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ECONOMIC DEVELOPMENT GRANT PROPOSAL FOR THE NORTHWEST TN REGIONAL INDUSTRIAL CENTER

ENVIRONMENTAL ASSESSMENT

Obion County, Tennessee (Union City)

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1.0 PROPOSED ACTION AND NEED

An integral part of the Tennessee Valley Authority's (TVA) mission is to promote economic development within the TVA service area. TVA provides financial assistance to help bring to market new or improved sites and facilities within the TVA service area and position communities to compete successfully for new jobs and capital investment. TVA proposes to provide an economic development grant through InvestPrep funds to the City of Union City, Tennessee (Union City) in partnership with the Obion County Joint Economic Development Corporation (OCJEDC) to assist with the development of a portion of the Northwest TN Regional Industrial Center (NTNRIC) in Obion County, Tennessee. The area of TVA's Proposed Action (herein referred to as the Project Area) encompasses 70 acres, consisting mainly of agricultural land with some forested areas located adjacent to Highway 21, in Union City, Tennessee (Figure 1 below and Attachment 1, Figure 1-A). TVA funds would be matched with non-TVA funds and used for tree clearing, burning of felled trees and stumps, geotechnical borings, grading for a 100,000-square-foot (SF) gravel building pad with associated parking/truck court areas, a temporary sediment pond and detention basin, construction of a new gravel driveway, and addition of gravel to the existing dirt road. Following the site improvements, the disturbed areas would be stabilized. These activities, herein referred to as the Proposed Action, are further detailed in Section 3.2 below.

The proposed grant to Union City would assist with the above-mentioned site improvements to allow prospects to better envision the development potential of the site. The proposed improvements would lead to an increased probability of achieving TVA's core mission of job creation and capital investment. The Project Area of 70 acres is a portion of the larger 436-acre NTNRIC and, as such, is surrounded by multiple developed industrial or commercial sites. The sites within 1 mile south and southwest include Williams Food Works & Distribution, Greenfield Products, Made in America Seating, and Titan Tire. The NTNRIC's existing developments are located along Greenfield Drive, which includes an existing road spur with a bridge over Pursley Creek that extends to the southern bounds of the Project Area. The NTNRIC also includes Veteran's Park with an open waterbody feature and a walking trail loop. The Jones-Walker Veterans of Foreign Wars (VFW) Post 4862 is also located south of the Project Area along Highway 21. Additional features along Highway 21 located directly adjacent to the Project Area include Carman Cemetery to the northeast, Beck's Reelfoot Seed & Supply, and Ken-Tenn Asphalt LLC to the southeast. Other features within 1 mile of the Project Area include railroad lines to the west, the Union City Energy Authority electric substation to the northwest, the Union City, Tennessee Water Tower to the north, a lake to the north, and the WUWT-TV television station to the southeast. Additional features within 1 mile of the Project Area and south of Highway 51 include a residential subdivision, Magnolia Place assisted living facility, Job World, Excel Boats, Ford Construction Asphalt Plant, Southern Concrete Products, Union City Forklift, Inc., G&H Tool & Die, and Kohler. Target markets for the Project Area include general manufacturing, automotive suppliers, and distribution. Pursuant to the National Environmental Policy Act (NEPA) and TVA's implementing regulations 18 Code of Federal Regulations (CFR) 1318, this Environmental Assessment (EA) evaluates the environmental impacts that would potentially result from TVA's Proposed Action. TVA's decision is whether to provide the requested funding to Union City.

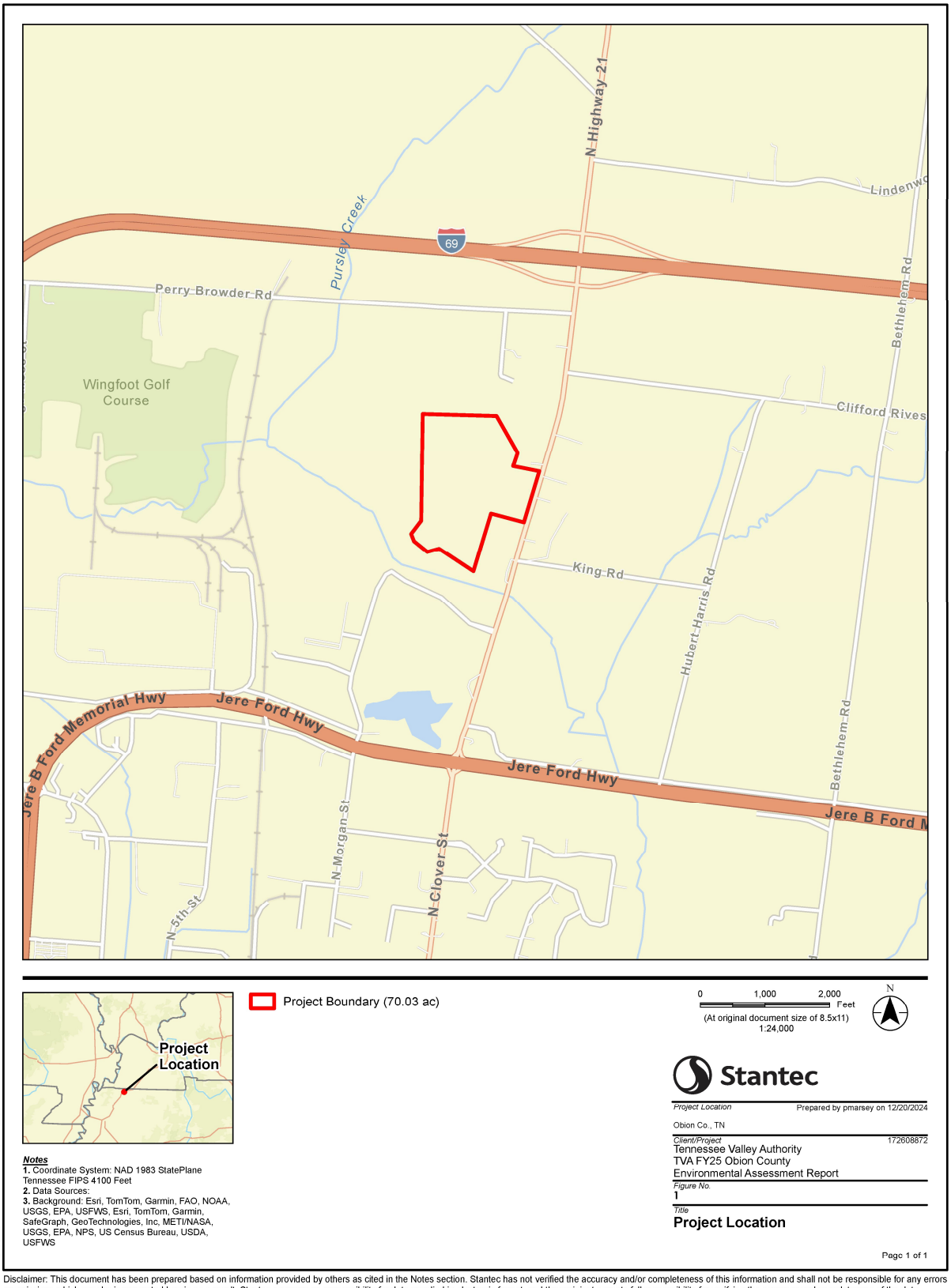

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Figure 1. Project Location Map

2.0 OTHER ENVIRONMENTAL REVIEWS AND DOCUMENTATION

In preparation for site development, other studies have been performed by Union City or the OCJEDC at the NTNRIC, including the 70-acre Project Area. The various studies were performed at different times.

- In April 2013, Construction Materials Laboratory, Inc. (CML) conducted a preliminary subsurface geotechnical investigation for a study area including most of the Project Area and considered potential for thirteen industrial lots ranging from 3-120+ acres with potential building footprints as large as 550,000 to 750,000 SF (CML 2013).
- In May 2013, the Austin Company provided a geotechnical review of the CML 2013 report and concluded that the site appears to be suitable for industrial development and may support loads of 1,800 to 2,500 pounds per square foot (psf) (The Austin Company 2013).
- In April 2020, CML prepared a preliminary subsurface investigation for a study area including the full Project Area extent and considered the potential for a 750,000 SF industrial-type building across the site, including truck docks and a rail spur (CML 2020). These geotechnical reports are considered a feasibility study and should not be used for final design. The geotechnical reports should provide sufficient preliminary geotechnical information to prospective companies for understanding soil limitations and construction considerations; however, further geotechnical exploration and analysis would be required based on the proposed facility location and design plans.
- A Phase I Environmental Site Assessment (Phase I ESA) was conducted by AccuLab Environmental Services, Inc. (AccuLab) in March 2013 on approximately 508 acres, which included the 70-acre Project Area (AccuLab 2013).
- AccuLab updated the Phase I ESA report in April 2020, which included a discussion of additional information and a reduction of the study extent to approximately 400 acres, which still included the Project Area (AccuLab 2020). The purpose of the Phase I ESA was to identify the presence of recognized environmental conditions (REC), including controlled and historical RECs, or other environmental liabilities within the Project Area.
- In May 2013, the Tennessee Department of Environment and Conservation (TDEC) Division of Remediation determined that No Further Action was required at the Phase I ESA report's approximately 508-acre subject property (TDEC 2013a).
- A 2012 preliminary correspondence with the U.S. Fish and Wildlife Service (USFWS) suggested consideration of the federally listed Indiana bat (*Myotis sodalis*) at the Project Area, although the exact boundaries of the area considered are unclear (USFWS 2012).
- Additionally, the 2012 preliminary response from the TDEC Division of Natural Areas reported no known records of rare species within 4 miles of the parcel but noted that forested habitat may support the federally listed Indiana bat (TDEC 2012a).
- In 2013, DEPA LLC prepared a bat habitat survey map including the Project Area that identified acreage of mature forest habitat and individual suitable trees (DEPA 2013).
- TVA staff biologists performed field surveys for terrestrial zoology (November 2024) and botany (December 2024) in the Project Area. These surveys included assessments for the presence of federally or state-listed species and their habitats at the 70-acre Project Area.

- In coordination with OCJEDC, the TDEC Division of Water Resources conducted field visits in November 2012 and January 2013 to evaluate potential water resources present across 540 acres, including the Project Area. TDEC completed a Hydrologic Determination Field Data Sheet for the tributary to Pursley Creek during the November 2012 field visit (TDEC 2013b).
- The TDEC hydrologic determinations for NTNRIC were coordinated in July 2013 with the U.S. Army Corps of Engineers (USACE) – Memphis District and concluded with a Preliminary Jurisdictional Determination (PJD) for identified waters (USACE 2013).
- Brophy-Heineke and Associates (2023) conducted a wetland and waters delineation of a portion of the Project Area in 2023.
- TDEC (2023) provided a hydrologic determination for the above-mentioned Brophy-Heineke and Associates (2023) delineation.
- The USACE (2025) provided an Approved Jurisdictional Determination (AJD) for the above-mentioned Brophy-Heineke and Associates (2023) delineation.
- Stantec performed a wetland and waters delineation of the 70-acre NTNRIC Project Area in January 2025 (Stantec 2025a). The purpose of the study was to determine whether wetlands or waters occurred on the site as regulated by the USACE and/or TDEC.
- OCJEDC coordination with TDEC Division of Archaeology in 2013 concluded that the proposed development should have no effect on significant archaeological resources (TDEC 2013c).
- Stantec also performed a Phase I cultural resources survey for the 70-acre NTNRIC Project Area in January 2025 (Stantec 2025b). The purpose of the study was to evaluate any archaeological resources present within the Project Area, as well as assess the effects of the proposed project on archaeological resources, including those resources eligible for or listed in the National Register of Historic Places (NHRP).
- On February 7, 2025, the Tennessee Historical Commission – State Historic Preservation Office (THC-SHPO) concurred that no historic properties eligible for listing in the NRHP will be affected by this undertaking (THC-SHPO 2025) (Attachment 2). The consulted Tribes provided no objections to the proposed undertaking.

3.0 ALTERNATIVES

Based on internal scoping, TVA has determined that there are two reasonable alternatives to assess under NEPA: the No Action Alternative and the Action Alternative.

3.1 The No Action Alternative

Under the No Action Alternative, TVA would not provide InvestPrep funds to Union City. TVA would not be furthering its mission of promoting economic development by assisting the local community to compete successfully for new jobs and capital investment through the Proposed Action. If Union City was able to secure alternate funding and proceed with its current plans, the overall environmental consequences would be similar to those expected from implementing the Action Alternative. In the event the project is postponed, any environmental effects would be delayed for the duration of the postponement. If the project is canceled, no direct environmental

effects would be anticipated, as environmental conditions on the site would remain essentially unchanged from the current conditions for the foreseeable future.

3.2 The Action Alternative

Under the Action Alternative, TVA would provide InvestPrep funds to Union City for site improvements to the Project Area. These improvements with TVA funds would be matched with non-TVA funds and used for clearing 3.31 acres of trees located in the northern part of the Project Area. Felled trees would be cut and burned on site. Stumps would be removed and burned on site. Geotechnical borings (14 total) would be completed prior to grading within the Project Area to create a 100,000-SF gravel building pad and associated parking/truck court areas. Approximately 53,300 cubic yards of cut and fill would be needed to excavate a temporary sediment pond and detention basin and balance the gravel building pad, but no off-site borrow would be required. Gravel (4 inches thick) would be added to the building pad upon completion. The Action Alternative also includes the addition of gravel to the existing dirt road to create a marketing road that would be 16 feet wide, and the construction of a new gravel driveway to connect the gravel marketing road and the gravel building pad. Following the site improvements, the disturbed areas would be stabilized with seed and mulch. Activities required for the Action Alternative would occur over approximately 12 months and would require a small workforce that would most likely be assigned from a local contractor. Work activities would not be anticipated at night or on weekends. For ease of discussion in this EA, the Proposed Action is collectively described as grading and/or construction.

Union City, or its contractors, would obtain all required permits and authorizations, and in compliance with those permits, take appropriate feasible measures, such as implementing best management practices (BMPs) and best construction practices, to minimize or reduce the potential environmental effects of the Proposed Action to insignificant levels. These practices would include the installation of sediment and erosion controls (silt fences, sediment traps, etc.), management of fugitive dust, and daytime work hours.

TVA's preferred alternative is the Action Alternative. The Action Alternative does not include the assessment of activities that may be directly or indirectly associated with adjacent lots already developed or under construction or the eventual build-out, occupation, and future use of the Project Area. The future use of the site has not been defined. Given this uncertainty, an analysis of the potential impacts for the development of the adjacent lots or the eventual build-out, occupation, and future use is beyond the scope of this EA.

4.0 AFFECTED ENVIRONMENT AND ANTICIPATED IMPACTS

4.1 Site Description

The 70-acre Project Area encompasses a portion of the NTNRIC in Obion County, Tennessee, with mainly agricultural land with some forested areas located south of I-69, west of Highway 21, and north of Jere B. Ford Memorial Highway (U.S. Highway 51), in Union City, Tennessee (Attachment 1, Figure 1-A).

The Project Area is situated within a broader area of mixed agriculture (e.g., hay fields), scattered forest, industrial/commercial, developed, and light residential area, and is zoned as Industrial. Site access is from Greenfield Drive, located south of the Project Area. The land use surrounding the Project Area includes pasture, scattered forest, and railroad to the west; industrial and commercial areas to the south and southwest; pasture, scattered forest, commercial and light residential areas to the east; and forest, a lake, residential, a water tower and an electric substation to the north and northwest. Permanent utilities located adjacent to the Project Area include a 12-inch water line, an eight-inch sewer line, overhead electric lines, including TVA 161-kilovolt (kV) transmission lines, distribution lines, and a 4-inch natural gas line.

The Project Area ranges from approximately 342 to 384 feet above mean sea level (msl) (Attachment 1, Figure 1-B). Historically, the Project Area has been farmed with a variety of crops over the years.

4.2 Impacts Evaluated

As stated previously, a Phase I ESA was conducted in the Project Area. The Phase I ESA found evidence of an old livestock feeding operation in the northeast area of the Project (AccuLab 2020). A small cinder block building was located near the abandoned livestock feeding operation. The small feedlot was not in active use but included four large pens having concrete floors and a covered area at the north end, and four grain silo bases made of concrete. Although AccuLab found no areas of solid waste disposal on the Project Area, either historic or current, they indicated that during the time the livestock feedlot was in operation, livestock waste would likely have been flushed to the adjacent unnamed tributary of Pursley Creek. AccuLab was unable to access the cinder block building during site reconnaissance, but indicated that PCBs (polychlorinated biphenyls) or asbestos-containing material were unlikely to be present. No other RECs, controlled RECs, historical RECs, or significant data gaps were identified (AccuLab 2020). Based on the Phase I ESA, there is no evidence that the historical use of pesticides/herbicides at the Project Area was conducted outside of standard practices. Therefore, the possible long-term use of agricultural-grade pesticides or herbicides that may persist in the soils at the subject property does not represent a REC. No demolition or construction waste activities would be associated with the Action Alternative.

Based on aerial photography, topographic maps, and the 2008 Obion County, Tennessee, flood insurance rate map (FIRM) panels (see Attachment 1, Figure 1-C), a small portion of the Project Area would be located within the Pursley Creek 100-year floodplain.

As noted in Section 2.0, TDEC and the USACE provided background information regarding waters and wetlands for areas, including the Project Area, in 2013. Brophy-Heineke and Associates (2023) surveyed an area that included the northern portion of the Project Area, followed by jurisdictional determinations from TDEC (2023) and the USACE (2025). Stantec developed a preliminary map of water and wetland features based on the United States Fish and Wildlife Service (USFWS) Wetland Inventory and Water Inventory as provided in Attachment 1, Figure 1-D. Stantec then conducted a survey for aquatic resources (i.e., waterbodies) and wetlands in the Project Area on January 2, 2025, and identified one wetland, two intermittent streams, and five wet weather conveyances (Stantec 2025b; Attachment 1, Figure 1-E). Therefore, the Proposed Action under the Action Alternative could result in impacts to surface waters and wetlands. Because the Proposed Action would not affect a perennial surface waterbody, there would be no effects on aquatic zoological resources.

The Proposed Action would change the Project Area from a mostly open hay field with some trees to a developed lot designed to attract industrial development. The NTNRIC is currently zoned as Industrial and is located within an area near industrial, commercial, and residential development, particularly to the north and south. Given the zoning and these conditions, the Proposed Action would not cause a change in land use.

The Proposed Action would result in the conversion of 31.07 acres of prime farmland (Attachment 1; Figure 1-F). However, the Project Area is located within designated Industrial zoning, and as such, it would be considered exempt from the Farmland Protection Policy Act. Given the existing zoning type, the Proposed Action under the Action Alternative would not have negative impacts on prime farmland.

As noted above, Stantec performed a cultural resources assessment of the NTNRIC Project Area in January 2025 (Stantec 2025a). The area was examined by pedestrian survey, and 290 shovel tests were performed; 287 were negative and three were positive. Stantec concluded that the proposed economic development at the site would not affect any cultural resources. On February 7, 2025, the Tennessee Historical Commission – State Historic Preservation Office (THC-SHPO) concurred that no historic properties eligible for listing in the NRHP would be affected by this undertaking (Attachment 2). Given that no known historic structures were identified within the project footprint and that the Proposed Action does not involve the construction of aboveground resources, no historic architectural resources would be impacted by the project, directly or visually. Therefore, a Phase I historic structures survey was not required, and impacts to historic structures and sites would not be anticipated.

Managed areas include lands held in public ownership that are managed by an entity (e.g., TVA, United States Department of Agriculture, United States Forest Service, State of Tennessee) to protect and maintain certain ecological and/or recreational features. Natural areas include ecologically significant sites, federal, state, or local park lands, national or state forests, wilderness areas, scenic areas, wildlife management areas, recreational areas, greenways, trails, Nationwide Rivers Inventory streams, and wild and scenic rivers. Ecologically significant sites are either tracts of privately owned land that are recognized by resource biologists as having significant environmental resources or identified tracts on TVA lands that are ecologically significant but not specifically managed by TVA's Natural Areas Program. A review of TVA's Natural Heritage database identified no managed/natural areas within 3 miles of the proposed Project Area; therefore, managed/natural areas impacts would not be anticipated.

Recreation areas include lands held in private or public ownership that are managed by an individual or entity (e.g., TVA, United States Department of Agriculture, United States Forest Service, State of Tennessee) to protect and maintain certain ecological and/or recreational features. Recreation areas include federal, state, or local park lands, national or state forests, scenic areas, wildlife management areas, greenways, trails, Nationwide Rivers Inventory streams, and wild and scenic rivers. Recreation activities include but are not limited to nature walking/hiking, camping, bird watching, fishing, hunting, cycling, picnicking, swimming, playgrounds, outdoor sporting events, or any other leisurely pastime conducted on public or privately owned or managed land.

TVA Natural Resources and Recreation Management staff conducted a desktop-level review of recreation areas within a 3-mile radius of the Project Area, utilizing mapping databases such as ArcGIS, Google Earth, and TVA's EGIS. Table 4-1 depicts eight recreation areas identified to be

within a 3-mile radius of the Project Area. Only one of those areas was identified to be less than one mile away from the Project Area. Some dispersed recreational activities, such as hunting, nature observation, hiking, and walking for pleasure, may occur on some of the lands near the Project Area and related access routes.

Table 4-1. Recreational Areas Located within Three Miles of the Project Area in Obion County, Tennessee

Recreation Area	Distance/Direction from Project Area
Veteran's Park	0.7 mi South
Adam's Park	1.8 mi South
Obion County Fairgrounds	2.6 mi Southeast
Thompson Field	2.7 mi Southeast
Grove Creek Run	2.8 mi Southeast
Graham Park	2.9 mi Southeast
Union City Youth Soccer Field	3.0 mi Southeast
Obion County Memorial Gardens	3.0 mi East

Given the distances between the outdoor recreation areas and the Project Area, along with the lack of overlap, and considering that the Project Area is zoned as Industrial and situated close to an industrial/commercial area, the implementation of the Action Alternative would not lead to significant impacts on recreational opportunities near the Project Area.

TVA has determined that the Proposed Action, subsequent to TVA's selection of the Action Alternative, would have no impact on solid and hazardous wastes, aquatic zoology, land use, prime farmland, managed and natural areas, and recreation as discussed above. Therefore, potential impacts to these resources are not described in further detail in this EA.

Resources that could potentially be impacted (negatively or positively) by implementing the Action Alternative include air quality and climate change, groundwater, soils, floodplains, surface water, wetlands, terrestrial zoology, and botany. Implementation of the Action Alternative could create potential impacts to the human environment, including archaeology and historic resources, visual effects, noise, socioeconomics, and transportation issues. Potential impacts to resources and impacts to the human environment resulting from the implementation of the Action Alternative are discussed in detail below.

4.2.1 Air Quality and Climate Change

Federal and state regulations protect ambient air quality. With authority granted by the Clean Air Act (CAA) 42 United States Code (USC) 7401 et seq., as amended in 1977 and 1990, the United States Environmental Protection Agency (USEPA) established National Ambient Air Quality Standards (NAAQS) to protect human health and public welfare. The USEPA codified NAAQS in 40 CFR 50 for the following "criteria pollutants": nitrogen dioxide (NO_2), carbon monoxide (CO), ozone, sulfur dioxide (SO_2), lead, particulate matter (PM) with an aerodynamic diameter equal to or less than 10 microns (PM_{10}), and PM with an aerodynamic diameter equal to or less than 2.5 microns ($PM_{2.5}$). The NAAQS reflects the relationship between pollutant concentrations and health and welfare effects. Primary standards protect human health, including the health of

sensitive populations such as asthmatics, children, and the elderly. Secondary standards are designed to protect public welfare, including visibility, animals, crops, vegetation, and buildings. These standards reflect the latest scientific knowledge and have an adequate margin of safety intended to address uncertainties and provide a reasonable degree of protection. The air quality in Obion County, Tennessee, is designated as being in attainment with respect to the criteria pollutants (USEPA 2025).

Other pollutants, such as hazardous air pollutants (HAPs) and greenhouse gases (GHGs), are also a consideration in air quality impact analyses. Section 112(b) of the CAA lists HAPs, also known as toxic air pollutants or air toxins, because they present a threat of negative human health effects or negative environmental effects. Although there are no applicable ambient air quality standards for HAPs, their emissions are limited through permit thresholds and technology standards as required by the CAA.

GHGs are gases that trap heat in the atmosphere and are non-toxic and non-hazardous at normal ambient concentrations. At this time, there are no applicable ambient air quality standards or emission limits for GHGs under the CAA. GHGs occur in the atmosphere both naturally and resulting from human activities, such as the burning of fossil fuels. GHG emissions due to human activity are the main cause of increased atmospheric concentration of GHGs since the industrial age and are the primary contributor to climate change. The principal GHGs are carbon dioxide (CO_2), methane, and nitrous oxide.

Air quality impacts associated with activities under the Action Alternative include emissions from fossil fuel-fired equipment and fugitive dust from ground disturbances. Fossil fuel-fired equipment is a source of combustion emissions, including nitrogen oxides (NO_X), CO, volatile organic compounds (VOCs), SO_2, PM_{10}, $PM_{2.5}$, GHGs, and small amounts of HAPs. Gasoline and diesel engines used as a result of the Action Alternative would be expected to be in compliance with the USEPA mobile source regulations in 40 CFR Part 85 for on-road engines and 40 CFR Part 89 for non-road engines. These regulations are designed to minimize emissions and require a maximum sulfur content in diesel fuel of 15 parts per million (ppm). Trees would also be cleared as part of the Proposed Action, and the burning of trees and stumps is also anticipated on site. Burning of woody debris produces smoke containing CO, CO_2, PM, NO_2, and VOCs (ORCAA 2024). Smoke inhalation can cause irritation, breathing issues, and respiratory diseases.

Fugitive dust is a source of respirable airborne PM, including PM_{10} and $PM_{2.5}$, which could result from ground disturbances such as land clearing, grading, excavation, and travel on unpaved roads. The amount of dust generated is a function of the activity, silt and moisture content of the soil, wind speed, frequency of precipitation, vehicle traffic, vehicle types, and roadway characteristics. Union City, or its contractors, would be expected to comply with TDEC Air Pollution Control Rule 1200-3-8, which requires reasonable precautions to prevent PM from becoming airborne. Such reasonable precautions include grading of roads, clearing of land, and the use of water or chemicals for control of dust in construction operations on dirt roads and stockpiles, as needed.

With the use of BMPs and other required measures described above to reduce emissions associated with the Action Alternative, air quality impacts would be minimal, temporary, and localized; and would not be anticipated to result in any violation of applicable ambient air quality standards, impact regional air quality, or affect nearby persons.

Concerning climate change, trees, like other green plants, are carbon sinks that use photosynthesis to convert CO_2 into sugar, cellulose, and other carbon-containing carbohydrates that they use for food and growth. Carbon sequestration is the process by which carbon sinks remove CO_2 from the atmosphere. Although forests do release some CO_2 from natural processes such as decay and respiration, a healthy forest typically stores carbon at a greater rate than it releases carbon.

Implementation of the Action Alternative would result in 3.31 acres of tree clearing. Although the Project Area primarily is pasture land, it contributes as a carbon sink. However, on a national or global scale, the Proposed Action of clearing 3.31 acres of trees would have little contribution to climate change.

Under the No Action Alternative, if Union City was able to secure the funding for the proposed TVA-funded actions described in this EA from outside sources, similar emissions associated with equipment and ground disturbances would occur, resulting in similar air quality and climate change impacts as those described above for the Action Alternative. In the event the Project was postponed, any effects would be delayed for the duration of the postponement. If Union City was not able to secure the funding for the proposed actions described in this EA, emissions associated with equipment and ground disturbances would not occur, and there would be no impacts to air quality and climate change from the No Action Alternative.

4.2.2 Groundwater

The Project Area is located within the East Gulf Coastal Plain Section of the Coastal Plain Province (USGS 2023), which extends from eastern Louisiana and includes parts of Mississippi, Alabama, western Tennessee, western Georgia, and the Florida panhandle. The East Gulf Coastal Plain Section in the vicinity of the Project Area is characterized as unconsolidated to semi-consolidated sediments, silts, and clay (USGS 1995).

In western Tennessee, the principal aquifer system in the East Gulf Coastal Plain Section is the Mississippi embayment aquifer system, which consists of sediments that include sand, silt, lignite, and clay that are primarily Late Cretaceous through late Eocene (USGS 1995). The Mississippi embayment aquifer system is comprised of several named aquifers. The local aquifer systems underlying the Project Area include (in descending order): the upper Claiborne aquifer, middle Claiborne aquifer, lower Claiborne-upper Wilcox aquifer, middle Wilcox aquifer, lower Wilcox aquifer, and the McNairy-Nacatoch aquifer (USGS 1995). The upper Claiborne aquifer consists of interbedded silt, fine sand, and sporadic lignite. The middle Claiborne aquifer consists of thick sand sequences with few or no clay layers. The lower Claiborne-upper Wilcox aquifer consists of thick beds of coarse to fine sand interbedded with thin layers of silt, clay, and lignite. The middle Wilcox aquifer is made up of thin, interbedded silt, fine sand, and clay layers. The lower Wilcox aquifer consists primarily of fluvial deposited sands. The bottom-most aquifer that comprises the Mississippi embayment aquifer system is the McNairy-Nacatoch aquifer, which consists of a single thick sand bed, or two or more sand beds separated by thinner marl or clay layers (USGS 1995).

The water quality in the Mississippi embayment aquifer system is considered soft to moderately hard with a calcium bicarbonate type near outcrop areas of the aquifer and transitions to a sodium bicarbonate type as it flows deeper into the aquifers. The dissolved solids concentrations for the Mississippi embayment aquifer system are typically less than 250 milligrams per liter (mg/L) in the vicinity of the Project Area. The principal aquifers used for water supply in the Mississippi embayment aquifer system are the middle Claiborne, lower Wilcox, and the McNairy-Nacatoch aquifers. The middle Claiborne and lower Wilcox receive recharge via precipitation in aquifer

outcrops and downward leakage from the above overlying aquifers. The McNairy-Nacatoch receives recharge primarily from precipitation infiltration in aquifer outcrop areas, and a small portion of recharge is upward from the underlying aquifers (USGS 1995).

Implementation of the Action Alternative would result in ground disturbance during construction activities. Tree clearing and subsequent stump burning would result in minor ground disturbance at shallow depths. The collection of geotechnical borings (14 total), site grading, compaction for development of a 100,000 SF gravel building pad, associated parking/truck court areas, construction of a new gravel driveway to connect the existing dirt marketing road (that would be graveled), and a temporary sediment pond and detention basin would result in greater ground disturbance at moderate depths. Ground disturbances are not anticipated to be at depths that would intersect public groundwater supplies (approximately 200 to 1,500 feet beneath the land surface) (USGS 1995) or result in significant impacts to groundwater resources. The geotechnical borings conducted on site in the 2020 report “Northwest Tennessee Regional Industrial Center – Rail Site Geotechnical Report” conducted by CML (2020) indicate the overburden at the Project Area consists mostly of clayey silts, silty clays, and sandy clays that extend up to 100 feet deep as noted in Boring No. 15 which represents the deepest boring collected at the Project Area. These layers of clayey materials separate the potential sand beds that may occur at the bottom of the upper Claiborne aquifer, although these sand extents are laterally limited in this formation, allowing the aquifer to provide only small supplies of groundwater (USGS 1995). Shallow aquifers could sustain minor impacts from changes in overland water flow and recharge caused by clearing, grading, and construction of a temporary sediment pond and detention basin within the Project Area. Water infiltration, which is normally enhanced by vegetation, would be reduced until vegetation is re-established. In addition, near-surface soil compaction caused by heavy construction vehicles could reduce the ability of the soil to absorb water. These minor impacts would be temporary and would not significantly affect groundwater resources. A Phase I ESA was completed in August 2013 with an updated report provided in 2020 by AccuLab Environmental Services, Inc., which indicates that the Project Area consists of agricultural land (used for row crop production) and forested areas. The 2020 update states that there was no discovery of negative environmental conditions in the Project Area. Historical land use of the Project Area was primarily agriculture, with wooded areas and the remains of a livestock feeding operation in the northeast corner of the property. As such, it is not anticipated that construction activities would encounter hazardous substances during the Proposed Action.

Under the No Action Alternative, if Union City was able to secure the funding from other sources for the proposed TVA-funded actions described in this EA, similar ground disturbance would occur, resulting in similar impacts to groundwater resources as those described above for the Action Alternative. In the event the Project was postponed, any effects would be delayed for the duration of the postponement. If Union City was not able to secure the funding for the actions described in this EA, ground disturbance associated with tree clearing, site grading and compaction for the development of the gravel building pad, construction of a new gravel driveway to connect to the marketing road, and a temporary sediment pond and detention basin would not occur and there would be no impacts to groundwater resources.

4.2.3 Soils

The Project Area is located within the East Gulf Coastal Plain Section of the Coastal Plain Province (USGS 2023). Soil types and descriptions were obtained from the Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA-NRCS 2025) (see Attachment 1, Figure 1-F). Soil types found within the Project Area include: Adler silt loam (0 to 2 percent slopes, occasionally flooded), Grenada silt loam (5 to 8 percent slopes, eroded), Loring silt loam (2 to 5 percent slopes), and Memphis silt loam (2 to 5 percent slopes, northern phase).

A geotechnical investigation was conducted on the Project Area in 2020 (CML, Inc. 2020). The 2020 investigation involved four soil borings within the Project Area (in addition to 10 borings conducted in 2004 and 2013). The borings ranged from 20 to 60 feet below the land surface, with a single boring conducted to a depth of 100 feet below the land surface. The soil borings encountered clays, clayey sands, sandy clays, clayey silts, and silty clays across the Project Area. The report recommends that, regarding future development, initially, the Project Area should be cleared of vegetation, topsoil, and surface debris. Once the topsoil has been removed, the report recommends that exposed material be allowed to dry for four to five days of sunny weather. The report also states that the exposed subgrade should be proof-rolled under the direction of the project geotechnical engineer to ascertain any yielding or weak areas. Additionally, the geotechnical report makes several recommendations related to building foundations (shallow, intermediate, and deep), the use of on-site material for fill, groundwater monitoring (due to perched water table), and pavement options (soil cement, asphalt, and concrete) for the Project Area that would not be applicable to the Proposed Action (CML, Inc. 2020).

Under the Action Alternative, soils in the Project Area would be disturbed by tree clearing, tree, and stump burning, widespread grading for a 100,000 SF gravel building pad, associated parking/truck court areas, construction of a new gravel driveway to connect the existing dirt marketing road (that would be graveled), and a temporary sediment pond and detention basin. The Proposed Action includes the stabilization of disturbed soils following grading as described in Section 3.2. Further, BMPs would be required as part of the National Pollutant and Discharge Elimination System (NPDES) General Permit for Discharges Associated with Construction Activities (TNR100000). This permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP would identify specific BMPs to address construction-related activities that would be adopted to minimize erosion-related impacts. BMPs, as described in the Tennessee Erosion and Sediment Control Handbook (TDEC 2012b), would be used during site development to avoid contamination of surface water in the Project Area. These factors would effectively avoid or minimize impacts on soils and from soil erosion.

Under the No Action Alternative, if Union City was able to secure the funding for the proposed TVA-funded actions described in this EA, similar ground disturbance would occur, resulting in similar impacts to soils as those described above for the Action Alternative. In the event the Project was postponed, any effects would be delayed for the duration of the postponement. If Union City was not able to secure the funding for the actions described in this EA, ground disturbance associated with tree clearing, site grading and compaction for the development of the gravel building pad, construction of a new gravel driveway to connect to the marketing road, and a temporary sediment pond and detention basin would not occur and there would be no impacts to soils or from soil erosion.

4.2.4 Floodplains

Based on aerial photography, topographic maps, and the 2008 Obion County, Tennessee, FIRM panel 47131C0208C effective November 5, 2008, and revised January 25, 2024 (see Attachment 1, Figure 1-C), a small portion of the southern Project Area would be located within the Pursley Creek 100-year floodplain. Based on Pursley Creek Flood Profile 09P(a), effective January 25, 2024, the 100- and 500-year flood elevations of Pursley Creek at the Project Area would be 343.5 and 344.5 feet, respectively. The exact location of the gravel building pad and detention pond is not known; however, ground disturbance would be limited to areas at or above the existing ground elevation of 344.5 feet within the Project Area, which would be at least one foot above the 100-year flood elevation of 343.5.

Adoption of the Action Alternative would not directly impact floodplains and their natural and beneficial values due to the Proposed Action. Indirect impacts would be minimized by using standard BMPs during construction. Consistent with Executive Order (EO) 11988, tree clearing would have a beneficial impact on floodplains. To minimize negative impacts, tree-clearing debris would be disposed of in areas with existing ground elevation above 343.5 feet, which would be outside the 100-year floodplain; therefore, the tree clearing would be consistent with EO 11988.

Under the No Action Alternative, if Union City was able to secure the funding for the proposed TVA-funded actions described in this EA, similar ground disturbance would occur, resulting in similar impacts to floodplains as those described above for the Action Alternative. In the event the Project was postponed, any effects would be delayed for the duration of the postponement. If Union City was not able to secure the funding for the actions described in this EA, ground disturbance associated with tree clearing, site grading and compaction for the development of the gravel building pad, construction of new gravel driveway to connect to the marketing road, and a temporary sediment pond and detention basin would not occur and there would be no impacts to floodplains.

4.2.5 Surface Water

The Project Area is located within the 08010202 watershed, an eight-digit hydrologic unit code (HUC). Precipitation for Obion County, Tennessee, averages 51.98 inches annually in Union City (USClimateData.com 2025).

Brophy-Heineke and Associates (2023) identified one wet weather conveyance/ephemeral feature (WWC-5) in the northern part of the Project Area, as subsequently confirmed by jurisdictional determinations from TDEC (2023) and the USACE (2025). Stantec's January 2025 surface water field surveys covered the portion of the Project Area south of the Brophy-Heineke and Associates study and identified two intermittent streams (S001 and S003, Table 4-2) (Stantec 2025a). Five additional wet weather conveyance/ephemeral features were also identified by Stantec. No ponds or lakes were identified within the Project Area.

Table 4-2. Intermittent Streams Identified in the 2025 Survey of the Project Area

Feature Identification	Flow Regime	Description	Project Effects
S001	Intermittent stream	Located in the northern portion of the Project Area. Water was actively flowing from east to west at an average depth of 6 inches, and riffles and pools were easily observed during the survey. The channel substrate consisted of silt and clay in the upstream portion, with dispersed pebbles and cobbles in the lower portion.	avoided
S003	Intermittent stream	Located in the south-central portion of the study area. Water was actively flowing from north to south at an average depth of 2 inches during the survey. S003 directly drains into Pursley Creek, which is a tributary to the North Fork Obion River. The channel substrate consisted of silt and clay.	avoided

Under the Action Alternative, intermittent streams S001 and S003 would be avoided, and a 30-foot buffer would be maintained in Union City's design plans. TDEC and the USACE provided jurisdictional determinations for the Brophy-Heineke survey that identified a wet weather conveyance/ephemeral feature (WWC-5) west of Wetland 001 as described below. The two intermittent streams identified by Stantec in the portion of the Project Area not covered by the Brophy-Heineke survey would be avoided, and there would be no direct impacts to surface waters. TDEC and USACE jurisdictional determinations of the Stantec-identified wet weather conveyance/ephemeral features has not yet occurred. Given these factors, impacts on streams would not be significant. Implementation of the Proposed Action would be consistent with the Clean Water Act Sections 401 and 404.

As discussed in Section 4.2.3, BMPs would be required as part of the NPDES General Permit for Discharges Associated with Construction Activities (TNR100000), including a SWPPP. The BMPs used during site development would act to avoid sediment runoff into surface water adjacent to the Project Area.

Under the No Action Alternative, if Union City was able to secure the funding for the proposed TVA-funded actions described in this EA from outside sources, similar site activities would occur, resulting in similar impacts on surface waters as those described above for the Action Alternative. In the event the Project was postponed, any effects would be delayed for the duration of the postponement. If Union City was not able to secure the funding for the actions described in this EA, disturbance associated with the Proposed Action would not occur, and there would be no impacts on surface waters.

4.2.6 Wetlands

As noted above for surface waters, Brophy-Heineke and Associates (2023) performed a survey for wetlands in the northern portion of the Project Area, and none were documented. Stantec performed a field survey of the entire Project Area on January 2, 2025, to document wetlands (Stantec 2025a). A map of features based on the USFWS National Wetland Inventory and Waterbody Inventory is provided in Attachment, Figure 1-D. One wetland was identified during the Stantec field survey (Attachment 1, Figure 1-E).

W001 (identified by Stantec), 0.47 acre in size, is a palustrine shrub scrub wetland located in the northern portion of the Project Area. The shallow wetland appears to have been formed after a berm was naturally eroded through. Water in the wetland is received by sheet flow from adjacent fields, groundwater, and runoff from the surrounding hillslope. Surface water feature WWC-5, as identified in the Brophy-Heineke and Associates (2023) survey described above, serves as W001's connection into the greater watershed, connecting further downstream to S001 (identified by Stantec). A Tennessee Rapid Assessment (TRAM) Score of 50 was given to this wetland, which determines this wetland of "moderate resource value" (TDEC 2017).

Under the Action Alternative, wetland W001 would be avoided, and a 30-foot buffer would be maintained in Union City's design plan (Attachment 1, Figure 1-E). The delineated wetland would be avoided, therefore, there would be no direct impacts to wetlands, and coordination with the USACE and TDEC would not be required. Given these factors, there would be no impacts on wetlands, and implementation of the Proposed Action would be consistent with EO 11990 and the Clean Water Act Sections 401 and 404.

Under the No Action Alternative, if Union City was able to secure the funding for the proposed TVA-funded actions described in this EA from outside sources, similar site activities would occur, resulting in similar impacts on wetlands as those described above for the Action Alternative. In the event the Project was postponed, any effects would be delayed for the duration of the postponement. If Union City was not able to secure the funding for the actions described in this EA, disturbance associated with the Proposed Action would not occur, and there would be no impacts on wetlands.

4.2.7 Terrestrial Zoology

4.2.7.1 Wildlife

The 70-acre Project Area consists of approximately 52.65 acres of agricultural land, 12.25 acres of deciduous forest, 1.4 acres of early-successional habitat, a 0.5-acre old cement livestock feeding operation, and 3.2 acres of dirt roads. The Project Area is directly surrounded by more agricultural land and patches of deciduous forest, with some residential lots on the northeast corner and an industrial building on the southeast corner. The landscape in the surrounding area is predominantly industrial and agricultural land with some residential lots and fragments of deciduous forests.

The Project Area has been cultivated with various crops over the years. Although highly disturbed, the agricultural field offers habitat to a variety of common avian species such as the common grackle, red-tailed hawk, and red-winged blackbird, among others (National Geographic 2002). Mammalian species likely present in this habitat include eastern cottontail, long-tailed weasel, and striped skunk (Whitaker 1996). White-tailed deer tracks were observed in the agricultural field during a field survey by a TVA terrestrial zoologist on September 26, 2024. Reptilian species with the potential to occur in agricultural fields include eastern garter snake, gray rat snake, prairie kingsnake, and southern black racer (Powell et al. 2016). A variety of insects can be found in agricultural land, including aphids, armyworms, beetles, corn borers, grasshoppers, and stink bugs (Akin et al. 2012, Jankielsohn 2018).

Based on Google Earth and Historic Aerials imagery (Historic Aerials 2024), the majority (approximately 7.3 acres) of deciduous forest within the Project Area has remained undisturbed since at least the 1950s. The easternmost side of the forested area was highly disturbed in the

past, was left to regenerate beginning in 2012, and is currently forested (approximately 4.8 acres). The mature deciduous forest and the secondary growth forest provide habitat for an array of terrestrial animal species. Common birds typical of this habitat include American crow, Carolina wren, and downy woodpecker (National Geographic 2002). Black-and-white warbler, blue jay, Carolina chickadee, northern cardinal, red-bellied woodpecker, and tufted titmouse were observed in the forested area during the September 2024 field survey. Red fox and Virginia opossum are mammalian species likely to occur in this forested habitat (Whitaker 1996). This area also provides foraging and roosting habitat for several species of bat; common bat species likely found within this habitat are the big brown bat and the eastern red bat (Harvey et al. 2011). Common raccoon tracks and eastern gray squirrels were observed during the September 2024 field survey.

Early-successional habitat in the southwestern portion of the forested area and along the forest edges offers habitat to a multitude of avian species such as the common yellowthroat, eastern towhee, and field sparrow (National Geographic 2002). Mammalian species likely present in this habitat include eastern mole, southeastern shrew, and white-footed mouse (Whitaker 1996). A variety of insects were observed in this habitat during the September 2024 field survey, including cloudless sulfur, eastern-tailed blue, red paper wasp, silver-spotted skipper, thread waisted wasp, tiger swallow tail, variegated fritillary, and viceroy.

The existing dirt road and mowed grass around it are heavily disturbed and do not offer suitable habitat for rare wildlife species, but these can be used by common species. American robin, black vulture, and northern mockingbird are birds commonly found along roads and in industrial complexes (National Geographic 2002). Roadside ditches provide potential habitat for amphibians, including Cope’s gray treefrog and Fowler’s toad (Powell et al. 2016).

A review of the TVA Regional Natural Heritage database on September 19, 2024, resulted in no records of caves within three miles of the Project Area. No new caves were found during the September 2024 field survey. No other unique terrestrial habitat is known within three miles of the Project Area.

No records of heronries or aggregations of other migratory birds have been documented within three miles of the Project Area. A review of the U.S. Fish and Wildlife Service’s (USFWS 2024a) Information for Planning and Consultation (IPaC) tool in September 2024 identified four migratory bird species of conservation concern (MBCC) that can occur within the Project Area: American kestrel, chimney swift, grasshopper sparrow, and rusty blackbird.

American kestrel can be found in a variety of open habitats, including grasslands, meadows, farmland, and urban areas. They nest in cavities, such as old woodpecker holes, natural tree hollows, or nest boxes (Yeager and Brittingham 2016). The agricultural field provides a suitable foraging habitat for this species; suitable nesting habitat is available within the forested area of the Project Area.

Chimney swifts are associated with human settlement and primarily use chimneys as nesting habitat; when chimneys are unavailable, swifts may utilize other human-made structures, such as barns, silos, and vents made out of porous materials such as brick, stone, or mortar (USFWS 2025). They forage over a variety of habitats, including open terrain, forests, and residential areas (Steeves et al. 2020). Suitable foraging habitat for chimney swift is available within the Project Area. The silos within the Project Area are made of steel and do not provide nesting habitat for chimney swift.

Grasshopper sparrows prefer grasslands, prairies, hayfields, and open pastures with little shrub cover and with some bare ground. They typically build their domed nests at the base of grass (Vickery 2020). Suitable foraging and nesting habitat for this species exists within the early-successional habitat in the Project Area.

Rusty blackbird breeds in Alaska, Canada, and the northeastern U.S. In their wintering range, they may use flooded woods, edges of ponds and streams, and adjacent fields (Avery 2020). No perennial streams or pond boundaries are present within the Project Area. The Project Area does not contain optimal wintering habitat for the rusty blackbird.

Under the Action Alternative, TVA would provide InvestPrep funds to assist with the development of the NTNRIC including the following Proposed Action: clearing approximately 3.31 acres of deciduous forest and 1.39 acres of early-successional habitat, geotechnical borings, grading and stabilization for the construction of a 100,000 SF gravel building pad, grading and stabilization of a temporary sediment pond and detention basin, construction of a new gravel driveway, and addition of gravel to the existing dirt road.

The Proposed Action would result in the displacement of wildlife (primarily common, habituated species) currently using the area. Direct effects on some individuals could occur if those individuals are immobile during the time of habitat removal (e.g., during breeding, nesting, or hibernation seasons). Habitat removal likely would disperse mobile wildlife into surrounding areas in attempts to find new food resources, shelter, and to reestablish territories. Due to the extent of previous disturbance in the agricultural field and the amount of similarly suitable habitat in areas immediately adjacent to the Project Area, minor, but not significant impacts to populations of common wildlife species could occur as a result of the Proposed Action.

Suitable nesting habitat for chimney swift and rusty blackbird is not available within the Project Area. Therefore, if present during the course of the Proposed Action, these species would be expected to be mobile and to flush if disturbed. Similarly, suitable foraging habitat is available outside of the Project Area in the surrounding landscape, such that disturbed individuals could find alternative habitat nearby. The Proposed Action would not significantly impact populations or aggregations of these two migratory bird species.

Suitable nesting habitat for American kestrel is available in the forested portions of the Project Area. Early-successional habitat provides suitable nesting habitat for grasshopper sparrow. The Proposed Action may destroy nests, eggs, or juveniles of these two species if present. Considering the relatively small amount of habitat to be impacted, minor but not significant impacts to populations of these migratory birds of conservation concern could occur as a result of the Proposed Action.

Under the No Action Alternative, TVA would not provide InvestPrep funds to assist with the development of the NTNRIC. If Union City was able to obtain alternate funding and proceed with its current plans, the overall environmental consequences would be similar to those anticipated from implementing the Action Alternative. In the event the Project is postponed, any effects would be delayed for the duration of the postponement. If Union City is unable to secure other funding or the Project is canceled, the Proposed Action would not occur; habitats would remain in their current state, and terrestrial animals and their habitats would not be affected.

4.2.7.2 Threatened and Endangered Species (Wildlife)

The Endangered Species Act (ESA) (16 USC §§ 1531-1543) was passed to conserve the ecosystems upon which endangered and threatened species depend, and to conserve and recover those species. An endangered species is defined by the ESA as any species in danger of extinction throughout all or a significant portion of its range. A threatened species is likely to become endangered within the foreseeable future throughout all or a significant part of its range. Critical habitats, essential to the conservation of listed species, can also be designated under the ESA. The ESA establishes programs to conserve and recover endangered and threatened species and makes their conservation a priority for federal agencies. Section 7 of the ESA requires federal agencies to consult with the USFWS when proposed actions of the federal agency may affect endangered or threatened species or designated critical habitats.

The State of Tennessee provides protection for species considered threatened, endangered, or deemed in need of management within the state, other than those federally listed under the ESA. The listings are managed by TDEC; additionally, the Tennessee Natural Heritage Program and TVA both maintain databases of species that are considered threatened, endangered, of special concern, or tracked in Tennessee.

A review of the TVA Regional Natural Heritage Database on September 19, 2024, resulted in no records of federally and state-listed species within three miles of the Project Area. One federally protected species (bald eagle) and one species proposed for federal listing (tricolored bat) have been recorded in Obion County, Tennessee. A review of the USFWS IPaC tool identified two additional species proposed for federal listing (alligator snapping turtle and monarch butterfly) and one species listed as an experimental population (whooping crane) with potential to occur within the Project Area. A list of the terrestrial threatened and endangered species reported from Obion County and other species of conservation concern documented within a 3-mile radius of the Project Area can be found in Table 4-3. Species-specific information and habitat suitability within the Project Area are discussed below.

Table 4-3. Federally Listed Terrestrial Animal Species Reported from Obion County, Tennessee, and Other Species of Conservation Concern Documented Within Three Miles of the Project Area[1]

Common Name	Scientific Name	Status Federal (Rank)	Status State (Rank)	Suitable Habitat Present
Birds				
Bald eagle[2]	*Haliaeetus leucocephalus*	DL	-(S3)	N
Whooping crane[3]	*Grus americana*	EXPN	-(SX)	P
Insects				
Monarch butterfly[1]	*Danaus plexippus*	PT	-(S4)	P
Mammals				
Tricolored bat[2]	*Perimyotis subflavus*	PE	T(S2S3)	P
Reptiles				
Alligator snapping turtle[3]	*Macrochelys temminckii*	PT	T(S2S3)	N

Source: TVA Regional Natural Heritage Database and USFWS IPaC online system (IPaC: Home) extracted April 4, 2025.

[1] Historically, this species has not been tracked by state or federal heritage programs; USFWS has determined that this species could occur within the Project Area.

[2] Species that have not been documented within three miles of the APE but have been documented within Obion County, Tennessee.

[3] Species have not been documented within three miles of the Project Area, nor from Obion County, Tennessee; the USFWS has determined this species has the ability to occur within the APE.

Key: DL = Delisted
EXPN = Experimental Population, Non-Essential
N = No, no records of species within proposed Project Area, and no suitable habitat is present
P = Potentially suitable habitat is present, but no records of species in proposed Project Area
PE = Proposed Endangered
S1 = Critically Imperiled
S2 = Imperiled
S3 = Vulnerable
S4 = Apparently Secure
SX = Presumed Extirpated
T = Proposed Threatened
T = Threatened.

The monarch butterfly is a highly migratory species, with eastern United States (U.S.) populations overwintering in Mexico. Monarch populations typically return to the eastern U.S. in April (Davis and Howard 2005). Summer breeding habitat requires milkweed plant species, on which adults exclusively lay eggs for larvae to develop and feed on. Adults may drink nectar from other blooming wildflowers when milkweeds are not in bloom (Schweitzer and Jepsen 2014). Although the monarch butterfly has not been historically tracked by state or federal heritage programs, the USFWS IPaC tool indicated that this species has the potential to occur within the Project Area. The forest edges and the early-successional field within the Project Area contain flowering plant species that provide suitable foraging habitat for adult monarchs. Abundant milkweed plants suitable for developing larvae were not observed during the September 2024 field survey.

Alligator snapping turtles are large freshwater turtles that are confined to river systems that flow into the Gulf of America, formerly known as the Gulf of Mexico, as renamed by EO 14172. This species is typically associated with deep water of large rivers where they feed on fish and other small invertebrates and vertebrates that they can scavenge. These turtles can also be found in small streams, floodplain swamps, and oxbow lakes associated with large rivers. Only females

and juveniles spend time inland as they move from nest to water. Females are generalists when it comes to nest site selection, appearing to prefer some canopy cover. Nest sites are typically found between eight and 72 feet from water, but have also been found more than 500 feet away. Nesting occurs from May to July, and hatchlings emerge about 100 to 150 days later, depending on temperature (USFWS 2021a). Although no records of alligator snapping turtle are known from Obion County, Tennessee, the USFWS IPaC tool indicated that this species has the potential to occur within the Project Area. No large bodies of water exist within the Project Area, and no suitable nesting habitat for the alligator snapping turtle was observed during the September 2024 field survey.

The bald eagle is protected under the Bald and Golden Eagle Protection Act (16 USC 668–668d). This species is associated with strong, mature trees capable of supporting their large nests, which they build near larger waterways where they forage primarily for fish (USFWS 2007). Five bald eagle nest records are known from Obion County, Tennessee, the nearest of which is approximately 15.4 miles from the Project Area. Foraging habitat for bald eagles is not available within the Project Area. Neither individuals nor their nests were observed during the September 2024 field survey.

The whooping crane is a large bird that once occurred throughout North America but has declined to one self-sustaining wild population that breeds in Canada and winters in coastal Texas. Whooping cranes from this population are listed as endangered in the Southwest, USFWS Region 2 (USFWS 2024b). In the eastern United States, an additional population has been established from captive-raised birds that breed in Wisconsin and overwinter in Florida. This additional population is categorized as a non-essential experimental population (USFWS 2001). For the purposes of consultation on private land, non-essential experimental populations are treated as a proposed species with no Section 7(a)(2) requirements, but federal agencies must not jeopardize their existence in accordance with ESA Section 7(a)(4) (16 USC 1531–1544). During migration, whooping cranes may be found in coastal marshes, estuaries, agricultural fields, and other large wetland habitats (USFWS 2001). Since 2007, a small group of atypical individuals have come to winter in Tennessee, in a rural area on the Cumberland River; however, whooping cranes are rare migrants and winter residents in Tennessee (TWRA 2024). Although not optimal, migration habitat for this species exists within the Project Area.

The tricolored bat is generally solitary or found in small groups. They are associated with a variety of forested landscapes where they forage along forest edges and waterways. Summer roosts are primarily in live and dead leaf clusters of live or recently dead deciduous hardwood trees, Spanish moss, and beard lichen. However, this species has also been documented roosting in clusters of dead pine needles, live cedars, artificial structures such as bridges and culverts, and sometimes barns during summer months. In winter, this species is most commonly found in caves and mines but may also use culverts, abandoned wells, tree cavities, and rock shelters (USFWS 2021b). Three records of tricolored bat are known from Obion County, Tennessee, the nearest of which is from a mist-net capture approximately 3.79 miles from the Project Area. Foraging habitat for tricolored bat is available over the agricultural field and its drainage basin, and over and around trees, forest corridors, and forest edges within the Project Area. No caves are known within three miles of the Project Area. One culvert, one small cinder block building, and three steel grain silos were observed during the September 2024 field survey. Upon inspection, these structures did not provide suitable roosting areas for tricolored bat, and no signs of bat use were observed. No additional artificial structures that can provide suitable habitat for tricolored bat were observed

within the Project Area. Approximately 3.25 of the 3.31 acres of deciduous forest proposed for removal in the Project Area provide suitable summer roosting habitat for tricolored bat.

Under the Action Alternative, TVA would provide InvestPrep funds to assist with the development of the Northwest TN Regional Industrial Center which includes the following proposed actions: clearing approximately 3.31 acres of forest and 1.39 acres of early-successional habitat, 14 geotechnical borings in agricultural land, grading and stabilizing agricultural land for the construction of a 100,000 SF gravel building pad, grading and stabilization of temporary sediment pond and detention basin, construction of a new gravel driveway, and addition of gravel to the existing dirt road.

Milkweed plants suitable for developing monarch butterfly larvae were not observed during the September 2024 field survey. As such, the Proposed Action would not jeopardize the continued existence of monarch butterfly.

Suitable nesting habitat for alligator snapping turtle is not available within the Project Area; therefore, the Proposed Action would not jeopardize the continued existence of this species.

Foraging habitat for bald eagles is not available within the Project Area, and neither individuals nor their nests were observed during the field survey. BMPs would be implemented in the Project Area to minimize potential impacts to tributaries of larger bodies of water where suitable habitat may be present. Given the distance to known nesting records and with the implementation of BMPs, no impacts to bald eagles would be anticipated as a result of the Proposed Action. Proposed Actions under the Action Alternative would be in compliance with the National Bald Eagle Management Guidelines.

Although not optimal, migration habitat for whooping crane exists within the Project Area. As whooping crane breeding habitat occurs outside of Obion County, any individuals present at the time the proposed actions are ongoing would be mobile and expected to flush. Similarly, suitable alternative habitat is present outside of the Project Area. As such, the Proposed Action would not jeopardize the continued existence of whooping crane.

No caves or artificial structures suitable for use by tricolored bat exist in the Project Area or would be impacted by the Action Alternative. Approximately 3.25 acres of suitable summer roosting habitat for tricolored bat would be removed under the Action Alternative. TVA recommends removing trees outside of tricolored bat pup season (May 25 to July 31) to avoid direct impacts to any immobile tricolored bats during pup season that may be present within the Project Area. The Action Alternative would not jeopardize the continued existence of tricolored bat.

Under the No Action Alternative, TVA would not provide InvestPrep funds to assist with the development of the NTNRIC which includes the following proposed actions: clearing approximately 3.31 acres of forest and 1.39 acres of early-successional habitat, geotechnical borings, grading and stabilization for the construction of a 100,000 SF gravel building pad, grading and stabilization of a temporary sediment pond and detention basin, construction of a new gravel driveway, and adding gravel to an existing dirt road. If Union City was able to obtain alternate funding and proceed with its current plans, the overall environmental consequences would be similar to those anticipated from implementing the Action Alternative. In the event the Project is postponed, any effects would be delayed for the duration of the postponement. If Union City is unable to secure other funding or the Project is canceled, the Proposed Action would not occur;

habitats would remain in their current state, and threatened and endangered terrestrial animals and their habitats would not be affected.

Neither the Action Alternative nor the No Action Alternative would result in significant impacts to any terrestrial species or their habitats.

4.2.8 Botany

4.2.8.1 Vegetation

The Proposed Action would occur in the Loess Plains Level IV ecoregion (Griffith et al. 1998), which is characterized as having flat plains with thin loess soil, much of which is agriculture, pine plantation, or reverted to mixed evergreen-deciduous forest. Land cover is a mixture of cropland, mixed forest, pasture, and some pine plantations, and land use is rural-residential, urban, and industrial.

TVA staff conducted field surveys in October 2024 to document plant communities, infestations of invasive plants, and to search for possible threatened and endangered plant species in areas where work would occur. Most areas within the Project Area were visited during the surveys. Using the National Vegetation Classification System (Grossman et al. 1998), vegetation types observed during field surveys can be classified as a combination of deciduous forest and herbaceous vegetation. No forested areas in the Project Area had structural characteristics indicative of old-growth forest stands (Leverett 1996). The plant communities observed on site are common and well-represented throughout the region. Vegetation in the Project Area is characterized by two main types: forest (29 percent) and herbaceous (71 percent).

Deciduous forest is characterized as forest in which greater than 75 percent of total canopy cover is comprised of deciduous trees; this forest type occupies 29 percent of the Project Area. This habitat type is found between large swaths of pine plantations and mixed evergreen-deciduous forest and is dominated by black willow, cherry bark oak, green ash, overcup oak, sugarberry, sycamore, water hickory, white mulberry, white oak, and witch hazel. The understory consisted of American hornbeam, Christmas fern, ebony spleenwort, mayapple, pawpaw, sassafras, summer grape, wild comfrey, wild yam, and winged elm. Most deciduous forests in the Project Area have trees that average 12-inch diameter at breast height (dbh), with some trees reaching 24-inch dbh.

Herbaceous vegetation is characterized as having greater than 75 percent cover of forbs and grasses and less than 25 percent cover of other types of vegetation and occurs on approximately 71 percent of the Project Area. Most of this habitat type occurs along roadsides or as cropland, hayfields, recent clear-cuts, and heavily manipulated pastures. Most of these sites are dominated by plants indicative of early-successional habitats, including many non-native species. Early-successional areas with naturalized vegetation contain herbaceous species like American pokeweed, annual ragweed, broomsedge, bristle thistle, bearded beggarticks, common elephant’s-foot, giant ragweed, and meadow-grass.

EO 13112 directed TVA and other federal agencies to prevent the introduction of invasive species (both plants and animals), control their populations, restore invaded ecosystems, and take other related actions. EO 13751 amends EO 13112 and directs actions by federal agencies to continue coordinated federal prevention and control efforts related to invasive species. This EO incorporates considerations of human and environmental health, climate change, technological innovation, and other emerging priorities into federal efforts to address invasive species and

strengthens coordinated, cost-efficient federal action. Some invasive plants have been introduced accidentally, but most were brought here as ornamentals or for livestock forage. Because these robust plants arrived without their natural predators (insects and diseases), their populations spread quickly across the landscape, displacing native species and degrading ecological communities or ecosystem processes (Miller 2010). No federal-noxious weeds but many non-native invasive plant species were observed throughout the Project Area during the October 2024 field survey. Invasive species present across significant portions of the landscape include Amur honeysuckle, Chinese privet, Japanese honeysuckle, Japanese stiltgrass, Johnson grass, and tall fescue. During field surveys, invasive plants were prevalent in sections of herbaceous vegetation types.

Adoption of the Action Alternative would not significantly affect the botany of the region. Converting forest land for the construction of the gravel building pad, marketing road, and gravel driveway would be long-term in duration, but insignificant. The Action Alternative would require clearing of approximately 3.31 acres, most of which is deciduous forest. Virtually all forested areas in the Project Area have been previously cleared, and the plant communities found there are common and well-represented throughout the region. Also, project-related work would temporarily affect herbaceous plant communities, but these areas would likely recover to their pre-project condition in less than one year.

Nearly the entire Project Area currently has a substantial component of invasive terrestrial plants, and adoption of the Action Alternative would not significantly affect the extent or abundance of these species at the county, regional, or state level. Vegetating with non-invasive species would serve to minimize the potential introduction and spread of invasive species in the Project Area.

Under the No Action Alternative, areas within the Project Area would remain in their current condition. Thus, adoption of the No Action Alternative would not affect plant life because no project-related work would occur. In the event the Project is postponed, any effects would be delayed for the duration of the postponement. Changes to local plant communities resulting from natural ecological processes and human-related disturbance would continue to occur, but the changes would not result from the Proposed Action. Therefore, there would be no direct, indirect, or reasonably foreseeable impacts to plant life under the No Action Alternative.

4.2.8.2 Threatened and Endangered Plants

A review of the TVA Natural Heritage Database indicates that no state-listed or federally listed plant species have been previously reported within a 5-mile vicinity of the proposed Project Area. No federally listed plant species have been previously reported from Obion County, Tennessee. No state or federally listed plants were observed in the Project Area. No designated critical habitat for plants occurs in the Project Area.

Adoption of the Action Alternative would not impact federal or state-listed species. Adoption of the Action Alternative would have no effect on federal plant species because no federally listed plant species occur in the Project Area. Also, no populations of state-listed species were observed during field surveys of the Project Area. Therefore, no direct, indirect, or reasonably foreseeable impacts on endangered and threatened species and their critical habitats would be anticipated as a result of implementing the Action Alternative.

Adoption of the No Action Alternative would not impact federally listed plants, designated critical habitat, or state-listed plant species because no project-related work would occur. Under the No Action Alternative, the proposed construction of the gravel building pad, marketing road, and driveway would not occur. No federally listed plants or designated critical habitat occur within the proposed Project Area. In the event the Project is postponed, any effects would be delayed for the duration of the postponement. Changes to local plant communities resulting from natural ecological processes and human-related disturbance would continue to occur. These changes may benefit or negatively affect plants present in the Project Area, but the changes would be unrelated to the Proposed Action.

4.2.9 Archaeology and Historic Structures

Historic and cultural resources, including archaeological resources, are protected under various federal laws, including the Archaeological Resources Protection Act, the Native American Graves Protection and Repatriation Act, and the National Historic Preservation Act (NHPA). Section 106 of the NHPA requires federal agencies to consult with the respective State Historic Preservation Officer (SHPO) when proposed federal actions could affect these resources.

TVA determined that the Action Alternative would be an “undertaking” as defined by the regulations under NHPA. Once an action is determined to be an undertaking, the regulations require agencies to consider whether the proposed activity has the potential to impact historic properties. If the undertaking is such an activity, then the agency must follow the following steps: (1) involve the appropriate consulting parties; (2) define the Area of Potential Effect (APE); (3) identify historic properties in the APE; (4) evaluate possible effects of the undertaking on historic properties in the APE; and (5) resolve negative effects (36 CFR § 800.4 through 800.13). An APE is defined as the “geographic area or areas within which the undertaking may directly or indirectly cause alterations in the character or use of historic properties if any such properties exist” (36 CFR § 800.16). TVA recommends that the APE be considered as the total area within which the proposed grading would take place (70 acres), where physical effects could occur, as well as areas within a half-mile radius of the project, within which the project would be visible, where visual effects on historic structures could occur.

TVA contracted with Stantec to perform an archaeological survey for the Project APE, which was conducted in January 2025, and to write a report titled Phase I Cultural Resources Survey for the NTNRIC, Obion County, Tennessee. TVA determined that the survey and the report are consistent with the *Secretary of the Interior’s Standards and Guidelines for Identification* (NPS 1983).

As noted in Section 4.2, TVA, through consultation with the SHPO, has determined that the APE would be restricted to the Project Area. Given that there are no known historic structures identified within the Project Area and that the Proposed Action under the Action Alternative does not involve the construction of aboveground resources, no historic architectural resources would be impacted by the Proposed Action under the Action Alternative, directly or visually. As such, no Phase I historic structures surveys were required. TVA concludes that no effects to historic sites or structures would occur with the Proposed Action under the Action Alternative.

Stantec’s background research did not identify any previously known archaeological sites within the APE. Stantec performed systematic shovel testing at 30-meter intervals spaced on transects 30 meters apart.

Prior to the field effort, a total of 322 shovel tests were pre-plotted for excavation within the APE. During the field effort, an additional six shovel tests were excavated, bringing the total shovel tests to 328. The survey resulted in 287 negative shovel tests, three were positive, and 38 shovel tests could not be excavated due to obvious disturbances, including drainages, ditches, and roads. The Phase I archaeological survey's three positive shovel tests resulted in the identification of two isolated finds. Find 1 consists of a light scatter of historic artifacts from two positive shovel tests and a surface find near the southwestern corner of the APE. Find 2 consists of two historic artifacts recovered from one shovel test excavated along the side of drainage in the southern portion of the APE. Stantec recommended no further archaeological work for both isolated finds within the APE. In addition to the isolated finds, Stantec also investigated the extant remains of a feedlot and utility building situated in the northeast corner of the APE. Stantec's team determined these remains to be modern and do not represent an archaeological site.

Under the Action Alternative, there would be no impacts to cultural resources. On February 7, 2025, the THC-SHPO concurred with Stantec's report and TVA's findings that no historic properties eligible for listing in the NHRP would be affected by the Project (Attachment 2). The consulted federally recognized Tribes provided no objections to the Project.

Under the No Action Alternative, if Union City was able to secure the funding for the proposed TVA-funded actions described in this EA from outside sources, similar site activities would occur, also resulting in no impacts on archaeological resources as described above for the Action Alternative. In the event the Project was postponed, any effects would be delayed for the duration of the postponement. If Union City was not able to secure the funding for the actions described in this EA, disturbance associated with the Proposed Action would not occur, and there would be no impacts on archaeological resources.

4.2.10 Visual Resources

The Project Area spans 70 acres and consists mainly of agriculture with some forested areas. The Project Area is bordered by Highway 21 to the east, Greenfield Drive to the south, and Perry Browder Road to the north. The visual landscape setting adjacent to the Project Area consists primarily of agricultural land with residential areas to the northeast, east, and south, a small forested section near the northern portion, and trees lining the north and east borders.

Under the Action Alternative, construction vehicles and equipment visible during construction activities would have a minor visual impact over the temporary construction period, as well as a minor permanent impact due to grading. Drivers along Highway 21 and Greenfield Drive would view construction activity, although the activity would not be inconsistent with an industrial park and its development. Drivers along Perry Browder Road or Interstate 69 may have some direct views of the Project Area; however, there would be substantial screening by trees and other industrial/commercial areas along the roadway immediately adjacent to the Project Area, and any changes to the views would be similar to other areas along the road. While motorists using the roads may notice a change in the viewshed, this change would be minor given the brief period that drivers would be in the area. Implementation of the Action Alternative would result in a minor decrease in visual quality for residents in the viewshed.

Under the No Action Alternative, if Union City was able to secure the funding for the proposed TVA-funded actions described in this EA from outside sources, the proposed work would occur, resulting in similar direct and indirect visual quality impacts as described above for the Action Alternative. In the event the Project was postponed, any effects would be delayed for the duration

of the postponement. If Union City was not able to secure the funding for the actions described in this EA, the proposed work would not occur, and existing site conditions would likely be maintained, resulting in no visual quality impacts.

4.2.11 Noise

Existing ambient noise levels, or background noise levels, are the current sounds from natural and artificial sources at receptors. The magnitude and frequency of background noise at any given location may vary considerably over the course of a day or night and throughout the year. The variations are caused in part by weather conditions, seasonal vegetative cover, and human activity. Existing sources of noise in the vicinity of the Project Area are primarily associated with traffic along the surrounding roads and the surrounding businesses and residences.

Noise impacts associated with construction activities under the Action Alternative would be primarily from the heavy equipment used. Construction activities would likely involve the operation of an excavator, bulldozer, dump truck, or similar vehicles, and heavy machinery over the temporary duration of construction. Heavy equipment noise levels would fluctuate depending on the number and type of vehicles and equipment in use at any given time. The Action Alternative would be implemented over 12 months, during which construction-related noise may be generated. In addition, construction-related sound levels experienced by a noise-sensitive receptor in the vicinity of construction activity would be a function of distance, other noise sources, and the presence and extent of vegetation, structures, and intervening topography between the noise source and receptor. It is anticipated that sound levels would not exceed 85 decibels at the Project Area boundary per Occupational Safety and Health Administration standards.

Under the Action Alternative, primary sensitive noise receptors in the Project Area vicinity include residential areas to the northeast, east, and southeast, a farm to the southeast, and a cemetery (Carmen Cemetery) directly adjacent to the north. The noise would be localized and temporary, and no receptor would be exposed to significant noise levels for an extended period of time. No construction is anticipated during the weekends. Further, construction activities would be anticipated to be conducted during daylight hours, when ambient noise levels are often higher, and most individuals are less sensitive to noise. Industrial and commercial facilities adjacent to busy roads and highways are accustomed to noise. Carmen Cemetery is located directly along the northern border of the Project Area; it would continue to be screened from noise by a medium-dense forested area, thereby reducing potential noise impacts. The residential homes located 100 to 240 feet north would be screened from noise by a large, dense forested area, reducing potential noise impacts. The residential homes located 100 feet to the east have some screening from noise due to a sparse tree line, but could be subjected to construction noise. The farm and residential homes located 275 feet southeast would have some screening from noise due to sparse tree lines, but could be subjected to construction noise. Overall, noise-related impacts resulting from the implementation of the Action Alternative would be anticipated as temporary and minor.

Under the No Action Alternative, if Union City was able to secure the funding for the proposed TVA-funded actions described in this EA from outside sources, there would be impacts to noise receptors similar to those described above for the Action Alternative. In the event the Project was postponed, any effects would be delayed for the duration of the postponement. If Union City was not able to secure the funding for the actions described in this EA, the proposed disturbances would not occur, and existing site conditions would likely be unchanged, resulting in no impacts to noise receptors.

4.2.12 Socioeconomics

This section evaluates the potential impact of the Action Alternative on socioeconomic resources. It also considers the range of communities impacted to determine whether the Action Alternative would be likely to have impacts on minority and low-income populations.

This analysis focuses on the state, county, and locality within which the Action Alternative would occur. Publicly available statistics generated by the United States Census Bureau and the United States Bureau of Labor Statistics were used to characterize socioeconomic conditions in the host state (Tennessee), county (Obion), and locality (Union City, Tennessee) (Table 4-4). Details of the Action Alternative were then used to evaluate likely effects on existing socioeconomic resources. The demographics and income of the host county and locality were considered, relative to the demographics and wealth levels at the state level, to identify the potential for impacts on minority and low-income populations.

Table 4-4. Population, Demographics, Income, and Employment in the Host State, County, and Locality

	Tennessee	Obion County	Union City, Tennessee
Population [1]			
July 2023 Population	6,986,082	30,570	11,040
April 2021 Population	6,859,497	30,722	11,119
Population, Percent Change	1.85%	-0.49%	-0.71%
Population per Square Mile [2]	173	56.1	911.8
Demographics [1]			
White Alone, not Hispanic or Latino	4,994,428	24,307	6,991
Black or African American Alone	1,099,942	3,208	2,429
American Indian and Alaska Native Alone	6,914	22	12
Asian Alone	127,497	69	48
Native Hawaiian and Other Pacific Islander Alone	3,783	40	0
Some Other Race Alone	25,909	62	36
Two or More Races	231,152	1,248	494
Hispanic or Latino (of any race)	496,457	1,614	1,030
Income [1]			
Median Household Income	$67,097	$53,102	$45,523
Per Capita Income	$37,866	$29,891	$23,606
Percent with Income Below the Poverty Level	14.0%	19.3%	22.4%
Employment (Not Seasonally Adjusted): April 2022 [3]			
Labor Force	3,407,350	13,085	NA
Employed	3,296,778	12,589	NA
Unemployed	110,572	496	NA
Unemployment Rate (%)	3.2	4.0	NA

[1] Source: United States Census Bureau (2025)
[2] Source: United States Census Reporter (2025)
[3] Source: United States Bureau of Labor Statistics (2025)

The evaluation of socioeconomic data determined the following:

- Relative to the average Tennessee resident, the residents of Obion County live at a lower population density and lower (negative) population growth. Relative to the average Tennessee resident, the residents of Union City, Tennessee, live at a higher population density, but lower (negative) population growth.
- Relative to the average Tennessee resident, the residents of Obion County are less likely to self-identify as a minority race or ethnicity. Relative to the average Tennessee resident, the residents of Union City, Tennessee, are more likely to self-identify as a minority race or ethnicity.
- Per capita income and median household income are both lower in Obion County than in Tennessee. Per capita income and median household income are both lower in Union City, Tennessee, than in Tennessee as a whole.
- Residents of Obion County are more likely to live below the poverty level than residents of Tennessee as a whole. Residents of Union City, Tennessee, are more likely to live below the poverty level than residents of Tennessee as a whole.
- The unemployment rate in Obion County is more than the unemployment rate in Tennessee.

There are no residential subdivisions within 0.5 mile of the Project Area; however, there are about 22 residential homes within 0.5 mile of the Project Area. The U.S. Census Bureau identified the following demographic characteristics for this area. Relative to the state, these neighborhoods in aggregate have a high percentile population of color, a high level of low-income population, a moderate rate of linguistic isolation, and a high level of population with less than a high school education.

As described in Section 1.0 (Proposed Action and Need), the Action Alternative would include tree clearing, burning of felled trees, geotechnical borings prior to grading for a gravel building pad, a temporary sediment pond and detention basin, construction of a new gravel driveway, and addition of gravel to the existing dirt road. Erosion prevention, sediment control, and stabilization measures would be implemented after completion of grading.

This effort would be expected to take place over a 12-month period and would require a small workforce, likely drawn from a local contractor. Implementation of the Action Alternative would not be anticipated to materially impact the local economy or the local workforce. In addition, no negative socioeconomic impacts would be anticipated from the Proposed Action; therefore, no negative impacts would be anticipated to minority or low-income populations as a result of the Action Alternative. Minor positive indirect impacts may be noted through the increase in employment as a result of the Action Alternative.

Under the Action Alternative, there would be minimal potential that the Proposed Action would result in negative impacts on minority and low-income populations. This conclusion is based on two observations. First, the Action Alternative would have a minor positive effect on the local economy. Second, as described throughout this document, environmental effects associated with the Action Alternative would be minor, temporary, and would generally be constrained to the 70-acre Project Area.

Under the No Action Alternative, if Union City was able to secure the funding for the proposed TVA-funded actions described in this EA from outside sources, similar activities would occur, resulting in socioeconomic impacts similar to those described in the preceding paragraphs. In the event the Project was postponed, any effects would be delayed for the duration of the postponement. If Union City was not able to secure the funding for the actions described in this EA, economic activity and socioeconomic changes would not occur.

4.2.13 Transportation

The Project Area can be accessed during construction activities from the east at Highway 21 and the south via a gravel road to Greenfield Drive. Greenfield Drive provides access to Highway 21 to the east and Highway 51 to the south, and Highway 21 provides access to Interstate 69 to the north and Highway 51 to the south.

Greenfield Drive is a local road that provides access to four industrial properties and multiple rural properties south of the Project Area. Greenfield Drive is a paved two-lane road sufficiently wide for a single lane of traffic in each direction. Based on a preliminary review of Google Street View images (recorded June 2024) and incidental observations during field surveys, the road is in good condition with wide grassy swales on each side of the road. Greenfield Drive is not defined by the Functional Classification System for Union City (Tennessee Department of Transportation [TDOT] 2025a). The Project Area entrance location and configuration should consider safe sight distances and other safety concerns for the traffic that would enter Greenfield Drive from the property. Necessary precautions would be taken during mobilization and demobilization, such as reduced speed in areas of poor visibility or poor road conditions, with other precautions such as a flagman or traffic control to be considered if required.

Highway 21 is a two-lane paved highway that provides access to multiple residential, industrial, and rural properties. Based on a preliminary review of Google Street View images (recorded September 2024) and incidental observations during field surveys, the road is in good condition with paved shoulders and wide vegetated verges. Highway 21 is listed as a minor arterial roadway on the Functional Classification System for Union City (TDOT 2025a). Normal care would be taken by workers entering Highway 21 regarding traffic safety.

Highway 51 is a four-lane paved highway at the intersection of Highway 21. Based on a preliminary review of Google Street View images (recorded September 2024) and incidental observations during field surveys, the road is in good condition with a vegetated median, dedicated turning and merging lanes, and wide vegetated verges. Highway 51 is listed as a part of the National Highway System and as the principal arterial roadway on the Functional Classification System for Union City (TDOT 2025a). Normal care would be taken by workers entering or crossing Highway 51 regarding traffic safety.

Interstate 69 is a four-lane paved highway at the intersection of Highway 21. Based on a preliminary review of Google Street View images (recorded June and September 2024) and incidental observations during field surveys, the road is in good condition with a vegetated median, dedicated ramps, merging lanes, and wide vegetated verges. Interstate 69 is not listed on the Functional Classification System for Union City (TDOT 2025a) or Obion County (TDOT 2025a). Based on Google Earth historical aerial imagery, Interstate 69 was constructed after the publication of the 2018 Functional Classification System maps. Normal care would be taken by workers entering or exiting Interstate 69 regarding traffic safety.

Based on a review of TDOT historical traffic data (TDOT 2025b), there are no traffic count stations on Greenfield Drive. The nearest traffic count stations are located on Highway 21 and Highway 51. There are additional traffic count stations at the intersection of Highway 21 and Interstate 69, and east and westbound on Interstate 69, but there is no published data for these stations. The 2024 annual average daily traffic count (AADT) for the relevant stations is presented in Table 4-5 below.

Table 4-5. Tennessee Department of Transportation Traffic Count Data for the Project Area

Route Description	Location ID	Distance from Project Area (Miles)	Year	AADT
Highway 21	66000111	0.8	2024	1,980
Highway 51	66000098	0.8	2024	5,197

Source: Tennessee Department of Transportation 2025b (Annual Average Daily Traffic (AADT) (tn.gov)), extracted 3/5/2025.

Under the Action Alternative, in the context of the existing AADT road volumes, the anticipated traffic generated by the proposed activities would be minimal. It would be anticipated that existing traffic volumes for Greenfield Drive would be minor, as it provides access to limited other sites, and traffic volumes for Highway 21 would be minor. Because of the anticipated limited volume of workers on the site required for tree-clearing activities, grading, and the short timeframe of the Proposed Action, direct or indirect impacts to local traffic would be anticipated as temporary and minor.

Under the No Action Alternative, if Union City was able to secure the funding for the proposed TVA-funded actions described in this EA from outside sources, the grading and construction activities would also result in a temporary and negligible impact on overall traffic volumes and level of service. In the event the project would be postponed, any effects would be delayed for the duration of the postponement. If Union City was not able to secure the funding for the actions described in this EA, there would be no impact to overall traffic volumes and level of service.

5.0 PERMITS, LICENSES, AND APPROVALS

The Action Alternative would result in greater than one acre of earth-disturbing activities; therefore, it would be necessary for Union City, or its contractors, to obtain local, state, or federal permits, licenses, and approvals necessary for the project for coverage under the applicable NPDES General Permit for Discharges Associated with Construction Activity (TNR100000). Coverage would require the submittal of a Notice of Intent (NOI) and the development of a site-specific SWPPP.

6.0 BEST MANAGEMENT PRACTICES AND MITIGATION MEASURES

To minimize or reduce the environmental effects of site activities associated with the Action Alternative, Union City, or its contractors, would ensure that all grading activities conducted would be in compliance with stormwater permitting requirements and use applicable BMPs to minimize and control erosion and fugitive dust during these actions. Vegetating with non-invasive species would minimize the potential introduction and spread of invasive species in the Project Area. Wetland W001 and intermittent streams S001 and S003 would be avoided, and a 30-foot buffer would be maintained.

Union City would also limit ground disturbance to areas at or above the existing ground elevation of 344.5 feet mean sea level (msl) within the Project Area. Additionally, tree-clearing debris would be disposed of in areas with existing ground elevation above 343.5 feet.

Operations involving chemical or fuel storage or resupply, and vehicle servicing would be handled outside of riparian areas and in such a manner as to prevent these items from reaching a watercourse. Earthen berms or other effective means would be installed to protect nearby stream channels from direct surface runoff. Servicing of equipment and vehicles would be expected to be done with care to avoid leakage, spillage, and subsequent surface or groundwater contamination. Oil waste, filters, and other litter would be collected and disposed of properly.

7.0 LIST OF PREPARERS

Table 7-1 summarizes the expertise and contribution made to the EA by the Project Team.

Table 7-1. Environmental Assessment Project Team

Name/Education	Experience	Project Role
TVA		
Brittany Kunkle *B.S. Environmental and Soil Science*	6 years in Project Management, Managing and Performing NEPA Analyses	Economic Development Grant Project NEPA Compliance Manager
David Mitchell *M.S. Soil and Water Science* *B.S. Horticulture*	18 years in ecological restoration and plant ecology, 6 years of environmental program management	Threatened and Endangered Plants, Plant Ecology, Invasive Plant Species
Zach Buecker *B.S. Biology*	15 years in water/wetland assessment and compliance	Surface Water
Derek Reaux *Ph.D. Anthropology, University of Nevada, Reno* *M.A. Anthropology, University of Nevada, Reno* *B.A. Anthropology, University of Kentucky*	12 years of experience in archaeological research, cultural resource management, and Section 106 compliance	Cultural resources, NHPA Section 106 compliance
Matt Reed *M.S. Wildlife and Fisheries Science; QHP*	14 years working with threatened and endangered aquatic species in the southeastern United States; 8 years in ESA, NEPA, and CWA compliance and stream assessments	Aquatic Ecology, Aquatic T&E Species
Carrie Williamson, P.E. (TN), CFM *B.S. and M.S. Civil Engineering*	12 years in Floodplains and Flood Risk; 11 years in Compliance Monitoring; 3 years in River Forecasting	Floodplains QA/QC
Maria Aguirre *B.S. Environmental Science, Belmont University*	3 years in biological compliance, NEPA compliance, and ESA consultation for T&E; 4 years in biological field studies	Terrestrial Zoology, Threatened and Endangered Species
Sara McLaughlin-Johnson *B.S. Wildlife and Fisheries Science*	12 years in biological compliance, NEPA compliance, and ESA consultation for T&E; 18 years in biological field studies	Terrestrial Zoology, Threatened and Endangered Species

Name/Education	Experience	Project Role
Fallon Parker Hutcheon *M.S. Environmental Studies* *B.S. Biology*	6 years in wetland delineation, wetland impact analysis, and NEPA/CWA compliance	Wetlands
Stantec		
Douglas Mooneyhan *M.S. Biology, Tennessee Technological University* *B.S. Wildlife and Fisheries Science, University of Tennessee*	35 years in managing and performing environmental studies, Project Manager for a variety of different project types including NEPA, construction monitoring, natural resources, water resources, and fisheries biology	EA Program Manager QA/QC
Jaclyn Martin *M.S. Environmental Sciences, Swedish University of Agricultural Sciences, Uppsala, Sweden* *M.S. Environmental Sciences, University of Natural Resources and Life Sciences, Vienna, Austria* *B.S. Biology, Winthrop University, South Carolina*	9 years in environmental consulting in the preparation and review of NEPA compliance reports, environmental assessments, and permitting for a variety of telecommunication, alternative energy, and FERC-regulated projects.	QA/QC
Duane Simpson *M.A. Anthropology, University of Arkansas* *B.A. Anthropology, Ohio University*	28 years in archaeological consulting, including management of projects across the Southeast and Mid-Atlantic regions. Principal Investigator for over 16 years.	Archaeology
Rachel Kennedy *M.H.P. Historic Preservation, University of Kentucky* *B.A. Political Science and History, University of Kentucky*	22 years of experience working in non-profit, governmental, and private sectors with all aspects of preservation planning, from interpretation of the Secretary of the Interior's Standards for the Treatment of Historic Properties to cultural landscape examinations to identifying, evaluating, and listing properties to the National Register of Historic Places. Meets the Secretary of the Interior's Professional Qualifications Standards for History and Architectural History, per 36 Code of Federal Regulations (CFR), Part 61.	Historic Structures and Sites
Josh Yates, P.G. *M.S. Geology, University of South Florida* *B.S. Natural Resources Management and Engineering, University of Connecticut*	17 years of hydrogeologic assessments and water resources permitting experience. This experience includes water supply planning, hydrogeologic investigations, groundwater modeling, water use permitting, well construction oversight, EIS and EA preparation, minimum flow and level (MFL) impact analysis, monitoring well network design, aquifer performance tests, and GIS analysis.	Groundwater

Name/Education	Experience	Project Role
Ellen Mullins *M.S. Forestry, Mississippi State University, Starkville, Mississippi, 2015* *B.S. Forestry, University of Kentucky, Lexington, Kentucky, 2011*	Ms. Ellen Mullins is a project manager with 15 years of experience in environmental consulting and government. Ellen currently provides support and leadership for environmental planning and the NEPA permitting process. She prepares application packages and manages agency coordination efforts related to Threatened and Endangered Species, Clean Water Act (CWA) Section 404/401, and Section 106 Cultural Resources. She serves as a technical expert for natural resource projects for documents that are used in regulatory submissions.	Deputy Project Manager, QA/QC, Prime Farmland, Air Quality and Climate Change, Noise
Chris Knabel, TN-QHP *B.S. Natural Resources and Environmental Science, University of Kentucky*	Mr. Knabel is a biologist with 7 years of experience conducting wetland delineations, hydrologic determinations, threatened and endangered species surveys, and various other ecological and biological field surveys. He has personally conducted numerous hydrologic determinations throughout Tennessee and conducted thousands of acres of wetland delineations throughout Tennessee and Kentucky. Additionally, he has extensive knowledge of USACE Section 404 permitting and Section 7 protected species consultation.	Aquatics, Wetlands
Shane Kelley, TN-QHP *B.S. Natural Resources & Environmental Science, University of Kentucky*	Mr. Kelley is a biologist with 11 years of experience in multiple areas of the environmental field with a particular focus on USACE Section 404 permitting, Section 7 protected species consultation, and various ecological and biological field surveys. He is a Qualified Hydrologic Professional and has personally conducted numerous Hydrological Determinations throughout Tennessee and North Carolina and completed thousands of acres of wetland delineations throughout Kentucky, Tennessee, and Mississippi. Mr. Kelley has conducted various endangered plant species surveys throughout Kentucky, Tennessee, and North Carolina, including Short's goldenrod (*Solidago shortii*), Virginia spiraea (*Spiraea virginiana*), and small whorled pogonia (*Isotria medeoloidies*). Additionally, he is a federally permitted bat biologist for all listed bat species throughout the TVA service area.	Aquatics, Wetlands

Name/Education	Experience	Project Role
Iris Eschen *Heald Business College, San Francisco, CA*	As Document Production Manager, Ms. Eschen has more than 36 years of experience coordinating the production of large, complex documents for engineering and environmental consulting firms in California. She has overseen the technical editing, quality assurance, quality check, and production, submission, and distribution of countless reports and written products, including environmental impact statements/reports (EISs/EIRs), license applications, pre-application documents (PADs), wetland delineations, initial studies, mitigated negative declarations (MNDs), biological opinions (BOs), environmental assessments (EAs), and habitat conservation plans (HCPs).	Editor, Document Production
Brenton Jenkins, P.E. *B.S. Environmental Engineering, Louisiana State University*	10 years in environmental consulting for various private and public sector clients, including engineering design, permitting, and assessments, primarily in the oil and gas sector.	Transportation
Emily Smith *M.S. Lipscomb University* *B.S. University of Tennessee at Chattanooga*	Emily has worked extensively on NEPA documents, including Categorical Exclusions, EAs, and Comprehensive Impact Analyses.	Socioeconomics, Recreation
Kathleen Pangan M.S. *Biology, University of California – San Diego* *B.S. Biology: Ecology, Behavior, and Evolution, University of California – San Diego*	A biologist with more than 16 years of experience in ecology, technical analysis, and scientific fieldwork.	Surface Water, Aquatics, Wetlands
Afton Tankersley *M.S. Environmental Science, Columbus State University* *B.S. Biology, Bethel College*	A biologist with experience preparing multiple NEPA documents, including EISs for the FERC and the Nuclear Regulatory Commission.	Air Quality and Climate Change, Noise, Visual Resources

8.0 AGENCIES AND OTHERS CONSULTED

The following federal and state agencies and federally recognized Indian Tribes were consulted:

- Tennessee Historical Commission / State Historic Preservation Office.
- Absentee Shawnee Tribe of Indians of Oklahoma, Cherokee Nation, The Chickasaw Nation, Eastern Shawnee Tribe of Oklahoma, Jena Band of Choctaw Indians, The Osage Nation, Quapaw Nation, Shawnee Tribe, and the United Keetoowah Band of Cherokee Indians in Oklahoma.

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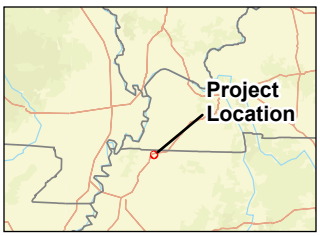
Attachment 1

Project Figures



Project Boundary (70.03 ac)

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N

Notes

1. Coordinate System: NAD 1983 StatePlane Tennessee FIPS 4100 Feet
2. Data Sources:
3. Background: Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS, Esri Community Maps Contributors, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census

Stantec

Project Location
Obion Co., TN

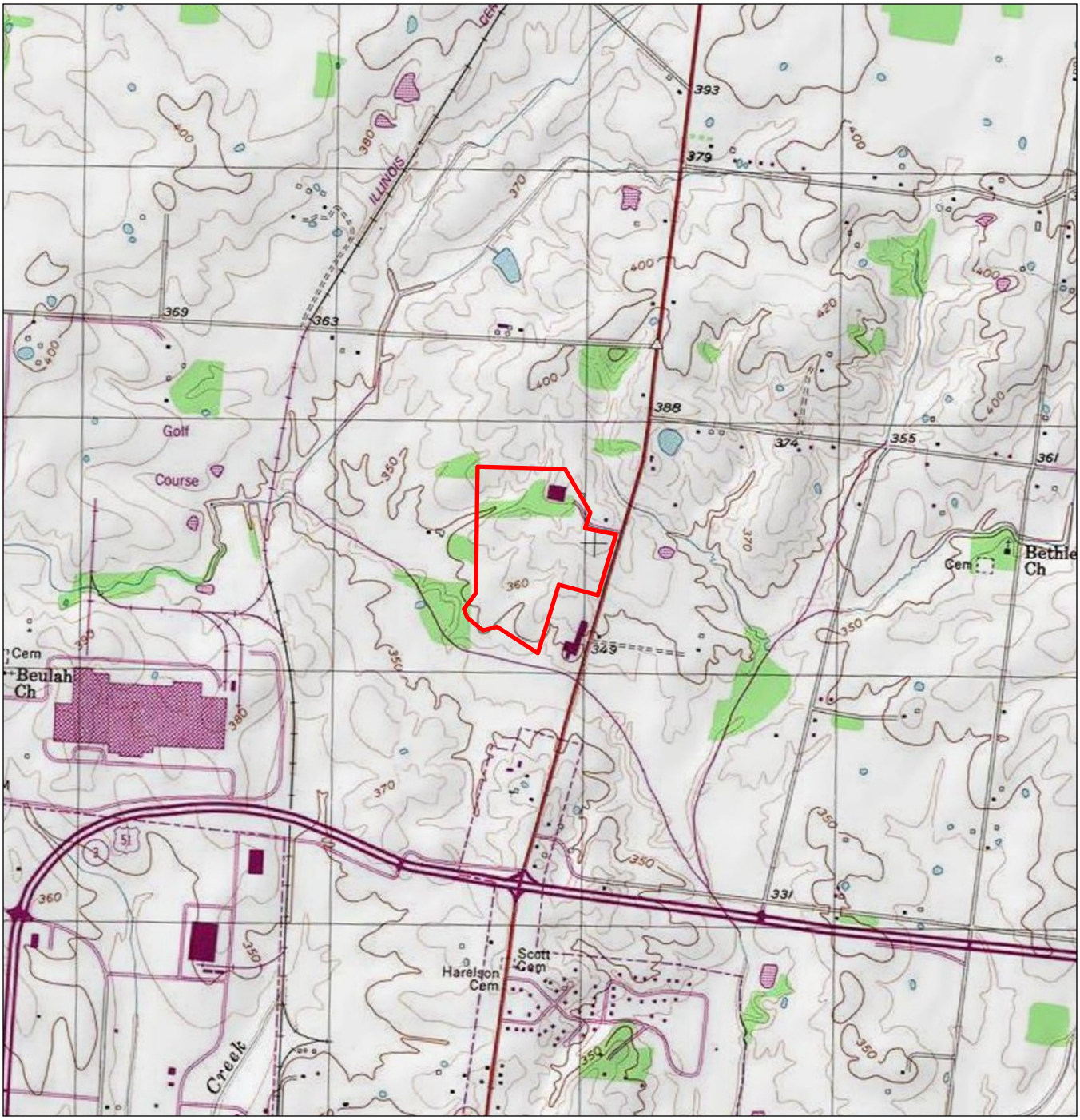
Prepared by pmarsey on 12/20/2024

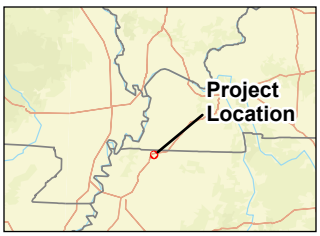
Client/Project
Tennessee Valley Authority
TVA FY25 Obion County
Environmental Assessment Report

172608872

Figure No.
1A

Title
Project Aerial





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Notes
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2. Data Sources:
3. Background: Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS, Copyright:© 2013 National Geographic Society, i-cubed

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Project Location
Obion Co., TN

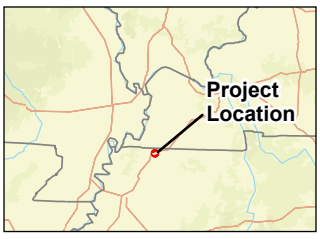
Prepared by pmarsey on 12/20/2024

Client/Project
Tennessee Valley Authority
TVA FY25 Obion County
Environmental Assessment Report

172608872

Figure No.
1B

Title
USGS Quadrangle



Project Boundary (70.03 ac)
0.2% Annual Chance Flood Hazard
1% Annual Chance Flood Hazard

0 200 400 Feet
(At original document size of 8.5x11)
1:4,800

N

Stantec

Notes
1. Coordinate System: NAD 1983 StatePlane Tennessee FIPS 4100 Feet
2. Data Sources: FEMA
3. Background: Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS, Esri Community Maps Contributors, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census

Project Location
Obion Co., TN

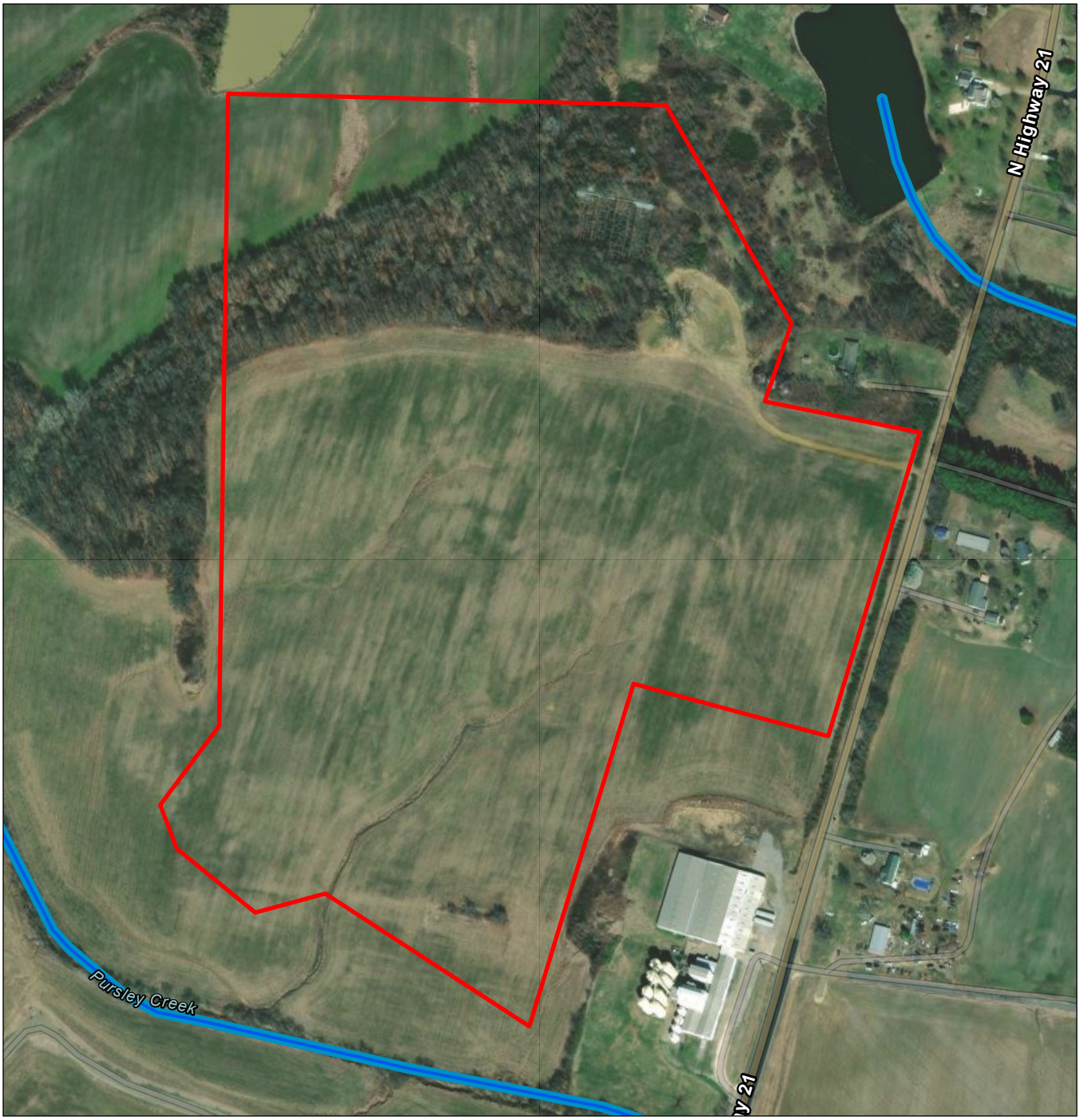
Prepared by pmarsey on 2/6/2025

Client/Project 172608872
Tennessee Valley Authority
TVA FY25 Obion County
Environmental Assessment Report

Figure No.
1C

Title
FEMA Floodplain

Q:\172608872\03_data\gis_cad\TVA - Obion County\TVA - Obion County.aprx Revised: 2025-02-06 By: pmarsey



Project Boundary (70.03 ac)

NHD Flowline

NWI Wetlands

Riverine

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(At original document size of 8.5x11)
1:4,800

N

Stantec

Notes

1. Coordinate System: NAD 1983 StatePlane Tennessee FIPS 4100 Feet
2. Data Sources: USGS, USFWS
3. Background: Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS, Esri Community Maps Contributors, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census

Project Location
Obion Co., TN

Prepared by pmarsey on 12/20/2024

Client/Project
Tennessee Valley Authority
TVA FY25 Obion County
Environmental Assessment Report

172608872

Figure No.
1D

Title
USFWS NWI Wetland and Water Inventory

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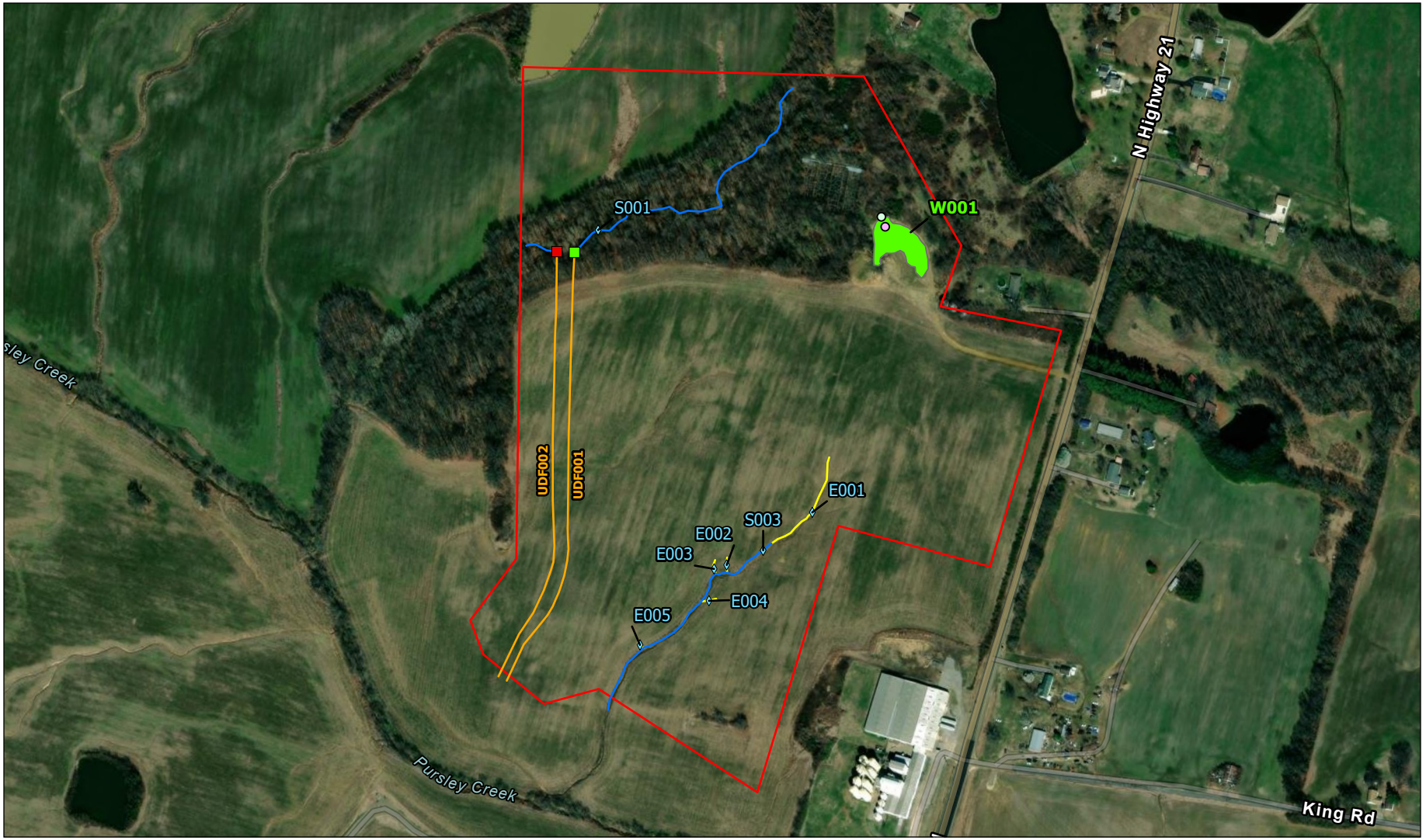
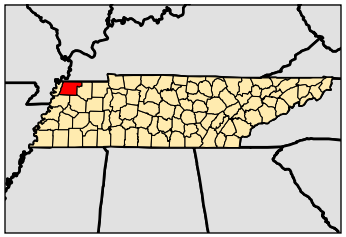




Legend

- Project Boundary
- Wetland Boundary Polygon
- Stream Point
- Wet Weather Conveyance
- Stream
- Upland Drainage Feature

Soil Data Point

- Upland
- Wetland

Culverts

- Inlet
- Outlet

N

0 250 500 Feet

(At original document size of 8.5x11)
1 inch = 500 feet

Notes

1. Coordinate System: NAD 1983 StatePlane Tennessee FIPS 4100 Feet
2. Data Sources: TVA, Stantec
3. Background: Esri Aerial Imagery Hybrid Basemap

Stantec

Project Location
Obion County,
Tennessee

Prepared by LD on 2025-01-03
TR by KC on 2025-01-14
IR by SK on 2025-01-14

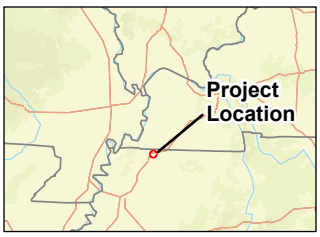
Client/Project
Tennessee Valley Authority
TVA InvestPrep 2025
Wetland and Waterbody Delineation Report

172608872

Figure No.
1E

Title
Delineated Wetlands and Waterbodies Map

C:\Users\mangel\Stantec\Kelley, Shane - TVA InvestPrep 2025\Obion County, TN\GIS\TVA_Obion.aprx Revised: 2025-04-14 By: mangel



- Project Boundary (70.03 ac)
- Ad - Adler silt loam, 0 to 2 percent slopes, occasionally flooded (3.45 ac)
- GrC2 - Grenada silt loam, 5 to 8 percent slopes, eroded (38.96 ac)
- LoB - Loring silt loam, 2 to 5 percent slopes (26.46 ac)
- MfB - Memphis silt loam, 2 to 5 percent slopes, northern phase (1.16 ac)
- All areas are prime farmland (31.07 ac)
- Not prime farmland (38.96 ac)

0 200 400 Feet
(At original document size of 8.5x11)
1:4,800

N

Notes
1. Coordinate System: NAD 1983 StatePlane Tennessee FIPS 4100 Feet
2. Data Sources: USDA-NRCS
3. Background: Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS, Esri Community Maps Contributors, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census

Stantec

Project Location
Obion Co., TN

Prepared by pmarsey on 12/20/2024

Client/Project 172608872
Tennessee Valley Authority
TVA FY25 Obion County
Environmental Assessment Report

Figure No.
1F

Title
NRCS Soils

Q:\gis_projects\172608872\03_data\gis_cad\TVA - Obion County\TVA - Obion County.aprx Revised: 2024-12-20 By: pmarsey

Attachment 2

Agency Correspondence

TENNESSEE VALLEY AUTHORITY

400 West Summit Hill Drive, Knoxville, Tennessee 37902

February 7, 2025

Mr. E. Patrick McIntyre, Jr.
Executive Director
and State Historic Preservation Officer
Tennessee Historical Commission
2941 Lebanon Pike
Nashville, Tennessee 37243-0442

Dear Mr. McIntyre:

TENNESSEE VALLEY AUTHORITY (TVA), ECONOMIC DEVELOPMENT, NORTHWEST TENNESSEE REGIONAL INDUSTRIAL CENTER, OBION COUNTY, TENNESSEE (36.458623, -89.045260) (TVA TRACKING NUMBER – CRMS ID 98904306559)

TVA is providing financial assistance to the City of Union City, Tennessee to assist with the =grading of a 100,000 square foot dirt building pad, grading of a detention pond, geotechnical boring, creation of a marketing road, and the graveling of an existing dirt road. A total of 4.7 acres of trees will also be removed as a part of the project. The project area is located along Greenfield Drive in Union City, Tennessee. The purpose of this project is to place the property in a more marketable position for acquisition and future development. TVA has determined that this project is an undertaking (as defined at 36 CFR § 800.16(y)) that has the potential to cause effects on historic properties. Given that the proposed project does not involve the construction of above-ground structures, visual impacts to historic architectural resources are unlikely. Therefore, TVA recommends that the Area of Potential Effects (APE) be considered the project footprint (70 acres) where physical effects could occur.

TVA's background research determined no cultural resource surveys had been conducted in the APE. The background research also determined that no historic architectural structures are located within the APE or within direct line of sight of the APE. Due to the lack of previous survey coverage, TVA contracted Stantec Consulting Services Inc. (Stantec) to carry out a Phase I archaeological survey of APE. Please find attached a copy of the draft report titled, *Phase I Cultural Resources Survey for the Northwest Tennessee Regional Industrial Center, Obion County, Tennessee.*

Stantec conducted an archaeological survey of the APE consisting of shovel testing and visual inspections. A total of 290 shovel tests were excavated in the project area and all but three were negative for cultural material. The three positive shovel tests represent isolated finds containing historic period refuse. Isolated finds are not considered eligible for listing in the National Register of Historic Places (NRHP). No additional cultural resources were identified during the survey. Stantec recommended no additional archaeological work in the APE.

TVA agrees with the methodology and recommendations of the Stantec survey report. TVA finds the proposed undertaking, as currently planned, would have no effect on historic properties.

Pursuant to 36 CFR Part 800.3(f)(2), TVA is consulting with federally recognized Indian tribes regarding historic properties within the proposed project's APE that may be of religious and cultural significance and are eligible for the NRHP.

Pursuant to 36 CFR Part 800.4(d)(1) we are notifying you of TVA's finding of no historic properties affected; providing the documentation specified in § 800.11(d); and inviting you to review the finding. Also, we are seeking your agreement with TVA's finding that the undertaking as currently planned will have no effects on historic properties.

Please contact Derek Reaux by email, djreaux@tva.gov with your comments.

Sincerely,

Michaelyn Harle
Manager, Cultural Project Reviews, Environment and Economic Development and Deputy Federal Preservation Officer
Cultural Resources

DJR:ERB
Enclosures
cc (Enclosures):
Ms. Jennifer Barnett
Tennessee Division of Archaeology
1216 Foster Avenue, Cole Bldg. #3
Nashville, Tennessee 37210

From:	TN Help
To:	Beliles, Emily
Cc:	Reaux, Derek; Harle, Michaelyn S
Subject:	Northwest Tennessee Regional Industrial Center, Econonmic Development; CRMS 98904306559 - Project # SHPO0006432
Date:	Friday, February 7, 2025 11:11:22 AM
Attachments:	image image

TENNESSEE HISTORICAL COMMISSION
STATE HISTORIC PRESERVATION OFFICE
2941 LEBANON PIKE
NASHVILLE, TENNESSEE 37243-0442
OFFICE: (615) 532-1550
www.tnhistoricalcommission.org

02-07-2025 10:09:58 CST

Micahelyn Harle
Tennessee Valley Authority

RE: Tennessee Valley Authority (TVA), Northwest Tennessee Regional Industrial Center, Economic Development; CRMS 98904306559, Project#: SHPO0006432, Union City, Obion County, TN

Dear Micahelyn Harle:

In response to your request, we have reviewed the archaeological resources survey report and accompanying documentation submitted by you regarding the above-referenced undertaking. Our review of and comment on your proposed undertaking are among the requirements of Section 106 of the National Historic Preservation Act. This Act requires federal agencies or applicants for federal assistance to consult with the appropriate State Historic Preservation Office before they carry out their proposed undertakings. The Advisory Council on Historic Preservation has codified procedures for carrying out Section 106 review in 36 CFR 800 (Federal Register, December 12, 2000, 77698-77739).

Considering the information provided, we concur with your agency that no historic properties eligible for listing in the National Register of Historic Places will be affected by this undertaking. If project plans are changed or archaeological remains are discovered during project construction, please contact this office to determine what

further action, if any, will be necessary to comply with Section 106 of the National Historic Preservation Act. Please provide your Project # when submitting any additional information regarding this undertaking. Questions or comments may be directed to Jennifer Barnett, who drafted this response, at Jennifer.Barnett@tn.gov, +16156874780.

Sincerely,

E. Patrick McIntyre, Jr.
Executive Director and
State Historic Preservation Officer

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