere to PHMSA's *Unanticipated Discoveries Protocols*.

- In the event that unmarked human remains are encountered during permitted activities, all work shall halt and Norwich Department of Public Utilities 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? 4(f) properties include publicly owned parks, recreational areas, wildlife or waterfowl refuges, and historic sites. If yes, provide a list of properties and a map of 4(f) properties as an attachment.	Yes. Norwichtown Green Bean Hill Green Greenspace at 155 Laurel Hill Avenue

Will any construction activities temporarily impact use of the park including but not limited to access to any portion of the park, parking lots, trails, recreational fields, etc.?	No. Project activities would be limited to roadway right of way. Use and access would not be impacted
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.	No.
Is there any other information relevant to the project area or the proposed work as it pertains to Section 4(f)?	No.

Conclusion:

Section 4(f) of the US Department of Transportation (USDOT) Act of 1966 as amended (Section 4(f)) (49 U.S.C. § 303(c)); is a federal law that applies to transportation projects that require funding or other approvals by the USDOT. Section 4(f) prohibits the Secretary of Transportation from approving any program or project which requires the use of any publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or any land from an historic site of national, state, or local significance unless:

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

PHMSA conducted a review of the Project Area and confirmed that there are no publicly owned public parks, recreation areas, national, state, or local significant wildlife and waterfowl refuges, or any historic sites of national, state, or local significance affected by the project. Therefore, there would be no use of Section 4(f) resources.

Mitigation Measures:

- Norwich Department of Public Utilities shall ensure that full public access to, and use of Norwichtown Green, Bean Hill Green, and the Greenspace at 155 Laurel Hill Avenue is maintained during construction.
- Ensure construction activities do not interfere with public access to and/or use of public recreational facilities during 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. Service lines are installed on private property with the permission of the property owner. The installation of service lines do not require easements.
Will the project result in detours, transportation restrictions, or other impacts to normal traffic flow or to existing transportation facilities during construction? How long are construction activities estimated to last?	Yes. The installation of gas mains will require alternating one-way traffic patterns, as all gas mains will be installed under existing roadways. Occasionally short detours may be required if the location of the new gas main or the narrowness of the road in which the gas main is being installed prevents the safe use of alternating one-way traffic. Detours will be avoided whenever possible. The overall project is expected to take 2.5 years to complete. However, construction activities impacting individual properties or businesses is only expected to last 1 to 2 days during the installation of gas mains, 1 day to install the service, and 1 to 2 days to resurface the roadway upon completion of all work.
Will there be any permanent change to existing transportation facilities? If so, what are the changes, and how would the changes affect the public?	No permanent changes to transportation facilities would occur.
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? How long will service interruptions last, if applicable?	No. EMS vehicles, public transportation buses, and school buses are always accommodated in the implementation of daily traffic plans.
Is there any other information relevant to the project area or the proposed work as it pertains to Land Use and Transportation?	No.

Conclusion:

There will be no permanent changes to land use. The project is replacing/upgrading the existing pipe and would not include new pipeline to serve any additional 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. Any impacts will be coordinated with local and state agencies.

Mitigation Measures:

- Restore all impacted areas to pre-construction conditions;
- Maintain traffic flows to the extent possible;
- Use traffic control measures to assist traffic negotiating through construction areas, as needed;
- Coordinate with state and local agencies regarding detours and routing adjustments during construction;
- Notify potentially impacted residents and business owners (access, parking, etc.); and
- 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 feet.) 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. When natural gas services are installed construction equipment will be working within 50 feet of occupied buildings. Service work is completed utilizing small excavation equipment and is done exclusively during normal working hours.

Will the project require high-noise and vibration inducing construction methods? If so, please specify.	Yes. There are two construction methods/activities that may be high-noise and vibration inducing - removal of rock/ledge and the process of milling roadways impacted by the project. The removal of rock/ledge is very likely to be sporadic at best with excavation depths generally restricted to 36 inches or less. Milling and paving of impacted streets is necessary to ensure safe and efficient transportation networks following the completion of the project.
Will the project comply with state and local ordinances? If so, identify applicable ordinances and limitations on noise/vibration times or sound levels.	Yes. Project working hours will be limited to between 7:00 am and 5:00 pm.
Will construction activities require large bulldozers, hoe ram, or other vibratory equipment within 20 feet of a structure?	No.
Is there any other information relevant to the project area or the proposed work as it pertains to Noise and Vibration?	No.

Conclusion:

The project is located in the City of Norwich. Ambient noise consists of a combination of environmental noise primarily from road traffic, construction, industry, population density and other sources.

The pipeline replacement project would result in temporary construction noise impacts; however, no vibration impact should occur. Excavators, dump trucks, skid steers, rollers, pavers, and other similar construction equipment would be used to excavate a trench, lay pipe, compact soils and re-pave the affected areas. Construction for the project is anticipated to last 2.5 years. There are numerous sensitive noise receptors (*e.g.*, residences, schools, houses of worship, etc.) located adjacent to the streets where work would occur. Noise impacts experienced by these receptors would be minor and temporary, and no adverse vibration impacts would result from the proposed work. Construction would be required to abide by local noise control ordinances in the City of Norwich. Noise control measures would be chosen by the contractor and could include the following, as necessary:

- Use low noise emitting equipment;
- Implement noise-deadening measures for truck loading and operations;
- Conduct monitoring and maintenance of equipment to meet noise limits;
- Use acoustic enclosures, shields, or shrouds for equipment; and
- Minimize the use of generators or use quiet generators to power equipment.

Mitigation Measures:

- Adhere to all local, city and state noise regulations.

Community Effects	
Question	**Information and Justification**
Will the project displace existing residents or workers from their homes and communities? If so, what is the expected duration?	No.

Will the project require service disruptions to homes and communities? If so, what is the expected communication and outreach plan to the residents and the duration of the outages?	Yes. Outages are only expected on the day a natural gas service is tied over to a new natural gas main. This work only happens with communication, coordination, and permission granted by the property owner. Communications include an initial door hanger provided at the beginning of the project with a description of the project and a request to contact Norwich Public Utilities at a convenient time to arrange for a site visit, then a site visit will take place to locate where the property owner would like the service to be installed and to establish a date convenient for the property owner to have the service installed, then a communication a day or two before the service is installed confirming the work is still permitted to take place. For customers with language barriers many of our customer service representatives are multi-lingual and we have access to language translators to assist.
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. For customers with language barriers many of our customer service representatives are bilingual or multilingual, we have access to language translators to assist those representatives who are not bilingual or multilingual, and our website has built in language translators for ESL residents. Additionally, doorhangers and other written project notifications will be sent in the prevailing local languages, such as Spanish, Creole, and Mandarin.
Is there any other information relevant to the project area or the proposed work as it pertains to Community Effects?	No.

Conclusion:

The proposed project would result in an overall reduction in leaking natural gas pipelines. Construction activities would result in minor temporary air quality impacts, including the intentional venting of existing distribution lines prior to replacement. Noise impacts associated with construction are anticipated to be minor. The removal of leak prone pipe would reduce leaks and the potential for incidents, will result in an increase in pipeline safety across the system while also improving operation and reliability. PHMSA determined the project would not impact the local community.

Mitigation Measures:

- Provide advanced notification of service disruptions and construction schedule to all affected parties including residents and businesses adjacent to the project area;
- Coordinate service disruptions and construction schedule with local community leaders and groups, as applicable;
- Maintain service at temporary facilities, if appropriate;
- Promote public engagement to reduce project delivery delays and public controversy;
- Develop outreach plans to involve and engage all populations; and
- The City of Norwich will have translators available to communicate with residents with limited English proficiency.

Safety	
Question	**Information and Justification**
Has a risk profile been developed to describe the condition of the current infrastructure and potential safety concerns?	Yes, as described in the Distribution Integrity Management Program (DIMP).
Has a public awareness program been developed and implemented that follows the guidance provided by the American Petroleum Institute (API) Recommended Practice (RP) 1162?	Yes.
Does the project area include pipes prone to leakage?	Yes. Cast iron and bare steel pipes will be replaced.

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. Norwich Public Utilities employees a full time Safety Professional that regularly conducts safety trainings reinforcing company safety standards and policies. Additionally, the Safety Professional conducts regular site safety inspections/audits on construction activities and issues follow up reporting summarizing whether crews were compliant with OSHA and company safety standards, and if not, makes recommendations for improvements. The Safety Professional holds Certified Safety Professional (CSP) certification, Construction Health and Safety Technician (CHST) certification, and Certified Utility Safety Professional (CUSP) certification. Additionally, Norwich Public Utilities employs a Compliance & Training Specialist that helps assure all gas safety procedures are followed through training and inspections.
Has an assessment of the project been performed to analyze the risk and benefits of implementation?	Yes. Our DIMP serves as the analysis of risk and benefit of replacing cast iron mains on an accelerated schedule.

Is there any other information relevant to the project area or the proposed work as it pertains to Safety?	No.

Conclusion:

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

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

Mitigation Measures:

- Incorporate public awareness programs, as necessary;
- Use standard construction safety methods and procedures;
- Ensure DIMP procedures are updated as necessary;
- Ensure work is constructed in accordance with industry best practices; and
- Comply with all local, state, and federal regulations.

4. Categorical Exclusion Determination

Categorical Exclusions to be Applied:

As the proposed action is repair, replacement, upgrading, rebuilding, or minor relocation of pipelines within existing rights-of-way to an existing natural gas pipeline, the following Categorical Exclusion, as listed in the DOE NEPA implementing procedures, 10 CFR 1021, adopted by PHMSA effective July 3, 2024[5] applies:

> B5.4 Repair or Replacement of Pipelines
>
> Repair, replacement, upgrading, rebuilding, or minor relocation of pipelines within existing rights-of-way, provided that the actions are in accordance with applicable requirements (such as Army Corps of Engineers permits under section 404 of the Clean Water Act). Pipelines may convey materials including, but not limited to, air, brine, carbon dioxide, geothermal system fluids, hydrogen gas, natural gas, nitrogen gas, oil, produced water, steam, and water.

Eligibility Criteria:

The proposed activity meets the eligibility criteria of 10 CFR 1021.41O(b) because the proposed action does not have any extraordinary circumstances that might affect the significance of the environmental effects, is not connected to other actions with potentially significant impacts [40 CFR 1508.25(a)(l)], is not related to other actions with individually insignificant but cumulatively significant impacts [40 CFR 1508.27(b)(7)], and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211 concerning limitations on actions during environmental impact statement preparation. The "Integral Elements" of 10 CFR 1021 are satisfied because the proposed action will not:

1. Threaten a violation of statutory, regulatory, or permit requirements for environment, safety, and health, including requirements of DOE and Executive Orders;
2. Require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions or facilities;
3. Disturb hazardous substances, pollutants, contaminants, or Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)-excluded petroleum and natural gas products that preexist in the environment such that would be uncontrolled or un-permitted releases;
4. Have the potential to cause significant impacts on environmentally sensitive resources, which includes (i) property (sites, buildings, structures, and objects) of historical, archeological, or architectural significance; (ii) federally-listed and state-listed threatened or endangered species or their habitat, federally-protected marine mammals and essential fish habitat and otherwise federally-protected species; (iii) floodplains and wetlands; (iv) federally and state designated areas (wilderness areas, national parks, national monuments, national natural landmarks, wild and scenic rivers, wildlife refuges, scenic areas, and marine sanctuaries); (v) prime or unique farmland; (vi) special sources of water (sole-source aquifers, wellhead protection areas, and other vital water resources); and (vii) tundra, coral reefs, or rain forests); or

[5] Federal Register :: Adoption of Department of Energy Categorical Exclusion Under the National Environmental Policy Act

5. Involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species.

Compliance Action:

The proposed action satisfies the DOE NEPA eligibility criteria and integral elements, does not pose extraordinary circumstances, and meets the requirements for the CE referenced above. Based on my review of the proposed action, I have determined that the proposed action fits within the specified class(es) of action, the other regulatory requirements set forth above are met, and the proposed action is hereby categorically excluded from further NEPA review.

PHMSA Approval:

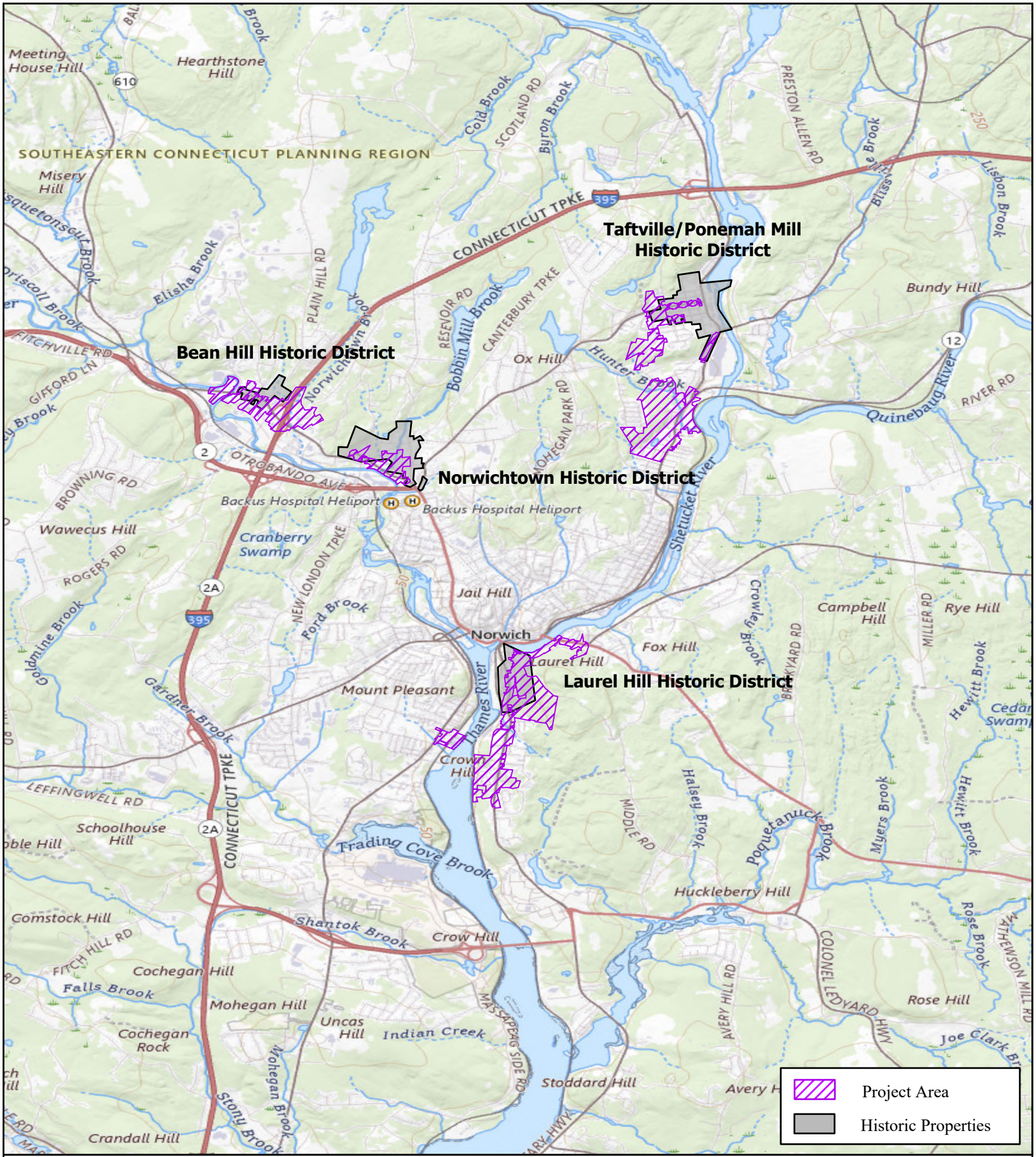
AMANDA LAUREN MURPHY

Digitally signed by AMANDA LAUREN MURPHY
Date: 2025.05.22 11:03:44 +02'00'

Appendix A

Project Map

Project Area Map



Name: Norwich Gas Line Replacement
Scale: 75,000
Total Acreage: 618
Norwich, New London County, Connecticut

0 1 2 Miles

N

Service Layer Credits: USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road data; Natural Earth Data; U.S. Department of State HIU; NOAA National Centers for Environmental Information. Data refreshed February, 2025.