



Environmental Assessment

**RURAL BROADBAND INFRASTRUCTURE EXPANSION IN THE ALLEGHENIES:
SHADE GAP TOWER COLLOCATION AND SHADE MOUNTAIN TOWER**

Department of
Commerce

HUNTINGDON COUNTY, PENNSYLVANIA

National
Telecommunications
and Information
Administration

November 10, 2023

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1.0 Executive Summary

Terracon Consultants, Inc. (Terracon) has prepared this Environmental Assessment (EA) on behalf of Ambassador Tower LLC and Upward Broadband as the National Environmental Policy Act (NEPA) review of the proposed Rural Broadband Infrastructure Expansion in the Alleghenies Project (RBIEAP). The RBIEAP has been awarded grant funding from the National Telecommunications and Information Administration (NTIA)'s Broadband Infrastructure Program (BIP) to expand broadband access to unserved/underserved areas comprised of 977 census blocks in the Pennsylvania counties of Huntingdon, Fulton, Bedford, Franklin, Perry and Mifflin. The larger overall proposed broadband grant will deploy fixed wireless broadband service across 31 communications towers, which are divided into 9 separate and independent projects. The "Grantee" is a covered partnership comprised of Pennsylvania county governments for Huntingdon (lead applicant), Bedford and Fulton counties, two internet providers, Upward Broadband and Crowsnest Broadband, and a Pennsylvania nonprofit, Alleghenies Broadband, Inc. (ABI) (collectively referred to as Huntingdon County).

This EA's proposed action addresses the second component of the total project and comprises two communication tower locations: the Shade Gap tower collocation and the proposed Shade Mountain tower, both located in Huntingdon County, Pennsylvania. The proposed action is being implemented by Ambassador Tower LLC, who will own the tower assets, and Upward Broadband, who will own the communications equipment (collectively referred to hereafter as the "Responsible Party").

Shade Gap Tower is an existing 260-foot self-supporting lattice communication tower (268 feet with appurtenances) located at 22384 Croghan Pike, Dublin Township (Shade Gap), Pennsylvania (NAD83: 40° 10' 40.6" N | 77° 51' 45.8" W). The tower is currently owned by Vertical Bridge Development, LLC and was constructed on December 8, 2021 with a Federal Communications Commission (FCC) Antenna Structure Registration system (ASR) file number of 1321061.

Shade Mountain Tower is the proposed construction of a new 199-foot self-supporting lattice communication tower and compound including access and utilities easements. The proposed tower will be located at 40° 19' 3.18" N | 77° 46' 08.38" W. Shade Mountain Tower will be constructed and owned by Ambassador Tower LLC.

The proposed action is based on the lack of broadband access in Huntingdon County and uses the most reasonably accessible areas. Based on the proposed projects, a total of four alternatives were considered during the EA process:

1. Proposed Action Alternative: The collocation/modification of Shade Gap Tower and the construction of Shade Mountain Tower and associated compound/equipment and access/utility easements.

2. Fiber to the Premise - Underground Cable: The consideration of using buried fiber-optic cable as a viable technology for project implementation presented significant readily apparent barriers that eliminated the technology from further discussion.
3. Fiber to the Premise - Aerial Cable: The covered partnership would enter into a joint pole agreement with existing utility providers in order to acquire necessary access to attach fiber optic cabling to existing utility pole infrastructures.
4. No Action Alternative: No collocation/modification of Shade Gap Tower and no construction of Shade Mountain Tower; broadband coverage in certain areas of Huntingdon County would remain underserved.

While all alternatives were considered, the Proposed Action Alternative was selected for comprehensive analysis and final design because it would provide telecommunications enhancement to the community with few infrastructure constraints, less cost, and low environmental impact.

Because the proposed project utilizes federal funds, NTIA must fulfill obligations under the NEPA and other applicable local, state, and federal regulations. In compliance with these regulations, the following EA has been prepared. The implementation of NEPA requires a systematic, interdisciplinary approach to project planning and implementation, and emphasizes that the environmental impacts of federally funded projects be given serious consideration in the decision-making process. The EA evaluates the potential social, economic, and environmental effects from the proposed project, and was prepared with input from stakeholder agencies. The EA addresses the following:

- Noise
- Air Quality
- Geology and Soils
- Water Resources
- Biological Resources
- Historic and Cultural Resources
- Aesthetic and Visual Resources
- Land Use
- Infrastructure
- Socioeconomic Resources
- Human Health and Safety

The results of the EA indicate that, with appropriate mitigation and conservation measures, the Proposed Action Alternative would not result in any significant adverse effects to the natural, cultural, or human environment. The findings of the EA are summarized in the following table:

Table 1.0 Effect Comparison of Alternatives

Resource Area	Proposed Action Alternative	No Action Alternative
Noise	Short term impacts during construction would be temporary and minor. Mitigation methods include limiting the hours of the Shade Gap Collocation construction to occur only during permissible construction hours (6am to 9pm) in accordance with Huntington County Zoning Ordinance. Sensitive receptors were not identified in the location of the Shade Mountain Tower site. The on-going operations of telecommunications towers are not considered significant sources of noise. Less than significant noise impacts are anticipated.	No impacts.
Air Quality	Short term impacts during construction would be temporary and minor, including fugitive dust emissions from vehicular movement and facility construction. Dust suppression techniques via water trucks or other methods can be used reduce fugitive dust emissions during construction. The Shade Mountain proposed tower includes a propane-powered generator, which would only operate during the case of emergencies and falls under a Pennsylvania Department of Environmental Protection (PA DEP) permit exemption. Less than significant impacts to air quality are anticipated.	No impacts.
Geology and Soils	Minimal impact to soils will occur during construction of the Shade Mountain tower. Dust suppression techniques via water trucks or other methods can be used to reduce fugitive dust emissions. The Shade Gap collocation includes only minor ground disturbance (underground conduit and equipment) which will occur within the previously developed tower compound. No significant impacts to geology or soils are anticipated.	No impacts.
Water Resources	There are no water features in the vicinity of either site location. No impacts to water resources are anticipated.	No impacts.

Resource Area	Proposed Action Alternative	No Action Alternative
Biological Resources	<p>A Pennsylvania Natural Diversity Inventory (PNDI) environmental review was completed for the project. The environmental review tool is utilized to coordinate concurrent project reviews with the Pennsylvania Department of Conservation and Natural Resources (DCNR), the Pennsylvania Fish and Boat Commission (PFBC), the Pennsylvania Game Commission (PGC), and the United States Fish and Wildlife Service (USFWS). Review of the Shade Gap tower collocation indicated no environmental concerns with any agencies and no further consultation was required for the proposed collocation. As a mitigation measure, it should be confirmed that there are no active nests on the tower prior to collocation activities, to ensure the protection of migratory birds during project implementation.</p> <p>The PFBC requested a survey for the Timber Rattlesnake (<i>Crotalus horridus</i>, Species of Special Concern) for the Shade Mountain tower site. The surveys confirmed the presence of dens in the vicinity of the tower site and a snake was observed crossing the project’s limits of disturbance and access road. To avoid impacts to the rattlesnake, the PFBC has requested that the Responsible Party shall construct a temporary fence around the construction site to reduce the access of snakes prior to October 15th. To confirm no impacts to snakes, ground disturbing activities conducted within this area and prior to October 15 shall be monitored by a PFBC-approved snake monitor. After October 15, the area will be assumed to be free of snakes and ground disturbing activities may proceed without a monitor. The PFBC additionally included recommendations and Best Management Practices (BMPs) which are further outlined in Sections 5.5 and 6.0 of the EA. Additionally, preconstruction nesting surveys should be completed for any construction occurring during a migratory bird nesting window. Less than significant Impacts to biological resources are anticipated as long as required mitigation measures are followed during project implementation.</p>	No impacts.

Resource Area	Proposed Action Alternative	No Action Alternative
Historic and Cultural Resources	<p>No historic or archeological resources were identified at the Shade Gap Collocation and Shade Mountain project locations. Cultural resources in the viewshed of both projects were not determined to be adversely affected by the project implementation. The State Historic Preservation Office (SHPO) and federally recognized tribes were consulted and did not identify any cultural resources to be adversely impacted at either location.</p> <p>No impacts to historic and cultural resources are anticipated. In the unlikely event that unanticipated historic properties, cultural artifacts, archeological deposits, or human remains are inadvertently encountered during the bore program excavation activities, all ground disturbing activities must halt immediately, and NTIA along with the appropriate state and/or tribal agencies must be contacted, in accordance with applicable state law and federal regulation (36 C.F.R. § 800.13(b)).</p>	No impacts.
Aesthetic and Visual Resources	<p>The Shade Mountain proposed tower site is located in a wooded, rural area surrounded by powerline easements. The NRHP-eligible Hower-Hart Farm is located approximately 0.75 miles northeast of Shade Mountain, but the tower was not found to visually impact the resource and SHPO concurred with this finding. No other significant resources were identified within a 0.75-mile visual radius for the Shade Mountain proposed tower. Several NRHP-listed and eligible properties and one park (Harpers Memorial Park) were identified within a 0.75-mile radius of the Shade Gap collocation site; however, due to the nature of the undertaking (a collocation on an existing tower), the proposed action was not found to visually impact aesthetic and visual resources and SHPO concurred with this finding. Less than significant impacts to aesthetic and visual resources are anticipated.</p>	No impacts.
Land Use	<p>The proposed Shade Gap collocation would not impact the current land use and the proposed Shade Mountain tower is a compatible land use with the surrounding environment. No significant impacts to land use are anticipated.</p>	No impacts.
Infrastructure	<p>The project will overall provide beneficial impacts to the infrastructure of Huntingdon County by providing valuable broadband coverage and services.</p>	Less than significant impacts.
Socioeconomic Resources	<p>Beneficial impacts to socioeconomics will result in the form of better communication capabilities, increased educational opportunities, economic development potential, higher security, and improved access to health care due to broadband access.</p>	<p>Communities in rural Huntingdon County would continue to lack access to broadband infrastructure. Significant Impact</p>

Resource Area	Proposed Action Alternative	No Action Alternative
Human Health and Safety	<p>No sources of significant contamination were identified at either of the tower locations. The Responsible Party will identify buried utilities prior to subsurface construction methods using 811 (Call Before You Dig) and permit only workers qualified by training or experience to operate heavy machinery and equipment. Coordination with the Federal Aviation Administration (FAA) will be completed to ensure the proposed tower will pose no hazards to air navigation. No significant impacts to human health and safety are anticipated.</p> <p>Beneficial impacts to human health and safety will result in the form of better communication capabilities, higher security, and improved access to health care due to broadband access.</p>	Less than significant impacts.

This EA has been completed based upon site information and the review of readily available information obtained from commercial services, government agencies, and/or other sources as described herein. This EA was prepared in accordance with the NEPA implementing procedures of the Council on Environmental Quality (CEQ; 40 CFR Parts 1500-1508), Federal Communications Commission (FCC; 47 CFR §1.1301-1 .1320), and guidance provided by NTIA. The objective of the EA is to assess whether the proposed action is likely to result in a significant environmental impact, for which an Environmental Impact Statement (EIS) would be required. The U.S. Department of Commerce, NTIA is the agency responsible for awarding BIP grant funds for the proposed covered project including this proposed action and is lead agency for NEPA. In addition, Section 106 of the National Historic Preservation Act of 1966 (NHPA), as codified at 36 CFR Part 800, regulates assessment of cultural resources for all federal undertakings. FCC’s Nationwide Programmatic Agreement for the Collocation of Wireless Antennas (47 CFR Part 1, Appendix B) and the Nationwide Programmatic Agreement Regarding the Section 106 National Historic Preservation Act Review Process (47 CFR Part 1, Appendix C) further stipulate the review process for cultural resources and amend 47 CFR, Part 1, Subpart I, rule section 1.1307(a)(4).

2.0 Purpose and Need

The purpose of the project is to deploy internet to underserved populations of Huntingdon County and the action is needed due to insufficient access to broadband. On November 15, 2021, President Biden signed the Infrastructure Investment and Jobs Act into law, which included a significant investment of \$65 billion to help close the digital divide and ensure that all Americans have access to reliable, high speed, and affordable broadband. According to NTIA, the purpose of the Act is to lay critical groundwork for widespread access and affordability of broadband, creating new jobs and economic opportunities, providing increased access to healthcare services, enriching educational experiences of students, and improving overall quality of life for all Americans. According to the Pennsylvania Broadband Development Authority (PBDA), broadband connectivity:

- Fosters economic growth and innovation
- Provides the critical infrastructure for the future
- Grow workforce development and educational achievement opportunities
- Provides adequate, reliable emergency services
- Enhances community health, well-being, access to health care services, and quality of life

Under the Infrastructure Investment and Jobs Act, the BIP program's purpose is to use grant funding to expand broadband access to unserved/underserved areas of the Country. Huntingdon County, Pennsylvania has been identified as having a significant deficiency of broadband coverage. This installation will improve wireless communications and connectivity coverage in the immediate vicinity of Shade Mountain tower as well as improve the coverage to areas of the county that currently do not have access. By providing this coverage, Huntingdon County, its businesses, citizens, and students will receive the high level of access consistent with larger urban areas. The project will provide much-needed wireless communications and connectivity coverage to public institutions and create opportunities for broadband connections to both businesses and households in this underserved region of Pennsylvania. By providing wireless communications and connectivity coverage, the project is expected to facilitate rural economic development, job creation, education, and improve access to health care and emergency services.

3.0 Description of Proposed Action and Alternatives

This Chapter includes a description of the Proposed Action and project alternatives as well as the justification for the alternatives selected for further study.

3.1 Introduction

The larger overall proposed broadband grant will deploy fixed wireless broadband service across 31 communications towers providing high-speed broadband internet to the proposed service area comprised of 977 census blocks in the Pennsylvania counties of Huntingdon, Fulton, Bedford, Franklin, Perry, and Mifflin. This EA's proposed action addresses the second component of the total project and comprises two communication tower locations: the Shade Gap tower collocation and the proposed Shade Mountain tower, both located in Huntingdon County, Pennsylvania. The proposed communication facilities will improve cellular connectivity and the overall project will provide much-needed high-speed internet connectivity to public institutions and create opportunities for broadband connections to both businesses and households in these rural areas of Huntingdon County. By providing high-speed connectivity, the project is expected to facilitate rural economic development, job creation, education, and improve access to health care and emergency services.

3.2 Proposed Action

The Proposed Action comprises two communication facilities, the proposed Shade Gap tower collocation and the proposed Shade Mountain tower.

Shade Gap Tower Collocation

Shade Gap Tower is an existing 260-foot self-supporting lattice communication tower (268 feet with appurtenances) located at 22384 Croghan Pike, Dublin Township (Shade Gap), Pennsylvania (NAD83: 40° 10' 40.6" N | 77° 51' 45.8" W). The tower is currently owned by Vertical Bridge Development, LLC and was constructed on December 8, 2021 with a Federal Communications Commission (FCC) Antenna Structure Registration system (ASR) file number of 1321061. This site was chosen due to the fact that the existing lease would allow for collocation over a new build, which reduces operational costs and environmental impacts. The existing tower site is located in an open field with light tree cover, existing above ground utilities, and directly adjacent to US 522/Croghan Pike. The adjacent land use is a mixture of wooded and grassed land, low density residential, and commercial. All ground disturbance anticipated at this site will occur within the approximate 10,000 square-foot graveled and fenced tower compound. Equipment staging will occur either within the existing gravel access road, which extends northeast from the site, or within the grassed field to the adjacent south of the tower compound.

Proposed Shade Mountain Tower

Shade Mountain Tower is the proposed new construction of a 199-foot self-supporting lattice communications tower located at 40° 19' 3.18" N | 77° 46' 08.38" W. The parcel is owned by the Zeiset J P Family Partnership and is identified as Huntingdon County Tax Parcel Map No. 42-13-07. Development consists of an approximate 10,000 square-foot tower compound and an approximate 30-foot by 220-foot access/utility easement that connects proposed utilities to the south. The compound will be accessed via an existing access road that extends to the northwest. Improvements to the existing road are not proposed. New electric service cable will additionally be installed underground along the access easement from an existing Valley Rural Electric Cooperative pad-mounted transformer to the site. The tower will likely be installed on a mat foundation within the fenced compound. The compound will also house an 8-foot by 8-foot equipment shelter and ice bridge, a propane aboveground storage tank, and associated emergency backup generator. Shade Mountain Tower will be constructed and owned by Ambassador Tower LLC. Preliminary site drawings are included in Appendix B and photographs are included in Appendix F.

This tower site was chosen because it provided the best coverage for the area in need and was already located adjacent to a power easement with feasible sources for power in close proximity. It was also chosen in consideration of construction access, subsurface conditions, zoning considerations, and cooperation of property owner.

The area proposed for the Shade Mountain Tower and compound has dense vegetation and is forested with mixed deciduous trees adjacent to an existing two track dirt access road. Anticipated site work includes the removal of trees and vegetation within the proposed compound, geotechnical core boring and soil resistivity testing, installation of the mat tower foundation, 8-foot compound fencing, gravel for compound area, installation of the self-support lattice tower, a grounding ring for the tower, and installation of the 8-foot by 8-foot shelter and

ice bridge. Ground disturbance is estimated to be approximately 10,500 square foot (approximately 0.241 acres). Examples of equipment that will likely be used during construction include cranes, backhoes, excavators, and bulldozers. The proposed equipment staging area utilized will be along the access road to the south of the site.

3.3 No Action Alternative

Under the no action alternative, the project would not move forward, and Huntingdon County would remain underserved with regards to wireless communications and connectivity coverage. No construction impacts would occur, as described under the proposed action alternative. None of the benefits outlined in 2.0 would occur under the no action alternative.

3.4 Alternatives

Based on the proposed project, a total of four alternatives were considered during the EA process:

1. Proposed Action Alternative: The collocation/modification of Shade Gap Tower and the construction of Shade Mountain Tower and associated compound/equipment.
2. Fiber to the Premise - Underground Cable: The consideration of using buried fiber-optic cable as a viable technology for project implementation presented significant readily apparent barriers that eliminated the technology from further discussion.
3. Fiber to the Premise - Aerial Cable: The covered partnership would enter into a joint pole agreement with existing utility providers in order to acquire necessary access to attach fiber optic cabling to existing utility pole infrastructures.
4. No Action Alternative: No collocation/modification of Shade Gap Tower and no construction of Shade Mountain Tower; broadband coverage in certain areas of Huntingdon County would remain underserved.

While all four alternatives were considered, the Proposed Action Alternative is being proposed for comprehensive analysis and final design because it would have fewer infrastructure constraints, less environmental impact, lower cost, and fulfill the requirements of the grant.

3.5 Alternatives Considered but Eliminated from Further Discussion

As discussed in Section 3.4, four alternatives were considered but eliminated from further study (the overhead cable alternative and the underground cable alternative).

Fiber to the Premise-Underground Cable

The consideration of using buried fiber-optic cable as a viable technology for project implementation presented significant readily apparent barriers that eliminated the technology from further discussion. In rural areas, the cost of laying fiber cables can be at least five times higher than fixed wireless. In contrast, fixed wireless technology can be deployed faster and with lower costs, making it a more feasible option for delivering high-speed internet to remote communities. Compared to fiber, fixed wireless technology also offers faster installation times,

further reducing costs. Fixed wireless technology installations can often be completed within days, if there is a clear line of sight between the antenna and the user's location. This means that fixed wireless technology offers a cost-effective solution for both urban and rural areas that require fast and reliable internet access without incurring the excessive costs of fiber installation. The administration and real property (land) acquisition burden would also be far greater for buried fiber-optic cable as the undertaking of such a project would require the extensive acquisition of easements and/or right-of-way. The time required to obtain hundreds of rights of way and environmental clearance would likely prevent project before the BIP implementation deadline. Therefore, the buried fiber-optic cable alternative could not be developed affordably, efficiently, or in an environmentally sensitive manner. For these reasons, the buried fiber optic cable alternative would not be considered feasible, and it is not discussed further in this EA.

Fiber to the Premise-Aerial Cable

This alternative would result in construction of hundreds of miles of new, aerial fiber optic cable using traditional installation techniques on existing or new utility poles or towers. Under this alternative, the covered partnership would enter into a joint pole agreement with existing utility providers in order to acquire necessary access to attach fiber-optic cabling to the existing utility pole infrastructure. Several factors led to elimination of using aerial cable as a viable alternative for project implementation. The total project cost of installing aerial fiber-optic cable would be expected to be much greater than those costs anticipated for activities described under the Proposed Action. In rural areas, the cost of installing aerial fiber-optic cable would be at least five times higher than fixed wireless.

The administrative and planning burden would also be far greater for aerial fiber-optic cable as the undertaking of such a project would require the extensive acquisition of easements and/or right-of-way. The time required to assess existing infrastructure including engineering review of all existing poles and their capacity to hold additional cable associated with this project could not be ascertained without a detailed system study by the affected utilities that would again delay the implementation of this project beyond the BIP implementation deadline. Further, application of new cable to existing or new poles and towers has its own significant inherent environmental impacts and a far more extensive permitting process, affecting both urban and rural areas. The costs of system-wide installation and ongoing maintenance of aerial cable would be expected to be much greater than the Proposed Action. In contrast, fixed wireless technology can be deployed faster and with lower costs, making it a more feasible option for delivering high-speed internet to remote communities. Compared to aerial fiber-optic cable, fixed wireless technology also offers faster installation times, further reducing costs. This means that fixed wireless technology offers a cost-effective solution for both urban and rural areas that require fast and reliable internet access without incurring the excessive costs of fiber installation. For these reasons, the aerial fiber-optic cable alternative would not be considered feasible, and it is not discussed further in this EA.

4.0 Description of the Affected Environment

A screening process was used to determine which environmental resources are likely to be impacted by the proposed action. Because the project is specifically designed to produce certain environmental benefits and to avoid or mitigate others, some environmental resources required less discussion. In some cases, environmental resources may be dismissed from analysis if they are unlikely to be significantly impacted by the proposed project. The remaining resources are analyzed further to assess the established baseline, likely impacts of the proposed action, and to determine what actions should be taken to mitigate adverse impacts.

4.1 Noise

Noise pollution is sound that becomes unwanted with normal activities, disrupts normal activities, or diminishes one's quality of life. Noise pollution can adversely affect a person's health and lead to several stress related issues. Sound is usually represented on a logarithmic scale with a unit called the decibel (dB). Sound on the decibel scale is referred to as sound level. According to EPA (US EPA, 1974), noise Levels of 45 decibels are associated with indoor residential areas, hospitals, and schools. Noise levels of 55 decibels are identified for certain outdoor areas where human activity takes place. The level of 70 decibels is identified as a threshold for all areas in order to prevent hearing loss.

According to the Huntingdon County Model Zoning Ordinance set by the Huntingdon County Planning & Development Department, no principal or accessory use, or operations or activities on its lot, shall generate a sound level exceeding the limits established in the table below, when measured at the locations specified in the table below. The term dBA means "A-weighted decibel". A-weighting is a curve relating to the measurement of sound pressure level. A-weighting is applied to instrument-measured sound levels in an effort to account for the relative loudness perceived by the human ear (Meyer-Bisch, Christian, 2005).

Table 4.1 Sound Level Limits by Receiving Land Use / District for Huntingdon County

Land Use Zone District Receiving the Noise	Hours/Days	Maximum Sound Level
1. At Lot Line of Residential Use in a Residential District	<ol style="list-style-type: none"> 1. 6am-9pm other than Sundays, Christmas Day, Thanksgiving Day, New Years Day, Labor Day, and Memorial Day 2. 9pm-7am plus all of the following days: Sundays, Christmas, Thanksgiving, New Years, Easter Sunday, Labor Day, and Memorial Day 	<ol style="list-style-type: none"> 1. 62 dBA 2. 55dBA
2. Lot Line of a Principal Residential Use that is not in a Residential District	<ol style="list-style-type: none"> 3. Same as above 4. Same as above 	<ol style="list-style-type: none"> 3. 65 dBA 4. 62 dBA
3. Any Lot Line other than 1 or 2 (referenced above)	All times and days	70 dBA

The above-listed maximum permissible sound level limits shall not apply to several listed noise sources, which include *repair or installation of utilities or construction of structures, sidewalks or streets between the hours of 6am and 9pm, except for clearly emergency repairs which are not restricted by time* (Huntingdon County Model Zoning Ordinance, 2008).

The Shade Gap collocation will occur within an existing telecommunications tower compound which utilizes an existing access road. The surrounding area contains a mixture of wooded/grassed land and low density residential and commercial development. While there is some residential development in the area, it is separated from the tower site by wooded buffers. Shade Gap Tower is also located adjacent to an active utility right-of-way (ROW) alongside Croghan Pike (Hwy 522). These areas experience noise from automobiles and other modes of transportation and agricultural related activities on a regular basis. Noise levels along highways vary with speed, type of vehicle, and intensity of traffic by time of day.

The Shade Mountain Tower project area consists of wooded land. The site is abutted by wooded land and several powerline easements. There are no residential structures, churches, schools, or other sensitive receptors within 0.75 miles of the proposed tower site. Additionally, this area experience noise from automobiles and other modes of transportation on a regular basis. Noise levels along highways vary with speed, type of vehicle, and intensity of traffic by time of day.

4.2 Air Quality

Air quality at the project area is regulated by the Pennsylvania Department of Environmental Protection (PA DEP), which administers federal and state air quality standards. The EPA has set national ambient air quality standards (NAAQS) for six of the following criteria pollutants (US EPA, 2022): ozone (O₃), particulate matter (PM 2.5 and 10), nitrogen dioxide (NO₂), carbon monoxide (CO), sulfur dioxide (SO₂), and lead (Pb). Under these standards, a geographic location with pollutant levels below air quality standards is said to be in "attainment," while higher levels are in "non-attainment." New construction and conversion activities which are located in "non-attainment" or "maintenance" areas, as determined by the EPA, may need to be modified or mitigation measures developed and implemented to conform to the State Implementation Plan (US EPA, 2022e). The Clean Air Act (42 U.S.C. 7401 et seq.) prohibits federal assistance to projects that are not in conformance with the SIP. According to the EPA Green Book Nonattainment Areas for Criteria Pollutants, Huntingdon County, Pennsylvania is not located within a non-attainment area for any major pollutants (US EPA, 2022c). In accordance with Executive Order (EO) 13990, this EA also takes into consideration the potential emission of greenhouse gases (GHG) associated with the project.

4.3 Geology and Soils

According to the United States Geological Survey (USGS) Ground Water Atlas of the United States Section L, both project areas fall within The Valley and Ridge Province, which is characterized by layered sedimentary rock that has been complexly folded and locally thrust faulted. As the result of repeated cycles of uplift and erosion, resistant layers of well-cemented sandstone and

conglomerate form elongate mountain ridges and less resistant, easily eroded layers of limestone, dolomite, and shale form valleys. The rocks of the province range in age from Cambrian to Pennsylvanian. Parts of this province from central Pennsylvania into New Jersey have been glaciated, and glacial deposits fill or partially fill some of the valleys.

According to the United States Department of Agriculture (USDA) Natural Resource Conservation Service's (NRCS) Web Soil Survey, soils beneath the Shade Gap Tower are defined as 100% Hublersburg cherty silt loam, 8 to 15% slope. The Hublersburg series of soils consists of very deep, well drained soils formed in residuum weathered from impure limestone. They are found on convex upland slopes of 0 to 35 percent with moderate permeability. The Shade Gap tower location is a previously developed tower compound and access road. The soils beneath the compound were previously disturbed with the construction of the existing tower, compound, and access road.

According to the USDA NRCS Web Soil Survey, soils beneath the proposed Shade Mountain Tower are defined as 100% Rubble land (Surface area covered with cobbles, stones or boulders). Construction at Shade Mountain Tower will necessitate about 0.25 acres of ground disturbance for the new tower location compound, and an additional 250-feet of ground disturbance is anticipated for the installation of an electric utility easement.

4.4 Water Resources and Wetlands

The *US Army Corps of Engineers (USACE) Wetland Delineation Manual* (USACE, 1987) defines wetlands as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area either lacks vegetation or the vegetation is dominated by hydrophytes.

The definition of a Waters of the US (WOTUS) is: Waters, which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; Territorial waters; Interstate waters; Impoundments of waters defined as waters of the United States; Tributaries of the above waters that are relatively permanent, standing, or continuously flowing bodies of water; Wetlands adjacent to and having a continuous surface connection to the above waters, which have relatively permanent, standing, or continuously flowing bodies of water (other than waters that are themselves wetlands); or Interstate lakes and ponds not identified above that are relatively permanent, standing, or continuously flowing bodies of water with a continuous connection to the waters above, except those that are wetlands. (33 CFR 328.3).

Typically, the USACE and the U.S. Environmental Protection Agency (EPA) will assert jurisdiction over the following waters:

- Traditional navigable waters (TNWs),
- Wetlands adjacent to TNWs,
- Non-navigable tributaries of TNWs that are relatively permanent where the tributaries have continuous flow,
- Wetlands directly abutting non-navigable tributaries of TNWs,
- Non-navigable tributaries that are not relatively permanent,
- Wetlands displaying a continuous surface connection to TNWs, and
- Wetlands adjacent to do not directly abutting a relatively permanent non-navigable tributary.

Any person, firm, or agency planning to alter or work in waters of the U.S., including the discharge of dredged or fill material, must first obtain authorization from the USACE under Section 404 of the Clean Water Act (CWA; 33 United States Code [USC] 1344). Permits, licenses, variances, or similar authorization may also be required by other federal, state, and local statutes. Section 10 of the Rivers and Harbors Act of 1899 prohibits the obstruction or alteration of navigable waters of the U.S. without a permit from the USACE (33 USC 403).

Collocation on Shade Gap Tower

On-site visual observations and a review of the representative USFWS National Wetlands Inventory (NWI) map and USGS topographic maps did not identify any readily identifiable wetlands or wetland characteristics (e.g. standing water, hydrophytic vegetation, soil saturation and inundation, drainage patterns and sediment deposition, watermarks and drift lines on trees and vegetation, or water stained leaves) or surface waters within the footprint of the Shade Gap tower site. According to the NWI Online Mapper, the nearest mapped wetland is a Riverine wetland known as Shade Creek located approximately 1,470 feet to the southeast. The Shade Gap tower site consists of a previously developed tower compound and access road in a grassed field in an upland setting. No wetlands are mapped on or within the vicinity of the site. Additionally, the installation of equipment will only disturb areas within the previously developed gravel equipment compound.

Proposed Shade Mountain Tower

On-site visual observations and a review of the representative USFWS NWI map did not identify any readily identifiable wetlands or wetland characteristics (e.g. standing water, hydrophytic vegetation, soil saturation and inundation, drainage patterns and sediment deposition, watermarks and drift lines on trees and vegetation, or water stained leaves) or surface waters within the footprint of the Shade Mountain site. According to the NWI Online Mapper, the nearest identified wetland is a Riverine wetland known as Black Log Creek located approximately 4,540 feet to the northwest. The Shade Mountain proposed tower site consists of wooded land along the ridgeline of a mountain top. No wetlands, surface waters, or drainage features are mapped on or in the vicinity of the tower site or utility easement.

4.4.1 Surface Water (i.e., Lakes and Rivers)

According to the Susquehanna River Basin Commission (SRBC), Huntingdon County, Pennsylvania falls within the Juniata Subbasin of the Susquehanna River Basin. The Susquehanna River Basin covers 27,510 square miles of drainage area, covering half the land area of Pennsylvania and portions of New York and Maryland, and includes all or portions of 66 counties. The Juniata subbasin drains an area of approximately 3,400 square miles. The basin supplies water to the population of significant portions of Bedford, Blair, Fulton, Huntingdon, Perry, Juniata and Mifflin Counties. This expansive basin originates from the confluence of the Little Juniata River and the Frankstown Branch Juniata River in Blair and Huntingdon counties. As indicated in Section 4.4, no wetlands or surface waters are mapped on either site.

4.4.2 Groundwater

According to the USGS Pennsylvania Water Science Center, the nearest ground water monitoring station in Huntingdon County, Pennsylvania shows the water level on average at 52.8 feet below the surface. No sole source aquifers are mapped within the state of Pennsylvania. No groundwater recharge areas are known to exist on either project site (USGS, 2023).

4.4.3 Coastal Zone, Estuary, and Inter-tidal Areas

Huntingdon County is located within an inland portion of Pennsylvania and is not mapped within a coastal zone, estuary, or inter-tidal area. As such, neither project site is mapped within a coastal zone, estuary or inter-tidal area.

4.4.4 Flood Plains

EO 11988, "Floodplain Management", requires Federal agencies to avoid actions, to the extent practicable that will result in the location of facilities in floodplains and/or affect floodplain values. Executive Order (EO) 14030, *Climate-Related Financial Risk*, reinstates EO 13690, *Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input*. EO 13690 requires practitioners to use the Federal Flood Risk Management Standard (FFRMS)-established approaches for identification of floodplains for federally funded projects.

Facilities located in a floodplain may be damaged or destroyed by a flood or may change the flood handle capability of the floodplain, or the pattern, or magnitude of the flood flow. The relevant floodplain for most applicant projects is an area, which has a 1-percent chance of a flood occurrence in a given year. The flood of this interval is referred to as the 100-year flood or the base flood. The floodplain management guidelines require Federal agencies to apply the 0.2 percent or 500-year flood occurrence standard to the location of "critical facilities." Critical facilities include health care facilities, emergency service facilities, and areas used for the storage of hazardous materials.

According to the applicable Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) maps, neither project site is mapped within a floodplain.

4.4.5 Wild and Scenic Rivers

According to the National Park Service (NPS) Wild and Scenic Rivers Map, neither project site is located near a wild or scenic river. Additionally, the Susquehanna and Juniata Rivers are not considered wild and scenic rivers. Therefore, the project area does not contain any wild and scenic rivers (National Wild and Scenic Rivers, 2023).

4.5 Biological Resources

The proposed Shade Gap Tower will take place within an existing telecommunications tower compound which contains a self-support lattice tower, support equipment, and buried connection to utilities. The existing compound is contained within a chain link fenced area and is accessible via a gravel driveway. The proposed project involves the installation of antennas on the existing tower and placement of associated equipment within the tower compound.

The area proposed for the Shade Mountain Tower and compound has dense vegetation and is forested with mixed deciduous trees adjacent to an existing access road. The United States Forest Service (USFS) individual tree species parameter map was consulted and identified the following species as typically within the proposed area: sweet birch (*Betula lenta*), red maple (*Acer rubrum*), chestnut oak (*Quercus prinus*), black cherry (*Prunus serotina*), and black locust (*Robinia pseudoacacia*). Wildlife in the vicinity of Huntingdon County typically include those associated with forested and rural areas throughout the northeastern United States.

4.5.1 Threatened and Endangered Species

An Informal Biological Assessment was performed by Terracon Consultants, Inc. (Terracon) regarding the proposed tower. As part of the assessment, a preliminary review was completed using the U.S. Fish and Wildlife Service (USFWS) Information, Planning and Conservation System (IPaC) Endangered Species Act species list to identify listed and proposed threatened and endangered species, as well as critical habitats that may be located on or near the proposed project (Appendix D). According to the IPaC report, the following species are listed to have the potential to be present in the vicinity of both the Shade Gap collocation and Shade Mountain Tower sites:

Table 4.5.1 Federally-Listed Species

Taxon	Name	Species Habitat	Status
Mammals	Indiana Bat (<i>Myotis sodalis</i>)	Found in caves and in wooded land. During the winter, this species utilizes caves or abandoned mines. During summer, this species utilizes wooded areas where trees contain exfoliating bark of live trees or decaying bark of snag trees. (USFWS)	Endangered (Federal)

Taxon	Name	Species Habitat	Status
	Northern Long-eared Bat (<i>Myotis septentrionalis</i>)	Found in caves and in wooded land. During the winter, this species utilizes caves or abandoned mines, called hibernacula. During summer, this species utilizes wooded areas where trees contain exfoliating bark of live trees or decaying bark of snag trees (USFWS).	Endangered (Federal)
Insect	Monarch Butterfly (<i>Danaus plexippus</i>)	Found in open prairies, meadows, and grasslands. Sometimes along roadsides and disturbed areas but almost always in the vicinity of milkweed populations. Breeding areas are virtually all patches of milkweed in North America and some other regions. (NatureServe)	Candidate (Federal)
Flowering Plants	Northeastern Bulrush (<i>Scirpus ancistrochaetus</i>)	Found in open, tall herb-dominated wetlands. Often it grows at the water's edge, or in a few centimeters of water, but it may also be in fairly deep water (0.3-0.9 m) or away from standing water. (NatureServe)	Endangered (Federal)

Terracon also utilized the Pennsylvania Natural Diversity Inventory (PNDI) online database environmental review tool to further refine the environmental review process for both federally and Pennsylvania-state protected species. The PNDI system is managed by the Pennsylvania Department of Conservation and Natural Resources (DCNR) in order to build, maintain, and provide accurate and accessible ecological information needed for conservation, development planning, natural resources management, and for the protection of threatened and endangered species, special concern species, and rare and significant ecological features. The PNDI environmental review tool analyzes proposed project footprints against known species locations and recommends conservation measures and other actions that may be needed to maintain compliance with the Federal Endangered Species Act, as well as allied Pennsylvania state species protection laws.

Within Pennsylvania, the PNDI environmental review tool takes primacy in the project environmental review process over IPaC. The environmental review tool is utilized to coordinate concurrent project reviews with the DCNR, the Pennsylvania Fish and Boat Commission (PFBC), the Pennsylvania Game Commission (PGC), and the USFWS. For the Shade Gap tower collocation, the PNDI environmental review tool project response indicates the DCNR, PFBC, PGC, and USFWS concluded: "No Impact is anticipated to threatened and endangered species and/or special concern species and resources. Therefore, no further coordination is required with these state jurisdictional agencies."

For the Shade Mountain Tower, the PNDI environmental review tool project response indicates the DCNR, PGC, and USFWS concluded: "No Impact is anticipated to threatened and endangered species and/or special concern species and resources. Therefore, no further coordination is required with these state jurisdictional agencies." The PFBC indicated further review was required for the Timber Rattlesnake (*Crotalus horridus*, Species of Special Concern). On behalf of Upward Broadband LLC, WHM Consulting, LLC (WHM) was contracted to conduct a Phase I Habitat Assessment and then a Phase II Absence/Presence Survey of the site. The conclusions of the Phase II report state:

During timber rattlesnake Phase II presence/absence surveys, timber rattlesnakes were observed in several areas of the potential denning habitat just below the Rural Broadband Infrastructure Expansion Project. One male was also observed crossing through the LOD and access road before disappearing on the north side of the mountain. There are also several dens below the 300ft buffer that were confirmed during the Pennsylvania pipeline Phase II surveys in 2014 and 2015.

Based on the findings of the results of the survey, consultation with PFBC was performed to determine appropriate mitigation measures to ensure the protection of the timber rattlesnake during the proposed tower construction. These mitigation measures are outlined in Chapter 5.

The Migratory Bird Treaty Act of 1918 (MBTA) decrees that migratory birds and their parts (including eggs, nests, and feathers) are federally protected. The MBTA is the domestic law that affirms, or implements, the United States' commitment to four international conventions (with Canada, Japan, Mexico, and Russia) for the protection of a shared migratory bird resource. Each of the conventions protect selected species of birds that are common to these countries (i.e., they occur in these countries at some point during their annual life cycle). Bald and Golden Eagles are protected by the MBTA as well as the Bald and Golden Eagle Protection Act (BGEPA), enacted in 1940, which prohibits anyone, without a permit issued by the USFWS, from "taking" bald or golden eagles, including their parts (including feathers), nests, or eggs. The following migratory birds of concern were identified within the vicinity of the site on the IPaC:

Table 4.5.2 Migratory Birds

Species Name	Bird of Conservation Concern (BCC)	Seasonal Occurrence in Project Area
Bald Eagle (<i>Haliaeetus leucocephalus</i>)	No	January through December
Black-capped Chickadee (<i>Poecile atricapillus</i>)	Yes	April through July
Eastern Whip-poor-will (<i>Antrostomus vociferus</i>)	Yes	May through August
Golden-winged Warbler (<i>Vermivora chrysoptera</i>)	Yes	May through July
Prairie Warbler (<i>Setophaga discolor</i>)	Yes	May through July
Wood Thrush (<i>Hylocichla mustelina</i>)	Yes	May through August

Mitigation measures for migratory birds protected under the MTBA are outlined in Chapter 5.

4.5.2 Critical or Threatened / Endangered Habitat

There are no critical habitats mapped at the site. No wildlife refuges or fish hatcheries are documented at the site. There were no water features identified in the project areas. The site is

not mapped within a wilderness area of wildlife preserve. As discussed in Section 4.5.1, the proposed project will not affect listed or protected species.

4.5.3 Wetland Habitats

Due to the scope of the proposed project activities, the current conditions and review of applicable source data, significant changes in surface features such as wetland fill, water diversion or deforestation will not be required at Shade Gap Tower and Shade Mountain Tower. No wetlands or water features are located on the site. As discussed in Section 4.4, no wetlands are mapped on the site locations and no wetlands characteristics were observed on either site.

4.6 Historic and Cultural Resources

The NHPA and the Advisory Council on Historic Preservation's implementing regulations, 36 CFR Part 800, require Federal agencies to take into account the effect their actions may have on historic properties prior to carrying out such actions.

4.6.1 Archaeological Resources

Due to prior ground disturbing activities within the Shade Gap Tower site, and the small footprint of the proposed collocation, there is a low probability that archaeological materials would be found in an undisturbed context. Therefore, no further archaeological investigations were performed for the proposed project. Project documents were submitted through the PA-SHARE website the Pennsylvania State Historic Preservation Office (SHPO). Based on the information provided, SHPO found that this project will have no effect on cultural resources eligible for or listed in the National Register of Historic Places. See SHPO documentation included in Appendix E for additional details.

A Phase I cultural resource survey was conducted at the Shade Mountain Tower site. A pedestrian survey was conducted of the project area, which did not encounter artifacts, historic structural remains, or surface level evidence of cultural deposits. Shovel testing was conducted within the location of the proposed communications compound and did not encounter subsurface cultural deposits. Based on the results of the pedestrian survey and subsurface testing, it is unlikely that unknown, NRHP eligible cultural resources are present within the direct APE. Therefore, Terracon recommends a finding of no historic properties for the direct APE. No historic properties have been previously recorded within the project area, and one historic property has been recorded within 0.5-mile of the project area.

No significant archaeological resources (determined to be listed or eligible for the NRHP) were identified within the specific project area boundaries. Additionally, the PA SHPO was consulted with regarding the proposed project and issued a response that they are not aware of any historic resources in the project area that would be affected by the proposed project (Appendix E). Federally recognized Tribal Nations were also consulted regarding the project and did not identify any potential concerns with the project.

4.6.2 Architectural Resources

Project documents for the Shade Gap Tower were submitted through the PA-SHARE website the Pennsylvania SHPO. Based on the information provided, SHPO found that the project will have no effect on cultural resources eligible for or listed in the National Register of Historic Places. See SHPO documentation included in Appendix E for additional details.

A records search was conducted of the PA-SHARE GIS database maintained by SHPO for information regarding previously recorded historic properties within the Shade Mountain Tower project area and the 0.5-mile APE for visual effects. According to the results of the records search, no historic properties have previously been recorded within the project area. One historic property has been recorded within 0.5-mile of the project area. The Hower-Hart Farm (2020RE01034), a historic farmstead is located approximately 0.5-mile to the northeast of the proposed tower location. This property is eligible for inclusion on the NRHP and consists of 10 structures and land associated with the historic farmstead. Only a very small portion of the historic property within the visual effects APE is vacant land included in the property boundary. This land primarily consists of the downslope of Shade Mountain. The structures associated with Hower-Hart Farm are located 1.2-mile or more from the proposed project area. The PA SHPO was consulted with regarding the proposed project and issued a response that they are not aware of any historic resources in the project area that would be affected by the proposed project (Appendix E).

4.6.3 Native American Traditional, Cultural or Religious Resources

The NHPA requires that federal agencies must consult with any Federally recognized Tribal Nation that attaches religious and cultural significant to historic properties affected by an undertaking in carrying out the Section 106 review process. NTIA has teamed with the FCC to use their Tower Construction Notification System (TCNS), an on-line, password-protected system that notifies all Tribal Nations and Native Hawaiian Organizations (NHOs) of proposed communication tower construction in their areas of interest. NTIA initiated tribal consultation using Responsible Party prepared information/documentation to notify Tribal Nations of the project and provided The Responsible Party a Notice of Organization (NOO) listing out the tribes consulted and their procedures. Through the TCNS system, NTIA consulted with the following Federally recognized tribes:

- Omaha Tribe of Nebraska
- Delaware Nation
- Absentee-Shawnee Tribe of Indians of Oklahoma
- Tuscarora Nation
- Bad River Band of Lake Superior Tribe of Chippewa Indians
- Red Cliff Band of Lake Superior Chippewa Indians of Wisconsin
- Seneca-Cayuga Nation
- Eastern Shawnee Tribe of Oklahoma
- Wyandotte Nation

- Shawnee Tribe
- Chippewa Cree Tribe of the Rocky Boy's Reservation
- Lac du Flambeau Band of Lake Superior Chippewa Indians
- Delaware Tribe of Indians

Based on NTIA's engagement with the tribes, three tribes (Eastern Shawnee Tribe of Oklahoma, Shawnee Tribe, and Lac du Flambeau Band of Lake Superior Chippewa Indians) replied that they have no concerns with the project. The remainder of the tribes did not respond within the allotted time period, indicating no interest in the project. No Native American Traditional, Cultural or Religious Resources have been identified in the project area. A copy of the project tribal summary table and responses received as part of consultation are included in Appendix C.

4.7 Aesthetic and Visual Resources

Neither project site is located in a national and state park. No national scenic trails are mapped within either of the project sites (NPS, 2023b). The NRHP-listed properties identified in Huntingdon County are further discussed in Section 4.6 (Cultural Resources). The Shade Gap collocation will occur on an existing tower.

There are no parks or designated recreational areas located at the Shade Mountain Tower proposed location area of potential effects; however, there is a NRHP/eligible property, Hower-Hart Farm, located 1.2 miles northeast of the proposed project location. It is not anticipated that the proposed tower will be visible from the Hower-Hart Farm at a distance of 1.2 miles.

4.8 Land Use

According to the Huntingdon County Tax Assessor's website, Shade Mountain Tower's parent parcel is zone as agricultural and Shade Gap Tower's parent parcel is zoned as Commercial – Exempt (Huntingdon County, 2023c). Shade Gap Tower has a current land use of an existing communications tower on privately owned land surrounded by undeveloped land, commercial, and low-density residential land use. No change to land use is anticipated. Shade Mountain Tower has a current land use of undeveloped forest on privately owned land adjacent to an existing access road. The Shade Mountain Tower will involve converting approximately 0.25 acres of forested area for the tower compound and easement.

The Farmland Protection Policy Act (FPPA) regulates federal actions with the potential to convert important farmland to non-agricultural uses under 7 CFR Parts 657-658. Important farmland includes all pasturelands, croplands, and forests considered to be prime, unique, or of statewide or locally important lands. Farmland does not have to be currently used for cropland, but land committed to "urban development or water storage" is not subject to FPPA requirements. It assures that to the extent practicable federal programs are administered to be compatible with state/local units of government, and private programs and policies to protect farmland. Projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are completed or assisted by a federal agency, including providing

financing or loans. Therefore, only areas designated as “Important” in active agricultural use or not yet developed need to be evaluated.

A consultation of the Soil Survey Geographic Database (SSURGO) shows Shade Gap Tower as located within an area considered as “land already in or committed to urban development...” and therefore is not considered “farmland” as defined by 7 CFR §658.2. The soils at the Shade Mountain tower site consist of Rubble land (Surface area covered with cobbles, stones or boulders) which is not considered prime farmland soil.

According to federal lands mapping data maintained by the USGS, USFS, and the National Park Service (NPS) the project sites are not located in an officially designated wilderness area and/or wildlife preserve (i.e. refuge). Both sites, Shade Gap Tower (existing) and Shade Mountain Tower (proposed new construction) are located on privately owned land and are therein not in an officially designated wilderness area or wildlife preserve.

4.9 Infrastructure

Shade Gap Tower is an existing communications tower with connections to electrical and fiber optic utilities. The site is located along an existing highway with an active utility ROW. As the project is to collocate equipment on this tower, no change or impact is anticipated.

Shade Mountain Tower is a proposed new construction communications tower that is adjacent to an existing access road. No improvements to the existing access road are anticipated. The site was selected in part because of the proximity (approximately 250 ft) to an existing Valley Rural Electric Cooperative pad-mounted transformer. It is anticipated that new underground electric installation will run 250 feet between the proposed tower and existing pad-mounted transformer. Aside from the tower itself and associated equipment to be installed within the proposed tower compound, no other forms of infrastructure are significant for the purposes of this project. The Responsible Party will contact 811 (Call Before You Dig) prior to installing subsurface utilities to ensure the installation does not conflict with other utilities already located within the adjacent power easement.

4.10 Socioeconomic Resources

Under EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, requires that federal agencies, whenever practical and appropriate, maintain information of populations by race, national origin, or income and shall use this information to determine whether their programs, policies, and activities have disproportionately high and adverse human health or environmental effects. Based on a review the EPA Environmental Justice Screening Tool census report (US EPA, 2023a), Huntingdon County has a population density of 52 people per square mile. The demographics of the community consist of 91% White, 6% Black, and 2% Hispanic. The population is 53% male and 47% female. Age ranges for the population include 4% under the age of 4, 18% under 17, 82% over the age of 18, and 21% over the age of 65. Education statistics for the area indicate 49% of the population has a high school diploma, 15% have some college without a degree, 8% have an associate

degree, and 18% have a bachelors or higher. Linguistically, 96% of the population speaks only English and 4% includes non-English languages at home. Economically, 10% of households earn less than \$15,000, 11% earn \$15-25,000, 26% earn \$25-50,000, 19% earn \$50-75,000, and 34% earn more than \$75,000 annual income. A total of 77% of properties are owner occupied and 23% are renter occupied.

Based on the results of the EJSCREEN report for Huntingdon County, the county is ranked lower than both the state and USA average for particulate matter, ozone, diesel particulate matter, air toxics cancer risk, air toxics respiratory HI, traffic proximity, superfund proximity, RMP facility proximity, hazardous waste proximity, underground storage tanks and wastewater discharge. Huntingdon County also has a lower demographic index, less people of color, higher income, the average unemployment rate, and lower-to-average education rates in comparison to the state and USA averages. Huntingdon is a predominantly rural community of Pennsylvania. According to the Climate and Economic Justice Screening Tool, Huntingdon County includes census tracts that are both denoted as disadvantaged and not disadvantaged.

4.11 Human Health and Safety

The most significant concern to human health and safety for the project is proximity to existing overhead and buried utilities. The Responsible Party will identify buried utilities in the existing ROW and power easement prior to subsurface construction methods through the use of 811 (Call Before You Dig) and permit only workers qualified by training or experience to operate heavy machinery and equipment. Occupational Health and Safety (OSHA) standards will be followed with regarding to all construction activities.

On May 24, 2023, an electronic search using the Commonwealth of Pennsylvania, DEP Environmental Site Assessment Search Tool was performed for both sites to examine facilities in proximity. Layers examined include: Beneficial Land, Use Coal Mining Operation, Coal Pillar Mining, Commercial Hazardous Waste Operation, GP12 Prep Plant Emissions Operation, Mine Drainage Treatment Land Recycling Project, Oil and Gas Entity, Residual Waste Operation, Water Pollution Control Facility, AML Point Feature, AML Inventory Site, AML Polygon Feature, Air Emission Plant, Captive Hazardous Waste Operation, Coal Pillar Oil and Gas, Encroachment Location, Erosion and Sedimentation Control Facility, Industrial Mineral Mining Operation, Land Recycling Cleanup Location, Municipal Waste Operation, Oil and Gas Encroachment Location, Oil and Gas Location, Oil and Gas Water Pollution Control Facility, Storage Tanks-Active, and Storage Tanks-Inactive and Water Resources. No facilities were located within a 500-foot radius of either site. No potentially hazardous land uses have been identified on or adjacent to either site location. The reports are included in Appendix D.

In accordance with Title 14 of the Code of Federal Regulations (14 CFR) Part 77, the proposed Shade Mountain tower will require Federal Aviation Administration (FAA) filing to ensure it does not pose a hazard to air navigation. FAA Part 77 filing typically applies to proposed structures greater than 200' or within the glide slope of an airport. The collocation of antennas on the

existing Shade Gap tower collocation will not increase the height of the tower and will not require FAA filing.

5.0 Analysis of Environmental Impacts

The level of NEPA analysis depends on the potential significance of the project's environmental impacts. The term 'significance' as used in NEPA requires considerations of both context and intensity. Context means that the significance of an action must be analyzed in several contexts, such as society as a whole (human, national), the affected region, the affected interests, and the locality. Intensity refers to the severity of the impact, the cumulative effects, and the degree of controversy surrounding the proposed action. Significance varies with the setting of the proposed action. Both short-term and long-term effects are relevant. Impacts that are routinely handled through issuance of permits, consultations, modifications to design, or other agreements are generally not considered to be significant unless there are exceptional circumstances and/or a potential for generating substantial controversy. It should be noted that minimal discussion is provided within the table and following sections regarding areas of the affected environment where little to no consequence is anticipated regarding the proposed action.

5.1 Noise

Under the Proposed Action Alternative, short term direct impacts from mechanized construction equipment (pickup trucks, installation equipment, etc.) would occur during the tower and equipment installation phase. Typical construction equipment can cause noise levels above 70 dB (ANSI, 2018). These impacts would be temporary and minor and would be most impactful at the location of the noise-generating equipment. On-going operations at telecommunications tower sites are not considered significant sources of noise. Sound generation may occasionally occur from emergency generators utilized at the project locations in the case of power loss. The Shade Gap tower site already contains an emergency backup generator within the existing tower compound. The Shade Mountain proposed tower site will include a new generator; however, no sensitive receptors (residences, churches, schools, etc.) are located within 0.75-miles of the Shade Mountain site.

The Huntingdon County Model Zoning Ordinance maximum permissible sound level limits do not apply to the *repair or installation of utilities or construction of structures, sidewalks or streets between the hours of 6am and 9pm*. As such, mitigation methods include limiting the hours of construction to occur only during normal business hours (6am to 9pm). Workers should follow OSHA requirements for worker protection (i.e. wearing hearing protection). The Proposed Action would not introduce significant long-term changes to the noise environment at each location. Noise impacts resulting from the project are not considered to be significant. No indirect impacts are anticipated.

Under the No Action Alternative, no impacts would occur to noise levels.

5.2 Air Quality

Construction activities associated with the proposed project would generate particulate matter from soil disturbances and diesel-powered equipment (direct impacts). Air emissions from construction vehicles and equipment would be minor and temporary resulting in negligible impacts to air quality. Ground disturbing activities such as tree clearing, and trenching would temporarily generate fugitive dust emissions. To minimize the effects of fugitive dust during construction, dust suppression via water trucks or other methods may be implemented. Post-construction, the construction-scarred areas would be re-vegetated where necessary. The re-establishing vegetation would also serve to reduce fugitive dust.

Post-construction during the operational period, there would not be significant emissions of air pollutants at either site. The Shade Gap collocation site contains an existing emergency generator already in-use, and the proposed Shade Mountain tower site includes the installation of a new emergency backup generator. The proposed 24 horsepower (hp) generator will run on a two-cylinder engine and be fueled by an adjacent propane storage tank. Based on these specifications, the proposed generator is below the 100 hp threshold under 25 Pennsylvania Code Section 127.14(a)(8) Air Permit Exemptions. As such, a PA DEP air permit for the proposed generator is not required and mitigation measures are not anticipated. Air quality impacts directly resulting from the project are considered to be less than significant.

Under the No Action Alternative, no impacts would occur to air quality.

5.3 Geology and Soils

The proposed collocation involves the installation of equipment on the existing tower and within the previously disturbed and gravel-covered tower compound. Construction of the new tower at Shade Mountain Tower will necessitate about 0.25 acres of ground disturbance for the new tower location compound and an additional 250-feet of ground disturbance is anticipated for the installation of an electric utility easement. During construction, soil erosion and sedimentation can be avoided or minimized through best management practices (BMPs). Site watering can serve to suppress fugitive dust along with seeding and stabilization required for compliance with SWPPP BMPs. Post-construction, the construction-scarred areas would be re-vegetated where necessary. The re-establishing vegetation would serve to reduce erosion and fugitive dust. Geologic and soil impacts resulting from the project are considered to be less than significant.

Under the No Action Alternative, no impacts would occur to geology and soils.

5.4 Water Resources

As discussed in Chapter 4, no wetlands; surface waters; groundwater recharge areas; sole source aquifers; 100-year floodplains; wild and scenic rivers; or other water resources were identified on the Shade Gap collocation and Shade Mountain tower sites. Significant impacts to water resources are not anticipated as no on-site or adjacent water features will be crossed, filled, or

otherwise impacted by the proposed project. As currently proposed, no water resource impacts resulting from the project are anticipated.

Under the No Action Alternative, no impacts would occur to water resources.

5.5 Biological Resources

An Informal Biological Assessment was performed by Terracon Consultants regarding the proposed project. Habitat for threatened and endangered species, PDNI species of concern, and Birds of Conservation Concern/migratory birds were compared to the conditions on the site. For the Shade Gap collocation project, the PNDI environmental review tool project response indicates the DCNR, PFBC, PGC, and USFWS concluded: "No Impact is anticipated to threatened and endangered species and/or special concern species and resources. Therefore, no further coordination is required with these state jurisdictional agencies."

For the proposed Shade Mountain tower site, the PNDI environmental review tool project response indicates the DCNR, PGC, and USFWS concluded: "No Impact is anticipated to threatened and endangered species and/or special concern species and resources. Therefore, no further coordination is required with these state jurisdictional agencies." The PFBC indicated further review was required for the Timber Rattlesnake (*Crotalus horridus*, Species of Special Concern). Subsequently, species surveys were performed which identified dens outside of the project limits of disturbance but within the general area of the project. As a result of the surveys, consultation with PFBC was performed to determine appropriate mitigation measures to ensure protection of the snake during project construction. The PFBC provided the following recommendations:

Work should be conducted between April 15-October 15 and we recommend that you take the following precautions to safeguard workers and rattlesnakes:

- 1. A PFBC approved Timber Rattlesnake biologist who has the proper permits (Scientific Collector's Permit), and the proper skills to handle this venomous species will be on-site prior to and during construction.*
 - 2. The PFBC approved Timber Rattlesnake biologist will be on-site prior to and during construction activities, during the above time frame, to inspect and clear the area (including staging areas and access roads) of Timber Rattlesnakes and to capture and remove any rattlesnakes that may interfere with work activities.*
 - 3. Timber Rattlesnakes observed on-site are to be measured, sexed, and the habitat characterized where the snake was found. All captured snakes should be released within close proximity (under 100 meters) of the capture site if possible. Rattlesnake captures and relocations are to be documented by photographs, habitat descriptions, in addition to being mapped and labeled accordingly. The biologist is to submit a report to this office (Natural Diversity Section) following the completion of the project documenting all of the activity and herpetofauna encountered.*
-

4. *If erosion control fabric is to be used at this site, materials that are known to reduce the risk of snake entrapment should be selected, such as loosely woven natural fiber ECM. Use of monofilament/plastic netting should be avoided.*

5. *Workers responsible for implementing this project should be advised that Timber Rattlesnakes may be encountered and that avoidance is the best means of minimizing risks to personal safety. It is suggested a procedure be implemented for Timber Rattlesnake encounters and workers are to be advised that the Timber Rattlesnake is a state protected species and is not to be harmed. Killing of Timber Rattlesnakes is prohibited by the Commission pursuant to 58 Pa. Code Section 79.6.*

6. *The well pad area appears to have some basking habitat for snakes. Basking rocks for gestating females can be replaced using the habitat creation guidance document attached.*

7. *During the construction period, PFBC personnel may communicate with the on-site biologist and may visit the site area periodically to view the progression of the project and answer any questions or concerns that may arise. For safety purposes, PFBC personnel will register with the on-site manager upon entering the construction area.*

Additionally, on July 31, 2023, the PFBC provided the additional clarifications/recommendations:

In addition to the above-listed requirements and to allow for construction to occur after October 15th, PFBC requires the grantee to construct a temporary fence, to reduce the access of snakes into the tower area. This fence will be reviewed by PFBC's approved snake biologist and constructed prior to October 15th. To confirm no impacts to snakes, ground disturbing activities conducted within this area and prior to October 15 will be monitored by PFBC's approved snake biologist. After October 15 or a date prior as determined by PFBC's approved snake biologist, the area will be assumed to be free of snakes and ground disturbing activities may proceed without a monitor. With the incorporation of these BMPs, the PA Boat & Fish Commission has agreed to allow the grantee to proceed with construction through the winter months from Oct 16th through April 14th.

Based on a review of the habitat for the above-listed species, compared to an analysis of the habitat present on the site location, and the implementation of the referenced PFBC precautions, it is anticipated that the proposed Shade Mountain telecommunications tower or proposed Shade Gap collocation will result in less than significant direct or indirect impacts to protected species or critical habitats.

No bald or golden eagle nests have been documented within 660 feet of either site; however, several migratory birds were identified with the potential to occur in the vicinity of the proposed Shade Mountain tower site. If construction is to occur during a breeding season, a preconstruction nesting survey is recommended as a mitigation measure. Additionally, USFWS recommendations published in Revised Guidelines for Communication Tower Design, Siting, Construction, Operation, Retrofitting, and Decommissioning (2021) state the preferred tower

height to decrease potential effects on migratory birds is less than 200 feet tall. Siting and design process for this project could not conform to all the USFWS recommendations; however, mitigating factors proposed for implementation at the site include the following: limiting the tower height to 199 feet, location in minimally sensitive areas, and eliminating the need for guy wires. While migratory birds are not anticipated to be a concern for the Shade Gap collocation site, the Responsible Party should confirm the tower does not contain any avian nests or activities prior to commencing with the equipment installation.

Based on the above mitigation measures, it is anticipated that the proposed Shade Mountain telecommunications tower or proposed Shade Gap collocation will result in less than significant direct or indirect impacts to migratory birds protected under the MTBA.

Under the No Action Alternative, no impacts would occur to biological resources.

5.6 Historic and Cultural Resources

No archeological resources were identified at either site location. No aboveground Historic Properties were determined to be affected by either project. Both the State Historic Preservation Office (SHPO) and Federally-recognized tribes with ancestral interest in the region have been contacted regarding the project and did not identify any adverse impacts or concerns. No impacts to historic and cultural resources are anticipated.

In the unlikely event that unanticipated historic properties, cultural artifacts, archeological deposits, or human remains are inadvertently encountered during the bore program excavation activities, all ground disturbing activities must halt immediately, and NTIA along with the appropriate state and/or tribal agencies must be contacted, in accordance with applicable state law and federal regulation (36 C.F.R. § 800.13(b)). The proposed action will result in no significant direct or indirect impact to historic and cultural resources.

Under the No Action Alternative, no impacts would occur to cultural resources.

5.7 Aesthetic and Visual Resources

The collocation of antenna arrays and ground-based equipment at the location of Shade Gap will not have a significant aesthetic or visual impact on the surrounding viewshed. No significant resources were identified in the viewshed of the proposed Shade Mountain tower. The proposed action will result in less than significant direct or indirect impacts to aesthetic and visual resources.

Under the No Action Alternative, no impacts would occur to aesthetic and visual resources.

5.8 Land Use

The project sites are classified as agricultural and commercial land in a predominantly rural area. Rural areas have historically lacked the access to broadband that is available to more urban locations. The proposed project is anticipated to have a beneficial impact on occupants of

surrounding areas. This Project will involve the permanent change equating to approximately 0.25 acres of forested area for the Shade Mountain Tower compound, which will be conducted consistent with local land use requirements. Additionally, the proposed action will not impact prime farmland. The proposed action will result in less than significant direct or indirect impacts to land use.

Under the No Action Alternative, no impacts would occur to land use.

5.9 Infrastructure

The proposed action involves a tower collocation and a proposed tower. It is anticipated that new underground electric installation will run 250 feet between the proposed tower and existing pad-mounted transformer. The project will not involve any infrastructure alterations of these areas outside of their designated use. Overall, the project is anticipated to provide a beneficial impact to the community of Huntingdon County that currently lack access to broadband. To ensure minimal conflict with other utilities in the area, the Responsible Party will utilize 811 (Call Before You Dig) to identify potentially buried utilities in the power easement prior to any construction activities. The proposed action will result in no significant direct or indirect impacts to infrastructure.

Under the No Action Alternative, no installation or upgrades to broadband would occur in Huntingdon County. Although the existing communities could continue as is and the no action alternative does not preclude the potential for future upgrades/installations to occur, installation or upgrades to broadband would be a beneficial impact; therefore, less than significant impacts would occur to infrastructure.

5.10 Socioeconomic Resources

The proposed sites are located in predominantly rural communities of Huntingdon County, some of which are considered disadvantaged populations. The proposed action will not generate any negative environmental conditions that would adversely impact surrounding populations or communities. Alternatively, the proposed project is anticipated to have a beneficial impact on the occupants of these rural and residential areas, who have previously lacked access to broadband that is available in more urban/populated areas. The proposed action will result in no significant direct or indirect impacts to socioeconomic resources.

Under the No Action Alternative, communities in rural and residential Huntingdon County would continue to lack access to broadband infrastructure, which would result in a significant impact.

5.11 Human Health and Safety

No potential environmental concerns have been identified in the vicinity of the sites that would potentially impact soil or groundwater. The Responsible Party will additionally identify buried utilities in the ROW prior to subsurface construction methods through the use of 811 (call before you dig) and permit only workers qualified by training or experience to operate heavy machinery and equipment. FAA Part 77 filing will be completed for the proposed Shade Mountain tower site

to ensure the tower does not pose a hazard to air navigation. The proposed action will result in no significant impact to human health and safety.

Under the No Action Alternative, no impacts would occur to human health and safety.

5.12 Cumulative impacts

Cumulative impacts take into consideration reasonably foreseeable future actions that will occur in the project region as well as reasonably close causal relationships to the proposed action. Based on a review of documents from Huntingdon County's Planning and Development website, the Huntingdon County Commissioners adopted the Huntingdon County Comprehensive Plan Update that has been published as part of the plan titled "Alleghenies Ahead: Shared Strategies for a Stronger Region" On July 3, 2018. Alleghenies Ahead is a 'collaborative effort to develop and implement strategies that will increase the region's chances to create jobs, increase the region's capacity to compete for households who have choices, and become a region of stronger and more vital communities'. Based on a review of these plans, the proposed action fits within the broader goals of the community through providing gaps of broadband and internet coverage that will allow for economic development, job creation, and education opportunities. Additionally, the work will be performed in compliance with Huntingdon County's planning and zoning requirements.

In addition to the local planning and development guidelines, the proposed action (the construction of one tower and the collocation of equipment on another) is part of an overall project that includes the development of multiple other towers and additional collocations within the region. The overall project will provide further expansion and eliminate gaps in rural internet coverage. Sections of the overall project were created in accordance with the proposed buildout requirements of the grant. While each portion of this project will be considered in within own Environmental Assessment, the cumulative effect of this collective portfolio are not anticipated to result in significant adverse environmental impacts.

6.0 Applicable Environmental Permits and Regulatory Requirements

The following Special Requirements shall be implemented as part of the proposed action to retain a finding of no significant impact:

- To avoid impacts to the Timber Rattlesnake, work should be conducted between April 15-October 15 and we recommend that you take the following precautions to safeguard workers and rattlesnakes:
 1. A PFBC approved Timber Rattlesnake biologist who has the proper permits (Scientific Collector's Permit), and the proper skills to handle this venomous species will be on-site prior to and during construction.
 2. The PFBC approved Timber Rattlesnake biologist will be on-site prior to and during construction activities, during the above time frame, to inspect and clear the area (including staging areas and access roads) of Timber Rattlesnakes and to capture and remove any rattlesnakes that may interfere with work activities.

3. Timber Rattlesnakes observed on-site are to be measured, sexed, and the habitat characterized where the snake was found. All captured snakes should be released within close proximity (under 100 meters) of the capture site if possible. Rattlesnake captures and relocations are to be documented by photographs, habitat descriptions, in addition to being mapped and labeled accordingly. The biologist is to submit a report to this office (Natural Diversity Section) following the completion of the project documenting all of the activity and herpetofauna encountered.

4. If erosion control fabric is to be used at this site, materials that are known to reduce the risk of snake entrapment should be selected, such as loosely woven natural fiber ECM. Use of monofilament/plastic netting should be avoided.

5. Workers responsible for implementing this project should be advised that Timber Rattlesnakes may be encountered and that avoidance is the best means of minimizing risks to personal safety. It is suggested a procedure be implemented for Timber Rattlesnake encounters and workers are to be advised that the Timber Rattlesnake is a state protected species and is not to be harmed. Killing of Timber Rattlesnakes is prohibited by the Commission pursuant to 58 Pa. Code Section 79.6.

6. The well pad area appears to have some basking habitat for snakes. Basking rocks for gestating females can be replaced using the habitat creation guidance document attached.

7. During the construction period, PFBC personnel may communicate with the on-site biologist and may visit the site area periodically to view the progression of the project and answer any questions or concerns that may arise. For safety purposes, PFBC personnel will register with the on-site manager upon entering the construction area.

- In addition to the above-listed requirements and to allow for construction to occur after October 15th, PFBC requires the Responsible Party to construct a temporary fence, to reduce the access of snakes into the tower area. This fence will be reviewed by PFBC's approved snake biologist and constructed prior to October 15th. To confirm no impacts to snakes, ground disturbing activities conducted within this area and prior to October 15 will be monitored by PFBC's approved snake biologist. After October 15 or a date prior as determined by PFBC's approved snake biologist, the area will be assumed to be free of snakes and ground disturbing activities may proceed without a monitor. With the incorporation of these BMPs, the PA Boat & Fish Commission has agreed to allow the Responsible Party to proceed with construction through the winter months from Oct 16th through April 14th.
- It should be confirmed that there are no active nests on the Shade Gap tower prior to collocation activities, to ensure the protection of migratory birds during project implementation.

- Pre-construction nesting surveys for migratory birds should be completed at the Shade Mountain site before ground disturbing activities that occur with migratory bird nesting seasons.
- In the unlikely event that unanticipated historic properties, cultural artifacts, archeological deposits, or human remains are inadvertently encountered during the bore program excavation activities, all ground disturbing activities must halt immediately, and NTIA along with the appropriate state and/or tribal agencies must be contacted, in accordance with applicable state law and federal regulation (36 C.F.R. § 800.13(b)).
- Limiting the hours of construction to occur only during designated construction hours at the Shade Gap Tower site (6am and 9pm) to reduce off-site noise impacts to sensitive receptors and comply with County Noise Ordinances.
- Use of dust suppression techniques via water trucks or other methods may be implemented to reduce fugitive dust emissions during construction.
- The Responsible Party will screen the project location for existing buried utilities by calling 811 (Call Before You Dig) and permit only workers qualified by training or experience to operate heavy machinery and equipment. Workers should follow OSHA requirements for worker protection (i.e. wearing hearing protection, etc.).
- Coordination with the Federal Aviation Administration (FAA) will be completed to ensure the proposed tower will pose no hazards to air navigation.

Table 6.0 Potential Applicable Statutory, Regulatory, and Other Requirements

Regulation	Project Information / Applicability
All Resources	
National Environmental Policy Act (NEPA) of 1969 42 U.S.C. § 4321 et seq.	NEPA EA and associated public involvement procedures are underway.
Vegetation, Wildlife, and Fish	
Endangered Species Act of 1973 16 U.S.C. § 1531 et seq.	Review of the Shade Gap tower collocation indicated no environmental concerns with any agencies and no further ESA consultation was required for the proposed collocation. The PFBC requested a survey for the Timber Rattlesnake (<i>Crotalus horridus</i> , Species of Special Concern) for the Shade Mountain tower site. The surveys confirmed the presence of dens in the vicinity of the tower site and a snake was observed crossing the project’s limits of disturbance and access road. To avoid impacts to the rattlesnake, the PFBC requires a series of mitigation measures which are outlined above in Section 6.0.
Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) of 1976 16 U.S.C. 1801 et seq.	The project as currently proposed will have no effect on fisheries.
Bald Eagle and Golden Eagle Protection Act (Eagle Act) of 1940 16 U.S.C. § 668-668d	No bald or Golden Eagles nests are documented within 660 feet of either project site. The project as currently proposed will have no effect on Bald or Golden Eagles. See mitigation measures below regarding migratory birds.

Regulation	Project Information / Applicability
<p>Migratory Bird Treaty Act (MBTA) of 1918 16 U.S.C. § 703-712</p> <p>Responsibilities to Federal Agencies to Protect Migratory Birds Executive Order 13186</p>	<p>It should be confirmed that there are no active nests on the tower prior to collocation activities, to ensure the protection of migratory birds during project implementation. Pre-construction nesting surveys for migratory birds should be completed at the Shade Mountain site before ground disturbing activities. The project as currently proposed will have no effect on migratory birds.</p>
<p>Fish and Wildlife Conservation Act 16 U.S.C. § 2901 et seq.</p> <p>Fish and Wildlife Coordination Act 16 U.S.C. § 661 et seq.</p>	<p>The project as currently proposed will not affect wildlife resources as long as mitigation measures are followed regarding the Timber Rattlesnake and migratory birds.</p>
<p>Waters, Wetlands, and Floodplain Protection</p>	
<p>Clean Water Act 33 U.S.C. § 1251 et seq.</p> <p>Floodplain/Wetlands Environmental Review Requirements 10 CFR 1022.12</p> <p>Floodplain Management Executive Order 11988</p> <p>Protection of Wetlands Executive Order 11990</p>	<p>No wetlands, floodplains, surface waters, or WOTUS have been identified on or near either site. The project will not impact these features.</p>
<p>Coastal Zone Management Act (CZMA) 16 U.S.C. § 1451 et seq.</p>	<p>The project is not located in a coastal zone requiring coordination under the CZMA.</p>
<p>Air Quality and Greenhouse Gases</p>	
<p>The Clean Air Act, as revised in 1990 42 U.S.C. § 4701</p>	<p>The project is not anticipated to require any air permits. To minimize the effects of fugitive dust during construction, dust suppression techniques via water trucks or other methods would be implemented.</p>
<p>Final Mandatory Reporting of Greenhouse Gases Rule 40 CFR 98</p> <p>Federal Leadership in Environmental, Energy, and Economic Performance Executive Order 13514</p>	<p>The project is not anticipated to require any air permits. To minimize the effects of fugitive dust during construction, dust suppression techniques via water trucks or other methods would be implemented.</p>

Regulation	Project Information / Applicability
Cultural and Historic Resources	
<p>Antiquities Act of 1906 16 U.S.C. § 431-433</p> <p>Historic Sites Act of 1935 16 U.S.C. § 461-467</p> <p>National Historic Preservation Act (NHPA), as amended, inclusive of Section 106 54 U.S.C. § 306108 et seq.</p> <p>Archaeological Data Preservation Act of 1974 (16 U.S.C. § 469 – 469-1)</p> <p>Archaeological Resources Protection Act of 1979, as amended 16 U.S.C. § 469 a-c</p> <p>Native American Graves Protection and Repatriation Act 25 U.S.C. § 3001 et seq.</p> <p>Indian Sacred Sites Executive Order 13007</p> <p>American Indian Religious Freedom Act of 1978 (42 U.S.C. § 1996)</p>	<p>Impacts to cultural resources are not anticipated. In the unlikely event that unanticipated historic properties, cultural artifacts, archeological deposits, or human remains are inadvertently encountered during the bore program excavation activities, all ground disturbing activities must halt immediately, and NTIA along with the appropriate state and/or tribal agencies must be contacted, in accordance with applicable state law and federal regulation (36 C.F.R. § 800.13(b)).</p>
Noise, Public Health, and Safety	
<p>Noise Control Act of 1972 42 U.S.C. § 4901 et seq.</p>	<p>Construction work will be performed during construction hours of 6am to 9pm at the Shade Gap tower site to reduce construction noise to off-site sensitive receptors.</p>

Noise, Public Health, and Safety	
<p>Spill Prevention Control and Countermeasures Rule 40 CFR 112</p> <p>Comprehensive Environmental Response, Compensation, and Liability Act 42 U.S.C. § 9601 et seq.</p> <p>Resource Conservation and Recovery Act 42 U.S.C. § 6901 et seq.</p> <p>The Toxic Substances Control Act 15 U.S.C. 2601 et seq.</p>	<p>Construction work will be performed during construction hours of 6am to 9pm at the Shade Gap tower site to reduce construction noise to off-site sensitive receptors. Workers should follow OSHA requirements for worker protection (i.e. wearing hearing protection, etc.). The Responsible Party will identify buried utilities prior to subsurface construction methods using 811 (Call Before You Dig) and permit only workers qualified by training or experience to operate heavy machinery and equipment. Coordination with the Federal Aviation Administration (FAA) will be completed to ensure the proposed tower will pose no hazards to air navigation.</p>
Environmental Justice	
Environmental Justice	No additional requirements apply to the project for Environmental Justice.
State, County, and Local Plan Consistency	
NPDES Permit	A NPDES permit is not anticipated due to construction less than one acre.

7.0 Consultations

Table 7.0 Agency Consultations:

Agency and Name	Consultation	Status
PA Department of Conservation and Natural Resources	Environmental Review	No further review required, no known impact
PA Fish and Boat Commission Josh Brown	Environmental Review	Avoidance measures required
Pennsylvania Game Commission	Environmental Review	No further review required, no known impact
United States Fish and Wildlife Service	Environmental Review	No further review required, no known impact
PA SHPO Emma Diehl	Section 106 of the NHPA	SHPO Concurrence received
Dublin Township Trudy O'Donnell	Section 106 of the NHPA	No response received
Tell Township Terry Kennedy Sr.	Section 106 of the NHPA	No response received
Shirly Township Kathy Jo Varner	Section 106 of the NHPA	No response received
Huntingdon County Historical Society Margaret Skrivseth	Section 106 of the NHPA	No response received

Tribal Nation Consultation

NTIA initiated tribal consultation using Responsible Party prepared information/documentation to notify Tribal Nations of the project and provided The Responsible Party a NOO listing out the tribes consulted and their procedures. Through the TCNS system, NTIA consulted with the following Federally-recognized tribes:

- Omaha Tribe of Nebraska
- Delaware Nation
- Absentee-Shawnee Tribe of Indians of Oklahoma
- Tuscarora Nation
- Bad River Band of Lake Superior Tribe of Chippewa Indians
- Red Cliff Band of Lake Superior Chippewa Indians of Wisconsin
- Seneca-Cayuga Nation
- Eastern Shawnee Tribe of Oklahoma
- Wyandotte Nation
- Shawnee Tribe
- Chippewa Cree Tribe of the Rocky Boy's Reservation
- Lac du Flambeau Band of Lake Superior Chippewa Indians
- Delaware Tribe of Indians

Based on NTIA's engagement with the tribes, three tribes (Eastern Shawnee Tribe of Oklahoma, Shawnee Tribe, and Lac du Flambeau Band of Lake Superior Chippewa Indians) replied that they have no concerns with the project. The remainder of the tribes did not respond within the allotted time period, indicating no interest in the project. No Native American Traditional, Cultural or Religious Resources have been identified in the project area.

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APPENDIX A

List of Preparers

Name	Title	Role
Emily Kosmalski	Environmental Planning Manager	Author / Special Study Coordinator
Kathy Eisele	Senior Environmental Planner	Author / Tribal and Agency Consultation Coordinator
JoAnn Ivey	Senior Environmental Planner	Author
Jennifer Wood Cyra Malec	Environmental Planner	Authors
Paul DeAngelo	Senior Biologist	Biological and Wetland Resource Reviewer
Suzanne Reece	Senior Archeologist, Principal Investigator	Cultural Resources Reviewer
Patricia Davenport – Jacobs Meghan Browning	Architectural Historian, Principal Investigator	Cultural Resources Researchers
Josh Duncan	Archeologist	Cultural Resources Research
Bill Kaufell	Air and Noise Specialist	Air and Noise Review
Woo Smith	Environmental Planning Manager	Report Review and QA/QC

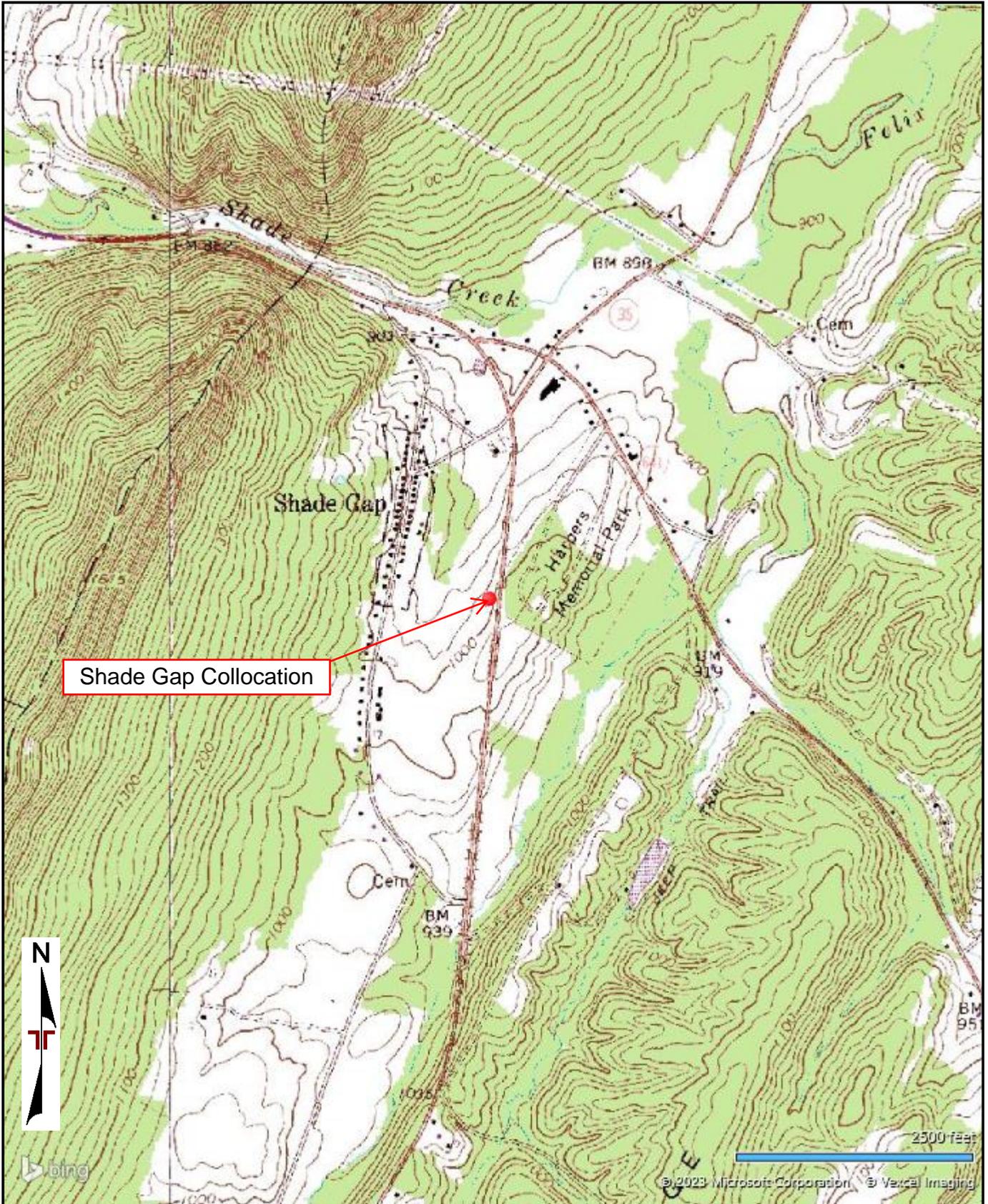
APPENDIX B



DIAGRAM IS FOR GENERAL LOCATION ONLY,
AND IS NOT INTENDED FOR CONSTRUCTION
PURPOSES

Project Manager: KAE	Project No. J8237028	844 N Lenola Rd, Ste 1 Moorestown, NJ 08057-1052	Vicinity Map		Exhibit
Drawn by: JKW	Scale: AS SHOWN		Shade Gap Collocation and Shade Mountain Tower		1
Checked by: KAE	File Name: J8237028				
Approved by: KAE	Date: May 2023				

*Shade Gap Collocation
Figures*



TOPOGRAPHIC MAP IMAGE COURTESY OF THE U.S. GEOLOGICAL SURVEY
 QUADRANGLES INCLUDE: ORBISONIA, PA (1/1/1984) and SHADE GAP, PA (1/1/1983).

Project Manager: KAE	Project No. J8237028	 844 N Lenola Rd, Ste 1 Moorestown, NJ 08057-1052	Topographic Map	Exhibit
Drawn by: JPD	Scale: AS SHOWN			Shade Gap Collocation Shade Gap, Huntingdon County, PA Coordinates: 40.177958, -77.862717
Checked by: KAE	File Name: J8237028			
Approved by: KAE	Date: May 2023			

Legend

- Proposed Shed
- Proposed Underground Conduit
- Existing Self-Support Tower
- Existing Tower Compound
- Existing Access Road
- M Existing Meter Rack



DIAGRAM IS FOR GENERAL LOCATION ONLY,
AND IS NOT INTENDED FOR CONSTRUCTION
PURPOSES

Project Manager: KAE	Project No. J8237028
Drawn by: JKW	Scale: AS SHOWN
Checked by: KAE	File Name: J8237028
Approved by: KAE	Date: May 2023

terracon

844 N Lenola Rd, Ste 1
Moorestown, NJ 08057-1052

Proposed Site Plans
Shade Gap Collocation Shade Gap, Huntingdon County, PA Coordinates: 40.177958, -77.862717

Exhibit
3a



Shade Gap Collocation

2500 feet

© 2023 Microsoft Corporation © Vexcel Imaging

AERIAL PHOTOGRAPHY PROVIDED BY MICROSOFT BING MAPS

Project Manager:	KAE
Drawn by:	JPD
Checked by:	KAE
Approved by:	KAE

Project No.	J8237028
Scale:	AS SHOWN
File Name:	J8237028
Date:	May 2023



844 N Lenola Rd, Ste 1
Moorestown, NJ 08057-1052

Aerial Location Map

Shade Gap Collocation
Shade Gap, Huntingdon County, PA
Coordinates: 40.177958, -77.862717

Exhibit
4a



DIAGRAM IS FOR GENERAL LOCATION ONLY,
AND IS NOT INTENDED FOR CONSTRUCTION
PURPOSES

Project Manager: KAE	Project No. J8237028
Drawn by: JKW	Scale: AS SHOWN
Checked by: KAE	File Name: J8237028
Approved by: KAE	Date: May 2023

Terracon
844 N Lenola Rd, Ste 1
Moorestown, NJ 08057-1052

FEMA Flood Plain Map
Shade Gap Collocation Shade Gap, Huntingdon County, PA Coordinates: 40.177958, -77.862717

Exhibit
5a

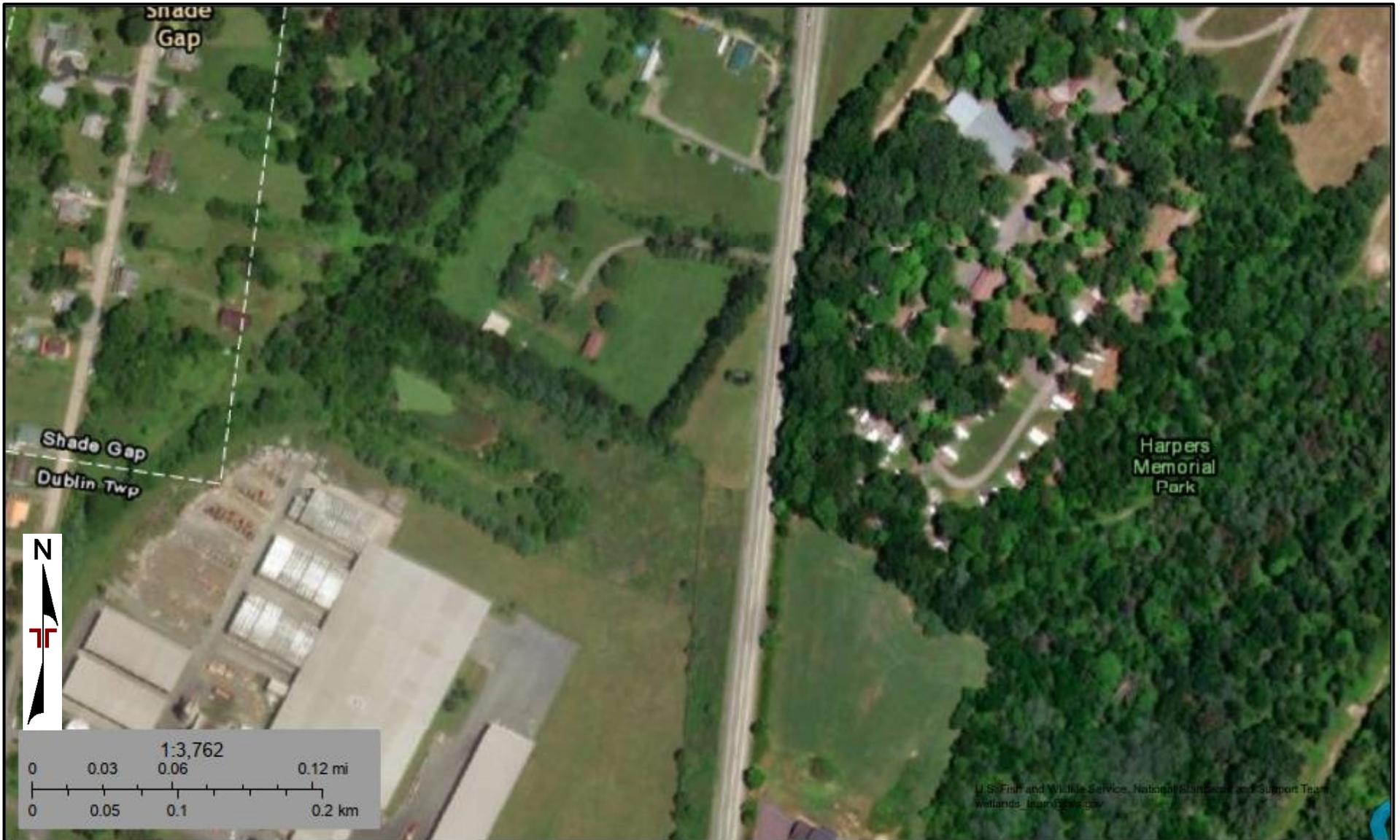


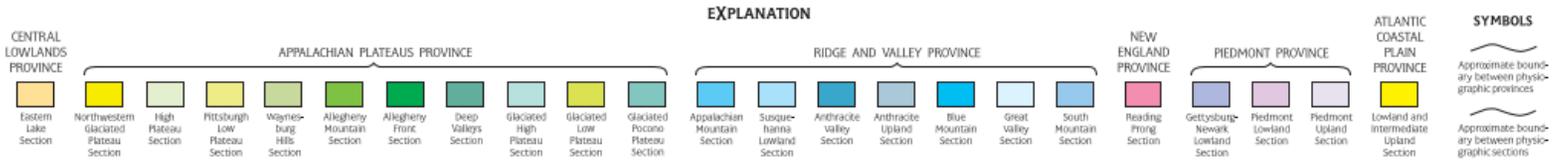
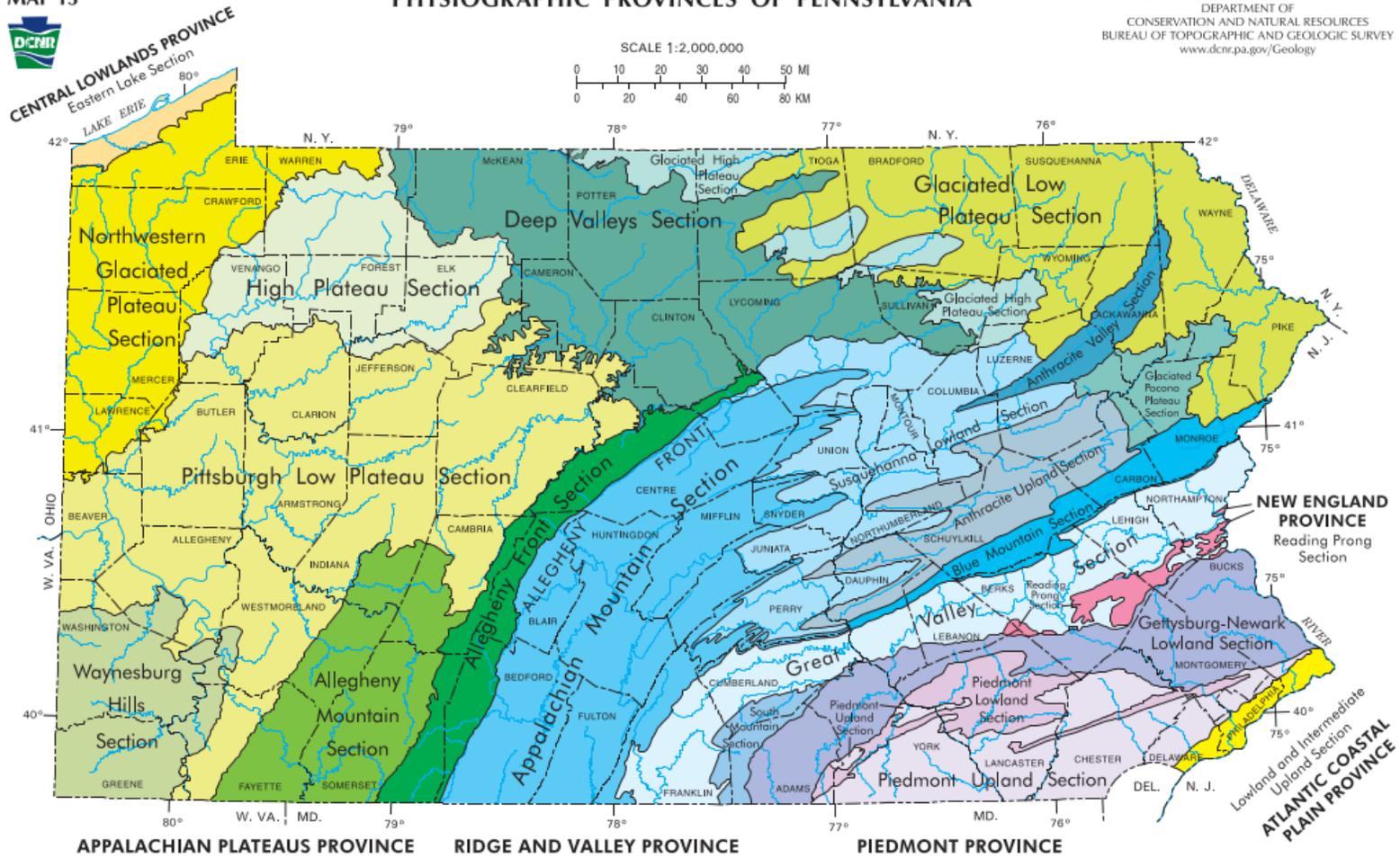
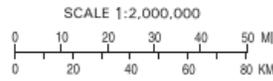
DIAGRAM IS FOR GENERAL LOCATION ONLY,
AND IS NOT INTENDED FOR CONSTRUCTION
PURPOSES

Project Manager: KAE	Project No. J8237028	 844 N Lenola Rd, Ste 1 Moorestown, NJ 08057-1052	National Wetlands Inventory Map	Exhibit
Drawn by: JKW	Scale: AS SHOWN		Shade Gap Collocation Shade Gap, Huntingdon County, PA Coordinates: 40.177958, -77.862717	6a
Checked by: KAE	File Name: J8237028			
Approved by: KAE	Date: May 2023			



PHYSIOGRAPHIC PROVINCES OF PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF
CONSERVATION AND NATURAL RESOURCES
BUREAU OF TOPOGRAPHIC AND GEOLOGIC SURVEY
www.dcnr.pa.gov/Geology



Project Manager: KAE	Project No. J8237028
Drawn by: JKW	Scale: AS SHOWN
Checked by: KAE	File Name: J8237028
Approved by: KAE	Date: May 2023

tterracon

844 N Lenola Rd, Ste 1
Moorestown, NJ 08057-1052

Geologic Map

Shade Gap Collocation

Shade Gap, Huntingdon County, PA

Coordinates: 40.177958, -77.862717

Exhibit

7a

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES



Map Scale: 1:1,020 if printed on A portrait (8.5" x 11") sheet.

0 15 30 60 90 Meters

0 45 90 180 270 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
EiC	Elliber very cherty loam, 5 to 15 percent slopes	0.2	3.7%
HxC	Hublersburg cherty silt loam, 8 to 15 percent slopes	4.2	96.3%
Totals for Area of Interest		4.3	100.0%

Project Manager: KAE
 Drawn by: JPD
 Checked by: KAE
 Approved by: KAE

Project No. J8237028
 Scale: AS SHOWN
 File Name: J8237028
 Date: August 2023

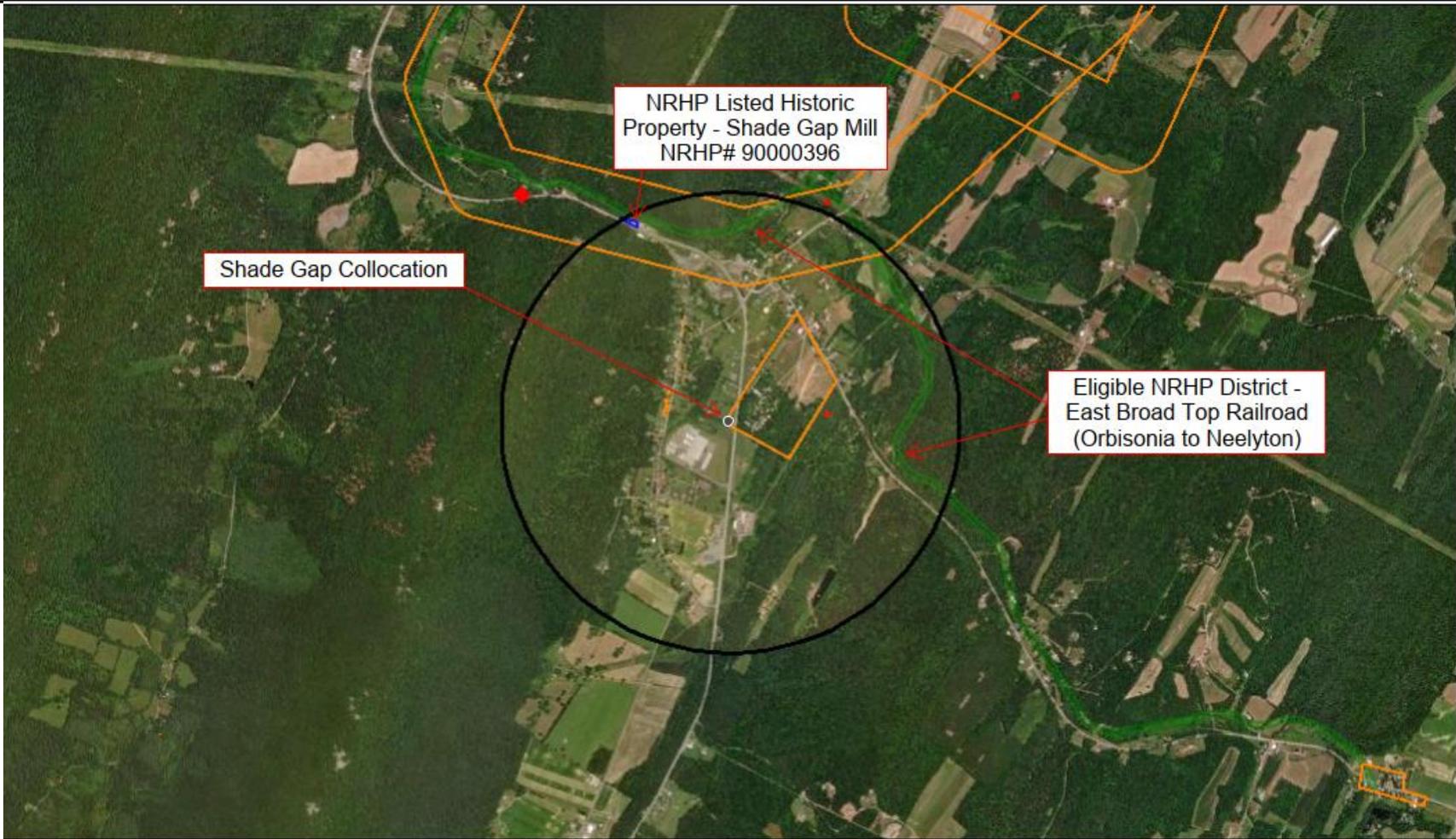


844 N Lenola Rd, Ste 1
 Moorestown, NJ 08057-1052

Soils Map

Shade Gap Collocation
 Shade Gap, Huntingdon County, PA
 Coordinates: 40.177958, -77.862717

Exhibit
8a



5/30/2023

- Above Ground Resource**
- Eligible
 - Not Eligible
 - Demolished
 - NHL
 - Eligible
 - Undetermined
 - Listed
 - Not Eligible
 - Undetermined

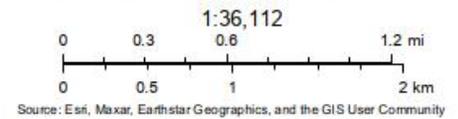


DIAGRAM IS FOR GENERAL LOCATION ONLY,
AND IS NOT INTENDED FOR CONSTRUCTION
PURPOSES

Project Manager: KAE	Project No. J8237028
Drawn by: JKW	Scale: AS SHOWN
Checked by: KAE	File Name: J8237028
Approved by: KAE	Date: May 2023



844 N Lenola Rd, Ste 1
Moorestown, NJ 08057-1052

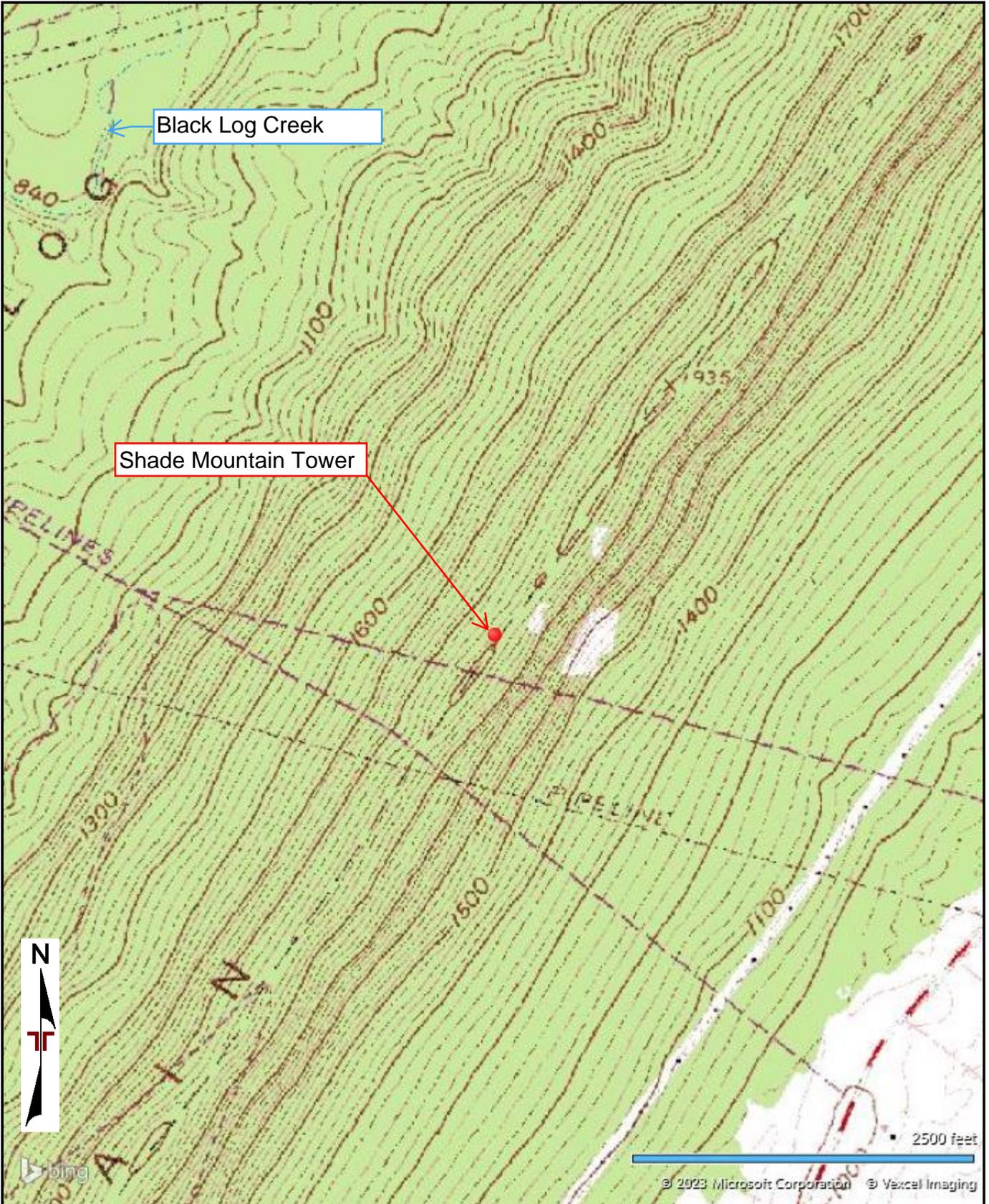
Historic Sites Map

Shade Gap Collocation
Shade Gap, Huntingdon County, PA
Coordinates: 40.177958, -77.862717

Exhibit

9a

*Shade Mountain Tower
Figures*



TOPOGRAPHIC MAP IMAGE COURTESY OF THE U.S. GEOLOGICAL SURVEY
 QUADRANGLES INCLUDE: AUGHWICK, PA (1/1/1971) and BLAIRS MILLS, PA (1/1/1971).

Project Manager:
KAE

Drawn by:
JPD

Checked by:
KAE

Approved by:
KAE

Project No.
J8237028

Scale:
AS SHOWN

File Name:
J8237028

Date:
May 2023

Terracon

844 N Lenola Rd, Ste 1
 Moorestown, NJ 08057-1052

Topographic Map

Shade Mountain Tower
 Orbisonia, Huntingdon County, PA
 Coordinates: 40.31803, -77.76889

Exhibit

2b



DIAGRAM IS FOR GENERAL LOCATION ONLY,
AND IS NOT INTENDED FOR CONSTRUCTION
PURPOSES

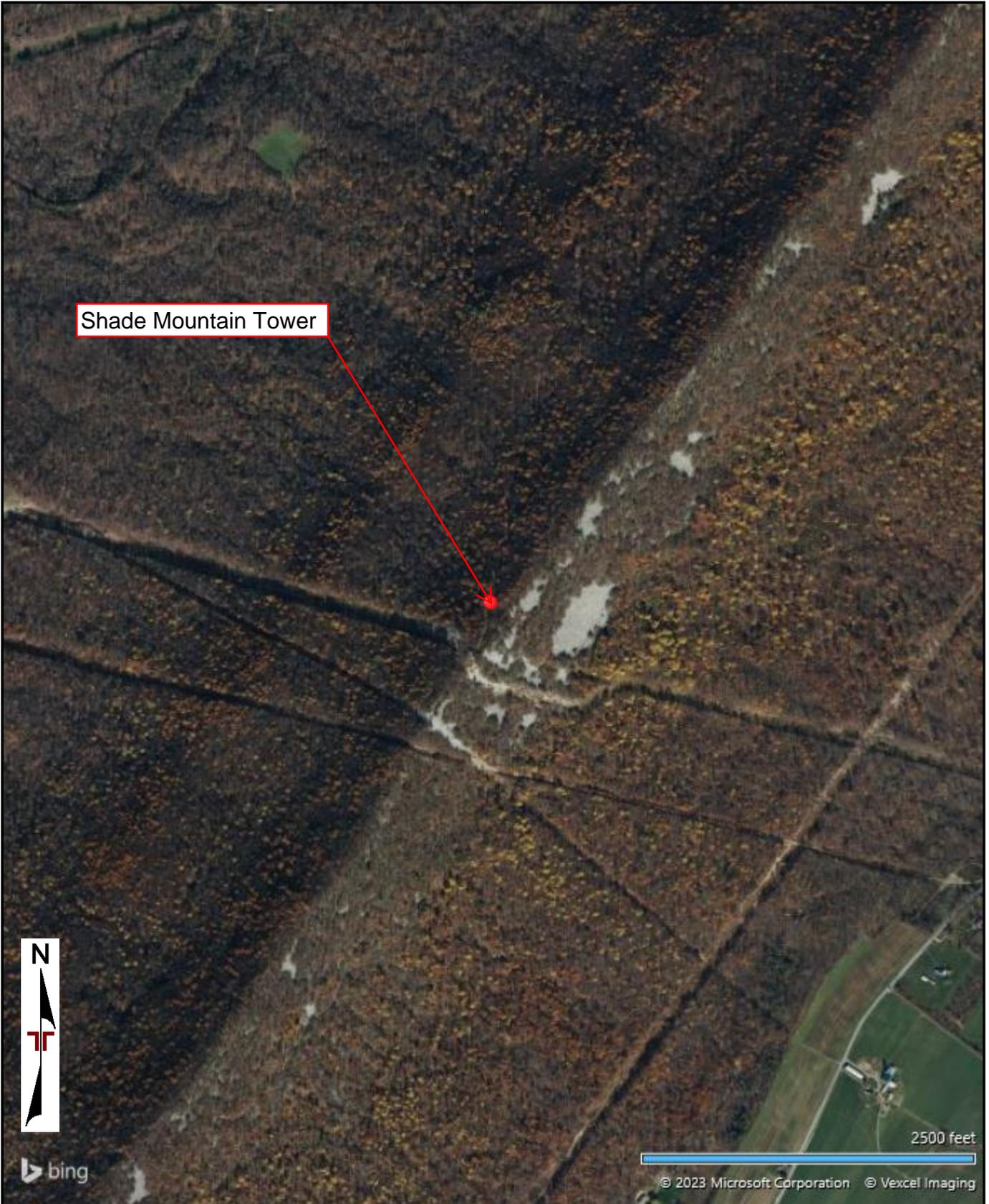
Project Manager: KAE	Project No. J8237028
Drawn by: JKW	Scale: AS SHOWN
Checked by: KAE	File Name: J8237028
Approved by: KAE	Date: May 2023



844 N Lenola Rd, Ste 1
Moorestown, NJ 08057-1052

Proposed Site Plans
Shade Mountain Tower
Orbisonia, Huntingdon County, PA Coordinates: 40.31803, -77.76889

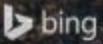
Exhibit
3b



Shade Mountain Tower



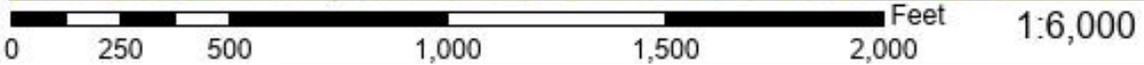
2500 feet



© 2023 Microsoft Corporation © Vexcel Imaging

AERIAL PHOTOGRAPHY PROVIDED BY MICROSOFT BING MAPS

Project Manager: KAE	Project No. J8237028	 844 N Lenola Rd, Ste 1 Moorestown, NJ 08057-1052	Aerial Location Map	Exhibit
Drawn by: JPD	Scale: AS SHOWN		Shade Mountain Tower Orbisonia, Huntingdon county, PA Coordinates: 40.31803, -77.76889	4b
Checked by: KAE	File Name: J8237028			
Approved by: KAE	Date: May 2023			



77°45'49"W 40°18'51"N

DIAGRAM IS FOR GENERAL LOCATION ONLY,
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PURPOSES

Project Manager: KAE	Project No. J8237028
Drawn by: JKW	Scale: AS SHOWN
Checked by: KAE	File Name: J8237028
Approved by: KAE	Date: May 2023

terracon

844 N Lenola Rd, Ste 1
Moorestown, NJ 08057-1052

FEMA Flood Plain Map
Shade Mountain Tower
Orbisonia, Huntingdon County, PA
Coordinates: 40.31803, -77.76889

Exhibit
5b

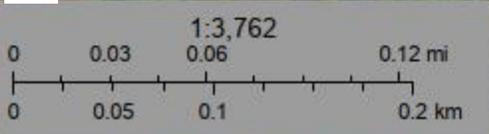


DIAGRAM IS FOR GENERAL LOCATION ONLY,
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PURPOSES

Project Manager: KAE	Project No. J8237028
Drawn by: JKW	Scale: AS SHOWN
Checked by: KAE	File Name: J8237028
Approved by: KAE	Date: May 2023



844 N Lenola Rd, Ste 1
Moorestown, NJ 08057-1052

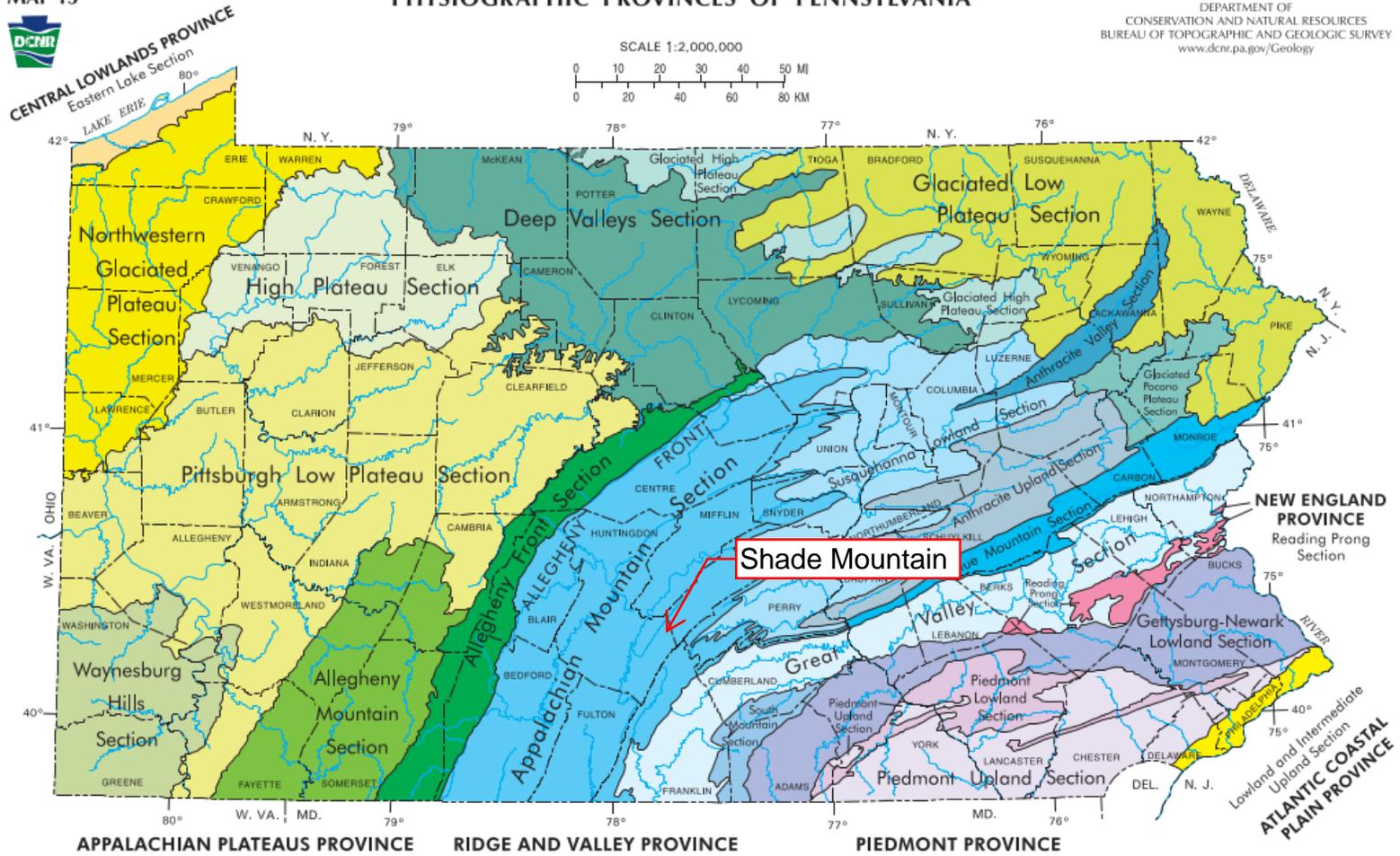
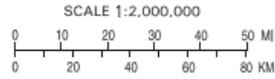
National Wetlands Inventory Map
Shade Mountain Tower Orbisonia, Huntingdon County, PA Coordinates: 40.31803, -77.76889

Exhibit
6b

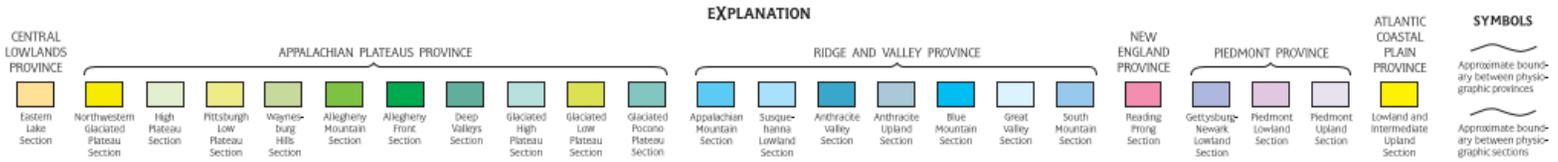


PHYSIOGRAPHIC PROVINCES OF PENNSYLVANIA

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Shade Mountain



Project Manager: KAE	Project No. J8237028
Drawn by: JKW	Scale: AS SHOWN
Checked by: KAE	File Name: J8237028
Approved by: KAE	Date: May 2023

844 N Lenola Rd, Ste 1
Moorestown, NJ 08057-1052

Geologic Map

Shade Mountain Tower

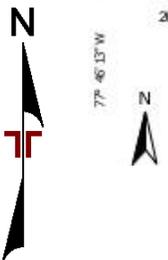
Orbisonia, Huntingdon County, PA

Coordinates: 40.31803, -77.76889

Exhibit

7b

DIAGRAM IS FOR GENERAL LOCATION ONLY,
AND IS NOT INTENDED FOR CONSTRUCTION
PURPOSES



Map Scale: 1:1,340 if printed on A landscape (11" x 8.5") sheet.

0 15 30 60 90 Meters

0 50 100 200 300 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Ru	Rubble land	6.7	100.0%
Totals for Area of Interest		6.7	100.0%

DIAGRAM IS FOR GENERAL LOCATION ONLY,
AND IS NOT INTENDED FOR CONSTRUCTION
PURPOSES

Project Manager: KAE	Project No. J8237028
Drawn by: JKW	Scale: AS SHOWN
Checked by: KAE	File Name: J8237028
Approved by: KAE	Date: May 2023

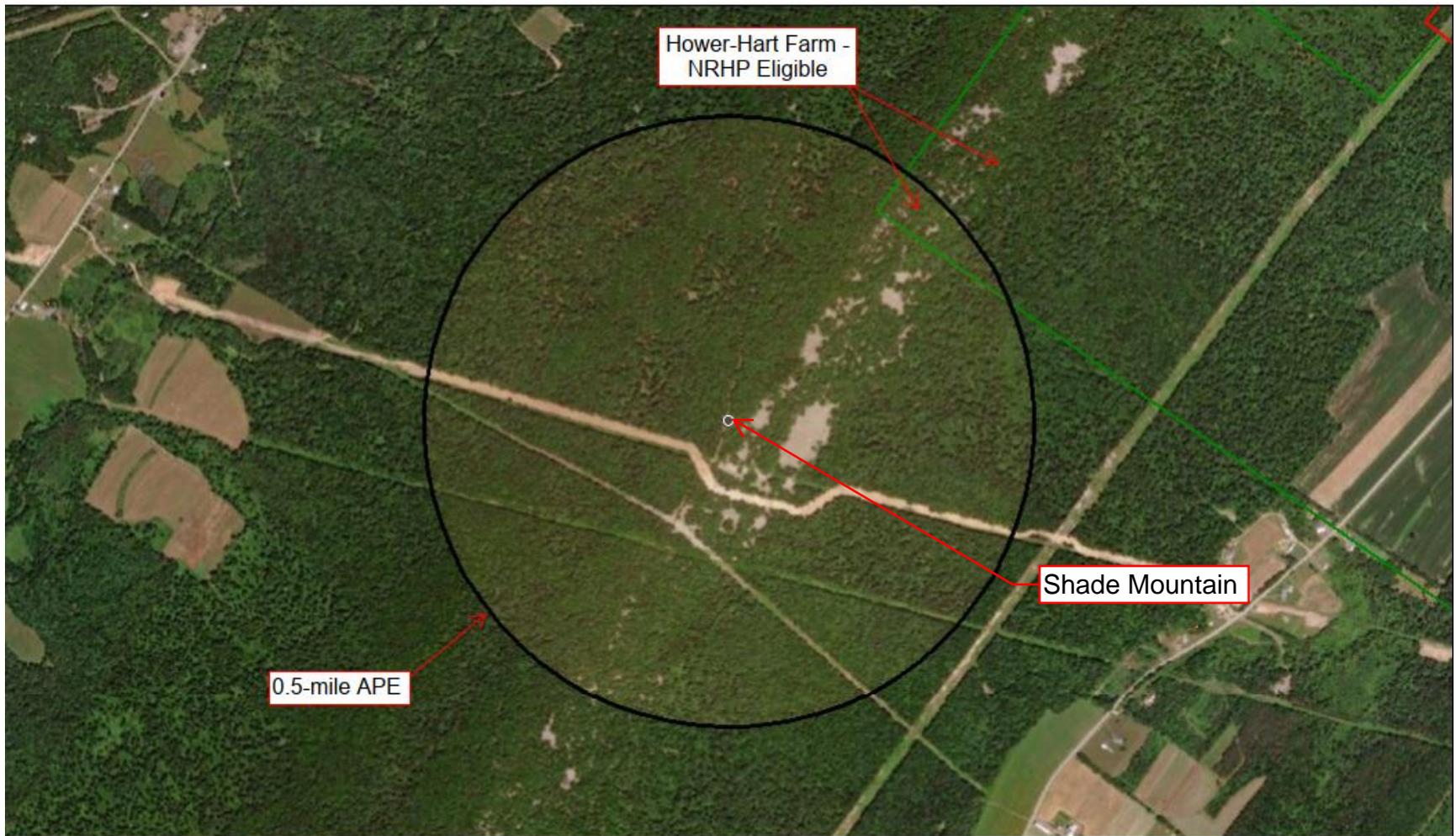


844 N Lenola Rd, Ste 1
Moorestown, NJ 08057-1052

Soils Map

Shade Mountain Tower
Orbisonia, Huntingdon County, PA
Coordinates: 40.31803, -77.76889

Exhibit
8b



5/30/2023

Above Ground Resource

- NHL
- Listed

- Eligible
- Not Eligible
- Demolished
- Undetermined
- Not Eligible
- Undetermined

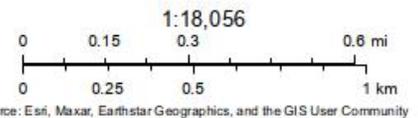


DIAGRAM IS FOR GENERAL LOCATION ONLY,
AND IS NOT INTENDED FOR CONSTRUCTION
PURPOSES

Project Manager: KAE	Project No. J8237028
Drawn by: JKW	Scale: AS SHOWN
Checked by: KAE	File Name: J8237028
Approved by: KAE	Date: May 2023


 844 N Lenola Rd, Ste 1
 Moorestown, NJ 08057-1052

Historic Sites Map

Shade Mountain Tower
Orbisonia, Huntingdon County, PA
Coordinates: 40.31803, -77.76889

Exhibit

9b

APPENDIX C



UNITED STATES DEPARTMENT OF COMMERCE
National Telecommunications and
Information Administration
Washington, D.C. 20230

**NOTICE OF ORGANIZATION(S) WHICH WERE SENT PROPOSED
BROADBAND PROJECT NOTIFICATION INFORMATION**

Date: 04/28/2023

UPWARD BROADBAND
EMILY KOSMALSKI
1401 CONSTITUTION AVE.
WASHINGTON, DC 20230

Dear Applicant:

The National Telecommunications and Information Administration (NTIA) is using a modified version of the Federal Communications Commission's (FCC) Tower Construction Notification System (TCNS) as a means of expediting its Broadband grant programs. This notice is to inform you that the following authorized parties were sent information about the application that you submitted to NTIA through TCNS. The information was forwarded to authorized TCNS users by electronic mail and/or regular mail (letter).

Persons who have received the notification that you provided include leaders or their designees of federally-recognized American Indian Tribes, including Alaska Native Villages (collectively "Tribal Nations"), Native Hawaiian Organizations (NHOs), and State Historic Preservation Officers (SHPOs) who have set their geographic preferences on TCNS. For your convenience in identifying the referenced Tribal Nations and NHOs and in making further contacts, the City and State of the Seat of Government for each Tribal Nation and NHO, as well as the designated contact person, is included in the listing below. We note that Tribal Nations may have Section 106 cultural interests in ancestral homelands or other locations that are far removed from their current Seat of Government. Consistent with the FCC's rules as set forth in the NPA, NTIA requires that all Tribal Nations and NHOs listed below are afforded a reasonable opportunity to respond to this notification, consistent with the procedures set forth below.

We note that the review period for all parties begins upon receipt of a full project submittal and notifications that do not provide this serve as information only. If, upon receipt, the Tribal Nation or NHO does not respond within a reasonable time, you should make a reasonable effort at follow-up contact, unless the Tribal Nation or NHO has agreed to different procedures. In the event a Tribal Nation or NHO does not respond to a follow-up inquiry, or if a substantive or procedural disagreement arises between you and a Tribal Nation or NHO, you must seek guidance from NTIA. NTIA will follow procedures consistent with those set forth in the FCC's Second Report and Order released on March 30, 2018 (FCC 18-30).

1. THPO - Jarell Grant - Omaha Tribe of Nebraska - (PO Box: 368) - Macy, NE - jarell.grant@theomahatribe.com; mark.parker@theomahatribe.com - 402-837-5391 (ext: 434) - electronic mail

Details: Please note we have updated procedures. Please email us at Omahatribefcctns@outlook.com

2. TCNS Coordinator - Tiffany Martinez - Delaware Nation - 31064 State Highway 281 (PO Box: 825) - Anadarko, OK - tmartinez@delawarenation-nsn.gov; epaden@delawarenation-nsn.gov - 405-247-2448 (ext: 1403) - electronic mail
Details: The Delaware Nation of Oklahoma Historic Preservation Office has developed the following consultation procedures for all TCNS projects identified as undertakings by the Federal Communications Commission. In the email subject line, please specify whether the project is for a tower, small cell, or collocation. Our response can be given faster

with this information.

3. Cultural Preservation Director - Carol Butler - Absentee-Shawnee Tribe of Indians of Oklahoma - 2025 S. Gordon Cooper Drive - Shawnee, OK - fccasttens@gmail.com - 405-275-4030 (ext: 6312) - electronic mail

4. TCNS Rep - Bryan Printup - Tuscarora Nation - 5226 Walmore Rd - Via: Lewiston, NY - bprintup@hetf.org - 716-264-6011 (ext: 103) - electronic mail

If the applicant/tower builder receives no response from the Tuscarora Nation within 30 days after notification through TCNS, the Tuscarora Nation has no interest in participating in pre-construction review for the proposed site. The Applicant/tower builder, however, must immediately notify the Tuscarora Nation in the event archaeological properties or human remains are discovered during construction, consistent with Section IX of the Nationwide Programmatic Agreement and applicable law.

5. THPO - Edith Leoso - Bad River Band of Lake Superior Tribe of Chippewa Indians - (PO Box: 39) - Odanah, WI - thpo@badriver-nsn.gov; THPOAsst@badriver-nsn.gov - 715-682-7123 - electronic mail

If the applicant/tower builder receives no response from the Bad River Band of Lake Superior Tribe of Chippewa Indians within 30 days after notification through TCNS, the Bad River Band of Lake Superior Tribe of Chippewa Indians has no interest in participating in pre-construction review for the proposed site. The Applicant/tower builder, however, must immediately notify the Bad River Band of Lake Superior Tribe of Chippewa Indians in the event archaeological properties or human remains are discovered during construction, consistent with Section IX of the Nationwide Programmatic Agreement and applicable law.

6. THPO - Marvin DeFoe - Red Cliff Band of Lake Superior Chippewa Indians of Wisconsin - 88455 Pike Road, HWY 13 - Bayfield, WI - Marvin.DeFoe@redcliff-nsn.gov; Edwina.Buffalo-Reyes@redcliff-nsn.gov - 715-779-3700 (ext: 4242) - electronic mail

Details: Boozhoo, we do not have the Red Cliff Portal site online anymore and apologize for the inconvenience.

If you have a project that has already been paid for or would like to voluntarily pay for, please email documents for project review to THPO@redcliff-nsn.gov. This address is only to be used by Consultants who are voluntarily paying for projects.

If you have any questions, please contact Marvin Defoe, THPO Manager at (715) 779-3700 Ext. 4244 or Edwina Buffalo-Reyes, THPO Assistant at (715) 779-3700Ext. 4243.

7. THPO - William Tarrant - Seneca-Cayuga Nation - 23701 S 655 Road (PO Box: 453220) - Grove, OK - wtarrant@sctribe.com - 918-787-5452 (ext: 344) - regular mail

Details: Please refrain from sending review information via email. We request all information to be sent via mail to PO Box 453220, Grove, OK 74345.

8. Cell Tower Coordinator - Kelly Nelson - Eastern Shawnee Tribe of Oklahoma - 70500 East 128 Road - Wyandotte, OK - celltower@estoo.net - 918-666-2435 (ext: 1861) - regular mail

Details: DO NOT EMAIL DOCUMENTATION; it will be deleted without being opened.

Submit one printed color copy by US postal mail or other parcel carrier of all documentation to:

Eastern Shawnee Tribe
Attn: CellTower Program
70500 E. 128 Rd.
Wyandotte, OK 74370

Provide a 1-page cover letter with the following information:

- a. TCNS Number
- b. Company Name
- c. Project Name, City, County, State
- d. Project type
- e. Project coordinates
- f. Contact information

The Eastern Shawnee Procedures document is available and highly recommended for guidance; send an email to celltower@estoo.net requesting our most current copy.

9. THPO - Sherri Clemons - Wyandotte Nation - 64700 E, Hwy 60 - Wyandotte, OK - sclemons@wyandotte-nation.org - 918-678-6344 - electronic mail
Details: Please refrain from sending information via mail. We ONLY accept information via email to: sclemons@wyandotte-nation.org. We will advise if we require additional information.

10. THPO - Tonya Tipton - Shawnee Tribe - 29 South 69A Highway - Miami, OK - tcns@shawnee-tribe.com - 918-542-2441 (ext: 103) - electronic mail
Details: In the case of projects with NO ground disturbance such as antennae on the sides of buildings or existing poles, the Shawnee Tribe concurs that no known historic properties will be negatively impacted by the project. The Shawnee Tribe DOES NOT wish to consult on those projects with NO ground disturbance.

If the project DOES involve ground disturbance at all, the Shawnee Tribe would like to ACCEPT your invitation for consultation and will provide a review.

If you have any questions, you may contact the Shawnee Tribe via email at TCNS@shawnee-tribe.com

Thank you for the opportunity to comment.

11. THPO - Jonathan Windy Boy - Chippewa Cree Tribe of the Rocky Boy's Reservation - 96 Clinic Rd North - Box Elder, MT - marci.buchman@gmail.com; precisionarchaeology@gmail.com - 406-395-5215 - electronic mail and regular mail
Details: The Chippewa Cree Tribe performs its reviews of FCC undertakings and projects through its arrangement with I Response; a Tribally-owned enterprise. Please send all of your Forms 620 and Forms 621 to I Response at <http://app.iresponse106.com/>. The reviews will begin once all the required documentation has been received at <http://app.iresponse106.com/>. If the qualified and professional reviewers determine that additional information is required, or that field work is required, they will contact you through the I Response system and through TCNS. If the Tribe determines that the proposed project will have an effect on historic properties and/or Tribal religious and cultural sites or properties, we will provide notice to the project proponent and to the FCC.

12. THPO - Sarah Thompson - Lac du Flambeau Band of Lake Superior Chippewa Indians - Tribal Historic Preservation Office (PO Box: 67) - Lac du Flambeau, WI - ldfthpo@ldftribe.com - 715-588-2139 - electronic mail
Details: Effective Immediately:

Please send all submissions through email until further notice. Effective 3/23/2020

Please email all submissions to ldfthpo@ldftribe.com

Thank you

13. Deputy THPO, Archaeologist - Susan Bachor - Delaware Tribe of Indians - 126 University Circle Stroud Hall, Rm. 437 - East Stroudsburg, PA - sbachor@delawaretribe.org; lheady@delawaretribe.org - 610-761-7452 - electronic mail
Details: The Delaware Tribe of Indians areas of interest include our aboriginal territories (circa 1600), known locations of historic Delaware settlements, routes of removal and forced migration, and all lands of Delaware aboriginal title ceded by treaty to the United States. If you are receiving this notification, then your project falls within these areas of interest and we ask that you provide us with a cover letter describing the project and its location (including the project coordinates) as well as a topographic map showing the project location. If an archaeological survey has already been performed in preparation for the project, please send a copy of that as well. Additionally, we may request a biological assessment of culturally significant treaty resources which may be affected by the proposed undertaking.

We are only interested in consulting on projects that involve ground disturbance that is planned to take place in both undisturbed and previously disturbed contexts. We are not interested in consulting on collocations or projects that involve no ground disturbance. If your project does involve ground disturbance or you do not receive a response from us within 30 days of submitting the above project information, then we have no comments on the project. However, if any archaeological resources or human remains are disturbed at any point in the project planning or construction, we ask that the project be halted until we can be notified of the inadvertent discovery and can determine the most appropriate course of action. If your company would like a formal written response from the Delaware Tribe concerning the potential impact of your project to culturally and religiously significant sites, please contact Susan Bachor at sbachor@delawaretribe.org to request such a response.

In order to better facilitate consultation throughout our areas of interest we have three regional tribal historic preservation offices. While our Tribal Headquarters remains in Oklahoma, our Eastern Office in Pennsylvania is the point of contact for all consultation within our Eastern Region which includes the states of Massachusetts, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland and Virginia. If your project exists in any of these states, please contact Susan Bachor with the above project information at the following e-mail address. All offices prefer digital submissions and the project information can be submitted by e-mail.

Susan Bachor, Acting Director of Historic Preservation
Eastern Office
126 University Circle
Stroud Hall, Rm. 437
East Stroudsburg PA 18301
(610) 761-7452
sbachor@delawaretribe.org

Our Midwestern office is the point of contact for all consultation within our Midwestern region which includes the states of West Virginia, Ohio, Indiana, Michigan and Illinois. If your project exists in any of these states, please contact Larry Heady with the above project information at the following e-mail address. Our Midwestern office prefers to receive digital submissions and the project information can be submitted by e-mail.

Larry Heady, THPO
Midwestern Office
125 Dorry Lane, Grants Pass, OR 97527
lheady@delawaretribe.org
(262) 825-7586

We, at the Delaware Tribe Historic Preservation Office, along with our Chief and Tribal Council remain committed to protecting the cultural and physical integrity of our historic sites, traditional cultural properties, sacred sites, objects of cultural patrimony, and most importantly, the remains of our Ancestors. We look forward to working with you on our shared interests in preserving and protecting Delaware heritage within our areas of interest.

The information you provided was also forwarded to the additional Tribes and NHOs listed below. These Tribes and NHOs have NOT set their geographic preferences on TCNS, and therefore they are currently receiving tower notifications for the entire United States.

The information you provided was also forwarded to the following SHPOs in the state in which you propose to construct and neighboring states. The information was provided to these SHPOs as a courtesy for their information and planning.

14. - Amanda Terrell - Ohio History Connection - 800 E. 17th Avenue - Columbus, OH - aterrell@ohiohistory.org - 614-298-2000 - electronic mail

15. Historic Preservation Supervisor - Barbara Frederick - Pennsylvania State Historic Preservation Office - Pennsylvania Historical & Museum Commission 400 North St, 2nd Floor - Harrisburg, PA - bafrederic@pa.gov - 717-772-4519 - electronic mail

16. Deputy SHPO - Susan Pierce - West Virginia Division of Culture & History, Historic Preservation Office - 1901 Kanawha Boulevard East - Charleston, WV - susan.pierce@wvculture.org - - electronic mail

17. SHPO - Barbara Franco - Pennsylvania Historical and Museum Commission - 300 North Street - Harrisburg, PA - bcutler@state.pa.us - 717-787-2891 - electronic mail

TCNS automatically forwards all notifications to all Tribal Nations and SHPOs that have an expressed interest in the geographic area of a proposal. A particular Tribal Nation or SHPO may also set forth policies or procedures within its details box that exclude from review certain facilities (for example, a statement that it does not review collocations with no ground disturbance or that indicates that no response within 30 days indicates no interest in participating in pre-construction review).

Please be advised that the NTIA cannot guarantee that the contact(s) listed above opened and reviewed an electronic or regular mail notification. The following information relating to the proposed project was forwarded to the person(s) listed above.

Notification Received: 04/25/2023

Notification ID: 265957

Project Number: 50

Applicant: Upward Broadband

Applicant Contact: Emily Kosmalski

Project Type(s): Multiple Project Components

Region(s) affected (State, County): PENNSYLVANIA, HUNTINGDON

Address or Geographical Location Description: Installation of a new tower with antennas near 16150 Blacklog Valley Rd, Orbisonia PA and collocation of antennas on an existing 260-ft tower at 22384 Croghan Pike, Shade Gap, PA.

If you have any questions or comments regarding the content of this notice, please contact NTIA at: TCNS@ntia.gov.

APPENDIX D

Shade Gap Collocation
Section 7 Documentation



844 N. Lenola Road, Suite 1
Moorestown, NJ 08057

P (856) 813-3281
F (856) 813-3279

Terracon.com

July 25, 2023

Ambassador Towers LLC
3105 Lincoln Highway East
Paradise, PA 17562

Re: Natural Resources Site Evaluation for a Telecommunications Site

To Whom It May Concern:

Terracon has completed a review of potential impacts to listed and proposed threatened/ endangered species and critical habitats resulting from the proposed construction of a telecommunications site. The lead federal agency for this project is the National Telecommunications and Information Administration (NTIA). In addition to NTIA National Environmental Policy Act (NEPA) considerations, Federal Communications Commission’s (FCC) regulations, as identified in 47CFR § 1.1307 (a) 3, are also included, which require that the effects of the proposed tower construction to protected species and critical habitats are considered. Findings in this report are based upon the site’s current utilization, the most recent reconnaissance information and from other activities described herein; such information is subject to change. Basic site information is presented in the table below.

Site Name:	Shade Gap Collocation
Terracon Project Number:	J8237028
Address:	22384 Croghan Pike
City, County, State:	Dublin Township (Shade Gap), Huntingdon County, PA, 17255
Latitude / Longitude:	40° 10' 40.6" N / 77° 51' 45.8" W
Existing Tower Height:	264 feet, including attachments
Tower Type:	Self-support
Project Description:	Collocation of antennas on existing tower and installation of associated equipment within existing tower compound.
Description of the surrounding properties	Residential, agricultural, and wooded land
Description of wetlands or water bodies near the site	Based on a review of the National Wetlands Inventory (NWI) map and topographic maps, there are no mapped wetlands or surface waters within 500 feet of the proposed tower compound or easement.
Elevation and topography	997 feet above mean sea level. The topography in the immediate site area slopes to the northwest.

According to the Natural Resource Conservation Service (NRCS) Web Soil Survey for Huntingdon County, Pennsylvania, the dominant soil type at the site is Hublersburg cherty silt loam, 8 to 15 percent slopes (HxC). This soil type has no frequency of ponding, is well drained, and is not considered hydric soil by the NRCS.

Terracon conducted a preliminary review using the U.S. Fish and Wildlife Service (USFWS) Information, Planning and Conservation System (IPaC) Endangered Species Act species list to identify listed and proposed threatened and endangered species, as well as critical habitats that may be located on or near the project site.

According to the IPaC report, the following species have the potential to be present in the vicinity of the project area:

Taxon	Name	Species Habitat	Status
Mammal	Indiana Bat (<i>Myotis sodalists</i>)	Found in caves and in wooded land. During the winter, this species utilizes caves or abandoned mines. During summer, this species utilizes wooded areas where trees contain exfoliating bark of live trees or decaying bark of snag trees. (USFWS)	Endangered
Mammal	Northern Long-eared Bat (<i>Myotis septentrionalis</i>)	Found in caves and in wooded land. During the winter, this species utilizes caves or abandoned mines, called hibernacula. During summer, this species utilizes wooded areas where trees contain exfoliating bark of live trees or decaying bark of snag trees (USFWS).	Endangered
Insect	Monarch Butterfly (<i>Danaus plexippus</i>)	Found in open prairies, meadows, and grasslands. Sometimes along roadsides and disturbed areas but almost always in the vicinity of milkweed populations. Breeding areas are virtually all patches of milkweed in North America and some other regions (NatureServe).	Candidate
Flowering Plant	Northeastern Bulrush (<i>Scirpus ancistrochaetus</i>)	Grows in wet areas – small wetlands, sinkhole ponds or wet depressions with seasonally fluctuating water levels (USFWS).	Endangered

There are no critical habitats documented at the site. There are no mapped critical habitats, wildlife refuges, or fish hatcheries mapped at the pole location. The IPaC species list is attached at the end of this document.

Terracon also utilized the Pennsylvania Natural Diversity Inventory (PNDI) online database environmental review tool to further refine the environmental review process for both federally and Pennsylvania-state protected species. The PNDI system is managed by the Pennsylvania Department of Conservation and Natural Resources (DCNR) in order to build, maintain, and provide accurate and accessible ecological information needed for conservation, development planning, natural resources management, and for the protection of threatened and endangered species, special concern species, and rare and significant ecological features. The PNDI environmental review tool analyzes proposed project footprints against known species locations and recommends conservation measures and other actions that may be needed to maintain compliance with the Federal Endangered Species Act, as well as, allied Pennsylvania state species protection laws.

Within Pennsylvania, the PNDI environmental review tool takes primacy in the project environmental review process over IPaC. The environmental review tool is utilized to coordinate concurrent project reviews with the DCNR, the Pennsylvania Fish and Boat Commission (PFBC), the Pennsylvania Game Commission (PGC), and the USFWS.

The PNDI environmental review tool project response indicates the DCNR, PGC, PFBC, and USFWS concluded: *No Impact is anticipated to threatened and endangered species and/or special concern species and resources.* Therefore, no further coordination is required with these state and federal jurisdictional agencies.



The proposed project involves the installation of antennas on the existing tower and placement of associated equipment within the tower compound. Based on a review of the habitat for the above-listed species, compared to an analysis of the habitat present on the site location, it is not anticipated that the proposed telecommunications collocation will affect listed or proposed protected species or critical habitats.

The Migratory Bird Treaty Act of 1918 (MBTA) decrees that migratory birds and their parts (including eggs, nests, and feathers) are federally protected. The MBTA is the domestic law that affirms, or implements, the United States' commitment to four international conventions (with Canada, Japan, Mexico, and Russia) for the protection of a shared migratory bird resource. Each of the conventions protect selected species of birds that are common to these countries (i.e., they occur in these countries at some point during their annual life cycle). The following migratory birds of concern were identified within the vicinity of the site on the IPaC:

Species Name	Bird of Conservation Concern (BCC)	Seasonal Occurrence in Project Area
Bald Eagle (<i>Haliaeetus leucocephalus</i>)	No	January through December
Black-capped Chickadee (<i>Poecile atricapillus</i>)	Yes	April through July
Chimney Swift (<i>Chaetura pelagica</i>)	Yes	March through August
Kentucky Warbler (<i>Oporornis formosus</i>)	Yes	April through August
Wood Thrush (<i>Hylocichla mustelina</i>)	Yes	May through August

It is not anticipated that migratory birds will pose a significant constraint to site development. However, a migratory bird nest survey should be conducted if nests are present on the existing tower at the time of the collocation activities.

USFWS recommendations published in Revised Guidelines for Communication Tower Design, Siting, Construction, Operation, Retrofitting, and Decommissioning (2021) state the preferred tower height to decrease potential effects on migratory birds is less than 200 feet tall. Siting and design process for this project could not conform to all the USFWS recommendations; however, mitigating factors proposed for implementation at the site include the following: location in minimally sensitive areas and eliminating the need for guy wires.

Based on Terracon's analysis and reconnaissance, the proposed site activities will have no effect on listed or proposed protected species or critical habitats. No further coordination is required with jurisdictional agencies at this time.

Please feel free to contact our office at 856-813-3267 if you need additional information.

Natural Resources Site Evaluation

Shade Gap Collocation ■ Dublin Township (Shade Gap), PA
July 2023 ■ Terracon Project No. J8237028



Sincerely,

Terracon Consultants, Inc.

Kathryn A. Eisele

Kathryn A. Eisele
Sr. Project Manager

A handwritten signature in black ink, appearing to read 'Paul DeAngelo'.

Paul DeAngelo
Senior Principal / Department Manager
Environmental

Attachments: Tower Site Evaluation Form
Topographic Site Location Map
National Wetlands Inventory Map
Site Plans
Photographs
IPaC Report
PDNI Receipt

9. Dominant vegetative species in each habitat type: _____

10. Average diameter breast height of dominant tree species in forested areas: _____

11. Will construction cause fragmentation of a larger habitat into two or more smaller blocks? _____ If yes, describe: _____

12. Evidence of bird roosts or rookeries present? _____ If yes, describe: _____

13. Distance to nearest wetland area (swamp, marsh, riparian, marine, etc.), and coastline: _____

14. Distance to nearest telecommunications tower: _____

15. Potential to collocate antennas on existing towers or structures: _____

16. Have measures been incorporated to minimize impacts on migratory birds? _____
If yes, describe: _____

17. Has an evaluation been made to determine if the proposed facility may affect listed or proposed endangered or threatened species or their habitats as required by FCC regulation at 47 CFR 1.1307(a)(3)? Yes If yes, present findings: _____
No endangered or threatened species or critical habitats will be affected by the proposed project.

18. Additional information required: None _____

Please refer to Appendix B for Site Figures

Please refer to Appendix F for Site Photographs



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Pennsylvania Ecological Services Field Office
110 Radnor Road Suite 101
State College, PA 16801-7987
Phone: (814) 234-4090 Fax: (814) 234-0748

In Reply Refer To:
Project Code: 2023-0072860
Project Name: Shade Gap

April 24, 2023

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

To Whom It May Concern:

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

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-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 ECOS-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:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

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

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

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/birds/policies-and-regulations/executive-orders/e0-13186.php>.

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

Attachment(s):

- Official Species List
 - USFWS National Wildlife Refuges and Fish Hatcheries
 - Migratory Birds
 - Wetlands
-

OFFICIAL SPECIES LIST

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

This species list is provided by:

Pennsylvania Ecological Services Field Office

110 Radnor Road Suite 101
State College, PA 16801-7987
(814) 234-4090

PROJECT SUMMARY

Project Code: 2023-0072860
Project Name: Shade Gap
Project Type: Co-location of Towers
Project Description: Communication Tower
Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@40.17797365,-77.8626116402101,14z>



Counties: Huntingdon County, Pennsylvania

ENDANGERED SPECIES ACT SPECIES

There is a total of 4 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. Note that 1 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, 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.

-
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 <i>Myotis sodalis</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> ▪ The monarch is a candidate species and not yet listed or proposed for listing. There are generally no section 7 requirements for candidate species (FAQ found here: https://www.fws.gov/savethemonarch/FAQ-Section7.html). Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

FLOWERING PLANTS

NAME	STATUS
Northeastern Bulrush <i>Scirpus ancistrochaetus</i>	Endangered
Population:	
No critical habitat has been designated for this species.	
Species profile: https://ecos.fws.gov/ecp/species/6715	

CRITICAL HABITATS

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

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

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

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

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern \(BCC\) list](#) or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

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

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Sep 1 to Aug 31
Black-capped Chickadee <i>Poecile atricapillus praticus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 10 to Jul 31
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25

NAME	BREEDING SEASON
Kentucky Warbler <i>Oporornis formosus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 20 to Aug 20
Wood Thrush <i>Hylocichla mustelina</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

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

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of

certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

WETLANDS

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

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

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

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

IPAC USER CONTACT INFORMATION

Agency: Terracon
Name: Angela Maroti
Address: 2105 Newpoint Place
Address Line 2: Suite 600
City: Lawrenceville
State: GA
Zip: 30043
Email: angela.maroti@terracon.com
Phone: 8303055445

1. PROJECT INFORMATION

Project Name: **Shade Gap**

Date of Review: **4/25/2023 05:39:42 PM**

Project Category: **Communication, Cell or communication tower (include access roads in project area), modification of existing tower**

Project Area: **0.23 acres**

County(s): **Huntingdon**

Township/Municipality(s): **DUBLIN TOWNSHIP**

ZIP Code:

Quadrangle Name(s): **SHADE GAP**

Watersheds HUC 8: **Lower Juniata**

Watersheds HUC 12: **Shade Creek**

Decimal Degrees: **40.177952, -77.862597**

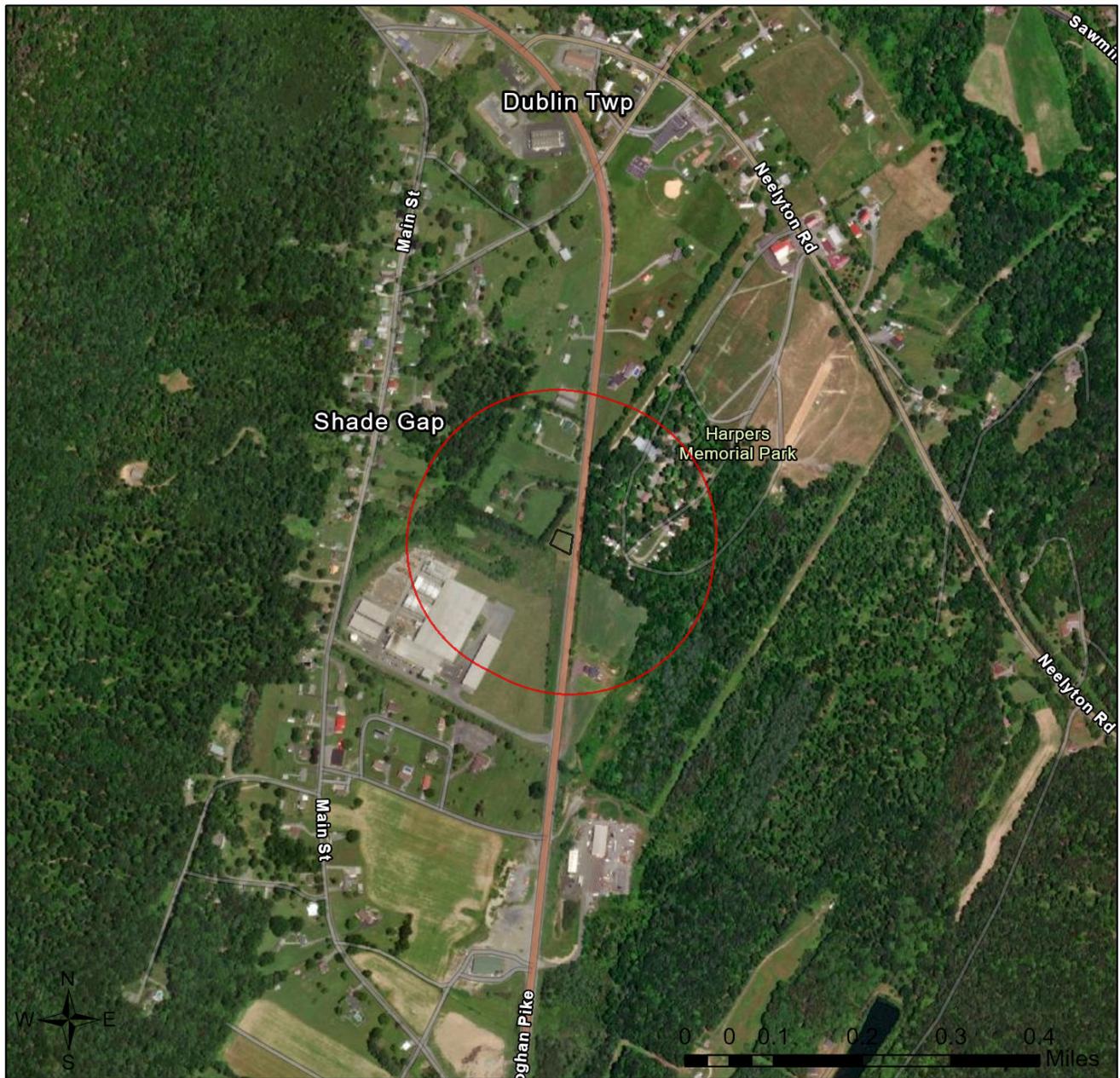
Degrees Minutes Seconds: **40° 10' 40.6274" N, 77° 51' 45.3502" W**

2. SEARCH RESULTS

Agency	Results	Response
PA Game Commission	No Known Impact	No Further Review Required
PA Department of Conservation and Natural Resources	No Known Impact	No Further Review Required
PA Fish and Boat Commission	No Known Impact	No Further Review Required
U.S. Fish and Wildlife Service	No Known Impact	No Further Review Required

As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate no known impacts to threatened and endangered species and/or special concern species and resources within the project area. Therefore, based on the information you provided, no further coordination is required with the jurisdictional agencies. This response does not reflect potential agency concerns regarding impacts to other ecological resources, such as wetlands.

Shade Gap

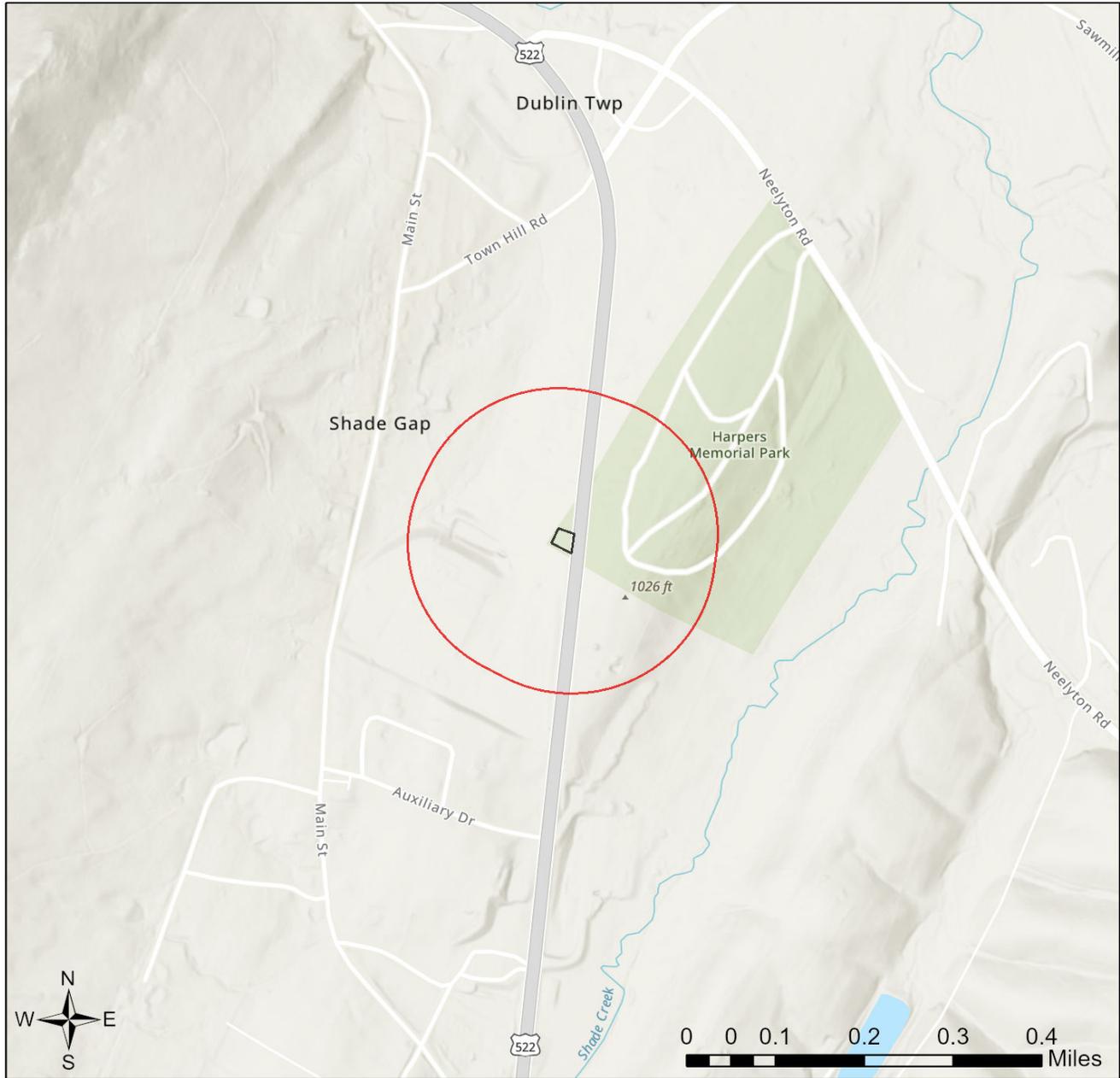


-  Buffered Project Boundary
-  Project Boundary



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

Shade Gap



-  Buffered Project Boundary
-  Project Boundary



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

3. AGENCY COMMENTS

Regardless of whether a DEP permit is necessary for this proposed project, any potential impacts to threatened and endangered species and/or special concern species and resources must be resolved with the appropriate jurisdictional agency. In some cases, a permit or authorization from the jurisdictional agency may be needed if adverse impacts to these species and habitats cannot be avoided.

These agency determinations and responses are **valid for two years** (from the date of the review), and are based on the project information that was provided, including the exact project location; the project type, description, and features; and any responses to questions that were generated during this search. If any of the following change: 1) project location, 2) project size or configuration, 3) project type, or 4) responses to the questions that were asked during the online review, the results of this review are not valid, and the review must be searched again via the PNDI Environmental Review Tool and resubmitted to the jurisdictional agencies. The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer impacts than what is listed on this PNDI receipt. The jurisdictional agencies **strongly advise against** conducting surveys for the species listed on the receipt prior to consultation with the agencies.

PA Game Commission

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Department of Conservation and Natural Resources

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Fish and Boat Commission

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

U.S. Fish and Wildlife Service

RESPONSE:

No impacts to **federally** listed or proposed species are anticipated. Therefore, no further consultation/coordination under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq. is required. Because no take of federally listed species is anticipated, none is authorized. This response does not reflect potential Fish and Wildlife Service concerns under the Fish and Wildlife Coordination Act or other authorities.

4. DEP INFORMATION

The Pa Department of Environmental Protection (DEP) requires that a signed copy of this receipt, along with any required documentation from jurisdictional agencies concerning resolution of potential impacts, be submitted with applications for permits requiring PNDI review. Two review options are available to permit applicants for handling PNDI coordination in conjunction with DEP's permit review process involving either T&E Species or species of special concern. Under sequential review, the permit applicant performs a PNDI screening and completes all coordination with the appropriate jurisdictional agencies prior to submitting the permit application. The applicant will include with its application, both a PNDI receipt and/or a clearance letter from the jurisdictional agency if the PNDI Receipt shows a Potential Impact to a species or the applicant chooses to obtain letters directly from the jurisdictional agencies. Under concurrent review, DEP, where feasible, will allow technical review of the permit to occur concurrently with the T&E species consultation with the jurisdictional agency. The applicant must still supply a copy of the PNDI Receipt with its permit application. The PNDI Receipt should also be submitted to the appropriate agency according to directions on the PNDI Receipt. The applicant and the jurisdictional agency will work together to resolve the potential impact(s). See the DEP PNDI policy at <https://conservationexplorer.dcnr.pa.gov/content/resources>.

5. ADDITIONAL INFORMATION

The PNDI environmental review website is a preliminary screening tool. There are often delays in updating species status classifications. Because the proposed status represents the best available information regarding the conservation status of the species, state jurisdictional agency staff give the proposed statuses at least the same consideration as the current legal status. If surveys or further information reveal that a threatened and endangered and/or special concern species and resources exist in your project area, contact the appropriate jurisdictional agency/agencies immediately to identify and resolve any impacts.

For a list of species known to occur in the county where your project is located, please see the species lists by county found on the PA Natural Heritage Program (PNHP) home page (www.naturalheritage.state.pa.us). Also note that the PNDI Environmental Review Tool only contains information about species occurrences that have actually been reported to the PNHP.

6. AGENCY CONTACT INFORMATION

PA Department of Conservation and Natural Resources

Bureau of Forestry, Ecological Services Section
400 Market Street, PO Box 8552
Harrisburg, PA 17105-8552
Email: RA-HeritageReview@pa.gov

PA Fish and Boat Commission

Division of Environmental Services
595 E. Rolling Ridge Dr., Bellefonte, PA 16823
Email: RA-FBPACENOTIFY@pa.gov

U.S. Fish and Wildlife Service

Pennsylvania Field Office
Endangered Species Section
110 Radnor Rd; Suite 101
State College, PA 16801
Email: IR1_ESPenn@fws.gov
NO Faxes Please

PA Game Commission

Bureau of Wildlife Management
Division of Environmental Review
2001 Elmerton Avenue, Harrisburg, PA 17110-9797
Email: RA-PGC_PNDI@pa.gov
NO Faxes Please

7. PROJECT CONTACT INFORMATION

Name: _____
Company/Business Name: _____
Address: _____
City, State, Zip: _____
Phone:(_____) _____ Fax:(_____) _____
Email: _____

8. CERTIFICATION

I certify that ALL of the project information contained in this receipt (including project location, project size/configuration, project type, answers to questions) is true, accurate and complete. In addition, if the project type, location, size or configuration changes, or if the answers to any questions that were asked during this online review change, I agree to re-do the online environmental review.

applicant/project proponent signature

date

Shade Mountain Tower
Section 7 Documenta
tion

August 10, 2023

Ambassador Towers LLC
3105 Lincoln Highway East
Paradise, PA 17562

Re: Natural Resources Site Evaluation for a Telecommunications Site

To Whom It May Concern:

Terracon has completed a review of potential impacts to listed and proposed threatened/endangered species and critical habitats resulting from the proposed construction of a telecommunications site. The lead federal agency for this project is the National Telecommunications and Information Administration (NTIA). In addition to NTIA National Environmental Policy Act (NEPA) considerations, Federal Communications Commission's (FCC) regulations, as identified in 47CFR § 1.1307 (a) 3, are also included, which require that the effects of the proposed tower construction to protected species and critical habitats are considered. Findings in this report are based upon the site's current utilization, the most recent reconnaissance information and from other activities described herein; such information is subject to change. Basic site information is presented in the table below.

Site Name:	Shade Mountain Tower
Terracon Project Number:	J8237028
Address:	16150 Blacklog Valley Road
City, County, State:	Tell Township (Orbisonia), Huntingdon County, PA, 17243
Latitude / Longitude:	40° 19' 3.18" N / 77° 46' 8.38" W
Proposed Lease Area:	10,000 square feet
Proposed Tower Height:	199 feet, including attachments
Tower Type:	Self-support
Description of the site	Undeveloped, wooded land
Proposed Access Road:	Approximate 30-foot by 220-foot access/utility easement that connects with an existing access road to the south. New electric service cable will additionally be installed underground along the access easement from an existing Valley Rural Electric Cooperative pad-mounted transformer to the site.
Description of the surrounding properties	Undeveloped, wooded land
Description of wetlands or water bodies near the site	Based on a review of the National Wetlands Inventory (NWI) map and topographic maps, there are no mapped wetlands or surface waters within 500 feet of the proposed tower compound or easement.
Elevation and topography	1,895.75 feet above mean sea level. The topography in the immediate site area slopes steeply to the southeast and northwest.

The Terracon team performed a site visit on June 26, 2023. At the time of the site reconnaissance, the proposed tower compound and access road/utility easement consisted of wooded land. The surrounding properties are also undeveloped wooded land.

According to the Natural Resource Conservation Service (NRCS) Web Soil Survey for Huntingdon County, Pennsylvania, the dominant soil type at the site is Rubble land (Ru). This soil type has no frequency of ponding, is well drained, and is not considered hydric soil by the NRCS. According to USGS and NWI mapping, there are no wetlands, watercourses, floodways or water bodies mapped at the project site or within 500 feet of the project site.

Terracon conducted a preliminary review using the U.S. Fish and Wildlife Service (USFWS) Information, Planning and Conservation System (IPaC) Endangered Species Act species list to identify listed and proposed threatened and endangered species, as well as critical habitats that may be located on or near the project site.

According to the IPaC report, the following species have the potential to be present in the vicinity of the project area:

Taxon	Name	Species Habitat	Status
Mammal	Indiana Bat (<i>Myotis sodalist</i>)	Found in caves and in wooded land. During the winter, this species utilizes caves or abandoned mines. During summer, this species utilizes wooded areas where trees contain exfoliating bark of live trees or decaying bark of snag trees. (USFWS)	Endangered
Mammal	Northern Long-eared Bat (<i>Myotis septentrionalis</i>)	Found in caves and in wooded land. During the winter, this species utilizes caves or abandoned mines, called hibernacula. During summer, this species utilizes wooded areas where trees contain exfoliating bark of live trees or decaying bark of snag trees (USFWS).	Endangered
Insect	Monarch Butterfly (<i>Danaus plexippus</i>)	Found in open prairies, meadows, and grasslands. Sometimes along roadsides and disturbed areas but almost always in the vicinity of milkweed populations. Breeding areas are virtually all patches of milkweed in North America and some other regions (NatureServe).	Candidate
Flowering Plant	Northeastern Bulrush (<i>Scirpus ancistrochaetus</i>)	Grows in wet areas – small wetlands, sinkhole ponds or wet depressions with seasonally fluctuating water levels (USFWS).	Endangered

There are no critical habitats documented at the site. There are no mapped critical habitats, wildlife refuges, or fish hatcheries mapped at the pole location. The IPaC species list is attached at the end of this document.

Terracon also utilized the Pennsylvania Natural Diversity Inventory (PNDI) online database environmental review tool to further refine the environmental review process for both federally and Pennsylvania-state protected species. The PNDI system is managed by the Pennsylvania Department of Conservation and Natural Resources (DCNR) in order to build, maintain, and provide accurate and accessible ecological information needed for conservation, development planning, natural resources management, and for the protection of threatened and endangered species, special concern species, and rare and significant ecological features. The PNDI environmental review tool analyzes proposed project footprints against known species locations and recommends conservation measures and other

actions that may be needed to maintain compliance with the Federal Endangered Species Act, as well as, allied Pennsylvania state species protection laws.

Within Pennsylvania, the PNDI environmental review tool takes primacy in the project environmental review process over IPaC. The environmental review tool is utilized to coordinate concurrent project reviews with the DCNR, the Pennsylvania Fish and Boat Commission (PFBC), the Pennsylvania Game Commission (PGC), and the USFWS.

The PNDI environmental review tool project response indicates the DCNR, PGC, and USFWS concluded: *No Impact is anticipated to threatened and endangered species and/or special concern species and resources.* Therefore, no further coordination is required with these state and federal jurisdictional agencies. The PFBC requested further review for timber rattlesnake (*Crotalus horridus*), a state-listed species of special concern.

On behalf of Upward Broadband LLC, WHM Consulting, LLC (WHM) was contracted to conduct a Phase I Habitat Assessment and then a Phase II Absence/Presence Survey of the site. The conclusions of the Phase II report state: *During timber rattlesnake Phase II presence/absence surveys, timber rattlesnakes were observed in several areas of the potential denning habitat just below the Rural Broadband Infrastructure Expansion Project. One male was also observed crossing through the LOD and access road before disappearing on the north side of the mountain. There are also several dens below the 300ft buffer that were confirmed during the Pennsylvania pipeline Phase II surveys in 2014 and 2015.*

On June 2, 2023, the PFBC provided the following recommendations after receipt of the above-referenced surveys:

We are concerned about direct and indirect effects that the proposed project could have on the local population of the Timber Rattlesnake. Work should be conducted between April 15-October 15 and we recommend that you take the following precautions to safeguard workers and rattlesnakes:

1. A PFBC approved Timber Rattlesnake biologist who has the proper permits (Scientific Collector's Permit), and the proper skills to handle this venomous species will be on-site prior to and during construction. Enclosed is the list of PFBC approved rattlesnake biologists for your convenience.
2. The PFBC approved Timber Rattlesnake biologist will be on-site prior to and during construction activities, during the above time frame, to inspect and clear the area (including staging areas and access roads) of Timber Rattlesnakes and to capture and remove any rattlesnakes that may interfere with work activities.
3. Timber Rattlesnakes observed on-site are to be measured, sexed, and the habitat characterized where the snake was found. All captured snakes should be released within close proximity (under 100 meters) of the capture site if possible. Rattlesnake captures and relocations are to be documented by photographs, habitat descriptions, in addition to being mapped and labeled accordingly. The biologist is to submit a report to this office (Natural Diversity Section) following the completion of the project documenting all of the activity and herpetofauna encountered.
4. If erosion control fabric is to be used at this site, materials that are known to reduce the risk of snake entrapment should be selected, such as loosely woven natural fiber ECM. Use of monofilament/plastic netting should be avoided.



5. Workers responsible for implementing this project should be advised that Timber Rattlesnakes may be encountered and that avoidance is the best means of minimizing risks to personal safety. It is suggested a procedure be implemented for Timber Rattlesnake encounters and workers are to be advised that the Timber Rattlesnake is a state protected species and is not to be harmed. Killing of Timber Rattlesnakes is prohibited by the Commission pursuant to 58 Pa. Code Section 79.6.

6. The well pad area appears to have some basking habitat for snakes. Basking rocks for gestating females can be replaced using the habitat creation guidance document attached.

7. During the construction period, PFBC personnel may communicate with the on-site biologist and may visit the site area periodically to view the progression of the project and answer any questions or concerns that may arise. For safety purposes, PFBC personnel will register with the on-site manager upon entering the construction area.

On July 31, 2023, the PFBC provided the below additional recommendations:

As proposed in email correspondence (July 26, 2023), Upward Broadband will agree to construct a temporary fence, to reduce the access of snakes into the tower area. This fence will be constructed by Upward Broadband and reviewed by Phil Dunning/WHM and be constructed prior to October 15th. To confirm no impacts to snakes, ground disturbing activities conducted within this area and prior to October 15 will be monitored by Phil Dunning/WHM. After October 15 or a date prior as determined by Phil Dunning/WHM, the area will be assumed to be free of snakes and ground disturbing activities may proceed without a monitor. With the incorporation of these BMPs, Joshua Brown from the PA Boat & Fish Commission has agreed to allow Upward Broadband to proceed with construction through the winter months from Oct 16th through April 14th.

Based on a review of the habitat for the above-listed species, compared to an analysis of the habitat present on the site location, and the implementation of the referenced PFBC precautions, it is not anticipated that the proposed telecommunications tower will affect listed or proposed protected species or critical habitats.

The Migratory Bird Treaty Act of 1918 (MBTA) decrees that migratory birds and their parts (including eggs, nests, and feathers) are federally protected. The MBTA is the domestic law that affirms, or implements, the United States' commitment to four international conventions (with Canada, Japan, Mexico, and Russia) for the protection of a shared migratory bird resource. Each of the conventions protect selected species of birds that are common to these countries (i.e., they occur in these countries at some point during their annual life cycle). The following migratory birds of concern were identified within the vicinity of the site on the IPaC:

Species Name	Bird of Conservation Concern (BCC)	Seasonal Occurrence in Project Area
Bald Eagle (<i>Haliaeetus leucocephalus</i>)	No	January through December
Black-capped Chickadee (<i>Poecile atricapillus</i>)	Yes	April through July
Eastern Whip-poor-will (<i>Antrostomus vociferus</i>)	Yes	May through August
Golden-winged Warbler (<i>Vermivora chrysoptera</i>)	Yes	May through July



Species Name	Bird of Conservation Concern (BCC)	Seasonal Occurrence in Project Area
Prairie Warbler (<i>Setophaga discolor</i>)	Yes	May through July
Wood Thrush (<i>Hylocichla mustelina</i>)	Yes	May through August

If construction is to occur during breeding season, a preconstruction nesting survey is recommended as a mitigation measure.

USFWS recommendations published in Revised Guidelines for Communication Tower Design, Siting, Construction, Operation, Retrofitting, and Decommissioning (2021) state the preferred tower height to decrease potential effects on migratory birds is less than 200 feet tall. Siting and design process for this project could not conform to all the USFWS recommendations; however, mitigating factors proposed for implementation at the site include the following: limiting the tower height to 199 feet, location in minimally sensitive areas, and eliminating the need for guy wires.

Based on Terracon’s analysis and reconnaissance, effects related to the Timber Rattlesnake can be avoided and or minimized with the implementation of the management precautions outlined by the PFBC. The proposed site activities are not anticipated to effect other listed or proposed protected species or critical habitats. With the exception of a post-construction report to the PFBC addressing the Timber Rattlesnake, no further coordination is required with jurisdictional agencies at this time.

Please feel free to contact our office at 856-813-3267 if you need additional information.

Sincerely,
Terracon Consultants, Inc.

Kathryn Eisele

Kathryn A. Eisele
 Sr. Project Manager

Paul DeAngelo

Paul DeAngelo
 Senior Principal / Department Manager
 Environmental

- Attachments:** Tower Site Evaluation Form
 Topographic Site Location Map
 National Wetlands Inventory Map
 Site Plans
 Photographs
 IPaC Report
 PDNI Receipt
 Phase II Absence/Presence Survey, May 2023
 PFBC Letter, June 2, 2023
 PFBC Letter, July 31, 2023



TOWER SITE USFWS EVALUATION FORM

1. Location (attach map) State: Pennsylvania County: Huntingdon
Latitude/Longitude: 40° 19' 3.18" N / 77° 46' 8.38" W Elevation: 1,895.75 feet
City and Highway Direction: Tell Township, West of Route 522

2. Will the equipment be co-located on an existing FCC Licensed tower or other existing structure (building, billboard, etc.)? No If yes, type of structure: n/a

IF YES, NO FURTHER INFORMATION IS REQUIRED

If No, provide proposed specifications for new tower:

Height: 199 feet Construction type: Self-support tower

Guy-wired? No Number of bands: n/a Total Number of wires: n/a

Lighting (Security & Aviation): None

***IF TOWER WILL BE LIGHTED OR GUY-WIRED, COMPLETE ITEMS 3-18.
IF NOT, COMPLETE ONLY ITEMS 17 AND 18.***

3. Area of tower footprint in acres or square feet: _____

4. Length and width of access road in feet: _____

5. General description of terrain, mountainous, rolling hills, etc. (attach photographs):

6. Meteorological conditions (incidence of fog, low ceilings, etc.): _____

7. Soil type(s): _____

8. Habitat types and land use on and adjacent to the site:

Type: _____ Percent/acreage: _____

9. Dominant vegetative species in each habitat type: _____

10. Average diameter breast height of dominant tree species in forested areas: _____

11. Will construction cause fragmentation of a larger habitat into two or more smaller blocks? _____ If yes, describe: _____

12. Evidence of bird roosts or rookeries present? _____ If yes, describe: _____

13. Distance to nearest wetland area (swamp, marsh, riparian, marine, etc.), and coastline: _____

14. Distance to nearest telecommunications tower: _____

15. Potential to collocate antennas on existing towers or structures: _____

16. Have measures been incorporated to minimize impacts on migratory birds? _____
If yes, describe: _____

17. Has an evaluation been made to determine if the proposed facility may affect listed or proposed endangered or threatened species or their habitats as required by FCC regulation at 47 CFR 1.1307(a)(3)? Yes If yes, present findings: _____
No endangered or threatened species or critical habitats will be affected by the proposed project.

18. Additional information required: None _____

Please refer to Appendix B for Site Figures

Please refer to Appendix F for Site Photographs



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Pennsylvania Ecological Services Field Office
110 Radnor Road Suite 101
State College, PA 16801-7987
Phone: (814) 234-4090 Fax: (814) 234-0748

In Reply Refer To:
Project Code: 2023-0073759
Project Name: Shade Mountain

April 25, 2023

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

To Whom It May Concern:

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

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-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 ECOS-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:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

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

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

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/birds/policies-and-regulations/executive-orders/e0-13186.php>.

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

Attachment(s):

- Official Species List
 - USFWS National Wildlife Refuges and Fish Hatcheries
 - Migratory Birds
 - Wetlands
-

OFFICIAL SPECIES LIST

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

This species list is provided by:

Pennsylvania Ecological Services Field Office

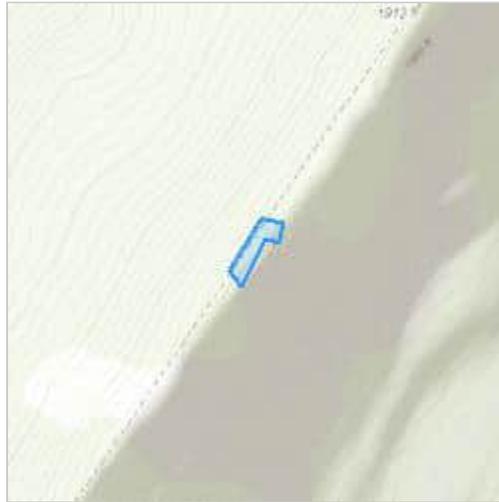
110 Radnor Road Suite 101
State College, PA 16801-7987
(814) 234-4090

PROJECT SUMMARY

Project Code: 2023-0073759
Project Name: Shade Mountain
Project Type: Communication Tower New Construction
Project Description: New construction of Irregular 60' X120' fenced graveled compound with proposed 195ft self support lattice tower with new electric utility lines and 8'x8' shelter, backup generator and 1000gal above ground storage tank.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@40.31729785,-77.7693863750917,14z>



Counties: Huntingdon County, Pennsylvania

ENDANGERED SPECIES ACT SPECIES

There is a total of 4 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. Note that 1 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, 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.

-
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 <i>Myotis sodalis</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> ▪ The monarch is a candidate species and not yet listed or proposed for listing. There are generally no section 7 requirements for candidate species (FAQ found here: https://www.fws.gov/savethemonarch/FAQ-Section7.html). Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

FLOWERING PLANTS

NAME	STATUS
Northeastern Bulrush <i>Scirpus ancistrochaetus</i>	Endangered
Population:	
No critical habitat has been designated for this species.	
Species profile: https://ecos.fws.gov/ecp/species/6715	

CRITICAL HABITATS

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

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

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

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

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern \(BCC\) list](#) or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

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

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Sep 1 to Aug 31
Black-capped Chickadee <i>Poecile atricapillus praticus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 10 to Jul 31
Eastern Whip-poor-will <i>Antrostomus vociferus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Aug 20

NAME	BREEDING SEASON
Golden-winged Warbler <i>Vermivora chrysoptera</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8745	Breeds May 1 to Jul 20
Prairie Warbler <i>Dendroica discolor</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Jul 31
Wood Thrush <i>Hylocichla mustelina</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

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

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

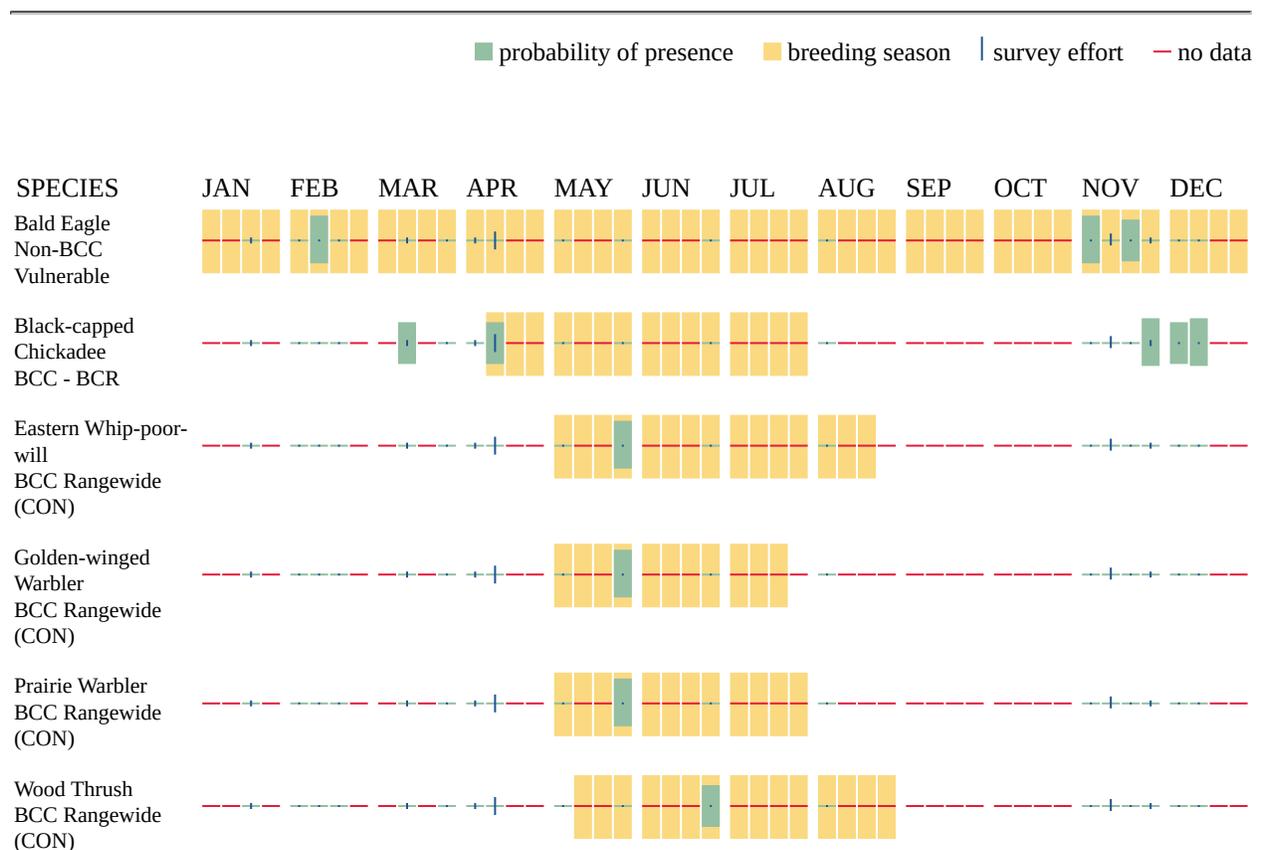
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

No Data (-)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>

- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

MIGRATORY BIRDS FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look

at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be

aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

WETLANDS

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

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

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

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

IPAC USER CONTACT INFORMATION

Agency: Terracon
Name: Angela Maroti
Address: 2105 Newpoint Place
Address Line 2: Suite 600
City: Lawrenceville
State: GA
Zip: 30043
Email: angela.maroti@terracon.com
Phone: 8303055445

1. PROJECT INFORMATION

Project Name: **Rural Broadband Infrastructure Expansion in the Alleghenies Project (Upward Broadband) Shade Mtn**

Date of Review: **1/9/2023 12:10:43 PM**

Project Category: **Communication, Cell or communication tower (include access roads in project area), new tower**

Project Area: **0.41 acres**

County(s): **Huntingdon**

Township/Municipality(s): **TELL TOWNSHIP**

ZIP Code:

Quadrangle Name(s): **AUGHWICK**

Watersheds HUC 8: **Lower Juniata**

Watersheds HUC 12: **Blacklog Creek; Trough Spring Branch-Tuscarora Creek**

Decimal Degrees: **40.316622, -77.769835**

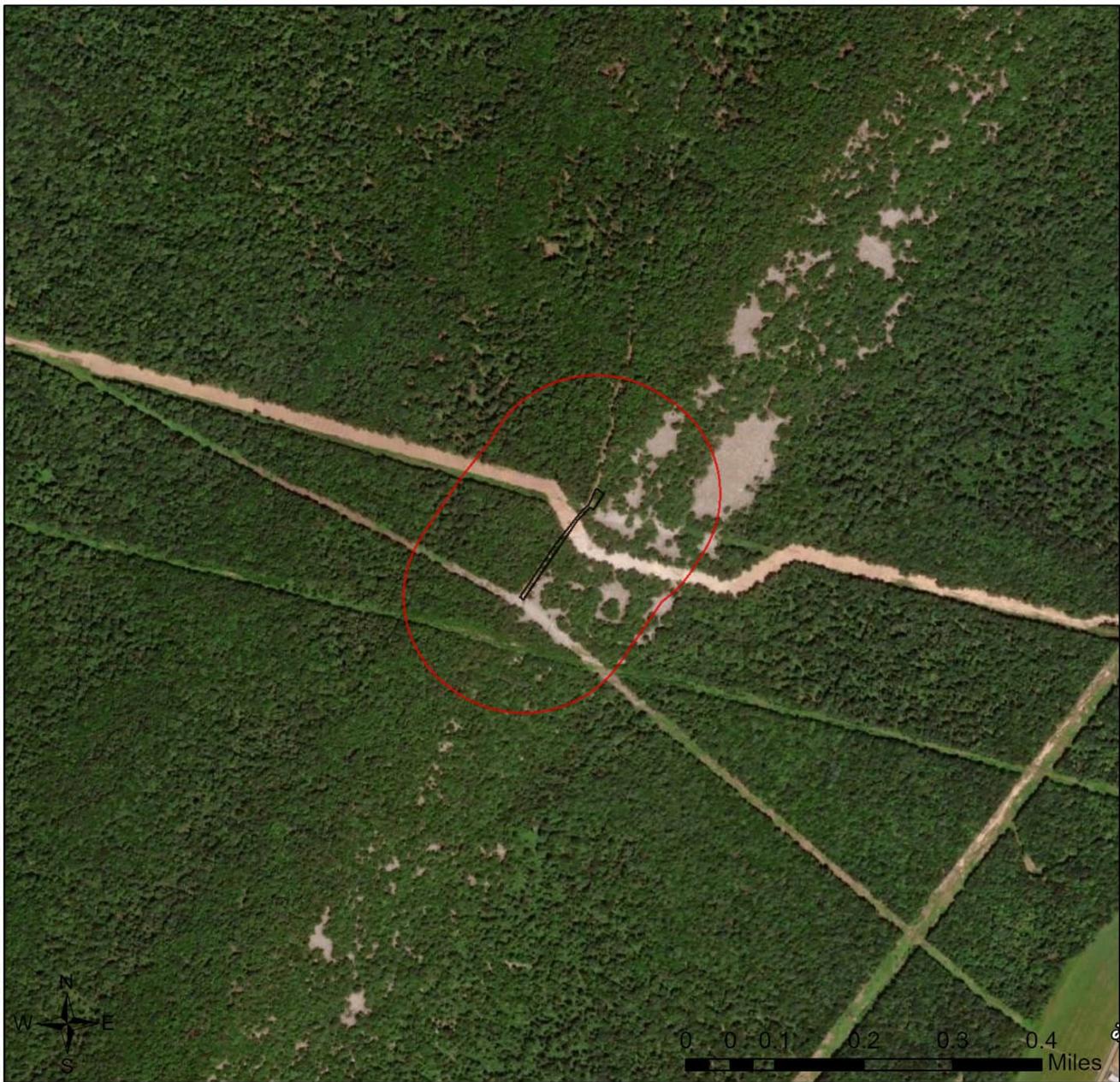
Degrees Minutes Seconds: **40° 18' 59.8403" N, 77° 46' 11.4058" W**

2. SEARCH RESULTS

Agency	Results	Response
PA Game Commission	No Known Impact	No Further Review Required
PA Department of Conservation and Natural Resources	No Known Impact	No Further Review Required
PA Fish and Boat Commission	Potential Impact	FURTHER REVIEW IS REQUIRED, See Agency Response
U.S. Fish and Wildlife Service	No Known Impact	No Further Review Required

As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate there may be potential impacts to threatened and endangered and/or special concern species and resources within the project area. If the response above indicates "No Further Review Required" no additional communication with the respective agency is required. If the response is "Further Review Required" or "See Agency Response," refer to the appropriate agency comments below. Please see the DEP Information Section of this receipt if a PA Department of Environmental Protection Permit is required.

Rural Broadband Infrastructure Expansion in the Alleghenies Project (Upward Broadband)

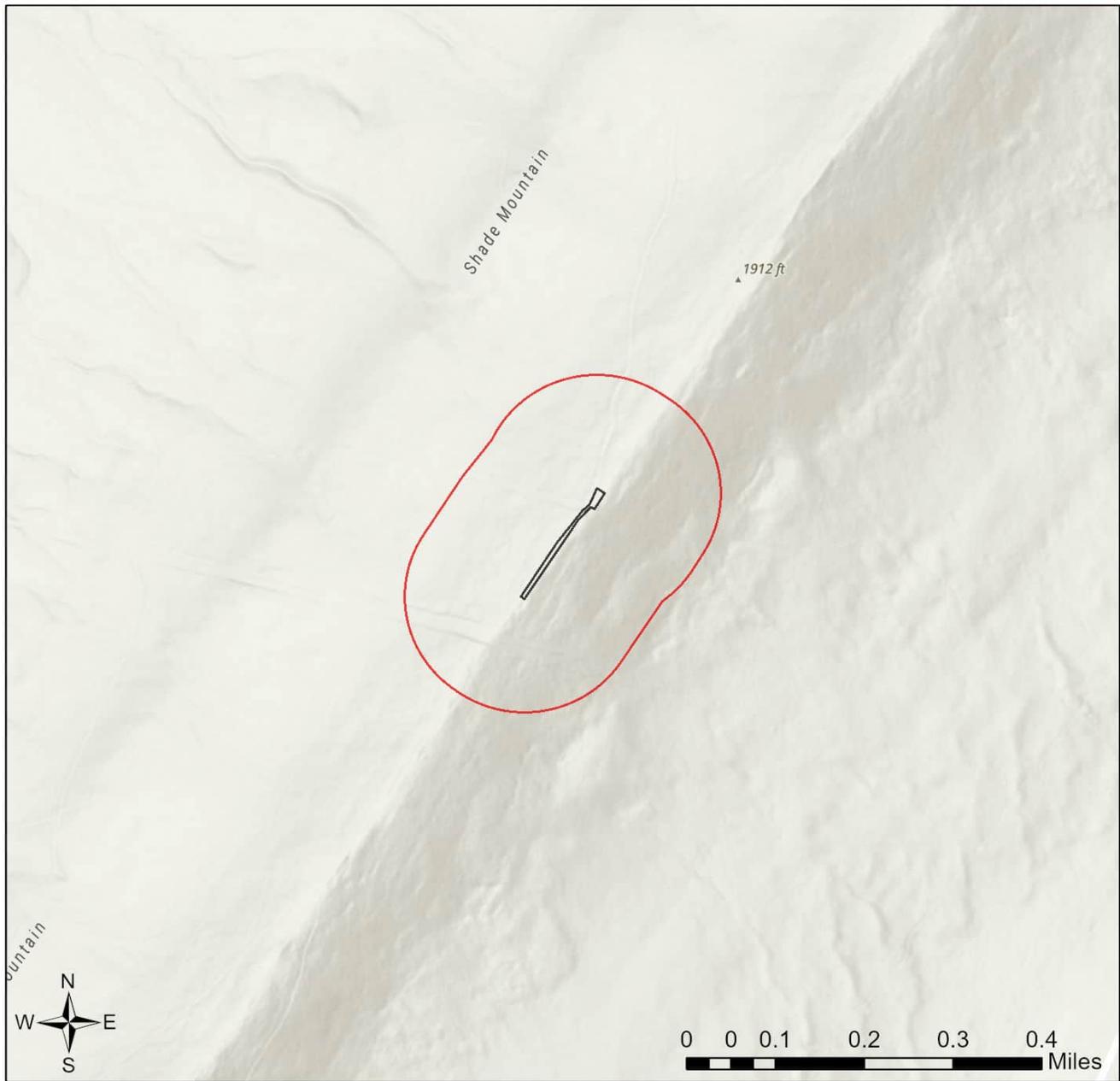


-  Buffered Project Boundary
-  Project Boundary



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

Rural Broadband Infrastructure Expansion in the Alleghenies Project (Upward Broadband)



-  Buffered Project Boundary
-  Project Boundary



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

RESPONSE TO QUESTION(S) ASKED

Q1: Which of the following accurately describes the habitats on and within 650 feet of the project area? "Project area" includes all features of the project (including buildings, roads, utility lines, outfall and intake structures, wells, stormwater retention/detention basins, parking lots, driveways, lawns, etc.), as well as all associated impacts (e.g., temporary staging areas, work areas, temporary road crossings, areas subject to grading or clearing, etc.). Include all areas that will be permanently or temporarily affected -- either directly or indirectly -- by any type of disturbance (e.g., land clearing, grading, tree removal, flooding, etc.).

Your answer is: Field investigations confirm that large rocks or boulders, talus or scree, rock outcrops, boulder fields, quarries, caves and associated passages, cliffs, abandoned highwalls from previous surface mining, and abandoned deep mines ARE NOT located in or within 650 feet of the project area. (Information concerning all areas that were field investigated is available upon request.)

3. AGENCY COMMENTS

Regardless of whether a DEP permit is necessary for this proposed project, any potential impacts to threatened and endangered species and/or special concern species and resources must be resolved with the appropriate jurisdictional agency. In some cases, a permit or authorization from the jurisdictional agency may be needed if adverse impacts to these species and habitats cannot be avoided.

These agency determinations and responses are **valid for two years** (from the date of the review), and are based on the project information that was provided, including the exact project location; the project type, description, and features; and any responses to questions that were generated during this search. If any of the following change: 1) project location, 2) project size or configuration, 3) project type, or 4) responses to the questions that were asked during the online review, the results of this review are not valid, and the review must be searched again via the PNDI Environmental Review Tool and resubmitted to the jurisdictional agencies. The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer impacts than what is listed on this PNDI receipt. The jurisdictional agencies **strongly advise against** conducting surveys for the species listed on the receipt prior to consultation with the agencies.

PA Game Commission

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Department of Conservation and Natural Resources

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Fish and Boat Commission

RESPONSE:

Further review of this project is necessary to resolve the potential impact(s). Please send project information to this agency for review (see WHAT TO SEND).

PFBC Species: (Note: The Pennsylvania Conservation Explorer tool is a primary screening tool, and a desktop review may reveal more or fewer species than what is listed below.)

Scientific Name	Common Name	Current Status
Sensitive Species**		Special Concern Species*

U.S. Fish and Wildlife Service

RESPONSE:

No impacts to **federally** listed or proposed species are anticipated. Therefore, no further consultation/coordination under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq. is required. Because no take of federally listed species is anticipated, none is authorized. This response does not reflect potential Fish and Wildlife Service concerns under the Fish and Wildlife Coordination Act or other authorities.

* Special Concern Species or Resource - Plant or animal species classified as rare, tentatively undetermined or candidate as well as other taxa of conservation concern, significant natural communities, special concern populations (plants or animals) and unique geologic features.

** Sensitive Species - Species identified by the jurisdictional agency as collectible, having economic value, or being susceptible to decline as a result of visitation.

WHAT TO SEND TO JURISDICTIONAL AGENCIES

If project information was requested by one or more of the agencies above, upload* or email the following information to the agency(s) (see AGENCY CONTACT INFORMATION). Instructions for uploading project materials can be found [here](#). This option provides the applicant with the convenience of sending project materials to a single location accessible to all three state agencies (but not USFWS).

*If information was requested by USFWS, applicants must email, or mail, project information to IR1_ESPenn@fws.gov to initiate a review. USFWS will not accept uploaded project materials.

Check-list of Minimum Materials to be submitted:

____ Project narrative with a description of the overall project, the work to be performed, current physical characteristics of the site and acreage to be impacted.

____ A map with the project boundary and/or a basic site plan (particularly showing the relationship of the project to the physical features such as wetlands, streams, ponds, rock outcrops, etc.)

In addition to the materials listed above, USFWS REQUIRES the following

____ **SIGNED** copy of a Final Project Environmental Review Receipt

The inclusion of the following information may expedite the review process.

____ Color photos keyed to the basic site plan (i.e. showing on the site plan where and in what direction each photo was taken and the date of the photos)

____ Information about the presence and location of wetlands in the project area, and how this was determined (e.g., by a qualified wetlands biologist), if wetlands are present in the project area, provide project plans showing the location of all project features, as well as wetlands and streams.

4. DEP INFORMATION

The Pa Department of Environmental Protection (DEP) requires that a signed copy of this receipt, along with any required documentation from jurisdictional agencies concerning resolution of potential impacts, be submitted with applications for permits requiring PNDI review. Two review options are available to permit applicants for handling PNDI coordination in conjunction with DEP's permit review process involving either T&E Species or species of special concern. Under sequential review, the permit applicant performs a PNDI screening and completes all coordination with the appropriate jurisdictional agencies prior to submitting the permit application. The applicant will include with its application, both a PNDI receipt and/or a clearance letter from the jurisdictional agency if the PNDI Receipt shows a Potential Impact to a species or the applicant chooses to obtain letters directly from the jurisdictional agencies. Under concurrent review, DEP, where feasible, will allow technical review of the permit to occur concurrently with the T&E species consultation with the jurisdictional agency. The applicant must still supply a copy of the PNDI Receipt with its permit application. The PNDI Receipt should also be submitted to the appropriate agency according to directions on the PNDI Receipt. The applicant and the jurisdictional agency will work together to resolve the potential impact(s). See the DEP PNDI policy at <https://conservationexplorer.dcnr.pa.gov/content/resources>.

5. ADDITIONAL INFORMATION

The PNDI environmental review website is a preliminary screening tool. There are often delays in updating species status classifications. Because the proposed status represents the best available information regarding the conservation status of the species, state jurisdictional agency staff give the proposed statuses at least the same consideration as the current legal status. If surveys or further information reveal that a threatened and endangered and/or special concern species and resources exist in your project area, contact the appropriate jurisdictional agency/agencies immediately to identify and resolve any impacts.

For a list of species known to occur in the county where your project is located, please see the species lists by county found on the PA Natural Heritage Program (PNHP) home page (www.naturalheritage.state.pa.us). Also note that the PNDI Environmental Review Tool only contains information about species occurrences that have actually been reported to the PNHP.

6. AGENCY CONTACT INFORMATION

PA Department of Conservation and Natural Resources

Bureau of Forestry, Ecological Services Section
400 Market Street, PO Box 8552
Harrisburg, PA 17105-8552
Email: RA-HeritageReview@pa.gov

PA Fish and Boat Commission

Division of Environmental Services
595 E. Rolling Ridge Dr., Bellefonte, PA 16823
Email: RA-FBPACENOTIFY@pa.gov

U.S. Fish and Wildlife Service

Pennsylvania Field Office
Endangered Species Section
110 Radnor Rd; Suite 101
State College, PA 16801
Email: IR1_ESPenn@fws.gov
NO Faxes Please

PA Game Commission

Bureau of Wildlife Management
Division of Environmental Review
2001 Elmerton Avenue, Harrisburg, PA 17110-9797
Email: RA-PGC_PNDI@pa.gov
NO Faxes Please

7. PROJECT CONTACT INFORMATION

Name: _____
Company/Business Name: _____
Address: _____
City, State, Zip: _____
Phone:(_____) _____ Fax:(_____) _____
Email: _____

8. CERTIFICATION

I certify that ALL of the project information contained in this receipt (including project location, project size/configuration, project type, answers to questions) is true, accurate and complete. In addition, if the project type, location, size or configuration changes, or if the answers to any questions that were asked during this online review change, I agree to re-do the online environmental review.

applicant/project proponent signature

date

Science Collaborating with Business
for Better Environmental Solutions



UPWARD BROADBAND, LLC.

**RURAL BROADBAND INFRASTRUCTURE EXPANSION
PROJECT**

HUNTINGDON COUNTY, PENNSYLVANIA

TIMBER RATTLESNAKE (*Crotalus horridus*)
PHASE II PRESENCE/ABSENCE SURVEY REPORT

MAY 2023

Prepared for:



*Upward Broadband, LLC
3105 Lincoln Highway East
Paradise, PA 17562*

Prepared By:



366 Walker Drive
Suite 300
State College, PA 16801
Phone: 814-689-1650 Fax: 814-689-1557



UPWARD BROADBAND, LLC
RURAL BROADBAND INFRASTRUCTURE EXPANSION PROJECT

TIMBER RATTLESNAKE (*Crotalus horridus*)
PHASE II PRESENCE/ABSENCE SURVEY REPORT

Table of Contents

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- 1.0 Executive Summary
- 2.0 Introduction
- 3.0 Phase II Presence/Absence Survey
 - 3.1 Presence/Absence Survey Methodology
 - 3.2 Presence/Absence Survey Area Results
- 4.0 Conclusions & Mitigation Measures
- 5.0 References

Attachments

- A) Phase I Habitat Survey Report
- B) Resumes
- C) Representative Photographs
- D) Survey Results Map

UPWARD BROADBAND, LLC
RURAL BROADBAND INFRASTRUCTURE EXPANSION PROJECT

TIMBER RATTLESNAKE (*Crotalus horridus*)
PHASE II PRESENCE/ABSENCE SURVEY REPORT

1.0 EXECUTIVE SUMMARY

This report summarizes the 2023 timber rattlesnake (*Crotalus horridus*) Phase II presence/absence survey conducted by WHM Consulting, LLC (WHM) for the Upward Broadband, LLC Rural Broadband Infrastructure Expansion Project (Project). Onsite Phase II surveys for the state-listed species of special concern, timber rattlesnake, were conducted on May 8, May 10, May 12, and May 14 of 2023. The surveys were conducted by Philip R. Dunning (PFBC Qualified Timber Rattlesnake Surveyor) and field assistants in accordance with the PFBC Natural Diversity Section - Timber Rattlesnake Presence-Absence Survey Guidelines, Revised February 11, 2015 (PFBC 2015). Fifteen (15) timber rattlesnakes were observed in denning habitat below the LOD during the surveys.

2.0 INTRODUCTION

WHM was retained by Upward Broadband, LLC, to conduct Phase I Habitat Assessment surveys for the timber rattlesnake (*Crotalus horridus*), state-listed as a species of special concern by the Pennsylvania Fish and Boat Commission (PFBC) for the Project. A Phase I survey was conducted April 12, 2023 (see Attachment A). Phase II presence/absence surveys were conducted in the spring of 2023. The purpose of the Phase II investigations was to determine whether timber rattlesnakes were present in potential denning habitat for the timber rattlesnake that exists within 300' of the limit of disturbance (LOD) of the proposed Project. This report provides information on the methodology, data collected, survey findings, and conclusions pertaining to the presence/absence surveys in the potential timber rattlesnake habitat identified in the study area.

3.0 PHASE II PRESENCE/ABSENCE SURVEY

3.1 PRESENCE/ABSENCE SURVEY METHODOLOGY

Standard timber rattlesnake Phase II presence/absence survey protocol was utilized for the presence/absence surveys for timber rattlesnakes (PFBC 2015). Under these guidelines, proposed developments in potential timber rattlesnake denning habitat require at least four (4) independent site surveys (on non-consecutive days) between April 15 and May 15 in order to determine presence or absence of the species.

Following PFBC guidelines, weather conditions and habitat parameters were recorded during all survey efforts. These data included percentage of air and ground temperatures, relative humidity, and wind speed. Field surveys were only conducted during favorable weather conditions, i.e. shaded air temperatures of at least 65°F (18.3°C) and sun-exposed ground temperatures of at least 75°F (23.9°C). Potential denning habitat areas were surveyed four (4) times during the appropriate season in all areas of potential habitat located at or within 300' of the Project. Experienced herpetologists with timber rattlesnake survey experience from WHM conducted the surveys at the Project site. The list of rattlesnake surveyors includes: PFBC qualified timber rattlesnake surveyor Philip

Dunning, and field assistants Curtis George, Charly Bloom, and Stacy Foster (see Attachment B – Resumes). Areas of confirmed denning habitat were delineated using a Trimble GeoHX global positioning system (GPS) unit and documented using digital cameras for a geo-referenced photographic representation of confirmed habitat and timber rattlesnakes (see Attachment C).

3.2 PRESENCE/ABSENCE SURVEY AREA RESULTS

Timber rattlesnakes were observed in the denning area below the LOD during the phase II denning surveys. Tables 3-1, 3-2, 3-3, and 3-4, describe the habitat results. Table 3-1 describes the herpetofauna found during the surveys. Table 3-2 outlines the size, color, and sex of timber rattlesnakes observed during phase II surveys. Table 3-3 outlines the weather conditions during each survey. Mapping of the survey results can be found in Attachment D.

TABLE 3-1: SUMMARY OF HERPETOFAUNA OBSERVED		
DATE (2023)	HERPETOFAUNA SPECIES OBSERVED	NUMBER
5/8	Timber Rattlesnake	4
5/10	Timber Rattlesnake	4
5/12	Timber Rattlesnake	6
	Eastern Fence Lizard	7
5/14	Timber Rattlesnake	1

TABLE 3-2: TIMBER RATTLESNAKE OBSERVATIONS ALONG THE RURAL BROADBAND INFRASTRUCTURE PROJECT						
Date	Snake ID	Latitude/Longitude (NAD83)	Total Length (in.)	Sex	Color	Comments
5/8	TR1	40.317245N -77.769115W	+/- 40	Male	Black	Coming up from denning area about to cross onto access road.
5/8	TR2	40.316752N -77.769290W	+/- 16	Unknown	Black	Coiled basking in scree slide.
5/8	TR3	40.317028N -77.769132W	+/- 16	Unknown	Black	Coiled basking in scree slide.
5/8	TR4	40.317093N -77.769075W	+/- 38	Male	Yellow	Slithering across scree slide.
5/10	TR5	40.316966N -77.768470W	+/- 36	Unknown	Black	Slithering up scree slide.
5/10	TR6	40.316982N -77.768460W	+/- 18	Unknown	Yellow	Basking in denning habitat.
5/10	TR7	40.316757N -77.769429W	+/- 32	Female	Black	Coiled under rock in denning habitat.
5/10	TR8	40.316792N -77.769318W	+/- 12	Unknown	Black	Basking on slide in denning habitat.
5/12	TR9	40.316846N -77.769272W	+/- 33	Female	Black	Coiled basking in scree slide.
5/12	TR10	40.316706N -77.769391W	+/- 31	Female	Black	Coiled basking in scree slide.
5/12	TR11	40.316706N -77.769391W	+/- 33	Unknown	Black	Coiled basking in scree slide.
5/12	TR12	40.316558N -77.769227W	+/- 32	Unknown	Yellow	Coiled basking in scree slide.

TABLE 3-2: TIMBER RATTLESNAKE OBSERVATIONS ALONG THE RURAL BROADBAND INFRASTRUCTURE PROJECT						
Date	Snake ID	Latitude/Longitude (NAD83)	Total Length (in.)	Sex	Color	Comments
5/12	TR13	40.316895N -77.768230W	+/- 40	Male	Yellow	Coiled basking in scree slide.
5/12	TR14	40.316895N -77.768230W	+/- 30	Female	Yellow	Coiled basking in scree slide.
5/14	TR15	40.317103N -77.768591W	+/- 32	Unknown	Yellow	Coiled basking in scree slide.

TABLE 3-3: SUMMARY OF SURVEY WEATHER CONDITIONS													
Date 2023	Denning Area	START						END					
		Time	Air Temp (° F)	Ground Temp (° F)	RH (%)	Wind (mph)	Cloud Cover (%)	Time	Air Temp (° F)	Ground Temp (° F)	RH (%)	Wind (mph)	Cloud Cover (%)
5/8	All Habitat Areas	1130	66.1	77.2	61.2	3.1	70	1425	69.3	79.2	56.2	2.1	60
5/10	All Habitat Areas	1140	65.7	78.3	44.1	0.6	5	1440	73.1	81.9	40.9	0.9	3
5/12	All Habitat Areas	1045	73.5	84.9	37.4	0.6	5	1530	87.1	93.8	31.2	0.8	10
5/14	All Habitat Areas	1020	68.6	76.2	40.5	0.4	0	1345	70.1	79.3	44.1	1.8	5

RH = Relative Humidity

4.0 CONCLUSIONS & MITIGATION MEASURES

During timber rattlesnake Phase II presence/absence surveys, timber rattlesnakes were observed in several areas of the potential denning habitat just below the Rural Broadband Infrastructure Expansion Project. One male was also observed crossing through the LOD and access road before disappearing on the north side of the mountain. There are also several dens below the 300ft buffer that were confirmed during the Pennsylvania pipeline Phase II surveys in 2014 and 2015. The Pennsylvania Fish & Boat Commission (PFBC) has requested the following mitigation measures on similar Projects that would include:

1. If construction or blasting occurs between April 15 and October 15, have a qualified construction site monitor on site for all construction activities.
2. Inform site workers about timber rattlesnakes and not to kill or harass any snakes on site.

5.0 REFERENCES

Pennsylvania Fish and Boat Commission (PFBC). 2010. Pennsylvania Fish & Boat Commission Natural Diversity Section Timber Rattlesnake Presence-Absence Survey Guidelines Revised February 11, 2015.

ATTACHMENT A
PHASE I HABITAT SURVEY REPORT

Science Collaborating with Business
for Better Environmental Solutions



UPWARD BROADBAND, LLC

**RURAL BROADBAND INFRASTRUCTURE EXPANSION
PROJECT**

HUNTINGDON COUNTY, PENNSYLVANIA

TIMBER RATTLESNAKE (*Crotalus horridus*)
PHASE I HABITAT ASSESSMENT REPORT

APRIL 2023

Prepared for:



*Upward Broadband, LLC
3105 Lincoln Highway East
Paradise, PA 17562*

Prepared By:



366 Walker Drive
Suite 300
State College, PA 16801
Phone: 814-689-1650 Fax: 814-689-1557



UPWARD BROADBAND, LLC
RURAL BROADBAND INFRASTRUCTURE EXPANSION PROJECT

TIMBER RATTLESNAKE (*Crotalus horridus*)
PHASE I HABITAT ASSESSMENT REPORT

Table of Contents

Sections

- 1.0 Executive Summary
- 2.0 Introduction
- 3.0 Phase I Habitat Assessment
 - 3.1 Phase I Habitat Assessment Methodology
 - 3.2 Phase I Habitat Assessment Results
- 4.0 Conclusions & Mitigation Measures
- 5.0 References

Attachments

- A) Survey Area & Results Maps
- B) Resumes
- C) Representative Photographs
- D) PFBC Timber Rattlesnake Assessment Data Forms
- E) PFBC Correspondence
- F) Site Plan

UPWARD BROADBAND, LLC
RURAL BROADBAND INFRASTRUCTURE EXPANSION PROJECT

TIMBER RATTLESNAKE (*Crotalus horridus*)
PHASE I HABITAT ASSESSMENT SURVEY REPORT

1.0 EXECUTIVE SUMMARY

This report summarizes the 2023 timber rattlesnake (*Crotalus horridus*) Phase I habitat assessment conducted by WHM Consulting, LLC (WHM) for the Upward Broadband, LLC Rural Broadband Infrastructure Expansion Project (Project). An onsite Phase I survey for the state-listed species of special concern, timber rattlesnake, was conducted on April 12, 2023. The survey was conducted by Philip R. Dunning (PFBC Qualified Timber Rattlesnake Surveyor) and field assistant in accordance with the PFBC Natural Diversity Section - Timber Rattlesnake Presence-Absence Survey Guidelines, Revised February 11, 2015 (PFBC 2015). Potential suitable denning and gestation habitat was identified near the limits of disturbance (LOD) during the survey.

2.0 INTRODUCTION

WHM was retained by Upward Broadband, LLC, to conduct a Phase I Habitat Assessment survey for the timber rattlesnake (*Crotalus horridus*), state listed as a species of special concern by the Pennsylvania Fish and Boat Commission (PFBC) for the Project. The purpose of the Phase I investigation was to determine whether habitat for the timber rattlesnake exists within 300' of the LOD of the proposed Project. This report provides information on the methodology, data collected, survey findings, and conclusions pertaining to the timber rattlesnake assessment survey area.

3.0 PHASE I HABITAT ASSESSMENT

3.1 PHASE I HABITAT ASSESSMENT METHODOLOGY

Following the PFBC's timber rattlesnake habitat assessment methodology, potential habitat is defined as denning/overwintering sites for timber rattlesnakes, as well as basking/gestation habitat (PFBC 2010). Denning habitat for the timber rattlesnake can be described as talus slopes or scree slopes, and rock outcrops and large ledges used by timber rattlesnakes to overwinter. These areas can be found in open or closed canopies. Gestation or basking habitat can be open or semi-open canopied talus or scree slides, as well as open canopied slab rock, log piles, or mountain top ledges that female timber rattlesnakes will use to gestate and give birth to young in the late summer/early fall.

Timber Rattlesnake Phase I habitat assessment surveys were conducted in Huntingdon County within a survey corridor extending 300' of the LOD. Areas of potential habitat were surveyed using handheld Trimble global positioning system (GPS) units and documented using digital cameras for a geo-referenced photographic representation of potential habitat.

3.2 PHASE I HABITAT ASSESSMENT RESULTS

A Phase I survey for potential timber rattlesnake denning and gestating habitat was conducted on April 12, 2023. Mapping of the survey area and survey result can be found in Attachment A. The maps were generated to illustrate survey areas, proposed

pipeline alignment and photograph locations. Attachment B shows the representative photographs of the site. Attachment C outlines the resumes of the PFBC Qualified Surveyor (Phillip Dunning) and assistant who participated in the field surveys for this Project. Timber rattlesnake habitat assessment data forms can be found in Attachment D. PFBC Correspondence can be found in Attachment E.

4.0 CONCLUSIONS & MITIGATION MEASURES

During timber rattlesnake Phase I presence/absence surveys, potential timber rattlesnake denning and/or gestation habitat was observed along the northwest slope and southeast slope within the survey corridor along the edge of the existing road and cell tower LOD. Open canopied log piles on the northeast section of the access road were also GPS'd and photographed. Open canopied and closed canopied rocky ledges and talus slides suitable for denning, and large open canopied rockslides suitable for gestation were observed throughout the survey area with some potential denning and gestation habitat being within the LOD. In line with PFBC's typical recommendations, WHM suggests the following measures be taken:

1. Avoid impacting any critical habitat (denning or gestation) for the timber rattlesnake. If any critical habitat cannot be avoided, Phase II presence/absence surveys may be required by the PFBC.
2. If requested by the PFBC and due to the proximity to known confirmed timber rattlesnake dens and gestation sites on the slope below the LOD, have a timber rattlesnake construction monitor on site during all construction activities, specifically any earth disturbance or rock moving, between April 15 and October 15.

5.0 REFERENCES

Pennsylvania Fish and Boat Commission (PFBC). 2010. Pennsylvania Fish & Boat Commission Natural Diversity Section Timber Rattlesnake Presence-Absence Survey Guidelines Revised February 11, 2015.

Sevon, W. D., comp. 2015. "Landforms of Pennsylvania." *Physiographic Provinces of Pennsylvania* (n.d.): n. pag. *Geology - Landforms of Pennsylvania*. Pennsylvania Department of Conservation on Natural Resources, 2015. Web. 27 July 2015.

ATTACHMENT A
SURVEY AREA & RESULTS MAPS



M:\GIS\PROJECTS\UPWARD-23-001\MXD\UpwardBroadband_ProspectLocation_04102023.mxd

WHM
consulting, LLC

366 Walker Drive, Suite 300
State College, PA 16801
Tele: 814.689.1650 Fax: 814.689.1557

UPWARD BROADBAND, LLC
RURAL BROADBAND INFRASTRUCTURE EXPANSION PROJECT

TIMBER RATTLESNAKE SURVEY MAP

SHIRLEY & TELL TOWNSHIPS

HUNTINGDON COUNTY

PENNSYLVANIA

Date:	4/25/2023
WHM DRAWING NUMBER:	UPWARD-23-001
Drawn By:	FTN
Figure Number:	1

ATTACHMENT B
REPRESENTATIVE PHOTOGRAPHS



ID: P1

Taken by: PD

Comments: Facing north, view of logs in the northeast section of LOD that could be used to bask by rattlesnakes.



ID: P2

Taken by: PD

Comments: Facing southwest, view of potential gestation habitat next to the existing access road.



ID: P3

Taken by: PD

Comments:
Facing northeast, view of potential denning and gestation that was typical throughout the survey area.



ID: P4

Taken by: PD

Comments:
Looking south, view of eastern ratsnake basking in potential denning habitat on the slope south of the LOD.



ID: P5

Taken by: PD

Comments:
Facing west, view of scree slide that could be used for denning and gestation on the existing powerline ROW adjacent to the LOD.



ID: P6

Taken by: PD

Comments:
Looking northeast, view of large scree slide that is confirmed denning and gestation for timber rattlesnakes below the LOD of the Project.



ID: P7

Taken by: PD

Comments: Facing south, view of scree slide that could be used for denning and gestation adjacent to existing road and LOD on southwest section of the Project.



ID: P8

Taken by: PD

Comments: Facing southwest, view of man made small footed myotis habitat that could be utilized for gestation by the timber rattlesnake adjacent to the LOD.

ATTACHMENT C
RESUMES

Philip R. Dunning, Senior Biologist, Senior Herpetologist

Education

- M.S., *Biological Science, East Stroudsburg University, 2007*
- B.S., *Wildlife and Fisheries Sciences, Pennsylvania State University 2003*

Certifications

- *Pennsylvania Fish & Boat Commission Approved Timber Rattlesnake Surveyor and Construction Site Monitor*
- *NJ Approved Primary Venomous Snake Monitor*

Health and Safety Training

- *ISN 0323972*
- *40 Hour HAZWOPER – June 2016*
- *8 Hour HAZWOPER Refresher – March 2020*
- *Energy Transfer Contractor Safety Orientation – December 2016*
- *Southwest Energy Training Assurance Program (TAP) – 2015 Core and Supplement – December 2016*
- *Shell Contractor HSE Handbook – September 2016*
- *Adult First Aid/CPR – American Red Heart Association, Pennsylvania – February 2016*
- *Williams Safety Training, April 2020*

Professional Training

- *Army Corps of Engineers Wetland Delineation / Regional Supplement / Waters of the United States Training – April 2016*

Mr. Dunning is recognized by the Pennsylvania Fish & Boat Commission as a Qualified Timber Rattlesnake Surveyor and by the New Jersey Endangered and Threatened Species Program as a Qualified Timber Rattlesnake Biologist and Surveyor. He specializes in surveys and studies of threatened and endangered species, general herpetological surveys, endangered mammal surveys, biological/ecological assessments, and natural resource inventories. He is also experienced in vernal pool surveys, Bog Turtle Surveys, presence/absence determination, and macro invertebrate sampling, wetland delineations, and rare, threatened, and endangered plant surveys

Professional Experience

Timber Rattlesnake Experience

- Oversees All Timber Rattlesnake Projects;
- Led/supervised/managed phase I, II and III timber rattlesnake surveys throughout Pennsylvania and New Jersey;
- Completed and submitted final technical proposals and reports related to phase I, II and III surveys and studies;
- Published presentation abstracts and popular articles in scientific journals or newsletters;
- Conducted Timber Rattlesnake construction monitoring projects; and
- Timber Rattlesnake Historic Den Assessments.

Other Relevant Experience

- Natural Environment Inventories and Analysis;
- Endangered Species Surveys;
- Qualified New Jersey Primary Venomous Snake Monitor;
- Northern Copperhead Habitat Field Work;
- Northern Copperhead Trapping for Telemetry Project;
- Bog Turtle Phase I Habitat Assessments;
- Bog Turtle Phase II Physical Surveys and Trapping Services;
- Wetland Assessments and Delineations;
- Phase I and Phase II Timber Rattlesnake Survey Crew Leader;
- Phase I Allegheny Woodrat Surveys;
- Presence/Absence surveys for Small-footed Myotis;
- Bat Mist-Netting Technician;
- Southern Hognose, Canebrake, Pine Snake Radio Tracking;
- Whip-poor-will and Chuck-Will's-Widow Point Call Survey; and
- Macro-Invertebrate Sampling;
- State Rare, Threatened, and Endangered Plant Surveys;
- Assisted in several Plant Surveys for *Glyceria obtusa*, *Platanthera blephariglottis*, *Solidago uliginosa*, and *Solidago speciosa*.

Charly Bloom (WPIT), Environmental Technician

EDUCATION

- *Environmental & Ecological Biology, Bachelor of Science, Lock Haven University, Pennsylvania, 2019.*

CERTIFICATIONS

- *Wetland Professional In Training (WPIT) - 2023*

PROFESSIONAL TRAINING

- *2022 Cohort – Chesapeake Urban Stormwater Professionals (CUSP) Program – online - 2022*
- *2022 Chapter 102/NPDES Workshop – Danville, PA – December 2022*
- *Introductory Permit Training – Gailey Environmental - Online - April 2021*
- *OSHA 40 Hour HAZWOPER Training; AllProbe Environmental; June 2019*
- *8 Hour HAZWOPER Refresher – September 2021*
- *8 Hour HAZWOPER Refresher – August 2022*
- *Adult First Aid/CPR – American Red Heart Association, Pennsylvania – January 2021*
- *Basic Wetland Delineation – Wetland Training Institute – Richmond, VA, November 2020*
- *Northeastern Plants of the Wetland Boundary Online – Wetland Training Institute – November 2020*

Ms. Bloom is a graduate from Lock Haven University in 2019, where she was awarded a Bachelors degree in Biological Environmental and Ecological Science. Ms. Bloom is an Environmental Technician that works in the field and wetland crews for WHM.

Professional Experience

General Environmental Projects

- Used GIS software for mapping and analysis
- Used a Trimble GPS for mapping boundaries for mapping purposes
- Composed various Environmental Reports/Permits for landfills, gas companies, wind farms, construction companies, private landowners, and regulatory agencies in multiple states (OH, PA, MD, NJ)

Environmental Projects

- Performed wetland monitoring and maintenance on various wetlands
- Performed Stream Surveys
- Performed wetland and watercourse delineations using US Army Corps of Engineers Wetlands Delineation Manual 1987 and applicable regional supplements

ATTACHMENT D
PFBC TIMBER RATTLESNAKE ASSESSMENT DATA FORMS

Pennsylvania Fish & Boat Commission, Natural Diversity Section
Timber Rattlesnake Habitat Assessment Form (revised 02/11/10)

Project Information

Project/Property Name: Rural Broadband Infrastructure Expansion Project SIR# 57320

Project Type/Description: Cell Phone Tower and Cable Line

Project Size* (acreage): 0.3 acres

Applicant/Landowner Name: Upward Broadband, LLC

County: Huntingdon Quad: Mount Union Township/Municipality: Tell

* Attach a copy of topographic map and a site sketch showing survey site and natural features identified.

Assessment Site Information [Areas within and at least 300 feet around the entire project area need to be assessed.]

Date: 4/12/23 Time: 11:00 AM

Site ID**: Survey Area 1

Latitude: 40.316503 N Longitude: -77.769817 W

Map Datum Used: NAD 83

Assessment Size** (acreage): 17.4 acres

** The surveyor should use his/her judgement on the size of the area that a single assessment encompasses.

Weather Conditions (Note: Assessment cannot be conducted in snow cover.)

Air temperature (°F) 74°F % Cloud Cover 10%

Habitat Description

General description: The survey area is an existing pipeline and powerline running northwest to southeast over shade mountain. The new cell tower will be on top next to an existing road and the cable will follow the road heading northwest to a cable box. The entire site excluding the existing road is an open ended scree slide with 50% being open scree and 50% shaded by trees.

Topographical description: Mountain forested slope and open scree slide and open ROW.

Slope (Degrees) 50°

Aspect Northwest to southeast (compass orientation, i.e., direction hillside faces)

Ground Cover:

% rocky ground cover: 85 %

% rocky ground cover that receives direct sunlight: 50%

List size range and shape of rocks (round, flat, etc.): Steering wheel sized to couch sized rock

Are there rock outcrops or ledges present? Yes

Are boulder fields, and/or talus/scree slopes present? Yes

Are flat gestation slabs present? Yes

Project Name Rural Broadband Infrastructure Expansion Project **Site ID #** Survey Area 1 (con't)

Vegetative Composition:

% Tree Canopy Cover 50% total (0% on ROW and in open scree slides, 95% in forested sections)

Dominant species present in and surrounding the described habitat:

Trees: White oak, red oak, black birch, yellow birch, white pine, american beech, red maple, eastern hemlock

Shrubs: Green briar, bristly dewberry, Allegheny blackberry

Other plant species of note: Grass spp., fern spp.

Species Observations

Were herpetofauna species or their signs (e.g., sheds, scat, "forms") observed on-site (include timber rattlesnake observations)? If so, what species and how many?

3 eastern ratsnakes, 1 fence lizard

Additional Comments/Observations: (use additional sheets if necessary)

Known rattlesnake and copperhead denning and gestation sites on slope below LOD

INVESTIGATOR'S OPINION

In your opinion, is there timber rattlesnake critical habitat? Yes or No

If Yes, what timber rattlesnake critical habitat occurs in this area? See below.

Potential Hibernaculum/Den Yes or No

Gestation/Birthing Yes or No

I certify that to the best of my knowledge, all of the information provided herein is accurate and complete.

Philip R. Dunning

Investigator's Name (print)

Philip Dunning

Investigator's Signature

4/14/2023

Date

Reporting, The following items need to be submitted for review:

- (1) Timber rattlesnake habitat assessment form.
- (2) A project narrative/description, exact project location, equipment to be used in earth moving activities
- (3) Color photographs of surveyed area showing: general panorama, rocky areas, and specimens observed.
- (4) Site sketch showing the location and direction of photos taken.
- (5) Topographic map showing location of area surveyed, the identified potential habitat delineated, the proposed project and associated boundaries.

Please mail these items to:

**Natural Diversity Section
PA Fish & Boat Commission
450 Robinson Lane
Bellefonte, PA 16823**

Pennsylvania Fish & Boat Commission, Natural Diversity Section
Timber Rattlesnake Habitat Assessment Form (revised 02/11/10)

Project Information

Project/Property Name: Rural Broadband Infrastructure Expansion Project SIR# 57320

Project Type/Description: Cell Phone Tower and Cable Line

Project Size* (acreage): 0.3 acres

Applicant/Landowner Name: Upward Broadband, LLC

County: Huntingdon Quad: Mount Union Township/Municipality: Tell

* Attach a copy of topographic map and a site sketch showing survey site and natural features identified.

Assessment Site Information [Areas within and at least 300 feet around the entire project area need to be assessed.]

Date: 4/12/23 Time: 11:00 AM

Site ID**: Gestation Only Sites

Latitude: 40.317170 N Longitude: -77.769384 W

Map Datum Used: NAD 83

Assessment Size** (acreage): 17.4 acres

** The surveyor should use his/her judgement on the size of the area that a single assessment encompasses.

Weather Conditions (Note: Assessment cannot be conducted in snow cover.)

Air temperature (°F) 74°F % Cloud Cover 10%

Habitat Description

General description: The 3 gestation only sites include basking logs on the north side of the existing access road near the LOD and 2 man made small footed bat habitat areas on the existing pipeline ROW. Rattlesnakes could definitely use all 3 of these areas to bask and gestate.

Topographical description: Mountain forested top, log piles, and open rock piles on open ROW above slope.

Slope (Degrees) 20°

Aspect Northwest to southeast (compass orientation, i.e., direction hillside faces)

Ground Cover:

% rocky ground cover: 85 %

% rocky ground cover that receives direct sunlight: 90%

List size range and shape of rocks (round, flat, etc.): Steering wheel sized to coffee table sized rock

Are there rock outcrops or ledges present? No

Are boulder fields, and/or talus/scree slopes present? No

Are flat gestation slabs present? Yes

Project Name Rural Broadband Infrastructure Expansion Project **Site ID #** Gestation only sites (con't)

Vegetative Composition:

% Tree Canopy Cover 30% total along road (0% on ROW and in open scree slides, 95% in forested sections)

Dominant species present in and surrounding the described habitat:

Trees: White oak, red oak, black birch, yellow birch, white pine, american beech, red maple, eastern hemlock

Shrubs: Green briar, bristly dewberry, Allegheny blackberry

Other plant species of note: Grass spp., fern spp.

Species Observations

Were herpetofauna species or their signs (e.g., sheds, scat, "forms") observed on-site (include timber rattlesnake observations)? If so, what species and how many?

3 eastern ratsnakes, 1 fence lizard

Additional Comments/Observations: (use additional sheets if necessary)

Known rattlesnake and copperhead denning and gestation sites on slope below LOD

INVESTIGATOR'S OPINION

In your opinion, is there timber rattlesnake critical habitat? Yes or No

If Yes, what timber rattlesnake critical habitat occurs in this area? See below.

Potential Hibernaculum/Den Yes or No

Gestation/Birthing Yes or No

I certify that to the best of my knowledge, all of the information provided herein is accurate and complete.

Philip R. Dunning

Investigator's Name (print)

Philip Dunning

Investigator's Signature

4/14/2023

Date

Reporting, The following items need to be submitted for review:

- (1) Timber rattlesnake habitat assessment form.
- (2) A project narrative/description, exact project location, equipment to be used in earth moving activities
- (3) Color photographs of surveyed area showing: general panorama, rocky areas, and specimens observed.
- (4) Site sketch showing the location and direction of photos taken.
- (5) Topographic map showing location of area surveyed, the identified potential habitat delineated, the proposed project and associated boundaries.

Please mail these items to:

**Natural Diversity Section
PA Fish & Boat Commission
450 Robinson Lane
Bellefonte, PA 16823**

ATTACHMENT E
PFBC CORRESPONDENCE



January 17, 2023

IN REPLY REFER TO

SIR# 57320

Upward Broadband, LLC
Jacob Lester
3105 Lincoln HWY E
Paradise, Pennsylvania 17562

**RE: Species Impact Review (SIR) – Rare, Candidate, Threatened and Endangered Species
PNDI Search No. 776366_1
Rural Broadband Infrastructure Expansion in the Alleghenies Project (Upward Broadband)
Shade Mtn
Tell Township: HUNTINGDON County**

Dear Jacob Lester:

This responds to your inquiry about a Pennsylvania Natural Diversity Inventory (PNDI) Internet Database search “potential conflict” or a threatened and endangered species impact review. These projects are screened for potential conflicts with rare, candidate, threatened or endangered species under Pennsylvania Fish and Boat Commission jurisdiction (fish, reptiles, amphibians, aquatic invertebrates only) using the Pennsylvania Natural Diversity Inventory (PNDI) database and our own files. These species of special concern are listed under the Endangered Species Act of 1973, the Wild Resource Conservation Act, and the Pennsylvania Fish and Boat Code (Chapter 75), or the Wildlife Code.

Timber Rattlesnake (*Crotalus horridus*, Species of Special Concern)

Timber Rattlesnakes occur in relatively high elevation forested, mountainous regions of the Commonwealth. They prefer forested areas to forage for small mammals (e.g., mice and chipmunks) and southerly-facing slopes for hibernating and other thermoregulatory activities. The Timber Rattlesnake is threatened by habitat loss/alteration, wanton killing, and poaching. In Pennsylvania, Timber Rattlesnakes are a protected species. Special (venomous snake) permits are needed to hunt individual rattlesnakes, and only legal sized males (>42 inches) can be taken during a restricted hunting season. However, communal overwintering and gestation habitats, where congregations of these snakes may occur, are considered critical habitats for the species and are therefore protected through the environmental review process. Also, due to the species being venomous, projects that come in close proximity to these critical habitats will likely encounter the species and potentially pose health and human safety concerns to project workers. Therefore, in these consultations, the PFBC aims to avoid and minimize impacts to the species and address health and human safety issues.

Given the proximity of the project to known critical Timber Rattlesnake habitat, we recommend that a Timber Rattlesnake habitat assessment be conducted in the project area by a qualified Timber Rattlesnake surveyor. We have included a list of qualified surveyors for your convenience. These surveyors have been vetted by the Commission and have the appropriate permits to conduct the requisite surveys. Upon completion of the habitat survey, the qualified rattlesnake biologist is to submit

a report to this office for review and comment. The habitat survey report should include color photographs of the project area (keyed to a site map or diagram) and a description of habitats occurring within the immediate area to be developed (including access roads), as well as the surrounding area. Potential Timber Rattlesnake critical habitat (denning/gestating areas) should be photographed and mapped accordingly. In addition, the report should also include detailed project plans and maps with a description of the proposed work (including access roads), project impacts and alternatives. Pending the review of this information, a survey targeting the presence of the Timber Rattlesnake in the project area and/or other project modifications may be requested.

This response represents the most up-to-date summary of the PNDI data and our files and is valid for two (2) years from the date of this letter. An absence of recorded species information does not necessarily imply species absence. Our data files and the PNDI system are continuously being updated with species occurrence information. Should project plans change or additional information on listed or proposed species become available, this determination may be reconsidered, and consultation shall be re-initiated.

If you have any questions regarding this review, please contact Josh Brown at 814-359-5129 or joshbrown@pa.gov and refer to the SIR # 57320. Thank you for your cooperation and attention to this important matter of species conservation and habitat protection.

Sincerely,

A handwritten signature in black ink that reads "Christopher A. Urban". The signature is written in a cursive style with a large, prominent initial "C".

Christopher A. Urban, Chief
Natural Diversity Section

CAU/JRB/dn

Enclosure

ATTACHMENT F
SITE PLAN

ATTACHMENT B
RESUMES

Philip R. Dunning, Senior Biologist, Senior Herpetologist

Education

- M.S., Biological Science, East Stroudsburg University, 2007
- B.S. Wildlife and Fisheries Sciences, Pennsylvania State University, 2003

Certifications

- Pennsylvania Fish & Boat Commission Approved Timber Rattlesnake Surveyor and Construction Site Monitor
- NJ Approved Primary Venomous Snake Monitor

Health and Safety Training

- ISN – 3232972
- 40 Hour HAZWOPER – June 2016
- 8 Hour HAZWOPER Refresher – March 2022
- Energy Transfer Contractor Safety Orientation – December 2016
- Southwest Energy Training Assurance Program (TAP) – 2015 Core and Supplement – December 2016
- Shell Contractor HSE Handbook – September 2016
- Adult First Aid/CPR – American Heart Association, Pennsylvania – January 2021
- Williams Safety Training – April 2020

Professional Training

- Army Corps of Engineers Wetland Delineation / Regional Supplement / Waters of the United States Training – April 2016

Mr. Dunning is recognized by the Pennsylvania Fish & Boat Commission as a Qualified Timber Rattlesnake Surveyor and by the New Jersey Endangered and Threatened Species Program as a Qualified Timber Rattlesnake Biologist and Surveyor. He specializes in surveys and studies of threatened and endangered species, general herpetological surveys, endangered mammal surveys, biological/ecological assessments, and natural resource inventories. He is also experienced in vernal pool surveys, Bog Turtle Surveys, presence / absence determination, and macro invertebrate sampling, wetland delineations, and rare, threatened, and endangered plant surveys.

Professional Experience

Timber Rattlesnake Experience

- Oversee all Timber Rattlesnake Projects;
- Led/Supervised/Managed phase I, II and III timber rattlesnake surveys throughout Pennsylvania and New Jersey;
- Completed and submitted final technical proposals and reports related to phase I, II and III surveys and studies;
- Published presentation abstracts and popular articles in scientific journals or newsletters;
- Conducted Timber Rattlesnake construction monitoring projects; and
- Timber Rattlesnake Historic Den Assessment.

Other Relevant Experience

- Natural Environment Inventories and Analysis;
- Endangered Species Surveys;
- Qualified New Jersey Primary Venomous Snake Monitor;
- Northern Copperhead Habitat Field Work;
- Northern Copperhead Trapping for Telemetry Project;
- Bob Turtle Phase I Habitat Assessments;
- Bob Turtle Phase II Physical Surveys and Trapping Services;
- Wetland Assessments and Delineations;
- Phase I and Phase II Timber Rattlesnake Survey Crew Leader;
- Phase I Allegheny Woodrat Surveys;
- Presence/Absence surveys for Small-footed Myotis;
- Bat Mist-Netting Technician;
- Southern Hognose, Canebrake, Pine Snake Radio Tracking;
- Whip-poor-will and Chuck-Will's-Widow Point Call Survey; and
- Macro-Invertebrate Sampling;
- State Rare, Threatened, and Endangered Plant Surveys;
- Assisted in several Plant Surveys for *Glyceria obtusa*, *Platanthera blephariglottis*, *Solidago uliginosa*, and *Solidago speciosa*.

Curtis George, PWS, Environmental Specialist

EDUCATION

- B.S. *Environmental Resource Management, the Pennsylvania State University, 2010*

HEALTH & SAFETY

CERTIFICATIONS & TRAINING

- ISN-03894196
- *Professional Wetland Scientist (PWS) PWS Seal # 3639*
- *Atlantic Sunrise safety training – September 2017*
- *Kinder Morgan Safety Orientation – October 2017*
- *Adult First Aid/CPR/AED – American Heart Association, Pennsylvania – February 2023*
- *OSHA 40 Hour HAZWOPER Training; All Probe Environmental; October 2017*
- *OSHA 8 Hour HAZWOPER Refresher Training – November 2018, December 2019, March 2021, January 2022, January 2023*

PROFESSIONAL TRAINING

- *Basic Wetland Delineation – Wetland Training Institute – Richmond, VA, November 2020*
- *Northeastern Plants of the Wetland Boundary Online – Wetland Training Institute – November 2020*
- *Stream Habitat and Measurements Techniques – National Conservation Training Center – Shepherdstown, WV, March 2017*
- *FWS Geospatial Workshop – National Conservation Training Center – Shepherdstown, WV, March 2016*
- *Overview of Wetland Delineation Protocols and the Interim NC/NE Regional Supplement to the USACE Delineation Manual – State College, PA, April 2011*

Curtis George graduated from the Pennsylvania State University with a B.S. degree in Environmental Resource Management and minors in Watershed and Water Resource Management and Wildlife and Fisheries sciences. Mr. George is a Professional Wetland Scientist (PWS) certified by the Society of Wetland Scientists (SWS). Throughout his career, Curtis has worked with private, state and federal agencies to gain experience performing a wide range of biological tasks throughout the United States. He has a background with wetlands and watershed management and has gained lots of knowledge performing surveys and using GIS software.

PROFESSIONAL EXPERIENCE

Environmental Experience

- Led wetland crews to perform wetland delineations for proposed construction sites;
- Participated in surveys of biological and physical parameters for stream restoration projects;
- Performed construction oversight for wetland creation projects;
- Performed a variety of biological surveys for birds, macroinvertebrates, herps, fish and plants;
- Controlled invasive plants and animal species using both manual and chemical means;
- Raised fish for stocking in state waterways;
- Contributed to report writing and permit preparation;
- Performed post construction monitoring on various oil and gas related projects.

Mapping and Surveying

- Used survey grade Trimble equipment to perform RTK elevation surveys for various biological and resiliency projects.
- Performed bathymetry surveys for creating sediment and water movement models;
- Utilized GIS software to create maps for various projects and to manipulate survey data;
- Performed surveys and tasks using Trimble Juno Series and GeoHX handheld GPS units;
- Used various GPS units to navigate the back country.

Charly Bloom (WPIT), Environmental Technician

EDUCATION

- *Environmental & Ecological Biology, Bachelor of Science, Lock Haven University, Pennsylvania, 2019.*

CERTIFICATIONS

- *Wetland Professional In Training (WPIT) - 2023*

PROFESSIONAL TRAINING

- *2022 Cohort – Chesapeake Urban Stormwater Professionals (CUSP) Program – online - 2022*
- *2022 Chapter 102/NPDES Workshop – Danville, PA – December 2022*
- *Introductory Permit Training – Gailey Environmental - Online - April 2021*
- *OSHA 40 Hour HAZWOPER Training; AllProbe Environmental; June 2019*
- *8 Hour HAZWOPER Refresher – September 2021*
- *8 Hour HAZWOPER Refresher – August 2022*
- *Adult First Aid/CPR – American Red Heart Association, Pennsylvania – January 2021*
- *Basic Wetland Delineation – Wetland Training Institute – Richmond, VA, November 2020*
- *Northeastern Plants of the Wetland Boundary Online – Wetland Training Institute – November 2020*

Ms. Bloom is a graduate from Lock Haven University in 2019, where she was awarded a Bachelors degree in Biological Environmental and Ecological Science. Ms. Bloom is an Environmental Technician that works in the field and wetland crews for WHM.

Professional Experience

General Environmental Projects

- Used GIS software for mapping and analysis
- Used a Trimble GPS for mapping boundaries for mapping purposes
- Composed various Environmental Reports/Permits for landfills, gas companies, wind farms, construction companies, private landowners, and regulatory agencies in multiple states (OH, PA, MD, NJ)

Environmental Projects

- Performed wetland monitoring and maintenance on various wetlands
- Performed Stream Surveys
- Performed wetland and watercourse delineations using US Army Corps of Engineers Wetlands Delineation Manual 1987 and applicable regional supplements

COMPANY TITLE

Timber Rattlesnake Construction Monitor

Stacy Foster

EDUCATION

- *The Pennsylvania State University Associate of Science in Wildlife Technology; Graduated May 14, 2011*
- *Member of Delta Mu Sigma Honor Society (2009, 2010) and Ecology Club (2010)*
- *Recognition for Outstanding Adult Learner (2009-10, 2010-11)*
- *Recognition for Superior Academic Achievement – Dean's List (Fall '09, Summer '10)*

CERTIFICATIONS

- *PA Fish and Boat Commission Qualified Timber Rattlesnake Construction Site Monitor (2015)*

HEALTH & SAFETY

CERTIFICATIONS & TRAINING

- *OSHA 24 Hour HAZWOPER Certificate*
- *PSU LACUC Certified (2010, 2012)*
- *First Aid, Adult and Child CPR – AED and Infant Trained (2010, 2013)*

VOLUNTEER WORK

- *Wildlife Educational Presentation – Oklahoma Elementary School, DuBois, PA*
- *Deer Density Pellet Count – Treasure Lake, DuBois, PA (2012,2012)*
- *Deer Density Pellet Count – Clear Creek State Forest, PA (2010, 2012, 2013)*
- *Flight 93 Memorial Tree Planting (April 2013 and 2014)*

Ms. Foster is recognized by the Pennsylvania Fish & Boat Commission as a Qualified Timber Rattlesnake Construction Site Monitor. Stacy specializes in surveys and studies of threatened and endangered species, general herpetological surveys, endangered mammal surveys, biological/ecological assessments, and natural resource inventories..

PROFESSIONAL EXPERIENCE

- Conduct Timber Rattlesnake Phase I Habitat Assessments on Proposed Pipeline in PA and NY States
- Follow Safe Practices to Effectively Handle and Relocate Timber Rattlesnakes and Other Herpetofauna As Mandated by State Appointed Protocols
- Safely Handle, Tube, And Release Venomous Snakes
- Radio-Tracking Timber Rattlesnakes (April 2011, August 2015)
- PIT Tagging of Non-Venomous and Venomous Snakes
- Handling and Processing of Northern Saw-Whet Owls Via Protocol
- Identify Flora/Fauna Along Transects
- Tag and Release of Monarch Butterflies
- Conducting Bird Point Count Surveys
- Use GPS And Maps to Navigate to Project Locales
- Data and Report Writing
- Public Speaking and Some Environmental Education
- Wildlife Lab Technician
- Assist Professors in Lab Set-Up and Clean-Up
- Repairing and Cleaning Equipment
- Photograph Lab Experiences

ATTACHMENT C
REPRESENTATIVE PHOTOGRAPHS



ID: TR1

Taken by: PD

Comments: Facing north, view of male rattlesnake coiled inside of LOD briefly before heading over the north side of the mountain.



ID: TR2

Taken by: PD

Comments: Facing north, view of juvenile rattlesnake basking in forested section of denning habitat.



ID: TR3

Taken by: PD

Comments:
Facing northeast,
view of male
rattlesnake basking
in denning habitat
below LOD.



ID: TR5

Taken by: PD

Comments:
Looking east, view
of juvenile
rattlesnake basking
in denning habitat
below LOD.



ID: TR9

Taken by: PD

Comments:
Facing west, view
of female
rattlesnake
basking in
forested denning
habitat.



ID: TR13

Taken by: PD

Comments:
Looking northeast,
view of adult
rattlesnake basking
in scree slide below
the LOD.

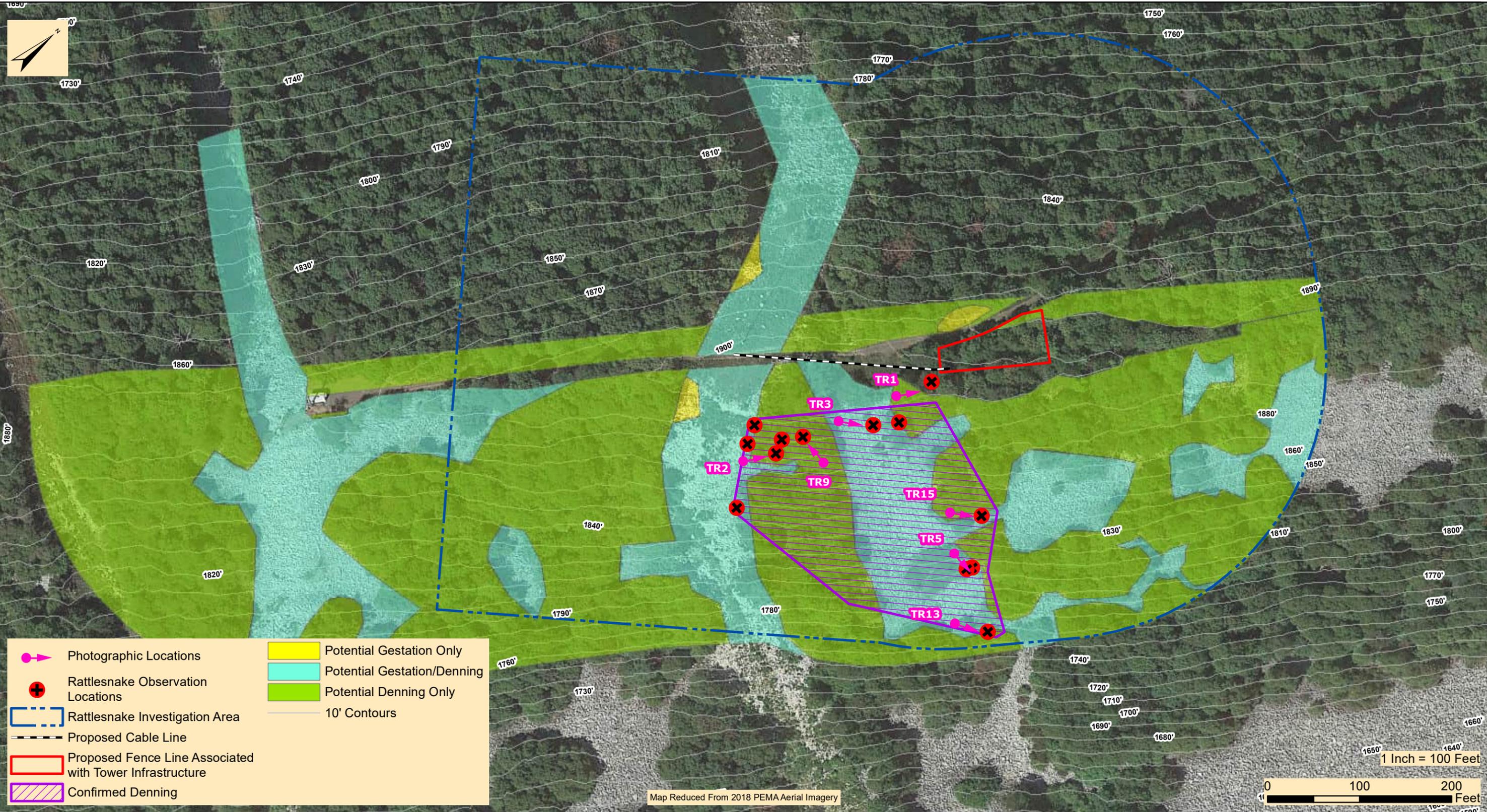


ID: TR15

Taken by: PD

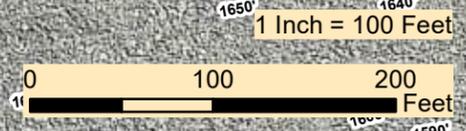
Comments:
Facing east, view
of adult
rattlesnake
basking in
forested scree
slide.

ATTACHMENT D
SURVEY RESULTS MAP



Photographic Locations	Potential Gestation Only
Rattlesnake Observation Locations	Potential Gestation/Denning
Rattlesnake Investigation Area	Potential Denning Only
Proposed Cable Line	10' Contours
Proposed Fence Line Associated with Tower Infrastructure	
Confirmed Denning	

Map Reduced From 2018 PEMA Aerial Imagery



366 Walker Drive, Suite 300
 State College, PA 16801
 Tele: 814.689.1650 Fax: 814.689.1557

UPWARD BROADBAND, LLC
RURAL BROADBAND INFRASTRUCTURE EXPANSION PROJECT
TIMBER RATTLESNAKE PHASE II SURVEY MAP

SHIRLEY & TELL TOWNSHIPS

HUNTINGDON COUNTY

PENNSYLVANIA

Date:	5/19/2023
WHM DRAWING NUMBER:	UPWARD-23-001
Drawn By:	FTN
Figure Number:	1

N:\PROJECTS\UPWARD-23-001\MXD\UPWARD\Broadband Phase II_05182023.mxd



June 2, 2023

IN REPLY REFER TO

SIR# 57320

Upward Broadband, LLC
Jacob Lester
3105 Lincoln HWY E
Paradise, Pennsylvania 17562

**RE: Species Impact Review (SIR) – Rare, Candidate, Threatened and Endangered Species
PNDI Search No. 776366_1
Rural Broadband Infrastructure Expansion in the Alleghenies Project (Upward Broadband)
Shade Mtn
Tell Township: HUNTINGDON County**

Dear Jacob Lester:

Timber Rattlesnakes occur in relatively high elevation forested, mountainous regions of the Commonwealth. They prefer forested areas to forage for small mammals (e.g., mice and chipmunks) and southerly-facing slopes for hibernating and other thermoregulatory activities. The Timber Rattlesnake is threatened by habitat loss/alteration, wanton killing, and poaching. In Pennsylvania, Timber Rattlesnakes are a protected species. Special (venomous snake) permits are needed to hunt individual rattlesnakes, and only legal sized males (>42 inches) can be taken during a restricted hunting season. However, communal overwintering and gestation sites are considered critical habitats for the species and are therefore protected through the environmental review process. Also, due to the species being venomous, projects that come in close proximity to these critical habitats will likely encounter the species and potentially pose health and human safety concerns to project workers. Therefore, in these consultations, the PFBC aims to avoid and minimize impacts to the species and address health and human safety issues.

In prior correspondence with the Commission, due to nearby known occurrences of Timber Rattlesnake (*Crotalus horridus*, Species of Special Concern) within the vicinity of the proposed project, to further determine potential adverse impacts from the proposed project to the species of concern, a habitat evaluation (*Letter dated January 17, 2023*) and ensuing species occurrence survey (*via email correspondence, April 28, 2023*) were requested for the subject property.

As a Pennsylvania qualified/recognized and properly permitted surveyor of the Timber Rattlesnake, Mr. Phillip Dunning was contracted to evaluate the habitats on site to determine their potential to support Timber Rattlesnakes and determine species occupancy at the site. According to the report (*RURAL BROADBAND INFRASTRUCTURE EXPANSION PROJECT, HUNTINGDON COUNTY, PENNSYLVANIA, TIMBER RATTLESNAKE (Crotalus horridus) PHASE I HABITAT ASSESSMENT REPORT*) conducted by WHM Consulting, LLC, report dated April 14, 2023), potentially suitable overwintering and gestation habitat for Timber Rattlesnakes occur within the immediate vicinity of the project site. Subsequently, Timber Rattlesnake presence was confirmed within and adjacent to the project site *RURAL BROADBAND INFRASTRUCTURE EXPANSION PROJECT, HUNTINGDON COUNTY, PENNSYLVANIA,*

TIMBER RATTLESNAKE (Crotalus horridus) PHASE II PRESENCE/ABSENCE SURVEY REPORT conducted by WHM Consulting, LLC, report dated May 25, 2023.

We are concerned about direct and indirect effects that the proposed project could have on the local population of the Timber Rattlesnake. **Work should be conducted between April 15-October 15 and we recommend that you take the following precautions to safeguard workers and rattlesnakes:**

1. A PFBC approved Timber Rattlesnake biologist who has the proper permits (Scientific Collector's Permit), and the proper skills to handle this venomous species will be on-site prior to and during construction. Enclosed is the list of PFBC approved rattlesnake biologists for your convenience.

2. The PFBC approved Timber Rattlesnake biologist will be on-site prior to and during construction activities, during the above time frame, to inspect and clear the area (including staging areas and access roads) of Timber Rattlesnakes and to capture and remove any rattlesnakes that may interfere with work activities.

3. Timber Rattlesnakes observed on-site are to be measured, sexed, and the habitat characterized where the snake was found. All captured snakes should be released within close proximity (under 100 meters) of the capture site if possible. Rattlesnake captures and relocations are to be documented by photographs, habitat descriptions, in addition to being mapped and labeled accordingly. The biologist is to submit a report to this office (Natural Diversity Section) following the completion of the project documenting all of the activity and herpetofauna encountered.

4. If erosion control fabric is to be used at this site, materials that are known to reduce the risk of snake entrapment should be selected, such as loosely woven natural fiber ECM. Use of monofilament/plastic netting should be avoided.

5. Workers responsible for implementing this project should be advised that Timber Rattlesnakes may be encountered and that avoidance is the best means of minimizing risks to personal safety. It is suggested a procedure be implemented for Timber Rattlesnake encounters and workers are to be advised that the Timber Rattlesnake is a state protected species and is not to be harmed. Killing of Timber Rattlesnakes is prohibited by the Commission pursuant to 58 Pa. Code Section 79.6.

6. The well pad area appears to have some basking habitat for snakes. Basking rocks for gestating females can be replaced using the habitat creation guidance document attached.

7. During the construction period, PFBC personnel may communicate with the on-site biologist and may visit the site area periodically to view the progression of the project and answer any questions or concerns that may arise. For safety purposes, PFBC personnel will register with the on-site manager upon entering the construction area.

This response represents the most up-to-date summary of the PNDI data and our files and is valid for two (2) years from the date of this letter. An absence of recorded species information does not necessarily imply species absence. Our data files and the PNDI system are continuously being updated with species occurrence information. Should project plans change or additional information on listed or proposed species become available, this determination may be reconsidered, and consultation shall be re-initiated.

If you have any questions regarding this review, please contact Josh Brown at 814-359-5129 or joshbrown@pa.gov and refer to the SIR # 57320. Thank you for your cooperation and attention to this important matter of species conservation and habitat protection.

Sincerely,

A handwritten signature in black ink that reads "Christopher A. Urban". The signature is written in a cursive style with a large, prominent initial "C".

Christopher A. Urban, Chief
Natural Diversity Section

CAU/JRB/dn

Enclosure



July 31, 2023

IN REPLY REFER TO

SIR# 57320

Upward Broadband, LLC
Jacob Lester
3105 Lincoln HWY E
Paradise, Pennsylvania 17562

**RE: Species Impact Review (SIR) – Rare, Candidate, Threatened and Endangered Species
PNDI Search No. 776366_1
Rural Broadband Infrastructure Expansion in the Alleghenies Project (Upward Broadband)
Shade Mtn
Timber Rattlesnake Impact Avoidance
Tell Township: HUNTINGDON County**

Dear Jacob Lester:

Timber Rattlesnakes occur in relatively high elevation forested, mountainous regions of the Commonwealth. They prefer forested areas to forage for small mammals (e.g., mice and chipmunks) and southerly-facing slopes for hibernating and other thermoregulatory activities. The Timber Rattlesnake is threatened by habitat loss/alteration, wanton killing, and poaching. In Pennsylvania, Timber Rattlesnakes are a protected species. Special (venomous snake) permits are needed to hunt individual rattlesnakes, and only legal sized males (>42 inches) can be taken during a restricted hunting season. However, communal overwintering and gestation sites are considered critical habitats for the species and are therefore protected through the environmental review process. Also, due to the species being venomous, projects that come in close proximity to these critical habitats will likely encounter the species and potentially pose health and human safety concerns to project workers. Therefore, in these consultations, the PFBC aims to avoid and minimize impacts to the species and address health and human safety issues.

In prior correspondence with the Commission, due to nearby known occurrences of Timber Rattlesnake (*Crotalus horridus*, Species of Special Concern) within the vicinity of the proposed project, to further determine potential adverse impacts from the proposed project to the species of concern, a habitat evaluation (Letter dated January 17, 2023) and ensuing species occurrence survey (via email correspondence, April 28, 2023) were requested for the subject property.

As a Pennsylvania qualified/recognized and properly permitted surveyor of the Timber Rattlesnake, Mr. Phillip Dunning was contracted to evaluate the habitats on site to determine their potential to support Timber Rattlesnakes and determine species occupancy at the site. According to the report (RURAL BROADBAND INFRASTRUCTURE EXPANSION PROJECT, HUNTINGDON COUNTY, PENNSYLVANIA, TIMBER RATTLESNAKE (*Crotalus horridus*) PHASE I HABITAT ASSESSMENT REPORT) conducted by WHM Consulting, LLC, report dated April 14, 2023), potentially suitable overwintering and gestation habitat for Timber Rattlesnakes occur within the immediate vicinity of the project site. Subsequently, Timber Rattlesnake presence was confirmed within and adjacent to the project site

RURAL BROADBAND INFRASTRUCTURE EXPANSION PROJECT, HUNTINGDON COUNTY, PENNSYLVANIA, TIMBER RATTLESNAKE (*Crotalus horridus*) PHASE II PRESENCE/ABSENCE SURVEY REPORT) conducted by WHM Consulting, LLC, report dated May 25, 2023. Given the presence of snakes within the project site, we requested that a qualified Timber Rattlesnake biologist be onsite to safeguard workers and rattlesnakes (*SIR Letter dated June 2, 2023*). An ensuing follow-up call occurred on July 19, 2023 to discuss potential modifications to the seasonal restriction.

As proposed in email correspondence (July 26, 2023), Upward Broadband will agree to construct a temporary fence, to reduce the access of snakes into the tower area. This fence will be constructed by Upward Broadband and reviewed by Phil Dunning/WHM and be constructed prior to October 15th. To confirm no impacts to snakes, ground disturbance activities conducted within this area and prior to October 15 will be monitored by Phil Dunning/WHM. After October 15 or a date prior as determined by Phil Dunning/WHM, the area will be assumed to be free of snakes and ground disturbing activities may proceed without a monitor. With the incorporation of these BMPs, Upward Broadband may proceed with construction through the winter months from Oct 16th through April 14th.

Additionally, Timber Rattlesnakes observed on-site are to be measured, sexed, and the habitat characterized where the snake was found. All captured snakes should be released within close proximity (under 100 meters) of the capture site if possible. Rattlesnake captures and relocations are to be documented by photographs, habitat descriptions, in addition to being mapped and labeled accordingly. The biologist is to submit a report to this office (Natural Diversity Section) following the completion of the project documenting all of the activity and herpetofauna encountered.

If erosion control fabric is to be used at this site, materials that are known to reduce the risk of snake entrapment should be selected, such as loosely woven natural fiber ECM. Use of monofilament/plastic netting should be avoided.

Workers responsible for implementing this project should be advised that Timber Rattlesnakes may be encountered and that avoidance is the best means of minimizing risks to personal safety. It is suggested a procedure be implemented for Timber Rattlesnake encounters and workers are to be advised that the Timber Rattlesnake is a state protected species and is not to be harmed. Killing of Timber Rattlesnakes is prohibited by the Commission pursuant to 58 Pa. Code Section 79.6.

Note that during the construction period, PFBC personnel may communicate with the on-site biologist and may visit the site area periodically to view the progression of the project and answer any questions or concerns that may arise. For safety purposes, PFBC personnel will register with the on-site manager upon entering the construction area.

Enclosed is the list of PFBC approved rattlesnake biologists for your convenience.

This response represents the most up-to-date summary of the PNDI data and our files and is valid for two (2) years from the date of this letter. An absence of recorded species information does not necessarily imply species absence. Our data files and the PNDI system are continuously being updated with species occurrence information. Should project plans change or additional information on listed or proposed species become available, this determination may be reconsidered, and consultation shall be re-initiated.

If you have any questions regarding this review, please contact Josh Brown at 814-359-5129 or joshubrown@pa.gov and refer to the SIR # 57320. Thank you for your cooperation and attention to this important matter of species conservation and habitat protection.

Sincerely,

A handwritten signature in black ink that reads "Christopher A. Urban". The signature is written in a cursive style with a large, prominent "C" at the beginning.

Christopher A. Urban, Chief
Natural Diversity Section

CAU/JRB/dn

Enclosure

APPENDIX E

*Shade Gap Collocation
Section 106 Compliance
Documentation*



Pennsylvania State Historic Preservation Office

PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION

February 6, 2023

Jacob Lester
3105 LINCOLN HWY E
PARADISE PA 17562

RE: ER Project # 2023PR00457.001, Rural Broadband Infrastructure Expansion in the Alleghenies Project (Upward Broadband) Shade Gap, Federal Communications Commission, Dublin Township, Huntingdon County

Dear Jacob Lester:

Thank you for submitting information concerning the above referenced project. The Pennsylvania State Historic Preservation Office (PA SHPO) reviews projects in accordance with state and federal laws. Section 106 of the National Historic Preservation Act of 1966, and the implementing regulations (36 CFR Part 800) of the Advisory Council on Historic Preservation, is the primary federal legislation. The Environmental Rights amendment, Article 1, Section 27 of the Pennsylvania Constitution and the Pennsylvania History Code, 37 Pa. Cons. Stat. Section 500 et seq. (1988) is the primary state legislation. These laws include consideration of the project's potential effects on both historic and archaeological resources.

Above Ground Resources

No Above Ground Concerns - Environmental Review - No Effect - Above Ground

Based on the information received and available within our files, it is our opinion that the proposed project will have No Effect on above ground historic properties, including historic buildings, districts, structures, and/or objects, should they exist. Should the scope of the project change and/or should you be made aware of historic property concerns, you will need to reinitiate consultation with our office using PA-SHARE.

For questions concerning above ground resources, please contact Tyra Guyton at tyguyton@pa.gov.

Archaeological Resources

No Archaeological Concerns - Environmental Review - No Effect - Archaeological

Based on the information received and available in our files, in our opinion, the proposed project should have No Effect on archaeological resources. Our analysis indicates that archaeological resources are potentially located in this project area. Should the scope of the project be amended to include additional ground-disturbing activity and/or should you be made aware of historic property concerns, you will need to reinitiate consultation with our office using PA-SHARE.

For questions concerning archaeological resources, please contact Taylor Napoleon at tnapoleon@pa.gov.

Sincerely,

A handwritten signature in black ink that reads "Emma Diehl". The signature is written in a cursive style with a long horizontal stroke at the end.

Emma Diehl
Environmental Review Division Manager

Notification Date:

File Number:

General Information

1) (Select only one) (NE) NE – New UA – Update of Application WD – Withdrawal of Application	
2) If this application is for an Update or Withdrawal, enter the file number of the pending application currently on file.	File Number:

Applicant Information

3) FCC Registration Number (FRN): 0033898511
4) Name: Ambassador Towers LLC

Contact Name

5) First Name: Ben	6) MI:	7) Last Name: Momose	8) Suffix:
9) Title: NEPA Regulatory Compliance			

Contact Information

10) P.O. Box:	And /Or	11) Street Address: 3105 Lincoln Highway East	
12) City: Paradise		13) State: PA	14) Zip Code: 17562
15) Telephone Number: (210)448-2623		16) Fax Number:	
17) E-mail Address: bmomose@upwardbroadband.com			

Consultant Information

18) FCC Registration Number (FRN): 0028057495
19) Name: Terracon Consultants

Principal Investigator

20) First Name: Meghan	21) MI:	22) Last Name: Browning	23) Suffix:
24) Title:			

Principal Investigator Contact Information

25) P.O. Box:	And /Or	26) Street Address: 844 N. Lenola Road	
27) City: Moorestown		28) State: NJ	29) Zip Code: 08057
30) Telephone Number: (856)813-3267		31) Fax Number:	
32) E-mail Address: Kathy.Eisele@Terracon.com			

Professional Qualification

33) Does the Principal Investigator satisfy the Secretary of the Interior's Professional Qualification Standards?	(<input checked="" type="checkbox"/>) <u>Y</u> es () <u>N</u> o
34) Areas of Professional Qualification:	
() Archaeologist	
() Architectural Historian	
(<input checked="" type="checkbox"/>) Historian	
() Architect	
() Other (Specify) _____	

Additional Staff

35) Are there other staff involved who meet the Professional Qualification Standards of the Secretary of the Interior?	(<input checked="" type="checkbox"/>) <u>Y</u> es () <u>N</u> o
--	--

If "YES," complete the following:

36) First Name: Patricia	37) MI:	38) Last Name: Davenport-Jacobs	39) Suffix:
40) Title:			
41) Areas of Professional Qualification:			
() Archaeologist			
(<input checked="" type="checkbox"/>) Architectural Historian			
() Historian			
() Architect			
() Other (Specify) _____			

36) First Name: Suzanne	37) MI:	38) Last Name: Reece	39) Suffix:
40) Title:			
41) Areas of Professional Qualification:			
(<input checked="" type="checkbox"/>) Archaeologist			
() Architectural Historian			
() Historian			
() Architect			
() Other (Specify) _____			

Site Information

Tower Construction Notification System

1) TCNS Notification Number: NTIA TCNS No. 265957

Site Information

2) Positive Train Control Filing Subject to Expedited Treatment Under Program Comment: () Yes (**X**) No

3) Site Name: **Shade Gap Collocation**

4) Site Address: **22384 Crogham Pike**

5) Detailed Description of Project:

Collocation of antennas on existing tower and installation of associated equipment within existing tower compound.

6) City: **Dublin Twp (Shade Gap)**

7) State: **PA**

8) Zip Code: **17255**

9) County/Borough/Parish: **HUNTINGDON**

10) Nearest Crossroads: **Croghan Pike and Auxiliary Road**

11) NAD 83 Latitude (DD-MM-SS.S): **40-10-40.6** (**X**) N or () S

12) NAD 83 Longitude (DD-MM-SS.S): **077-51-45.7** () E or (**X**) W

Collocation Information

13) Antennas will be located on (Select One):

(**X**) Communications Tower (Select One): () Guyed Lattice Tower (**X**) Self-supporting Lattice () Monopole
() Other (Describe): _____
() Non-Tower Structure (Describe Structure): _____

14) Tower height above ground level (including top-mounted attachments such as lightning rods): **264.0** (**X**) Feet () Meters

15) Description of Antennas to be collocated (e.g. number, type, shape, dimensions, color):

To be determined

16) Will the Antennas be placed at multiple levels on the structure? **To be determined** () Yes () No
If "Yes", describe placement:

If "No", specify the height of collocation above ground: _____ () Feet () Meters

17) Structure Completion Year: **2022** (YYYY)
() Check here if your year provided is approximate.

<p>18) Has the Communications Tower or Non-Tower Structure been the subject of SHPO/THPO review?</p> <p>If "Yes", specify the following:</p> <p>Company that made the submission: <u>Vertical Bridge</u></p> <p>Date submitted: <u>unknown</u> SHPO/THPO Reference Number: <u>unknown</u></p>	<p>(<input checked="" type="checkbox"/>) <u>Yes</u> (<input type="checkbox"/>) <u>No</u></p>
<p>19) Is the Communications Tower or Non-Tower Structure eligible for listing on the National Register?</p>	<p>(<input type="checkbox"/>) <u>Yes</u> (<input checked="" type="checkbox"/>) <u>No</u></p>

Collocation Status

20) Current Collocation Status (Select One):

() Construction and/or installation has not yet commenced

() Construction and/or installation has commenced, but is not completed

Construction and/or installation commenced on: _____

() Construction has been completed

Construction and/or installation commenced on: _____ Construction and/or installation completed on: _____

Determination of Effect

21) Direct Effects (Select One):

() No Historic Properties in Area of Potential Effects (APE)

() No Effect on Historic Properties in APE

() No Adverse Effect on Historic Properties in APE

() Adverse Effect on one or more Historic Properties in APE

22) Visual Effects (Select One):

() No Historic Properties in Area of Potential Effects (APE)

() No Effect on Historic Properties in APE

() No Adverse Effect on Historic Properties in APE

() Adverse Effect on one or more Historic Properties in APE

Tribal/NHO Involvement

1) Have Indian Tribes or Native Hawaiian Organizations (NHOs) been identified that may attach religious and cultural significance to historic properties which may be affected by the undertaking within the APEs for direct and visual effects?	<input checked="" type="checkbox"/> Yes () <input type="checkbox"/> No
2a) Tribes/NHOs contacted through TCNS Notification Number: _____ Number of Tribes/NHOs: 0	
2b) Tribes/NHOs contacted through an alternate system: NTIA TCNS No. 265957 Number of Tribes/NHOs: 13	

Tribe/NHO Contacted Through TCNS

3) Tribe/NHO FRN:
4) Tribe/NHO Name:

Contact Name

5) First Name:	6) MI:	7) Last Name:	8) Suffix:
9) Title:			

Dates & Response

10) Date Contacted _____	11) Date Replied _____
<input type="checkbox"/> No Reply	
<input type="checkbox"/> Replied/No Interest	
<input type="checkbox"/> Replied/Have Interest	
<input type="checkbox"/> Replied/Other	

Other Tribes/NHOs Contacted

Tribe/NHO Information

1) FCC Registration Number (FRN):
2) Name:

Contact Name

3) First Name:	4) MI:	5) Last Name:	6) Suffix:
7) Title:			

Contact Information

8) P.O. Box:	And /Or	9) Street Address:		
10) City:		11) State:	12) Zip Code:	
13) Telephone Number:		14) Fax Number:		
15) E-mail Address:				
16) Preferred means of communication: <input type="checkbox"/> E-mail <input type="checkbox"/> Letter <input type="checkbox"/> Both				

Dates & Response

17) Date Contacted _____	18) Date Replied _____
<input type="checkbox"/> No Reply <input type="checkbox"/> Replied/No Interest <input type="checkbox"/> Replied/Have Interest <input type="checkbox"/> Replied/Other	

Historic Properties

Properties Identified

1) Have any historic properties been identified within the APEs for direct and visual effect?	(<input checked="" type="checkbox"/>) <u>Y</u> es () <u>N</u> o
2) Has the identification process located archaeological materials that would be directly affected, or sites that are of cultural or religious significance to Tribes/NHOs?	() <u>Y</u> es (<input checked="" type="checkbox"/>) <u>N</u> o
3) Are there more than 10 historic properties within the APEs for direct and visual effect? If "Yes", you are required to attach a Cultural Resources Report in lieu of adding the Historic Property below.	(<input checked="" type="checkbox"/>) <u>Y</u> es () <u>N</u> o

Historic Property

4) Property Name:
5) SHPO Site Number:

Property Address

6) Street Address:		
7) City:	8) State:	9) Zip Code:
10) County/Borough/Parish:		

Status & Eligibility

11) Is this property listed on the National Register? Source: _____	() <u>Y</u> es () <u>N</u> o
12) Is this property eligible for listing on the National Register? Source: _____	() <u>Y</u> es () <u>N</u> o
13) Is this property a National Historic Landmark?	() <u>Y</u> es () <u>N</u> o

<p>14) Direct Effects (Select One):</p> <p>() No Effect on this Historic Property in APE</p> <p>() No Adverse Effect on this Historic Property in APE</p> <p>() Adverse Effect on this Historic Property in APE</p>
<p>15) Visual Effects (Select One):</p> <p>() No Effect on this Historic Property in APE</p> <p>() No Adverse Effect on this Historic Property in APE</p> <p>() Adverse Effect on this Historic Property in APE</p>

Local Government Involvement

Local Government Agency

1) FCC Registration Number (FRN):

2) Name: **Dublin Township**

Contact Name

3) First Name: **Trudy**

4) MI:

5) Last Name: **O'Donnell**

6) Suffix:

7) Title:

Contact Information

8) P.O. Box:

And
/Or

9) Street Address: **21347 Main Street**

10) City: **Shade Gap**

11) State: **PA**

12) Zip Code: **17255**

13) Telephone Number: **(814)259-3774**

14) Fax Number:

15) E-mail Address: **dublintwp@embarqmail.com**

16) Preferred means of communication:

() E-mail

() Letter

() Both

Dates & Response

17) Date Contacted **06/08/2023**

18) Date Replied _____

() No Reply

() Replied/No Interest

() Replied/Have Interest

() Replied/Other

Additional Information

19) Information on local government's role or interest (optional):

Other Consulting Parties

Other Consulting Parties Contacted

1) Has any other agency been contacted and invited to become a consulting party?	(<input checked="" type="checkbox"/>) <u>Yes</u> () <u>No</u>
--	---

Consulting Party

2) FCC Registration Number (FRN):
3) Name: Huntingdon County Historical Society

Contact Name

4) First Name: Margaret	5) MI:	6) Last Name: Skrivseth	7) Suffix:
8) Title:			

Contact Information

9) P.O. Box:	And /Or	10) Street Address: 106 Fourth Street
11) City: Huntingdon	12) State: PA	13) Zip Code: 16652
14) Telephone Number: (814)643-5449	15) Fax Number:	
16) E-mail Address: hchsmail@gmail.com		
17) Preferred means of communication:		
(<input checked="" type="checkbox"/>) E-mail		
() Letter		
() Both		

Dates & Response

18) Date Contacted 06/08/2023	19) Date Replied _____
(<input checked="" type="checkbox"/>) No Reply	
() Replied/No Interest	
() Replied/Have Interest	
() Replied/Other	

Additional Information

20) Information on other consulting parties' role or interest (optional):

Designation of SHPO/THPO

1) Designate the Lead State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO) based on the location of the tower/collocation.

SHPO/THPO

Name: Pennsylvania State Historic Preservation Office

2) You may also designate up to three additional SHPOs/THPOs if the APEs include multiple states. If the APEs include other countries, enter the name of the National Historic Preservation Agency and any state and provincial Historic Preservation Agency

SHPO/THPO Name: _____

SHPO/THPO Name: _____

SHPO/THPO Name: _____

Certification

I certify that all representations on this FCC Form 621 Submission Packet and the accompanying attachments are true, correct, and complete.

Party Authorized to Sign

First Name:

MI:

Last Name:

Suffix:

Signature: _____

Date: _____

FAILURE TO SIGN THIS APPLICATION MAY RESULT IN DISMISSAL OF THE APPLICATION AND FORFEITURE OF ANY FEES PAID.

WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. Code, Title 18, Section 1001) AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. Code, Title 47, Section 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503).

Attachments :

Type

Description

Date Entered

Meghan Browning

Historian

PROFESSIONAL EXPERIENCE

Meghan holds a BA in History from Florida State University with an emphasis on social and cultural aspects. Meghan is a Historian for the Historic Preservation Group, Cultural Resource Department in Jacksonville, Florida. Prior to joining Terracon, Meghan gained practical experience in archival and museum studies and performed essential background research on historic architecture in Jacksonville while employed with the Jacksonville Historical Society. Her duties with Terracon include historical research, field reconnaissance, documenting and evaluating historic resources, developing historical narratives, and assisting with historic resource conditions assessments. Meghan meets the Secretary of the Interior's Professional Qualification Standards in History.

PROJECT EXPERIENCE

City-wide Historic Resources Survey – City of Sarasota, Florida

Meghan led the survey team that encompassed the entire city of Sarasota. Over 10,600 resources were surveyed, and 8,464 documented, recorded, and evaluated for historic significance. Meghan also helped develop the survey report and analyzed data to provide solid preservation planning recommendations for future use by the city. The project received a national award for Best Practices: Identification/Registration from the National Alliance of Preservation Commission in 2020.

Historic Resources Survey – Town of Palm Beach, Florida

The project consisted of a resource survey for the entirety of the Town of Palm Beach constructed in or prior to 1979. As a result, 2,170 resources were surveyed and 1,707 were documented, recorded, and evaluated for historic significance. The team identified nine areas that appear to meet the criteria for listing as historic districts on the National Register of Historic places and provided survey details (maps and data) required for listing and brief histories of each area to provide a framing context from which the Town could move forward with a nomination report. In addition, the team evaluated the Town comprehensively for its potential for an island-wide historic conservation district. Terracon also provided preservation strategies the Town can consider to further preservation in Palm Beach. Reporting included a variety of preservation alternatives to help the Town shape new proposed policies moving forward.

Historic Resource Surveys

Franklin County Countywide Historical Resource Survey – Franklin County, Florida

Historical Resources Survey and NRHP Nomination of Southeast Alabama – Dauphin Island, Houston, Henry and Geneva Counties, Alabama



EDUCATION

Bachelor of Arts, History,
Florida State University,
Tallahassee, FL

CERTIFICATIONS

Section 106: An Introduction
National Preservation Institute
NEPA & 106 Integration &
Coordination, Advisory Council
on Historic Preservation
BACE: Archival and Museum
Studies Certification, AASLH
and Council of State Archives
CRPT: Cemetery Resource
Protection Training, Florida
Public Archaeology Network

AFFILIATIONS

Florida Planning and Zoning
Association (FPZA) Board
Member
Southeastern Society of
Architectural Historians
(SESAH)
Society of Architectural
Historians (SAH)
National Trust for Historic
Preservation
Florida Trust for Historic
Preservation
Florida Historical Society
Jacksonville Historical Society
St. Augustine Historical Society
Alabama Historical Association

YEARS OF EXPERIENCE: 10

YEARS AT FIRM: 5

Historic Resource Mitigation & NRHP Survey Updates – St. Augustine, Florida
Town of Palm Beach Town-wide Survey – Palm Beach, Florida
County-wide Historical Resource Survey – Nassau County, Florida
West Augustine Historic Resource Survey – St. Augustine, Florida
City of Lake Worth Survey Updates, Ph. I - IV – Lake Worth Beach, Florida
Citywide Historical Resources Survey – Sarasota, Florida
City of Marathon Florida Historic Resource Survey and Preservation Plan – Marathon, Monroe County, Florida
City of Titusville Historical Resource Survey and Preservation Plan – Brevard County, Florida

Meghan Powell (continued)

National Register Nominations

Newtown National Register Nomination – Sarasota, Sarasota County, Florida
National Register Nomination for Vamo Lodge – Sarasota County, Florida
Historic Resource Mitigation & NRHP Survey Updates – St. Augustine, Florida

Cultural Resource Assessment Survey and Section 106 Compliance

FDOT Amelia Avenue – DeLand, Volusia County, Florida
Norfolk HUD Renovations – Norfolk, Virginia
Park Shirlington HUD Renovation – Arlington, Virginia
The Simpson Apartments – Atlanta, Georgia
Middle Georgia State University Cross County New Construction – Macon, Georgia
FDOT Bay Street – Jacksonville, Duval County, Florida
Verizon Telecommunications Compliance – State of Florida, Georgia Massachusetts, New York, New Jersey,
Southtown HUD Development – Birmingham, Alabama
Village of 5th CRAS – Augusta, Georgia
JEA Office Building – Jacksonville, Florida
Floribraska Avenue – Tampa, Florida
Transload Facility – Des Moines, Iowa
City Albany – Dougherty County, Georgia
City of Altamonte Springs – Seminole County, Florida
Collins Road Bridge Repair – Jacksonville, Florida
Town of Meldrim Historic Resources Assessment – Effingham County, Georgia

Historic Building Survey for CCC Recreation Sites – Cherokee National Forest, Tennessee

Cemetery Restoration Projects

Old City Cemetery Restoration – Jacksonville, Duval County, Florida
Pinehurst Cemetery Conditions Assessment – Jacksonville, Duval County, Florida
Hillside, Memorial, Mt. Olive, Old City, and Sunset Memorial Cemetery Conditions Assessment – Jacksonville, Duval County, Florida
Manatee Burying Grounds – Bradenton, Manatee County, Florida

Patricia Davenport-Jacobs

HISTORIC PRESERVATION GROUP MANAGER

PROFESSIONAL EXPERIENCE

Ms. Davenport-Jacobs brings more than 20 years of professional experience in the field of preservation and historic architecture. Her background includes local planning activities as a Main Street Director and Preservation Planning Officer instituting successful commercial façade grant, and transportation enhancement funded streetscape initiatives. She manages compliance and practical preservation projects for Terracon; has supervised and participated in historic resource surveys, building documentation, archival research, and historic context development projects throughout the southeast United States. She has worked with municipal governments, state, and federal agencies to identify, document, and provide National Register of Historic Places (NRHP) eligibility assessments for commercial, residential, governmental, industrial, and rural resources. These projects have involved archival research using primary and secondary source materials at local, state, and national repositories, and condition assessments and field documentation using advance field survey forms with ESRI Data collection applications, digital and 35mm photography. She has consulted with multiple local governments on preservation planning efforts and managed recordation of over 22,000 resources. Ms. Davenport-Jacobs meets the *Secretary of Interior Standards for Professional Qualifications* in Architectural History and History and has completed Section 106 training with the Advisory Council on Historic Preservation (2014 & 2015).

PROJECT EXPERIENCE

Historic Structure Surveys/NRHP Nominations

Sarasota Historic Preservation Project – Sarasota, FL
County Wide Survey of Historic Resources – Nassau Co., FL
St. Augustine Historic Resources Survey Phase IV – St. Augustine, FL
Historic Resources Phase I-IV – City of Lake Worth Beach, FL
Marathon Key Survey and NRHP -- City of Marathon, FL
West Titusville Survey – City of Titusville, FL
Historic Resources Survey for Fiber Optics, Downtown Albany, GA
Meldrim Assessment – Effingham County, GA
St. Augustine National Register Historic District – St. Augustine, FL
Anastasia Island -- St. Augustine, FL
West Augustine, Ft. Mose – St. Augustine, Florida
County-wide Survey – Nassau County, FL
Architectural survey of historic structures – City of Jacksonville, FL
National Register Nomination for Downtown Historic District – City of Jacksonville, FL
Historic Resource Survey Update – Lake County, FL
Historic Resource Survey, Bayview Garden – Pinellas County, FL

Cemetery Delineation, Conditions Assessments, Restorations; Monuments

Pinehurst Conditions Assessment and Restoration – Jacksonville, FL
Memorial, Sunset Memorial, Mt. Olive, Old City and Hillside Cemeteries Comprehensive Conditions Assessment – Jacksonville, FL
Manatee County Burying Grounds Conditions Assessment and Preservation Plan – Manatee County, FL
New Hope Cemetery Delineation and Restoration – Uniontown, Perry County, AL
Thiele Kaolin Mine: Shelton and Purvis Family Cemeteries Delineation, Warren County, GA
Colonial Park Cemetery and Laurel Grove Cemetery Marker Restoration-- Savannah, GA
St. Peter's Episcopal Church Cemetery, conditions assessment for grounds and monuments – Fernandina Beach, FL
Randolph Cemetery preservation including cleaning and consolidation of headstones and curbing, – Columbia, SC
Prioleau Cemetery preservation including masonry repointing, marker cleaning and vegetation removal, US Naval Weapons Station, Joint Base – Charleston, SC



EDUCATION

Master of Fine Arts, Historic Preservation, Savannah College of Art and Design, 2007

Bachelor of Science, Environmental Design, Auburn University, 1999

*AU Rural Studio - 1998

AFFILIATIONS

- National Trust for Historic Preservation
- Florida Trust for Historic Preservation
- American Institute for Conservation of Historic and Artistic Works – Associate
- Association for Preservation Technology and Training

CERTIFICATIONS

- Basic and Advanced Training Section 106 – ACHP
- Cemetery Resource Protection Training - FPAN

YEARS OF EXPERIENCE: 20

YEARS AT FIRM: 8

Patricia Davenport-Jacobs (continued)

Building Assessments/Conservation Treatments/HABS Documentation

Research and Documentation of Historic CCC Structures Cherokee National Forest – US Forest Service
Loran-C Tower Jupiter Inlet, HABS Level III – Palm Beach County, FL
Northrop Grumman Hangars, Archival Documentation -- St. Johns County, FL
St. Augustine Shipyards, HABS Documentation – St. Johns County, FL
Old Fort Jackson Casemates and Moat Wall, removal of unwanted biological growth – Savannah, GA
Tender Frame Shop rehabilitation and adaptive use; Boiler Room building assessment;
Compressor Room masonry assessment and roofing project Old Central of Georgia Railroad
Roundhouse Complex – Savannah, GA
Baron Von Steuben and Marquis de Lafayette Monuments preservation, Lafayette Square -- Washington DC
Universalists Unitarian Church of Savannah paint analysis – Savannah, GA
Asbury United Methodist Church paint analysis – Savannah, GA
Graham Condominium historic research and architectural assessment -- Savannah, GA
Ethel Tison House building assessment -- Savannah, GA

Section 106 Compliance DOT/FCC/USACE

Des Moines Transload Facility – Des Moines, IA
FECR San Sabastian Bridge Replacement – St. Augustine, Florida
Historic Structures Report Stormwater Improvements – City of Altamonte Springs, FL
Colling Road: Historic Bridge Repair/Replacement – DOT, Orange Park FL
Moncrief-Dinsmore Bridge Replacement – DOT, Jacksonville, FL
Archaeological and visual assessment, Peak Mt. – Ashe County, NC
Architectural assessment and disturbance letter, Hamilton Beach – Beaufort County, NC
Disturbance letter, 5GB0366 – Guilford County, NC
Visual assessment and disturbance letter, 478-195 (AT&T) – Pender County, NC
Arch assessment, Bushy Fork – Person County, NC
Arch/visual assessment, Hyco Lake – Person County, NC
Arch/visual assessment, Nixon's Farm – Surry County, NC
Visual assessment, DT Wendell – Wake County, NC
Arch disturbance letter and visual assessment, Raleigh Rooftop Tower – Wake County, NC

Presentations/articles/papers

Water Intrusion and Cleaning Methods for Masonry Buildings -- Florida Association of Museums
Historic Resource Survey in the Digital Age: Data Collection with New Technologies – Florida Trust for Historic Preservation
Guest Lecturer Philosophy and Criticism "Taking What You Learn and Putting it to Use", (SCAD – HP, Prof. Andres Gaviria) – Savannah, GA
Guest Lecturer Conservation Laboratory, Instruction on Vegetation Control Issues for Historic Structures, (SCAD—HP, Prof. B.S. Robinson) – Savannah, GA
Organized and hosted Historic Preservation Commission Training with the University of Georgia Outreach Program and GA Department of Community Affairs – Fitzgerald, GA
Organized and hosted Hands-On Training course on design assistance for Main Street Directors with GA Trust Main Street Design Assistance Coordinator – Fitzgerald, GA
Organized Preservation Engineering Workshop on Non-Destructive Testing Methods, Association for Preservation Technology International and the National Center for Preservation Technology and Training – Charleston, SC
Contributor to the University of Florida PIN Guest Lecture Series in Nantucket, with Arthur I. "Buddy" Jacobs, Chairman of the Board of Directors for the Preservation Institute of Nantucket (PIN),
Building Assessment II -- Instruction on paint analysis for Asbury United Methodist Church (Prof. Jim Abraham, SCAD)
APT Communiqué co-Editor
Preservation Treatments for Sod Structures in the Midwest – Virginia Lime Conference and APTi
Contributor to Testing Protocols for the Remediation of Unwanted Biological and Vegetative Growth on Historic Structures, Dr. Judy Bischoff, NPS Harpers Ferry

Suzanne Reece, MSC, RPA

PRINCIPAL INVESTIGATOR - ARCHAEOLOGY

PROFESSIONAL EXPERIENCE

Ms. Reece is an Archaeologist and Principal Investigator in our Minnesota office. Ms. Reece has worked as an archaeological Principal Investigator throughout the upper Midwest. She has planned, managed, and conducted numerous cultural resources surveys for both public and private clients ranging from individual landowners to federal agencies. Ms. Reece has expertise in the areas of historical research, pedestrian and subsurface archaeological investigations, human and animal skeletal analysis, artifact identification and curation, as well as mitigation of disturbances to archaeological sites. She also has extensive experience in evaluation of historic structures and archaeological sites for National Register of Historic Places (NRHP) eligibility.

PROPERTY DEVELOPMENT

Ms. Reece has done extensive work with both private and public sector clients assessing proposed site locations for cultural resources. Her work has helped clients avoid costly delays by identifying archaeological sites and historic properties prior to land purchases and the start of construction. She has conducted literature searches (desktop reviews), intensive Phase I and Phase II surveys, and archaeological monitoring of construction activities in support of site selection and property development projects. Some of the property development and site selection projects Ms. Reece has worked on include: residential developments, municipal and state land purchases, industrial park development, and wetland mitigation banks.

INFRASTRUCTURE DEVELOPMENT

Ms. Reece has planned and conducted numerous cultural resources surveys related to the repair, replacement, and creation of modern infrastructure. She has conducted literature searches (desktop reviews) for utility installations within road rights-of-way, as well as intensive Phase II surveys and Phase III treatment plans for waterline, sewer line, telecommunication, and flood mitigation projects. While conducting these surveys, Ms. Reece has also gained experience in identifying and documenting historic structures and historic districts.

MUNICIPAL, STATE, AND FEDERAL PROPERTY

Ms. Reece has conducted many cultural resources studies on public lands owned by a government entity. In conducting these projects, she has played a role in obtaining the necessary state and federal archaeological permits, overseen compliance with permit stipulations, and conducted and documented the resulting fieldwork. She has conducted archival research,



EDUCATION

Master of Science,
Osteoarchaeology, University of
Edinburgh, 2013.

Bachelor of Arts, Anthropology,
University of Minnesota, 2011.

AFFILIATIONS

American Association of Biological
Anthropologists (AABA)

International Council for
Archaeozoology (ICAZ)

Register of Professional
Archaeologists (RPA)

WORK HISTORY

Terracon Consultants, Inc., St. Paul,
Minnesota. Principal Investigator,
2018-Present.

Kogel Archaeological Consulting
Services, Sioux Falls, South Dakota.
Principal Investigator, 2013-2018.

University of Edinburgh, Edinburgh,
Scotland. Osteoarchaeologist, 2013.

University of Minnesota,
Minneapolis, Minnesota. Laboratory
Intern, 2010; Excavator, 2008.

Suzanne Reece, MSC, RPA

PRINCIPAL INVESTIGATOR - ARCHAEOLOGY

Phase I reconnaissance surveys and intensive Phase II surveys, mortuary feature relocation surveys, Phase III treatment plans and investigations, and archaeological monitoring for projects on public land.

TRANSPORTATION IMPROVEMENTS

Ms. Reece has led cultural resources planning efforts and fieldwork for numerous transportation improvement projects which require compliance with state or federal historic preservation laws. These projects have included improvements to railways, road construction and expansion, highway erosion and floodwater mitigation studies, as well as cultural resources oversight of soil borrow project areas. She has conducted research and prepared reports on the historic significance of structures such as bridges and culverts and how to mitigate their loss of historic integrity during repairs or replacements.

OSTEOARCHAEOLOGICAL PROJECT EXPERIENCE

COMPLEX AND COMMINGLED CONTEXTS

From the start of her archaeological training, Ms. Reece has worked with comingled human and animal skeletal remains from complex archaeological contexts. She has undertaken projects that involve sorting and identification of comingled skeletal remains from archaeological sites from the United States and around the world, including work with assemblages from Algeria, the Caucasus Mountains, Ireland, Spain, Turkey, and the United Kingdom. Her experience with human and non-human skeletal materials has proven invaluable in the analysis and proper identification of osseous material in both field and laboratory settings, particularly when fragmentary remains are involved.

MORTUARY FEATURE IDENTIFICATION

As a Principal Investigator, Ms. Reece has been responsible for the identification and investigation of potential burial features encountered during cultural resources surveys. Her experience includes identification and non-intrusive investigation of burial mound sites, determining likely burial mound locations based on historical and ethnographic documentation, and minimally invasive excavation of unconfirmed mortuary features. Ms. Reece has also conducted historic research and pedestrian surveys to identify the boundaries of historic cemeteries to ensure that proposed projects do not encroach on any unmarked burials that may be present.

SKELETAL ANALYSIS

In her work, Ms. Reece has used modern techniques to identify important biological information from human skeletal remains, including age, sex, height, and ancestry indicators. Her work has also included documentation and identification of both pathological conditions and traumatic injuries. Ms. Reece has conducted skeletal analysis with complete, partial, and fragmentary osseous material, as well as cremated remains (“cremains”). Her experience with analysis of animal remains includes identification of species, sex, age, body size estimations, pathological conditions, and traumatic injuries. Ms. Reece is also experienced in the identification of taphonomic changes in bone caused by human and animal activity as well as natural weathering processes

Please refer to Appendix B for Site Figures

ADDITIONAL SITE INFORMATION

Terracon understands that Ambassador Towers LLC is proposing to collocate antennas on an existing telecommunications tower under the following specifications:

Site Name:	Shade Gap Collocation
Terracon Project Number:	J8237028
Address:	22384 Croghan Pike
City, County, State:	Dublin Township (Shade Gap), Huntingdon County, PA, 17255
Latitude / Longitude:	40° 10' 40.6" N / 77° 51' 45.8" W
Existing Tower Height:	264 feet, including attachments
Tower Type:	Self-support
Project Description:	Collocation of antennas on existing tower and installation of associated equipment within existing tower compound.

The project consists of the collocation of antennas on an existing self-support tower and installation of associated equipment within existing tower compound. The surrounding properties are residential, agricultural, and wooded land.



**NOTICE OF ORGANIZATION(S) WHICH WERE SENT PROPOSED
BROADBAND PROJECT NOTIFICATION INFORMATION**

Date: 04/28/2023

UPWARD BROADBAND
EMILY KOSMALSKI
1401 CONSTITUTION AVE.
WASHINGTON, DC 20230

Dear Applicant:

The National Telecommunications and Information Administration (NTIA) is using a modified version of the Federal Communications Commission's (FCC) Tower Construction Notification System (TCNS) as a means of expediting its Broadband grant programs. This notice is to inform you that the following authorized parties were sent information about the application that you submitted to NTIA through TCNS. The information was forwarded to authorized TCNS users by electronic mail and/or regular mail (letter).

Persons who have received the notification that you provided include leaders or their designees of federally-recognized American Indian Tribes, including Alaska Native Villages (collectively "Tribal Nations"), Native Hawaiian Organizations (NHOs), and State Historic Preservation Officers (SHPOs) who have set their geographic preferences on TCNS. For your convenience in identifying the referenced Tribal Nations and NHOs and in making further contacts, the City and State of the Seat of Government for each Tribal Nation and NHO, as well as the designated contact person, is included in the listing below. We note that Tribal Nations may have Section 106 cultural interests in ancestral homelands or other locations that are far removed from their current Seat of Government. Consistent with the FCC's rules as set forth in the NPA, NTIA requires that all Tribal Nations and NHOs listed below are afforded a reasonable opportunity to respond to this notification, consistent with the procedures set forth below.

We note that the review period for all parties begins upon receipt of a full project submittal and notifications that do not provide this serve as information only. If, upon receipt, the Tribal Nation or NHO does not respond within a reasonable time, you should make a reasonable effort at follow-up contact, unless the Tribal Nation or NHO has agreed to different procedures. In the event a Tribal Nation or NHO does not respond to a follow-up inquiry, or if a substantive or procedural disagreement arises between you and a Tribal Nation or NHO, you must seek guidance from NTIA. NTIA will follow procedures consistent with those set forth in the FCC's Second Report and Order released on March 30, 2018 (FCC 18-30).

1. THPO - Jarell Grant - Omaha Tribe of Nebraska - (PO Box: 368) - Macy, NE - jarell.grant@theomahatribe.com; mark.parker@theomahatribe.com - 402-837-5391 (ext: 434) - electronic mail

Details: Please note we have updated procedures. Please email us at Omahatribefcctns@outlook.com

2. TCNS Coordinator - Tiffany Martinez - Delaware Nation - 31064 State Highway 281 (PO Box: 825) - Anadarko, OK - tmartinez@delawarenation-nsn.gov; epaden@delawarenation-nsn.gov - 405-247-2448 (ext: 1403) - electronic mail
Details: The Delaware Nation of Oklahoma Historic Preservation Office has developed the following consultation procedures for all TCNS projects identified as undertakings by the Federal Communications Commission. In the email subject line, please specify whether the project is for a tower, small cell, or collocation. Our response can be given faster

with this information.

3. Cultural Preservation Director - Carol Butler - Absentee-Shawnee Tribe of Indians of Oklahoma - 2025 S. Gordon Cooper Drive - Shawnee, OK - fccasttens@gmail.com - 405-275-4030 (ext: 6312) - electronic mail

4. TCNS Rep - Bryan Printup - Tuscarora Nation - 5226 Walmore Rd - Via: Lewiston, NY - bprintup@hetf.org - 716-264-6011 (ext: 103) - electronic mail

If the applicant/tower builder receives no response from the Tuscarora Nation within 30 days after notification through TCNS, the Tuscarora Nation has no interest in participating in pre-construction review for the proposed site. The Applicant/tower builder, however, must immediately notify the Tuscarora Nation in the event archaeological properties or human remains are discovered during construction, consistent with Section IX of the Nationwide Programmatic Agreement and applicable law.

5. THPO - Edith Leoso - Bad River Band of Lake Superior Tribe of Chippewa Indians - (PO Box: 39) - Odanah, WI - thpo@badriver-nsn.gov; THPOAsst@badriver-nsn.gov - 715-682-7123 - electronic mail

If the applicant/tower builder receives no response from the Bad River Band of Lake Superior Tribe of Chippewa Indians within 30 days after notification through TCNS, the Bad River Band of Lake Superior Tribe of Chippewa Indians has no interest in participating in pre-construction review for the proposed site. The Applicant/tower builder, however, must immediately notify the Bad River Band of Lake Superior Tribe of Chippewa Indians in the event archaeological properties or human remains are discovered during construction, consistent with Section IX of the Nationwide Programmatic Agreement and applicable law.

6. THPO - Marvin DeFoe - Red Cliff Band of Lake Superior Chippewa Indians of Wisconsin - 88455 Pike Road, HWY 13 - Bayfield, WI - Marvin.DeFoe@redcliff-nsn.gov; Edwina.Buffalo-Reyes@redcliff-nsn.gov - 715-779-3700 (ext: 4242) - electronic mail

Details: Boozhoo, we do not have the Red Cliff Portal site online anymore and apologize for the inconvenience.

If you have a project that has already been paid for or would like to voluntarily pay for, please email documents for project review to THPO@redcliff-nsn.gov. This address is only to be used by Consultants who are voluntarily paying for projects.

If you have any questions, please contact Marvin Defoe, THPO Manager at (715) 779-3700 Ext. 4244 or Edwina Buffalo-Reyes, THPO Assistant at (715) 779-3700Ext. 4243.

7. THPO - William Tarrant - Seneca-Cayuga Nation - 23701 S 655 Road (PO Box: 453220) - Grove, OK - wtarrant@sctribe.com - 918-787-5452 (ext: 344) - regular mail

Details: Please refrain from sending review information via email. We request all information to be sent via mail to PO Box 453220, Grove, OK 74345.

8. Cell Tower Coordinator - Kelly Nelson - Eastern Shawnee Tribe of Oklahoma - 70500 East 128 Road - Wyandotte, OK - celltower@estoo.net - 918-666-2435 (ext: 1861) - regular mail

Details: DO NOT EMAIL DOCUMENTATION; it will be deleted without being opened.

Submit one printed color copy by US postal mail or other parcel carrier of all documentation to:

Eastern Shawnee Tribe
Attn: CellTower Program
70500 E. 128 Rd.
Wyandotte, OK 74370

Provide a 1-page cover letter with the following information:

- a. TCNS Number
- b. Company Name
- c. Project Name, City, County, State
- d. Project type
- e. Project coordinates
- f. Contact information

The Eastern Shawnee Procedures document is available and highly recommended for guidance; send an email to celltower@estoo.net requesting our most current copy.

9. THPO - Sherri Clemons - Wyandotte Nation - 64700 E, Hwy 60 - Wyandotte, OK - sclemons@wyandotte-nation.org - 918-678-6344 - electronic mail

Details: Please refrain from sending information via mail. We ONLY accept information via email to: sclemons@wyandotte-nation.org. We will advise if we require additional information.

10. THPO - Tonya Tipton - Shawnee Tribe - 29 South 69A Highway - Miami, OK - tcns@shawnee-tribe.com - 918-542-2441 (ext: 103) - electronic mail

Details: In the case of projects with NO ground disturbance such as antennae on the sides of buildings or existing poles, the Shawnee Tribe concurs that no known historic properties will be negatively impacted by the project. The Shawnee Tribe DOES NOT wish to consult on those projects with NO ground disturbance.

If the project DOES involve ground disturbance at all, the Shawnee Tribe would like to ACCEPT your invitation for consultation and will provide a review.

If you have any questions, you may contact the Shawnee Tribe via email at TCNS@shawnee-tribe.com

Thank you for the opportunity to comment.

11. THPO - Jonathan Windy Boy - Chippewa Cree Tribe of the Rocky Boy's Reservation - 96 Clinic Rd North - Box Elder, MT - marci.buchman@gmail.com; precisionarchaeology@gmail.com - 406-395-5215 - electronic mail and regular mail

Details: The Chippewa Cree Tribe performs its reviews of FCC undertakings and projects through its arrangement with I Response; a Tribally-owned enterprise. Please send all of your Forms 620 and Forms 621 to I Response at <http://app.iresponse106.com/>. The reviews will begin once all the required documentation has been received at <http://app.iresponse106.com/>. If the qualified and professional reviewers determine that additional information is required, or that field work is required, they will contact you through the I Response system and through TCNS. If the Tribe determines that the proposed project will have an effect on historic properties and/or Tribal religious and cultural sites or properties, we will provide notice to the project proponent and to the FCC.

12. THPO - Sarah Thompson - Lac du Flambeau Band of Lake Superior Chippewa Indians - Tribal Historic Preservation Office (PO Box: 67) - Lac du Flambeau, WI - ldfthpo@ldftribe.com - 715-588-2139 - electronic mail
Details: Effective Immediately:

Please send all submissions through email until further notice. Effective 3/23/2020

Please email all submissions to ldfthpo@ldftribe.com

Thank you

13. Deputy THPO, Archaeologist - Susan Bachor - Delaware Tribe of Indians - 126 University Circle Stroud Hall, Rm. 437 - East Stroudsburg, PA - sbachor@delawaretribe.org; lheady@delawaretribe.org - 610-761-7452 - electronic mail
Details: The Delaware Tribe of Indians areas of interest include our aboriginal territories (circa 1600), known locations of historic Delaware settlements, routes of removal and forced migration, and all lands of Delaware aboriginal title ceded by treaty to the United States. If you are receiving this notification, then your project falls within these areas of interest and we ask that you provide us with a cover letter describing the project and its location (including the project coordinates) as well as a topographic map showing the project location. If an archaeological survey has already been performed in preparation for the project, please send a copy of that as well. Additionally, we may request a biological assessment of culturally significant treaty resources which may be affected by the proposed undertaking.

We are only interested in consulting on projects that involve ground disturbance that is planned to take place in both undisturbed and previously disturbed contexts. We are not interested in consulting on collocations or projects that involve no ground disturbance. If your project does involve ground disturbance or you do not receive a response from us within 30 days of submitting the above project information, then we have no comments on the project. However, if any archaeological resources or human remains are disturbed at any point in the project planning or construction, we ask that the project be halted until we can be notified of the inadvertent discovery and can determine the most appropriate course of action. If your company would like a formal written response from the Delaware Tribe concerning the potential impact of your project to culturally and religiously significant sites, please contact Susan Bachor at sbachor@delawaretribe.org to request such a response.

In order to better facilitate consultation throughout our areas of interest we have three regional tribal historic preservation offices. While our Tribal Headquarters remains in Oklahoma, our Eastern Office in Pennsylvania is the point of contact for all consultation within our Eastern Region which includes the states of Massachusetts, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland and Virginia. If your project exists in any of these states, please contact Susan Bachor with the above project information at the following e-mail address. All offices prefer digital submissions and the project information can be submitted by e-mail.

Susan Bachor, Acting Director of Historic Preservation
Eastern Office
126 University Circle
Stroud Hall, Rm. 437
East Stroudsburg PA 18301
(610) 761-7452
sbachor@delawaretribe.org

Our Midwestern office is the point of contact for all consultation within our Midwestern region which includes the states of West Virginia, Ohio, Indiana, Michigan and Illinois. If your project exists in any of these states, please contact Larry Heady with the above project information at the following e-mail address. Our Midwestern office prefers to receive digital submissions and the project information can be submitted by e-mail.

Larry Heady, THPO
Midwestern Office
125 Dorry Lane, Grants Pass, OR 97527
lheady@delawaretribe.org
(262) 825-7586

We, at the Delaware Tribe Historic Preservation Office, along with our Chief and Tribal Council remain committed to protecting the cultural and physical integrity of our historic sites, traditional cultural properties, sacred sites, objects of cultural patrimony, and most importantly, the remains of our Ancestors. We look forward to working with you on our shared interests in preserving and protecting Delaware heritage within our areas of interest.

The information you provided was also forwarded to the additional Tribes and NHOs listed below. These Tribes and NHOs have NOT set their geographic preferences on TCNS, and therefore they are currently receiving tower notifications for the entire United States.

The information you provided was also forwarded to the following SHPOs in the state in which you propose to construct and neighboring states. The information was provided to these SHPOs as a courtesy for their information and planning.

14. - Amanda Terrell - Ohio History Connection - 800 E. 17th Avenue - Columbus, OH - aterrell@ohiohistory.org - 614-298-2000 - electronic mail

15. Historic Preservation Supervisor - Barbara Frederick - Pennsylvania State Historic Preservation Office - Pennsylvania Historical & Museum Commission 400 North St, 2nd Floor - Harrisburg, PA - bafrederic@pa.gov - 717-772-4519 - electronic mail

16. Deputy SHPO - Susan Pierce - West Virginia Division of Culture & History, Historic Preservation Office - 1901 Kanawha Boulevard East - Charleston, WV - susan.pierce@wvculture.org - - electronic mail

17. SHPO - Barbara Franco - Pennsylvania Historical and Museum Commission - 300 North Street - Harrisburg, PA - bcutler@state.pa.us - 717-787-2891 - electronic mail

TCNS automatically forwards all notifications to all Tribal Nations and SHPOs that have an expressed interest in the geographic area of a proposal. A particular Tribal Nation or SHPO may also set forth policies or procedures within its details box that exclude from review certain facilities (for example, a statement that it does not review collocations with no ground disturbance or that indicates that no response within 30 days indicates no interest in participating in pre-construction review).

Please be advised that the NTIA cannot guarantee that the contact(s) listed above opened and reviewed an electronic or regular mail notification. The following information relating to the proposed project was forwarded to the person(s) listed above.

Notification Received: 04/25/2023

Notification ID: 265957

Project Number: 50

Applicant: Upward Broadband

Applicant Contact: Emily Kosmalski

Project Type(s): Multiple Project Components

Region(s) affected (State, County): PENNSYLVANIA, HUNTINGDON

Address or Geographical Location Description: Installation of a new tower with antennas near 16150 Blacklog Valley Rd, Orbisonia PA and collocation of antennas on an existing 260-ft tower at 22384 Croghan Pike, Shade Gap, PA.

If you have any questions or comments regarding the content of this notice, please contact NTIA at: TCNS@ntia.gov.



844 N. Lenola Road, Suite 1
 Moorestown, NJ 08057
 P (856) 813-3267
 F (856) 813-3279
Terracon.com

June 8, 2023

Dublin Township
 21347 Main Street / PO BOX 148
 Shade Gap, PA 17255
 ATTN: Trudy O'Donnell, Secretary/Dev. Permit Officer
 Phone: 814- 259-3774 / Email dublintwp@embarqmail.com

RE: Invitation to Comment as a Consulting Party on a Telecommunications Collocation Project

Site Name:	Shade Gap
Terracon Project Number:	J8237028
Address:	22384 Croghan Pike
City, County, State:	Dublin Township (Shade Gap), Huntingdon County, PA, 17255
Latitude / Longitude:	40° 10' 40.6" N / 77° 51' 45.8" W
Existing Tower Height:	264 feet, including attachments
Tower Type:	Self-support
Project Description:	Collocation of antennas on existing tower and installation of associated equipment within existing tower compound.

To Whom it May Concern:

In accordance with Section 106 of the National Historic Preservation Act (Section 106), the above-referenced proposed broadband deployment project is being evaluated for its potential effects to tribal resources, archaeological sites, or historic resources. If approved, funding for the above-referenced broadband deployment projects will be, in part, provided through a grant from the U.S. Department of Commerce, National Telecommunications & Information Administration (NTIA). As such, the proposed project is a federal undertaking subject to consultation under Section 106.

Terracon is writing to invite your comment on the effect of the above-referenced project on historic resources within the project's Area of Potential Effects (APE).

Field assessment for both historic properties and archaeological sites will be conducted, and a determination will be made of the project's direct and indirect effects on eligible properties. Consulting parties are invited to provide information concerning historic or archaeological properties already listed in the National Register or that could be eligible for listing in the National Register. We welcome your comments regarding the effect of the tower on historic resources that may be listed in or eligible for the National Register of Historic Places.

If you would like to comment, please respond to this letter within 30 days of its receipt. Thank you for your response on this matter. If you have any questions, please do not hesitate to call. If you wish to respond by email, I may be reached at kathy.eisele@terracon.com and (856) 813-3267.

Sincerely,
 Terracon Consultants, Inc.

Kathryn A. Eisele
 Sr. Project Manager

Attachment: Project Location Map with APE

Explore with us



844 N. Lenola Road, Suite 1
 Moorestown, NJ 08057
 P (856) 813-3267
 F (856) 813-3279
Terracon.com

June 8, 2023

Huntingdon County Historical Society
 106 Fourth Street
 PO Box 305
 Huntingdon, PA
 ATTN: Margaret Skrivseth, Executive Director
 Email: hchsmail@gmail.com / Phone 814-643-5449

RE: Invitation to Comment as a Consulting Party on a Telecommunications Collocation Project

Site Name:	Shade Gap
Terracon Project Number:	J8237028
Address:	22384 Croghan Pike
City, County, State:	Dublin Township (Shade Gap), Huntingdon County, PA, 17255
Latitude / Longitude:	40° 10' 40.6" N / 77° 51' 45.8" W
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Terracon is writing to invite your comment on the effect of the above-referenced project on historic resources within the project's Area of Potential Effects (APE).

Field assessment for both historic properties and archaeological sites will be conducted, and a determination will be made of the project's direct and indirect effects on eligible properties. Consulting parties are invited to provide information concerning historic or archaeological properties already listed in the National Register or that could be eligible for listing in the National Register. We welcome your comments regarding the effect of the tower on historic resources that may be listed in or eligible for the National Register of Historic Places.

If you would like to comment, please respond to this letter within 30 days of its receipt. Thank you for your response on this matter. If you have any questions, please do not hesitate to call. If you wish to respond by email, I may be reached at kathy.eisele@terracon.com and (856) 813-3267.

Sincerely,
 Terracon Consultants, Inc.

Kathryn A. Eisele
 Sr. Project Manager

Attachment: *Project Location Map with APE*

Explore with us

Proof of Publication of Legal Notice

In Accordance with the Provisions of "Newspaper Advertising Act" approved May 16, 1929, P.L. 1784, as amended

Proof of Publication

.....
vs.
.....

State of Pennsylvania
County of Huntingdon

SS:

Copy of Notice or Advertisement

BETSY CLINGER HIKES, being duly sworn according to law, deposes that she is ADMINISTRATIVE ASSISTANT of The Daily News, a newspaper of general circulation in Huntingdon County, Published at Huntingdon, Pennsylvania, daily established in 1922 and that the legal notice attached hereto and made part hereof was published in said Newspaper June 10, 2023 ;

PUBLIC NOTICE: Ambassador Towers LLC is proposing to collocate antennas on an existing 264-ft Self-Support Telecommunications Tower located near 22384 Croghan Pike, Dublin Twp (Shade Gap), Huntingdon Co, PA, 17255 (40° 10' 40.6" N, 77° 51' 45.8" W). Public comments regarding potential effects from this site on historic properties may be submitted within 30-days from the date of this publication to: K. Eisele, Terracon, 844 N. Lenola Rd, Ste 1, Moorestown, NJ 08057, 856-813-8267, or Kathy.eisele@terracon.com.

that the affiant is not interested in any manner in the subject matter of said notice or advertisement, and that all of the allegations contained herein as to

Betsy Clinger Hikes

the time, place and character of the said publication are true and correct.

Sworn to and subscribed before me this 5th

day of July A.D., 2023

My Commission expires

Sarah Snare
Prothonotary

Huntingdon County, Pennsylvania

My Commission Expires First Monday 2026

Sarah Snare

Statement of Advertising Costs

To Terracon - Collocate antennas

For June 10, 2023 \$27.40

publishing Notice or Advertisement attached hereto on above dates \$ 5.25

Probating same PROOF OF PUBLICATION Total \$32.65

Publisher's Receipt for Advertising Costs

The Daily News, by the publisher or authorized representative whose signature follows, hereby acknowledges receipt of the aforesaid advertising and probation costs and certifies that the same have been fully paid.

THE DAILY NEWS

By

AREAS OF POTENTIAL EFFECTS

Site Name:	Shade Gap Collocation
Terracon Project Number:	J8237028
Address:	22384 Croghan Pike
City, County, State:	Dublin Township (Shade Gap), Huntingdon County, PA, 17255
Latitude / Longitude:	40° 10' 40.6" N / 77° 51' 45.8" W
Existing Tower Height:	264 feet, including attachments
Tower Type:	Self-support
Project Description:	Collocation of antennas on existing tower and installation of associated equipment within existing tower compound.

A. Direct Effects

The direct APE was determined to be the existing approximate 10,000 square-foot tower compound.

B. Visual Effects

The proposed tower will be approximately 264 feet in overall height. The APE for visual effects is therefore considered to be a 0.75-mile radius, per the 2004 Programmatic Agreement (Section VI.4.a), which defines the visual APE as a 0.75-mile radius for towers between 200 and 399 feet in height (unless otherwise determined through consultation between the applicant and the local SHPO office).

Prior Disturbance Assessment

Shade Gap Collocation
22384 Croghan Pike
Shade Gap, Dublin Township, Huntingdon County
Pennsylvania 17255
Terracon Project No. J8237028
July 2023



Prepared for:
Ambassador Towers LLC

Prepared by:
Terracon Consultants, Inc.
844 N. Lenola Road, Suite 1
Moorestown, NJ 08057



June 22, 2023

PA State Historic Preservation Office
400 North Street, Second Floor
Harrisburg PA 17120
ATTN: Justin McKeel, Environmental Review Archaeologist
P: (717) 783-9900 / E: jusmckeel@pa.gov

Re: Prior Disturbance Assessment
Site Name: Shade Gap Collocation
Terracon Project No. J8237038

Dear Mr. McKeel,

Terracon Consultants, Inc. (Terracon) completed a prior disturbance assessment for a proposed collocation on an existing communications tower. The proposed project involves the placement of antennas on an existing tower and installations of associated support equipment within the existing tower compound. The proposed project is being done by Upward Broadband LLC., with funding partially provided by a grant from the National Telecommunications and Information Administration (NTIA). The proposed project is being conducted with the following specifications:

Site Name:	Shade Gap Collocation
Terracon Project Number:	J8237028
Address:	22384 Croghan Pike
City, County, State:	Dublin Township (Shade Gap), Huntingdon County, PA, 17255
Latitude / Longitude:	40° 10' 40.6" N / 77° 51' 45.8" W
Existing Tower Height:	264 feet, including attachments
Tower Type:	Self-support
Project Description:	Collocation of antennas on existing tower and installation of associated equipment within existing tower compound.

The lead federal agency for this project is the NTIA. The NTIA defers to the Federal Communications Commission’s (FCC) 2004 Nationwide Programmatic Agreement (NPA) (FCC 2004) for guidance and compliance with Section 106 of the National Historic Preservation Act of 1966, as amended. According to the NPA, the Applicant need not undertake a Field Survey for archaeological resources where the depth of previous disturbance exceeds the proposed construction depth or geomorphological evidence indicates that cultural resource-bearing soils do not occur within the project area. Based on the nature of the proposed undertaking (an antenna collocation on a previously constructed tower) this letter provides an evaluation from a Secretary of Interior (SOI)-qualified archaeologist regarding the applicability of a field survey for the proposed tower collocation.

The Area of Potential Effects (APE) for direct effects is determined to be the dimensions of ground disturbance associated with the telecommunications facility, associated equipment, and access

Explore with us

Prior Disturbance Assessment

Shade Gap ■ Shade Gap, PA
July 2023 ■ Terracon Project No. J8237028



and utilities easements. Since the height of the tower with attachments is 264 feet (overall height), the APE for visual effects is therefore considered to be a 0.75-mile radius, per the 2004 Programmatic Agreement (Section VI.C.4.a), which defines the visual APE as a 0.75-mile radius for towers 200 to 400 feet in height (unless otherwise determined through consultation between the applicant and the SHPO office).

Project Description

The project is located to the west of Croghan Pike in Shade Gap, Dublin Township, Huntingdon County, Pennsylvania. The proposed project will take place within an existing telecommunications installation which contains a self-support lattice tower, support equipment, and buried and overhead connection to utilities. The existing compound is contained within a chain link fence, and is accessible via a gravel driveway. The proposed project involves the installation of antennas on the existing tower and placement of associated equipment within the tower compound. The project area is depicted on the attached aerial photograph and 7.5-minute United States Geological Survey (USGS) topographic quadrangle.

Records Review

Terracon conducted a search of the Pennsylvania State Historic and Archaeological Resource Exchange (PA-SHARE) online database, maintained by the Pennsylvania State Historic Preservation Office (SHPO) for information on previously recorded historic properties within the project area and within 0.75-mile of the project area. This search found no historic properties have previously been recorded within the existing tower compound, and two historic properties have been recorded within the 0.75-mile search radius. The National Register of Historic Places (NRHP) listed Shade Gap Mill (1988RE00193/ NRHP #90000396) is located approximately 0.75-mile to the northwest of the tower location, and the NRHP-eligible East Broad Top Railroad (Orbisonia to Neelyton) District is located to the north and to the east of the tower at a similar distance.

Background research included an examination of historic photographs and maps of the project area found the parent parcel was vacant land or cultivated crop land up until the 1980s. By 1983, the property was subdivided and the portion of the parcel containing the project area became vacant land or greenspace along Croghan Pike. The reviewed topographic maps do depict the project areas as being within the boundary of "Harpers Memorial Park" beginning in 1969. This park has been recorded in the PA-SHARE database (2023RE06175), but has not been evaluated for possible inclusion on the NRHP. The location of the project area remained vacant until the construction of the existing tower compound, which occurred sometime after 2020.

Recommendations

Due to prior ground disturbing activities within the project site, and the small footprint of the proposed collocation, there is a low probability that archaeological materials would be

Prior Disturbance Assessment

Shade Gap ■ Shade Gap, PA
July 2023 ■ Terracon Project No. J8237028



encountered or be found in an undisturbed context. Therefore, no further archaeological investigations are recommended for the proposed project at this time. The placement of the antennas on an existing communications tower is also not likely to impact the recorded historic properties within 0.75-mile of the project area. A review of the project by SHPO was previously conducted in February 2023, and found the proposed colocation would not have an impact on above ground or archaeological resources. A copy of SHPO comment letter is attached.

Should buried artifacts, human remains, or cultural deposits be encountered during ground disturbing activities, it is Terracon’s recommendation that construction immediately halt, and the resources should be examined by a professional archaeologist. Appropriate authorities, including the appropriate tribal entities and SHPO, should be notified.

Closing

We appreciate the opportunity to provide you with this report. If you have any questions or comments, please contact Kathy Eisele at (856) 813-3276 or at Kathy.Eisele@terracon.com.

Sincerely,
Terracon Consultants, Inc.

Suzanne Reece, MSc, RPA
Principal Investigator Archaeologist

Marilyn Zenko
Senior Archaeologist

Attachments:
Project Maps
SHPO Comment Letter

Prior Disturbance Assessment

Shade Gap ■ Shade Gap, PA

July 2023 ■ Terracon Project No. J8237028



References

Federal Communications Commission (FCC)

2004 Nationwide Programmatic Agreement for Review of Effects on Historic Properties for Certain Undertakings Approved by the Federal Communications Commission. Available online: <http://wireless.fcc.gov/siting/npa/FCC-04-222A3.pdf>.

Historic Aerials

2023 *Historic Aerial Photograph Database*. Website at <http://www.historicaerials.com/>.

Pennsylvania State Historic Preservation Office (PA SHPO), publisher

2023 *PA-SHARE database*. Website at share.phmc.pa.gov/pashare.

2023 *Project Comment Letter*. Environmental Review Project Number 2023PR00457.001.

United States Geological Survey (USGS)

2023 *Shade Gap, Pennsylvania [map]. 1:24,000 7.5-minute series topographic quadrangle*. U.S. Department of the Interior, U.S. Geological Survey, Washington, D.C. Electronic map available from <https://store.usgs.gov/map-locator>.

Please refer to Appendix B for Site Figures



Pennsylvania State Historic Preservation Office

PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION

February 6, 2023

Jacob Lester
3105 LINCOLN HWY E
PARADISE PA 17562

RE: ER Project # 2023PR00457.001, Rural Broadband Infrastructure Expansion in the Alleghenies Project (Upward Broadband) Shade Gap, Federal Communications Commission, Dublin Township, Huntingdon County

Dear Jacob Lester:

Thank you for submitting information concerning the above referenced project. The Pennsylvania State Historic Preservation Office (PA SHPO) reviews projects in accordance with state and federal laws. Section 106 of the National Historic Preservation Act of 1966, and the implementing regulations (36 CFR Part 800) of the Advisory Council on Historic Preservation, is the primary federal legislation. The Environmental Rights amendment, Article 1, Section 27 of the Pennsylvania Constitution and the Pennsylvania History Code, 37 Pa. Cons. Stat. Section 500 et seq. (1988) is the primary state legislation. These laws include consideration of the project's potential effects on both historic and archaeological resources.

Above Ground Resources

No Above Ground Concerns - Environmental Review - No Effect - Above Ground

Based on the information received and available within our files, it is our opinion that the proposed project will have No Effect on above ground historic properties, including historic buildings, districts, structures, and/or objects, should they exist. Should the scope of the project change and/or should you be made aware of historic property concerns, you will need to reinitiate consultation with our office using PA-SHARE.

For questions concerning above ground resources, please contact Tyra Guyton at tyguyton@pa.gov.

Archaeological Resources

No Archaeological Concerns - Environmental Review - No Effect - Archaeological

Based on the information received and available in our files, in our opinion, the proposed project should have No Effect on archaeological resources. Our analysis indicates that archaeological resources are potentially located in this project area. Should the scope of the project be amended to include additional ground-disturbing activity and/or should you be made aware of historic property concerns, you will need to reinitiate consultation with our office using PA-SHARE.

For questions concerning archaeological resources, please contact Taylor Napoleon at tnapoleon@pa.gov.

Sincerely,

A handwritten signature in black ink that reads "Emma Diehl". The signature is written in a cursive style with a long horizontal stroke at the end.

Emma Diehl
Environmental Review Division Manager

Visual Effects Report

Site Name: Shade Gap
22384 Croghan Pike
Shade Gap, Dublin Township, Huntingdon County
Pennsylvania 17255
Terracon Project No. J8237028
July 2023



Prepared for:
Ambassador Towers LLC

Prepared by:
Terracon Consultants, Inc.
844 N. Lenola Road, Suite 1
Moorestown, NJ 08057

Patricia Davenport-Jacobs
Historic Preservation Group Manager

Meghan Browning
Historian

VISUAL EFFECTS REPORT

1.0 PROJECT SUMMARY

Terracon understands that Ambassador Towers LLC is proposing to collocate antennas on an existing telecommunications tower with the following specifications:

Site Name:	Shade Gap
Terracon Project Number:	J8237028
Address:	22384 Croghan Pike
City, County, State:	Dublin Township (Shade Gap), Huntingdon County, PA, 17255
Latitude / Longitude:	40° 10' 40.6" N / 77° 51' 45.8" W
Existing Tower Height:	264 feet, including attachments
Tower Type:	Self-support
Project Description:	Collocation of antennas on existing tower and installation of associated equipment within existing tower compound.
Visual APE:	0.75 miles

The proposed project involves the placement of antennas on an existing tower and installations of associated support equipment within the existing tower compound. The proposed project is being done by Ambassador Towers LLC, with funding partially provided by a grant from the National Telecommunications and Information Administration (NTIA). The lead federal agency for this project is the NTIA. The NTIA defers to the Federal Communications Commission's (FCC) 2004 Nationwide Programmatic Agreement (NPA) (FCC 2004) for guidance and compliance with Section 106 of the National Historic Preservation Act of 1966, as amended.

Federal Communications Commission (FCC) regulations require that carriers consider the effects of the proposed undertaking on historic properties in compliance with the *National Programmatic Agreement (NPA) for Review of Effects on Historic Properties for Certain Undertakings Approved by the Federal Communications Commission* (Nationwide PA [FCC 04-222]) and the National Historic Preservation Act (NHPA), as amended. In fulfillment of these requirements, Terracon Consultants completed a Historic Resources report for the proposed project.

The goal of this survey was to determine if properties eligible for or listed in the National Register of Historic Places (NRHP) are located within the APEs for direct and visual effects. The proposed tower will be approximately 264 feet in overall height. The APE for visual effects is therefore considered to be a 0.75-mile radius, per the 2004 Programmatic Agreement (Section VI.4.a), which defines the visual APE as a 0.75-mile radius for towers between 200 and 399 feet in height (unless otherwise determined through consultation between the applicant and the local SHPO office). The APE for direct effect was determined to be site specific and includes the existing approximate 10,000 square-foot tower compound.

The FCC requires a Secretary of the Interior (SOI) -qualified architectural historian or historian be involved in any historic resource evaluation for FCC National Environmental Policy Act (NEPA) projects, including all fieldwork, as well as determination of eligibility or effects on historic properties. The following individuals meet the above-listed criteria, and resumes are attached in the submittal as proof of SOI Principal Investigator (PI) qualifications for their respective fields:

- Patricia Davenport-Jacobs, Architectural Historian/Principal Investigator
- Meghan Powell, History

Visual Effects Report

Shade Gap Collocation ■ Shade Gap, Pennsylvania
July 2023 ■ Terracon Project No. J8237028



2.0 SITE DESCRIPTION

The project consists of the collocation of antennas on an existing self-support tower and installation of associated equipment within existing tower compound. The surrounding properties are residential, agricultural, and wooded land.

3.0 AREA OF POTENTIAL EFFECT (APE)

An online review was conducted of the NRHP and the National Historic Landmarks (NHL) databases to identify any listed historic properties within the applicable visual APE of the tower (provided in site information table). Additional file review was conducted using the established State Historic Preservation Office (SHPO) protocols to identify historic properties that are either listed or eligible for listing on the NRHP.

Terracon conducted a search of the Pennsylvania State Historic and Archaeological Resource Exchange (PA-SHARE) online database, maintained by the Pennsylvania State Historic Preservation Office (SHPO) for information on previously recorded historic properties within the project area and within 0.75-mile of the project area. This search found no historic properties have previously been recorded within the existing tower compound, and two historic properties have been recorded within the 0.75-mile search radius. The National Register of Historic Places (NRHP) listed Shade Gap Mill (1988RE00193/ NRHP #90000396) is located approximately 0.75-mile to the northwest of the tower location, and the NRHP-eligible East Broad Top Railroad (Orbisonia to Neelyton) District is located to the north and to the east of the tower at a similar distance. In addition, 37 above ground resources were identified within 0.75-miles of the site that have not been further evaluated regarding NRHP eligibility (see attached table).

The placement of the antennas on an existing communications tower is not likely to impact the recorded historic properties within 0.75-mile of the project area. A review of the project by SHPO was previously conducted in February 2023 and found the proposed collocation would not have an impact on aboveground or archaeological resources. A copy of SHPO comment letter is attached.

4.0 SUMMARY

It is Terracon's opinion that a finding of No Historic Properties within the direct effects APE and No Adverse Effect to Historic Properties within the visual effects APE is recommended for the proposed installation. Therefore, no further work is recommended at this time.

ATTACHMENTS

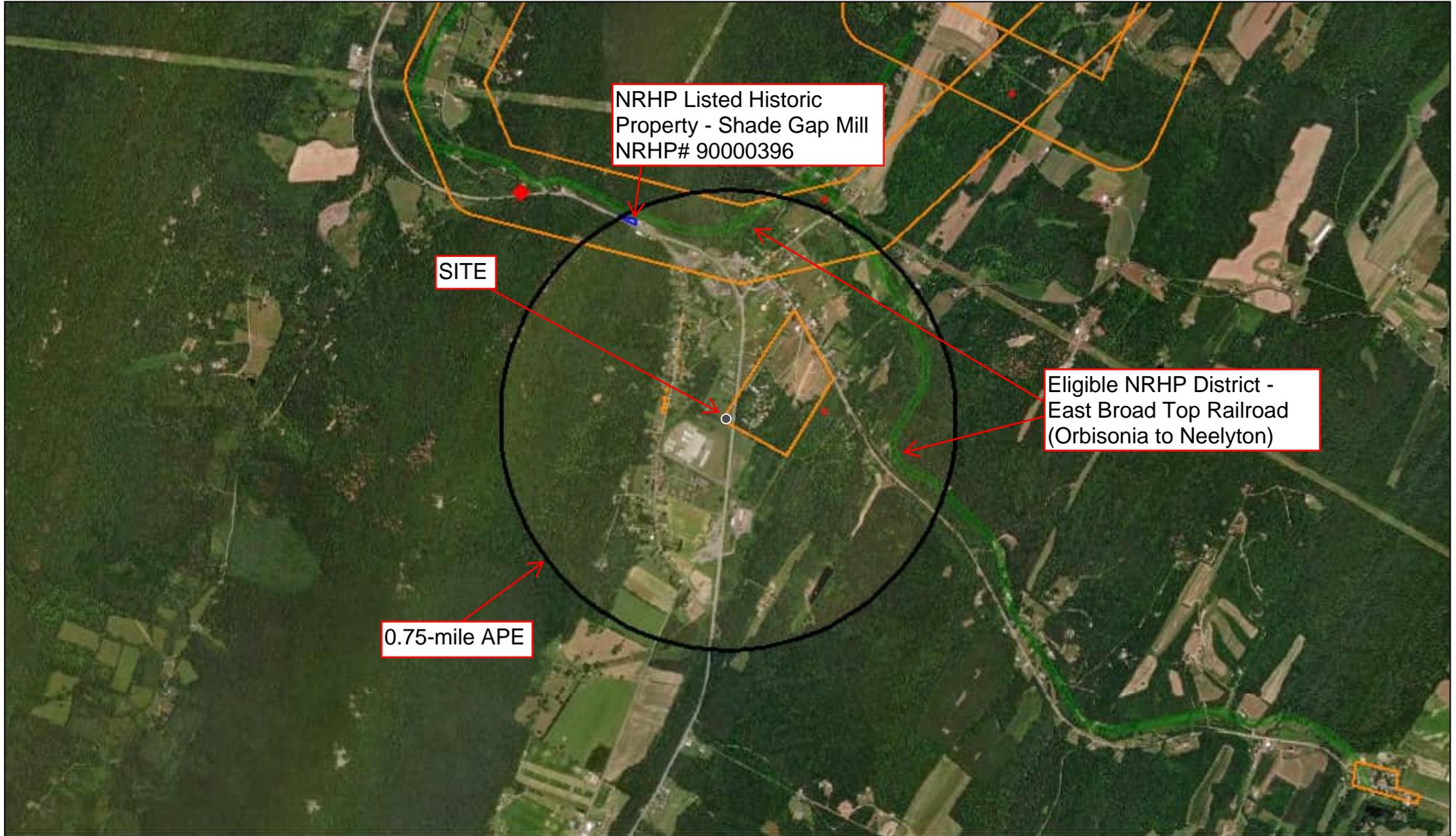
Photographs

PA SHPO Reply, February 6, 2023

PA State Historic and Archaeological Resource Exchange (SHARE) Map
Above Ground Resources Summary Table (Undetermined)

Please refer to Appendix F for Site Photographs

Shade Gap Tower



NRHP Listed Historic Property - Shade Gap Mill
NRHP# 90000396

SITE

Eligible NRHP District - East Broad Top Railroad (Orbisonia to Neelyton)

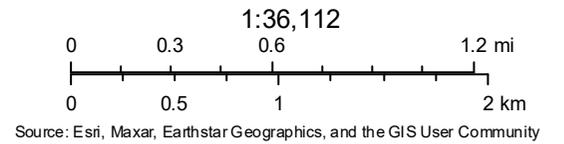
0.75-mile APE

5/30/2023

Above Ground Resource

- NHL
- Listed

- | | | |
|--|---|---|
| Eligible | Not Eligible | Demolished |
| Eligible | Undetermined | |
| Not Eligible | Undetermined | |



Visual Effects Report

Shade Gap Collocation ■ Shade Gap, Pennsylvania
 July 2023 ■ Terracon Project No. J8237028



Undetermined Resources			
ID Number	Entity	Type	Name
1988RE00193	Spatial	Above Ground Resource	Shade Gap Mill
1995RE26254	Spatial	Above Ground Resource	McGee
1995RE26262	Spatial	Above Ground Resource	Swoope
1995RE26263	Spatial	Above Ground Resource	Hudson
1995RE26264	Spatial	Above Ground Resource	Hudson
1995RE26265	Spatial	Above Ground Resource	Robinson
1995RE26266	Spatial	Above Ground Resource	School
1995RE26267	Spatial	Above Ground Resource	Blair
1995RE26268	Spatial	Above Ground Resource	Hudson
1995RE26269	Spatial	Above Ground Resource	Shade, Dr.
1995RE26270	Spatial	Above Ground Resource	Wilson
1995RE26271	Spatial	Above Ground Resource	Sipes
1995RE26272	Spatial	Above Ground Resource	Blair
1995RE26273	Spatial	Above Ground Resource	Mills
1995RE26274	Spatial	Above Ground Resource	Rhea
1995RE26359	Spatial	Above Ground Resource	Rhea
1995RE26360	Spatial	Above Ground Resource	Waggoner
1995RE26361	Spatial	Above Ground Resource	Caldwell
1995RE26362	Spatial	Above Ground Resource	Neely
1995RE26363	Spatial	Above Ground Resource	Wilson
1995RE26364	Spatial	Above Ground Resource	Scott
1995RE44547	Spatial	Above Ground Resource	Appleby
1995RE46254	Spatial	Above Ground Resource	Presbyterian Church
1995RE46259	Spatial	Above Ground Resource	Morrow
1995RE46260	Spatial	Above Ground Resource	School
1995RE54934	Spatial	Above Ground Resource	Methodist Church
1998RE00050	Spatial	Above Ground Resource	Roddy
2004RE08581	Spatial	Above Ground Resource	
2019RE17217	Spatial	Above Ground Resource	New Path
2019RE22625	Spatial	Above Ground Resource	Post Office
2019RE25598	Spatial	Above Ground Resource	Johnson Property
2022RE07907	Spatial	Above Ground Resource	21220 Main St
2022RE07908	Spatial	Above Ground Resource	Main St
2022RE07909	Spatial	Above Ground Resource	21230 Main St
2022RE07910	Spatial	Above Ground Resource	21208 Main St
2022RE07911	Spatial	Above Ground Resource	21194 Main St
2023RE06175	Spatial	Above Ground Resource	Harpers Memorial Park

Explore with us



Pennsylvania State Historic Preservation Office

PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION

February 6, 2023

Jacob Lester
3105 LINCOLN HWY E
PARADISE PA 17562

RE: ER Project # 2023PR00457.001, Rural Broadband Infrastructure Expansion in the Alleghenies Project (Upward Broadband) Shade Gap, Federal Communications Commission, Dublin Township, Huntingdon County

Dear Jacob Lester:

Thank you for submitting information concerning the above referenced project. The Pennsylvania State Historic Preservation Office (PA SHPO) reviews projects in accordance with state and federal laws. Section 106 of the National Historic Preservation Act of 1966, and the implementing regulations (36 CFR Part 800) of the Advisory Council on Historic Preservation, is the primary federal legislation. The Environmental Rights amendment, Article 1, Section 27 of the Pennsylvania Constitution and the Pennsylvania History Code, 37 Pa. Cons. Stat. Section 500 et seq. (1988) is the primary state legislation. These laws include consideration of the project's potential effects on both historic and archaeological resources.

Above Ground Resources

No Above Ground Concerns - Environmental Review - No Effect - Above Ground

Based on the information received and available within our files, it is our opinion that the proposed project will have No Effect on above ground historic properties, including historic buildings, districts, structures, and/or objects, should they exist. Should the scope of the project change and/or should you be made aware of historic property concerns, you will need to reinitiate consultation with our office using PA-SHARE.

For questions concerning above ground resources, please contact Tyra Guyton at tyguyton@pa.gov.

Archaeological Resources

No Archaeological Concerns - Environmental Review - No Effect - Archaeological

Based on the information received and available in our files, in our opinion, the proposed project should have No Effect on archaeological resources. Our analysis indicates that archaeological resources are potentially located in this project area. Should the scope of the project be amended to include additional ground-disturbing activity and/or should you be made aware of historic property concerns, you will need to reinitiate consultation with our office using PA-SHARE.

For questions concerning archaeological resources, please contact Taylor Napoleon at tnapoleon@pa.gov.

Sincerely,

A handwritten signature in black ink that reads "Emma Diehl". The signature is written in a cursive style with a long horizontal stroke at the end.

Emma Diehl
Environmental Review Division Manager

Shade Mountain Tower
Section 106 Compliance
Documentation



Pennsylvania State Historic Preservation Office

PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION

January 26, 2023

Jacob Lester
Upward Broadband, LLC.
3105 LINCOLN HWY E
PARADISE PA 17562

RE: ER Project # 2023PR00099.001, Rural Broadband Infrastructure Expansion in the Alleghenies Project (Upward Broadband) Shade Mtn, Federal Communications Commission, Tell Township, Huntingdon County

Dear Jacob Lester:

Thank you for submitting information concerning the above referenced project. The Pennsylvania State Historic Preservation Office (PA SHPO) reviews projects in accordance with state and federal laws. Section 106 of the National Historic Preservation Act of 1966, and the implementing regulations (36 CFR Part 800) of the Advisory Council on Historic Preservation, is the primary federal legislation. The Environmental Rights amendment, Article 1, Section 27 of the Pennsylvania Constitution and the Pennsylvania History Code, 37 Pa. Cons. Stat. Section 500 et seq. (1988) is the primary state legislation. These laws include consideration of the project's potential effects on both historic and archaeological resources.

Above Ground Resources

More Information Requested - New Photo

Please provide clear, color photographs of the entire project area, including any historic above ground resources located in the direct or visual APE. . Please submit the requested materials to the PA SHPO through PA-SHARE using the link under SHPO Requests More Information on the Response screen.

More Information Requested - Inquiry - General Inquiry

Please identify any above ground historic resources located within the direct or visual APE of the project. Please submit the requested materials to the PA SHPO through PA-SHARE using the link under SHPO Requests More Information on the Response screen.

More Information Requested - New Attachment

Please provide shapefiles for the visual APE. Please refer to the following link for guidelines for projects with potential visual effects:

<https://www.phmc.pa.gov/Preservation/About/Documents/Guidelines%20for%20Project%20with%20>

Please submit the requested materials to the PA SHPO through PA-SHARE using the link under SHPO Requests More Information on the Response screen.

For questions concerning above ground resources, please contact Tyra Guyton at tyguyton@pa.gov.

Archaeological Resources

No Archaeological Concerns - Environmental Review - No Effect - Archaeological

Based on the information received and available in our files, in our opinion, the proposed project should have No Effect on archaeological resources. Our analysis indicates that archaeological resources are potentially located in this project area. Should the scope of the project be amended to include additional ground-disturbing activity, including any changes to the proposed access to the project, and/or should you be made aware of historic property concerns, you will need to reinitiate consultation with our office using PA-SHARE.

For questions concerning archaeological resources, please contact Justin McKeel at jsmckeel@pa.gov.

Sincerely,



Emma Diehl
Environmental Review Division Manager



Pennsylvania State Historic Preservation Office

PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION

June 14, 2023

Ben Momose
Upward Broadband, LLC.
3105 LINCOLN HWY E
PARADISE PA 175620000

RE: ER Project # 2023PR00099.007, Rural Broadband Infrastructure Expansion in the Alleghenies Project (Upward Broadband) Shade Mtn, National Telecommunications and Information Admini, Tell Township, Huntingdon County

Dear Ben Momose:

Thank you for submitting information concerning the above referenced project. The Pennsylvania State Historic Preservation Office (PA SHPO) reviews projects in accordance with state and federal laws. Section 106 of the National Historic Preservation Act of 1966, and the implementing regulations (36 CFR Part 800) of the Advisory Council on Historic Preservation, is the primary federal legislation. The Environmental Rights amendment, Article 1, Section 27 of the Pennsylvania Constitution and the Pennsylvania History Code, 37 Pa. Cons. Stat. Section 500 et seq. (1988) is the primary state legislation. These laws include consideration of the project's potential effects on both historic and archaeological resources.

Above Ground Resources

No Above Ground Concerns - Environmental Review - No Adverse Effect - Above Ground

Based on the information received and available within our files, in our opinion, the proposed project will have No Adverse Effect on above ground historic properties. Should the scope of the project change and/or should you be made aware of historic property concerns, you will need to reinitiate consultation with our office using PA-SHARE.

For questions concerning above ground resources, please contact Tyra Guyton at tyguyton@pa.gov.

Sincerely,

A handwritten signature in black ink that reads 'Emma Diehl'.

Emma Diehl
Environmental Review Division Manager

Notification Date:

File Number:

General Information

1) (Select only one) (NE) NE – New UA – Update of Application WD – Withdrawal of Application	
2) If this application is for an Update or Withdrawal, enter the file number of the pending application currently on file.	File Number:

Applicant Information

3) FCC Registration Number (FRN): 0033898511
4) Name: Ambassador Towers LLC

Contact Name

5) First Name: Ben	6) MI:	7) Last Name: Momose	8) Suffix:
9) Title:			

Contact Information

10) P.O. Box:	And /Or	11) Street Address: 3105 Lincoln Highway East	
12) City: Paradise		13) State: PA	14) Zip Code: 17562
15) Telephone Number: (210)448-2623		16) Fax Number:	
17) E-mail Address: bmomose@upwardbroadband.com			

Consultant Information

18) FCC Registration Number (FRN): 0028057495
19) Name: Terracon Consultants

Principal Investigator

20) First Name: Suzanne	21) MI:	22) Last Name: Reece	23) Suffix:
24) Title:			

Principal Investigator Contact Information

25) P.O. Box:	And /Or	26) Street Address: 844 N. Lenola Road	
27) City: Moorestown		28) State: NJ	29) Zip Code: 08057
30) Telephone Number: (856)813-3267		31) Fax Number:	
32) E-mail Address: Kathy.Eisele@Terracon.com			

Professional Qualification

33) Does the Principal Investigator satisfy the Secretary of the Interior's Professional Qualification Standards?	(<input checked="" type="checkbox"/>) <u>Y</u> es () <u>N</u> o
34) Areas of Professional Qualification: <input checked="" type="checkbox"/>) Archaeologist <input type="checkbox"/>) Architectural Historian <input type="checkbox"/>) Historian <input type="checkbox"/>) Architect <input type="checkbox"/>) Other (Specify) _____	

Additional Staff

35) Are there other staff involved who meet the Professional Qualification Standards of the Secretary of the Interior?	() <u>Y</u> es (<input checked="" type="checkbox"/>) <u>N</u> o
--	--

If "YES," complete the following:

36) First Name: Patricia	37) MI:	38) Last Name: Davenport-Jacobs	39) Suffix:
40) Title:			
41) Areas of Professional Qualification: <input type="checkbox"/>) Archaeologist <input checked="" type="checkbox"/>) Architectural Historian <input type="checkbox"/>) Historian <input type="checkbox"/>) Architect <input type="checkbox"/>) Other (Specify) _____			

36) First Name: Meghan	37) MI:	38) Last Name: Browning	39) Suffix:
40) Title:			
41) Areas of Professional Qualification: <input type="checkbox"/>) Archaeologist <input type="checkbox"/>) Architectural Historian <input checked="" type="checkbox"/>) Historian <input type="checkbox"/>) Architect <input type="checkbox"/>) Other (Specify) _____			

Site Information

Tower Construction Notification System

1) TCNS Notification Number: **NTIA TCNS No. 265957**

Site Information

2) Positive Train Control Filing Subject to Expedited Treatment Under Program Comment: () Yes (**X**) No

3) Site Name: **Shade Mountain Tower**

4) Site Address: **16150 Blacklog Valley Road**

5) Detailed Description of Project:
Construction of self-support telecommunications tower

6) City: **Tell Township (Orbosonia)**

7) State: **PA**

8) Zip Code: **17243**

9) County/Borough/Parish: **HUNTINGDON**

10) Nearest Crossroads: **Blacklog Valley Road and W Taylor Road**

11) **NAD 83** Latitude (DD-MM-SS.S): **40-19-03.18**

(**X**) N or () S

12) **NAD 83** Longitude (DD-MM-SS.S): **077-46-08.38**

() E or (**X**) W

Tower Information

13) Tower height above ground level (include top-mounted attachments such as lightning rods): 199.0 (**X**) Feet () Meters

14) Tower Type (Select One):

() Guyed lattice tower

(**X**) Self-supporting lattice

() Monopole

() Other (Describe):

Project Status

15) Current Project Status (Select One):

(**X**) Construction has not yet commenced

() Construction has commenced, but is not completed

Construction commenced on: _____

() Construction has been completed

Construction commenced on: _____

Construction completed on: _____

Determination of Effect

14) Direct Effects (Select One):

- No Historic Properties in Area of Potential Effects (APE)
- No Effect on Historic Properties in APE
- No Adverse Effect on Historic Properties in APE
- Adverse Effect on one or more Historic Properties in APE

15) Visual Effects (Select One):

- No Historic Properties in Area of Potential Effects (APE)
- No Effect on Historic Properties in APE
- No Adverse Effect on Historic Properties in APE
- Adverse Effect on one or more Historic Properties in APE

Tribal/NHO Involvement

1) Have Indian Tribes or Native Hawaiian Organizations (NHOs) been identified that may attach religious and cultural significance to historic properties which may be affected by the undertaking within the APEs for direct and visual effects?	<input checked="" type="checkbox"/> <u>Y</u> es () <u>N</u> o
2a) Tribes/NHOs contacted through TCNS Notification Number: _____ Number of Tribes/NHOs: <u>0</u>	
2b) Tribes/NHOs contacted through an alternate system: NTIA TCNS No. 265957 Number of Tribes/NHOs: <u>13</u>	

Tribe/NHO Contacted Through TCNS

3) Tribe/NHO FRN:
4) Tribe/NHO Name:

Contact Name

5) First Name:	6) MI:	7) Last Name:	8) Suffix:
9) Title:			

Dates & Response

10) Date Contacted _____	11) Date Replied _____
<input type="checkbox"/> No Reply	
<input type="checkbox"/> Replied/No Interest	
<input type="checkbox"/> Replied/Have Interest	
<input type="checkbox"/> Replied/Other	

Other Tribes/NHOs Contacted

Tribe/NHO Information

1) FCC Registration Number (FRN):
2) Name:

Contact Name

3) First Name:	4) MI:	5) Last Name:	6) Suffix:
7) Title:			

Contact Information

8) P.O. Box:	And /Or	9) Street Address:		
10) City:		11) State:	12) Zip Code:	
13) Telephone Number:		14) Fax Number:		
15) E-mail Address:				
16) Preferred means of communication: <input type="checkbox"/> E-mail <input type="checkbox"/> Letter <input type="checkbox"/> Both				

Dates & Response

17) Date Contacted _____	18) Date Replied _____
<input type="checkbox"/> No Reply <input type="checkbox"/> Replied/No Interest <input type="checkbox"/> Replied/Have Interest <input type="checkbox"/> Replied/Other	

Historic Properties

Properties Identified

1) Have any historic properties been identified within the APEs for direct and visual effect?	(<input checked="" type="checkbox"/>) <u>Y</u> es () <u>N</u> o
2) Has the identification process located archaeological materials that would be directly affected, or sites that are of cultural or religious significance to Tribes/NHOs?	() <u>Y</u> es (<input checked="" type="checkbox"/>) <u>N</u> o
3) Are there more than 10 historic properties within the APEs for direct and visual effect? If "Yes", you are required to attach a Cultural Resources Report in lieu of adding the Historic Property below.	() <u>Y</u> es (<input checked="" type="checkbox"/>) <u>N</u> o

Historic Property

4) Property Name: Hower-Hart Farm
5) SHPO Site Number: 2020RE01034

Property Address

6) Street Address: 16103 Shade Valley Rd		
7) City: East Waterford	8) State: PA	9) Zip Code: 17021
10) County/Borough/Parish: HUNTINGDON		

Status & Eligibility

11) Is this property listed on the National Register? Source: _____	() <u>Y</u> es (<input checked="" type="checkbox"/>) <u>N</u> o
12) Is this property eligible for listing on the National Register? Source: PA CRIS _____	(<input checked="" type="checkbox"/>) <u>Y</u> es () <u>N</u> o
13) Is this property a National Historic Landmark?	() <u>Y</u> es (<input checked="" type="checkbox"/>) <u>N</u> o

14) Direct Effects (Select One): <input checked="" type="checkbox"/> No Effect on this Historic Property in APE <input type="checkbox"/> No Adverse Effect on this Historic Property in APE <input type="checkbox"/> Adverse Effect on this Historic Property in APE
15) Visual Effects (Select One): <input type="checkbox"/> No Effect on this Historic Property in APE <input checked="" type="checkbox"/> No Adverse Effect on this Historic Property in APE <input type="checkbox"/> Adverse Effect on this Historic Property in APE

Local Government Involvement

Local Government Agency

1) FCC Registration Number (FRN):

2) Name: **Tell Township**

Contact Name

3) First Name: **Terry**

4) MI:

5) Last Name: **Kennedy**

6) Suffix:

7) Title:

Contact Information

8) P.O. Box: **PO Box 268**

And
/Or

9) Street Address:

10) City: **Blairs Mills**

11) State: **PA**

12) Zip Code: **17213**

13) Telephone Number: **(814)259-3862**

14) Fax Number:

15) E-mail Address: **telltownship43@gmail.com**

16) Preferred means of communication:

() E-mail

() Letter

() Both

Dates & Response

17) Date Contacted **06/02/2023**

18) Date Replied _____

() No Reply

() Replied/No Interest

() Replied/Have Interest

() Replied/Other

Additional Information

19) Information on local government's role or interest (optional):

Other Consulting Parties

Other Consulting Parties Contacted

1) Has any other agency been contacted and invited to become a consulting party?	(<input checked="" type="checkbox"/>) Yes (<input type="checkbox"/>) No
--	---

Consulting Party

2) FCC Registration Number (FRN):
3) Name: Shirley Township

Contact Name

4) First Name: Kathy	5) MI:	6) Last Name: Jo Varner	7) Suffix:
8) Title:			

Contact Information

9) P.O. Box:	And /Or	10) Street Address: 15480 Croghan Pike		
11) City: Shirleysburg		12) State: PA	13) Zip Code: 17260	
14) Telephone Number: (814)542-4722		15) Fax Number:		
16) E-mail Address: shirleytwp@verizon.net				
17) Preferred means of communication: (<input checked="" type="checkbox"/>) E-mail (<input type="checkbox"/>) Letter (<input type="checkbox"/>) Both				

Dates & Response

18) Date Contacted 06/02/2023	19) Date Replied _____
(<input checked="" type="checkbox"/>) No Reply	
(<input type="checkbox"/>) Replied/No Interest	
(<input type="checkbox"/>) Replied/Have Interest	
(<input type="checkbox"/>) Replied/Other	

Additional Information

20) Information on other consulting parties' role or interest (optional):

Other Consulting Parties

Other Consulting Parties Contacted

1) Has any other agency been contacted and invited to become a consulting party?	(<input checked="" type="checkbox"/>) Yes (<input type="checkbox"/>) No
--	---

Consulting Party

2) FCC Registration Number (FRN):
3) Name: Huntingdon County Historical Society

Contact Name

4) First Name: Margaret	5) MI:	6) Last Name: Skrivseth	7) Suffix:
8) Title:			

Contact Information

9) P.O. Box: PO Box 305	And /Or	10) Street Address: 106 Fourth Street
11) City: Huntingdon	12) State: PA	13) Zip Code: 16652
14) Telephone Number: (814)643-5449	15) Fax Number:	
16) E-mail Address: hchsmail@gmail.com		
17) Preferred means of communication: (<input checked="" type="checkbox"/>) E-mail (<input type="checkbox"/>) Letter (<input type="checkbox"/>) Both		

Dates & Response

18) Date Contacted 06/02/2023	19) Date Replied _____
(<input checked="" type="checkbox"/>) No Reply (<input type="checkbox"/>) Replied/No Interest (<input type="checkbox"/>) Replied/Have Interest (<input type="checkbox"/>) Replied/Other	

Additional Information

20) Information on other consulting parties' role or interest (optional):

Designation of SHPO/THPO

1) Designate the Lead State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO) based on the location of the tower.

SHPO/THPO

Name: Pennsylvania State Historic Preservation Office

2) You may also designate up to three additional SHPOs/THPOs if the APEs include multiple states. If the APEs include other countries, enter the name of the National Historic Preservation Agency and any state and provincial Historic Preservation Agency.

SHPO/THPO Name: _____

SHPO/THPO Name: _____

SHPO/THPO Name: _____

Certification

I certify that all representations on this FCC Form 620 Submission Packet and the accompanying attachments are true, correct, and complete.

Party Authorized to Sign

First Name:

MI:

Last Name:

Suffix:

Signature: _____

Date: _____

FAILURE TO SIGN THIS APPLICATION MAY RESULT IN DISMISSAL OF THE APPLICATION AND FORFEITURE OF ANY FEES PAID.

WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. Code, Title 18, Section 1001) AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. Code, Title 47, Section 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503).

Attachments :

Type

Description

Date Entered

Suzanne Reece, MSC, RPA

PRINCIPAL INVESTIGATOR - ARCHAEOLOGY

PROFESSIONAL EXPERIENCE

Ms. Reece is an Archaeologist and Principal Investigator in our Minnesota office. Ms. Reece has worked as an archaeological Principal Investigator throughout the upper Midwest. She has planned, managed, and conducted numerous cultural resources surveys for both public and private clients ranging from individual landowners to federal agencies. Ms. Reece has expertise in the areas of historical research, pedestrian and subsurface archaeological investigations, human and animal skeletal analysis, artifact identification and curation, as well as mitigation of disturbances to archaeological sites. She also has extensive experience in evaluation of historic structures and archaeological sites for National Register of Historic Places (NRHP) eligibility.

PROPERTY DEVELOPMENT

Ms. Reece has done extensive work with both private and public sector clients assessing proposed site locations for cultural resources. Her work has helped clients avoid costly delays by identifying archaeological sites and historic properties prior to land purchases and the start of construction. She has conducted literature searches (desktop reviews), intensive Phase I and Phase II surveys, and archaeological monitoring of construction activities in support of site selection and property development projects. Some of the property development and site selection projects Ms. Reece has worked on include: residential developments, municipal and state land purchases, industrial park development, and wetland mitigation banks.

INFRASTRUCTURE DEVELOPMENT

Ms. Reece has planned and conducted numerous cultural resources surveys related to the repair, replacement, and creation of modern infrastructure. She has conducted literature searches (desktop reviews) for utility installations within road rights-of-way, as well as intensive Phase II surveys and Phase III treatment plans for waterline, sewer line, telecommunication, and flood mitigation projects. While conducting these surveys, Ms. Reece has also gained experience in identifying and documenting historic structures and historic districts.

MUNICIPAL, STATE, AND FEDERAL PROPERTY

Ms. Reece has conducted many cultural resources studies on public lands owned by a government entity. In conducting these projects, she has played a role in obtaining the necessary state and federal archaeological permits, overseen compliance with permit stipulations, and conducted and documented the resulting fieldwork. She has conducted archival research,



EDUCATION

Master of Science,
Osteoarchaeology, University of
Edinburgh, 2013.

Bachelor of Arts, Anthropology,
University of Minnesota, 2011.

AFFILIATIONS

American Association of Biological
Anthropologists (AABA)

International Council for
Archaeozoology (ICAZ)

Register of Professional
Archaeologists (RPA)

WORK HISTORY

Terracon Consultants, Inc., St. Paul,
Minnesota. Principal Investigator,
2018-Present.

Kogel Archaeological Consulting
Services, Sioux Falls, South Dakota.
Principal Investigator, 2013-2018.

University of Edinburgh, Edinburgh,
Scotland. Osteoarchaeologist, 2013.

University of Minnesota,
Minneapolis, Minnesota. Laboratory
Intern, 2010; Excavator, 2008.

Suzanne Reece, MSC, RPA

PRINCIPAL INVESTIGATOR - ARCHAEOLOGY

Phase I reconnaissance surveys and intensive Phase II surveys, mortuary feature relocation surveys, Phase III treatment plans and investigations, and archaeological monitoring for projects on public land.

TRANSPORTATION IMPROVEMENTS

Ms. Reece has led cultural resources planning efforts and fieldwork for numerous transportation improvement projects which require compliance with state or federal historic preservation laws. These projects have included improvements to railways, road construction and expansion, highway erosion and floodwater mitigation studies, as well as cultural resources oversight of soil borrow project areas. She has conducted research and prepared reports on the historic significance of structures such as bridges and culverts and how to mitigate their loss of historic integrity during repairs or replacements.

OSTEOARCHAEOLOGICAL PROJECT EXPERIENCE

COMPLEX AND COMMINGLED CONTEXTS

From the start of her archaeological training, Ms. Reece has worked with comingled human and animal skeletal remains from complex archaeological contexts. She has undertaken projects that involve sorting and identification of comingled skeletal remains from archaeological sites from the United States and around the world, including work with assemblages from Algeria, the Caucasus Mountains, Ireland, Spain, Turkey, and the United Kingdom. Her experience with human and non-human skeletal materials has proven invaluable in the analysis and proper identification of osseous material in both field and laboratory settings, particularly when fragmentary remains are involved.

MORTUARY FEATURE IDENTIFICATION

As a Principal Investigator, Ms. Reece has been responsible for the identification and investigation of potential burial features encountered during cultural resources surveys. Her experience includes identification and non-intrusive investigation of burial mound sites, determining likely burial mound locations based on historical and ethnographic documentation, and minimally invasive excavation of unconfirmed mortuary features. Ms. Reece has also conducted historic research and pedestrian surveys to identify the boundaries of historic cemeteries to ensure that proposed projects do not encroach on any unmarked burials that may be present.

SKELETAL ANALYSIS

In her work, Ms. Reece has used modern techniques to identify important biological information from human skeletal remains, including age, sex, height, and ancestry indicators. Her work has also included documentation and identification of both pathological conditions and traumatic injuries. Ms. Reece has conducted skeletal analysis with complete, partial, and fragmentary osseous material, as well as cremated remains ("cremains"). Her experience with analysis of animal remains includes identification of species, sex, age, body size estimations, pathological conditions, and traumatic injuries. Ms. Reece is also experienced in the identification of taphonomic changes in bone caused by human and animal activity as well as natural weathering processes

Patricia Davenport-Jacobs

HISTORIC PRESERVATION GROUP MANAGER

PROFESSIONAL EXPERIENCE

Ms. Davenport-Jacobs brings more than 20 years of professional experience in the field of preservation and historic architecture. Her background includes local planning activities as a Main Street Director and Preservation Planning Officer instituting successful commercial façade grant, and transportation enhancement funded streetscape initiatives. She manages compliance and practical preservation projects for Terracon; has supervised and participated in historic resource surveys, building documentation, archival research, and historic context development projects throughout the southeast United States. She has worked with municipal governments, state, and federal agencies to identify, document, and provide National Register of Historic Places (NRHP) eligibility assessments for commercial, residential, governmental, industrial, and rural resources. These projects have involved archival research using primary and secondary source materials at local, state, and national repositories, and condition assessments and field documentation using advance field survey forms with ESRI Data collection applications, digital and 35mm photography. She has consulted with multiple local governments on preservation planning efforts and managed recordation of over 22,000 resources. Ms. Davenport-Jacobs meets the *Secretary of Interior Standards for Professional Qualifications* in Architectural History and History and has completed Section 106 training with the Advisory Council on Historic Preservation (2014 & 2015).

PROJECT EXPERIENCE

Historic Structure Surveys/NRHP Nominations

Sarasota Historic Preservation Project – Sarasota, FL
County Wide Survey of Historic Resources – Nassau Co., FL
St. Augustine Historic Resources Survey Phase IV – St. Augustine, FL
Historic Resources Phase I-IV – City of Lake Worth Beach, FL
Marathon Key Survey and NRHP -- City of Marathon, FL
West Titusville Survey – City of Titusville, FL
Historic Resources Survey for Fiber Optics, Downtown Albany, GA
Meldrim Assessment – Effingham County, GA
St. Augustine National Register Historic District – St. Augustine, FL
Anastasia Island -- St. Augustine, FL
West Augustine, Ft. Mose – St. Augustine, Florida
County-wide Survey – Nassau County, FL
Architectural survey of historic structures – City of Jacksonville, FL
National Register Nomination for Downtown Historic District – City of Jacksonville, FL
Historic Resource Survey Update – Lake County, FL
Historic Resource Survey, Bayview Garden – Pinellas County, FL

Cemetery Delineation, Conditions Assessments, Restorations; Monuments

Pinehurst Conditions Assessment and Restoration – Jacksonville, FL
Memorial, Sunset Memorial, Mt. Olive, Old City and Hillside Cemeteries Comprehensive Conditions Assessment – Jacksonville, FL
Manatee County Burying Grounds Conditions Assessment and Preservation Plan – Manatee County, FL
New Hope Cemetery Delineation and Restoration – Uniontown, Perry County, AL
Thiele Kaolin Mine: Shelton and Purvis Family Cemeteries Delineation, Warren County, GA
Colonial Park Cemetery and Laurel Grove Cemetery Marker Restoration-- Savannah, GA
St. Peter's Episcopal Church Cemetery, conditions assessment for grounds and monuments – Fernandina Beach, FL
Randolph Cemetery preservation including cleaning and consolidation of headstones and curbing, – Columbia, SC
Prioleau Cemetery preservation including masonry repointing, marker cleaning and vegetation removal, US Naval Weapons Station, Joint Base – Charleston, SC



EDUCATION

Master of Fine Arts, Historic Preservation, Savannah College of Art and Design, 2007

Bachelor of Science, Environmental Design, Auburn University, 1999

*AU Rural Studio - 1998

AFFILIATIONS

- National Trust for Historic Preservation
- Florida Trust for Historic Preservation
- American Institute for Conservation of Historic and Artistic Works – Associate
- Association for Preservation Technology and Training

CERTIFICATIONS

- Basic and Advanced Training Section 106 – ACHP
- Cemetery Resource Protection Training - FPAN

YEARS OF EXPERIENCE: 20

YEARS AT FIRM: 8

Patricia Davenport-Jacobs (continued)

Building Assessments/Conservation Treatments/HABS Documentation

Research and Documentation of Historic CCC Structures Cherokee National Forest – US Forest Service
Loran-C Tower Jupiter Inlet, HABS Level III – Palm Beach County, FL
Northrop Grumman Hangars, Archival Documentation -- St. Johns County, FL
St. Augustine Shipyards, HABS Documentation – St. Johns County, FL
Old Fort Jackson Casemates and Moat Wall, removal of unwanted biological growth – Savannah, GA
Tender Frame Shop rehabilitation and adaptive use; Boiler Room building assessment;
Compressor Room masonry assessment and roofing project Old Central of Georgia Railroad
Roundhouse Complex – Savannah, GA
Baron Von Steuben and Marquis de Lafayette Monuments preservation, Lafayette Square -- Washington DC
Universalists Unitarian Church of Savannah paint analysis – Savannah, GA
Asbury United Methodist Church paint analysis – Savannah, GA
Graham Condominium historic research and architectural assessment -- Savannah, GA
Ethel Tison House building assessment -- Savannah, GA

Section 106 Compliance DOT/FCC/USACE

Des Moines Transload Facility – Des Moines, IA
FECR San Sabastian Bridge Replacement – St. Augustine, Florida
Historic Structures Report Stormwater Improvements – City of Altamonte Springs, FL
Colling Road: Historic Bridge Repair/Replacement – DOT, Orange Park FL
Moncrief-Dinsmore Bridge Replacement – DOT, Jacksonville, FL
Archaeological and visual assessment, Peak Mt. – Ashe County, NC
Architectural assessment and disturbance letter, Hamilton Beach – Beaufort County, NC
Disturbance letter, 5GB0366 – Guilford County, NC
Visual assessment and disturbance letter, 478-195 (AT&T) – Pender County, NC
Arch assessment, Bushy Fork – Person County, NC
Arch/visual assessment, Hyco Lake – Person County, NC
Arch/visual assessment, Nixon's Farm – Surry County, NC
Visual assessment, DT Wendell – Wake County, NC
Arch disturbance letter and visual assessment, Raleigh Rooftop Tower – Wake County, NC

Presentations/articles/papers

Water Intrusion and Cleaning Methods for Masonry Buildings -- Florida Association of Museums
Historic Resource Survey in the Digital Age: Data Collection with New Technologies – Florida Trust for Historic Preservation
Guest Lecturer Philosophy and Criticism "Taking What You Learn and Putting it to Use", (SCAD – HP, Prof. Andres Gaviria) – Savannah, GA
Guest Lecturer Conservation Laboratory, Instruction on Vegetation Control Issues for Historic Structures, (SCAD—HP, Prof. B.S. Robinson) – Savannah, GA
Organized and hosted Historic Preservation Commission Training with the University of Georgia Outreach Program and GA Department of Community Affairs – Fitzgerald, GA
Organized and hosted Hands-On Training course on design assistance for Main Street Directors with GA Trust Main Street Design Assistance Coordinator – Fitzgerald, GA
Organized Preservation Engineering Workshop on Non-Destructive Testing Methods, Association for Preservation Technology International and the National Center for Preservation Technology and Training – Charleston, SC
Contributor to the University of Florida PIN Guest Lecture Series in Nantucket, with Arthur I. "Buddy" Jacobs, Chairman of the Board of Directors for the Preservation Institute of Nantucket (PIN),
Building Assessment II -- Instruction on paint analysis for Asbury United Methodist Church (Prof. Jim Abraham, SCAD)
APT Communiqué co-Editor
Preservation Treatments for Sod Structures in the Midwest – Virginia Lime Conference and APTi
Contributor to Testing Protocols for the Remediation of Unwanted Biological and Vegetative Growth on Historic Structures, Dr. Judy Bischoff, NPS Harpers Ferry

Meghan Browning

Historian

PROFESSIONAL EXPERIENCE

Meghan holds a BA in History from Florida State University with an emphasis on social and cultural aspects. Meghan is a Historian for the Historic Preservation Group, Cultural Resource Department in Jacksonville, Florida. Prior to joining Terracon, Meghan gained practical experience in archival and museum studies and performed essential background research on historic architecture in Jacksonville while employed with the Jacksonville Historical Society. Her duties with Terracon include historical research, field reconnaissance, documenting and evaluating historic resources, developing historical narratives, and assisting with historic resource conditions assessments. Meghan meets the Secretary of the Interior's Professional Qualification Standards in History.

PROJECT EXPERIENCE

City-wide Historic Resources Survey – City of Sarasota, Florida

Meghan led the survey team that encompassed the entire city of Sarasota. Over 10,600 resources were surveyed, and 8,464 documented, recorded, and evaluated for historic significance. Meghan also helped develop the survey report and analyzed data to provide solid preservation planning recommendations for future use by the city. The project received a national award for Best Practices: Identification/Registration from the National Alliance of Preservation Commission in 2020.

Historic Resources Survey – Town of Palm Beach, Florida

The project consisted of a resource survey for the entirety of the Town of Palm Beach constructed in or prior to 1979. As a result, 2,170 resources were surveyed and 1,707 were documented, recorded, and evaluated for historic significance. The team identified nine areas that appear to meet the criteria for listing as historic districts on the National Register of Historic places and provided survey details (maps and data) required for listing and brief histories of each area to provide a framing context from which the Town could move forward with a nomination report. In addition, the team evaluated the Town comprehensively for its potential for an island-wide historic conservation district. Terracon also provided preservation strategies the Town can consider to further preservation in Palm Beach. Reporting included a variety of preservation alternatives to help the Town shape new proposed policies moving forward.

Historic Resource Surveys

Franklin County Countywide Historical Resource Survey – Franklin County, Florida

Historical Resources Survey and NRHP Nomination of Southeast Alabama – Dauphin Island, Houston, Henry and Geneva Counties, Alabama



EDUCATION

Bachelor of Arts, History,
Florida State University,
Tallahassee, FL

CERTIFICATIONS

Section 106: An Introduction
National Preservation Institute
NEPA & 106 Integration &
Coordination, Advisory Council
on Historic Preservation
BACE: Archival and Museum
Studies Certification, AASLH
and Council of State Archives
CRPT: Cemetery Resource
Protection Training, Florida
Public Archaeology Network

AFFILIATIONS

Florida Planning and Zoning
Association (FPZA) Board
Member
Southeastern Society of
Architectural Historians
(SESAH)
Society of Architectural
Historians (SAH)
National Trust for Historic
Preservation
Florida Trust for Historic
Preservation
Florida Historical Society
Jacksonville Historical Society
St. Augustine Historical Society
Alabama Historical Association

YEARS OF EXPERIENCE: 10

YEARS AT FIRM: 5

Historic Resource Mitigation & NRHP Survey Updates – St. Augustine, Florida
Town of Palm Beach Town-wide Survey – Palm Beach, Florida
County-wide Historical Resource Survey – Nassau County, Florida
West Augustine Historic Resource Survey – St. Augustine, Florida
City of Lake Worth Survey Updates, Ph. I - IV – Lake Worth Beach, Florida
Citywide Historical Resources Survey – Sarasota, Florida
City of Marathon Florida Historic Resource Survey and Preservation Plan – Marathon, Monroe County, Florida
City of Titusville Historical Resource Survey and Preservation Plan – Brevard County, Florida

Meghan Powell (continued)

National Register Nominations

Newtown National Register Nomination – Sarasota, Sarasota County, Florida
National Register Nomination for Vamo Lodge – Sarasota County, Florida
Historic Resource Mitigation & NRHP Survey Updates – St. Augustine, Florida

Cultural Resource Assessment Survey and Section 106 Compliance

FDOT Amelia Avenue – DeLand, Volusia County, Florida
Norfolk HUD Renovations – Norfolk, Virginia
Park Shirlington HUD Renovation – Arlington, Virginia
The Simpson Apartments – Atlanta, Georgia
Middle Georgia State University Cross County New Construction – Macon, Georgia
FDOT Bay Street – Jacksonville, Duval County, Florida
Verizon Telecommunications Compliance – State of Florida, Georgia Massachusetts, New York, New Jersey,
Southtown HUD Development – Birmingham, Alabama
Village of 5th CRAS – Augusta, Georgia
JEA Office Building – Jacksonville, Florida
Floribraska Avenue – Tampa, Florida
Transload Facility – Des Moines, Iowa
City Albany – Dougherty County, Georgia
City of Altamonte Springs – Seminole County, Florida
Collins Road Bridge Repair – Jacksonville, Florida
Town of Meldrim Historic Resources Assessment – Effingham County, Georgia

Historic Building Survey for CCC Recreation Sites – Cherokee National Forest, Tennessee

Cemetery Restoration Projects

Old City Cemetery Restoration – Jacksonville, Duval County, Florida
Pinehurst Cemetery Conditions Assessment – Jacksonville, Duval County, Florida
Hillside, Memorial, Mt. Olive, Old City, and Sunset Memorial Cemetery Conditions Assessment – Jacksonville, Duval County, Florida
Manatee Burying Grounds – Bradenton, Manatee County, Florida

Please refer to Appendix B for Site Figures

ADDITIONAL SITE INFORMATION

Terracon understands that Ambassador Towers LLC is proposing to build a telecommunications tower with associated antennas and equipment enclosures under the following specifications:

Site Name:	Shade Mountain Tower
Terracon Project Number:	J8237028
Address:	16150 Blacklog Valley Road
City, County, State:	Tell Township (Orbisonia), Huntingdon County, PA, 17243
Latitude / Longitude:	40° 19' 3.18" N / 77° 46' 8.38" W
Proposed Lease Area:	10,000 square feet
Proposed Tower Height:	199 feet, including attachments
Tower Type:	Self-support

The project consists of an approximate 10,000 square-foot tower compound and an approximate 30-foot by 220-foot access/utility easement. The proposed self-support tower will be 199 feet in overall height. The project site and surrounding properties are also undeveloped, wooded land.



Phone: 717-809-3025
Email: steve@AtoZLandConsultingServices.com

403 Lincoln Way East, Suite 100  McConnellsburg, PA 17233

F.F.F. 1A LETTER,

SITE NAME: SHADE MOUNTAIN

I certify that the Latitude 40-19-03.18 Longitude 77-46-08.38 is the referenced site and is accurate to within +/- 20' horizontal and site elevation of 1895.75' at center of the tower is accurate to within 3' +/- vertical.

The Latitude and Longitude as identified hereon are referenced to the North American Datum of 1983(NAD 83) and are expressed in Degrees-Minutes-Seconds. The elevation shown hereon in feet is referenced to the North American Vertical Datum of 1988(NAVD 88).

The Latitude and Longitude with the elevation are all proposed center of tower location.

A handwritten signature in black ink, appearing to read "Steven L. Wible".

Steven L. Wible, PLS

License# -SU075474





**NOTICE OF ORGANIZATION(S) WHICH WERE SENT PROPOSED
BROADBAND PROJECT NOTIFICATION INFORMATION**

Date: 04/28/2023

UPWARD BROADBAND
EMILY KOSMALSKI
1401 CONSTITUTION AVE.
WASHINGTON, DC 20230

Dear Applicant:

The National Telecommunications and Information Administration (NTIA) is using a modified version of the Federal Communications Commission's (FCC) Tower Construction Notification System (TCNS) as a means of expediting its Broadband grant programs. This notice is to inform you that the following authorized parties were sent information about the application that you submitted to NTIA through TCNS. The information was forwarded to authorized TCNS users by electronic mail and/or regular mail (letter).

Persons who have received the notification that you provided include leaders or their designees of federally-recognized American Indian Tribes, including Alaska Native Villages (collectively "Tribal Nations"), Native Hawaiian Organizations (NHOs), and State Historic Preservation Officers (SHPOs) who have set their geographic preferences on TCNS. For your convenience in identifying the referenced Tribal Nations and NHOs and in making further contacts, the City and State of the Seat of Government for each Tribal Nation and NHO, as well as the designated contact person, is included in the listing below. We note that Tribal Nations may have Section 106 cultural interests in ancestral homelands or other locations that are far removed from their current Seat of Government. Consistent with the FCC's rules as set forth in the NPA, NTIA requires that all Tribal Nations and NHOs listed below are afforded a reasonable opportunity to respond to this notification, consistent with the procedures set forth below.

We note that the review period for all parties begins upon receipt of a full project submittal and notifications that do not provide this serve as information only. If, upon receipt, the Tribal Nation or NHO does not respond within a reasonable time, you should make a reasonable effort at follow-up contact, unless the Tribal Nation or NHO has agreed to different procedures. In the event a Tribal Nation or NHO does not respond to a follow-up inquiry, or if a substantive or procedural disagreement arises between you and a Tribal Nation or NHO, you must seek guidance from NTIA. NTIA will follow procedures consistent with those set forth in the FCC's Second Report and Order released on March 30, 2018 (FCC 18-30).

1. THPO - Jarell Grant - Omaha Tribe of Nebraska - (PO Box: 368) - Macy, NE - jarell.grant@theomahatribe.com; mark.parker@theomahatribe.com - 402-837-5391 (ext: 434) - electronic mail

Details: Please note we have updated procedures. Please email us at Omahatribefcctns@outlook.com

2. TCNS Coordinator - Tiffany Martinez - Delaware Nation - 31064 State Highway 281 (PO Box: 825) - Anadarko, OK - tmartinez@delawarenation-nsn.gov; epaden@delawarenation-nsn.gov - 405-247-2448 (ext: 1403) - electronic mail
Details: The Delaware Nation of Oklahoma Historic Preservation Office has developed the following consultation procedures for all TCNS projects identified as undertakings by the Federal Communications Commission. In the email subject line, please specify whether the project is for a tower, small cell, or collocation. Our response can be given faster

with this information.

3. Cultural Preservation Director - Carol Butler - Absentee-Shawnee Tribe of Indians of Oklahoma - 2025 S. Gordon Cooper Drive - Shawnee, OK - fccasttens@gmail.com - 405-275-4030 (ext: 6312) - electronic mail

4. TCNS Rep - Bryan Printup - Tuscarora Nation - 5226 Walmore Rd - Via: Lewiston, NY - bprintup@hetf.org - 716-264-6011 (ext: 103) - electronic mail

If the applicant/tower builder receives no response from the Tuscarora Nation within 30 days after notification through TCNS, the Tuscarora Nation has no interest in participating in pre-construction review for the proposed site. The Applicant/tower builder, however, must immediately notify the Tuscarora Nation in the event archaeological properties or human remains are discovered during construction, consistent with Section IX of the Nationwide Programmatic Agreement and applicable law.

5. THPO - Edith Leoso - Bad River Band of Lake Superior Tribe of Chippewa Indians - (PO Box: 39) - Odanah, WI - thpo@badriver-nsn.gov; THPOAsst@badriver-nsn.gov - 715-682-7123 - electronic mail

If the applicant/tower builder receives no response from the Bad River Band of Lake Superior Tribe of Chippewa Indians within 30 days after notification through TCNS, the Bad River Band of Lake Superior Tribe of Chippewa Indians has no interest in participating in pre-construction review for the proposed site. The Applicant/tower builder, however, must immediately notify the Bad River Band of Lake Superior Tribe of Chippewa Indians in the event archaeological properties or human remains are discovered during construction, consistent with Section IX of the Nationwide Programmatic Agreement and applicable law.

6. THPO - Marvin DeFoe - Red Cliff Band of Lake Superior Chippewa Indians of Wisconsin - 88455 Pike Road, HWY 13 - Bayfield, WI - Marvin.DeFoe@redcliff-nsn.gov; Edwina.Buffalo-Reyes@redcliff-nsn.gov - 715-779-3700 (ext: 4242) - electronic mail

Details: Boozhoo, we do not have the Red Cliff Portal site online anymore and apologize for the inconvenience.

If you have a project that has already been paid for or would like to voluntarily pay for, please email documents for project review to THPO@redcliff-nsn.gov. This address is only to be used by Consultants who are voluntarily paying for projects.

If you have any questions, please contact Marvin Defoe, THPO Manager at (715) 779-3700 Ext. 4244 or Edwina Buffalo-Reyes, THPO Assistant at (715) 779-3700Ext. 4243.

7. THPO - William Tarrant - Seneca-Cayuga Nation - 23701 S 655 Road (PO Box: 453220) - Grove, OK - wtarrant@sctribe.com - 918-787-5452 (ext: 344) - regular mail

Details: Please refrain from sending review information via email. We request all information to be sent via mail to PO Box 453220, Grove, OK 74345.

8. Cell Tower Coordinator - Kelly Nelson - Eastern Shawnee Tribe of Oklahoma - 70500 East 128 Road - Wyandotte, OK - celltower@estoo.net - 918-666-2435 (ext: 1861) - regular mail

Details: DO NOT EMAIL DOCUMENTATION; it will be deleted without being opened.

Submit one printed color copy by US postal mail or other parcel carrier of all documentation to:

Eastern Shawnee Tribe
Attn: CellTower Program
70500 E. 128 Rd.
Wyandotte, OK 74370

Provide a 1-page cover letter with the following information:

- a. TCNS Number
- b. Company Name
- c. Project Name, City, County, State
- d. Project type
- e. Project coordinates
- f. Contact information

The Eastern Shawnee Procedures document is available and highly recommended for guidance; send an email to celltower@estoo.net requesting our most current copy.

9. THPO - Sherri Clemons - Wyandotte Nation - 64700 E, Hwy 60 - Wyandotte, OK - sclemons@wyandotte-nation.org - 918-678-6344 - electronic mail
Details: Please refrain from sending information via mail. We ONLY accept information via email to: sclemons@wyandotte-nation.org. We will advise if we require additional information.

10. THPO - Tonya Tipton - Shawnee Tribe - 29 South 69A Highway - Miami, OK - tcns@shawnee-tribe.com - 918-542-2441 (ext: 103) - electronic mail
Details: In the case of projects with NO ground disturbance such as antennae on the sides of buildings or existing poles, the Shawnee Tribe concurs that no known historic properties will be negatively impacted by the project. The Shawnee Tribe DOES NOT wish to consult on those projects with NO ground disturbance.

If the project DOES involve ground disturbance at all, the Shawnee Tribe would like to ACCEPT your invitation for consultation and will provide a review.

If you have any questions, you may contact the Shawnee Tribe via email at TCNS@shawnee-tribe.com

Thank you for the opportunity to comment.

11. THPO - Jonathan Windy Boy - Chippewa Cree Tribe of the Rocky Boy's Reservation - 96 Clinic Rd North - Box Elder, MT - marci.buchman@gmail.com; precisionarchaeology@gmail.com - 406-395-5215 - electronic mail and regular mail
Details: The Chippewa Cree Tribe performs its reviews of FCC undertakings and projects through its arrangement with I Response; a Tribally-owned enterprise. Please send all of your Forms 620 and Forms 621 to I Response at <http://app.iresponse106.com/>. The reviews will begin once all the required documentation has been received at <http://app.iresponse106.com/>. If the qualified and professional reviewers determine that additional information is required, or that field work is required, they will contact you through the I Response system and through TCNS. If the Tribe determines that the proposed project will have an effect on historic properties and/or Tribal religious and cultural sites or properties, we will provide notice to the project proponent and to the FCC.

12. THPO - Sarah Thompson - Lac du Flambeau Band of Lake Superior Chippewa Indians - Tribal Historic Preservation Office (PO Box: 67) - Lac du Flambeau, WI - ldfthpo@ldftribe.com - 715-588-2139 - electronic mail
Details: Effective Immediately:

Please send all submissions through email until further notice. Effective 3/23/2020

Please email all submissions to ldfthpo@ldftribe.com

Thank you

13. Deputy THPO, Archaeologist - Susan Bachor - Delaware Tribe of Indians - 126 University Circle Stroud Hall, Rm. 437 - East Stroudsburg, PA - sbachor@delawaretribe.org; lheady@delawaretribe.org - 610-761-7452 - electronic mail
Details: The Delaware Tribe of Indians areas of interest include our aboriginal territories (circa 1600), known locations of historic Delaware settlements, routes of removal and forced migration, and all lands of Delaware aboriginal title ceded by treaty to the United States. If you are receiving this notification, then your project falls within these areas of interest and we ask that you provide us with a cover letter describing the project and its location (including the project coordinates) as well as a topographic map showing the project location. If an archaeological survey has already been performed in preparation for the project, please send a copy of that as well. Additionally, we may request a biological assessment of culturally significant treaty resources which may be affected by the proposed undertaking.

We are only interested in consulting on projects that involve ground disturbance that is planned to take place in both undisturbed and previously disturbed contexts. We are not interested in consulting on collocations or projects that involve no ground disturbance. If your project does involve ground disturbance or you do not receive a response from us within 30 days of submitting the above project information, then we have no comments on the project. However, if any archaeological resources or human remains are disturbed at any point in the project planning or construction, we ask that the project be halted until we can be notified of the inadvertent discovery and can determine the most appropriate course of action. If your company would like a formal written response from the Delaware Tribe concerning the potential impact of your project to culturally and religiously significant sites, please contact Susan Bachor at sbachor@delawaretribe.org to request such a response.

In order to better facilitate consultation throughout our areas of interest we have three regional tribal historic preservation offices. While our Tribal Headquarters remains in Oklahoma, our Eastern Office in Pennsylvania is the point of contact for all consultation within our Eastern Region which includes the states of Massachusetts, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland and Virginia. If your project exists in any of these states, please contact Susan Bachor with the above project information at the following e-mail address. All offices prefer digital submissions and the project information can be submitted by e-mail.

Susan Bachor, Acting Director of Historic Preservation
Eastern Office
126 University Circle
Stroud Hall, Rm. 437
East Stroudsburg PA 18301
(610) 761-7452
sbachor@delawaretribe.org

Our Midwestern office is the point of contact for all consultation within our Midwestern region which includes the states of West Virginia, Ohio, Indiana, Michigan and Illinois. If your project exists in any of these states, please contact Larry Heady with the above project information at the following e-mail address. Our Midwestern office prefers to receive digital submissions and the project information can be submitted by e-mail.

Larry Heady, THPO
Midwestern Office
125 Dorry Lane, Grants Pass, OR 97527
lheady@delawaretribe.org
(262) 825-7586

We, at the Delaware Tribe Historic Preservation Office, along with our Chief and Tribal Council remain committed to protecting the cultural and physical integrity of our historic sites, traditional cultural properties, sacred sites, objects of cultural patrimony, and most importantly, the remains of our Ancestors. We look forward to working with you on our shared interests in preserving and protecting Delaware heritage within our areas of interest.

The information you provided was also forwarded to the additional Tribes and NHOs listed below. These Tribes and NHOs have NOT set their geographic preferences on TCNS, and therefore they are currently receiving tower notifications for the entire United States.

The information you provided was also forwarded to the following SHPOs in the state in which you propose to construct and neighboring states. The information was provided to these SHPOs as a courtesy for their information and planning.

14. - Amanda Terrell - Ohio History Connection - 800 E. 17th Avenue - Columbus, OH - aterrell@ohiohistory.org - 614-298-2000 - electronic mail

15. Historic Preservation Supervisor - Barbara Frederick - Pennsylvania State Historic Preservation Office - Pennsylvania Historical & Museum Commission 400 North St, 2nd Floor - Harrisburg, PA - bafrederic@pa.gov - 717-772-4519 - electronic mail

16. Deputy SHPO - Susan Pierce - West Virginia Division of Culture & History, Historic Preservation Office - 1901 Kanawha Boulevard East - Charleston, WV - susan.pierce@wvculture.org - - electronic mail

17. SHPO - Barbara Franco - Pennsylvania Historical and Museum Commission - 300 North Street - Harrisburg, PA - bcutler@state.pa.us - 717-787-2891 - electronic mail

TCNS automatically forwards all notifications to all Tribal Nations and SHPOs that have an expressed interest in the geographic area of a proposal. A particular Tribal Nation or SHPO may also set forth policies or procedures within its details box that exclude from review certain facilities (for example, a statement that it does not review collocations with no ground disturbance or that indicates that no response within 30 days indicates no interest in participating in pre-construction review).

Please be advised that the NTIA cannot guarantee that the contact(s) listed above opened and reviewed an electronic or regular mail notification. The following information relating to the proposed project was forwarded to the person(s) listed above.

Notification Received: 04/25/2023

Notification ID: 265957

Project Number: 50

Applicant: Upward Broadband

Applicant Contact: Emily Kosmalski

Project Type(s): Multiple Project Components

Region(s) affected (State, County): PENNSYLVANIA, HUNTINGDON

Address or Geographical Location Description: Installation of a new tower with antennas near 16150 Blacklog Valley Rd, Orbisonia PA and collocation of antennas on an existing 260-ft tower at 22384 Croghan Pike, Shade Gap, PA.

If you have any questions or comments regarding the content of this notice, please contact NTIA at: TCNS@ntia.gov.



844 N. Lenola Road, Suite 1
 Moorestown, NJ 08057
 P (856) 813-3267
 F (856) 813-3279
Terracon.com

June 2, 2023

Tell Township
 PO BOX 268
 Blairs Mills, PA 17213-0268
 ATTN: Terry Kennedy Sr., Permit Officer/Records Officer
 Email telltownship43@gmail.com / Phone 814-259-3862

RE: Invitation to Comment as a Consulting Party on a Proposed Telecommunications Tower

Site Name:	Shade Mountain
Terracon Project Number:	J8237028
Address:	16150 Blacklog Valley Road
City, County, State:	Tell Township (Orbisonia), Huntingdon County, PA, 17243
Latitude / Longitude:	40° 19' 3.18" N / 77° 46' 8.38" W
Proposed Lease Area:	10,000 square feet
Proposed Tower Height:	199 feet, including attachments
Tower Type:	Self-support

To Whom it May Concern:

In accordance with Section 106 of the National Historic Preservation Act (Section 106), the above-referenced proposed broadband deployment project is being evaluated for its potential effects to tribal resources, archaeological sites, or historic resources. If approved, funding for the above-referenced broadband deployment projects will be, in part, provided through a grant from the U.S. Department of Commerce, National Telecommunications & Information Administration (NTIA). As such, the proposed project is a federal undertaking subject to consultation under Section 106.

Terracon is writing to invite your comment on the effect of the above-referenced project on historic resources within the project's Area of Potential Effects (APE).

Field assessment for both historic properties and archaeological sites will be conducted, and a determination will be made of the project's direct and indirect effects on eligible properties. Consulting parties are invited to provide information concerning historic or archaeological properties already listed in the National Register or that could be eligible for listing in the National Register. We welcome your comments regarding the effect of the tower on historic resources that may be listed in or eligible for the National Register of Historic Places.

If you would like to comment, please respond to this letter within 30 days of its receipt. Thank you for your response on this matter. If you have any questions, please do not hesitate to call. If you wish to respond by email, I may be reached at kathy.eisele@terracon.com and (856) 813-3267.

Sincerely,
 Terracon Consultants, Inc.

Kathryn A. Eisele
 Sr. Project Manager

Attachment: Project Location Map with APE

Explore with us



844 N. Lenola Road, Suite 1
 Moorestown, NJ 08057
 P (856) 813-3267
 F (856) 813-3279
Terracon.com

June 2, 2023

Shirley Township
 15480 Croghan Pike
 Shirleysburg, PA 17260
 ATTN: Kathy JO Varner, Secretary/Treasurer
 Email shirleytwp@verizon.net / Phone 814-542-4722

RE: Invitation to Comment as a Consulting Party on a Proposed Telecommunications Tower

Site Name:	Shade Mountain
Terracon Project Number:	J8237028
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Sincerely,
 Terracon Consultants, Inc.

Kathryn A. Eisele
 Sr. Project Manager

Attachment: Project Location Map with APE

Explore with us



844 N. Lenola Road, Suite 1
 Moorestown, NJ 08057
 P (856) 813-3267
 F (856) 813-3279
Terracon.com

June 2, 2023

Huntingdon County Historical Society
 106 Fourth Street
 PO Box 305
 Huntingdon, PA
 ATTN: Margaret Skrivseth, Executive Director
 Email: hchsmail@gmail.com / Phone 814-643-5449

RE: Invitation to Comment as a Consulting Party on a Proposed Telecommunications Tower

Site Name:	Shade Mountain
Terracon Project Number:	J8237028
Address:	16150 Blacklog Valley Road
City, County, State:	Tell Township (Orbisonia), Huntingdon County, PA, 17243
Latitude / Longitude:	40° 19' 3.18" N / 77° 46' 8.38" W
Proposed Lease Area:	10,000 square feet
Proposed Tower Height:	199 feet, including attachments
Tower Type:	Self-support

To Whom it May Concern:

In accordance with Section 106 of the National Historic Preservation Act (Section 106), the above-referenced proposed broadband deployment project is being evaluated for its potential effects to tribal resources, archaeological sites, or historic resources. If approved, funding for the above-referenced broadband deployment projects will be, in part, provided through a grant from the U.S. Department of Commerce, National Telecommunications & Information Administration (NTIA). As such, the proposed project is a federal undertaking subject to consultation under Section 106.

Terracon is writing to invite your comment on the effect of the above-referenced project on historic resources within the project's Area of Potential Effects (APE).

Field assessment for both historic properties and archaeological sites will be conducted, and a determination will be made of the project's direct and indirect effects on eligible properties. Consulting parties are invited to provide information concerning historic or archaeological properties already listed in the National Register or that could be eligible for listing in the National Register. We welcome your comments regarding the effect of the tower on historic resources that may be listed in or eligible for the National Register of Historic Places.

If you would like to comment, please respond to this letter within 30 days of its receipt. Thank you for your response on this matter. If you have any questions, please do not hesitate to call. If you wish to respond by email, I may be reached at kathy.eisele@terracon.com and (856) 813-3267.

Sincerely,
 Terracon Consultants, Inc.

Kathryn A. Eisele
 Sr. Project Manager

Attachment: Project Location Map with APE

Explore with us

From: Huntingdon County Historical Society <hchsmail@gmail.com>
Sent: Monday, June 5, 2023 2:22 PM
To: Eisele, Kathy A
Subject: Re: Proposed Tower, Tell Township, PA (Site Name: Shade Mtn)

Dear Ms. Eisele,

Thank you for inviting the Huntingdon County Historical Society to comment on the proposed telecommunications tower. We know of no historic resources in that area.

Sincerely,

Margaret Skrivseth

Margaret Skrivseth
Executive Director
Huntingdon County Historical Society
P.O. Box 305
Huntingdon, PA 16652
(814)643-5449
email: hchsmail@gmail.com

On Fri, Jun 2, 2023 at 11:45 AM Eisele, Kathy A <Kathy.Eisele@terracon.com> wrote:

Huntingdon County Historical Society
106 Fourth Street
PO Box 305
Huntingdon, PA
ATTN: Margaret Skrivseth, Executive Director
Email: hchsmail@gmail.com / Phone 814-643-5449

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Sincerely,
Terracon Consultants, Inc.

Kathryn A. Eisele
Sr. Project Manager

Attachment: Project Location Map with APE

Kathryn A. Eisele
Senior Project Manager | Environmental



Philadelphia East | 844 N. Lenola Road, Suite 1 | Moorestown, NJ 08057
D (856) 813-3267 (preferred) | F (856) 813-3279 | M (609) 412-1300
kathy.eisele@terracon.com | Terracon.com



Terracon provides environmental, facilities, geotechnical, and materials consulting engineering services delivered with responsiveness, resourcefulness, and reliability.

Private and confidential as detailed here (www.terracon.com/disclaimer). If you cannot access the hyperlink, please e-mail sender.

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approved May 16, 1929, P.L. 1784, as amended

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County of Huntingdon

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that the affiant is not interested in any manner in the subject matter of said notice or advertisement, and that all of the allegations contained herein as to



the time, place and character of the said publication are true and correct.

Sworn to and subscribed before me this 9th
day of June A.D. 2023
My Commission expires

Sarah Share
Prothonotary
Huntingdon County, Pennsylvania
My Commission Expires First Monday 2026



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To Terracon - Telecommunications Tower Notice

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THE DAILY NEWS

By

PUBLIC NOTICE: Ambassador Towers LLC is proposing to build a 199-ft Self-Support Telecommunications Tower located near 16150 Blacklog Valley Rd, Tell Twp (Orbisonia), Huntingdon Co., PA, 17243 (40° 19' 3.18" N, 77° 46' 8.38" W). Public comments regarding potential effects from this site on historic properties may be submitted within 30-days from the date of this publication to: K. Eisele, Terracon, 844 N. Lenola Rd, Ste 1, Moorestown, NJ 08057, 856-813-8267, or Kathy.eisele@terracon.com.

AREAS OF POTENTIAL EFFECTS

Site Name:	Shade Mountain Tower
Terracon Project Number:	J8237028
Address:	16150 Blacklog Valley Road
City, County, State:	Tell Township (Orbisonia), Huntingdon County, PA, 17243
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A. Direct Effects

The direct APE was determined to be the approximate 10,000 square-foot tower compound and a proposed utility/access easement.

B. Visual Effects

The proposed tower will be approximately 199 feet in overall height. The APE for visual effects is therefore considered to be a 0.5-mile radius, per the 2004 Programmatic Agreement (Section VI.4.a), which defines the visual APE as a 0.5-mile radius for towers 200 feet or less in height (unless otherwise determined through consultation between the applicant and the local SHPO office).

Phase I Cultural Resources Survey

Site Name: Shade Mountain
Orbisonia, Tell Township
Huntingdon County, Pennsylvania 17243

June 30, 2023 | Project Number: J8237028

Prepared for:

Ambassador Towers LLC.
Paradise, Pennsylvania

Prepared by:

Suzanne Reece, MSc, RPA
Terracon Consultants, Inc.
Blue Bell, Pennsylvania

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Executive Summary

Ambassador Towers LLC. proposes to construct a new communications tower and support facility near Orbisonia, Pennsylvania. The project includes the construction of a self-supported lattice tower, an equipment compound, installation of utility lines to connect to existing services, and improvements to an existing access road. After completion of construction, the tower will be operated under Upward Broadband LLC., who has hired Terracon to assist with the permitting process associated with the project. This tower and associated support equipment are proposed with the following specifications:

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Tower Type:	Self-support

The lead federal agency for the proposed project is the National Telecommunications and Information Administration (NTIA), who is providing grant funding to assist with the construction of the communications tower. The NTIA defers to the Federal Communications Commission's (FCC) 2004 Nationwide Programmatic Agreement (NPA) for guidance and compliance with Section 106 of the National Historic Preservation Act of 1966, as amended. As such, the project proponent must consider the effects of the proposed undertaking on historic properties in compliance with the standards of the NPA. Secretary of Interior qualified Archaeologist Suzanne Reece, MSc, RPA, (Principal Investigator) inventoried historic properties within the area of potential effect (APE) with Staff Archaeologist Josh Duncan. The aim of this investigation was to determine if historic properties are located within the APE for direct or visual effects, and to determine if the proposed communications tower installation would have an adverse effect on cultural resources listed in, or eligible for listing in, the National Register of Historic Places (NRHP). The records search and field investigation were conducted in accordance with federal standards and the Pennsylvania State Historic Preservation Office's Guidelines for Archaeological Investigations in Pennsylvania (PA SHPO 2021). Based on the records search and field investigation, Terracon recommends a finding of *no historic properties* for the direct APE. One historic property is currently recorded within the 0.5-mile search radius, but will not be negatively impacted by the proposed project. As such, Terracon recommends a finding of *no adverse effect* for the APE of visual effects.

1.0 Introduction

Ambassador Towers LLC. is proposing to install a self-supporting lattice communications tower with attached antenna array and lighting rod near Orbisonia, Tell Township, Huntingdon County, Pennsylvania. The proposed overall height will be 199-feet, with appurtenances. The proposed project area is located on undeveloped property located to the southeast of the intersection of Blacklog Valley Road and Taylor Road. The APE for direct effects consists of the proposed project area including the location of the tower and equipment compound, as well as the utility and access corridor. The APE for visual effects consists of a one-half-mile radius of the APE, as directed by the FCC Nationwide Programmatic Agreement (2004).

2.0 Project Information

2.1 Project Area Description

The project area consists of a 60 by 120-foot tower compound and a 20-foot-wide easement for the access drive and utility corridor extending south from the proposed tower compound. The acreage of the proposed project is approximately 0.2 acre. The project area can be seen on an aerial photograph and a United States Geological Survey (USGS) topographic map in Appendix A, Exhibits 1 and 2. Overview photographs of the proposed project area can be seen in Appendix B, Figures 1 through 10.

The Natural Resource Conservation Service’s (NRCS) Web Soil Survey (2023) records one soil within the project area. This soil is summarized below in Table 1.

Table 1. Soils Within the Project Area.

Soil Name	Approx. Percentage of Project Area	Associated Landscape	Hydric Soil Rating
Rubble Land (Ru)	100	Mountain Slopes	No

The project area is located within the Appalachian Mountain Section of the Ridge and Valley physiographic province (PADCNR 2023). This region is bordered on the southeast by the base of the southeast slope of Blue Mountain. To the west and northwest, it is bordered by the center of the valley bottom west of the westernmost linear ridge. The rest of this section has arbitrary borders based on slope change of eastern ridges (PADCNR 2023). The Appalachian Mountain Section of the Ridge and Valley physiographic province is characterized by long narrow ridges and broad to narrow valleys, with some karst (PADCNR

2023). Local relief is considered moderate to very high, and drainage patterns consist of trellis, angulate, and some karst drainage (PADCNR 2023). The geologic structure of this section of the province consists of open and closed plunging folds having narrow hinges and planar limbs, including a variety of faults (PADCNR 2023). Underlying rock types are sandstone, siltstone, shale, conglomerate, limestone, and dolomite. The origins of this section arose from fluvial erosion, solution of carbonate rocks, and periglacial mass wasting (PADCNR 2023).

At the time of the Phase I survey, ground surface visibility ranged from 0 to 90 percent, with an average visibility of 40 percent. Vegetation within the project area primarily consisted of trees, ferns, and woodland undergrowth. The closest, named body of water to the project area is Blacklog Creek, which is located approximately one mile to the west of the proposed project area.

2.2 Objectives and Research Design

There were two main objectives of the Phase I Survey: determine if archaeological sites or historic-age structures are present within the proposed project area and determine if historic properties within the APE for visual effects would be adversely impacted by the proposed project. The background research for the project first involved investigating land use history, examination of historical maps and aerial photographs, and consultation of the PA-SHARE database for information on previously archaeological sites and historic-age resources. Next, a pedestrian survey was conducted to examine the project area, and a series of shovel tests were excavated. The collected information was reviewed, and a recommendation of effects is presented in this document.

3.0 Cultural Chronology and Ethnohistoric Context

Pre-Contact Period

This discussion employs a traditional cultural historical chronological sequence, though period distinctions and boundaries are often difficult to draw across broad geographical areas, given the incomplete and imprecise nature of the archaeological data. The summary information presented is provided as context for the interpretation of any identified pre-contact cultural resources within the archaeological APE and is not meant to be a complete and detailed history.

Paleoindian Period (13,950 to 9,950 Years B.P.)

The Paleoindian period encompassed the terminal Pleistocene, a cold, windy, and dry period of the declining Late Wisconsinan glaciation (Watts 1979). The southernmost advance of this glaciation did not reach Lehigh County (Sevon et al. 1999:14). Fluted lanceolate

projectile points are the primary early Paleoindian diagnostic artifacts. Available blood residue analysis suggests that these projectile points were used on a wide variety of large and small species that were available during the last stages of the Pleistocene, including mammoth, bison, sheep, caribou, musk ox, and even rabbits (Brush and Smith 1994; Loy and Dixon 1998). At Dutchess Quarry Cave No. 1 in Orange County, New York, caribou bones, teeth, and antler fragments were recovered. Broken caribou limb bones, possibly indicative of marrow extraction, occurred within the same stratum as a fluted Cumberland-like point (Funk and Steadman 1994; Funk et al. 1969).

Some of the primary evidence for Paleoindian occupation of Pennsylvania comes from the Meadowcroft Rockshelter (36WH297), the Shoop site (36DA20), and the Shawnee Minisink site (36MR43). Meadowcroft Rock Shelter, located in Washington County in southwestern Pennsylvania, saw repeated but sporadic and ephemeral utilization, possibly as early as 17,650 B.C., but more securely by 14,225 B.C. to 10,850 B.C. (Adovasio and Carlisle 1986). A small unfluted lanceolate blade (Miller Lanceolate) is attributed to a Paleoindian occupation dating between 10,850±870 B.C. and 9,350±700 B.C. at Meadowcroft Rock Shelter (Adovasio et al. 1988).

The Shoop site (36DA20), located in Dauphin County in central Pennsylvania, consists of a series of lithic concentrations situated on a plateau bordered by an upper branch and tributaries of Armstrong Creek (Witthoft 1952). This site produced numerous fluted projectile points and fragments together with an extensive associated collection of cores, flaked stone implements, and debitage. Reassessments of the data from the Shoop site (36DA20) have been offered by Carr (1989) and Cox (1986). Stone tools from the Shoop site (36DA20) retained blood residue attributed to the Family Cervidae, which includes deer, elk, moose, and caribou (Hyland et al. 1990).

The Shawnee Minisink site (36MR43) is located along the Delaware River just above the Delaware Water Gap in Monroe County, Pennsylvania. The Paleoindian component at the Shawnee Minisink site (36MR43) has been dated to 8,700 B.C. (or approximately 10,650 B.P.), and produced a single fluted projectile point, along with numerous other flaked stone tools and hammerstones (McNett 1985). Features associated with the Paleoindian component include hearths and concentrations of flaking debris (McNett 1985). Resource procurement and processing strategies associated with this component are fishing; the hunting of small animals, deer, and caribou; and the collection of floral resources, including copperleaf, pigweed, blackberry, buckbean, goosefoot, hackberry, hawthorn plum, and wintercress (Dent and Kauffman 1985). More recent excavations at Shawnee-Minisink have produced a date of approximately 11,000 B.P. for the Paleoindian components (Gingerich 2007).

According to the CRGIS database, five sites with Paleoindian components have been recorded in Lehigh County (PHMC 2017). All of these sites are classified as open habitations.

Three of these sites are recorded on terraces. One site is reported on a stream bench, and one is reported on lower slopes.

Archaic Period (9,950 to 3,800 Years B.P.)

Gradual climatic warming that occurred after the close of the Pleistocene gave rise to dense deciduous forests, which supported more numerous and varied species of flora and fauna. The Archaic period has traditionally been divided into Early, Middle, Late, and Terminal (or Transitional) periods, largely based upon hypothesized projectile point sequences, which have not been supported on well-dated, stratified sites.

Archaic peoples probably lived in small, highly mobile bands. Evidence gathered from various locations suggests the existence of broad-based economies centered on large and small game, birds, and fish, with the seasonal collection of nuts, berries, seeds, and greens (Asch and Asch 1985; Chapman 1975; Chapman and Watson 1993; Hughes et al. 1992; Meltzer and Smith 1986; Michels and Smith 1967). Although local and regional subsistence data remain sparse, evidence from the Susquehanna watershed supports the emergence of squash cultivation toward the end of the Archaic period (Hart and Asch-Sidell 1997).

While the Early Archaic period is associated with a technological and stylistic shift to projectiles and knives fitted with a variety of notched and stemmed blade forms, the remainder of the flaked stone tool assemblage had changed little. The Middle Archaic period in Pennsylvania is mainly defined by the presence of particular projectile point types including MacCorkle, St. Albans, LeCroy, Neville, Kanawha, Stanly, or Otter Creek types (Carr 1998:80). While bifurcate point forms seem to be clearly associated with a limited temporal span, other forms have been shown to persist into later periods. Custer (1996:Table 7) dates the Middle Archaic period, which corresponds to his "Hunter-Gatherer II Cultural Period," from 6,500 to 3,000 B.C. Raber (1985:33-36) also uses the 6,500 to 3,000 B.C. interval for the Middle Archaic in A Comprehensive State Plan for the Conservation of Archaeological Resources. While Cowin (1982, 1991) and George (1971, 1985), like Chapman (1975, 1985), assign most bifurcate point styles to the Early Archaic period, Carr (1998), Custer (1996), Gardner (1989), and Stewart and Cavallo (1991) include the bifurcates within the early Middle Archaic period. The CRGIS database also assigns bifurcate-producing sites to the Middle Archaic period (PHMC 2014).

Few Middle Archaic component archaeological sites have been excavated in Pennsylvania (Carr 1998:80). Three sites with Middle Archaic components, including the Meadowcroft Rock Shelter, Sheep Rock Shelter, and Shawnee-Minisink, have been the most informative, with others, such as the State Road Ripple Site (Cowin 1991), Conrail site (Griffiths-Connelly 1995), Central Builders site (Baker 1993), Sandts Eddy Site (Bergman et al. 1994), and West Water Street Site (Custer et al. 1993), being less so. Evidence, including the environmental reconstruction of the Early Holocene and site densities, suggests that population growth in Pennsylvania was slow throughout the Early Archaic, but increased

significantly during the Middle Archaic (Carr 1998:87). In addition to the growth in population, there appears to be a greater variety of lithic raw material types being used by Middle Archaic populations. These materials are often found in cobble form indicating use of local sources. The use of upland landforms for basecamp settlements also increased (Carr 1998:88).

The early Laurentian or "Proto-Laurentian" Tradition represents the oldest Late Archaic period assemblage defined in the Upper Susquehanna Valley in New York State (Funk 1993; Funk and RippetEAU 1977), where surface finds of Otter Creek and similar large side-notched projectile points are moderately common. Turnbaugh (1977) reports surface finds of Otter Creek projectile points in the West Branch Susquehanna River and Lycoming Creek valleys. At the East Bank site (36NB16), located on the West Branch Susquehanna River at the Interstate 80 crossing, Otter Creek-like projectile points occurred in four strata dating between ca. 6,900±40 and 3,620±60 years B.P. (East et al. 2002a). The various Brewerton projectile point forms (Ritchie 1961) are generally attributed to the Middle or Late Archaic periods in Pennsylvania, although similar forms may date to as late as the Middle Woodland period (East et al. 2002b). Surveys of upland areas in the Ridge and Valley physiographic province have revealed that Late Archaic sites are located in a variety of settings, including areas near springs, on benches, and on hillsides (Graetzer 1986; Hatch 1979; Miller 1993). Both base camps and special purpose sites are represented in the Late Archaic settlement pattern (Raber et al. 1998:126).

The CRGIS database indicates that 128 sites with Archaic components have been recorded in a variety of topographic settings in Lehigh County (PHMC 2017). These sites are primarily reported as open habitation sites, but 14 lithic reduction sites, three quarries, and two rockshelter habitations have also been recorded. The majority of these sites are recorded on stream benches (n=26), terraces (n=25), and floodplains (n=23). Sites were also identified in upland settings on toeslopes (n=14), lower slopes (n=6), hillslopes (n=9), upper slopes (n=1), upland flats (n=8), hilltops (n=5), ridgetops (n=5), and a saddle (n=1).

Woodland and Late Pre-Contact Periods (3,800 to 350 Years B.P.)

The emerging temporal overlap of broadspears, fishtails, Meadowood projectile points, ceramics, and steatite vessels suggests that the separate Terminal Archaic (or Transitional) period should be eliminated and merged with the Early Woodland period. Although the Woodland period is thought to have been marked by progressively greater reliance on native seed crops (chenopod, maygrass, sumpweed), little barley, and sunflower, as well as cultivated tropical plants, the evidence for this progression in Pennsylvania has not been forthcoming. All indications are that the hunting and gathering lifeways of the Archaic period largely continued well into the Woodland period. Maize was not in widespread use until ca. AD 850, while beans did not arrive until ca. AD 1250-1300. Large, nucleated and fortified settlements were probably not prominent fixtures on the landscape until ca. AD 1250 or later.

The hallmark of the Early and Middle Woodland periods would be the intensive trade in semi-finished and finished items made of exotic stone, particularly steatite (bowls); rhyolite (broadspears and bifaces); jasper (broadspears, Jack's Reef projectile points, and bifaces); argillite (broadspears, Fox Creek projectile points, and bifaces); and Onondaga chert (Meadowood projectile points/bifaces and Jack's Reef projectile points). These particular projectile point types can be firmly identified as diagnostic of the period through consistent and corroborating radiocarbon dates. Although triangular projectile points are evidenced in earlier period occupations, after AD 1000, they are the only style seen in pre-contact period tool kits (Kinsey 1972:441-443; Ritchie 1961:31-33). The exclusive use of small triangular projectile points is linked to the introduction of the bow and arrow. There have been attempts to link certain styles of triangular projectile points with certain ethnic groups; however, the evidence is not conclusive (Custer 1996:265). According to the CRGIS, the Early Woodland period within the project region has been predominantly distinguished by the presence of Meadowood, broadspear, Perkiomen, and Susquehanna projectile points (PHMC 2014).

The earliest eastern Pennsylvania Early Woodland complex, the Bushkill phase, was defined by Kinsey (1972) from components found within the Upper Delaware River Valley. Associated artifacts include Rossville and Lagoon projectile points, along with Broadhead Net-Marked and Vinette I ceramics. The Middle Woodland period in eastern Pennsylvania is associated with Jacks Reef and Fox Creek projectile points and plain and cord-marked ceramics. The people associated with these artifacts probably followed the typical Archaic pattern of seasonal hunting and gathering (Ritchie and Funk 1973:121). Evidence of plant cultivation from the Early Woodland is inferred, although there is no direct evidence for domesticated plants in the region at this time (Stewart 2003:7). Examples of eastern Pennsylvania sites with Early to Middle Woodland components are scarce, but include the Zimmerman (Werner 1972), Faucett (Kinsey 1975), and Three Mile Island (Custer 1996; Smith 1977). Evidence from these sites implies that these communities were semi-sedentary with cyclical use of some resources and a riverine-based hunting and fishing economy (Kinsey 1975; Stewart 2003:7).

The Late Woodland Clemsons Island/Owasco period apparently featured a dispersed settlement pattern, with small hamlets on low terraces adjacent to major streams surrounded by smaller, temporary procurement and processing stations, some of which may have been situated in upland areas. Components that have not been thoroughly disrupted by plowing are often associated with buried A (Ab) horizons that may indicate a period of relative environmental and hydrologic stability (East et al. 1988; Vento 1988; Vento and Fitzgibbons 1987; Vento et al. 1990). The Clemson Island culture was primarily located within the Susquehanna River drainage. Clemson Island ceramics are characterized by crushed rock temper with cord-marked or fabric-impressed surface treatments and often a row of punctuates and/or raised nodes/bosses below the lip or on the upper rim (Maryland Archaeological Conservation Lab 2002). Evidence of Clemson Island populations from sites

located on the islands and floodplains of the Middle Susquehanna and Juniata rivers indicates that these people built “small parallel-sided houses with rounded ends” (Kent 1980:33).

The later Late Woodland division (ca. AD 1250 to AD 1600) encompasses the Minguannan, Overpeck, Pahaquarra, and Delaware/Lenape (Unami and Munsee/Minisink complexes). Evidence for the presence of the Minguannan complex in southeastern Pennsylvania comes primarily from the Minguannan Site (Wilkins 1978) and the Webb Site (Custer 1985; Custer and Griffith 1985), both of which are located in Chester County. The settlement pattern of this complex involves large, macro-band base camps in productive floodplain and stream settings (Custer 1989).

The CRGIS database tabulates 50 sites with reported Transitional components in Lehigh County (PHMC 2017). The majority of these sites are characterized as open habitations; three lithic reduction sites, two quarries, and one rockshelter site have also been reported. The majority of the Transitional components are recorded on stream benches (n=14), floodplains (n=12), or terraces (n=8). Transitional components have also been found on sites that are located on toeslopes (n=4), lower slopes (n=1), hillslopes (n=3), and hilltops (n=3).

The CRGIS database assigns Woodland components to 76 sites in Lehigh County (PHMC 2017). These sites are reported on floodplains (n=12), terraces (n=12), stream benches (n=16), toeslopes (n=6), and lower slopes (n=5). Sites with Woodland components are also reported on terraces (n=24), stream benches (n=21), saddles (n=3), toe slopes (n=3), lower slopes (n=3), a middle slope (n=1), hill slopes (n=12), upland flats (n=10), hilltops (n=2), a ridgetop (n=1), and a saddle (n=1).

Contact Period (AD 1600–ca. 1750)

The Contact period dates from the first arrival of Europeans in eastern Pennsylvania until the removal of most of the Native Americans from the area ca. 1750 (Custer 1996). During the seventeenth and eighteenth centuries, Native American groups along the western frontier underwent rapid and dramatic changes in response to disease, the fur trade, and political strategizing of the French and English. From ca. AD 1550 to AD 1675, the Susquehannock were the dominant group in both the Susquehanna and Delaware River valleys (Custer 1996). The Susquehannock controlled the fur trade with the Europeans at this time.

The Iroquois League was a confederacy of Iroquoian-speaking tribes that occupied the area between the Mohawk and Genesee rivers in what is now southern New York State (Graymont 1988:13). The Iroquois expanded their hunting territory through negotiation or warfare with neighboring tribes. In 1675, the Iroquois defeated the Susquehannock (Waldman 1988; Wallace 1986) and claimed ownership of the entire Susquehanna Valley

(Weslager 1996). By 1675, the Susquehannock had left eastern Pennsylvania (Custer 1996).

During the Contact period, the Lenni Lenape (or Delaware) inhabited agricultural villages in the Delaware River Valley and along tributaries to the Delaware River (Weslager 1996). They adopted a subsistence strategy based on planting, hunting, and fishing (Weslager 1996). According to the CRGIS database, no Contact period sites have been recorded in Lehigh County. The Maxatawny Path, which connected Lechauwekink (modern day Easton) with Manangy's Town (present day Reading), passed through the present location of Allentown.

Historic Period (ca. 1750+)

Huntingdon County is located in South Central Pennsylvania, in the Ridge and Valley Appalachian Mountains of PA, which run southwest to northeast across the county. It was officially formed as a legal entity in 1787 and was incorporated as a borough in 1796. The county's name comes from Dr. William Smith, the Provost of the University of Pennsylvania, and owner of the land in the 1760s, who is said to have named the county after the Countess of Huntingdon, England (PHMC 2023). The land that became Huntingdon County was originally part of Cumberland County, the territory from which Bedford County was cut in 1771, and it was from Bedford County that Huntingdon County was cut in 1787 (Africa 1876). Over the next century the County's borders shrank somewhat, as land was taken for the creation of other new counties in central and south-central Pennsylvania (Africa 1876).

It is known from historical, oral, and archaeological data that, prior to settlement of the area that would become Huntingdon County, the land was inhabited by Indigenous Native Americans. The earliest named Native American inhabitants in the area are known as the Juniata Tribe of the Standing Stone, named for a stone obelisk that stood in the center of their village (SAH 2023). By the time Euro-American settlers arrived in the area, Shawnee and Tuscarora Native groups, allied with the Iroquoian Confederacy, had removed the Juniata Tribe from the area, though the name of "Standing Stone" was still used for the location that would become the Borough of Huntingdon (SAH 2023). It was the Iroquoian Confederacy that sold the land that would include Huntingdon County to the Colony of Pennsylvania during the Albany Purchase of 1754 (Native Americans 2022). Other tribes, including the Delaware, Susquehannock, and various Ohio Valley tribes certainly interacted in the region as well (Native Americans 2022).

Written records from Euro-American Settlers in the area go back to at least 1754, with John Harris' account and description of the Native village that stood at the junction of the Juniata River and standing Stone Creek (Borough of Huntingdon 2022). At that time, central Pennsylvania was the frontier that marked the ever-expanding boundary between Indian territory and colonial English territory, and a series of forts were built in the region to provide protection for the colonial settlers, who were largely German and Scots-Irish (SAH

2023). Fort Shirley was constructed circa 1755, near present-day Shirleysburg, which served as a staging area for military incursions into Native territory (SAH 2023). In 1767/1768, Dr. William Smith purchased a portion of land in what was then part of Cumberland County and began to lay out plans for the future borough of Huntingdon and selling lots along the Juniata River (Borough of Huntingdon 2022). Settlement of the area was slow at first, but the area saw a large influx of settlers in the 1780s, leading to formation of Huntingdon County, with the town of Huntingdon serving as the county seat, which it remains to this day (Borough of Huntingdon 2022). By the 1790s, Iron production began in the county, and the vast sources of brown hematite and fossil ores, as well as trees for charcoal and streams to power waterwheels, led the inhabitants to open multiple furnaces and forges, making iron production a major part of the Huntingdon County economy for the next century (SAH 2023). The completion of railroads in the area aided the iron-based economy of the area in the mid-19th century, and in 1852 the Pennsylvania Railroad tied Huntingdon to Pittsburgh, allowing some of the larger furnaces to remain open well into the 20th century (SAH 2023). However, the clear cutting of the forests for fuel for the furnaces, and ore shortages in the 1870s, led to the decline of the iron industry in Huntingdon County, and the economy in the region shifted to an agricultural and tourism-based economy in the 20th century (SAH 2023).

Tell Township sits along the southeast border of Huntingdon County and is a largely rural setting, covered with ridges and mountains, with agricultural land lying between this rocky terrain. This land was part of the larger region that was sold to the Colony of Pennsylvania by the Iroquoian Confederacy as part of the Albany Purchase of 1754 (Native Americans 2022). The township was formed as a legal entity in 1810, when it was cut from the pre-existing Dublin Township. However, there is written documentation concerning the land that would become Tell Township that exists from 1755 that refers to a Barnabas Barnes receiving a tract of land in Tell, in what is now Tell Township (Africa 1883). There was very little Euro-American settlement in the area of Tell Township in the 18th century, though the 1780s and 1790s did see an increase in new settlement, and a list of families that moved into the area, most of whom were Scots-Irish, is still available (Africa 1883). The 19th century saw an increase in settlement by Euro-Americans, leading to the formation of the township and several small hamlets and villages, including Nossville, which exists to this day (Africa 1883). The 19th century industry and economy of Tell Township was largely agricultural, though records indicate that there was a tannery, a blacksmith shop, shoe shop, post office, and several churches in the area from the early stages of the township's history. Throughout the 19th and 20th centuries much of the industry of the larger Huntingdon County, concerning iron production and logging, also played a role in Tell Township (Africa 1876), though records related to these activities and Tell Township specifically are sparse. Also, like its parent parcel, Huntingdon County, the modern economy of Tell Township in modern times is related to agriculture, along with some tourism related hunting, fishing, and other outdoor activities (SAH 2023).

4.0 Records Search and Background Research Results

A records search was conducted of the PA-SHARE GIS database maintained by SHPO for information regarding previously recorded historic properties within the project area and the 0.5-mile APE for visual effects. According to the results of the records search, no historic properties have previously been recorded within the project area. One historic property has been recorded within 0.5-mile of the project area. The Hower-Hart Farm (2020RE01034), a historic farmstead is located approximately 0.5-mile to the northeast of the proposed tower location. This property is eligible for inclusion on the National Register of Historic Places (NRHP), and consists of 10 structures and land associated with the historic farmstead. The small part of the historic property within the visual effects APE is vacant land included in the property boundary. This land primarily consists of the downslope of Shade Mountain. The structures associated with Hower-Hart Farm are located 1.2-mile or more from the proposed project area. A copy of the mapped search results from the GIS database can be found in Appendix A, Exhibit 3.

Three historical atlases and plat maps were consulted at the Historic Map Works (2023) website to identify potential historical-period resources within or near the project area, including: Hopkins and Co. 1874, Pomery, Whitman, and Co. 1873, and Walling and Gray 1872. None of the reviewed atlases and plat maps depicted man-made features within the proposed project area.

A series of historical USGS topographic maps were reviewed which ranged in date from 1922 to 2023. These maps depict the project area as undeveloped land from 1922 to the present. No man-made structures or features are depicted within the project area on the reviewed topographic maps. Several pipelines have been placed to the south of the project area including one that is first mapped in 1972, and a second in 1976 that branches as it reaches Shade Mountain. The access road to be used by the proposed project was originally associated with the development of these pipelines.

Aerial photographs dating from 1957 to 2020 were reviewed for information on land use history. The reviewed aerial photographs each depict the project area as wooded land, where land not obscured by trees is covered in rocks. No structures are depicted within the project area within the reviewed photographs. The nearby pipelines and access road are depicted in a similar manner as they are on the topographic maps.

5.0 Fieldwork

Suzanne Reece, MSc, RPA conducted the fieldwork for the Phase I survey with Staff Archaeologist Josh Duncan on June 26, 2003. The project area was examined with a

pedestrian survey, to identify any visible surface level artifacts or cultural features. No prehistoric or historic-age artifacts, cultural features, or structural remains were encountered during the pedestrian survey. Overview photographs of the project area can be found in Appendix B, Figures 1 through 10.

Five shovel tests were excavated within the proposed tower compound. No shovel tests were excavated within the access or utility easements. The shovel tests were documented with Munsell soil color charts, field notes, photographs, and Global Positioning System (GPS) coordinates. Table 2 summarizes the information collected during the shovel testing. The soils excavated from the shovel tests were passed through 1/4-inch wire mesh to screen for artifacts. No artifacts or cultural deposits were encountered during shovel testing. Soils in the excavated shovel tests were consistent throughout, and no evidence of buried cultural deposits. Shovel Test 5 was excavated near the existing access road, and the encountered soils were previously disturbed by the construction of the access road. On each of the shovel tests, efforts were made to excavate at least 10 cm into sterile subsoil. However, standard depths were not able to be reached due to dense rock deposits that standard hand digging equipment was not able to bypass. A representative photograph of a shovel test can be found in Appendix B, Figure 11. The locations of the shovel tests can be seen on a recent aerial photograph in Appendix B, Figure 14.

Table 2. Shovel Test Profiles and Artifact Data.

Shovel Test	Depth Below Ground Surface	Soil Description	Notes
1	0-25 cm	7.5YR 3/3 silty clay loam	Rocks throughout. Obstructed by rocks at base.
2	0-20 cm	7.5YR 3/3 silty clay loam	Rocks throughout. Obstructed by rocks at base.
3	0-20 cm	10YR 4/4 silty clay loam	Rocks throughout. Obstructed by rocks at base.
4	0-15 cm	7.5YR 3/3 silty clay loam	Rocks throughout. Obstructed by rocks at base.
5	0-20 cm	Mottled 10YR 5/2 and 10YR 3/6 silty clay loam intermixed with road gravel	Disturbed from prior construction. Obstruction at base.

A visit was made to an accessible portion of the NRHP eligible Hower-Hart farm, to review the potential visual impacts of the proposed project on the historic property. The viewshed review was conducted near the publicly accessible intersection of Shade Valley Road and Allison Road. While this visit demonstrated that the proposed project is visible from within

the historic farm, the visual impact of the proposed project to the contributing structures of the farmstead will be minimal (Appendix B, Figures 12 and 13). Furthermore, each of the contributing structures of the Hower-Hart farm is located more than a mile from the proposed project, which is far outside of the viewshed established by the FCC (2004).

6.0 Summary and Recommendations

A Phase I survey was conducted near Orbisonia, Tell Township, Huntingdon County, Pennsylvania ahead of the proposed construction of a lattice communications tower. A pedestrian survey was conducted of the project area, and did not encounter artifacts, historic structural remains, or surface level evidence of cultural deposits. Shovel testing was conducted within the location of the proposed communications compound, and did not encounter subsurface cultural deposits. Based on the results of the pedestrian survey and subsurface testing, it is unlikely that unknown, NRHP eligible cultural resources are present within the direct APE. Therefore, Terracon recommends a finding of *no historic properties* for the direct APE. No historic properties have been previously recorded within the project area, and one historic property has been recorded within 0.5-mile of the project area. A review of the potential visual impacts to this historic property was conducted, and it was found that the property will be minimally impacted by the proposed construction. Therefore, Terracon recommends a finding of *no adverse effect* for the APE of visual effects.

Should buried artifacts, human remains, or cultural deposits be encountered during ground disturbing activities, it is Terracon's recommendation that construction immediately halt, and the resources should be examined by a professional archaeologist. Appropriate authorities, including the State Historic Preservation Office (SHPO), should be notified.

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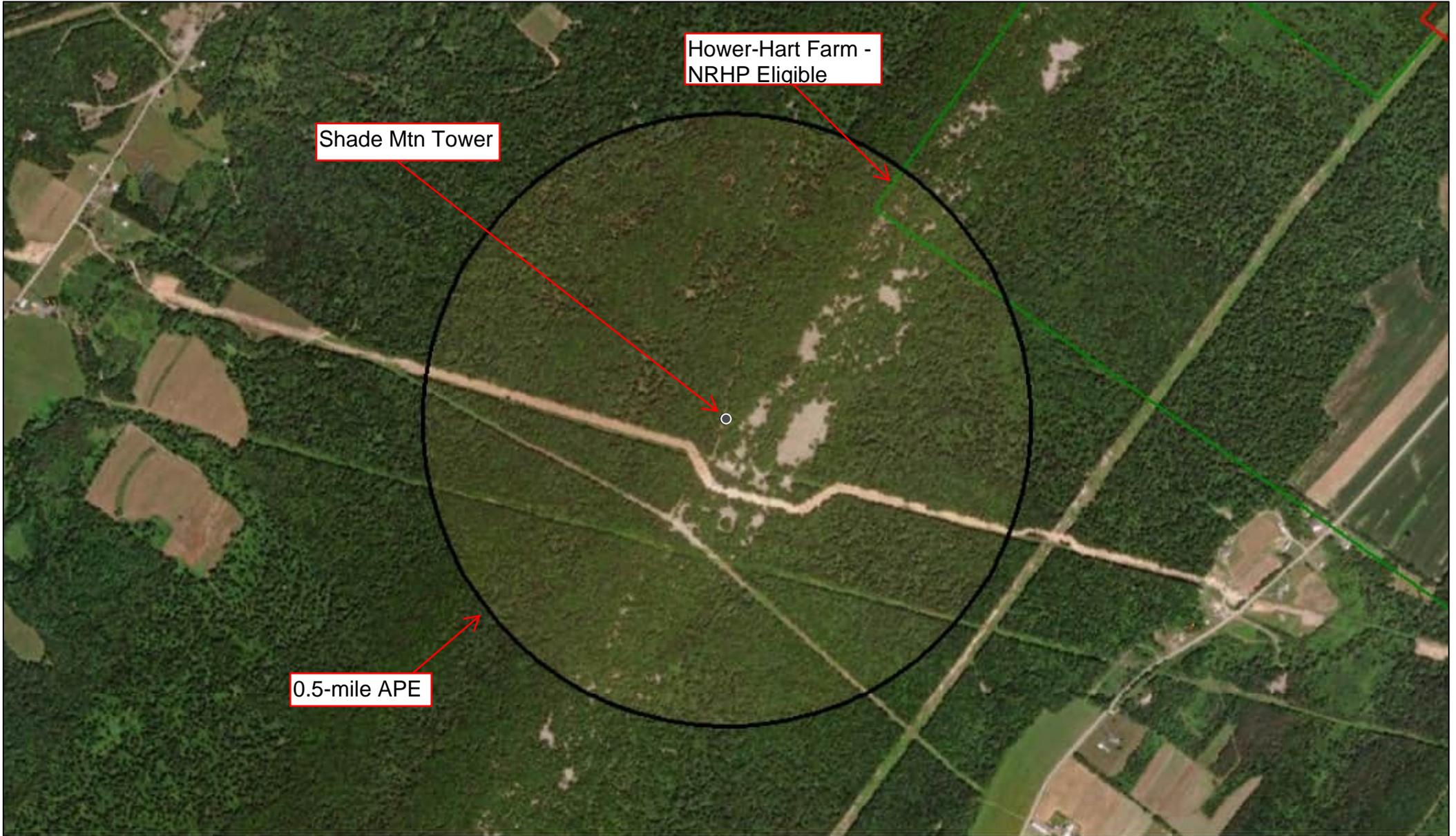
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Appendix A

Site Plan and Maps

Shade Mountain Tower

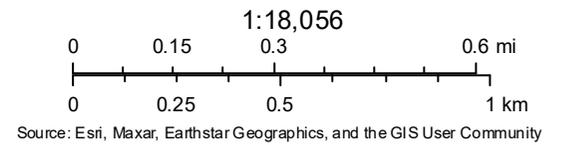


5/30/2023

Above Ground Resource

- NHL
- Listed

- | | | |
|--|---|---|
| Eligible | Not Eligible | Demolished |
| Eligible | Undetermined | |
| Not Eligible | Undetermined | |



Appendix B

Project Area Photographs



1. View of the proposed tower compound from the access road, view to the northeast.

2. View of the proposed tower compound, view to the north.



3. View of the proposed tower compound, view to the south.

4. View of the existing access road, view to the north.



5. View of the existing access road, view to the northwest.

6. View of the existing access road, view to the northwest.



7. View to the south from the proposed tower.

8. View to the east from the proposed tower.



9. View to the north from the proposed tower.

10. View to the west from the proposed tower.



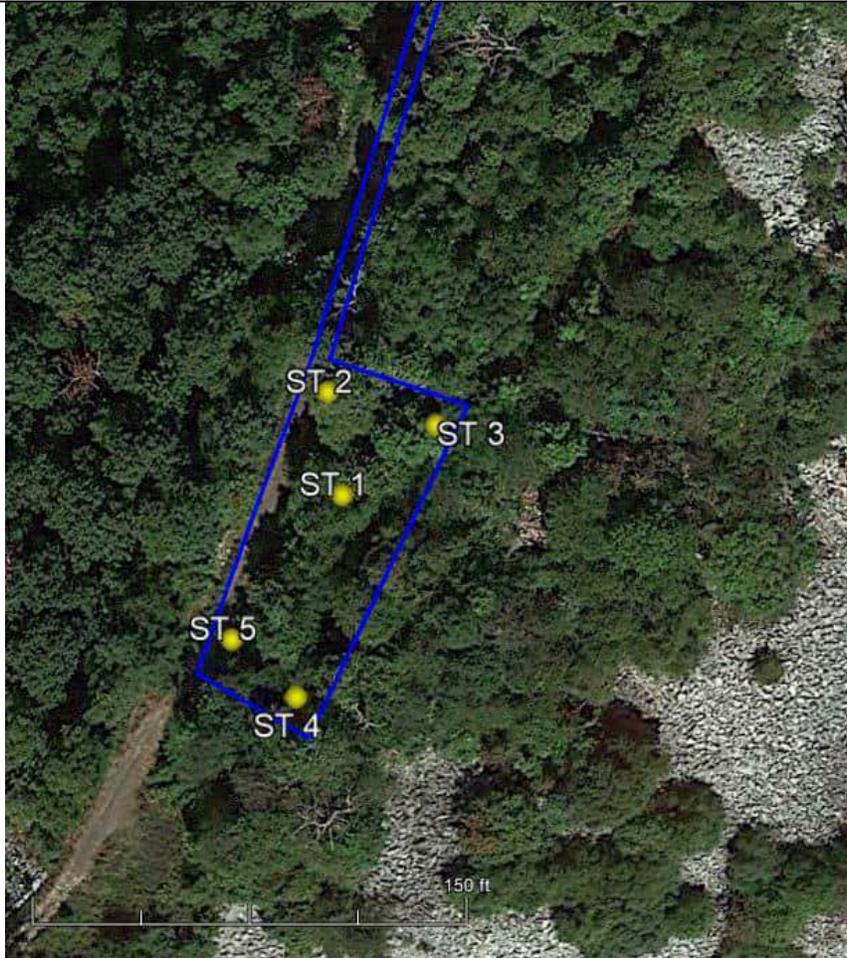
11. Overview of Shovel Test 1, a typical excavated shovel test.

12. View from within the boundary of the NRHP eligible Hower-Hart farm, view to the northeast.

Site Name: Shade Mountain
Project No. J8237028
Photographs Taken On: June 26, 2023



13. View from the NRHP eligible Hower-Hart farm toward the project site, view to the east.



14. The locations of the five excavated shovel tests (ST 1 through ST 5) in relation to the proposed tower compound on a recent aerial photograph.

Visual Effects Report
Site Name: Shade Mountain
165 Weeks Road
Hartwick, Otsego County, New York

Terracon Project No. J8237028
June 2023



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Meghan Browning
Meghan Browning
Historian

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VISUAL EFFECTS REPORT

1.0 PROJECT SUMMARY

Terracon understands that Ambassador Towers LLC is proposing to build a telecommunications tower with associated antennas and equipment enclosures under the following specifications:

Site Name:	Shade Mountain
Terracon Project Number:	J8237028
Address:	16150 Blacklog Valley Road
City, County, State:	Tell Township (Orbisonia), Huntingdon County, PA, 17243
Latitude / Longitude:	40° 19' 3.18" N / 77° 46' 8.38" W
Proposed Lease Area:	10,000 square feet
Proposed Tower Height:	199 feet, including attachments
Tower Type:	Self-support
Visual APE:	0.5 miles

Federal Communications Commission (FCC) regulations require that carriers consider the effects of the proposed undertaking on historic properties in compliance with the *National Programmatic Agreement (NPA) for Review of Effects on Historic Properties for Certain Undertakings Approved by the Federal Communications Commission* (Nationwide PA [FCC 04-222]) and the National Historic Preservation Act (NHPA), as amended. In fulfillment of these requirements, Terracon Consultants completed a Historic Resources report for the proposed project.

The goal of this survey was to determine if properties eligible for or listed in the National Register of Historic Places (NRHP) are located within the APEs for direct and visual effects. The APE for visual effects was determined to be a 0.5-mile radius surrounding the Site. The APE for visual effects is therefore considered to be a 0.5-mile radius, per the 2004 Programmatic Agreement (Section VI.4.a), which defines the visual APE as a 0.5-mile radius for towers 200 feet or less in height (unless otherwise determined through consultation between the applicant and the local SHPO office). The APE for direct effect was determined to be site specific.

The FCC requires a Secretary of the Interior (SOI) -qualified architectural historian or historian be involved in any historic resource evaluation for FCC National Environmental Policy Act (NEPA) projects, including all fieldwork, as well as determination of eligibility or effects on historic properties. The following individuals meet the above-listed criteria, and resumes are attached in the submittal as proof of SOI Principal Investigator (PI) qualifications for their respective fields:

- Patricia Davenport-Jacobs, Architectural Historian/Principal Investigator
- Meghan Powell, History

2.0 SITE DESCRIPTION

The project consists of an approximate 10,000 square-foot tower compound and an approximate 30-foot by 220-foot access/utility easement. The proposed self-support tower will be 199 feet in overall height. The project site and surrounding properties are also undeveloped, wooded land.

Visual Effects Report

Shade Mountain ■ Tell Township (Orbisonia), Pennsylvania
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3.0 AREA OF POTENTIAL EFFECT (APE)

An online review was conducted of the NRHP and the National Historic Landmarks (NHL) databases to identify any listed historic properties within the applicable visual APE of the tower (provided in site information table). Additional file review was conducted using the established State Historic Preservation Office (SHPO) protocols to identify historic properties that are either listed or eligible for listing on the NRHP.

Additionally, a desktop records search was conducted to identify previously recorded historic-age resources within the 0.5-mile area of potential effects for the proposed project. The review identified the following historic properties summarized in the following table:

Resource ID	Resource Name / Eligibility	Address / Distance from Site	Direct Effect Determination	Visual Effect Determination
2020RE01034	Hower-Hart Farm / NRHP Eligible	16103 Shade Valley Road, East Waterford, PA 17021 / 0.45 miles northeast	N/A	No adverse effect

The survey identified one previously recorded historic property, the Hower-Hart Farm, within the APE for visual effects. This resource is located 0.45 miles northeast of the site and includes a building constructed circa 1848.

Based on elevation and dense tree lines, there will be minimal visibility of the tower from the historic property. The proposed telecommunications project does not represent an adverse effect to the physical characteristics and associative qualities for which the historic property is considered significant.

4.0 SUMMARY

It is Terracon's opinion that a finding of No Historic Properties within the direct effects APE and No Adverse Effect to Historic Properties within the visual effects APE is recommended for the proposed installation. Therefore, no further work is recommended at this time.

5.0 REFERENCES

Federal Communications Commission (FCC)

2004 Nationwide Programmatic Agreement for Review of Effects on Historic Properties for Certain Undertakings Approved by the Federal Communications Commission. Available online: <http://wireless.fcc.gov/siting/npa/FCC-04-222A3.pdf>.

National Park Service (NPS)

2023 *National Register of Historic Places Database Search*. Electronic Document, <https://www.nps.gov/Nr/research/>, accessed May 2023.

Pennsylvania Historical and Museum Commission, Historic Preservation Office

2022 *PA State Historic and Archaeological Resource Exchange (SHARE) Map*, <https://share.phmc.pa.gov/pashare/search>, accessed May 2023.

Visual Effects Report

Shade Mountain ■ Tell Township (Orbisonia), Pennsylvania
June 2023 ■ Terracon Project No. J8237028



ATTACHMENTS

PA State Historic and Archaeological Resource Exchange (SHARE) Map
Aerial Location Map
Topographic Map
Photographs

Please refer to Appendix B for Site Figures

Please refer to Appendix F for Site Photographs

APPENDIX F

Visual Effects Report

Shade Mountain ■ Tell Township (Orbisonia), Pennsylvania
June 2023 ■ Terracon Project No. J8237028



Photo 1: View looking north toward the tower location



Photo : View looking east toward the tower location

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Photo 3: View looking west at the tower location



Photo 4: View looking south at the tower location

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Visual Effects Report

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Photo 5: View of the right-of-way area south of the tower facing west



Photo 6: View of the right-of-way area south of the tower facing east

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Photo 1: View looking west at the site.



Photo 2: View looking south at the site.

Visual Effects Report

Shade Gap Collocation ■ Shade Gap, Pennsylvania
July 2023 ■ Terracon Project No. J8237028



Photo 3: View from facing north toward the site. (Source: Google Earth Imagery, August 2022)



Photo 4: View from facing south toward the site. (Source: Google Earth Imagery, August 2022)

Visual Effects Report

Shade Gap Collocation ■ Shade Gap, Pennsylvania
July 2023 ■ Terracon Project No. J8237028



Photo 5: View from the site facing north. (Source: Google Earth Imagery, August 2022)



Photo 6: View from the site facing east (Source: Google Earth Imagery, August 2022)

Visual Effects Report

Shade Gap Collocation ■ Shade Gap, Pennsylvania
July 2023 ■ Terracon Project No. J8237028



Photo 7: View from the site facing south (Source: Google Earth Imagery, August 2022)