

Department of Commerce

National Telecommunications and Information Administration

March 2025

Environmental Assessment

Old Pearson Road (US-MS-5200) – Proposed 211-Foot Tall Self-Supporting Lattice Telecommunications Structure – Middle Mile Grant Award # 08-40-MM228

2622 S Pearson Road Richland, Rankin County, Mississippi Latitude: N 32° 12' 53.1" Longitude: W 90° 7' 46.3"

Table of Contents

1.0	Executive Summary	1
2.0	Purpose and Need	2
3.0 3.1 3.2	Description of Proposed Action and Alternatives	5
3.2 3.3 3.4 3.5	No Action Alternative	9 9
4.0	Description of the Affected Environment	
4.1	Noise	10
4.2	Air Quality	
4.3	Geology and Soils	
4.4	Water Resources	
4.5	Biological Resources	12
4.6	Historic and Cultural Resources	14
4.7	Aesthetic and Visual Resources	15
4.8	Land Use	15
4.9	Infrastructure	16
4.10	Human Health and Safety	16
5.0	Analysis of Environmental Impacts	16
5.1	Noise	16
5.2	Air Quality	18
5.3	Geology and Soils	18
5.4	Water Resources	19
5.5	Biological Resources	19
5.6	Historic and Cultural Resources	
5.7	Aesthetic and Visual Resources	
5.8	Land Use	23
5.9	Infrastructure	23
5.10	Human Health and Safety	24
6.0	Cumulative Impacts	25
7.0	Applicable Environmental Permits and Regulatory Requirements	26
8.0	Consultations	27
9.0	References	28

List of Tables

Table 4-1: Non-Aquatic Federally and State Endangered or Threatened Species	13
Table 5-1: Federally Endangered or Threatened Species Findings Summary	21
Table 7-1: Potential Applicable Statutory, Regulatory, and Other Requirements	26
Table 8-1: Agency Consultations	27
List of Figures	
Singue 2.4 Coords Bins	2
Figure 2-1 Search Ring	
Figure 2-2 Existing Heat Coverage Map Figure 2-3 Proposed Heat Coverage Map	
Figure 3-1 Aerial Photograph	
Figure 3-2 Site Plan with Power Utilities Figure 3-3 Site Plan with Fiber Utilities	
Figure 3-4 Site Plan with Stormwater and Sediment Controls	
rigure 3-4 site rian with stormwater and sediment controls	
APPENDIX A - Site Maps and Photographs	
APPENDIX B - Air Quality and EPA Programs	
APPENDIX C - Geology and Soils	
APPENDIX D - Water Resources	
APPENDIX E - Biological Resources	
APPENDIX F - Historic and Cultural Resources	
APPENDIX G - List of Preparers	

1.0 Executive Summary

The Towers, LLC, is utilizing Middle Mile Grant Program funding, provided by the National Telecommunications and Information Administration (NTIA), for the construction of a proposed 211-foot tall overall height self-supporting lattice telecommunications structure within Rankin County, Mississippi. The Proposed Action is being completed as part of a larger initiative to improve communications infrastructure within the State of Mississippi.

The proposed tower facility would support wireless antennas and associated equipment necessary to provide wireless voice and data communications. The Proposed Action is needed to offload wireless traffic currently being served by existing on-air macro tower sites to the north, west, east, and south of the Proposed Action that have been exhausted with heavy usage stemming from massive expansion in customer demand in recent years. Current wireless coverage in these areas is weak, and without the Proposed Action, coverage is likely to get worse as demand in the areas is anticipated to increase. The Proposed Action would improve access to reliable and modern wireless communications capabilities for surrounding areas of Rankin County, Mississippi in the vicinity of the Proposed Action site and allow users to continue to have reliable service over the long term. Benefits to the population would include, but are not limited to, improved communications infrastructure, increased educational and economic opportunities, and better access to healthcare services, including telehealth services.

The Proposed Action includes a proposed 211-foot-tall self-supporting lattice telecommunications structure and associated ground-level equipment that would be constructed within a proposed 75-foot by 75-foot fenced compound which would be situated within an 80-foot by 80-foot proposed lease area. The proposed facility would include an approximate 263-foot long by 30-foot-wide access/utility easement. Ground level equipment within the compound would include two equipment cabinets and an associated canopy, two utilities H-frames, and a 50kw backup generator. The proposed cabinets and generator would be placed on concrete slabs. Further, two, three-inch underground power conduits would be installed at an approximate depth of 36 inches within the access/utility easement from the proposed compound to a new power pole within the access/utility easement. From the power pole, overhead power lines would extend to an existing power pole located east of Old Pearson Road in order to avoid additional ground disturbance within the right-of-way. Underground fiber would be installed in the access/utility easement within two, two-inch conduits from the proposed compound to a new handhole located where the access/utility easement meets the Old Pearson Road right-of-way.

In addition, to manage stormwater runoff, The Towers, LLC, proposes a temporary 1-foot by 100-foot silt fence barrier to the west of the lease area, a 3-foot-wide swale installed within a 5-foot by 90-foot installation area to the south of the lease area, and a 3-foot-wide swale and a 15-foot long by 12-inch diameter culvert installed within a 5-foot by 80-foot installation area to the north of the lease area. An additional approximate 30-foot long by 18-inch diameter culvert would be installed north of the proposed lease area. The proposed swale and culverts would extend across the proposed access and utility easement. For purposes of the Environmental Assessment documentation, the footprint of the Proposed Action includes the entire lease, easement, silt fence, swale areas and the proposed power pole. In total, the Proposed Action area would total approximately 0.4 acres. Throughout the planning process, special care was taken to select site locations that were deemed to have a low likelihood to result in adverse

impacts to the natural or human environment. Adverse impacts on all resources were determined to be less than significant.

The Proposed Action is subject to the National Environmental Policy Act (NEPA) codified at 42 U.S.C. 4321, et seq; this Environmental Assessment is prepared in accordance with NEPA.

2.0 Purpose and Need

Purpose

The purpose of the Proposed Action is to improve and enhance reliable wireless voice and data communications to surrounding areas of Rankin County, Mississippi. The enhanced capabilities and reliability of voice and data communications resulting from the proposed action would provide additional economic and educational opportunities and access to previously inaccessible telehealth care services for the surrounding communities.

Need

Rural areas are consistently underserved communities as it relates to access to fiber and broadband communications infrastructure, which at one time was considered a luxury, but is now a basic utility for households and businesses. While improvements to communications technologies continue to evolve and improve, rural communities are geographically isolated with low population density, resulting in a lack of the necessary investment in communications infrastructure. Further, the use of alternative means of such communication (such as satellite internet access) are prohibitively expensive for members of these communities. The lack of investment in such infrastructure results in disparities in education, economic opportunities, health, and overall quality of life for current and future members of these communities.

Current wireless coverage in residential areas to the north, west, east, and south of the Proposed Action is weak, and without the Proposed Action, coverage is likely to get worse as demand in the areas is anticipated to increase. The Proposed Action is needed to offload wireless traffic currently being served by existing on-air macro tower sites to the north, west, east, and south of the Proposed Action that have been exhausted with heavy usage stemming from massive expansion in customer demand in recent years. The Proposed Action would improve access to reliable and modern wireless communications capabilities for surrounding areas of Rankin County, Mississippi in the vicinity of the Proposed Action site and allow users to continue to have reliable service over the long term. Benefits to the population would include, but are not limited to, improved communications infrastructure, increased educational and economic opportunities, and better access to healthcare services, including telehealth services.

The specific search ring used to identify a suitable site for a proposed communications facility to meet the needs discussed above is an approximate 0.5-mile radius as shown in Figure 2-1 below. It was determined that a tower height of no less than 200' would be required to satisfy the coverage needs. The heat maps included in Figures 2-2 and 2-3 below show the existing coverage and anticipated coverage that would be provided by the proposed action. As shown in Figure 2-3, wireless coverage would be improved within areas where wireless coverage is currently weak.





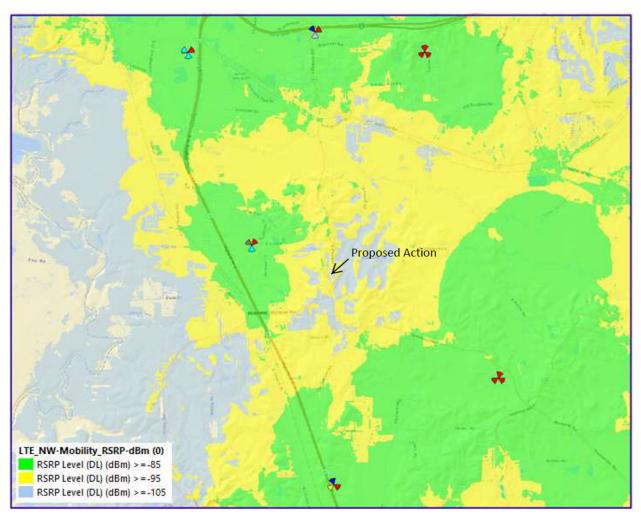


Figure 2-2 Existing Heat Coverage Map

RSRP – Reference Signal Received Power in which >=85 dBm is considered excellent and 85-95 dBm is considered good.

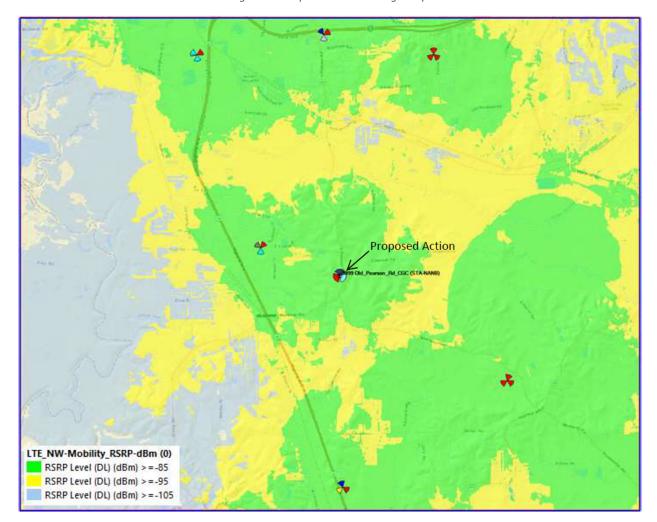


Figure 2-3 Proposed Heat Coverage Map

RSRP – Reference Signal Received Power in which >=85 dBm is considered excellent and 85-95 dBm is considered good.

3.0 Description of Proposed Action and Alternatives

3.1 Introduction

NEPA requires that the NTIA evaluate both the Proposed Action as well as reasonable alternatives that would also accomplish the purpose and need of the Proposed Action. At minimum, a No Action Alternative must be considered as part of the Alternatives Analysis.

3.2 Proposed Action

The Proposed Action is comprised of a single telecommunications facility located within western Rankin County, Mississippi. The Proposed Action is located on privately-owned land. The project area is located in a formerly wooded area that appears to have been cleared in 2021 in relation to a larger development and is currently occupied by a dirt drive and a cleared/vacant area (Figure 3-1). The Proposed Action includes a proposed 211-foot-tall self-supporting lattice telecommunications

structure and associated ground-level equipment that would be constructed within a proposed 75-foot by 75-foot fenced compound which would be situated within an 80-foot by 80-foot proposed lease area. The proposed facility would include an approximate 263-foot long by 30-foot-wide access/utility easement. Ground level equipment within the compound would include two equipment cabinets and an associated canopy, two utilities H-frames, and a 50kw backup generator. The proposed cabinets and generator would be placed on concrete slabs. Further, two, three-inch underground power conduits would be installed at an approximate depth of 36 inches within the access/utility easement from the proposed compound to a new power pole within the access/utility easement. From the power pole, overhead power lines would extend to an existing power pole located east of Old Pearson Road in order to avoid additional ground disturbance within the right-of-way. Underground fiber would be installed in the access/utility easement within two, two-inch conduits from the proposed compound to a new handhole located where the access/utility easement meets the Old Pearson Road right-of-way.

In addition, to manage stormwater runoff, including sediment and erosion control, The Towers, LLC, proposes a temporary 1-foot by 100-foot silt fence barrier to the west of the lease area, a 3-foot-wide swale installed within a 5-foot by 90-foot installation area to the south of the lease area, and a 3-foot-wide swale and a 15-foot long by 12-inch diameter culvert installed within a 5-foot by 80-foot installation area to the north of the lease area. An additional approximate 30-foot long by 18-inch diameter culvert would be installed north of the proposed lease area. The proposed swale and culverts would extend across the proposed access and utility easement. For purposes of the Environmental Assessment documentation, the footprint of the Proposed Action includes the entire lease area, access/utility easement, silt fence, swale areas, and overhead utilities extending to an existing utility pole on the east side of Old Pearson Road. In total, the Proposed Action area would total approximately 0.4 acres. No tree clearing or trimming is anticipated for the Project, though removal of minimal ruderal vegetation (grasses and weeds) within the previously cleared and graded site footprint would occur. Site Plans are provided in Figures 3-2, 3-3, and 3-4 below.

Construction work for the Proposed Action would begin with the project areas being cleared and graded as necessary using a mini-excavator / skid steer and three 4-foot diameter caissons being drilled at the proposed tower legs to a depth of approximately 15 feet below ground surface. Proposed silt fencing would also be installed during this initial phase. Additional excavation activities would include preparation for tower grounding and fiber and power vaults and associated conduits. The standard workday for this project is expected to last from 7am to 7pm. The skid steer is expected to be required for three workdays, the excavator is expected to be required for three workdays, and the drill rig is expected to be required for five workdays.

Following initial civil work, concrete would be poured for the tower foundation and generator and equipment pads to be located in the tower compound. Following curing, concrete inspection and strength testing would be completed.

Once concrete inspections and strength testing are completed, a crane would be utilized to assemble the proposed lattice tower. The crane would be staged within the proposed project area and would be required for two workdays. Ice bridges, antennas and cables, vaults and conduits, generators, and the grounding systems would then be installed, followed by backfill and compaction activities, and installation of the proposed swales and culverts. Following completion of equipment installation and

power and fiber connection, power up and testing activities would be completed. Installation of gravel and landscaping (as necessary), barbed-wire fencing, security hardware, and site signage would mark the completion of construction for the Proposed Action site. In total, construction activities are anticipated to last approximately 60 days and are expected to begin in 2025.

The site location and additional site-specific design details are depicted below. Site maps, plans, and photographs are also provided in Appendix A.



Figure 3-1 Aerial Photograph

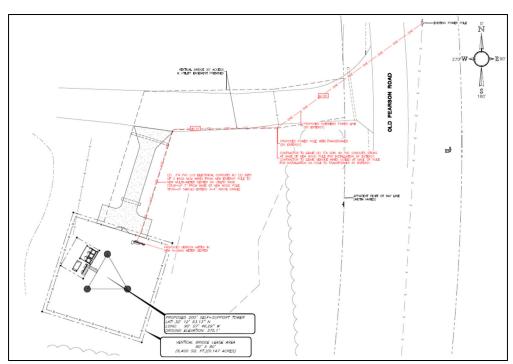
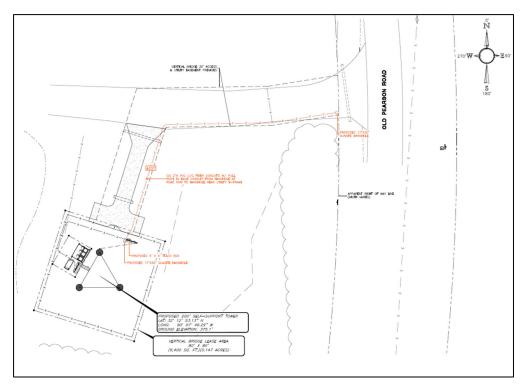


Figure 3-2 Site Plan with Power Utilities

Figure 3-3 Site Plan with Fiber Utilities



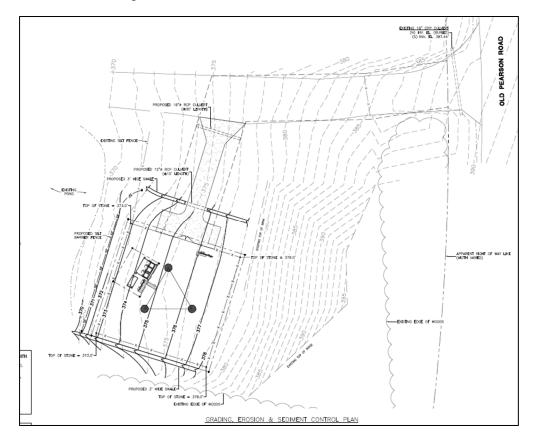


Figure 3-4 Site Plan with Stormwater and Sediment Controls

3.3 No Action Alternative

The "No Action" Alternative, which must be assessed in accordance with Federal NEPA regulations, assumes no Federal funding is provided by the Middle Mile Grant Program for the construction of the wireless telecommunications facility. The existing communications infrastructure in areas surrounding the Proposed Action would continue to operate in their current capacity with no changes to communications capabilities for the surrounding communities and would provide no relief to the unserved or underserved rural communities.

Benefits of the No Action Alternative would include avoiding any potential impacts to the project site location as a result of construction activities for the new tower facility (such as the generation of emissions of particulate matter, noise, and solid waste or impacts to any cultural resources) as well as any potential impacts to aesthetics in the area surrounding the project site.

3.4 Alternatives

Based on the purpose and need of the Proposed Action, a total of three alternatives were considered during the EA Process:

- 1. Proposed Action Alternative: Construction, operation, and maintenance of the Proposed Action in order to best satisfy the carrier's coverage objective within the search ring.
- 2. Other Tower Locations: Two other site locations within the search ring were considered. The first alternative location considered was an existing self-supporting lattice telecommunication

structure located at 32.219188°N, 90.130048°W, approximately 1,600 feet north of the Proposed Action location. The second location was a new tower located at 32.220053°N, 90.130730°W, approximately 1,950 feet to the northwest of the Proposed Action location.

3. No Action Alternative: The Proposed Action would not be constructed, and residents in the surrounding area would remain underserved in regard to voice and data communications.

While all three alternatives were considered, only the Proposed Action Alternative and the No Action Alternative are being carried forward for analysis in this EA. The "Other Tower Locations" alternative is further discussed below in Section 3.5, Alternatives Considered but Eliminated from Further Discussion.

3.5 Alternatives Considered but Eliminated from Further Discussion

The first Other Tower Location that was considered but eliminated from further discussion was an existing tower located north of the Proposed Action location. The tallest available colocation height on this tower was 168 feet, which would not satisfy the 200-foot height the carrier required to meet their coverage objectives. The second Other Tower Location that was considered but eliminated from further discussion was a new tower located to the northwest of the Proposed Action site, within the proposed search ring. This location has a ground elevation approximately 20 feet less than the Proposed Action location. The tower height required to match the height needed to satisfy the coverage objectives would not have been feasible due to zoning restrictions in the area.

4.0 Description of the Affected Environment

4.1 Noise

Noise can be broken into two groups, ambient and anthropogenic. Ambient noise tends to originate from natural sources such as wind and wildlife. Ambient noise levels in and around the general Proposed Action are primarily low and limited due to the rural and residential nature of the project area. Anthropogenic noise levels around the Proposed Action originate from adjacent roadways and rural residential developments. Data from the Mississippi Department of Transportation's Traffic Count Application estimates an Annual Average Daily Traffic count of 3,600 vehicles along Old Pearson Road in 2023 (MDOT 2024). The typical sound level of road traffic from approximately 50 feet away is about 85 dBA (Center for Environmental Excellence 2025). The Proposed Action Area is zoned as Residential Estate mix (Rankin County Map Viewer 2025). According to the Rankin County Ordinances, there is no applicable sound ordinance for this zoning category. Development in the immediate area surrounding the project is very low density, however, there is an increased number of residential developments further away from the Proposed Action area. Numerous residences and a church which may be considered sensitive receptors are located within 0.5 miles of the Proposed Action. The nearest residence is approximately 300 feet south of the Proposed Action and fronts Old Pearson Road. A church, Ebenezer CME Church, is located approximately 1,400 feet northeast of the Proposed Action. These resources each front roadways and would experience similar anthropogenic noise levels from typical roadway traffic. In addition, there are no passive parks, preserves or other sensitive receptors within 0.5 miles of the project site.

4.2 Air Quality

Under the Clean Air Act (CAA), the US Environmental Protection Agency (USEPA) establishes National Ambient Air Quality Standards (NAAQS) to protect public health and welfare (see 40 CFR 50). The CAA requires states to regulate air pollution emission sources to meet and maintain NAAQS, which establish maximum acceptable concentrations for criteria pollutants, including nitrogen dioxide (NO2), carbon monoxide (CO), sulfur dioxide (SO2), particulate matter with an aerodynamic diameter of 10 microns or less (PM10), particulate matter with an aerodynamic diameter of 2.5 microns or less (PM2.5), ozone (O3), and lead. According to the Mississippi Department of Environmental Quality (MDEQ) Air Quality Division, the state implementation plan strategy for NO2, CO, SO2, PM10, PM2.5, O3, and lead meet the national ambient air quality standards (MDEP 2024). In addition, no applicable permits are required for any stationary or operational equipment, including the proposed generator.

The Proposed Action site is located in an attainment area for the above listed criteria pollutants (EPA Nonattainment and Maintenance Area Dashboard).

4.3 Geology and Soils

Geologically, Proposed Action site is located within the Jackson Prairie Physiographic Region of the Coastal Plain Physiographic Province. This region is characterized by broad hills and irregular plains. Historically, vegetation consisted of mixed hardwoods and pine forests with irregular prairies. Today, the region has several uses, including grazing, livestock, agriculture, and forested and pine plantations (Natural Atlas 2025).

The Proposed Action site is located within the Loess Plains of the Mississippi Valley Loess Plains ecoregion, specifically within the Loess Plains Plain subregion. This region is characterized primarily of irregular plains and some gently rolling hills. Oak-hickory, oak-hickory-pine, and some mixed mesophytic forests were the dominant natural vegetation. Today, there is a mosaic of forest and cropland. Once a highly productive agricultural area in Mississippi, the Loess Plains ecoregion is now reverted to a mixed forest landscape with many areas now in pine plantations (U.S. Environmental Protection Agency 2024). According to the USDA Web Soil Survey (Appendix C), soils located within the Proposed Action site consists of Tippah silt loam, 2 to 5% slopes (35B2) and Smithdale-Providence complex, 8 to 17% slopes (65D). Tippah is classified as "All areas are prime farmland" and Smithdale is classified as "Not prime farmland." Portions of the Proposed Action footprint that are mapped as prime farmland soils are occupied by an existing dirt drive which would be utilized for access and utilities routing for the proposed facility. Additionally, the Proposed Action site was not identified on the Protected Agricultural Lands Database.

A Geotechnical Investigation Report prepared for the Proposed Action by Delta Oaks Group and dated November 18, 2024, noted drill refusal and weathered rock at 38 to 40 feet below ground surface (bgs), suggesting the presence of bedrock at this approximate depth (Appendix C). Soils lying above refusal depths consisted of sandy clay, lean clay, and clayey sand with limestone fragments encountered at 20 to 30 feet bgs.

4.4 Water Resources

Surface Water

According to the Natural Resources Review Update (NR Update) prepared November 4, 2024, the Proposed Action site is not located within or near surface waters. A pond is noted on the provided

Construction Drawings; however, this feature is better characterized as an area of standing water. A review of aerial photographs shows that this feature formed within the past five years in association with the dirt road that was constructed in relation to the previous land use of the parent tract for what appear to be borrow operations further to the west. This feature is located approximately 25 feet to the west of the edge of the proposed lease area. The nearest mapped feature is a stream located approximately 1,300 feet to the west. Additionally, the U.S. Fish and Wildlife Service's (USFWS) National Wetlands Inventory indicated no wetlands within or in the immediate vicinity of the footprint of the Proposed Action site (Appendix D).

Groundwater

According to the USEPA, the Proposed Action site is not located near a Sole Source Aquifer (USEPA Map of Sole Source Aquifer Locations, 2025). Based on a review of USGS's National Water Information System data, depth to groundwater at the Proposed Action area is likely greater than 90 feet. The most recent regional groundwater depth measurement is from a well located approximately 0.10-miles southwest of the proposed action area, with a well depth of 760 feet. The Geotechnical Investigation Report referenced in Section 4.3 did not encounter groundwater to 40 feet bgs.

Coastal Zone, Estuary and Inter-tidal Areas

The Proposed Action site is not located within or near coastal zones, estuaries, or inter-tidal areas (USFWS Coastal Barrier Resource System 2024) (Mississippi Office of Coastal Resources Management 2025).

Floodplains

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Panel 28121C0309F dated June 9, 2014, the Proposed Action area would not be located within a Special Flood Hazard Area of the 100-year floodplain (Appendix D).

Wild and Scenic Rivers

According to the National Wild and Scenic Rivers System, the Proposed Action site is not located within or adjacent to a Wild and Scenic River corridor (National Wild and Scenic Rivers System 2024). The nearest Wild and Scenic River is Black Creek, located approximately 100 miles from the Proposed Action site.

4.5 Biological Resources

Threatened and Endangered Species

The Endangered Species Act (ESA) requires that federal agencies, in consultation with the U.S. Fish and Wildlife Service (USFWS), must ensure that projects they fund, authorize, or carry out are not likely jeopardize the continued existence of listed species nor result in the destruction or adverse modification of designated critical habitat of such species. The law also prohibits any action that causes a "taking" of any species listed under the ESA.

Mississippi Department of Wildlife, Fisheries, and Parks (MDWFP) regulates state-listed threatened and endangered animal species. The capture, trap, take, or killing of state-listed threatened and

endangered animal species is unlawful unless expressly authorized under a permit issued by the USFWS or MDWFP.

The proposed action area is most cleared and graded land and an existing dirt drive. Vegetation, if present, is generally ruderal in nature and consists of successional weeds and grasses. Adjoining areas consist of mixed pine/hardwood forest and disturbed areas. Based on the disturbed nature of the Proposed Action area, wildlife utilization is expected to be minimal but may consist of typical wildlife species of the area including songbirds, deer, racoons, opossums, racoons, squirrels, snakes, and lizards.

An Official Species List generated from the US Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) tool was reviewed for federally listed and proposed threatened and endangered species that may be present at the Proposed Action site. Further, The MDWFP Rare, Threatened, and Endangered Species report was reviewed for state and federally listed species that have been documented by MDFWP as occurring in Rankin County. A list of these species is provided in Table 4-1 below. Further discussion of specific habitat generally occupied by the identified species is included in Section 5.5 and within the Natural Resources Review and Natural Resources Review Update prepared for the Proposed Action site and included in Appendix E.

Common Name	Scientific Name	Federal Status (IPaC)	State Status
Tri-colored Bat	Perimyotis subflavus	Proposed Endangered	Candidate
Alligator Snapping	Machrochelys temminckii	Proposed Threatened	-
Turtle			
Monarch Butterfly	Danaus plexippus	Proposed Threatened	-
Gulf Sturgeon	Acipenser oxyrinchus desotoi	Threatened*	Endangered
Ringed Map Turtle	Graptemys oculifera	Threatened*	Endangered
Inflated Heelsplitter	Potamilus inflatus	Threatened*	Endangered
Louisiana Black Bear	Ursus americanus luteolus	-	Endangered

Table 4-1: Federally and State Endangered or Threatened Species

<u>Critical or Threatened / Endangered Habitat</u>

The Proposed Action is located within the Mississippi Valley Loess Plains ecoregion. This region is characterized by primarily of irregular plains and some gently rolling hills (see discussion in Section 4.3) (USEPA 2024).

According to the USFWS Critical Habitat Mapper and the IPaC Official Species List reviewed, no designated or proposed critical habitat is located within the vicinity of the Proposed Action site. Additionally, no suitable habitat for endangered or threatened species exists within the footprint of the Proposed Action site (See Table 5-1).

Migratory Birds, Eagles, and Their Habitat

Executive Order 13186 requires Federal agencies to work with the USFWS to provide protection for migratory birds. These species are protected under the 1918 Migratory Bird Treaty Act (MBTA) (16 USC 703), which prohibits the taking of any migratory birds, their parts, nests, or eggs.

^{*}Federal status per MDWFP Rare, Threatened, and Endangered Species report; Not included on Federal IPaC Official Species list

Eagles are protected by the MBTA and the Bald and Golden Eagle Protection Act (BGEPA). This law, originally passed in 1940, provides for the protection of the bald eagle and the golden eagle (as amended in 1962) by prohibiting the take, possession, sale, purchase, barter, offer to sell, purchase or barter, transport, export or import, of any bald or golden eagle, alive or dead, including any part, nest, or egg, unless allowed by permit (16 U.S.C. 668(a); 50 CFR 22). "Take" includes pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb (16 U.S.C. 668c; 50 CFR 22.3).

A list of Migratory Birds identified by IPaC can be found Appendix E. The Proposed Action site is located within the Mississippi North American Migratory Bird Flyway. Based on the cleared nature of the Proposed Action site, it is anticipated that the site would provide less than optimal habitat for migratory birds. Minimal vegetation is present that could provide opportunities for migratory bird nesting or foraging or the general presence of migratory birds.

Breeding territories for bald eagles in Central Mississippi are located mostly along rivers and near reservoirs with large, tall $(40-120~\rm ft)$ trees for nesting and roosting. Nests are usually located within one mile of water, such as lakes, reservoirs, creeks, or rivers, and are often located in the ecotone between forest and water. The Proposed Action site is surrounded primarily by cleared and wooded land and residential development. The nearest large body of water is over twelve miles to the northeast (Ross R Barnett Reservoir). Based on a review of data available through iNaturalist.org and ebird.org data, the nearest eagle observation is approximately 8 miles to the north of the Proposed Action.

Wetlands Habitat

The Proposed Action site does not include areas that would provide wetlands habitat for protected species or other wetland-dependent species. As discussed in Section 4.4, a man-made wetland area may be present within approximately 25 feet to the west of the proposed lease area. Although wetland dependent species such as frogs and turtles may utilize this apparently disturbed area, the area is not anticipated to provide suitable habitat for protected species.

4.6 Historic and Cultural Resources

<u>Archaeological and Architectural Resources</u>

The Proposed Action site is not occupied by historic structures.

In July of 2020, the Advisory Council on Historic Preservation (ACHP) approved amendments to the *Program Comment to Avoid Duplicative Reviews for the Wireless Communications Facilities Construction and Modification*. This Program Comment allows select agencies, including NTIA, to rely on existing Federal Communications Commission (FCC) Section 106 procedures for those undertakings also subject to *Section 106 review under the Nationwide Programmatic Agreement for Review of Effects on Historic Properties for Certain Undertakings Approved by the FCC* (FCC Nationwide PA) and the *Nationwide Programmatic Agreement for the Collocation of Wireless Antennas*, as amended (FCC Collocation PA).

A Phase I Cultural Resources Survey was originally conducted in 2022 per the Mississippi Department of Archives and History (MDAH) state guidelines and the FCC Nationwide PA for the Proposed Action site for the purpose of identifying and addressing potential impacts to historic and cultural resources that may be located within the areas of potential effects (APEs) for the Proposed Action. Cultural

records and databases were reviewed and identified no cultural resources and no surveys within the APE for direct effects. No Historic Properties that are listed in or eligible for listing in the National Register of Historic Places (NRHP) were identified within the ¾-mile APE for visual effects. The Phase I survey did not uncover cultural resources within the APE for direct effects. The Proposed Action site is not occupied by historic structures.

Subsequently, two addendum letters were submitted to the MDAH to address changes to the proposed undertaking. An Archaeology Addendum to the original FCC Form 620 was submitted to the MDAH on October 25, 2024. An Addendum to FCC Form 620 was also submitted to the MDAH on November 5, 2024, addressing changes to the proposed design and stating that the tower would now be constructed by The Towers, LLC instead of by Verizon Wireless (Appendix F). No responses were received from the MDAH within the Nationwide PA mandated 30-day review period. The updated cultural records and databases were reviewed and identified no cultural resources on one survey (22-0371) within the APE for direct effects. No Historic Properties that are listed in or eligible for listing in the NRHP were identified within the ¾-mile APE for visual effects. A new Phase I survey was not conducted within the APE for direct effects as the alterations to the project plans do not significantly alter the archaeological findings of the 2022 Phase I Cultural Resources Survey, and the Proposed Action site is not occupied by historic structures.

Native American Traditional, Cultural or Religious Resources

Eleven federally recognized Tribes were identified that may attach religious and cultural significance to historic properties within the area of the Proposed Action site. Each interested tribe received initial notification from the Tower Construction Notification System (TCNS) system by August 26, 2022. Additionally, tribes were provided with updates to the proposed site plans on October 31, 2024, with their review period completed on November 30, 2024. All tribal responses and requests for information were met as shown in the Appendix F table "Tribal Correspondence Summary Table." Further discussion of Tribal consultation efforts is provided in Section 5.6.

4.7 Aesthetic and Visual Resources

The Proposed Action site is located within a dirt drive extending west from S Pearson Road and within a cleared/vacant lot. The surrounding area is generally characterized by rural, residential development, wooded, and grassed lands, and transportation development. Utilizing the ¾-mile Area of Potential Effects for Historic Resources, there were no sensitive visual receptors identified.

A review of the Mississippi Department of Archives and History HRID mapper, the National Map Viewer, the National Park Service Map Finder, and Google Earth indicated no recreational areas, natural features, notable architectural features, designated wilderness or wilderness study areas, national scenic or historic trails, or national or state parks are located within the vicinity of the Proposed Action site.

4.8 Land Use

Based on a site visit completed in 2022 and a review of recent aerial photography (2020-2023) the Proposed Action site consists of an area that was previously cleared and used as a borrow operation (soil and/or gravel). The Proposed Action site is zoned as Residential Estate mix (Rankin County Map Viewer 2025), is not currently developed, and does not appear to have been used for borrow

operations since 2022. Surrounding land use for the site is characterized by wooded and grassed land, and residential and transportation development.

4.9 Infrastructure

Infrastructure within close proximity to the Proposed Action site generally consists of a public road (S Pearson Road) from which access to the proposed facility would be provided. No additional infrastructure, such as power, water, or communications, are located within the footprint of the Proposed Action site, though the potential exists for buried utilities along the S Pearson Road right-of-way. A proposed power pole would be located within the proposed access/utility easement that would connect to an existing power pole across the S Pearson Road via overhead power lines. Any existing buried utilities within the S Pearson Road right-of-way, would be identified prior to construction via the state 811 calls as discussed below in Section 5.11.

4.10 Human Health and Safety

The Proposed Action site is currently a dirt drive adjacent to S Pearson Road and a cleared/vacant lot. The current operations at the Proposed Action site present no concerns to human health and safety. The Proposed Action site appears to have been cleared/graded, and a road constructed in association with a borrow operation but no longer has any current use and remains undeveloped and occupied by an unimproved dirt road. No hazardous waste sites or registered USTs were identified within the immediate vicinity of the Proposed Action (GARD database and EPA UST Finder).

Human health and safety concerns for the Project Area may results from the proximity of the proposed infrastructure and individual residences where damage to human health or property could occur if a tower were to fall. The local jurisdiction requires a 200-foot setback radius from residences. The proposed tower would be 361 feet from the nearest residence. Utilities servicing the towers would be buried along easements and would be extended overhead across S Pearson Road. Buried utilities would be marked with tracer lines, warning tape, and contained within conduit. Federal regulatory requirements addressing worker safety, protection, and health are administered and enforced by the Occupational Safety and Health Administration (OSHA). OSHA establishes worker protection standards that must be followed to prevent and minimize potential safety and health risks. Mississippi is not a state with an approved OSHA state plan, meaning federal OSHA regulations apply directly within the state. During construction, OSHA safety standards will be enforced for contractors and their employees. Following construction, there would be no threats to human health and safety from either the tower or the broadband equipment. The tower site will be fenced and posted to prevent unauthorized access to the tower. "NO TRESPASSING" signs will be posted. Climbing pegs will be removed from the tower below 10'. The installation of broadband will likely have a positive impact on the health of residents in the community, since they will be able to access telehealth services. Electromagnetic energy emitted by antennas will be below the permissible limits under the FCC's exposure limits, as required.

5.0 Analysis of Environmental Impacts

5.1 Noise

The Proposed Action would result in a negligible and temporary increase in anthropogenic noise levels during construction and installation activities. Anthropogenic noise sources have the highest potential to generate noise pollution and are further described below with the specification noise

levels for such equipment per Federal Highway Administration Construction Noise Handbook ([FHWA] 2017).

Anthropogenic potential noise from the construction of the Proposed Action could include the following temporary noise:

• Mobile equipment (i.e., equipment that operates in a cyclic fashion in which a period of full power is followed by a period of reduced power), including earth moving equipment such as an excavator (85 a-weighted decibels [dBA]), a crane (85 dBA), a skid steer (80dBA) a trencher or other equipment greater than 5 horsepower (85 dBA), haul or dump trucks (84 dBA), a concrete mixer truck (85 dBA), and passenger vehicles such as pickup trucks (55 dBA).

Anthropogenic potential noise from the operations of the Proposed Action could include the following:

- Stationary equipment (i.e., equipment that generates noise from one general area), including a backup generator (67 dBA with Sound Attenuated Enclosure).
- Mobile equipment including passenger vehicles such as pickup trucks (55 dBA).

No impact equipment (i.e., equipment that generates impulsive noise) is expected.

Construction activities would occur five days per week only during daytime hours. Following construction, increases in anthropogenic noise levels would also be negligible and would result from occasional and temporary noise associated with the operation of backup generators in the event of a power outage in the project location. The generator used would be the Kohler 30REOZK which runs a self-test lasting approximately 30 minutes and would occur monthly. The test runs at a lower, quieter RPM (67dBA) to ensure the system is running properly while consuming less fuel. The generator is expected to produce 81 dBA during maximum operating load. Additionally, technicians would visit the site once per month on average for standard maintenance. In the case of emergencies or the need to service or replace equipment, more frequent visits would be required, although the increased frequency would be temporary and insignificant in nature. The decibel level of the generator at maximum operating load would be considered high if a sensitive receptor were in the immediate vicinity of the generator and were to experience prolonged exposure. The nearest sensitive receptor is a residence located approximately 300 feet south of the Proposed Action and fronting Old Pearson Road. A church, Ebenezer CME Church, is located approximately 1,400 feet northeast of the Proposed Action. Neither of these sensitive receptors would experience prolonged exposure to anthropogenic noise levels, as these increase noise levels would be temporary in nature. Further, a dense forest buffer is located between the Proposed Action and the nearby residence, further buffering the anticipated equipment/generator noise. Based on distance, noise associated with the project is not anticipated to be perceptible from Ebenezer CME Church. Therefore, no appreciable level of sustained increased noise is anticipated to affect sensitive receptors either during construction or the operation and maintenance of the Proposed Action.

A No Action Alternative would not result in a change in noise levels at the Proposed Action site and would therefore have no adverse noise impacts.

5.2 Air Quality

The Proposed Action would result in negligible and temporary increase in air emissions at and near the Proposed Action site during construction and installation activities as a result of equipment operation and ground disturbing activities. Both equipment operation and ground disturbing activities would be temporary and would occur during the 60 days of anticipated construction at the Proposed Action site. During construction, emissions from the excavator, skid steer, and crane would occur only for a few days and are anticipated to be minimal in the context of State of Mississippi air quality standards, which are consistent with the Primary and Secondary National Ambient Air Quality Standards. During the operation phase, air emissions may occur only periodically in association with operation of the proposed back-up generator. Further, considering that the Proposed Action is located within an air quality attainment area, there are no specific non-attainment or maintenance area restrictions associated with air emissions at the Proposed Action location. Only generator engines meeting current EPA air quality standards would be utilized. No air quality permits are required for construction or operation of the Proposed Action, including the proposed back-up generator (Mississippi Commission on Environmental Quality 2025). Once construction is complete, a minor source of air pollution may be the occasional use of the back-up generator for monthly 30minute self-testing and during power outages.

In order to minimize the generation of airborne particulate (dust) emissions as a result of ground disturbance, best management practices (BMPs) (e.g. wetting and stabilizing exposed soils, minimizing exposed soils, and minimizing traffic across unpaved areas) would be implemented. Additionally, the maximum footprint of the Proposed Action site would total approximately 0.4 acres, thus minimizing the amount of exposed soil subject to dust generation. Further, development activities would be subject to both state and local air quality regulations in accordance with the Ambient Air Quality Standards for Mississippi.

A No Action Alternative would result in no construction or operations activities at the project location and therefore would have no impact to the air quality within the vicinity of the Proposed Action site.

5.3 Geology and Soils

The Proposed Action would result in ground disturbing activities measuring approximately 0.4-acres. There are no unusual geologic features, known occurrences of important minerals, or known sensitive geologic features present within the Proposed Action area. No sinkholes, fissures, or other karst features were observed nearby the project area. No impacts on geologic resources are anticipated. According to a Geotechnical Investigation Report dated November 18, 2024, auger refusal was met at an approximate depth of 38 to 40 feet, likely indicating the top of bedrock. The potential for soil erosion would be addressed through the implementation of erosion and sediment control best management practices, including the installation of drainage swales and silt fencing downslope of the Proposed Action area. No adverse impacts to soils are anticipated as a result of the Proposed Action. A majority of the Proposed Action area would not occur within soils designated as prime or unique farmlands or farmlands of statewide or local importance (See Appendix C). However, a small portion of the proposed access/utility easement overlays soil classified as prime farmland. This area is currently occupied by a dirt drive which would be utilized for access and utilities routing to the proposed facility. Based on the small scale of soil disturbance that would be required for the Proposed Action and the unchanged uses of mapped areas of prime farmland (existing dirt drive),

impacts to the quality of soil or surrounding soil and geologic conditions would be negligible and no adverse impacts to prime farmland would occur.

A No Action Alternative would result in no construction or installation activities at the Proposed Action site and therefore no impact to geologic conditions or soils.

5.4 Water Resources

The Proposed Action would not result in impacts to wetlands or surface waters and is not located within a sole source aquifer area or within a Special Flood Hazard Area of the 100-year floodplain. The anticipated regional groundwater levels at the Proposed Action site would be well beneath the extent of any excavation activities, no water withdrawals are proposed, and the passive use of the proposed communications tower is not anticipated to result in adverse effects to groundwater quality. Based on the small footprint and relatively flat terrain of the Proposed Action site, changes to existing stormwater runoff rates or impacts to water resources as a result of erosion and sediment runoff are expected to be non-existent or negligible. Where applicable, sediment and erosion control best management practices would be implemented, such as silt fencing or sediment traps, and erosion control mats. The proposed implementation of stormwater management measures are expected to minimize the effects to water resources. A pond is noted on the provided Construction Drawings, however, this feature is better characterized as an area of standing water. A review of aerial photographs shows that this feature formed within the past five years in association with the dirt road that was constructed in relation to the parent tracts previous land use. Therefore, no impacts to water resources are likely to result from the Proposed Action.

A No Action Alternative would result in no construction activities at the Proposed Action site and therefore would have no impact to water resources.

5.5 Biological Resources

Based on a review of the information provided by IPaC, MDWFP, site inspections, and a Natural Resources Review and Natural Resources Review Update, the Proposed Action site would not provide suitable habitat for federally or state listed or proposed species (See Table 5-1). However, potentially suitable habitat for the proposed endangered tricolored bat (*Perimyotis subflavus*) is present within 1,000 feet of the proposed action area. The tricolored bat roosts in clusters of leaves from live or recently dead deciduous hardwood trees. The area surrounding the Proposed Action area consists of hardwood trees that may provide suitable roosting habitat for the tricolored bat, however, no suitable tricolored bat habitat is present within the footprint of the Proposed Action, and no tree trimming or removal is proposed. No sinkholes, fissures, or other karst features were observed nearby the project area nor were large culverts or bridges.

Proposed species are not protected by the take prohibitions of the Endangered Species Act (ESA). However, under Section 7(a)(4) of the ESA, federal agencies must confer with the USFWS if their action will jeopardize the continued existence of a proposed species. Based on the small size of the proposed project and the lack of suitable habitat within the project footprint, the Proposed Action is not likely to jeopardize the continued existence of the tricolored bat.

According to a recently published (October 23, 2024) Northern Long-Eared Bat and Tricolored Bat Range-Wide Determination Key (DKey), for actions that may affect a proposed species, agencies cannot consult, but they can confer under the authority of section 7(a)(4) of the ESA. Such

conferences can follow the procedures for a consultation and be adopted as such if and when the proposed species is listed. Should the TCB be listed, agencies must review projects that are not yet complete, or projects with ongoing effects within the TCB range that previously received a No effect (NE) or may affect, not likely to adversely affect (MANLAA) determination from the key to confirm that the determination is still accurate.

On October 25, 2024, the above-referenced DKey (Appendix E) and was completed and a MANLAA finding was returned. The 15-day review period for the Dkey elapsed without comment from the USFWS, therefore no further coordination with their office is required for this species unless either of the following occurs:

- New information reveals effects of the action that may affect the northern long-eared bat or tricolored bat in a manner or to an extent not previously considered; or,
- The identified action is subsequently modified in a manner that causes an effect to the northern long-eared bat or tricolored bat that was not considered when completing the determination key.

Considering the age of the IPaC Official Species list generated on October 25, 2024, an updated list was generated on February 11, 2025. No changes to the previous list were noted except that the monarch butterfly, which was previously a federal candidate species, is now a proposed threatened species. Considering the small size of the proposed project and the lack of suitable habitat, the project would not jeopardize the continued existence of this species and no further consultation with the USFWS is needed.

Additionally, a consultation request was submitted to the MDWFP for the Proposed Action. The MDWFP responded on October 7, 2022, concluded that there are no records of rare, threatened, or endangered species or communities in the vicinity of the proposed cell tower project. However, the MDWFP recommended best management practices (BMPs) be property implemented, maintained, and monitored (particularly measures to prevent, or at least, minimize negative impacts to water quality). A Natural Resources Review Update dated November 4, 2024 was prepared to address minor modifications to the proposed communications facility design. Due to the minor increase in size of the proposed development, and the existing conditions at the site, and the presence of cleared land and an existing dirt drive in the Proposed Action footprint, it was concluded that no further consultation with MDWFP would be necessary. Documentation of the Natural Resources Review and Natural Resources Review Update prepared for the Proposed Action site and MDWFP consultation is provided in Appendix E. A current list of species identified by USFWS as potentially occurring at the Proposed Action site along with suitable habitat descriptions and a finding of effect for each is provided in Table 5-1 below.

Table 5-1: Federally Endangered or Threatened Species Findings Summary

Common Name	Scientific Name	Federal Status (IPaC)	State Status	Habitat	Finding of Effect
Tricolored bat	Perimyotis subflavus	Proposed Endangered	Candidate	Proposed Action located in Zone 1 year-round active zone; Primarily roost among living or dead leaf clusters of live or recently dead deciduous hardwood trees; Winter torpor in culverts, tunnels, bridges and trees	No suitable habitat within Proposed Action footprint; May affect, not likely to adversely affect finding determined through completion of IPaC DKey; No jeopardy while species remains proposed
Alligator snapping turtle	Macrochelys temminickii	Proposed Threatened	-	Slow-moving, deep water of rivers, sloughs, oxbows, and canals or lakes associated with rivers; Nest adjacent to such waters	No suitable habitat; No jeopardy
Monarch butterfly	Danaus plexippus	Proposed Threatened	-	Overwintering habitats of the eastern North American population consist of high altitude Mexican conifer forests; Within eastern North America, breeding areas are virtually all patches of milkweed	No suitable habitat; No jeopardy

^{*}List includes only species identified within the Federal IPaC Official Species List; State listed species excluded based on MDWFP consultation

Migratory Birds and their Habitats

Per the USFWS Recommended Best Management Practices for Communication Tower Design, Siting Construction, Operation, Maintenance, and Decommissioning (USFWS, 2021), "evidence suggests that night-migrating songbirds are either attracted to or disoriented by tower obstruction warning lighting systems, especially during overcast (i.e., low cloud ceiling), foggy, or otherwise low visibility conditions. Birds aggregate in larger numbers at towers with non-flashing lights compared to those with flashing lights, although birds aggregate at flashing lights during the "on" phase, they disperse during the "off" phase. Additionally, birds moving across the landscape at night (e.g. owl and seabirds) can collide with communications tower wires when they are placed in high movement areas." Further, communication towers may cause direct and indirect bird mortality through collisions with towers or guy wires or from exhaustion from circling a tower;

through construction, operation, and maintenance activities; and significant loss of fat reserves spent while circling towers, leading to reduced survival during long migrations.

The Grantee has proposed to construct a 211-foot tall (overall height) self-supporting lattice telecommunications structure. Based on the specifications of the proposed tower structure, the Grantee has conformed to USFWS-recommended siting and construction measures for new towers including 1) avoiding the use of guy wires, 2) utilizing the preferred lighting scheme for tower structures (flashing white/red lights), 3) selecting already degraded areas for tower placement, 4) not siting the tower in or near known bird concentration areas, or in known migratory bird movement routes, daily movement flyways, areas of breeding concentration, in habitat of threatened or endangered species, key habitats for birds of conservation concern, or near breeding areas of prairie grouse, 5) avoiding ridgelines, coastal areas, wetlands, or other known bird concentration areas, and 6) designing tower and associated facilities so as to avoid or minimize habitat loss within and adjacent to the tower footprint. The presence of migratory birds engaged in migrating activities cannot be ruled out in the general vicinity of the Proposed Action site and the proposed tower structure may provide opportunities for nesting and/or perching. Further, considering the habitat present on site which consists of a dirt drive and a cleared/graded vacant lot, the Proposed Action site is not expected to provide quality migratory bird habitat, thus pre-construction nest clearance surveys are not deemed necessary. Considering the USFWS guidance and the specification of the Proposed Action, the Grantee has committed to mitigation measures that would decrease risks to migratory birds.

Considering the proposed measures, the project is not anticipated to adversely affect migratory birds.

Bald and Golden Eagles

The Applicant would comply with the Bald and Golden Eagle Protection Act, which prohibits the take of bald or golden eagles without authorization from the Secretary of Interior. Based on the data reviewed (inaturalist.org, 2024) and the lack of suitable breeding/foraging habitat within at least three miles of the Proposed Action, no impacts to eagles are anticipated. Should bald eagle nesting occur within 660 feet of the proposed site in the future, guidance provided in the *National Bald Eagle Management Guidelines* would be followed to minimize the potential for impacts to nesting eagles.

A No Action Alternative would result in no construction activities at the Proposed Action site and therefore would have no impact to biological resources.

5.6 Historic and Cultural Resources

In July of 2020, the Advisory Council on Historic Preservation (ACHP) approved amendments to the *Program Comment to Avoid Duplicative Reviews for the Wireless Communications Facilities Construction and Modification*. This Program Comment allows select agencies, including NTIA, to rely on existing Federal Communications Commission (FCC) Section 106 procedures for those undertakings also subject to *Section 106 review under the Nationwide Programmatic Agreement for Review of Effects on Historic Properties for Certain Undertakings Approved by the FCC* (FCC Nationwide PA) and the *Nationwide Programmatic Agreement for the Collocation of Wireless Antennas*, as amended (FCC Collocation PA).

The Mississippi Department of Archives and History (MDAH) was provided with a Phase I Cultural Resources Survey for the Proposed Action in 2022. The MDAH issued a "no cultural resources listed in or eligible for listing in the NRHP will be directly or visually affected" determination for above ground and archaeological resources for the Proposed Action. Subsequently, Addendum letters were sent to the MDAH in 2024 addressing changes to the proposed design and stating that the tower would now be constructed by The Towers, LLC instead of by Verizon Wireless. No response from MDAH was received within the 30-day review period. Based on the lack of response from MDAH and in accordance with the procedures set forth in the NPA, concurrence with their previous conclusion that "No Historic Properties are located within the Area of Potential Effect" was assumed. Documentation of MDAH consultation is included in Appendix F.

Eleven federally recognized tribes were identified that may attach religious and cultural significance to Historic Properties within the areas of each proposed undertaking. All Native American Tribes that have expressed interest within this area have either concurred with the project or expressed no further interest. Documentation of THPO consultation is included in Appendix F.

The No Action Alternative would result in no construction activities at the Proposed Action site and therefore would have no impact to historic and cultural resources.

5.7 Aesthetic and Visual Resources

The Proposed Action would include the installation of a proposed 211-foot tall self-supporting lattice telecommunications tower. The proposed tower would be lighted with medium-intensity dual red/white flashing lights. Tower lights would be white during the day and red at night. Construction would occur only during daytime hours, thus there would be no construction-related lighting associated with the Proposed Action. No sensitive aesthetic or visual receptors are located within the viewshed of the Proposed Action, thus no adverse impacts to aesthetic and visual resources are anticipated.

A No Action Alternative would result in no construction activities or new additions to the landscape at the Proposed Action site and therefore would have no impact to aesthetic and visual resources.

5.8 Land Use

The Proposed Action would result minimal changes to the overall land use for the larger tract on which the Proposed Action would take place, and the Proposed Action would result in no changes to surrounding property land uses.

A No Action Alternative would result in no construction activities at the Proposed Action site and therefore would have no impact to land uses.

5.9 Infrastructure

The Proposed Action would require additional energy demands for the wireless facility, including a temporary increase during construction and installation activities. However, the overall increase in energy demand for the Proposed Action would be within the existing capabilities of local electrical distribution providers during construction and implementation as well as for continued operation of the wireless facilities. No new public roadways would be required for the construction of the Proposed Action, and since the Proposed Action involves unmanned wireless facilities, no water and sewer infrastructure would be required. While minimal impacts to local traffic would potentially

occur during the staging and construction portions of the Proposed Action, there would be no long-term impacts to traffic as a result of the operation of Proposed Action.

A No Action Alternative would result in no construction activities at the Proposed Action site and therefore would have no impact to infrastructure.

5.10 Human Health and Safety

Impacts to human health and safety under the Proposed Action alternative are expected to be minor and adverse over the short term; and beneficial over the long term with safety mitigation efforts included. During construction activities impacts to human health may occur. Impacts related to traffic management, utility line strikes, decreased air quality from dust and utility services, and accidental release of hazardous materials (i.e., fuels) could occur. However, mitigation efforts to manage traffic, identify buried utilities, dust management, and general protection of existing infrastructure will be in place under the Proposed Action alternative. Such measures would include performing utility locations prior to construction, discussing traffic management plan with State Department of Transportation agency officials, and dust suppression efforts. To reduce the potential for accidental releases of hazardous materials, fuels or other chemicals would be stored and maintained in designated staging areas. Additionally, an emergency spill kit containing absorption pads, material, shovel, and other cleanup items would be readily available for cleanup of chemical or fuel releases. Construction activities would be completed in a relatively short period. Additionally, during the operations and maintenance period of the tower, mitigation measures such as fencing and controlled access would be implemented. Limiting access to potentially dangerous equipment would mean that the operations of the towers does not lead to any adverse impacts to human health and safety over the long-term. No hazardous waste sites or registered USTs were identified within the vicinity of the Proposed Action (EPA Enviromapper 2025, MSDEQ, 2025). No ground disturbance is proposed within the S Pearson Road right-of-way, therefore, encounters with buried public utilities within the public right-of-way are not anticipated. Prior to conducting ground disturbing activities within the Proposed Action area, the Grantee would identify buried utilities through the use of 811 (call before you dig) and a private utility locator if necessary and would utilize permit-only workers qualified by training or experience to operate heavy machinery and equipment. During construction, Occupational Safety and Health Administration (OSHA) safety standards would be enforced for contractors and their employees. Following construction, the tower would be surrounding by chain-link fencing that would include gate access secured by a padlock to prevent and discourage public access to the site. Further, tower setbacks from individual residences required by the local jurisdiction (200 feet) would be followed to minimize the potential for human health and safety concerns in the event that tower would fall. Electromagnetic emissions (EME) from the proposed antennas would be reviewed by the carrier to ensure that emission levels are below the FCC exposure limits outlined in 47CFR § 1.1307, § 1.1310. The Proposed Action would result in no adverse impacts to human health and safety. The enhanced capabilities and reliability of voice and data communications resulting from the Proposed Action would be beneficial to human health by providing additional economic and educational opportunities and improved access to telehealth care services for Rankin County residents.

A No Action Alternative would result in no construction activities at the Proposed Action site and therefore negatively impact Rankin County and surrounding communities, who would continue to have diminished access to healthcare services.

6.0 Cumulative Impacts

Cumulative impacts are the incremental impacts on the environment from the Proposed Action, in addition to the environmental impacts from other past, present, and reasonably foreseeable future (i.e., 20 years) actions. Cumulative impacts can result from individually insignificant but collectively significant actions taking place over a period of time for a particular resource type or area of concern.

The Proposed Action is comprised of the construction and operation of a proposed 211-foot tall self-supporting lattice type tower and an associated facility that would be constructed within an area of less than 0.4-acres in size.

Based on a review of the Rankin County Comprehensive Plan 2023, there are no specific present or foreseeable actions for the Proposed Action area or adjoining areas. Impacts to the environment from the Proposed Action and associated actions, when combined with other past, present, or potential future actions, would be minimal. Further, the minimal negative impacts to the environment from the Proposed Action and associated actions would be greatly outweighed by the benefit to quality of life for the population surrounding the Proposed Action area. There are therefore no foreseeable cumulative effects that would result from the Proposed Action.

7.0 Applicable Environmental Permits and Regulatory Requirements

Table 7-1: Potential Applicable Statutory, Regulatory, and Other Requirements

Potentially Applicable	Relevant Project Information				
Requirement					
All Resources					
National Environmental Policy Act (NEPA) of 1969 42 U.S.C. § 4321 et seq.	NEPA requires all federal agencies to assess environmental effects of their proposed actions; this Environmental Assessment fulfills that requirement.				
Federal Aviation Administration Filing 14 CFR § Part 777 Section 77.9	FAA Aeronautical Study No. 2024-ASO-6349-OE Issue Date: 05/22/2024.				
Vegetation, Wildlife, and Fish					
Endangered Species Act of 1973 16 U.S.C. § 1531 et seq.	Sections 7(a)(1) and 7(a)(2) of the Endangered Species Act requires federal agencies to aid in the conservation of listed species and ensure activities are not likely to jeopardize the continued existence of federally listed or proposed species or destroy or adversely modify designated critical habitat.				
Waters, Wetlands, and Floodplain	Protection				
Clean Water Act 33 U.S.C. § 1251 et seq.	The Clean Water Act prohibits the discharge of any pollutant from a point source into navigable waters; no surface waters have been identified within or near the Proposed Action site.				
Floodplain Management					
Executive Order 11988	Executive Order 11988 requires federal activities to avoid adverse impacts to wetlands where practicable, and Executive Order 11990				
Protection of Wetlands Executive Order 11990	requires federal activities to elevate structures located within floodplains above the base flood level where practicable; no wetlands or floodplains have been identified within or near the Proposed Action site. A pond is noted on the provided Construction Drawings; however, this feature is better characterized as an area of standing water. A review of aerial photographs shows that this feature formed within the past five years in association with the dirt road that was constructed in relation to the parent tracts previous land use				
Cultural and Historic Resources					
National Historic Preservation Act (NHPA), as amended, inclusive of Section 106 54 U.S.C. § 306108 et seq.	Section 106 NHPA requires federal agencies to identify and assess the effects its actions may have on historic properties; the Section 106 review process has revealed no adverse effects on historic properties as a result of the Proposed Action.				

Noise, Public Health, and Safety	
Federal Communications	47 CFR 1.1310 provides radiofrequency radiation exposure limits
Commission (FCC)	from FCC; the Proposed Action would comply with the criteria set forth in 47 CFFR 1.1310.

8.0 Consultations

Table 8-1: Agency Consultations

Agency and Name	Consultation	Status
United States Fish and Wildlife	Information for	Updated list pulled February 12, 2025.
Service	Planning and	
	Consultation	
Mississippi Department of	Protected Species	Complete: MDWFP response received
Wildlife, Fisheries, and Parks	and Natural	10/7/2022
	Resources	
	Consultation	
Mississippi Department of	Section 106 Historic	Complete: SHPO response received
Archives & History – Hal Bell	Preservation	10/19/2022
(601) 576-6940	Consultation	Addendum Letters sent October 25, 2024,
		and November 5, 2024. No response received
		from MDAH
Crow Creek Sioux Tribe Tribal	Section 106 Historic	Complete: THPO response received
Historic Preservation Office –	Preservation	8/24/2022
Merle Marks	Consultation	
(605) 245-2221		
Alabama Coushatta Tribe	Section 106 Historic	Complete: Final follow-up attempt =
Tribal Historic Preservation	Preservation	10/27/2022 and cleared via Escalation on
Office – Bryant J Celestine	Consultation	11/11/2022
(936) 563-1100		
Coushatta Indian Tribe Tribal	Section 106 Historic	Complete: Final follow-up attempt =
Historic Preservation Office -	Preservation	10/27/2022 and cleared via Escalation on
Dakota John (337) 584-1401	Consultation	11/11/2022
Jena Band of Choctaw Indians	Section 106 Historic	Complete: THPO response received
Tribal Historic Preservation	Preservation	9/30/2022. Additional clearance received
Office – Lille Williamson (318)	Consultation	11/7/2024
992-8258		
Mississippi Band of Choctaw	Section 106 Historic	Complete: Final follow-up attempt =
Indians Tribal Historic	Preservation	10/27/2022 and cleared via Escalation on
Preservation Office – Kenneth	Consultation	11/11/2022
H Carleton (601) 650-7316		
Bad River Band of Lake	Section 106 Historic	Complete: No interest if no response within
Superior Tribe of Chippewa	Preservation	30 days of 8/26/2022, cleared 9/25/2022
Indians Tribal Historic	Consultation	

Agency and Name	Consultation	Status
Preservation Office – Edith		
Leoso (715) 682-7123		
Red Cliff Band of Lake	Section 106 Historic	Complete: Final follow-up attempt =
Superior Chippewa Indians of	Preservation	10/27/2022 and cleared via Escalation on
Wisconsin Tribal Historic	Consultation	11/11/2022
Preservation Office – Marvin		
Defor (715) 779-3761		
Choctaw Nation of Oklahoma	Section 106 Historic	Complete: THPO response received
Tribal Historic Preservation	Preservation	9/21/2022. Additional clearance received
Office – Vangie Robinson	Consultation	11/19/2024
(850) 924-8280		
Cherokee Nation Tribal	Section 106 Historic	Complete: THPO response received
Historic Preservation Office –	Preservation	9/23/2022
Gwen Terrapin (918) 772-4165	Consultation	
Alabama Quassarte Tribal	Section 106 Historic	Complete: Cleared via NOO on 8/26/2022
Town Tribal Historic	Preservation	
Preservation Office – Mary	Consultation	
Tiger (405) 452-3987		
Tunica-Biloxi Tribe of LA Tribal	Section 106 Historic	Complete: No interest if no response within
Historic Preservation Office –	Preservation	30 days of 8/26/2022, cleared 9/25/2022
Earl J Barbry Jr (318) 240-6451	Consultation	

9.0 References

Center for Environmental Excellence. 12 February 2025.

https://environment.transportation.org/focus-areas/noise/noise-overview/#elementor-toc heading-anchor-4

Ebird.org. 8 January 2025. https://ebird.org/hotspots

Environmental Protection Agency Enviromapper. 12 February 2025.

https://geopub.epa.gov/myem/efmap/index.html?ve=17,32.21520831484723,-

 $\frac{90.12886497621612\&pText=2622\%20S\%20Pearson\%20Rd,\%20Richland,\%20Mississippi,\%2039218\&miny=32.214208314847\&minx=-90.129864976216\&maxy=32.216208314847\&maxx=-90.127864976216$

Environmental Protection Agency Nonattainment and Maintenance Area Dashboard. 12 February 2025. https://awsedap.epa.gov/public/extensions/specs-area-dashboard/index.html

Environmental Protection Agency UST Finder. 12 February 2025.

https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=b03763d3f2754461adf86f121345d7bc

Federal Emergency Management Agency. Flood Map Service Center. 12 December 2024. https://msc.fema.gov/portal/home

Federal Highway Administration. Construction Noise Handbook. 12 February 2025.

https://www.nrc.gov/docs/ML1805/ML18059A141.pdf

Inaturalist.org. 8 January 2025.

https://www.inaturalist.org/taxa/5305-Haliaeetus-leucocephalus

Mississippi Department of Environmental Quality. 12 December 2024.

https://www.mdeq.ms.gov/wp-content/uploads/2019/01/Air-Regs-Chapter-2-Air-Permit-Regulations-July-25-2013-corrected-7-15-15.pdf

Mississippi Department of Environmental Quality. 12 December 2024.

https://www.mdeq.ms.gov/air/ambient-air-quality/

Mississippi Department of Environmental Quality. 17 February 2025.

https://opcgis.deq.state.ms.us/musterwebmap/

Mississippi Department of Transportation Traffic Volume Map. 12 December 2024.

https://mdot.ms.gov/portal/traffic_volume

Mississippi Office of Coastal Resources Management. 12 February 2025.

https://dmr.ms.gov/wp-content/uploads/2019/07/Title-22-Part-23-121218.pdf

National Telecommunications and Information Administration. NTIA Permitting and Environmental Information Application. 12 December 2024.

 $\frac{https://nbam.maps.arcgis.com/apps/instant/portfolio/index.html?appid=c7906b72e14045bf9fa6fe9addd469a0.$

Natural Atlas. Jackson Prairie Physiographic Province. 12 February 2025.

https://naturalatlas.com/ecoregions/jackson-prairie-2768434

Natural Resources Conservation Service. Web Soil Survey. 12 December 2024.

https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

National Wild and Scenic River System. 12 December 2024.

https://hub.arcgis.com/datasets/usfs::national-wild-and-scenic-river-

line/explore?location=37.978297%2C-96.102423%2C6.00

Protected Agricultural Lands Database. 12 December 2024.

https://farmlandinfo.org/statistics/pald

Rankin County Comprehensive Plan. 12 February 2025.

https://storymaps.arcgis.com/stories/643147812e6d462babd118276532349f

Rankin County Map Viewer. 12 February 2025.

https://gis.cmpdd.org/arcgis/apps/webappviewer/index.html?id=2a84c1decebc4733b91fb86c928b402a

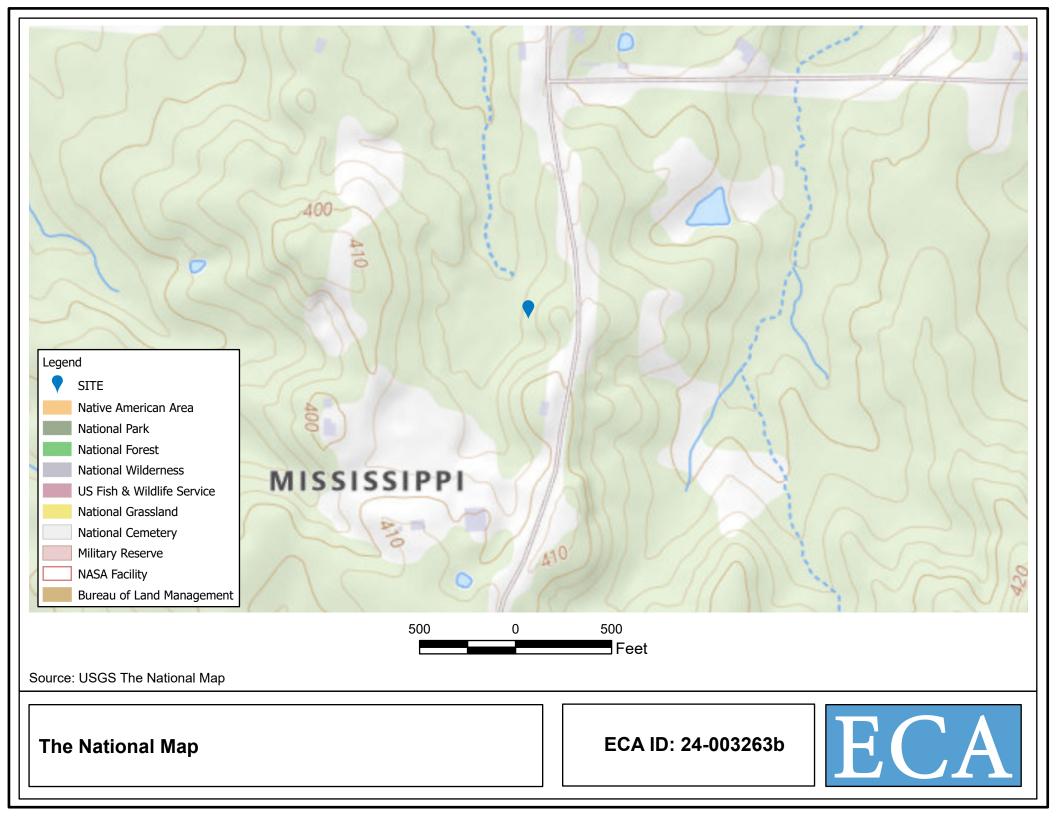
U.S. Census Bureau. QuickFacts. 12 December 2024.

https://www.census.gov/quickfacts/fact/table/rankincountymississippi,US/PST045224

U.S. Environmental Protection Agency. Air Quality Index Report. 12 December 2024. https://www.epa.gov/outdoor-air-quality-data/air-quality-index-report

- U.S. Environmental Protection Agency. EJSCREEN Report. 12 December 2024. https://ejscreen.epa.gov/mapper/
- U.S. Environmental Protection Agency. Map of Sole Source Aquifer Locations. 12 December 2024. https://www.epa.gov/dwssa/map-sole-source-aquifer-locations
- U.S. Environmental Protection Agency. Mississippi Valley Loess Plains. 12 December 2024. https://gaftp.epa.gov/EPADataCommons/ORD/Ecoregions/ms/ms front.pdf
- U.S. Fish and Wildlife Service. Coastal Barrier Resource System. 12 December 2024. https://www.fws.gov/library/collections/official-coastal-barrier-resources-system-maps
- U.S. Fish and Wildlife Service. Information for Planning and Consultation System. Web. 12 February 2025. https://ipac.ecosphere.fws.gov
- U.S. Fish and Wildlife Service. National Wetlands Inventory. Web. 12 December 2024. https://www.fws.gov/program/national-wetlands-inventory/wetlands-mapper
- U.S. Geological Survey. 7.5 Minute Topographic Quadrangle Map. Florence, MS (2024).
- U.S. Geological Survey. 7.5 Minute Topographic Quadrangle Map. Whitfield, MS (2024).
- U.S. Geological Survey. The National Map. 12 December 2024.

Appendix A Site Maps and Photographs





Site Location Map

ECA ID: 24-003263b



Approved by OMB 3060-1039 See instructions for public burden estimates

View of the lease area facing northwest.



View of the lease area facing northeast.



Applicant's Name: <u>Verizon Wireless</u> Project Number: <u>617087433</u>

Approved by OMB 3060-1039 See instructions for public burden estimates



View of the lease area facing southeast.



View of the lease area, facing southwest.

Applicant's Name: <u>Verizon Wireless</u>

Project Name: Old Pearson Rd CGC

Project Number: <u>617087433</u>

Approved by OMB 3060-1039 See instructions for public burden estimates



View from the Project Site and lease area, facing north.



View from the Project Site and lease area, facing northeast.

Applicant's Name: <u>Verizon Wireless</u> Project Number: <u>617087433</u>

Approved by OMB 3060-1039 See instructions for public burden estimates



7. View from the Project Site and lease area, facing east.



View from the Project Site and lease area, facing southeast.

Applicant's Name: <u>Verizon Wireless</u> Project Number: <u>617087433</u>

Approved by OMB 3060-1039 See instructions for public burden estimates



View from the from Project Site and lease area, facing south.



10. View from the Project Site and lease area, facing southwest.

Applicant's Name: <u>Verizon Wireless</u> Project Number: <u>617087433</u>

Approved by OMB 3060-1039 See instructions for public burden estimates



II. View from the Project Site and lease area, facing west.



12. View from the Project Site and lease area, facing northwest.

Applicant's Name: <u>Verizon Wireless</u>

Project Name: Old Pearson Rd CGC

Project Number: <u>617087433</u>

Approved by OMB 3060-1039 See instructions for public burden estimates

13. View along the proposed access and utility easement facing northeast. Access/utility easement indicated by the red arrow; not to scale.



14. View along the proposed access and utility easement facing southwest. Access/utility easement indicated by the red arrow; not to scale.

Applicant's Name: Verizon Wireless Project Number: <u>617087433</u>

Approved by OMB 3060-1039 See instructions for public burden estimates



I5. View of the access/utility easement facing east.



16. View of the entrance of the proposed access/utility easement entrance facing west.

Applicant's Name: <u>Verizon Wireless</u> Project Number: <u>617087433</u>

Approved by OMB 3060-1039 See instructions for public burden estimates



17. View of the proposed access/utility easement facing east



18. View of the proposed access/utility easement facing west.

Applicant's Name: <u>Verizon Wireless</u>

Project Name: Old Pearson Rd CGC

Project Number: <u>617087433</u>

Approved by OMB 3060-1039 See instructions for public burden estimates



19. View of the entrance to the proposed access/utility easement facing north.



20. View of the entrance to the proposed access/utility easement facing south.

Applicant's Name: <u>Verizon Wireless</u> Project Number: <u>617087433</u>

Approved by OMB 3060-1039 See instructions for public burden estimates



21. View from the entrance of the proposed access/utility easement facing east to Old Pearson Road.



22. View of the proposed access/utility easement facing northeast.

Applicant's Name: <u>Verizon Wireless</u> Project Number: <u>617087433</u>



VERICAL BRIDGE: US-MS-5200/OLD PEARSON RD **VERIZON PSLC CODE: 704922 VERIZON MDG LOCATION ID: 5000887959** 2622 S PEARSON ROAD, RICHLAND, MS 39218 200' SELF-SUPPORT TOWER RAW LAND CONSTRUCTION DRAWINGS

SITE INFORMATION

TOWER OWNER: THE TOWERS, LLC

750 PARK OF COMMERCE DRIVE, SUITE 200

BOCA RATON, FL 33487

SITE ADDRESS: 2622 S PEARSON ROAD

> RICHLAND, MS 39218 RANKIN COUNTY

> > 32.214758*

LATITUDE (NAD 83):

LONGITUDE (NAD 83): -90.129525° GROUND ELEVATION:

OCCUPANCY TYPE: ZONING JURISDICTION: PARCEL NUMBER:

RANKIN COUNTY E06 000185 00010

UNMANNED

POWER PROVIDER:

FIBER PROVIDER:

ENTERGY TRD

CONTACT INFORMATION

PROPERTY OWNER:

LOREN MUSE 2260 ALMAR ROAD FLORENCE, MS 39073

APPLICANT:

THE TOWERS, LLC 750 PARK OF COMMERCE DRIVE, SUITE 200

BOCA RATON, FL 33487

TOWER ENGINEERING INC. ENGINEER: 556 JEFFERSON STREET, SUITE 201 LAFAYETTE, LA 70501

SURVEYOR: TURNER SURVEYS, LLC

LUMBERTON, MS 39455



DIRECTIONS

FROM JACKSON, MS GET ON I-20 E/I-55 N, 2.4 MILES. FOLLOW I-20 E TO MS-468 E/S PEARSON RD IN PEARL. TAKE EXIT 48 FROM I-20 E, 3.7 MILES. CONTINUE ONT MS-468 E/S PEARSON RD. DRIVE TO OLD PEARSON RD, 3.6 MILES.

APPLICABLE CODES

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFIRMING TO THESE CODES:

- INTERNATIONAL BUILDING CODE (IBC LATEST EDITION) 2. TIA-222-H (LATEST EDITION)
- NFPA 780 LIGHTNING PROTECTION CODE 4. NATIONAL ELECTRICAL CODE (NEC LATEST EDITION)
- 5. ANY OTHER NATIONAL OR LOCAL APPLICABLE CODES (LATEST EDITION)

DRAWING INDEX

TITLE SHEET AND PROJECT INFORMATION

NOTES:

GENERAL NOTES N-2 GENERAL NOTES

SURVEY:

SU-1 SITE SURVEY SU-2 SITE SURVEY

CIVIL:

C-1 PLOT PLAN C-1A AERIAL OVERLAY

C-2 SITE PLAN COMPOUND PLAN

VERIZON LEASE AREA DETAILS C-2A.1

C-2B COMPOUND PLAN DETAILS

C-2B.1 SITE SIGN DETAILS

GRADING, EROSION, AND SEDIMENT CONTROL PLAN C-3

EROSION AND SEDIMENT CONTROL DETAILS

TOWER ELEVATION C-5

ANTENNA ORIENTATION PLAN

EQUIPMENT SLAB DETAILS C-6

C-7 ICE BRIDGE LAYOUT AND DETAILS CANOPY SPECIFICATIONS SHEET

CANOPY FOUNDATION DETAILS C-9

ELECTRICAL:

COMPOUND UTILITY ROUTING PLAN

ELECTRICAL UTILITY ROUTING PLAN E-1A

E-1B FIBER UTILITY ROUTING PLAN

E-2 GROUNDING PLAN

E-2A VZW OUTDOOR OVP CUTSHEET DETAIL

VZW EQUIPMENT CONDUIT ROUTING PLAN

GROUNDING DETAILS E-4

E-4A GROUNDING DETAILS

COMPOUND UTILITY H-FRAME DETAIL E-5 VERIZON WIRELESS UTILITY H-FRAME DETAIL

VERIZON UTILITY WIRING DIAGRAM & PANEL SCHEDULE

WELD CONNECTION DETAILS F-7

ATTACHMENTS:

VERIZON WIRELESS RFDS GENERATOR SPECIFICATIONS

SCOPE OF WORK

THESE PLANS HAVE BEEN DEVELOPED FOR THE PLACEMENT OF THE TELECOMMUNICATION AND PUBLIC UTILITY FACILITY, CONSISTING OF A 200'-0" SELF-SUPPORT TOWER, SPACE FOR CARRIER EQUIPMENT AND A UTILITY RACK WITHIN A FENCED COMPOUND (NO WATER OR SEWER REQUIRED), IN ACCORDANCE WITH THE SCOPE OF WORK IN THE PLANS. THESE PLANS ARE CONSTRUCTION DRAWINGS ACCOMPANIED BY A PASSING STRUCTURAL STABILITY ANALYSIS PREPARED BY LICENSED STRUCTURAL ENGINEER. STRUCTURAL ANALYSIS MUST INCLUDE BOTH TOWER

DO NOT SCALE DRAWINGS

CONTRACTOR SHALL VERIFY ALL PLANS & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAMI



verticalbridge

TOWER ENGINEERING. INC.



556 JEFFERSON ST. SUITE 201 LAFAYETTE, LA 70501 (337) 886-7176 TEL.

2920 KINGMAN ST. SUITE 201 METAIRIE, LA 70006 (504) 756-3112 TEL.

TEI PROJECT # 2124-220-1003-006

OLD PEARSON ROAD SITE # US-MS-5200

2622 S PEARSON ROAD RICHLAND, MS 39218

TOWNSHIP 4 NORTH RANGE 2 EAST

RANKIN COUNTY

REVISIONS A 09/05/24 PRELIMINARY ISSUE REV DATE DESCRIPTION

TITLE SHEET

SHEET

SITE WORK GENERAL NOTES:

- 1. THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
- 2. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY OWNER, EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) FLECTRICAL SAFETY D) TRENCHING & EXCAVATION.
- 3. ALL SITE WORK SHALL BE AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.
- 4. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
- 5. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK. SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF OWNER AND/OR LOCAL UTILITIES.
- 6. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION.
- 7. THE CONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE.
- 8. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS EQUIPMENT AND TOWER AREAS.
- 9. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED
- 10. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
- 11. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION AS SPECIFIED IN THE PROJECT SPECIFICATIONS.
- 12. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.

CONCRETE AND REINFORCING STEEL NOTES

- 1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.
- 2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE.
- 3. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.
- 4. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS: CONCRETE CAST AGAINST EARTH.......3 IN. CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:

CONCRETE EXPOSED TO EARTH OR WEATHER: #6 AND LARGER......2 IN. #5 AND SMALLER & WWF....... 1 1/2 IN.

BEAMS AND COLUMNS...... 1 1/2 IN.

- 5. A CHAMFER 3/4" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO. IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
- 6. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS, NO REPAR SHALL BE CUT WITHOUT PRIOR ENGINEERING APPROVAL WHEN DRILLING HOLES IN CONCRETE. EXPANSION BOLTS SHALL BE PROVIDED BY RAMSET/REDHEAD OR APPROVED EQUAL.

RF NOTES

- 1. ACTUAL LENGTHS SHALL BE DETERMINED PER SITE CONDITION BY CONTRACTOR.
- 2. THE DESIGN IS BASED ON RF DATA SHEETS, SIGNED AND APPROVED.
- 3. RADIO SIGNAL CABLE AND RACEWAY SHALL COMPLY WITH THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC. NFPA 70), CHAPTER 8.
- 4. ALL SPECIFIED MATERIAL FOR EACH LOCATION (E.G., OUTDOORS, INDOORS-OCCUPIED, INDOORS-UNOCCUPIED, PLENUMS, RISER SHAFTS, ETC.) SHALL BE APPROVED. LISTED, OR LABELED AS REQUIRED BY THE NEC.
- 5. RADIO SIGNAL CABLE SHALL BE SUPPORTED AT MINIMUM OF EVERY THREE (3) FEET EXCEPT INSIDE MONOPOLES OR LATTICE TOWERS WHERE CABLE AND CONNECTOR MANUFACTURERS SUPPORT RECOMMENDATIONS SHALL BE FOLLOWED. MANUFACTURER RECOMMENDED CABLE SUPPORT ACCESSORIES SHALL BE USED.
- 6. THE OUTDOOR CABLE SUPPORT SYSTEM SHALL BE PROVIDED WITH AN ICE SHIFLD TO SUPPORT AND PROTECT ANTENNA CARLE RUNS
- 7. DRIP LOOPS SHALL BE REQUIRED ON ALL OUTSIDE CABLES, CABLES SHALL BE SLOPED AWAY FROM THE BUILDING OR OUTDOOR BTS CABINETS TO PREVENT WATER FROM ENTERING THROUGH THE COAXIAL CABLE PORT.
- 8. ALL FEEDER LINE AND JUMPER CONNECTORS FOR VERIZON SHALL BE VERIZON APPROVED 7/16 DIN CABLE CONNECTORS THAT MEET IP68 STANDARDS.
- 9. 7/16 DIN CONNECTORS REQUIRE NO ADDITIONAL WEATHER PROOFING IN INDOOR APPLICATIONS IF INSTALLED AND TOROUGH PROPERLY IN OUTDOOR APPLICATIONS WEATHER PROOFING IS REQUIRED AND THE FOLLOWING PROCEDURE SHOULD BE FOLLOWED:
 - APPLY A "COURTESY" WRAP OF ONE LAYER OF 7MIL THICK VINYL ELECTRICAL TAPE EXTENDING APPROXIMATELY ONE (1) INCH ON EACH SIDE OF THE COAX CABLE/ CONNECTOR JUNCTURE.
- 10. USING WEATHERPROOFING KIT APPROVED BY CABLE MANUFACTURER AND CONTRACTOR, START TAPE APPROXIMATELY 5 INCHES FROM THE CONNECTOR AND WRAP 2 INCHES TOWARD THE CONNECTOR. THEN REVERSE THE TAPE SO THAT THE STICKY SIDE IS UP. TAPE OVER THE CONNECTOR OR SURGE ARRESTOR UNTIL THREE (3) TO FOUR (4) INCHES BEYOND THE CONNECTOR AND REVERSE AGAIN WITH THE STICKY SIDE DOWN FOR ANOTHER INCH OR TWO. ADD THE BUTYL RUBBER AND FINISH WITH A FINAL LAYER OF TAPE.
- 11. ANTENNAS SHALL BE PAINTED, WHEN REQUIRED, BY THE LANDLORD OR AUTHORITY HAVING JURISDICTION IN ACCORDANCE WITH ANTENNA MANUFACTURERS' SURFACE PREPARATION AND PAINTING REQUIREMENTS.
- 12. CABLE SHIELDS, AND TOWER CONDUITS SHALL BE GROUNDED AT THE TOP OF THE TOWER, WITHIN 10 FEET OF THEIR CONNECTORS, AND AT THE BOTTOM OF THE TOWER ABOUT 6 INCHES BEFORE THEY TURN TOWARD THE FACILITY. THEY SHALL BE GROUNDED AT THE MIDPOINT OF TOWERS THAT ARE BETWEEN 100 FEET AND 200 FEET HIGH, AND AT INTERVALS OF 100 FEET OR LESS ON TOWERS THAT ARE HIGHER THAN 200 FEET.
- 13. APPROVED GROUNDING KITS, WHICH INCLUDE GROUNDING STRAPS, SHALL BE USED TO GROUND THE COAXIAL CABLE SHIELDS, AND CONDUITS, THE GROUND CONDUCTORS FOR THE KITS AT THE TOP OF THE TOWER AND IN THE MIDDLE SECTION OF THE TOWER, ARE BONDED DIRECTLY TO TOWER STEEL USING EXOTHERMIC, BOLTED, OR APPROVED CLAMP CONNECTIONS.
- 14. ALL RADIO SIGNAL CABLE SHALL BE LABELED PER MARKET REQUIREMENTS
- 15. RRU'S/TMA'S TO BE INSTALLED AT TOWER TOP, SHALL BE SUPPLIED TO THE CONTRACTOR (WHERE REQUIRED) AND INSTALLED BY THE CONTRACTOR.
- 16. ANTENNA FEED LINE SYSTEM SWEEP TESTING SHALL BE PERFORMED AND REPORTED IN ACCORDANCE WITH THE REQUIREMENTS OF VERIZON SERVICES PROJECT DOCUMENT NO. 24782-801-3PS-EFY0-0001, REV. A. CONTRACTOR WILL NOT ACCEPT A RADIO SIGNAL CABLE INSTALLATION WITH UNSATISFACTORY SWEEP TEST RESULTS.
- 17. SECTOR ORIENTATION/AZIMUTH WILL VARY FROM REGION TO REGION AND IS SITE SPECIFIC. REFER TO RF REPORT FOR EACH SITE TO DETERMINE THE ANTENNA LOCATION AND FUNCTION OF EACH TOWER SECTOR FACE.

GENERAL NOTES

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:

> CONTRACTOR - GENERAL CONTRACTOR (CONSTRUCTION) OWNER - VERIZON/VERTICAL BRIDGE OEM - ORIGINAL EQUIPMENT MANUFACTURER

- 2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING CONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF OWNER.
- 3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES, CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES. RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- 4. DRAWINGS PROVIDED HERE ARE NOT TO SCALE AND ARE INTENDED TO SHOW OUTLINE ONLY
- 5. UNLESS NOTED OTHERWISE. THE WORK SHALL INCLUDE FURNISHING MATERIALS. APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED EQUIPMENT, ON THE DRAWINGS.
- 6. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED
- 7. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE OWNER.
- 8. CONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING
- 9. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS. GROUNDING CABLES.
- 10. CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS. SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED
- 11. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.

verticalbi

TOWER ENGINEERING. INC. 556 JEFFERSON ST.

@

D N

SUITE 201 LAFAYETTE, LA 70501 (337) 886-7176 TEL. 2920 KINGMAN ST.

SUITE 201

METAIRIE, LA 70006 (504) 756-3112 TEL. TEI PROJECT # 2124-220-1003-006

OLD PEARSON ROAD SITE # US-MS-5200

2622 S PEARSON ROAD RICHLAND MS 39218

TOWNSHIP 4 NORTH RANGE 2 EAST

RANKIN COUNTY

REVISIONS A 09/05/24 PRELIMINARY ISSUE DESIGNI DESCRIPTION REVIDATE l _{BY}

GENERAL NOTES

SHEET N-1

GROUNDING NOTES

- 1. THE CONTRACTOR SHALL REVIEW AND INSPECT THE EXISTING FACILITY GROUNDING SYSTEM AND LIGHTNING PROTECTION SYSTEM (AS DESIGNED AND INSTALLED) FOR STRICT COMPLIANCE WITH THE NEC (AS ADOPTED BY THE AHJ), THE SITE—SPECIFIC (UL, LPI, OR NFPA) LIGHTING PROTECTION CODE, AND GENERAL COMPLIANCE WITH TIA GROUNDING STANDARDS. THE CONTRACTOR SHALL REPORT ANY VIOLATIONS OR ADVERSE FINDINGS TO THE OWNER FOR RESOLUTION.
- ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION, AND AC POWER GES'S)
 SHALL BE BONDED TOGETHER, AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
- 3. THE CONTRACTOR SHALL PERFORM IEEE FALL—OF—POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR NEW GROUND ELECTRODE SYSTEMS. THE CONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
- 4. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.
- 5. EACH BTS CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, 6 AWG STRANDED COPPER OR LARGER FOR INDOOR BTS; 2 AWG STRANDED COPPER FOR OUTDOOR BTS
- 6. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
- APPROVED ANTIOXIDANT COATINGS (I.E., CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
- 8. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND RAR.
- 9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
- 10. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING. IN ACCORDANCE WITH THE NEC.
- 11. METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH 6 AWS COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
- 12. GROUND CONDUCTORS USED IN THE FACILITY GROUND AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON-METALLIC MATERIAL SUCH AS PVC PLASTIC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (E.G., NON-METALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.

ELECTRICAL INSTALLATION NOTES

- 1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE LOCAL CODES.
- 2. CONDUIT ROUTINGS ARE SCHEMATIC. SUBCONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.
- 3. WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC.
- 4. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.
- 5. CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS.
- 6. EACH END OF EVERY POWER, POWER PHASE CONDUCTOR (I.E., HOTS), GROUNDING, AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2 INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC & OSHA.
- 7. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING, AND BRANCH CIRCUIT ID NUMBERS (I.E., PANELBOARD AND CIRCUIT ID'S).
- 8. PANELBOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS.
- 9. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
- 10. POWER, CONTROL, AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (#14 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
- 11. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (#6 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2 GREEN INSULATION, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
- 12. POWER AND CONTROL WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (#14 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; WITH OUTER JACKET; LISTED OR LABELED FOR THE LOCATION USED, UNLESS OTHERWISE SPECIFIED.
- 13. ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WIRE NUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRE NUTS SHALL BE RATED FOR OPERATION AT NO LESS THAN 75°C (90°C IF AVAILABLE).
- 14. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.
- 15. ELECTRICAL METALLIC TUBING (EMT) OR RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40, OR RIGID PVC SCHEDULE 80 FOR LOCATIONS SUBJECT TO PHYSICAL DAMAGE)
 SHALL BE USED FOR EXPOSED INDOOR LOCATIONS
- 16. ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT), OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
- 17. GALVANIZED STEEL INTERMEDIATE METALLIC CONDUIT (IMC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE GRADE.
- 18. RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80) SHALL BE USED UNDERGROUND; DIRECT BURIED, IN AREAS OF OCCASIONAL LIGHT VEHICLE TRAFFIC OR ENCASED IN REINFORCED CONCRETE IN AREAS OF HEAVY VEHICLE TRAFFIC.
- 19. IQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
- 20. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SETSCREW FITTINGS ARE NOT ACCEPTABLE.
- 21. CABINETS, BOXES, AND WIRE WAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.
- 22. WIRE WAYS SHALL BE EPOXY-COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARD; SHALL BE PANDUIT TYPE E (OR EQUAL); AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.
- 23. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES, AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL, SHALL MEET OR EXCEED UL 50, AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.
- 24. METAL RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED, OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
- 25. NONMETALLIC RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
- 26. THE CONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE OWNER BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
- 27. THE CONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD AGAINST LIFE AND PROPERTY.

verizon

verticalbridge

TOWER ENGINEERING, INC.

556 JEFFERSON ST. SUITE 201 LAFAYETTE, LA 70501 (337) 886-7176 TEL.

2920 KINGMAN ST. SUITE 201 METAIRIE, LA 70006 (504) 756-3112 TEL. TEI PROJECT # 2124-220-1003-006

OLD PEARSON ROAD SITE # US-MS-5200

2622 S PEARSON ROAD RICHLAND, MS 39218

TOWNSHIP 4 NORTH RANGE 2 EAST

RANKIN COUNTY

20	REVISIONS					
DESIGN RECORD	A	09/05/24	PRELIMINARY ISSUE	NAS		
뀚						
10N						
SES						
]	REV	DATE	DESCRIPTION	BY		

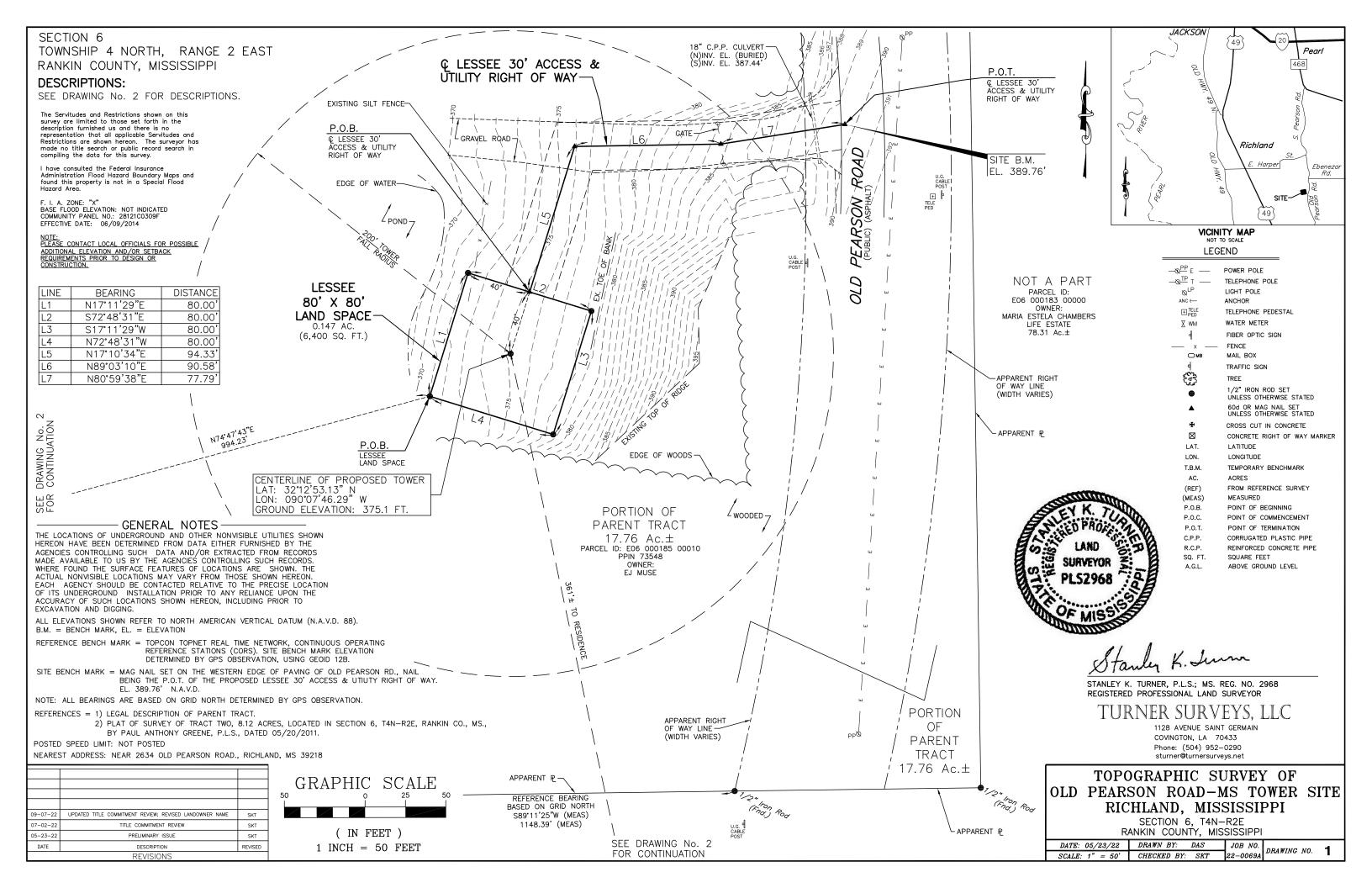
PROFESSIONAL STAN

NUMBE

SITE

GENERAL NOTES

N-2



DESCRIPTIONS:

LESSEE 80' X 80' LAND SPACE

A CERTAIN PIECE OR PARCEL OF LAND LOCATED IN SECTION 6, TOWNSHIP 4 NORTH, RANGE 2 EAST, COUNTY OF RANKIN, STATE OF MISSISSIPPI, MORE PARTICULARLY DESCRIBED AS FOLLOWS

COMMENCING AT A FOUND 1/2 INCH SQUARE ROD AT AN EXISTING FENCE CORNER AT THE APPARENT SOUTHWEST CORNER OF THE PARENT TRACT, SAID ROD IS REPORTED TO BE THE NORTHWEST CORNER OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 6, TOWNSHIP 4 NORTH, RANGE 2 EAST, RANKIN COUNTY, MISSISSIPPI; THENCE N74'47'43"E A DISTANCE OF 994.23 FEET TO A 1/2 INCH IRON ROD SET FOR A POINT OF BEGINNING; THENCE N17"11'29"E A DISTANCE OF 80.00 FEET TO A 1/2 INCH IRON ROD SET; THENCE S72°48'31"E A DISTANCE OF 80.00 FEET TO A 1/2 INCH IRON ROD SET; THENCE S17'11'29"W A DISTANCE OF 80.00 FEET TO A 1/2 INCH IRON ROD SET; THENCE N72°48'31"W A DISTANCE OF 80.00 FEET TO THE POINT OF BEGINNING, CONTAINING 0.147 ACRE (6,400 SQUARE FEET), AND IS SUBJECT TO ALL SERVITUDES AND RESTRICTIONS THAT MAY BE OF RECORD.

LESSEE 30' ACCESS & UTILITY RIGHT OF WAY

A CERTAIN PIECE OR PARCEL OF LAND LOCATED IN SECTION 6, TOWNSHIP 4 NORTH, RANGE 2 EAST, COUNTY OF RANKIN, STATE OF MISSISSIPPI, MORE PARTICULARLY

COMMENCING AT A FOUND 1/2 INCH SQUARE ROD AT AN EXISTING FENCE CORNER AT THE APPARENT SOUTHWEST CORNER OF THE PARENT TRACT, SAID ROD IS REPORTED TO BE THE NORTHWEST CORNER OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 6, TOWNSHIP 4 NORTH, RANGE 2 EAST, RANKIN COUNTY, MISSISSIPPI; THENCE N74'47'43"E A DISTANCE OF 994.23 FEET TO A 1/2 INCH IRON ROD SET AT THE SOUTHWEST CORNER OF THE LESSEE 80' X 80' LAND SPACE; THENCE N17'11'29"E A DISTANCE OF 80.00 FEET TO A 1/2 INCH IRON ROD SET; THENCE S72*48'31"E A DISTANCE OF 40.00 FEET TO A 60d NAIL SET ON THE NORTHERN LINE OF SAID LESSEE 80' X 80' LAND SPACE AND THE POINT OF BEGINNING FOR THE CENTERLINE OF THE LESSEE 30' ACCESS AND UTILITY RIGHT OF WAY; THENCE N17'10'34"E A DISTANCE OF 94.33 FEET TO A 60d NAIL SET; THENCE N89'03'10"E A DISTANCE OF 90.58 FEET TO A 60d NAIL SET; THENCE N80°59'38"E A DISTANCE OF 77.79 FEET TO A MAG NAIL SET ON THE WESTERN EDGE OF PAVING OF OLD PEARSON ROAD, A PUBLIC ASPHALT ROAD, AND THE POINT OF TERMINATION FOR THE CENTERLINE OF THE LESSEE 30' ACCESS AND UTILITY RIGHT OF WAY, AND IS SUBJECT TO ALL SERVITUDES AND RESTRICTIONS THAT

PARENT TRACT

17.76 AC. IN THE NW 1/4 OF SE 1/4, SECTION 6, T4N, R2E, RANKIN COUNTY, MISSISSIPPI PARCEL #: E6 185 10, PPIN: 73548

REPORT OF TITLE NOTES

TURNER SURVEYS, LLC HAS REVIEWED THE REPORT OF TITLE BY U.S. TITLE SOLUTIONS, FILE NO. UST71453, DATE OF REPORT: MAY 27. 2022, REFERENCE NO. 3000009 900213 FOR SITE, "OLD PEARSON RD-MS". THE LESSEE LAND SPACE IS 80' X 80', AND 30' ACCESS & UTILITY RIGHT OF WAY ARE LOCATED ON A CERTAIN TRACT SITUATED ON A CERTAIN 17.76 ACRE TRACT IN THE NW 1/4 OF THE SE 1/4 OF SECTION 6, TOWNSHIP 4 NORTH, RANGE 2 EAST. RANKIN COUNTY. MISSISSIPPI, NOW OR FORMERLY, PARENT TRACT FOR LAND SPACE AND 30' ACCESS & UTILITY RIGHT OF WAY IS OWNED BY LOREN MUSE

THE SURVEYOR MAKES NOTE OF THE FOLLOWING ITEMS IN THIS REPORT:

4.1 EASEMENT BY JAMES MANNERY AND JENNY MANNERY TO SOUTH CENTRAL BELL TELEPHONE COMPANY, DATED APRIL 28, 1979, RECORDED NOVEMBER 20, 1979, IN BOOK 394, PAGE 671. NOTES: UTILITY EASEMENT. FALLS ON EAST SIDE OF PEARSON ROAD, DOES NOT AFFECT 80' X 80' LAND SPACE OR ACCESS AND UTILITY RIGHT OF WAY.

UPDATED TITLE REPORT

TURNER SURVEYS, LLC HAS REVIEWED THE REPORT OF TITLE BY U.S. TITLE SOLUTIONS, FILE NO. UST2073, DATE OF REPORT: AUGUST 15, 2022, REFERENCE NO. 3000009 900213 FOR SITE, "OLD PEARSON RD-MS". THE LESSEE LAND SPACE IS 80' X 80', AND 30' ACCESS & UTILITY RIGHT OF WAY ARE LOCATED ON A CERTAIN TRACT SITUATED ON A CERTAIN 17.76 ACRE TRACT IN THE NW 1/4 OF THE SE 1/4 OF SECTION 6, TOWNSHIP 4 NORTH, RANGE 2 EAST, RANKIN COUNTY, MISSISSIPPI, NOW OR FORMERLY, PARENT TRACT FOR LAND SPACE AND 30' ACCESS & UTILITY RIGHT OF WAY IS OWNED BY LOREN MUSE

THE SURVEYOR MAKES NOTE OF THE FOLLOWING ITEMS IN THIS REPORT:

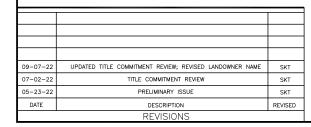
QUIT CLAIM DEED MADE BY LOREN MUSE, DATED JULY 28, 2022, RECORDED JULY 28, 2022, IN BOOK 2022, PAGE 17943. REVISED LANDOWNER NAME AND ADDED PPIN NUMBER TO REFLECT

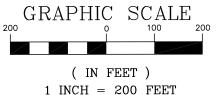
> NOT A PART PARCEL ID: E06 000180 00000 OWNER: BILLY RAY & VERMELL MAGNUM 35.75 Ac.±

NOT A PART

PARCEL ID: E06 000184 00000

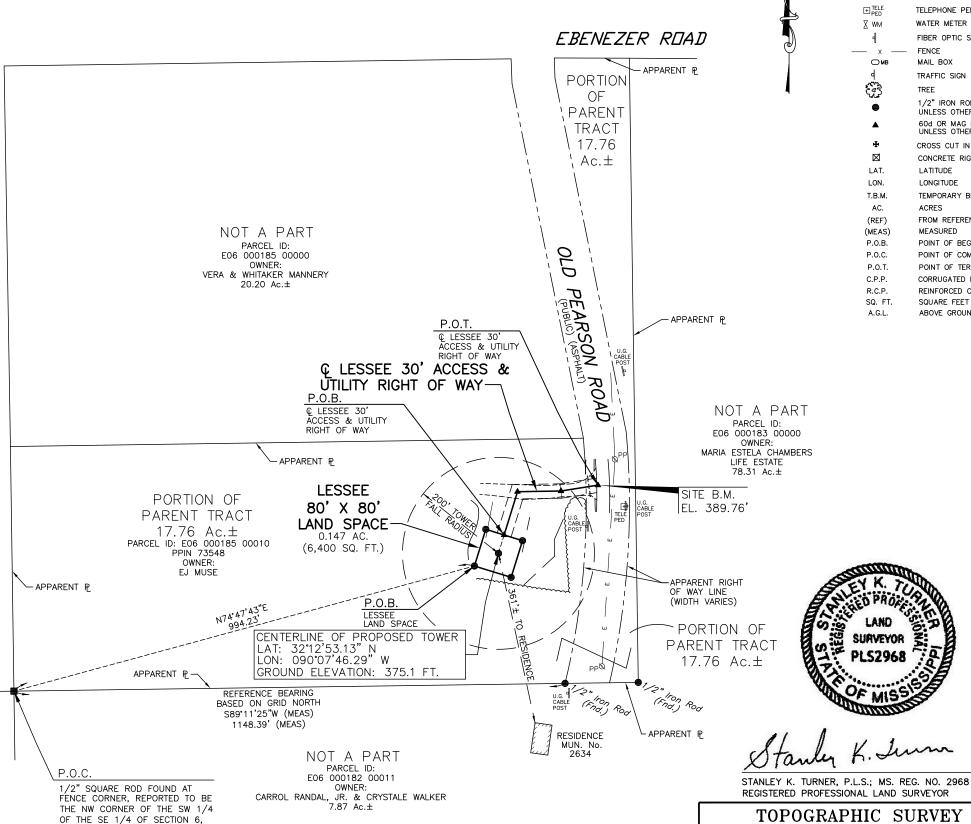
OWNER: RHEMANN CAPITAL LLC 104.40 Ac.±





T4N - R2E, RANKIN COUNTY, MS

SECTION 6 TOWNSHIP 4 NORTH, RANGE 2 EAST RANKIN COUNTY, MISSISSIPPI



TURNER SURVEYS. LLC

1128 AVENUE SAINT GERMAIN COVINGTON, LA 70433 Phone: (504) 952-0290 sturner@turnersurveys.net

TOPOGRAPHIC SURVEY OF OLD PEARSON ROAD-MS TOWER SITE RICHLAND, MISSISSIPPI

SURVEYOR

LEGEND

—⊗<u>™</u> 1

 ω_{LP}

ANC ←

± TELE

X ww

4

500

 \boxtimes

LAT.

LON. T.B.M.

AC.

(MEAS)

P.O.B.

P.O.C.

P.O.T.

C.P.P.

SQ. FT.

A.G.L.

Омв

POWER POLE

LIGHT POLE

WATER METER

FIBER OPTIC SIGN

ANCHOR

FENCE

MAIL BOX

LATITUDE

ACRES

MEASURED

SQUARE FEET

LONGITUDE

TRAFFIC SIGN

1/2" IRON ROD SET UNLESS OTHERWISE STATED

60d OR MAG NAIL SET UNLESS OTHERWISE STATED

CONCRETE RIGHT OF WAY MARKER

CROSS CUT IN CONCRETE

TEMPORARY BENCHMARK

FROM REFERENCE SURVEY

POINT OF COMMENCEMENT

CORRUGATED PLASTIC PIPE

REINFORCED CONCRETE PIPE

POINT OF TERMINATION

ABOVE GROUND LEVEL

POINT OF BEGINNING

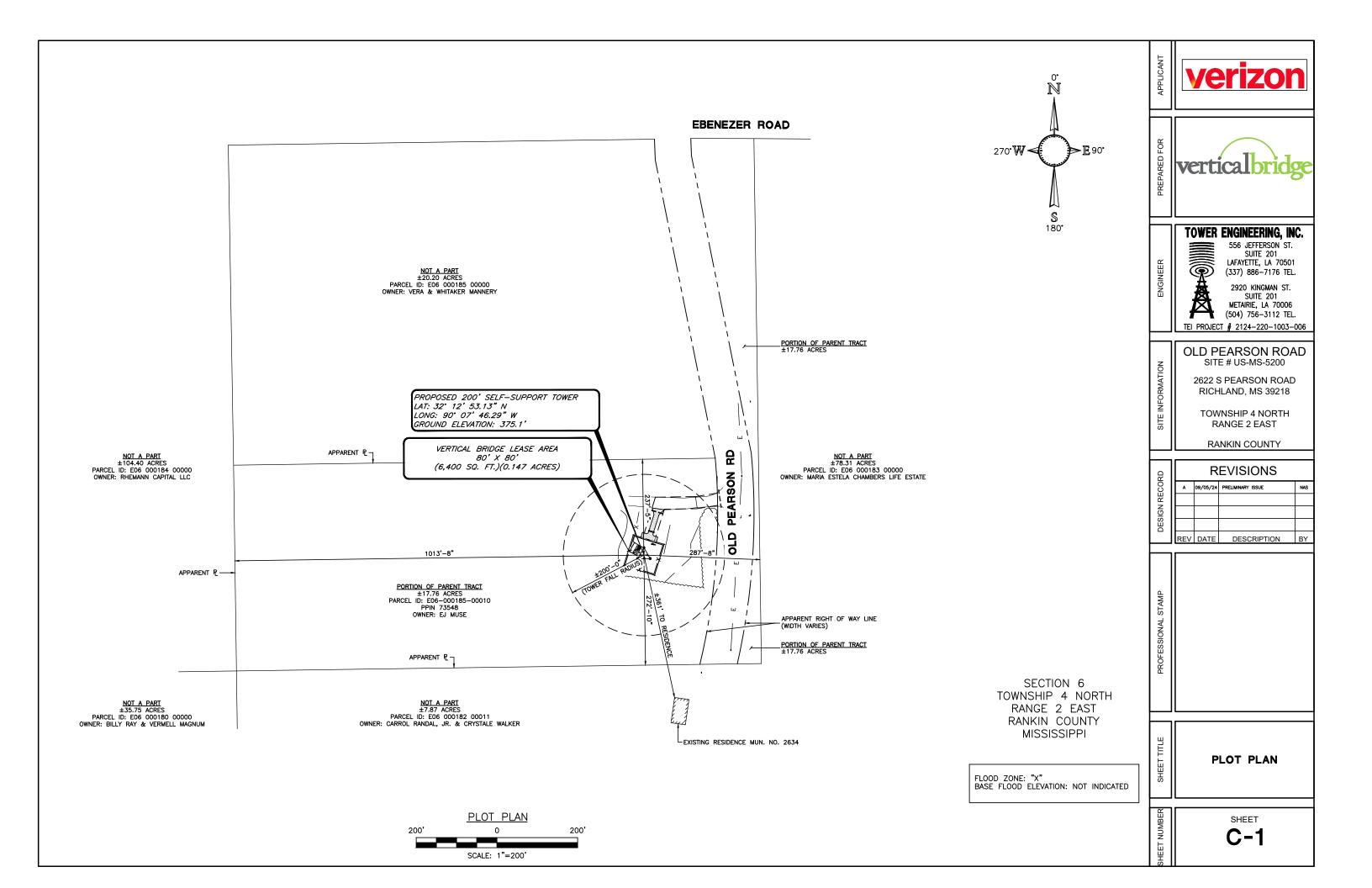
TELEPHONE POLE

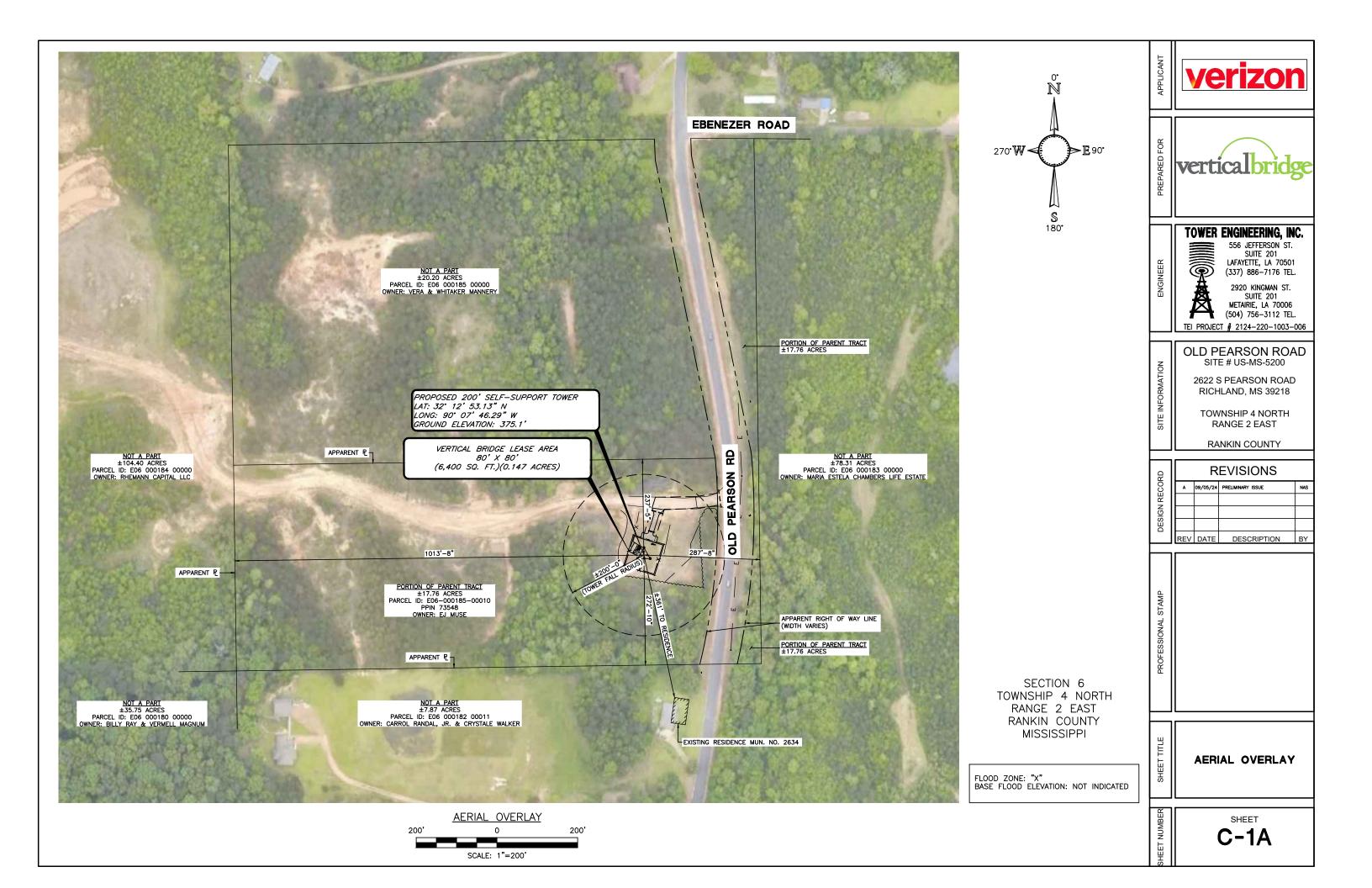
TELEPHONE PEDESTAL

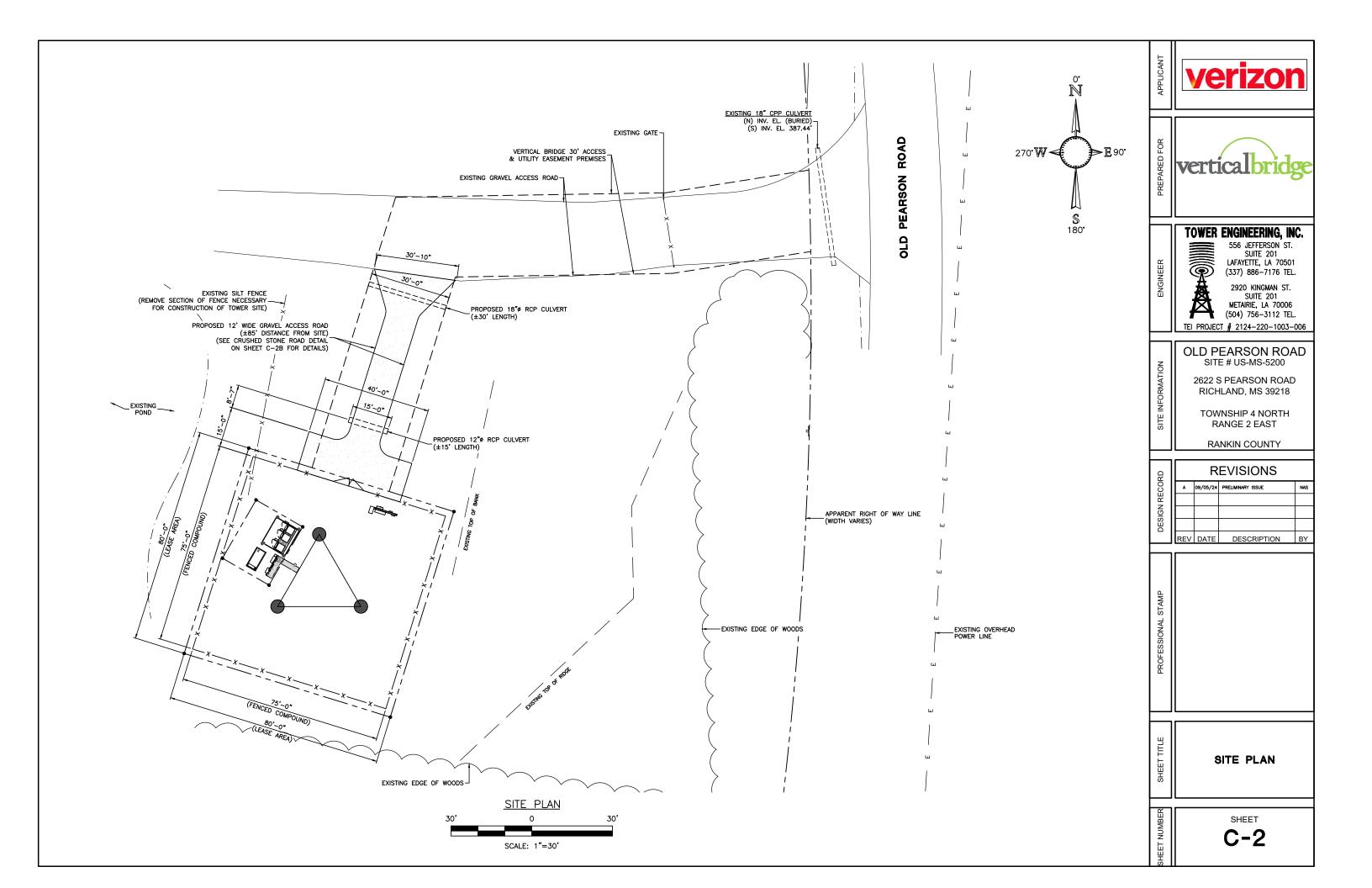
SECTION 6, T4N-R2E RANKIN COUNTY, MISSISSIPPI

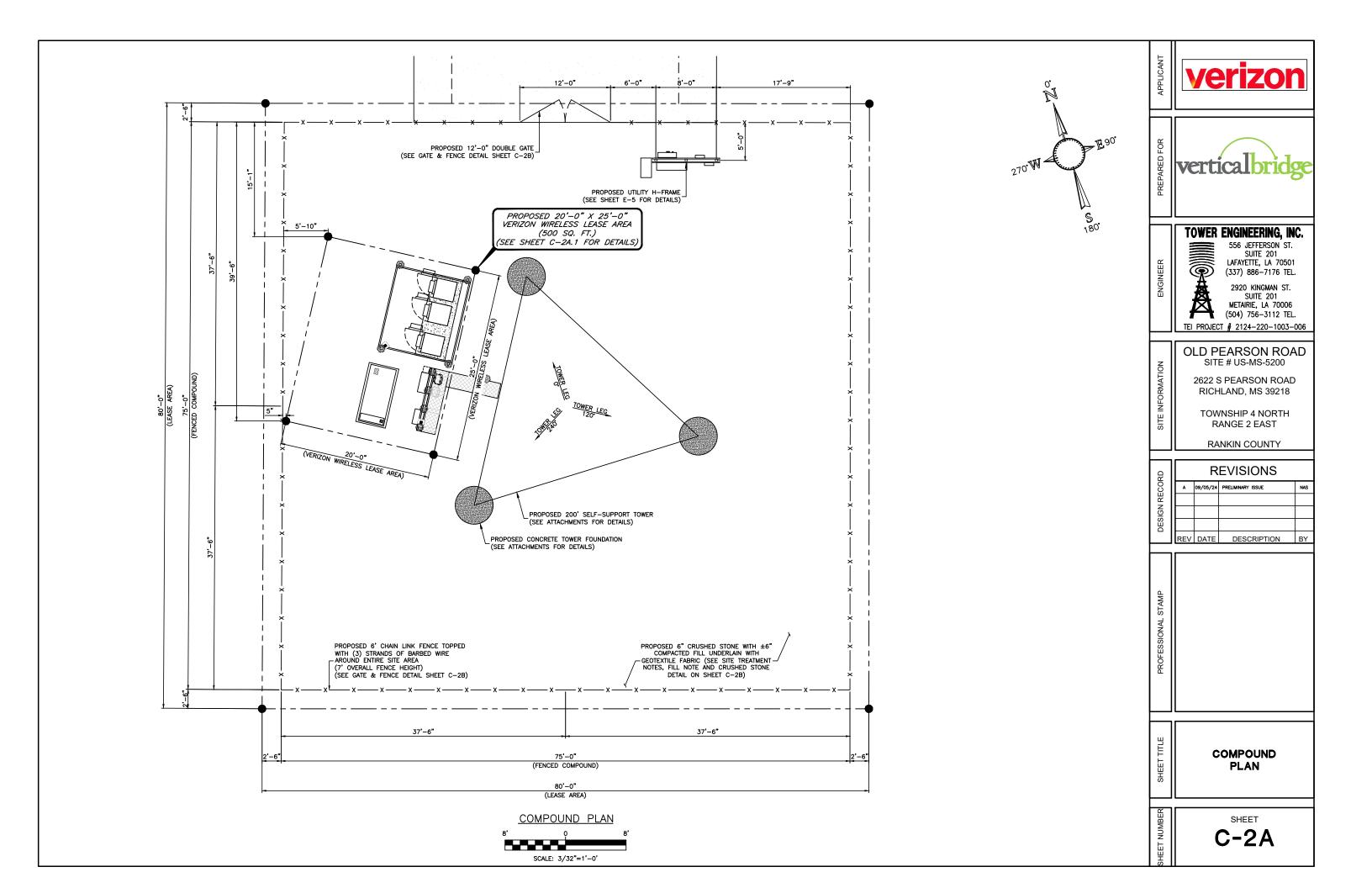
DATE: 05/23/22 | DRAWN BY: DAS | JOB NO.

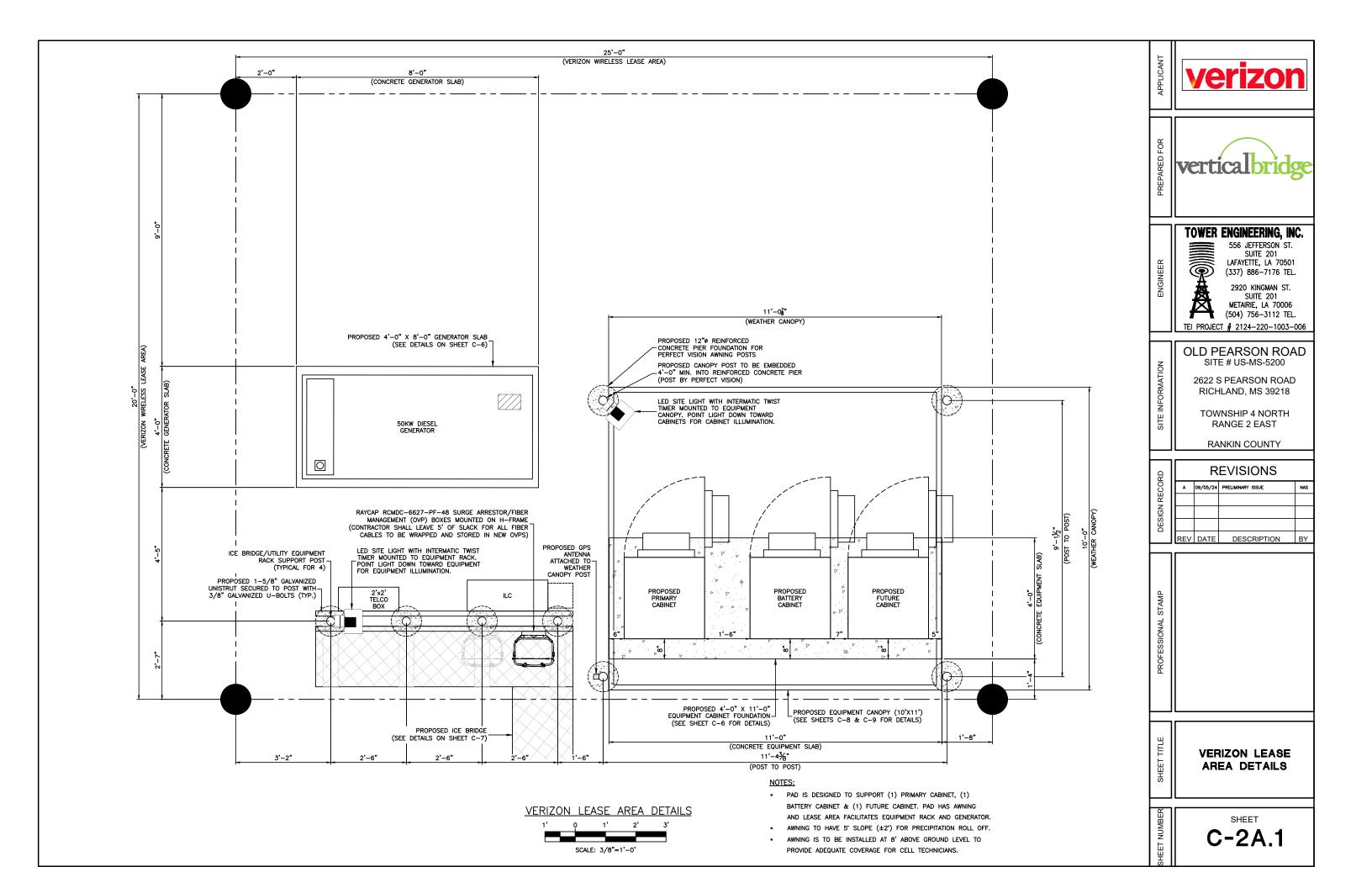
DRAWING NO. SCALE: 1" = 200' CHECKED BY: SKT 22-0069B











GENERAL NOTES:

- 1. ALL SITE WORK SHALL BE AS INDICATED ON THE DRAWINGS.
- 2. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES ORDINANCES, LAWS AND REGULATIONS OF ALL MUNICIPALITIES, UTILITIES
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS THAT MAY BE REQUIRED BY ANY FEDERAL, STATE,
- THE CONTRACTOR SHALL NOTIFY THE VZW CONSTRUCTION MANAGER, IN WRITING, OF ANY CONFLICTS, ERRORS OR OMISSIONS PRIOR TO THE SUBMISSION OF BIDS OR PERFORMANCE OF WORK. MINOR OMISSIONS OR ERRORS IN THE BID DOCUMENTS SHALL NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR THE OVERALL INTENT OF THESE DRAWINGS.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING SITE IMPROVEMENTS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED AS A RESULT OF CONSTRUCTION OF THIS FACILITY
- THE SCOPE OF WORK FOR THIS PROJECT SHALL INCLUDE PROVIDING ALL MATERIALS, EQUIPMENT AND LABOR REQUIRED TO COMPLETE THIS PROJECT. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- THE CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO SUBMITTING A BID TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- 8. CONTRACTOR SHALL MAKE A UTILITY "ONE CALL" TO LOCATE ALL UTILITIES PRIOR TO EXCAVATION AT SITE.
- 9. ANY UNDERGROUND UTILITIES OR STRUCTURES THAT EXIST BENEATH THE PROJECT AREA, CONTRACTOR MUST LOCATE IT AND CONTACT THE APPLICANT & THE OWNER'S REPRESENTATIVE.
- 10. NO SIGNIFICANT NOISE, SMOKE, DUST, OR ODOR WILL RESULT FROM THIS FACILITY.
- 11. THE FACILITY IS UNMANNED AND NOT INTENDED FOR HUMAN HABITATION (NO HANDICAP ACCESS REQUIRED)
- 12. THE FACILITY IS UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SANITARY SERVICE.
- 13. POWER TO THE FACILITY WILL BE MONITORED BY A SEPARATE METER.
- 14. THERE ARE NO COMMERCIAL SIGNS PROPOSED FOR THIS INSTALLATION.
- 15. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
- 16. THE SUBGRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION. MAXIMUM SOIL LIFTS:

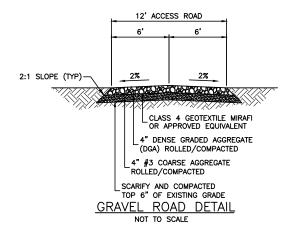
JUMPING JACK - 3'

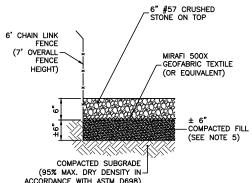
HOE OPERATED VIBRATORY PLATE - 8"

WHEELED VIBRATORY SOIL COMPACTOR — 12"
*LEFT HEIGHTS MAY NEED TO BE ADJUSTED DEPENDING ON SOIL TYPES AND MOISTURE CONTENT.

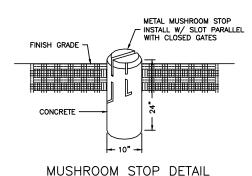
- 17. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY UTILITY OWNER. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR PIER DRILLING AROUND OR NEAR UTILITIES.
- 18. THE AREAS DISTURBED DUE TO CONSTRUCTION ACTIVITY SHALL BE GRADED AND RESTORED PER CODE/LANDLORD REQUIREMENTS (REFER TO
- 19. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL, AND COORDINATED WITH THE MUNICIPALITY.
- 20. UTILITY WARNING TAPE SHALL BE PLACED ABOVE ALL NEW CONDUITS AT MAX 18" DEPTH BELOW GRADE.
- 21. YZW CONTRACTOR RESPONSIBILITIES:

 A. ALL WORK IN THE YZW LEASED AREA EXCEPT POWER AND TELCO CONDUIT FROM MULTI-GANG METER RACK AND TELCO DEMARC WHICH SHALL BE INSTALLED BY BUILD-TO-SUIT VENDOR.
- WHICH SHALL BE INSTALLED BY BUILD-10-3011 VENDOR.
 INSTALLATION OF WAVEGUIDE SUPPORT FROM VZW LEASED AREA TO TOWER BASE.
 POWER AND FIBER LINES FROM VZW GROUND EQUIPMENT TO ANTENNA MOUNT LOCATION ON TOWER.
 VZW ANTENNAS, RRUS, AND APPURTENANT VZW EQUIPMENT ON ANTENNA MOUNTING PLATFORM AT RAD CENTER IN ACCORDANCE WITH





CRUSHED STONE DETAIL NOT TO SCALE



NOT TO SCALE

ROAD CONSTRUCTION NOTES:

- CONTRACTOR TO ADEQUATELY GRUB ALL STONE PLACEMENT AREAS FOR THE FULL LENGTH OF THE ACCESS
- 2. CONTRACTOR TO PROOF-ROLL THE GRUBBED AREA WITH A WEIGHTED-RUBBER TIRED VEHICLE.
- 3. CONTRACTOR SHOULD MITIGATE ALL ENCOUNTERED AREAS WHICH CONTAIN WEAK, YIELDING OR PUMPING SOIL MATERIALS.
- 4. IF LARGE MITIGATION AREAS ARE OBSERVED, THE CONTRACTOR SHOULD CONTACT THE ENGINEER FOR ADDITIONAL ROAD INSTALLATION
- 5. CONTRACTOR TO REFER TO THE SITE GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION.

SITE TREATMENT NOTES:

- 6" CRUSHED STONE INSIDE FENCING LINE UNDERLAIN BY GEOTEXTILE FABRIC, SEE CRUSHED STONE DETAIL THIS SHEET.
- 2. THE CONTRACTOR SHALL MAINTAIN ADEQUATE SURFACE DRAINAGE AWAY FROM ALL FOUNDATIONS PRIOR TO THE INITIATION OF CONSTRUCTION OPERATIONS AND AFTER COMPLETION OF CONSTRUCTION.
- 3. GRADES SHALL BE SET TO ENSURE POSITIVE DRAINAGE OF WATER AWAY FROM ALL FOLINDATIONS
- 4. SEE GEO-TECHNICAL REPORT FOR SITE PREPARATION RECOMMENDATIONS.
- 5. CONTRACTOR TO PLACE BACKFILL AND FILL MATERIAL ON ALL SIDES OF SITE. CONTRACTOR TO REMOVE VEGETATION, BREAK UP SLOPED SURFACED STEEPER THAN 1 VERTICAL TO 2 HORIZONTAL SO FILL MATERIAL WILL BOND WITH EXISTING SURFACE.





TOWER ENGINEERING, INC.



556 JEFFERSON ST. SUITE 201 LAFAYETTE, LA 70501 (337) 886-7176 TEL.

2920 KINGMAN ST. SUITE 201 MEIAIRIE, LA 7555 (504) 756-3112 TEL.

TEI PROJECT # 2124-220-1003-006

OLD PEARSON ROAD SITE # US-MS-5200

2622 S PEARSON ROAD RICHLAND. MS 39218

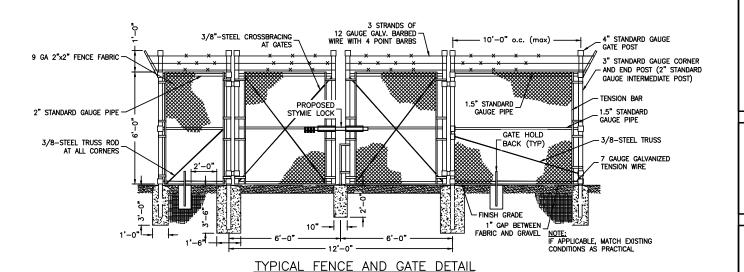
TOWNSHIP 4 NORTH RANGE 2 EAST

RANKIN COUNTY

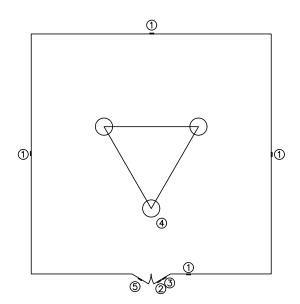
RD	REVISIONS							
DESIGN RECORD	A	09/05/24	PRELIMINARY ISSUE	NAS				
2								
<u>0</u>								
SES								
	REV	DATE	DESCRIPTION	BY				
			<u> </u>					

COMPOUND PLAN **DETAILS**

SHEET



NOT TO SCALE



NOTE: SEE TYPICAL SIGNS AND SPECIFICATIONS DETAIL ON THIS SHEET FOR SIGN DESIGNATIONS.

OVERALL SIGN PLACEMENT PLAN VIEW NOT TO SCALE



1) NO-TRESSPASSING SIGN
10"x14" DIGITAL PRINT MOUNTED
TO 0.40 THICK ALUMINUM



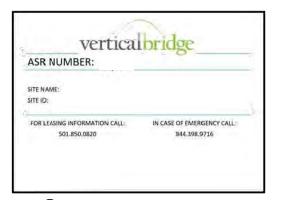
8"x12" DIGITAL PRINT MOUNTED TO 0.40 THICK ALUMINUM



2 NOTICE - RF SIGN (BLUE) 3 CAUTION - RF SIGN (YELLOW) 8"x12" DIGITAL PRINT MOUNTED TO 0.40 THICK ALUMINUM

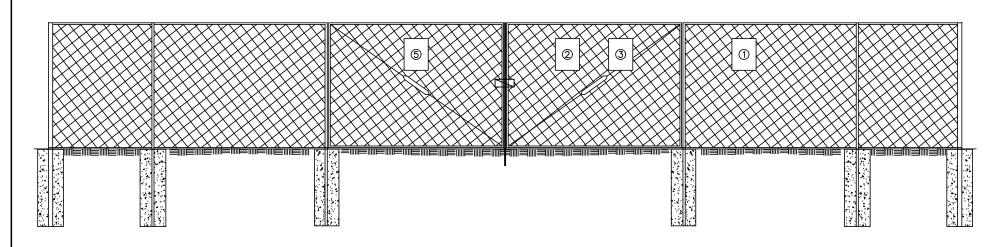
A NOTICE A **GUIDELINES FOR WORKING IN** RADIO FREQUENCY ENVIRONMENTS All personnel should have electromagnetic energy (EME) ewareness training. A. All personnel entering this aris must be authorized. A. Obey all posted signs. Assume all antennas are active. Before working on antennas, notify owners and disable appropriate transmitters. Maintain minimum 3 feet clearance from all antennas. Do not stop in front of antennas. A. Use personal RF monitors while working near antennas. A Never operate transmitters without shields during normal operation A. Do not operate base station antennas in equipment room.

(4) WORK GUIDELINES



5 <u>VERTICAL BRIDGE SIGN</u> 18"x24"

TYPICAL SIGNS AND SPECIFICATIONS NOT TO SCALE



SIGNAGE NOTES:

- SIGNS SHALL BE FABRICATED FROM CORROSION RESISTANT PRESSED METAL, AND PAINTED WITH LONG LASTING UV RESISTANT COATINGS.
- 2. SIGNS (EXCEPT WHERE NOTED OTHERWISE) SHALL BE MOUNTED TO THE TOWER, GATE, AND FENCE USING A MINIMUM OF 9 GAUGE ALUMINUM WIRE, HOG RINGS (AS UTILIZED IN FENCE INSTALLATIONS) OR BRACKETS WHERE NECESSARY. BRACKETS SHALL BE OF SIMILAR METAL AS THE STRUCTURE TO AVOID GALVANIC CORROSION.

verizon

TOWER ENGINEERING, INC.

556 JEFFERSON ST. SUITE 201 LAFAYETTE, LA 70501 (337) 886-7176 TEL.

2920 KINGMAN ST. SUITE 201 METAIRIE, LA 70006 (504) 756-3112 TEL.

TEI PROJECT # 2124-220-1003-006

OLD PEARSON ROAD SITE # US-MS-5200

2622 S PEARSON ROAD RICHLAND, MS 39218

TOWNSHIP 4 NORTH RANGE 2 EAST

RANKIN COUNTY

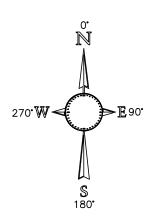
REVISIONS A 09/05/24 PRELIMINARY ISSUE REV DATE DESCRIPTION

SITE SIGN **DETAILS**

C-2B.1

SITE SIGNAGE FRONT GATE VIEW

NOT TO SCALE



NOTES:

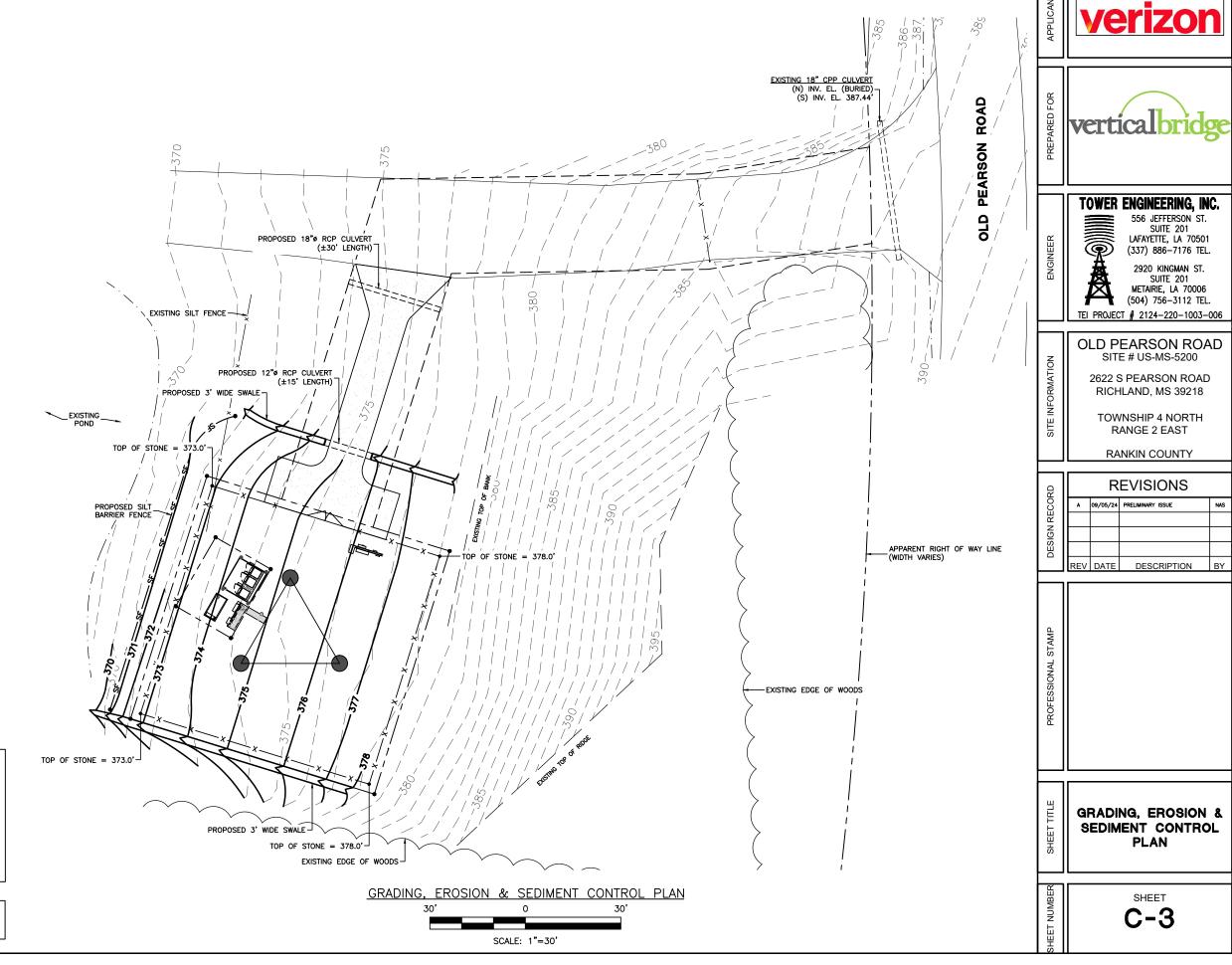
- CONSTRUCTION EXIT TO REDUCE OR ELIMINATE THE TRANSPORT OF MUD FROM THE CONSTRUCTION AREA ONTO PUBLIC RIGHT—OF—WAYS, STREETS, ALLEYS, SIDEWALKS, OR PARKING AREAS.
- TYPE C SEDIMENT BARRIER TO PREVENT ANY SEDIMENT CARRIED BY SHEET FLOW FROM LEAVING THE SITE AND ENTERING NATURAL DRAINAGE WAYS OR STORM DRAINAGE SYSTEMS.
- 3. DISTURBED AREA STABILIZATION (TEMPORARY) TO ESTABLISH A TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDINGS ON DISTURBED AREAS.
- 4. DISTURBED AREA STABILIZATION (PERMANENT) TO ESTABLISH A PERMANENT VEGETATIVE COVER SUCH AS TREES, SHRUBS, VINES, GRASSES, SOD, OR LEGUMES ON DISTURBED AREAS.
- DISTURBED AREA DUST CONTROL TO CONTROL THE SURFACE AND AIR MOVEMENT OF DUST ON CONSTRUCTION SITES, ROADWAYS, AND SIMILAR SITES.

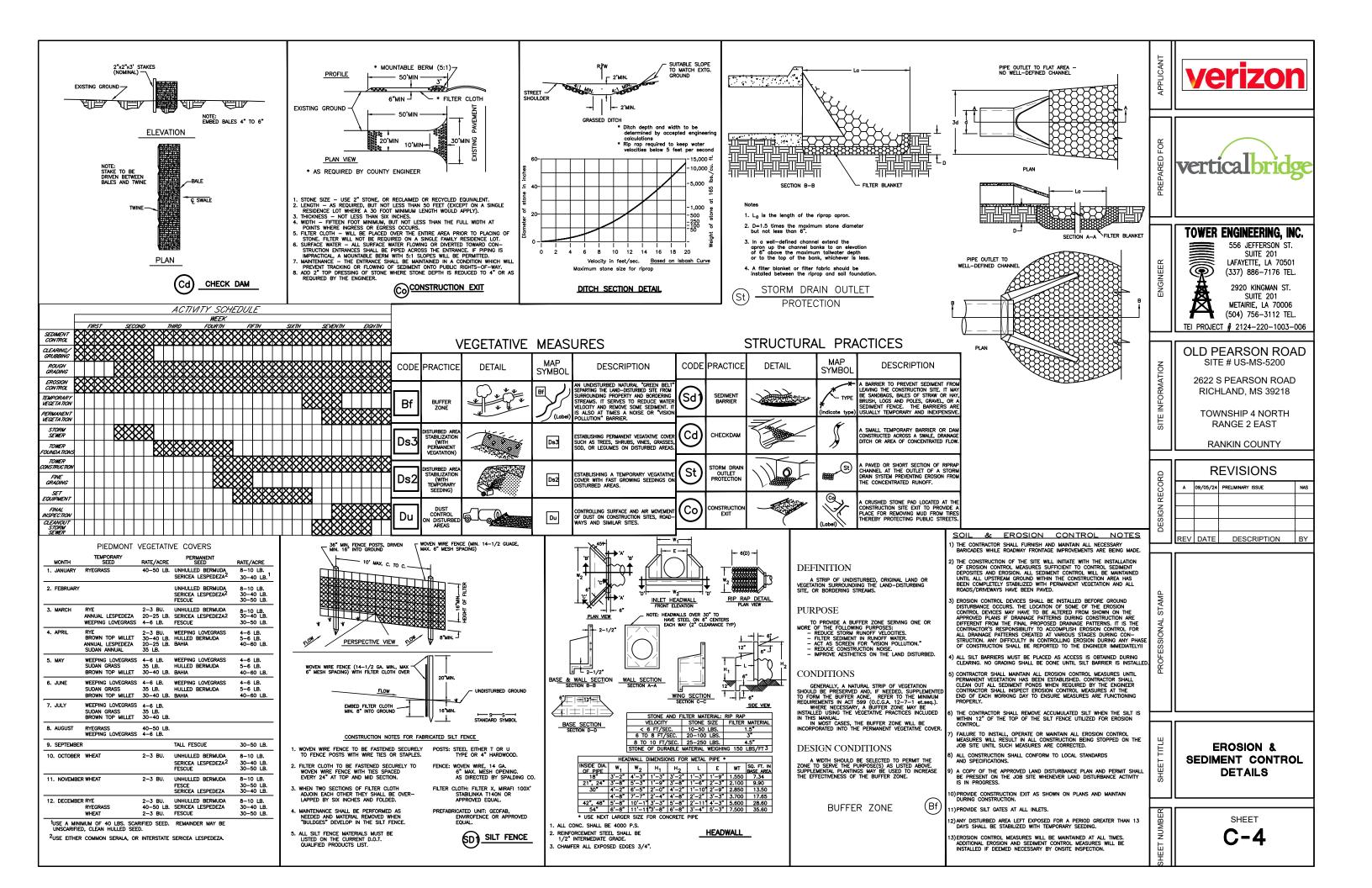
DISTURBED AREAS LEFT IDLE SHALL BE STABILIZED WITH TEMPORARY VEGETATION AFTER 13 DAYS; AFTER 30 DAYS PERMANENT VEGETATION SHALL BE ESTABLISHED.

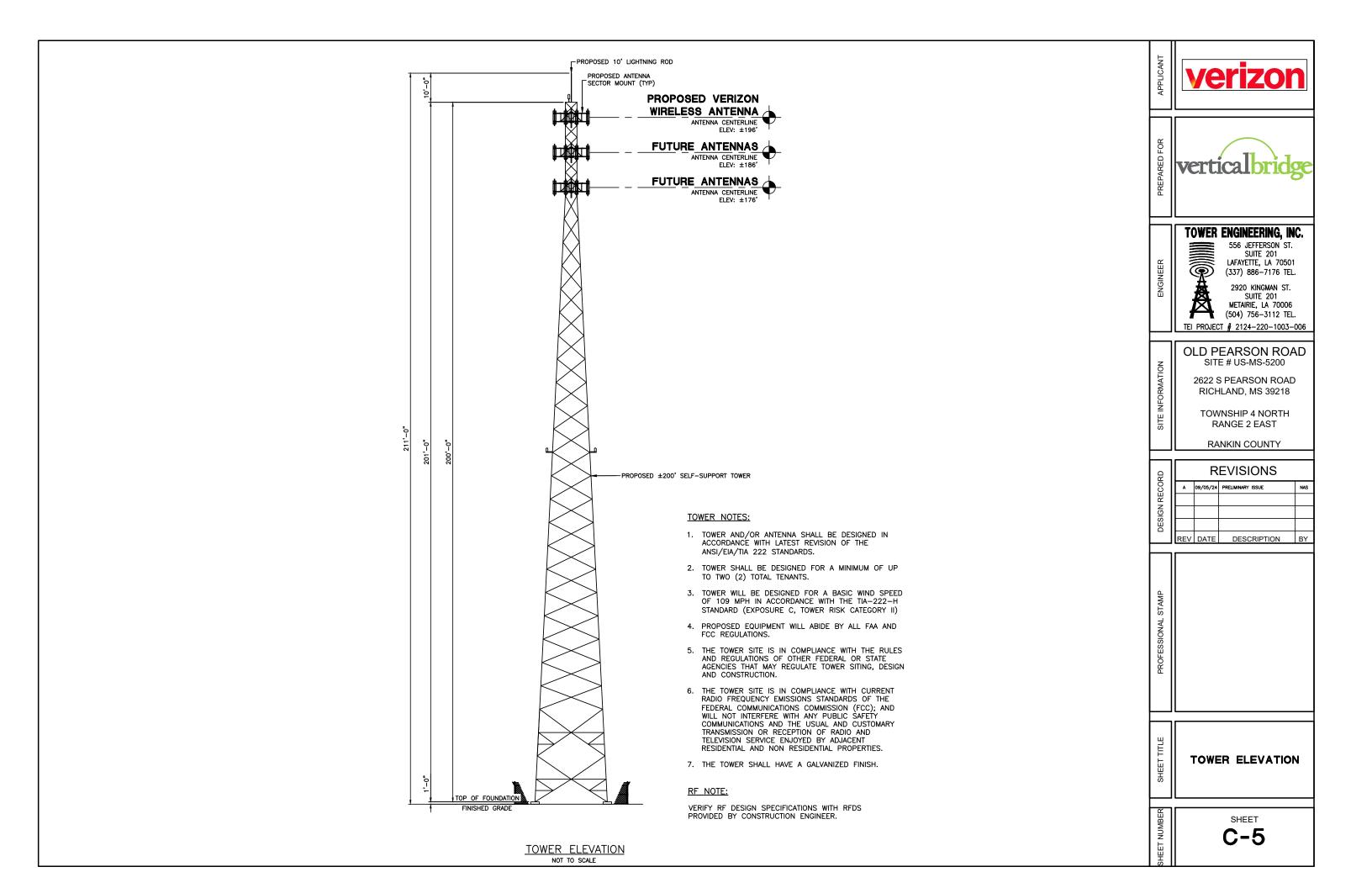
MAINTENANCE STATEMENT: EROSION CONTROL MEASURES WILL BE INSPECTED AT LEAST WEEKLY, AFTER EACH RAIN AND REPAIRED BY THE GENERAL CONTRACTOR.

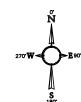
ADDITIONAL EROSION CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY ON—SITE INSPECTION.

NPDES PERMIT WILL NOT BE REQUIRED DUE TO SITE DEVELOPMENT/DISTURBED AREA IS LESS THAN 1 ACRE.

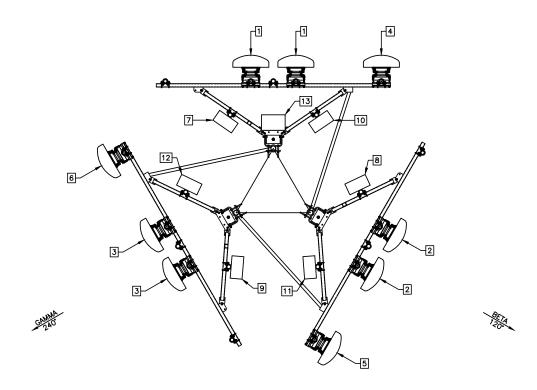












PROPOSED ANTENNA AND FIBER/HYBRID CABLE CONFIGURATION									
ELEV.	SECTOR	AZIMUTH	QTY.	LTE 700/850/1900/AWS ANTENNAS MECHANI 5G 850 ANTENNAS DOWN-T			MOUNT	HYBRID/FIBER CABLE	CABLE LENGTH
	1	o.	2	JMA MX06FIT865-02 ANTENNA	1	0,		(36) COAX JUMPER CABLES	±15'
196'	2	120°	2	JMA MX06FIT865-02 ANTENNA	2	O*			±15'
	3	240°	2	JMA MX06FIT865-02 ANTENNA	3	O*			±15'
5G L-SUB6 ANTENNAS/RRHs									
	1	o.	1	SAMSUNG MT6413-77A ANTENNA	4	0°		(6) 1X2 HYBRID JUMPER CABLES	±15'
196'	2	120°	1	SAMSUNG MT6413-77A ANTENNA	5	o*			±15'
	3	240°	1	SAMSUNG MT6413-77A ANTENNA	6	0°			±15'
					COMMSCOPE SFG22HDX-12-4-96				
	1		1	SAMSUNG RF4461D-13A RRH	7		ANTENNA SECTOR MOUNT		±15'
196'	2		1	SAMSUNG RF4461D-13A RRH	8			(3) 1X2 HYBRID JUMPERS	±15'
	3		1	SAMSUNG RF4461D-13A RRH	9				±15'
LTE 1900/AWS RRHs									
	1		1	SAMSUNG B2/B66A ORAN RRH (RF4439D-25A)	10				±15'
196'	2		1	SAMSUNG B2/B66A ORAN RRH (RF4439D-25A)	11			(3) 1X2 HYBRID JUMPERS	±15'
	3		1	SAMSUNG B2/B66A ORAN RRH (RF4439D-25A)	12				±15'
RAYCAP SURGE ARRESTOR & FIBER MANAGEMENT BOX									
196'			1	RAYCAP RCMDC-6627-PF-48 OVP	13			(2) HFT1206-24SV4-	·G ±225'



TOWER ENGINEERING, INC.

556 JEFFERSON ST.
SUITE 201
LAFAYETTE, LA 70501
(337) 886-7176 TEL.

556 JEFFERSON ST.
SUITE 201
LAFAYETTE, LA 70501
(337) 886–7176 TEL.
2920 KINGMAN ST.
SUITE 201
METAIRIE 201
METAIRIE 301
METAIRIE 3112 TEL.
TEL PROJECT # 3114 320 4103 000

TEI PROJECT # 2124-220-1003-006

OLD PEARSON ROAD SITE # US-MS-5200

2622 S PEARSON ROAD RICHLAND, MS 39218

TOWNSHIP 4 NORTH RANGE 2 EAST

RANKIN COUNTY

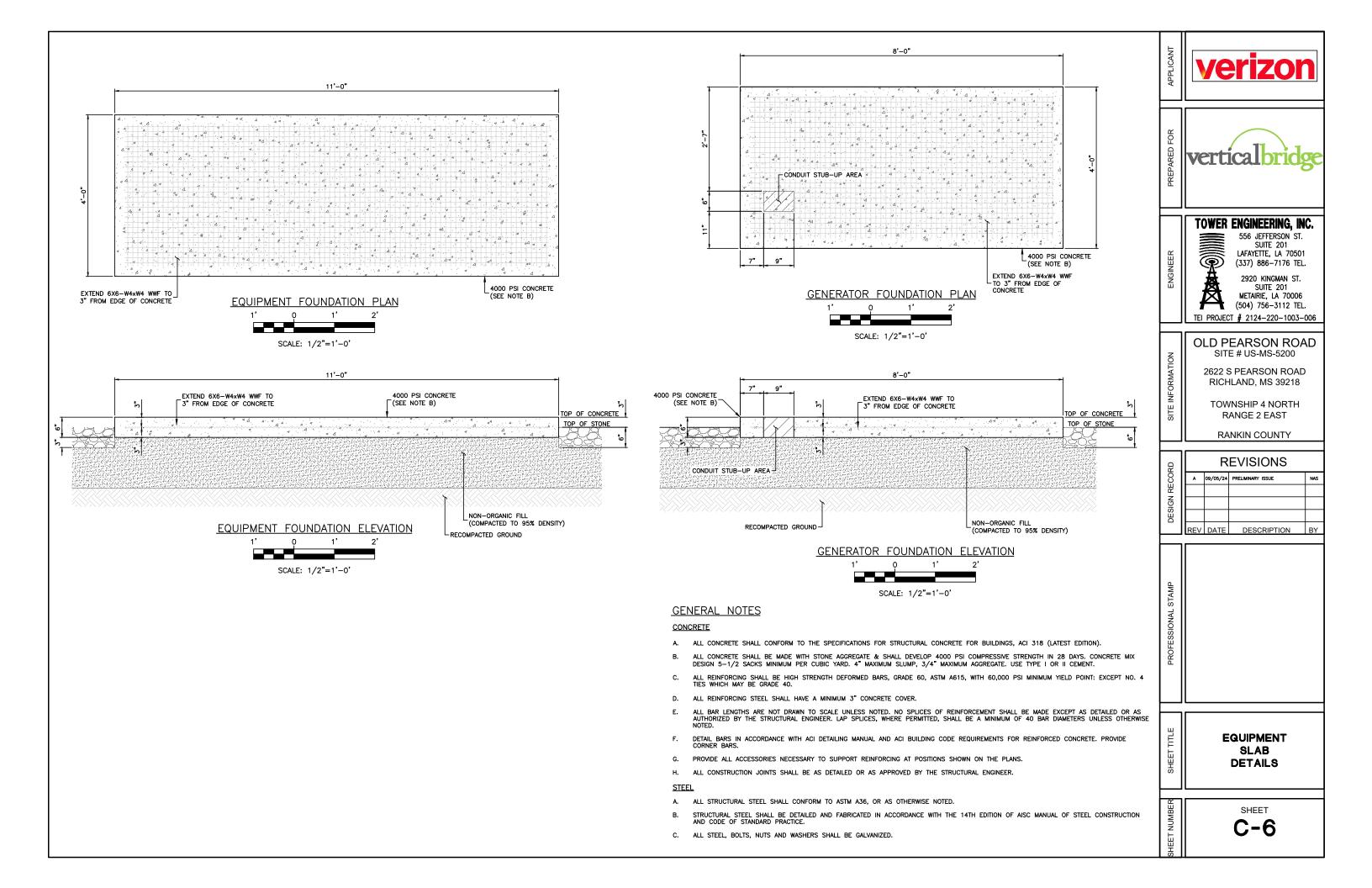
٦D		REVISIONS					
DESIGN RECORD	A	09/05/24	PRELIMINARY ISSUE	NAS			
I RE							
IGN							
SES							
	REV	DATE	DESCRIPTION	BY			
	^						

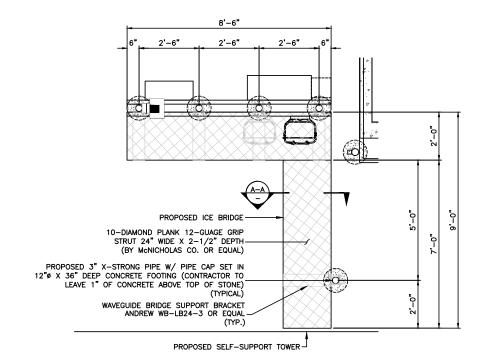
ANTENNA ORIENTATION PLAN

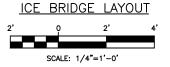
SHEET C-5A

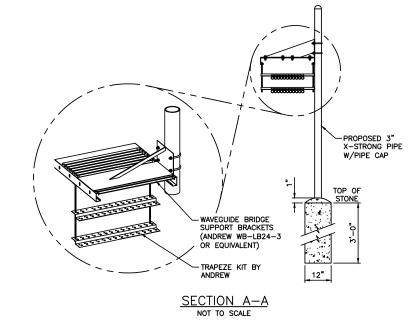
ANTENNA ORIENTATION PLAN

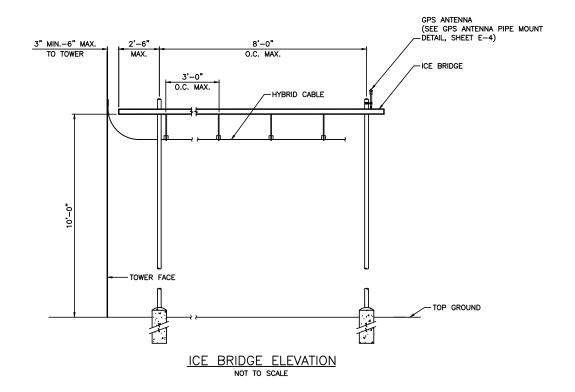


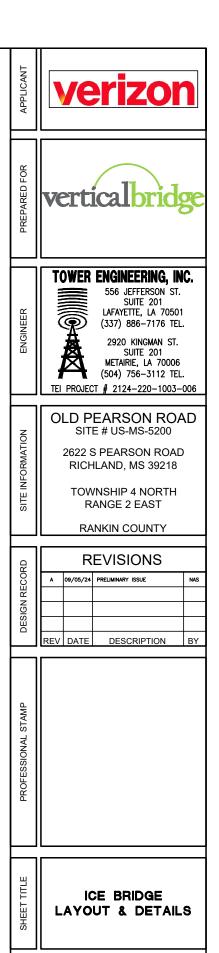




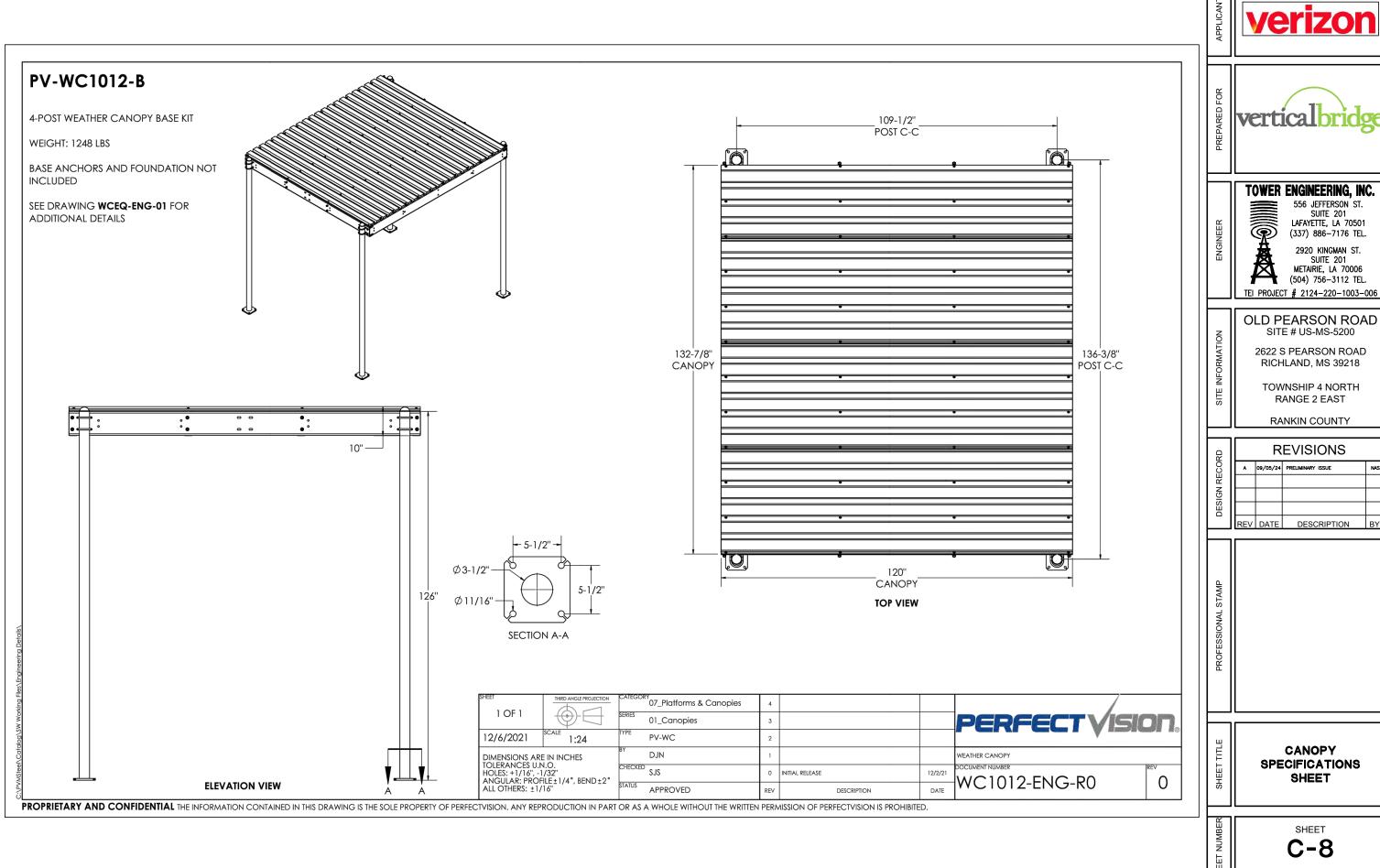


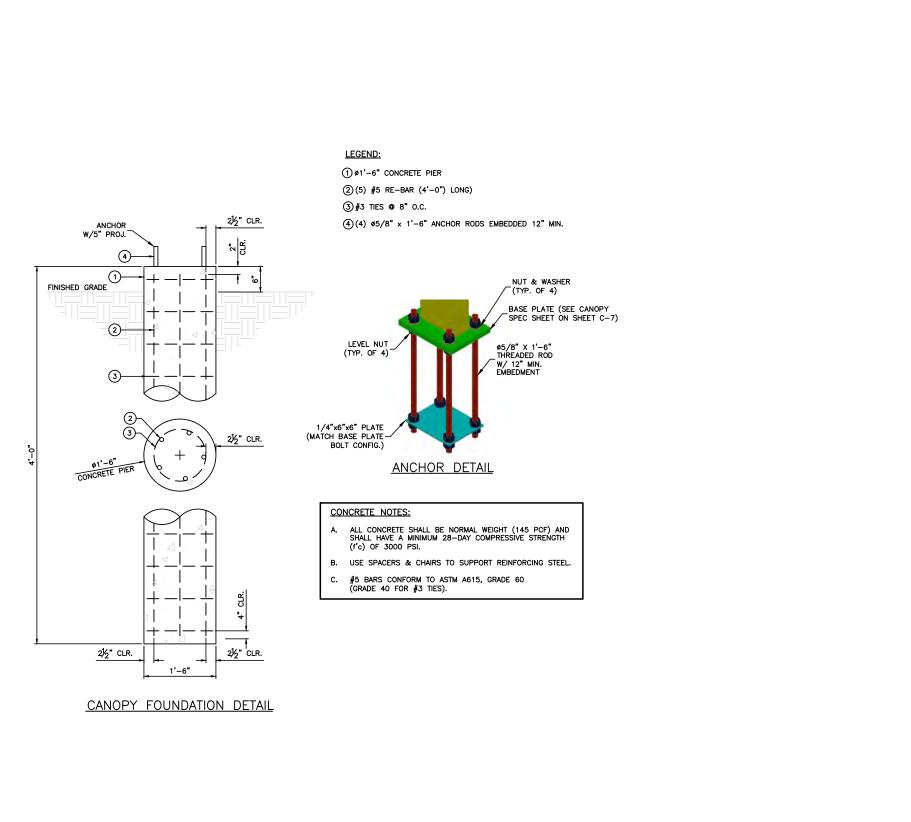






C-7





verizon

verticalbridge

TOWER ENGINEERING, INC.



556 JEFFERSON ST. SUITE 201 LAFAYETTE, LA 70501 (337) 886-7176 TEL.

2920 KINGMAN ST. SUITE 201 METAIRIE, LA 70006 (504) 756–3112 TEL.

TEI PROJECT # 2124-220-1003-006

OLD PEARSON ROAD SITE # US-MS-5200

2622 S PEARSON ROAD RICHLAND, MS 39218

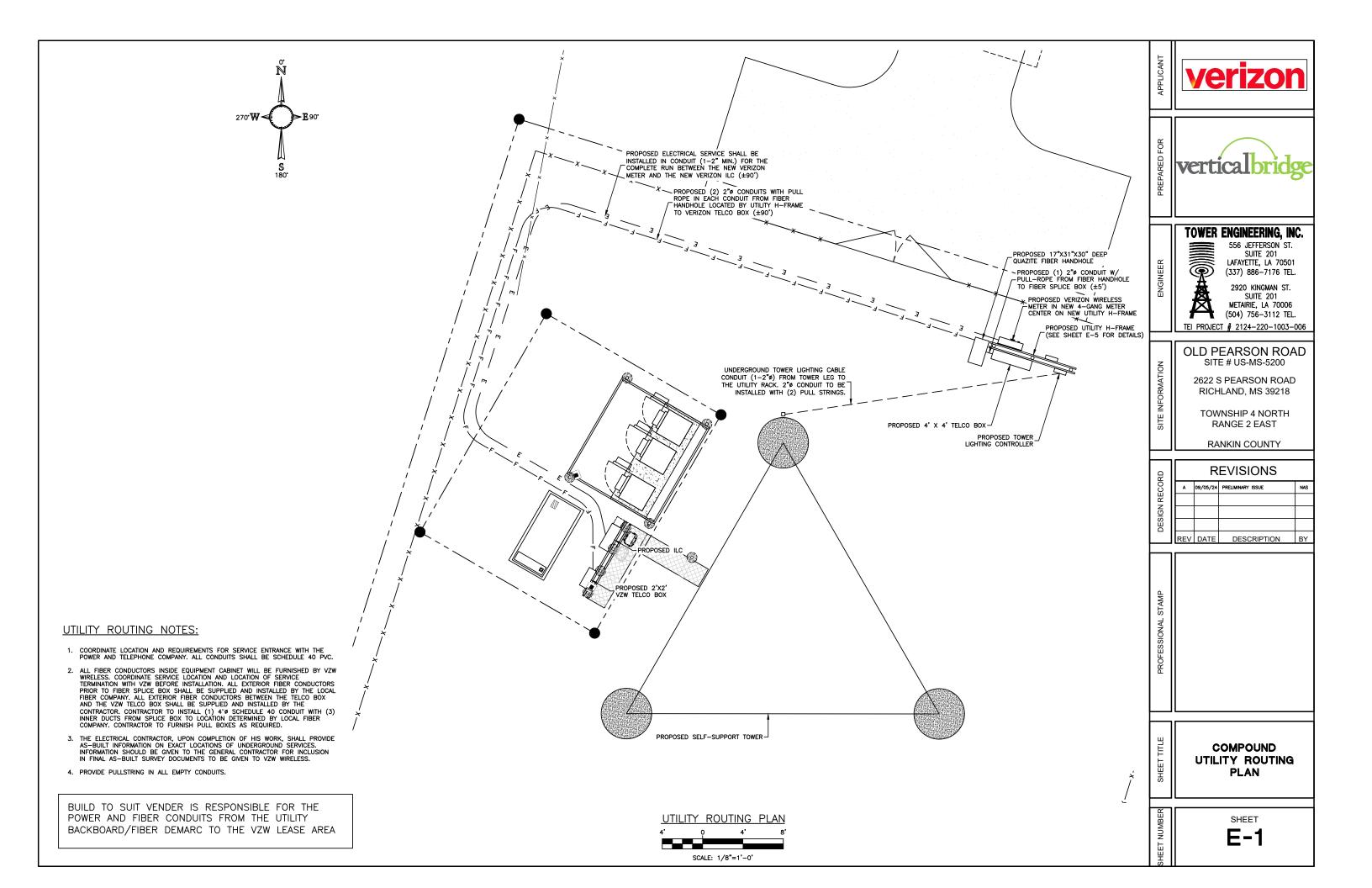
TOWNSHIP 4 NORTH RANGE 2 EAST

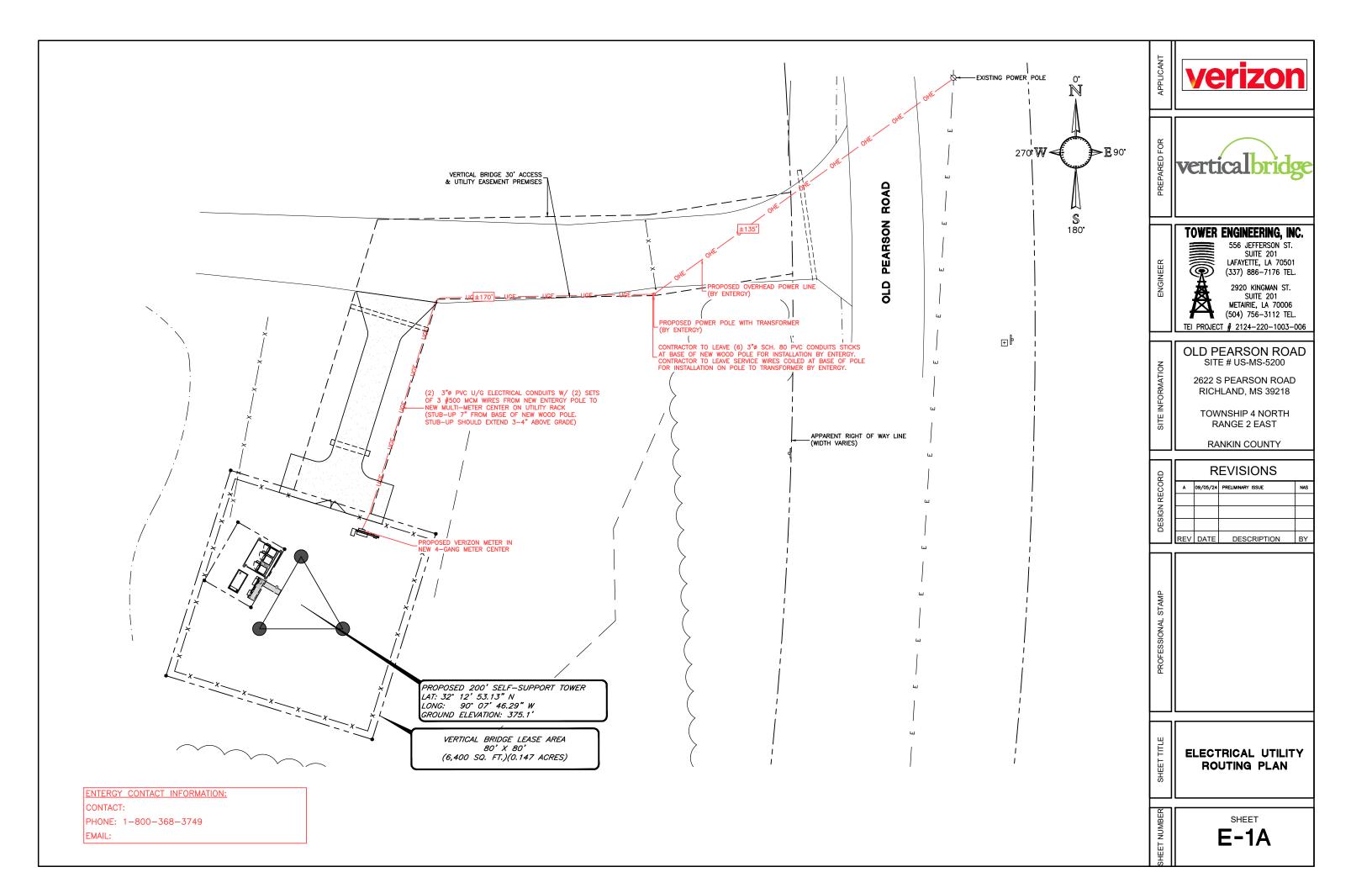
RANKIN COUNTY

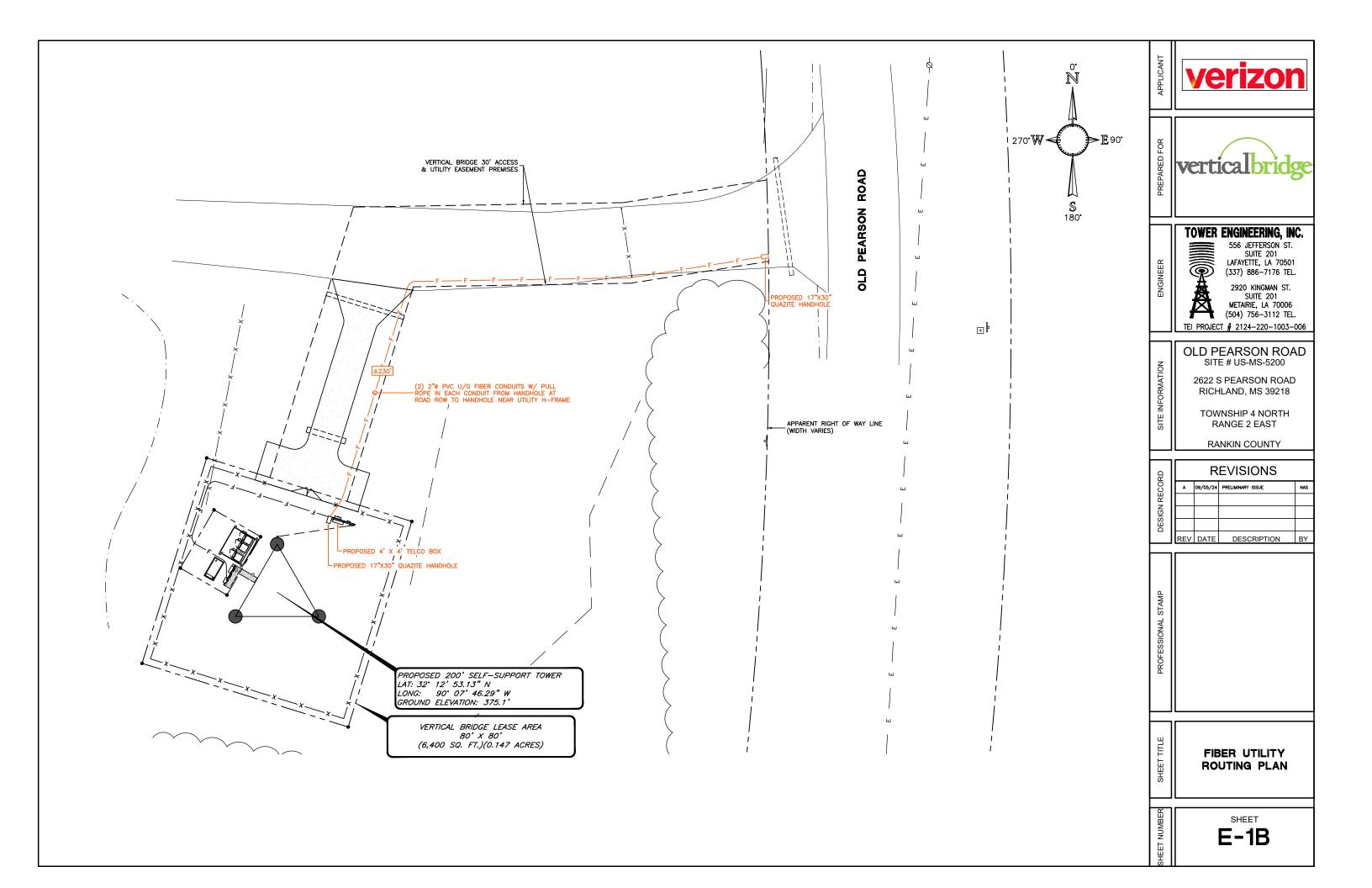
	2		REVISIONS					
	DESIGN RECORD	A	09/05/24	PRELIMINARY ISSUE	NAS			
	8							
	<u>G</u>							
	SES							
	_	RFV	DATE	DESCRIPTION	BY			

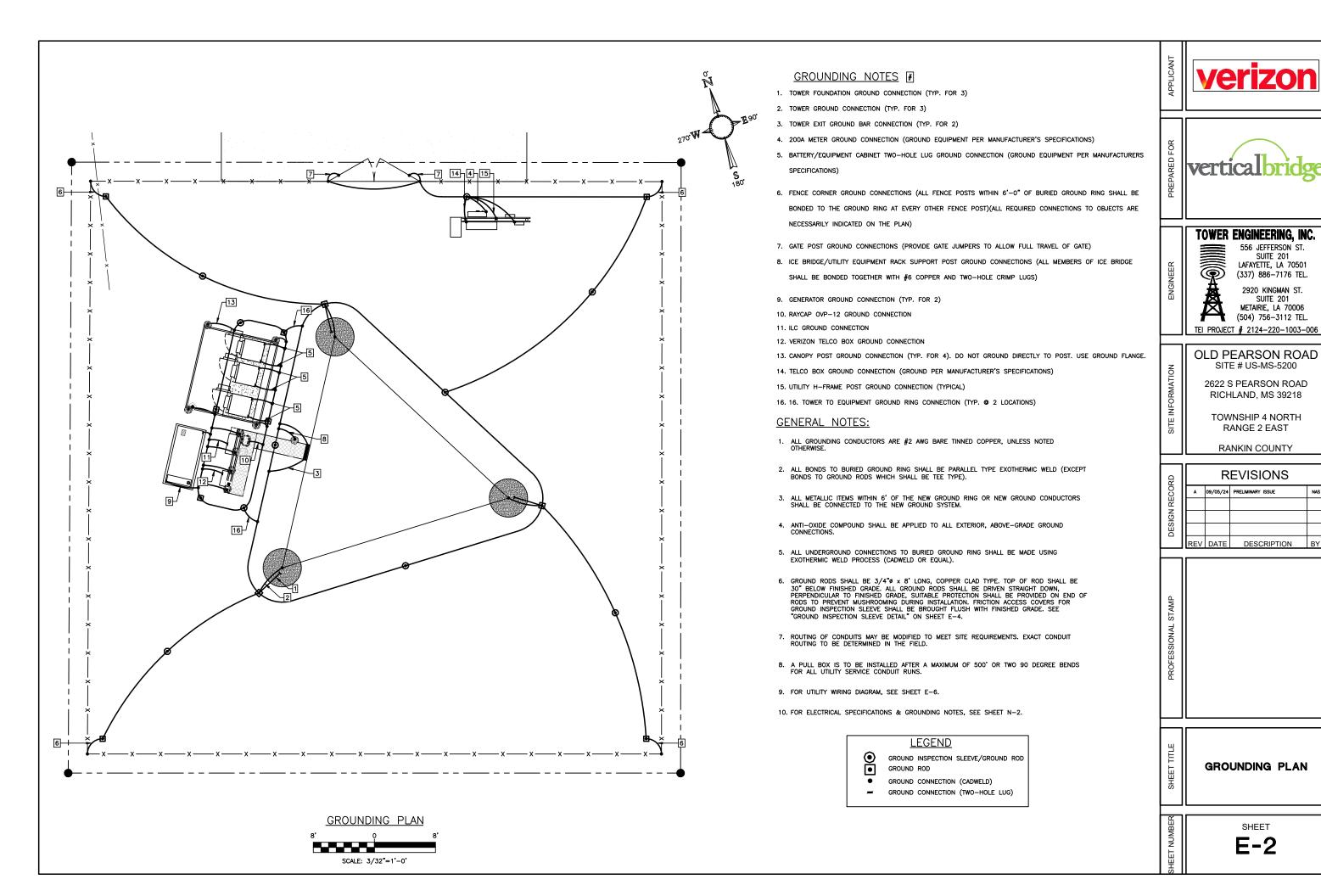
CANOPY FOUNDATION DETAILS

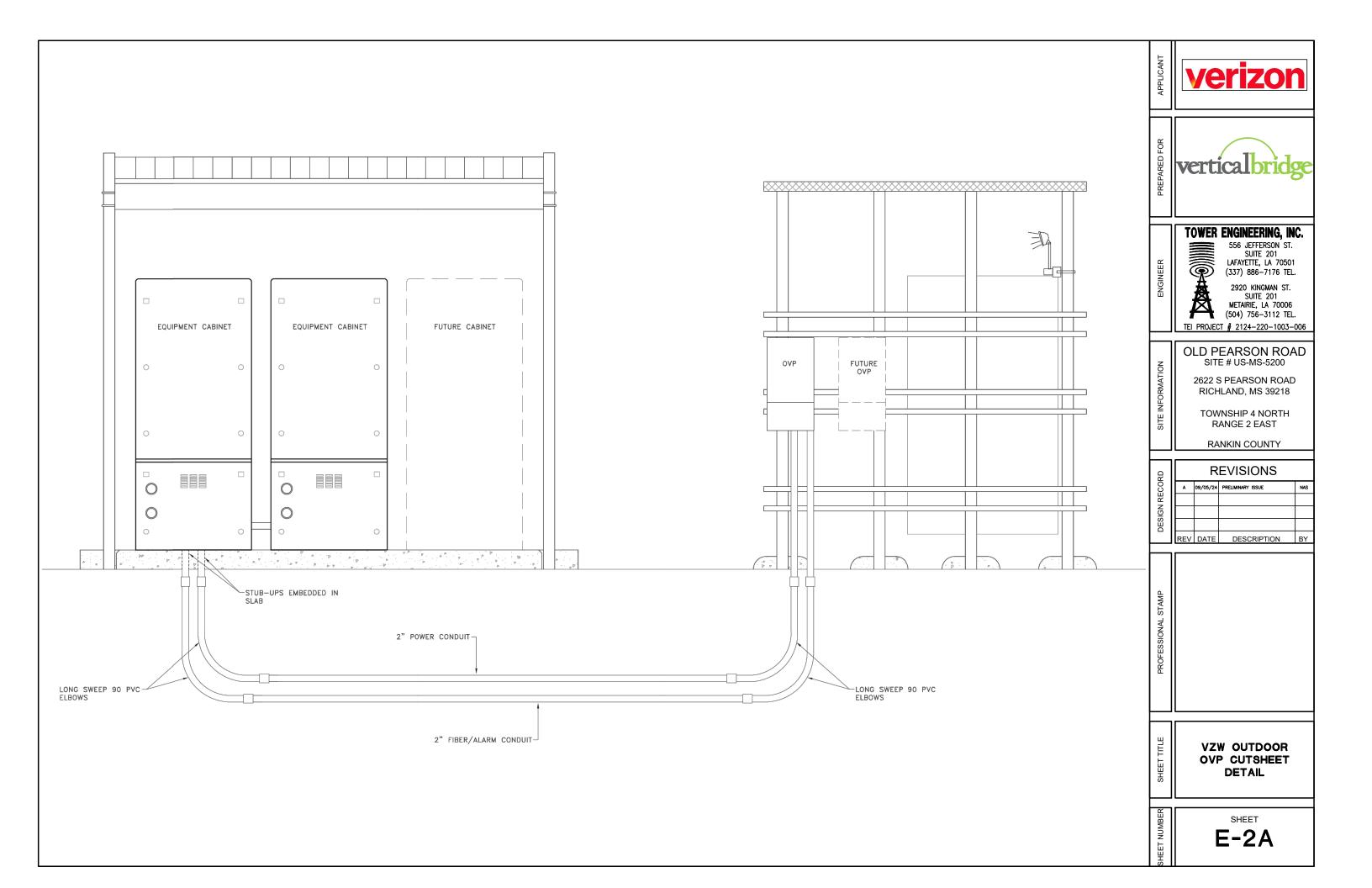
C-9

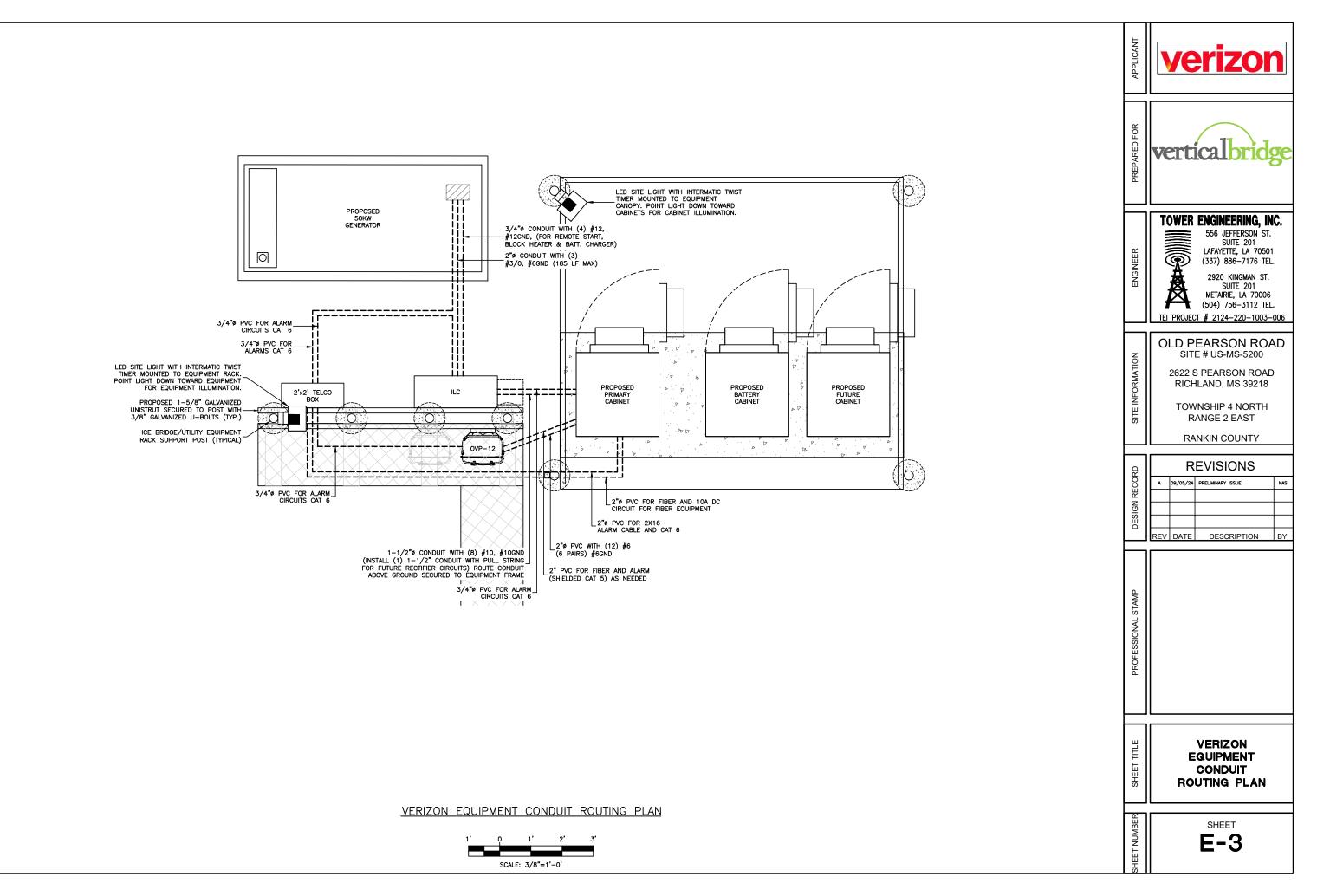


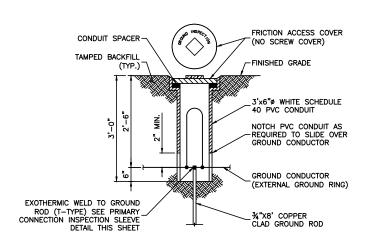




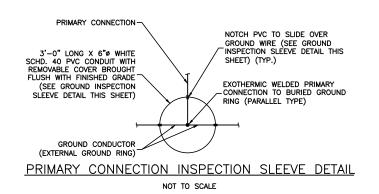


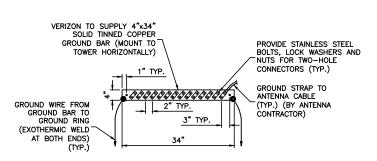




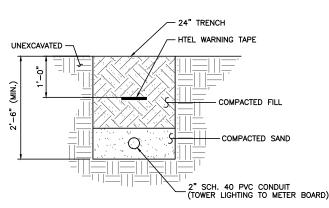


GROUND INSPECTION SLEEVE DETAIL

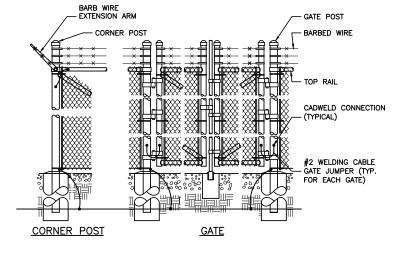




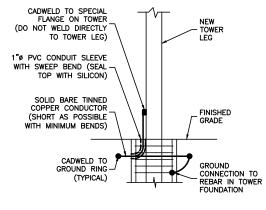
HORIZONTAL TOWER EXIT GROUND BAR DETAIL NOT TO SCALE



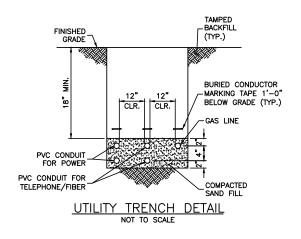
TOWER LIGHTING TRENCH DETAIL

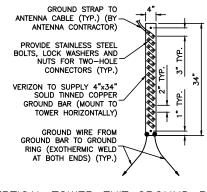


FENCE GROUNDING DETAIL NOT TO SCALE

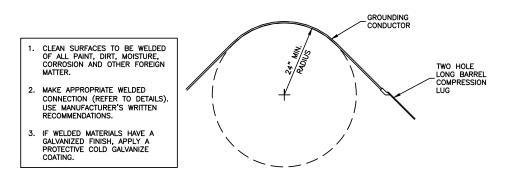


TOWER GROUNDING DETAIL NOT TO SCALE





VERTICAL TOWER EXIT GROUND BAR DETAIL NOT TO SCALE



MINIMUM GROUNDING CONDUCTOR RADIUS

NOT TO SCALE

verticalbridge

TOWER ENGINEERING. INC.



556 JEFFERSON ST. SUITE 201 LAFAYETTE, LA 70501 (337) 886-7176 TEL.

2920 KINGMAN ST. SUITE 201 METAIRIE, LA 70006 (504) 756-3112 TEL.

TEI PROJECT # 2124-220-1003-006

OLD PEARSON ROAD SITE # US-MS-5200

2622 S PEARSON ROAD RICHLAND, MS 39218

> **TOWNSHIP 4 NORTH** RANGE 2 EAST

RANKIN COUNTY

DESIGN RECORD		R	EVISIONS	
CO	Α	09/05/24	PRELIMINARY ISSUE	NAS
8				
<u>5</u>				
DES				
	REV	DATE	DESCRIPTION	BY

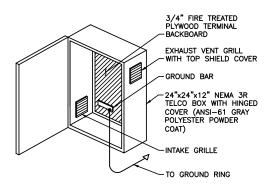
GROUNDING **DETAILS**

SHEET E-4

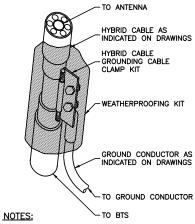
NOTE: ADD APPROPRIATE TOWER/ANTENNA AIR TERMINAL IN ORDER TO OBTAIN 45' CONE OF PROTECTION OVER NEW ANTENNAS. NEW ANTENNAS STRUCTURE (VERIFY TYPE) RRH & OVP GROUND TO GROUND BAR HYBRID CABLE -GROUND TO GROUND TOP GROUND BAR GROUND BAR (EVERY 75' MAX.) ICE BRIDGE LEGS (POSTS) SHALL BE CADWELDED TO THE CABLE TRAY AT THE FIRST POST AT THE TOWER-AND AT THE LAST POST AT _NEW HYBRID/FIBER CABLE TO EQUIPMENT THE EQUIPMENT WITH A #6 GROUND CABLE TRAY GROUNDING JUMPER WITH TWO-HOLE LUG CONNECTORS AT EACH JOINT (BOTH SIDES) - GROUND KIT (TYPICAL) ICE BRIDGE-TOWER FXIT (BOTTOM) -GROUND RING CADWELD GROUNDING ELEVATION NOT TO SCALE

NOTES:

- ELECTRICAL CONTRACTOR IS TO BE PRESENT AT OR IMMEDIATELY AFTER THE DELIVERY OF THE LUCENT CABINETS TO CRIMP THE LUGS TO THE CABINET GROUNDS AND SECURE THE CABINETS WITH STAINLESS STEEL HARDWARE.
- 2. EQUIPMENT GROUND BAR MAY BE INSTALLED HORIZONTALLY WITH TWO (2) GROUND LEADS OR VERTICALLY WITH ONE (1) GROUND LEAD.
- 3. ALL METALLIC COMPONENTS (SUCH AS ICE BRIDGE, ICE BRIDGE LEGS, GPS ANTENNA, GPS PIPE, GRATING, ETC.) SHALL BE BONDED TOGETHER WITH #6 GROUND CONNECTION.
- 4. CABLE GROUND KIT AT PROPOSED ANTENNA TO BE MOUNTED WITHIN 6" OF CONNECTION TO ANTENNA.
- 5. CABLE GROUND KIT AT BASE OF STRUCTURE TO BE MOUNTED WITHIN 36" ABOVE WHERE THE CABLING BENDS AWAY FROM THE STRUCTURE.

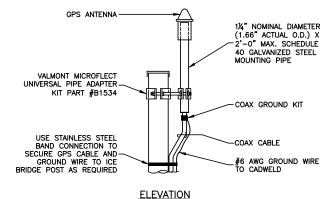


VERIZON TELCO BOX DETAIL



- 1. DO NOT INSTALL CABLE GROUND KIT AT A BEND.
- 2. ALWAYS DIRECT GROUND WIRE DOWN TO GROUND
- 3. GROUNDING KIT AND WEATHERPROOFING KIT SHALL BE TYPE AND PART # AS SUPPLIED OR RECOMMENDED BY HYBRID CABLE MANUFACTURER.

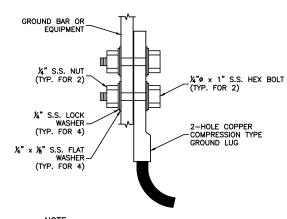
HYBRID CABLE GROUNDING DETAIL



NOTES:

- LOCATION OF ANTENNA MUST HAVE CLEAR VIEW OF SOUTHERN SKY AND CANNOT HAVE ANY BLOCKAGES EXCEEDING 25% OF THE SURFACE AREA OF A HEMISPHERE AROUND THE GPS ANTENNA.
- 2. ALL GPS ANTENNA LOCATIONS <u>MUST</u> BE ABLE TO RECEIVE CLEAR SIGNALS FROM A MINIMUM OF FOUR (4) SATELLITES. VERIFY WITH HANDHELD GPS BEFORE FINAL LOCATION OF GPS ANTENNA.
- 2" STRIP OF ELECTRICAL TAPE 3 LAYERS THICK WHERE COAX ENTERS 1½" PIPE TO PROTECT COAX INSULATION.

GPS ANTENNA PIPE MOUNT



NOTE:

THE SURFACE OF THE EQUIPMENT SHALL BE SANDED DOWN TO THE BARE METAL AND FREE OF ANY DIRT BEFORE APPLYING NO—OX OR EQUAL COMPOUND. PAINT TO MATCH EQUIPMENT.

2-HOLE LUG CONNECTION DETAIL NOT TO SCALE

verticalbridge

TOWER ENGINEERING. INC.



556 JEFFERSON ST. SUITE 201 LAFAYETTE, LA 70501 (337) 886-7176 TEL.

2920 KINGMAN ST. SUITE 201 METAIRIE, LA 70006 (504) 756-3112 TEL.

TEI PROJECT # 2124-220-1003-006

OLD PEARSON ROAD SITE # US-MS-5200

2622 S PEARSON ROAD RICHLAND, MS 39218

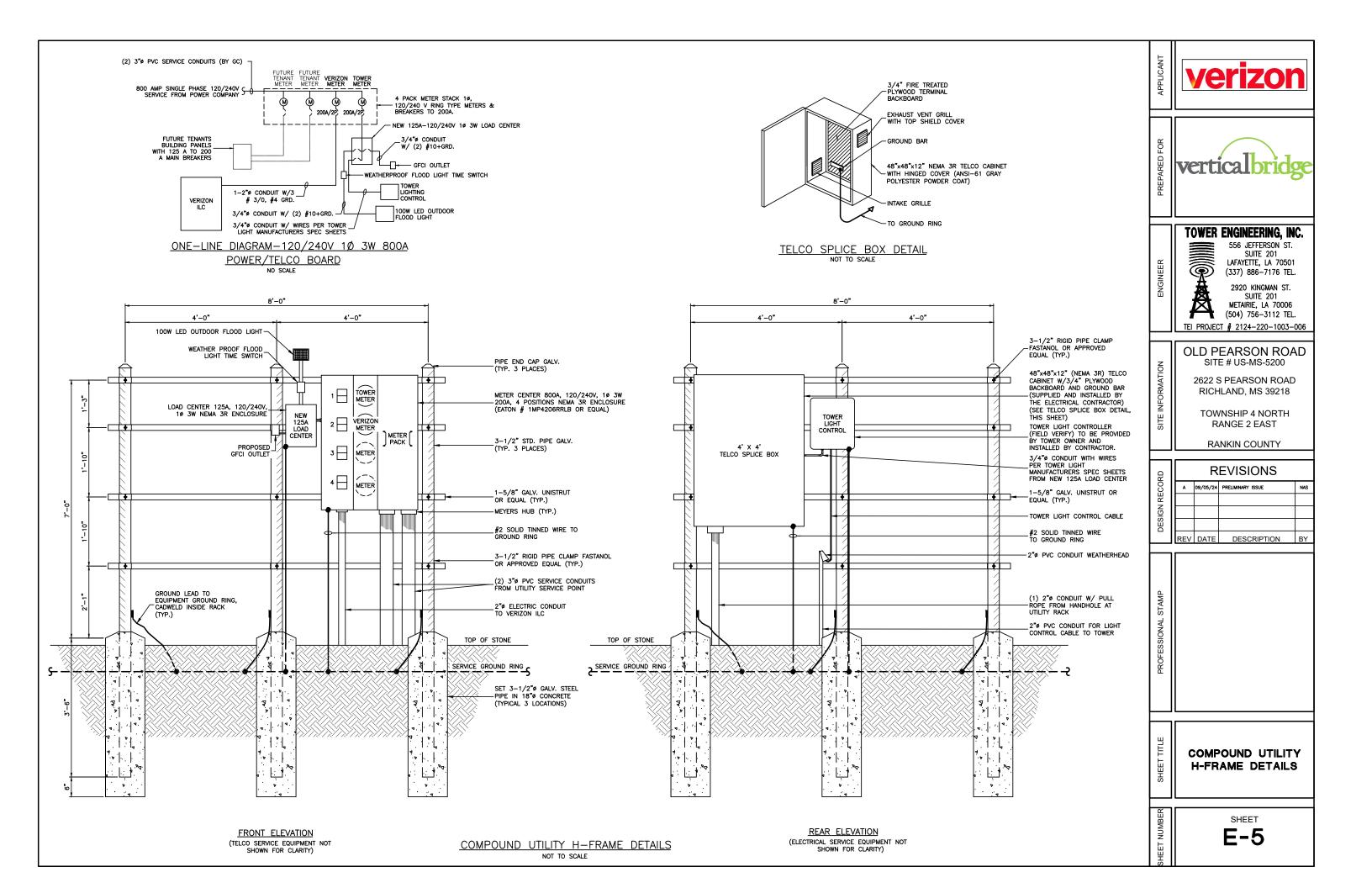
> **TOWNSHIP 4 NORTH** RANGE 2 EAST

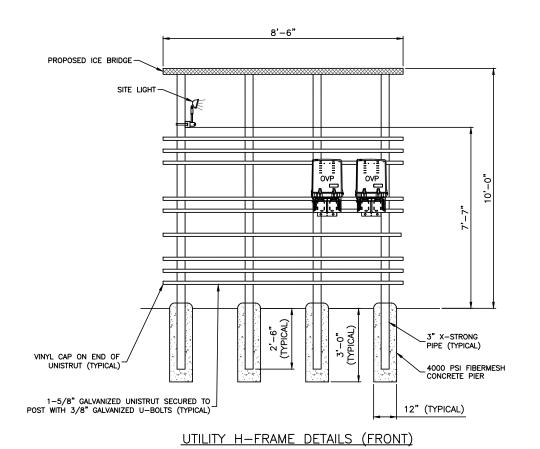
RANKIN COUNTY

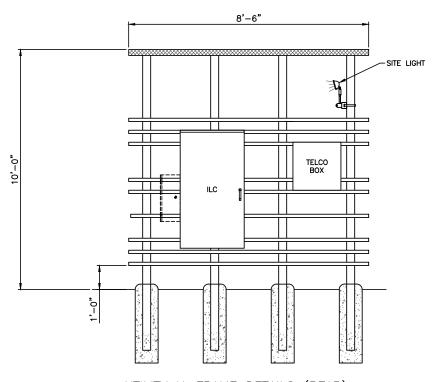
RD		R	EVISIONS	
DESIGN RECORD	A	09/05/24	PRELIMINARY ISSUE	NAS
R				
IGN				
DES				
	REV	DATE	DESCRIPTION	BY

GROUNDING **DETAILS**

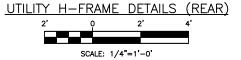
E-4A







SCALE: 1/4"=1'-0'







TOWER ENGINEERING, INC.



556 JEFFERSON ST.
SUITE 201
LAFAYETTE, LA 70501
(337) 886-7176 TEL.
2920 KINGMAN ST.
SUITE 201
METAIRIE, LA 70006
(504) 756-3112 TEL. 556 JEFFERSON ST. SUITE 201 LAFAYETTE, LA 70501

TEI PROJECT # 2124-220-1003-006

OLD PEARSON ROAD SITE # US-MS-5200

2622 S PEARSON ROAD RICHLAND, MS 39218

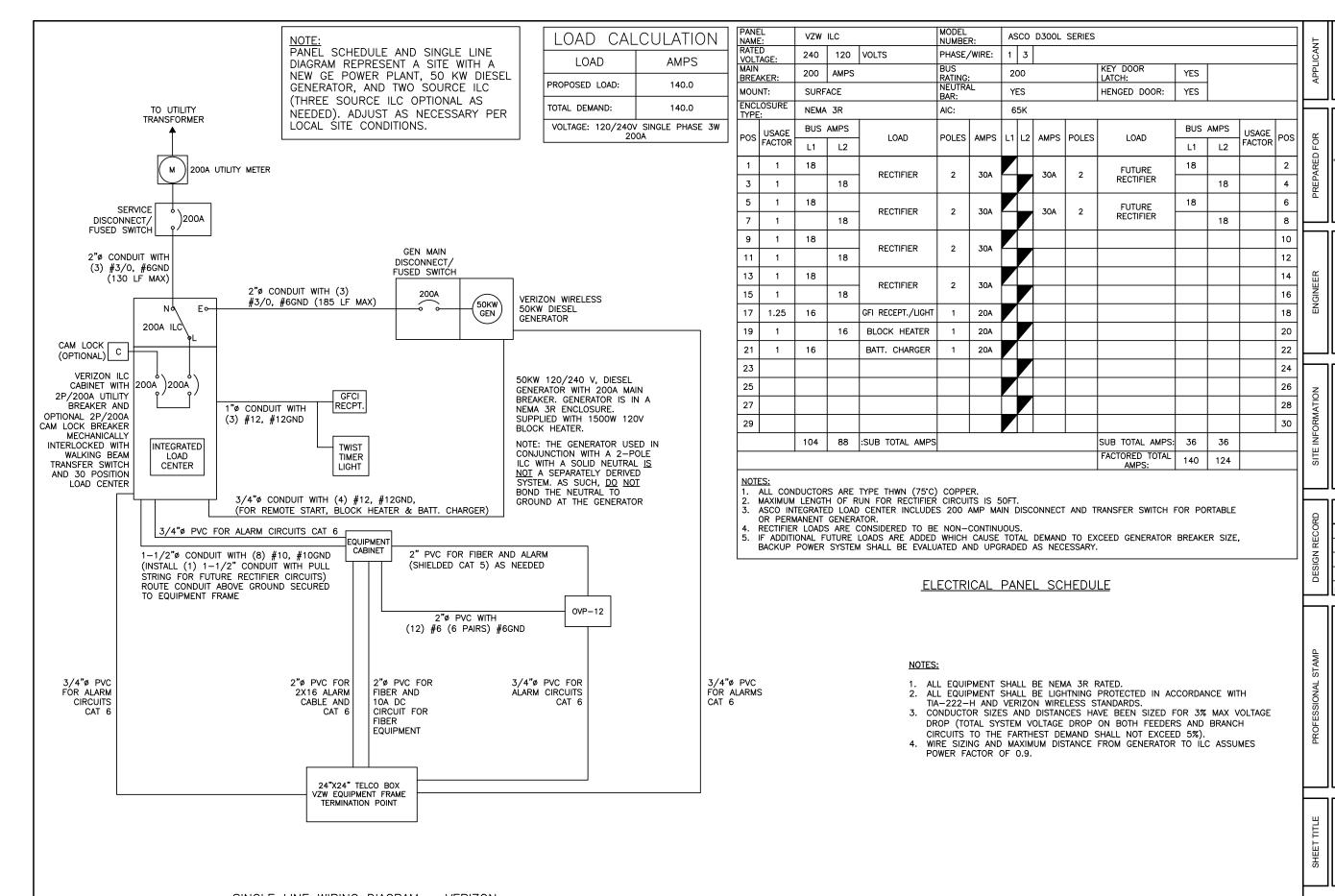
TOWNSHIP 4 NORTH RANGE 2 EAST

RANKIN COUNTY

DESIGN RECORD	REVISIONS								
ı	Ō	Α	09/05/24	PRELIMINARY ISSUE	NAS				
ı	8								
ı	<u>S</u>								
l	SES								
L		REV	DATE	DESCRIPTION	BY				

VERIZON WIRELESS UTILITY H-FRAME **DETAILS**

SHEET E-5A



SINGLE LINE WIRING DIAGRAM - VERIZON

WIRING DIAGRAM & PANEL SCHEDULE

VERIZON UTILITY

vertical bridge

TOWER ENGINEERING, INC.

a

556 JEFFERSON ST.

SUITE 201

LAFAYETTE, LA 70501

(337) 886-7176 TEL.

2920 KINGMAN ST.

SUITE 201

METAIRIE, LA 70006

(504) 756-3112 TEL.

TEI PROJECT # 2124-220-1003-006

OLD PEARSON ROAD

SITE # US-MS-5200

2622 S PEARSON ROAD

RICHLAND, MS 39218

TOWNSHIP 4 NORTH

RANGE 2 EAST

RANKIN COUNTY

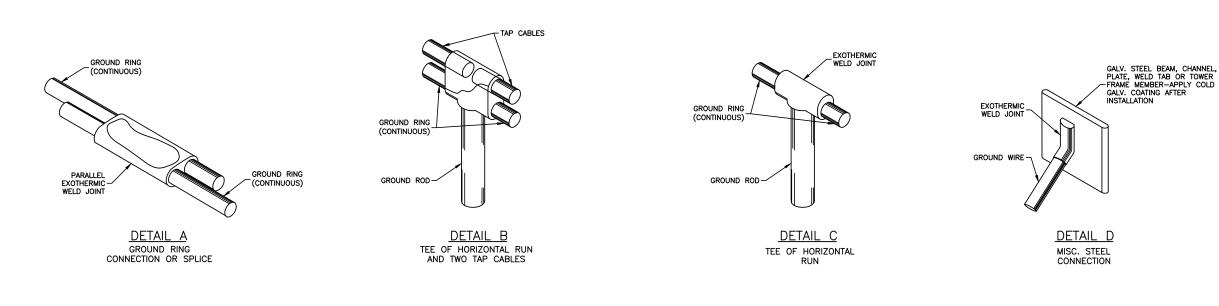
REVISIONS

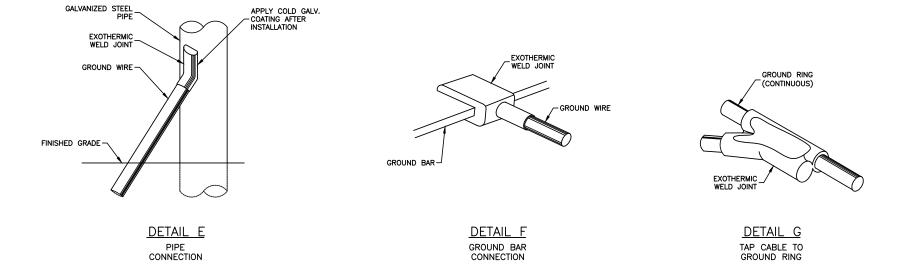
DESCRIPTION

09/05/24 PRELIMINARY ISSUE

EV DATE

SHEET **E-6**





verizon

verticalbridge

TOWER ENGINEERING, INC.

ENGINEER

SITE INFORMATION

556 JEFFERSON ST. SUITE 201 LAFAYETTE, LA 70501 (337) 886-7176 TEL.

2920 KINGMAN ST. SUITE 201 METAIRIE, LA 70006 (504) 756–3112 TEL.

TEI PROJECT # 2124-220-1003-006

OLD PEARSON ROAD SITE # US-MS-5200

2622 S PEARSON ROAD RICHLAND, MS 39218

TOWNSHIP 4 NORTH RANGE 2 EAST

RANKIN COUNTY

DESIGN RECORD		R	EVISIONS		
	00	Α	09/05/24	PRELIMINARY ISSUE	NAS
	R				
	<u>G</u> N				
	DES				
		REV	DATE	DESCRIPTION	BY

WELD CONNECTION DETAILS

E-7

SHEET TITLE



SOUTH > South Central Coast > Central Gulf Coast > Gulf Coast > Old_Pearson_Rd_CGC

RF Submit by: Aung, Nelson - nelson.aung@verizonwireless.com - 11/8/2023, 8:12:24 AM

EE Submit by: , - -

Project Details
FUZE Project ID: 16652826
Project Name: Old_Pearson_Rd
Project Alt Name: Old_Pearson_Rd - New Build
Project Type: Initial Build
Modification Type:
Designed Sector Carrier 4G: 18
Designed Sector Carrier 5G: 3
Additional Sector Carrier 4G: N/A
Additional Sector Carrier 5G: N/A
FP Solution Type & Tech Type: MCR;4G_700,4G_850,4G_AWS,4G_PCS,5G_L-Sub6
Carrier Aggregation: false
MPT Id:
eCIP-0: false
Suffix:

Location Info	rmation
	Site ID: 617087433
	E-NodeB ID: 999999,999999
	MDG Location ID: 5000887959
	PSLC: 704922
	Switch Name:
	Tower Owner:
	Tower Type: Self Support (Lattice Tower)
	Site Type: MACRO
	Site Sub Type: TRADITIONAL
	Street Address: 2622 S Pearson Road
	City: Richland
	State: MS
	Zip Code: 39218
	County: Rankin
	Latitude: 32.214567 / 32° 12' 52.4412" N
	Longitude: -90.129733 / 90° 7' 47.0388" W

RFDS Project Scope:

New Build LS6,AWS1,PCS1,700-LTE,850- LTE

- * Adding LS6,AWS1,PCS1,850-LTE and 700- LTE.
- * Install 6 number of Hexport antennas for 700-LTE, 850-LTE, PCS, and AWS.
- * Install 3 number of MT6413-77A antennas
- * Install 3 number of B2/B66A RRH ORAN (RF4439d-25A)
- * Install 3 number of B5/B13 RRH (RF4461d-13A)
- * Site needs 2 hybrid cables.
- * Install 1 OVP 12 at the shelter/bottom and 1 OVP 12 on the tower

Antenna Summary

Added															
700	850	1900	AWS	L-Sub6	Make	Model	Centerline	Tip Height	Azimuth	RET	4xRx	Inst. Type	Quantity	Item ID	
LTE	LTE 5G	LTE	LTE		JMA	MX06FIT865-02	196	200	0(0001) 0(01) 120(0002) 120(02) 240(0003) 240(03)		true	PHYSICAL	6		
				5G	Samsung	MT6413-77A	196	197.2	0(0001) 120(0002) 240(0003)		false	PHYSICAL	3		
Remove	d														
700	850	1900	AWS	L-Sub6	Make	Model	Centerline	Tip Height	Azimuth	RET	4xRx	Inst. Type	Quantity	Item ID	
									No data availa	ıble.					
Retained	1														
700	850	1900	AWS	L-Sub6	Make	Model	Centerline	Tip Height	Azimuth	RET	4xRx	Inst. Type	Quantity	Item ID	
	No data available.														

Added: 9 Removed: 0 Retained: 0

Equipment Summary

Added													
Equipment Type	Location	700	850	1900	AWS	L-Sub6	Make	Model	Cable Length	Cable Size	Install Type	Quantity	Item ID
RRU	Tower			LTE	LTE		Samsung	B2/B66A RRH ORAN (RF4439d-25A)			PHYSICAL	3	
RRU	Tower					5G	Samsung	MT6413-77A			PHYSICAL	0	
RRU	Tower	LTE	LTE 5G				Samsung	RF4461d-13A			PHYSICAL	3	
Hybrid Cable	Tower						Commscope	6 x 12			PHYSICAL	2	
OVP Box	Shelter						Raycap	OVP 12			PHYSICAL	1	
OVP Box	Tower						Raycap	OVP 12			PHYSICAL	1	
Removed													
Equipment Type	Location	700	850	1900	AWS	L-Sub6	Make	Model	Cable Length	Cable Size	Install Type	Quantity	Item ID
									No data available.				
Retained													
Equipment Type	Location	700	850	1900	AWS	L-Sub6	Make	Model	Cable Length	Cable Size	Install Type	Quantity	Item ID
								1	No data available.				

Service Info

	NANB	
01	02	03
0	120	240
999999	999999	999999
MX06FIT865-02	MX06FIT865-02	MX06FIT865-02
JMA	JMA	JMA
196	196	196
0	0	0
2	2	2
200	200	200
80.49	80.49	80.49
5230	5230	5230
10	10	10
724.44	724.44	724.44
		, -
Samsung	Samsung	Samsung
RF4461d-13A	RF4461d-13A	RF4461d-13A
4,4	4,4	4,4
4,4	4,4	4,4
13389982	13389987	13389992
ATOLL_API	ATOLL_API	ATOLL_API
	NANB	
01	02	03
0	120	240
999999	999999	999999
MX06FIT865-02	MX06FIT865-02	MX06FIT865-02
	15.4.4	
JMA	JMA	JMA
196	196	196
196 0	196 0	196 0
196 0 2	196 0 2	196 0 2
196 0 2 200	196 0 2 200	196 0 2 200
196 0 2 200 345	196 0 2 200 345	196 0 2 200 345
196 0 2 200 345 2450	196 0 2 200 345 2450	196 0 2 200 345 2450
196 0 2 200 345 2450 10 776.25	196 0 2 200 345 2450 10 776.25	196 0 2 200 345 2450 10 776.25
196 0 2 200 345 2450 10 776.25	196 0 2 200 345 2450 10 776.25	196 0 2 200 345 2450 10 776.25
196 0 2 200 345 2450 10 776.25	196 0 2 200 345 2450 10 776.25 Samsung RF4461d-13A	196 0 2 200 345 2450 10 776.25 Samsung RF4461d-13A
196 0 2 200 345 2450 10 776.25	196 0 2 200 345 2450 10 776.25 Samsung RF4461d-13A	196 0 2 200 345 2450 10 776.25 Samsung RF4461d-13A
196 0 2 200 345 2450 10 776.25	196 0 2 200 345 2450 10 776.25	196 0 2 200 345 2450 10 776.25
196 0 2 200 345 2450 10 776.25	196 0 2 200 345 2450 10 776.25 Samsung RF4461d-13A	196 0 2 200 345 2450 10 776.25

GNR		NANB	
Sector	0001	0002	0003
Azimuth	0	120	240
Cell / ENode B ID	9999999	999999	9999999
Antenna Model	MX06FIT865-02	MX06FIT865-02	MX06FIT865-0
Antenna Make	JMA	JMA	JMA
Antenna Centerline(Ft)	196	196	196
Mechanical Down-Tilt(Deg.)	0	0	0
Electrical Down-Tilt	2	2	2
Tip Height	200	200	200
Regulatory Power	345	345	345
DLEARFCN	2450	2450	2450
Channel Bandwidth(MHz)	10	10	10
Total ERP (W)	776.25	776.25	776.25
TMA Make			
TMA Model			
RRU Make	Samsung	Samsung	Samsung
RRU Model	RF4461d-13A	RF4461d-13A	RF4461d-13A
Number of Tx, Rx Lines	4,4	4,4	4,4
Position			
Transmitter Id	13389986	13389991	13389996
Source	ATOLL_API	ATOLL_API	ATOLL_API

1900 MHz LTE		NANB	
Sector	01	01	02
Azimuth	0	0	120
Cell / ENode B ID	999999	999999	999999
Antenna Model	MX06FIT865-02	MX06FIT865-02	MX06FIT865-02
Antenna Make	JMA	JMA	JMA
Antenna Centerline(Ft)	196	196	196
Mechanical Down-Tilt(Deg.)	0	0	0
Electrical Down-Tilt	2	2	2
Tip Height	200	200	200
Regulatory Power	209.79	209.79	209.79
DLEARFCN	625	825	625
Channel Bandwidth(MHz)	5	5	5
Total ERP (W)	575.44	575.44	575.44
TMA Make			
TMA Model RRU Make	Samsung	Compuna	Samsung
RRU Model	B2/B664 DDH ODAN (DE4/20d 25A)	Samsung B2/B66A RRH ORAN (RF4439d-25A)	B2/B66A DDH ODAN (DE4430d 25A)
Number of Tx, Rx Lines	4,4	4,4	4,4
Position	4,4	4,4	4,4
Transmitter Id	13389983	13389984	13389988
Source	ATOLL_API	ATOLL_API	ATOLL_API
- Course			
	02	03	03
	120	240	240
	999999	999999	999999
	MX06FIT865-02	MX06FIT865-02	MX06FIT865-02
	JMA	JMA	JMA
	196	196	196
	0	0	0
	2	2	2
	200	200	200
	209.79	209.79	209.79
	825	625	825
	5	5	5
	575.44	575.44	575.44
	Samsung	Samsung	Samsung
	B2/B66A RRH ORAN (RF4439d-25A) 4,4	B2/B66A RRH ORAN (RF4439d-25A) 4,4	B2/B66A RRH ORAN (RF4439d-25A) 4,4
	13389989	13389993	13389994
	ATOLL_API	ATOLL_API	ATOLL_API
	-	-	-

E		NANB	
Sector	01	02	03
Azimuth	0	120	240
Cell / ENode B ID	999999	999999	999999
Antenna Model	MX06FIT865-02	MX06FIT865-02	MX06FIT865-02
Antenna Make	JMA	JMA	JMA
Antenna Centerline(Ft)	196	196	196
nical Down-Tilt(Deg.)	0	0	0
etrical Down-Tilt	2	2	2
Tip Height	200	200	200
gulatory Power	120.15	120.15	120.15
DLEARFCN	2050	2050	2050
andwidth(MHz)	20	20	20
Total ERP (W)	1318.26	1318.26	1318.26
TMA Make			
TMA Model			
RRU Make	Samsung	Samsung	Samsung
RRU Model	B2/B66A RRH ORAN (RF4439d-25A	B2/B66A RRH ORAN (RF4439d-25A)	B2/B66A RRH ORAN (RF4439d
f Tx, Rx Lines	4,4	4,4	4,4
ition			
Transmitter Id	13389985	13389990	13389995
Source	ATOLL_API	ATOLL_API	ATOLL_API
		NANB	
Sector	0001	0002	0003
Azimuth	0	120	240
ENode B ID	9999999	999999	9999999
enna Model	MT6413-77A	MT6413-77A	MT6413-77A
Antenna Make	Samsung	Samsung	Samsung
Antenna Centerline(Ft)	196	196	196
anical Down-Tilt(Deg.)	0	0	0
Electrical Down-Tilt	0	0	0
Tip Height	197.2	197.2	197.2
Regulatory Power	643.36	643.36	643.36
DLEARFCN	650006	650006	650006
I Bandwidth(MHz)	100	100	100
Total ERP (W)	18627.3	18627.3	18627.3
TMA Make			
TMA Model			
RRU Make	Samsung	Samsung	Samsung
RRU Model	MT6413-77A	MT6413-77A	MT6413-77A
Number of Tx, Rx Lines	2,2	2,2	2,2
Position			
Transmitter Id	13389997	13389998	13389999
Source	ATOLL_API	ATOLL_API	ATOLL_API

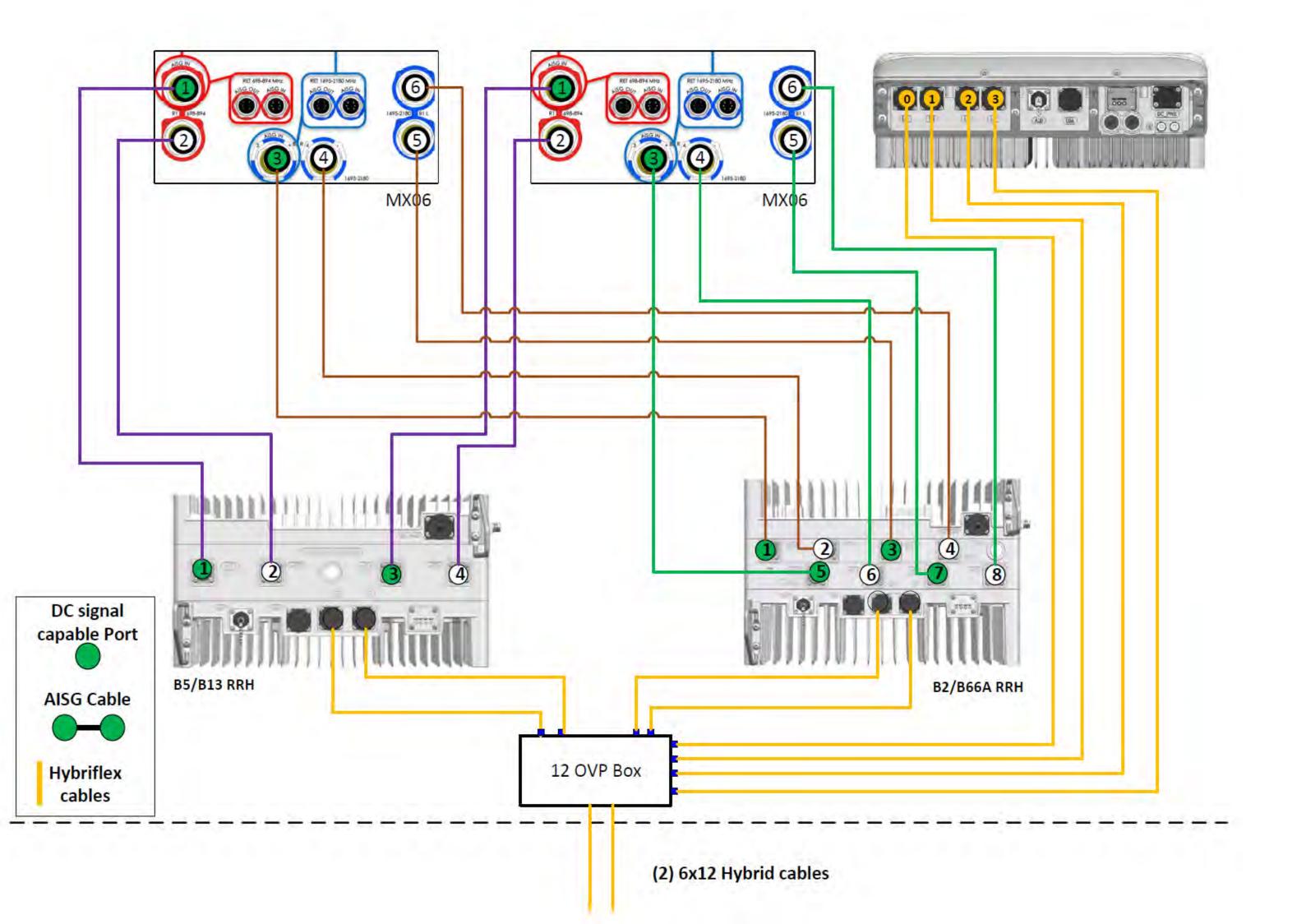
Callsigns Per Antenna

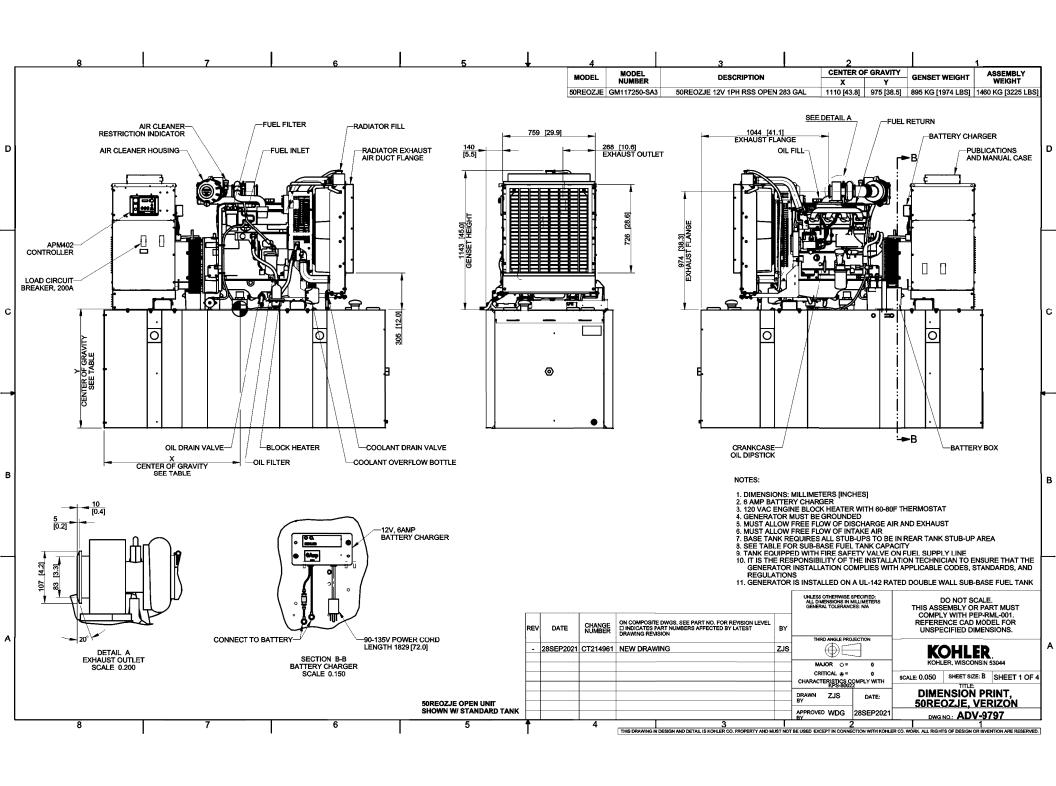
Sector	Antenna Make	Antenna Model		Tip			Mech	Gain		Regulatory	Callsigns	ns					
			Height AGL	Height	(TN)	Tilt	Tilt		Width	Power	700	850	1900	2100	28 GHz	31 GHz	39 GHz
	No data available.																

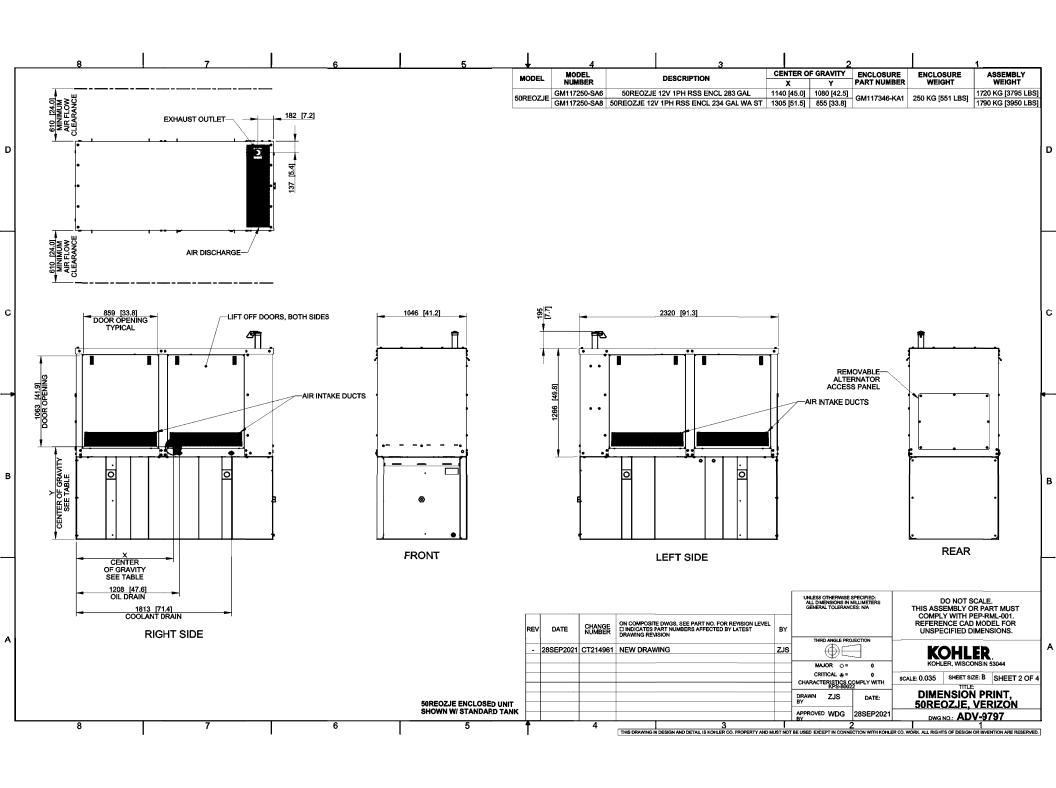
Callsigns

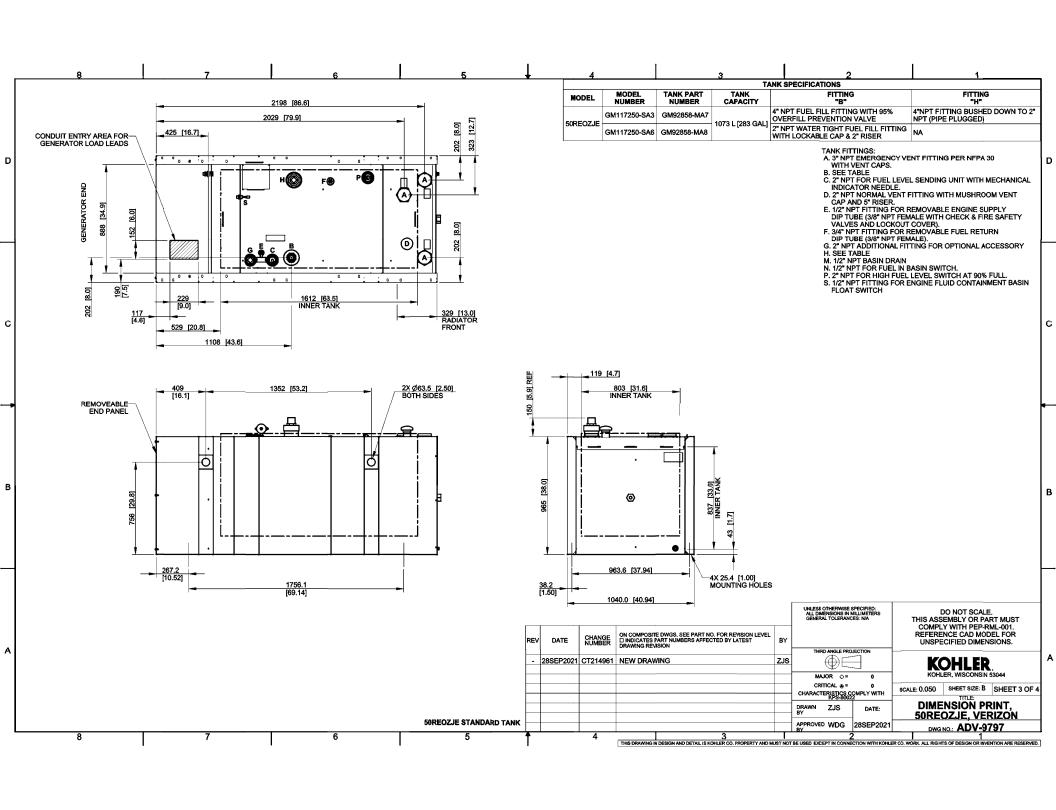
Callsign	Market	Radio Code	Market Number	Block	State	County	Licensee Name	Wholly Owned		Freq Range 1	Freq Range 2	Freq Range 3	Freq Range 4	Regulatory Power	Threshold (W)	POPs /Sq Mi	Status	Action	Approved for Insvc
WRHE763	Jackson, MS	UU	PEA090	M8	28121	Rankin	Cellco Partnership	Yes	100.000	38300.000- 38400.000	.000000	.000000	.000000		0	202.49	Active		Yes
WRHE757	Jackson, MS	UU	PEA090	M2	28121	Rankin	Cellco Partnership	Yes	100.000	37700.000- 37800.000	.000000	.000000	.000000		0	202.49	Active		Yes
WRNF501	Jackson, MS	PM	PEA090	A5	28121	Rankin	Cellco Partnership	Yes	20.000	3780.000- 3800.000	.000000	.000000	.000000	643.36	1640	202.49	Active	added	Yes
WRHE761	Jackson, MS	UU	PEA090	M6	28121	Rankin	Cellco Partnership	Yes	100.000	38100.000- 38200.000	.000000	.000000	.000000		0	202.49	Active		Yes
WRHE766	Jackson, MS	UU	PEA090	N2	28121	Rankin	Cellco Partnership	Yes	100.000	38700.000- 38800.000	.000000	.000000	.000000		0	202.49	Active		Yes
WQGA965	Jackson, MS-AL-LA	AW	BEA077	В	28121	Rankin	Cellco Partnership	Yes	20.000	1720.000- 1730.000	2120.000- 2130.000	.000000	.000000	120.15	1640	202.49	Active	added	Yes
WRHE762	Jackson, MS	UU	PEA090	M7	28121	Rankin	Cellco Partnership	Yes	100.000	38200.000- 38300.000	.000000	.000000	.000000		0	202.49	Active		Yes
WRHE764	Jackson, MS	UU	PEA090	М9	28121	Rankin	Cellco Partnership	Yes	100.000	38400.000- 38500.000	.000000	.000000	.000000		0	202.49	Active		Yes
WRHE770	Jackson, MS	UU	PEA090	N6	28121	Rankin	Cellco Partnership	Yes	100.000	39100.000- 39200.000	.000000	.000000	.000000		0	202.49	Active		Yes
WRNF503	Jackson, MS	PM	PEA090	B2	28121	Rankin	Cellco Partnership	Yes	20.000	3820.000- 3840.000	.000000	.000000	.000000		1640	202.49	Active		Yes
WRHE755	Jackson, MS	UU	PEA090	M1	28121	Rankin	Cellco Partnership	Yes	100.000	37600.000- 37700.000	.000000	.000000	.000000		0	202.49	Active		Yes
WRNF498	Jackson, MS	РМ	PEA090	A2	28121	Rankin	Cellco Partnership	Yes	20.000	3720.000- 3740.000	.000000	.000000	.000000	643.36	1640	202.49	Active	added	Yes
WRNF504	Jackson, MS	PM	PEA090	В3	28121	Rankin	Cellco Partnership	Yes	20.000	3840.000- 3860.000	.000000	.000000	.000000		1640	202.49	Active		Yes
WRNF499	Jackson, MS	РМ	PEA090	A3	28121	Rankin	Cellco Partnership	Yes	20.000	3740.000- 3760.000	.000000	.000000	.000000	643.36	1640	202.49	Active	added	Yes
WPZT692	Memphis-Jackson	CW	MTA028	В	28121	Rankin	Cellco Partnership	Yes	10.000	1870.000- 1875.000	1950.000- 1955.000	.000000	.000000	209.79	1640	202.49	Active	added	Yes
WRHE767	Jackson, MS	UU	PEA090	N3	28121	Rankin	Cellco Partnership	Yes	100.000	38800.000- 38900.000	.000000	.000000	.000000		0	202.49	Active		Yes
KNKA799	Jackson, MS	CL	CMA106	A	28121	Rankin	Alltel Corporation	Yes	25.000	824.000- 835.000	869.000- 880.000	845.000- 846.500	890.000- 891.500	345 - PSD	400	202.49	Active	added	Yes
WRHE760	Jackson, MS	UU	PEA090	M5	28121	Rankin	Cellco Partnership	Yes	100.000	38000.000- 38100.000	.000000	.000000	.000000		0	202.49	Active		Yes
WRHE768	Jackson, MS	UU	PEA090	N4	28121	Rankin	Cellco Partnership	Yes	100.000	38900.000- 39000.000	.000000	.000000	.000000		0	202.49	Active		Yes
WRHE765	Jackson, MS	UU	PEA090	N1	28121	Rankin	Cellco Partnership	Yes	100.000	38600.000- 38700.000	.000000	.000000	.000000		0	202.49	Active		Yes
WQJQ692	Mississippi Valley	wu	REA004	С	28121	Rankin	Cellco Partnership	Yes	22.000	746.000- 757.000	776.000- 787.000	.000000	.000000	80.49	1000	202.49	Active	added	Yes
WRNF497	Jackson, MS	РМ	PEA090	A1	28121	Rankin	Cellco Partnership	Yes	20.000	3700.000- 3720.000	.000000	.000000	.000000	643.36	1640	202.49	Active	added	Yes

WRHE769	Jackson, MS	UU	PEA090	N5	28121	Rankin	Cellco Partnership	Yes	100.000	39000.000- 39100.000	.000000	.000000	.000000		0	202.49	Active		Yes
WRHE758	Jackson, MS	UU	PEA090	МЗ	28121	Rankin	Cellco Partnership	Yes	100.000	37800.000- 37900.000	.000000	.000000	.000000		0	202.49	Active		Yes
WQVB582	Memphis-Jackson	cw	MTA028	A	28121	Rankin	Cellco Partnership	Yes	10.000	1850.000- 1855.000	1930.000- 1935.000	.000000	.000000	209.79	1640	202.49	Active	added	Yes
WRHE756	Jackson, MS	UU	PEA090	M10	28121	Rankin	Cellco Partnership	Yes	100.000	38500.000- 38600.000	.000000	.000000	.000000		0	202.49	Active		Yes
WRHE759	Jackson, MS	UU	PEA090	M4	28121	Rankin	Cellco Partnership	Yes	100.000	37900.000- 38000.000	.000000	.000000	.000000		0	202.49	Active		Yes
WRNF500	Jackson, MS	РМ	PEA090	A4	28121	Rankin	Cellco Partnership	Yes	20.000	3760.000- 3780.000	.000000	.000000	.000000	643.36	1640	202.49	Active	added	Yes
WQGA759	Jackson, MS	AW	CMA106	A	28121	Rankin	Cellco Partnership	Yes	20.000	1710.000- 1720.000	2110.000- 2120.000	.000000	.000000	120.15	1640	202.49	Active	added	Yes
WRNF502	Jackson, MS	PM	PEA090	B1	28121	Rankin	Cellco Partnership	Yes	20.000	3800.000- 3820.000	.000000	.000000	.000000		1640	202.49	Active		Yes



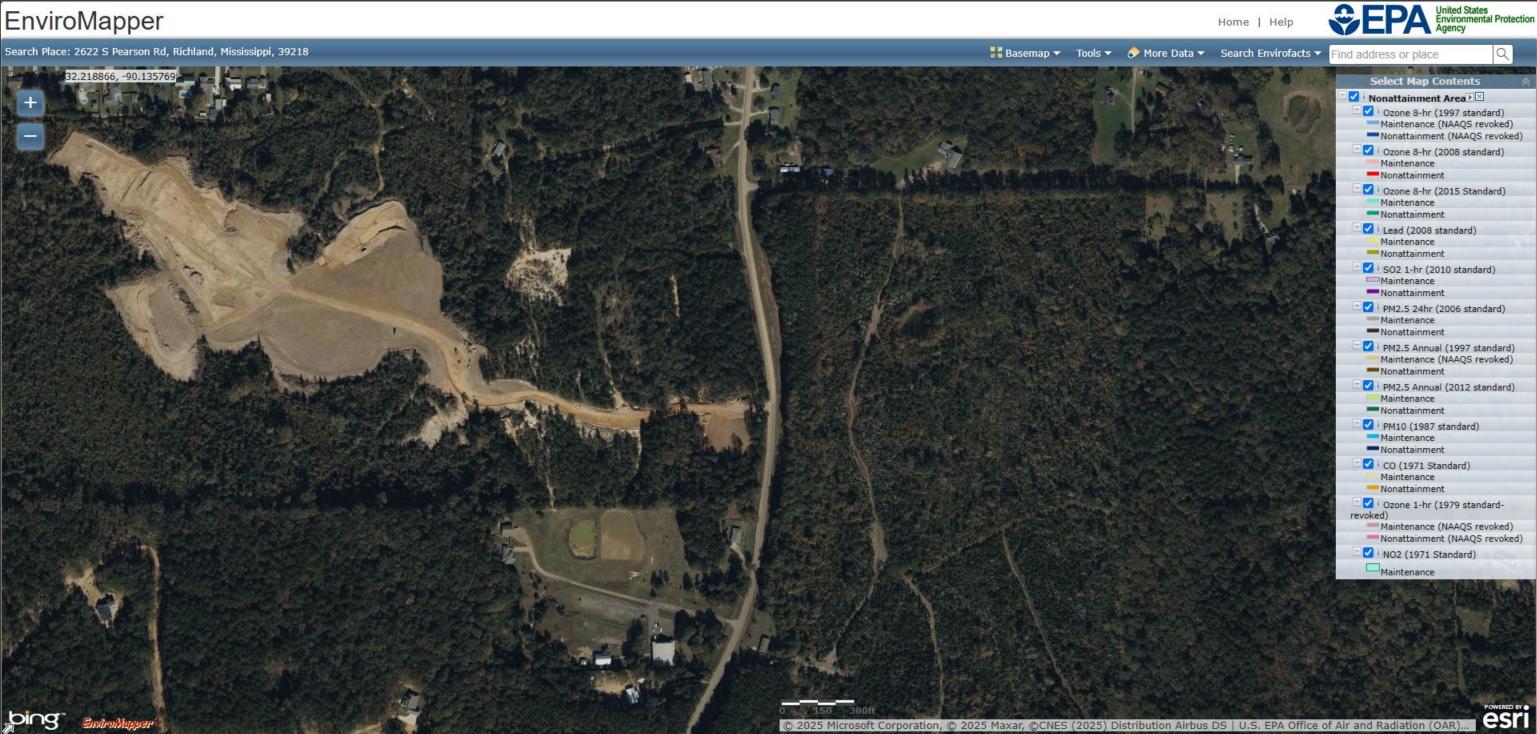


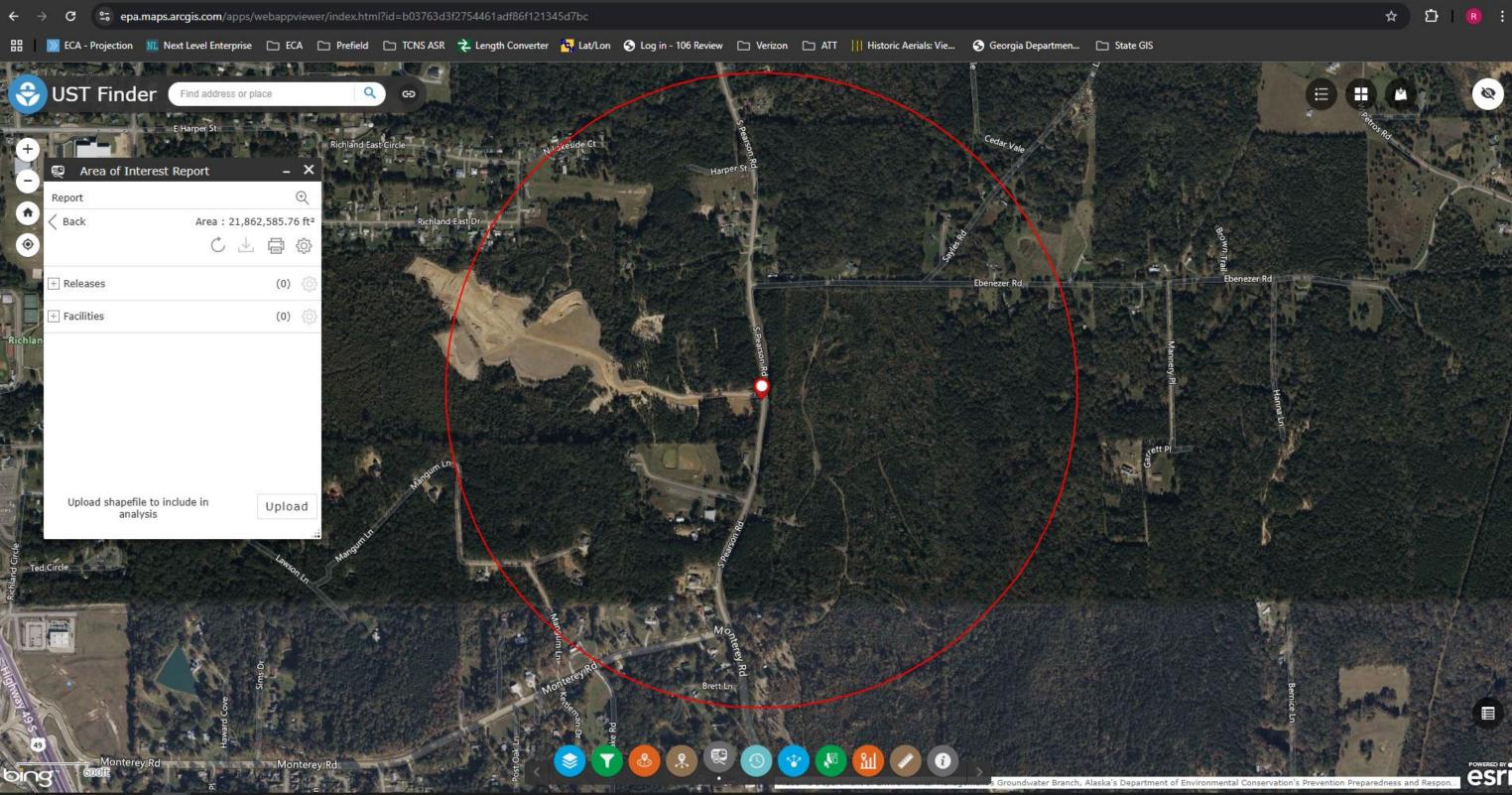


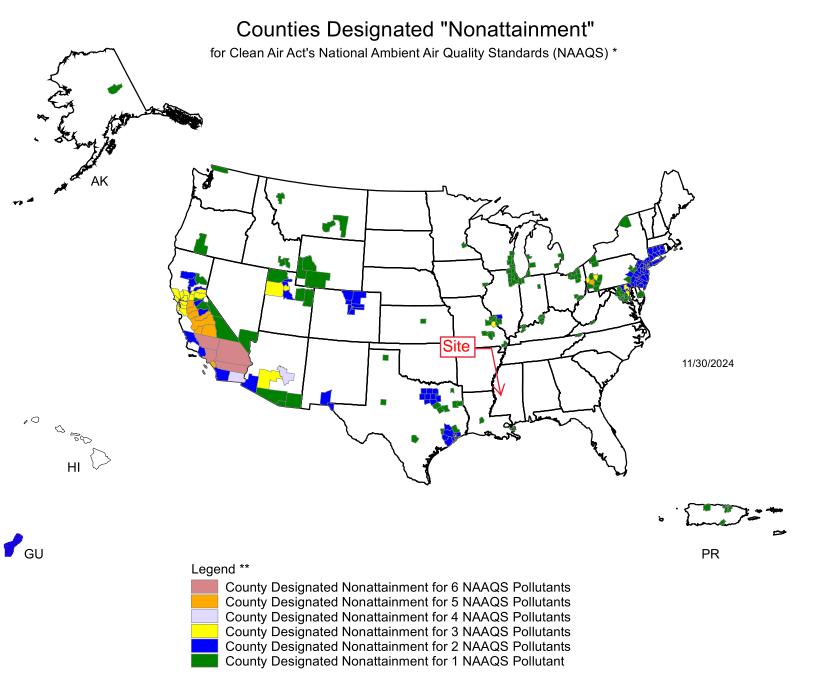


Appendix B Air Quality and EPA Programs

EnviroMapper Home | Help



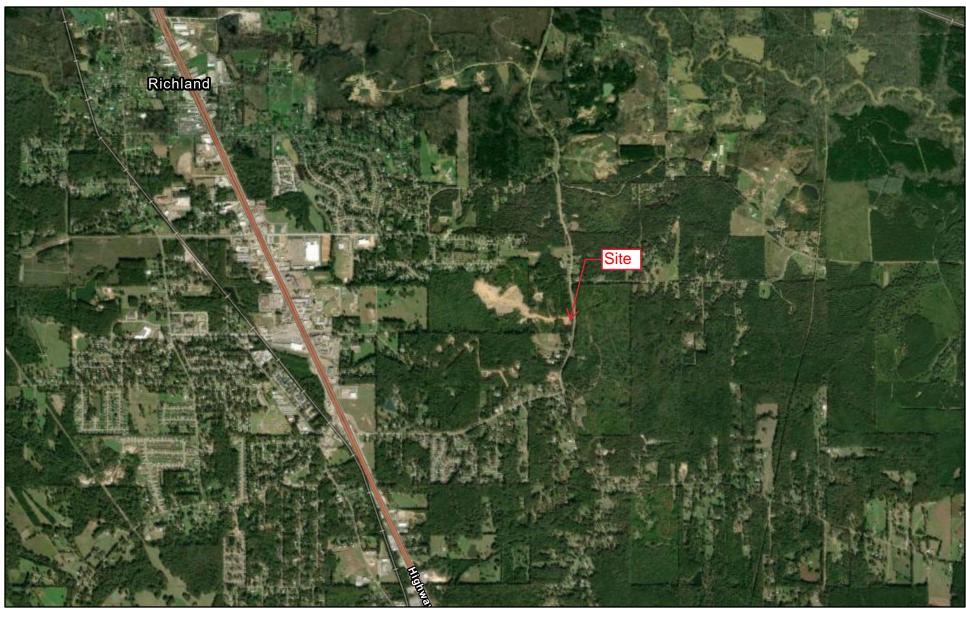




^{*} The National Ambient Air Quality Standards (NAAQS) are health standards for Carbon Monoxide, Lead (1978 and 2008), Nitrogen Dioxide, 8-hour Ozone (2008), Particulate Matter (PM-10 and PM-2.5 (1997, 2006 and 2012), and Sulfur Dioxide.(1971 and 2010)

^{**} Included in the counts are counties designated for NAAQS and revised NAAQS pollutants. Revoked 1-hour (1979) and 8-hour Ozone (1997) are excluded. Partial counties, those with part of the county designated nonattainment and part attainment, are shown as full counties on the map.

EPA Programs



10/29/2024

**Impaired Streams

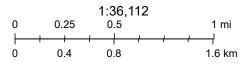
2,016 - 2,020.5

2,020.5 - 2,022 2,022 World Imagery

Low Resolution 15m Imagery

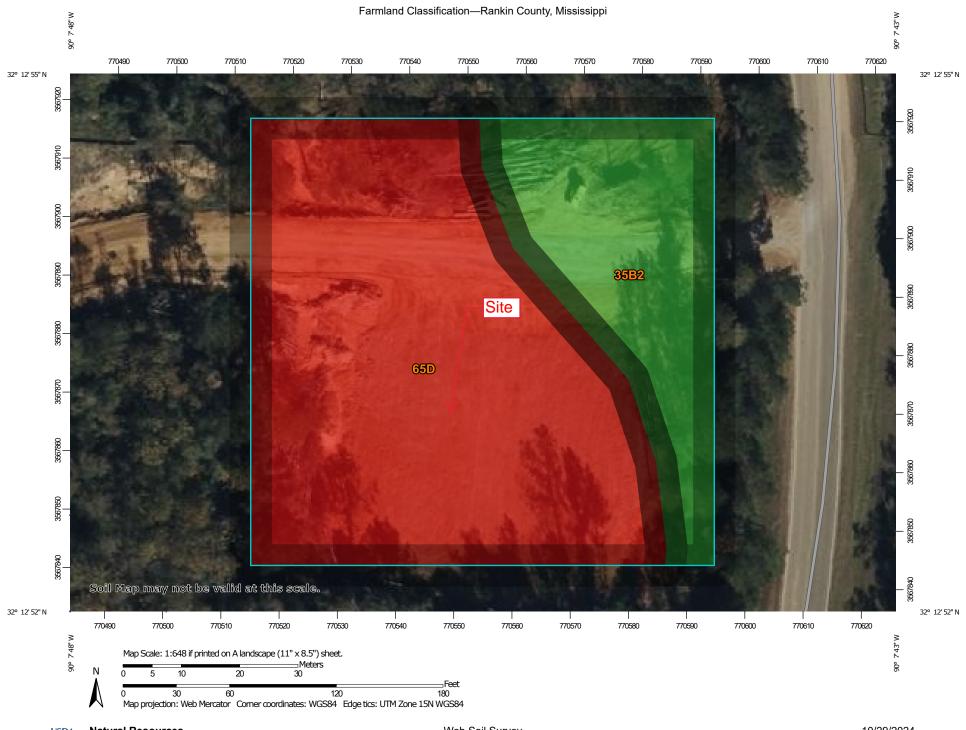
High Resolution 60cm Imagery

High Resolution 30cm Imagery Citations 9.6m Resolution Metadata



CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/ NASA, USGS, EPA, NPS, USDA, USFWS, Maxar

Appendix C Geology and Soils



		MAP LEGEND		
Area of Interest (AOI) Not prime farmland All areas are prime farmland Prime farmland if drained Prime farmland if protected from flooding or not frequently flooded during the growing season Prime farmland if irrigated Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season Prime farmland if irrigated and drained Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season	Prime farmland if subsoiled, completely removing the root inhibiting soil layer Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60 Prime farmland if irrigated and reclaimed of excess salts and sodium Farmland of statewide importance Farmland of statewide importance, if drained Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season Farmland of statewide importance, if irrigated	Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season Farmland of statewide importance, if irrigated and drained Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60	Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season Farmland of statewide importance, if warm enough Farmland of statewide importance, if thawed Farmland of local importance Farmland of local importance, if irrigated	Farmland of unique importance Not rated or not available Soil Rating Lines Not prime farmland All areas are prime farmland Prime farmland if drained Prime farmland if protected from floodin or not frequently flood during the growing season Prime farmland if drained and either protected from floodin or not frequently flood during the growing season Prime farmland if irrigated and either protected from floodin or not frequently flood during the growing season Prime farmland if irrigated and drained Prime farmland if irrigated and either protected from floodin or not frequently flood during the growing season

Farmland Classification—Rankin County, Mississippi

***	Prime farmland if subsoiled, completely removing the root	~	Farmland of statewide importance, if drained and either protected from	***	Farmland of statewide importance, if irrigated and reclaimed of excess	***	Farmland of unique importance Not rated or not available		Prime farmland if subsoiled, completely removing the root
~	inhibiting soil layer Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60	~	flooding or not frequently flooded during the growing season Farmland of statewide importance, if irrigated and drained	***	salts and sodium Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the	Soil Rat	ting Points Not prime farmland All areas are prime farmland	•	inhibiting soil layer Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
~	Prime farmland if irrigated and reclaimed of excess salts and sodium	~	Farmland of statewide importance, if irrigated and either protected from	~	growing season Farmland of statewide importance, if warm	•	Prime farmland if drained Prime farmland if protected from flooding or		Prime farmland if irrigated and reclaimed of excess salts and
~	Farmland of statewide importance Farmland of statewide		flooding or not frequently flooded during the growing season		enough, and either drained or either protected from flooding or not frequently flooded		not frequently flooded during the growing season		sodium Farmland of statewide importance
	importance, if drained Farmland of statewide	,	Farmland of statewide importance, if subsoiled,		during the growing season		Prime farmland if irrigated		Farmland of statewide importance, if drained
	importance, if protected from flooding or not frequently flooded during the growing season	***	completely removing the root inhibiting soil layer Farmland of statewide importance, if irrigated and the product of I (soil	~	Farmland of statewide importance, if warm enough		Prime farmland if drained and either protected from flooding or not frequently flooded during the	•	Farmland of statewide importance, if protected from flooding or not frequently flooded during
~	Farmland of statewide importance, if irrigated		erodibility) x C (climate factor) does not exceed 60	~	importance, if thawed Farmland of local importance		growing season Prime farmland if irrigated and drained		the growing season Farmland of statewide importance, if irrigated
				~	Farmland of local importance, if irrigated		Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season		

- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled. completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed

- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated

- Farmland of unique importance
- Not rated or not available

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

04

Local Roads

Background

Aerial Photography

The soil surveys that comprise your AOI were mapped at 1:20.000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Rankin County, Mississippi Survey Area Data: Version 20, Sep 6, 2024

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

Date(s) aerial images were photographed: Nov 8, 2021—Nov 29, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
35B2	Tippah silt loam, 2 to 5 percent slopes, eroded	All areas are prime farmland	0.4	28.6%
65D	Smithdale-Providence complex, 8 to 17 percent slopes	Not prime farmland	1.1	71.4%
Totals for Area of Intere	est	1.5	100.0%	

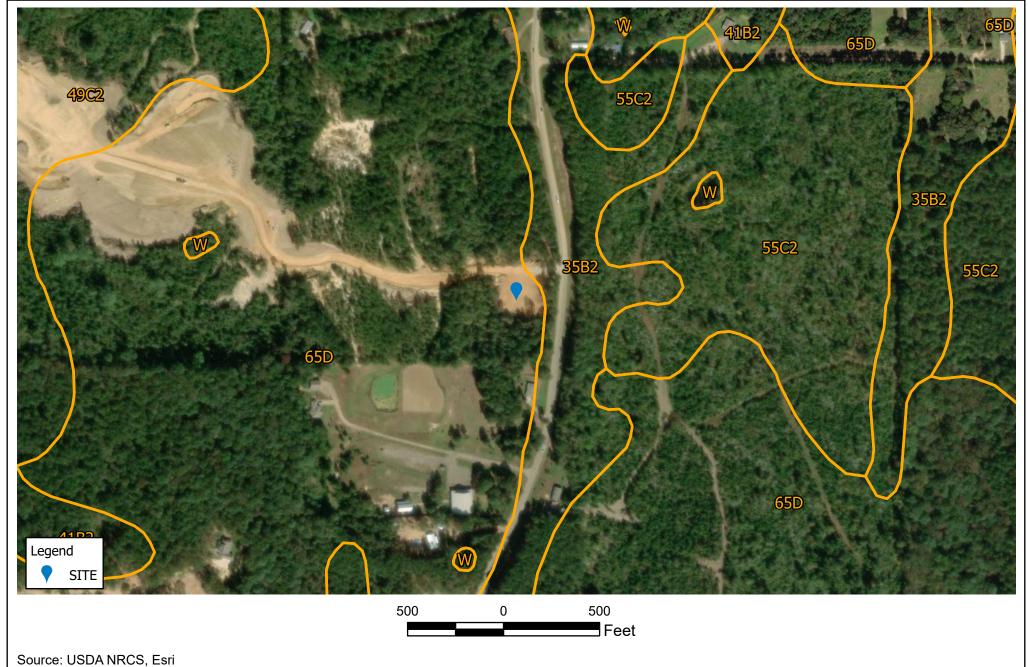
Description

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Rating Options

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower



Soil Map

ECA ID: 24-003263b



Map Unit Symbol	Map Unit Name	Farmland Classification	Water Table Depth (cm)	Drainage Class		
Tippah (35B2)	Tippah silt loam, 2 to 5 percent slopes, eroded	All areas are prime farmland	69	Moderately well drained		
Smithdale (65D)	Smithdale-Providence complex, 8 to 17 percent slopes	Not prime farmland	69	Well drained		







GEOTECHNICAL INVESTIGATION REPORT

November 18, 2024

Prepared For:

Vertical Bridge



Old Pearson Rd US-MS-5200

Proposed 200-Foot Self-Supporting Tower

2622 S Pearson Road, Richland (Rankin County), Mississippi 39218 Latitude N 32.214758° Longitude W 90.129525°

> Delta Oaks Group Project GEO24-23380-08 Revision 0 geotech@deltaoaksgroup.com

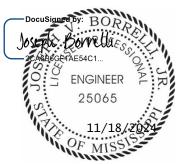
Performed By:

Robert Diven

Reviewed By:

Robert Dixon

Joseph V. Borrelli, Jr., P.E.





DELTA OAKS GROUP

INTRODUCTION

This geotechnical investigation report has been completed for the proposed 200-foot self-supporting tower located at 2622 S Pearson Road in Richland (Rankin County), Mississippi. The purpose of this investigation was to provide engineering recommendations and subsurface condition data at the proposed tower location. A geotechnical engineering interpretation of the collected information was completed and utilized to suggest design parameters regarding the adequacy of the structure's proposed foundation capacity under various loading conditions. This report provides the scope of the geotechnical investigation; geologic material identification; results of the geotechnical laboratory testing; and design parameter recommendations for use in the design of the telecommunication facility's foundation and site development.

SITE CONDITION SUMMARY

The proposed tower and compound are located on an open grass covered area exhibiting a gradually downward sloping topography from the southeast to northwest across the tower compound and subject property.

REFERENCES

- Construction Drawings, prepared by TOWER ENGINEERING, INC., dated September 5, 2024
- TIA Standard (TIA-222-H), dated October 2017

SUBSURFACE FIELD INVESTIGATION SUMMARY

The subsurface field investigation was conducted through the advancement of three (3) mechanical soil test borings denoted B-1 through B-3, to the termination depths of 39.5, 39.0, and 38.8 feet bgs, respectively. Samples were obtained at selected intervals in accordance with ASTM D 1586. The sampling was conducted at the estimated tower leg locations. Soil samples were transported to our laboratory and classified by a geotechnical engineer in accordance with ASTM D 2487. A detailed breakdown of the material encountered in our subsurface field investigation can be found in the boring logs presented in the Appendix of this report.

A boring plan portraying the spatial location of the boring in relation to the proposed tower, tower compound and immediate surrounding area can be found in the Appendix.



SUBSURFACE CONDITION SUMMARY

The following provides a general overview of the site's subsurface conditions based on the data obtained during our field investigation.

FILL

Fill material was not encountered during the subsurface field investigation.

SOIL

The residual soil encountered in the subsurface field investigation began at the existing ground surface in the boring and consisted of sandy clay, lean clay, clayey sand, silty sand, and silty gravel. The materials ranged from a loose to very dense relative density and a soft to hard consistency.

Auger advancement refusal was encountered during the subsurface field investigation in borings B-1 through B-3 at the depths of 39.5, 39.0, and 38.8 feet bgs, respectively.

ROCK

Bedrock was not verified through coring; however, it is likely that auger refusal depth indicates the top of rock.

SUBSURFACE WATER

At the time of drilling, subsurface water was not encountered during the subsurface investigation. However, subsurface water elevations can fluctuate throughout the year due to variations in climate, hydraulic parameters, nearby construction activity and other factors.

FROST PENETRATION

The frost penetration depth for Rankin County, Mississippi is 10 inches (0.8 feet).

CORROSIVITY

Soil resistivity was performed in accordance with ASTM G187 with a test result of 1,890 ohmscm.



FOUNDATION DESIGN SUMMARY

In consideration of the provided tower parameters and the determined soil characteristics, Delta Oaks Group recommends utilizing a drilled shaft foundation for the proposed structure. We recommend the use of a deep foundation due to the presence of a weak clay layer near the shallow foundation bearing depth. If a shallow foundation were utilized, there would be potential for bearing failure or excessive settlement.

The strength parameters presented in the following sections can be utilized for design of the foundation.

GENERAL SUBSURFACE STRENGTH PARAMETERS

		PETTERN IE GODGO	MITTOL SINEMOTITITAN	TITIETEITO	
Boring	Depth (bgs)	USCS	Moist/Buoyant Unit Weight (pcf)	Phi Angle (degrees)	Cohesion (psf)
	0.0 - 3.0	CL	120	0	1,000
	3.0 - 8.0	CL	110	0	500
	8.0 - 13.0	CL	115	0	700
	13.0 - 18.0	SC	105	29	0
B-1	18.0 - 23.0	CL	115	0	600
	23.0 - 28.0	CL	110	0	500
	28.0 - 33.0	CL	120	0	1,100
	33.0 - 38.0	CL	115	0	600
	38.0 - 39.5	CL	130	0	4,000



Boring	Depth (bgs)	USCS	Moist/Buoyant Unit Weight (pcf)	Phi Angle (degrees)	Cohesion (psf)
	0.0 - 3.0	CL	120	0	1,500
	3.0 - 6.0	CL	115	0	600
	6.0 - 8.0	CL	110	0	500
	8.0 - 13.0 CL 120				800
B-2	13.0 - 18.0 SC 115	115	32	0	
B-2	18.0 - 23.0	SC	115	30	0
	23.0 - 28.0	CL	110	0	500
	28.0 - 33.0	CL	110	0	400
	33.0 - 38.0	CL	130	0	4,000
	38.0 - 39.0	GM	130	45	0

Boring	Depth (bgs)	USCS	Moist/Buoyant Unit Weight (pcf)	Phi Angle (degrees)	Cohesion (psf)
	0.0 - 3.0	CL	110	0	400
	3.0 - 8.0	CL	115	0	600
	8.0 - 13.0	CL	120	0	800
	13.0 - 18.0 CL 120				1000
B-3	18.0 - 23.0	SC	110	30	0
	23.0 - 28.0	CL	120	0	1200
	28.0 - 33.0	CL	120	0	900
	33.0 - 38.0	CL	120	0	1100
	38.0 - 38.8	SM	130	45	0

- The unit weight provided assumes overburden soil was compacted to a minimum of 95% of the maximum dry density as obtained by the standard Proctor method (ASTM D 698) and maintained a moisture content within 3 percent of optimum.
- The values provided for phi angle and cohesion should be considered ultimate.



SUBSURFACE STRENGTH PARAMETERS - DRILLED SHAFT FOUNDATION

	SUBSURFAC	E SIKENGIH PAKAIV	<u> IETERS - DRILLED SHAFT FOUND</u>	ATION
Boring	Depth (bgs)	Net Ultimate Bearing Capacity (psf)	Ultimate Skin Friction - Compression (psf)	Ultimate Skin Friction - Uplift (psf)
	0.0 – 3.0	-	-	-
	3.0 - 8.0	4,390	270	270
	8.0 - 13.0	3,400	380	380
	13.0 - 18.0	4,230	770	570
B-1	18.0 - 23.0	3,840	330	330
	23.0 - 28.0	6,550	270	270
	28.0 - 33.0	4,920	600	600
	33.0 - 38.0	25,540	330	330
	38.0 - 39.5	34,540	2,040	2,040

Boring	Depth (bgs)	Net Ultimate Bearing Capacity (psf)	Ultimate Skin Friction - Compression (psf)	Ultimate Skin Friction - Uplift (psf)				
	0.0 – 3.0	-	-	-				
	3.0 - 6.0	6,120	320	320				
	6.0 - 8.0	5,300	270	270				
	8.0 - 13.0	4,290	430	430				
B-2	13.0 - 18.0	4,930	1,720	1,290				
D-2	18.0 - 23.0	3,260	1,390	1,040				
	23.0 - 28.0	2,860	270	270				
	28.0 - 33.0	25,250	220	220				
	33.0 - 38.0 51,290		2,040	2,040				
	38.0 - 39.0	58,690	2,930	2,190				



Boring	Depth (bgs)	Net Ultimate Bearing Capacity (psf)	Ultimate Skin Friction - Compression (psf)	Ultimate Skin Friction - Uplift (psf)
	0.0 – 3.0	-	-	-
	3.0 - 8.0	6,320	330	330
	8.0 - 13.0	6,460	430	430
	13.0 - 18.0	5,130	550	550
B-3	18.0 - 23.0	8,540	1,120	840
	23.0 - 28.0	7,630	660	660
	28.0 - 33.0	8,400	490	490
	33.0 - 38.0 43,560		600	600
	38.0 - 38.8	58,750	2,960	2,220

- The top 3.0 feet of soil should be ignored due to the frost penetration and the potential soil disturbance during construction.
- The values presented assume the concrete is cast-in-place against earth walls and any casing utilized during construction of the foundation was removed.
- Delta Oaks Group recommends an appropriate factor of safety be utilized for the design of the foundation.



SEISMIC DESIGN CONSIDERATIONS

Period (seconds)	Site Coefficients	Mapped Spectral Acceleration Parameters	Adjusted Spectral Acceleration Parameters	Design Spectral Acceleration Parameters
0.2	1.6 (F _a)	$S_s = 0.135$	S _{ms} = 0.216	S _{Ds} = 0.144
1.0	2.4 (F _v)	S ₁ = 0.081	$S_{m1} = 0.194$	S _{D1} = 0.130

- The site soils should be characterized as Seismic Site Class D
- Design considerations are based on the 2018 International Building Code and the subgrade conditions encountered during this investigation.



CONSTRUCTION

SITE DEVELOPMENT

The proposed access road and tower compound should be evaluated by a Geotechnical Engineer, or their representative, after the removal or "cutting" of the areas to design elevation but prior to the placement of any structural fill material to verify the presence of unsuitable or weak material. Unsuitable or weak materials should be undercut to a suitable base material as determined by a Geotechnical Engineer, or their representative. Backfill of any undercut area(s) should be conducted in accordance with the recommendations provided in the STRUCTURAL FILL PLACEMENT section of this report.

Excavations should be sloped or shored in accordance and compliance with OSHA 29 CFR Part 1926, Excavation Trench Safety Standards as well as any additional local, state and federal regulations.

STRUCTURAL FILL PLACEMENT

Structural fill materials should be verified, prior to utilization, to have a minimum unit weight of 110 pcf (pounds per cubic foot) when compacted to a minimum of 95% of its maximum dry density and within plus or minus 3 percentage points of optimum moisture. Materials utilized should not contain more than 5 percent by weight of organic matter, waste, debris or any otherwise deleterious materials. The Liquid Limit should be no greater than 40 with a Plasticity Index no greater than 20. Structural fill material should contain a maximum particle size of 4 inches with 20 percent or less of the material having a particle size between 2 and 4 inches. Backfill should be placed in thin horizontal lifts not to exceed 8 inches (loose) in large grading areas and 4 inches (loose) where small handheld or walk-behind compaction equipment will be utilized. The potential suitability of on-site materials to be utilized as fill should be evaluated by a Geotechnical Engineer, or their representative just prior to construction.

During construction structural fill placement should be monitored and tested. This should include at minimum, visual observation as well as a sufficient amount of in-place field density tests by a Geotechnical Engineer, or their representative. Materials should be compacted to a minimum of 95% of the maximum dry density as determined by ASTM D 698 (standard Proctor method). Moisture contents should be maintained to within plus or minus 3 percentage points of the optimum moisture content.

SHALLOW FOUNDATIONS

Foundation excavation(s) should be evaluated by a Geotechnical Engineer, or their representative, prior to reinforcing steel and concrete placement. This evaluation should include visual observation to verify a level bearing surface; vertical side-walls with no protrusions, sloughing or caving; and the exposed bearing surface is free of deleterious material, loose soil and standing water. Excavation dimensions should be verified and testing performed on the exposed bearing surface to verify compliance with design recommendations. Bearing testing should be conducted in accordance with ASTM STP399 (Dynamic Cone Penetrometer). A 6-inch layer of compacted crushed stone should be installed prior to reinforcing steel and concrete placement. If subsurface water is encountered during excavation dewatering methods such as sump pumps or well points may be required.



DRILLED SHAFT FOUNDATIONS

Drilled shaft foundations (caissons) are typically installed utilizing an earth auger to reach the design depth of the foundation. Specialized roller bits or core bits can be utilized to penetrate boulders or rock. The equipment utilized should have cutting teeth to result in an excavation with little or no soil smeared or caked on the excavation sides with spiral-like corrugated walls. The drilled shaft design diameter should be maintained throughout the excavation with a plumbness tolerance of 2 percent of the length and an eccentricity tolerance of 3 inches from plan location. A removable steel casing can be installed in the shaft to prevent caving of the excavation sides due to soil relaxation. Upon completion of the drilling and casing placement, loose soils and subsurface water greater than 3-inches in depth should be removed from the bottom of the excavation for the "dry" installation method. The drilled shaft installation should be evaluated by a Geotechnical Engineer, or their representative, to verify suitable end bearing conditions, design diameter and bottom cleanliness. The evaluation should be conducted immediately prior to as well as during concrete placement operations.

The drilled shaft should be concreted as soon as reasonably practical after excavation to reduce the deterioration of the supporting soils to prevent potential caving and water intrusion. A concrete mix design with a slump of 6 to 8 inches employed in conjunction with the design concrete compressive strength should be utilized for placement. Super plasticizer may be required to obtain the recommended slump range. During placement, the concrete may fall freely through the open area in the reinforcing steel cage provided it does not strike the reinforcing steel and/or the casing prior to reaching the bottom of the excavation. The removable steel casing should be extracted as concrete is placed. During steel casing removal a head of concrete should be maintained above the bottom of the casing to prevent soil and water intrusion into the concrete below the bottom of the casing.

If subsurface water is anticipated and/or weak soil layers are encountered drilled shafts are typically installed utilizing the "wet" method by excavating beneath a drilling mud slurry. The drilling mud slurry is added to the drilled shaft excavation after groundwater has been encountered and/or the sides of the excavation are observed to be caving or sloughing. Additional inspection by a Geotechnical Engineer, or their representative, during the "wet" method should consist of verifying maintenance of sufficient slurry head, monitoring the specific gravity, pH and sand content of the drilling slurry, and monitoring any changes in the depth of the excavation between initial approval and just prior to concreting.

Concrete placement utilizing the "wet" method is conducted through a tremie pipe at the bottom of the excavation with the drilling mud slurry level maintained at a minimum of 5 feet or one shaft diameter, whichever is greater, above the ground water elevation. The bottom of the tremie should be set one tremie pipe diameter above the excavation. A closure flap at the bottom of the tremie or a sliding plug introduced into the tremie before the concrete is recommended to reduce the potential contamination of the concrete by the drilling mud slurry. The bottom of the tremie must be maintained in the concrete during placement. Additional concrete should be placed through the tremie causing the slurry to overflow from the excavation in order to reduce the potential for the development of "slurry pockets" remaining in the drilled shaft.



QUALIFICATIONS

The design parameters and conclusions provided in this report have been determined in accordance with generally accepted geotechnical engineering practices and are considered applicable to a rational degree of engineering certainty based on the data available at the time of report preparation and our practice in this geographic region. All recommendations and supporting calculations were prepared based on the data available at the time of report preparation and knowledge of typical geotechnical parameters in the applicable geographic region.

The subsurface conditions used in the determination of the design recommendations contained in this report are based on interpretation of subsurface data obtained at specific boring locations. Irrespective of the thoroughness of the subsurface investigation, the potential exists that conditions between borings will differ from those at the specific boring locations, that conditions are not as anticipated during the original analysis, or that the construction process has altered the soil conditions. That potential is significantly increased in locations where existing fill materials are encountered. Additionally, the nature and extent of these variations may not be evident until the commencement of construction. Therefore, a geotechnical engineer, or their representative, should observe construction practices to confirm that the site conditions do not differ from those conditions anticipated in design. If such variations are encountered, Delta Oaks Group should be contacted immediately in order to provide revisions and/or additional site exploration as necessary.

Samples obtained during our subsurface field investigation will be retained by Delta Oaks Group for a period of 30 days unless otherwise instructed by Vertical Bridge. No warranty, expressed or implied, is presented.

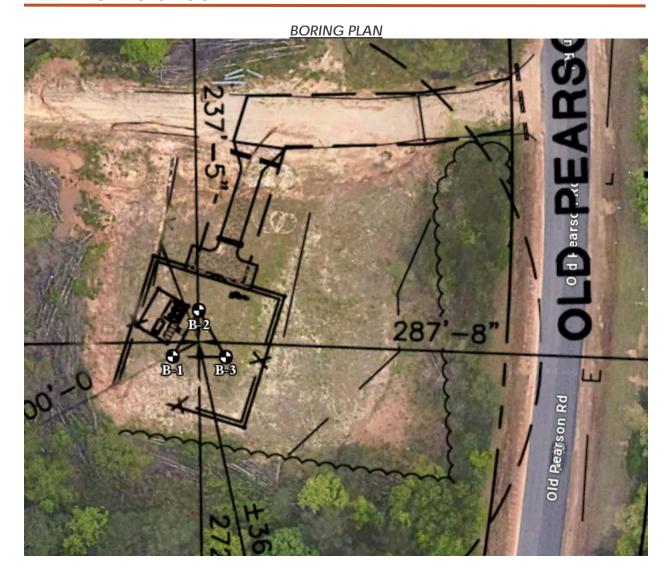
Delta Oaks Group appreciates the opportunity to be of service for this Geotechnical Investigation Report. Please do not hesitate to contact Delta Oaks Group with any questions or should you require additional service on this project.



APPENDIX

DELTA OAKS

DELTA OAKS GROUP





PROJECT NAME Old Pearson Rd (US-MS-5200)

PROJECT NUMBER GEO24-23380-08

PROJECT LOCATION Richland, Mississippi

CLIENT Vertical Bridge

Boring No.: B-1

PAGE 1 OF 1

	GROUP	Ι	CDO	LIND W	/ATED		ELC.						—	—			\dashv
	E DRILLED: 11/11/2024		GRU ∑	UND W					No	t on	00111	torod	1				
	LING METHOD: Hollow Stem Auger & Mud Rotary	1	✓ AT TIME OF														
	UND ELEVATION:	1	<u>1</u>									ierea					
BOR	ING DEPTH (ft): 39.5		<u>¥</u>	AFTE	R DRIL	LIN	3: -	No	t mea	sur	ed						_
O DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE		CLASSIFICATION	Pocket Penetrometer (tsf)	BLOWS 1st	BLOWS 2nd	BLOWS 3rd	N VALUE	1	0 20			VALU	JE ▲ 0 70	80 9	90
	Grey, red, orange, stiff, SANDY CLAY (CL), with silt, trace organics, moist	X		CL		1	2	8	10	1							
5	Red, white, orange, medium stiff, LEAN CLAY (CL), with sand, with silt, trace organics, moist	X		CL		1	2	3	5								
	brown, grey	X				1	2	3	5								
10		X				1	3	4	7	A					_		
	Brown, loose, fine to coarse grained, CLAYEY SAND (SC), trace silt, moist	X		SC		2	3	4	7	^							
20	Brown, grey, orange, medium stiff, LEAN CLAY (CL), with sand, with silt, trace mica, moist	X		CL		2	2	4	6				<u> </u>				
		X				2	2	3	5								
30	Brown, white, orange, stiff, SANDY CLAY (CL), with limestone fragments, trace silt, wet	X		CL		5	6	5	11								
	brown, tan, medium stiff, moist	X				2	2	4	6								
 40	WEATHERED ROCK SAMPLED AS: Grey, hard, SANDY CLAY (CL), moist	X				14	50/6"		100				_		+		
	Refusal at 39.5 feet. Bottom of borehole at 39.5 feet.																



PROJECT NAME Old Pearson Rd (US-MS-5200)

PROJECT NUMBER GEO24-23380-08

PROJECT LOCATION Richland, Mississippi

CLIENT Vertical Bridge

Boring No.: B-2

PAGE 1 OF 1

DAT	E DRILLED : 11/11/2024		GRO	DUND W	/ATER	LEVI	ELS:									
	LING METHOD: Hollow Stem Auger & Mud Rotary		∇		ME OF				No	t en	cour	itered				
	OUND ELEVATION :	1	Ţ		ND OF I											
	RING DEPTH (ft): 39	1	$ar{oldsymbol{ abla}}$		R DRIL											
DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE		MATERIAL CLASSIFICATION	Pocket Penetrometer (tsf)	BLOWS 1st	BLOWS 2nd	BLOWS 3rd	N VALUE			▲ SI	PT N	VALUE	Ε.Δ.	
0		Ś		싱	Pock		_			1	n 20	30	40 F	n 60	70 6	20 OO
- - -	Brown, grey, orange, stiff, SANDY CLAY (CL), with silt, trace organics, dry	X		CL		3	6	9	15		<u> </u>		40 3	0 00		
 5	red, grey, orange, medium stiff, moist	X				1	3	3	6							
-	Brown, grey, medium stiff, LEAN CLAY (CL), with silt, trace organics, moist	X		CL		1	2	3	5	\						
10	brown, grey, orange, trace sand	X				3	3	5	8		.				_	
 15	Brown, medium dense, fine to coarse grained, CLAYEY SAND (SC), trace silt, moist	X		SC		3	8	8	16		\					
 		X				3	5	5	10	4						
	- CANDY CLAY (OL) with															
	Brown, orange, medium stiff, SANDY CLAY (CL), with limestone fragments, trace silt, wet	X		CL		2	2	3	5	<u></u>						
30	soft	X				2	2	2	4							
 						50/4"			100							
 35 	*No Recovery -					JU/4			100							
_]																
40	WEATHERED ROCK SAMPLED AS: Brown, grey, very dense, SILTY GRAVEL (GM), with sand, saturated Refusal at 39.0 feet. Bottom of borehole at 39.0 feet.	\times		GM		50/6"			100							



PROJECT NAME Old Pearson Rd (US-MS-5200)

PROJECT NUMBER GEO24-23380-08

PROJECT LOCATION Richland, Mississippi

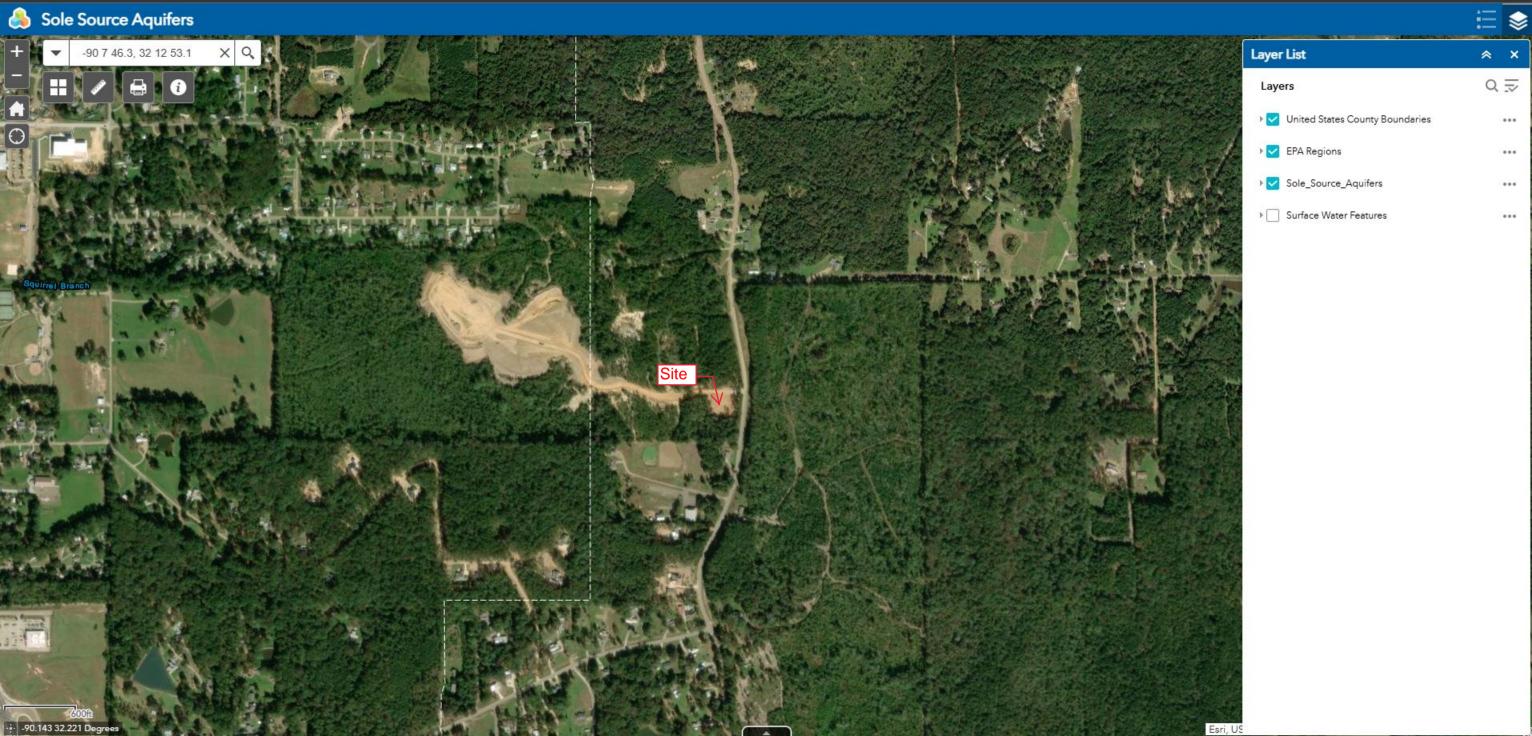
CLIENT Vertical Bridge

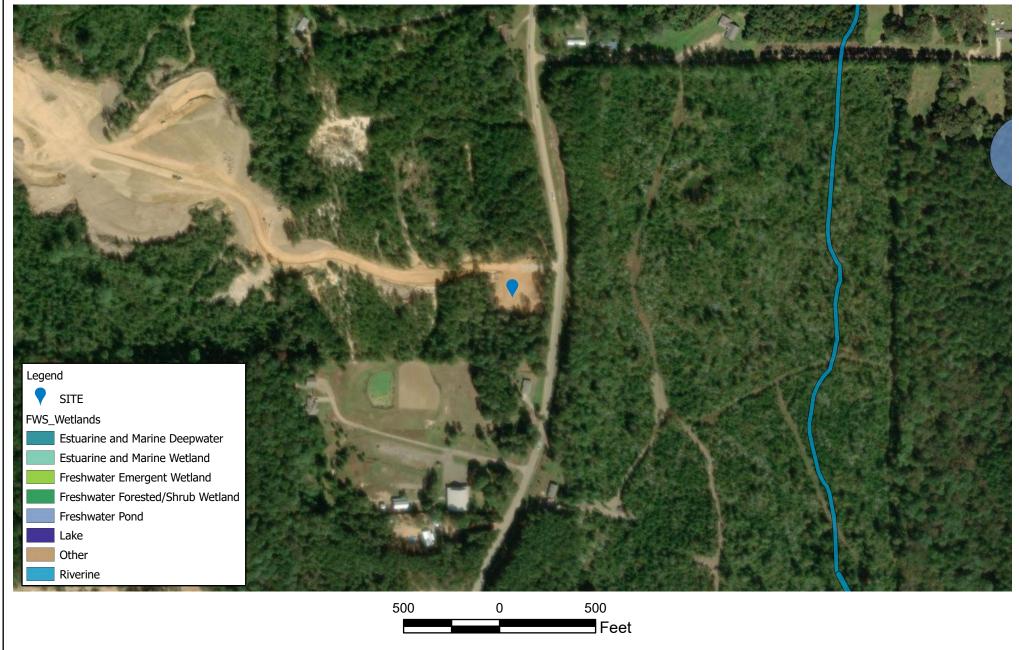
Boring No.: B-3

PAGE 1 OF 1

DATE	DRILLED: 11/11/2024		GRC	UND W	/ΔTFP	IFV	FI S:							_
	ING METHOD: Hollow Stem Auger & Mud Rotary		GRC ∑						- No	t encounte	red			
			Ţ											
	ND ELEVATION:	1	<u>*</u>							encounter	ea			
ORIN	NG DEPTH (ft): 38.8		<u>Ā</u>	AFTE		LINC	- : و	No	mea	sured				_
(£)	MATERIAL DESCRIPTION	SAMPLE TYPE		MA I EKIAL CLASSIFICATION	Pocket Penetrometer (tsf)	BLOWS 1st	BLOWS 2nd	BLOWS 3rd	N VALUE	10 20 3	NSPT N			ç
	Red, white, brown, soft, SANDY CLAY (CL), with silt, trace organics, moist	X		CL		2	2	2	4	↑				
1	medium stiff	X				2	2	4	6					
	Brown, grey, orange, medium stiff, LEAN CLAY (CL), trace sand, trace silt, trace mica, moist	X		CL		2	2	4	6					
)	with silt	X				2	4	4	8				+	
- - - 5	stiff, with sand	X				2	4	6	10	A				_
-	Brown, orange, grey, loose, fine to coarse grained, CLAYEY SAND (SC), with silt, moist	X		SC		2	3	5	8					
5	Brown, orange, stiff, LEAN CLAY (CL), with silt, trace sand, trace shells, moist	X		CL		2	4	8	12				_	_
	Brown, tan, stiff, SANDY CLAY (CL), with limestone fragments, wet	X		CL		3	5	4	9				_	_
- - - 5		X				3	5	6	11					_
	WEATHERED ROCK SAMPLED AS: Grey, very dense, fine to coarse grained, SILTY SAND (SM), trace gravel, trace clay, moist	×		SM		50/4",							+	_
	Bottom of borehole at 38.8 feet.													

Appendix D Water Resources





Source: U.S. Fish and Wildlife Service, National Standards and Support Team, wetlands_team@fws.gov

Wetlands Map

ECA ID: 24-003263b





Source: FEMA's National Flood Hazard Layer

FEMA Floodplain Map

ECA ID: 24-003263b



Appendix E Biological Resources



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Mississippi Ecological Services Field Office 6578 Dogwood View Parkway, Suite A Jackson, MS 39213-7856 Phone: (601) 965-4900

In Reply Refer To: 02/11/2025 17:33:12 UTC

Project Code: 2025-0039199 Project Name: 24-003263b

Subject: List of threatened and endangered species that may occur in your proposed project

location or may be affected by your proposed project

To Whom It May Concern:

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

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

Project code: 2025-0039199

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

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

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

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office. Please email consultation requests to MSFOSection7Consultation@fws.gov.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds

OFFICIAL SPECIES LIST

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

This species list is provided by:

Mississippi Ecological Services Field Office 6578 Dogwood View Parkway, Suite A Jackson, MS 39213-7856 (601) 965-4900

PROJECT SUMMARY

Project Code: 2025-0039199 Project Name: 24-003263b

Project Type: Communication Tower New Construction

Project Description: 211' Self-supporting lattice tower

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@32.21492175,-90.12949648293917,14z



Counties: Rankin County, Mississippi

ENDANGERED SPECIES ACT SPECIES

Project code: 2025-0039199

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME STATUS

Tricolored Bat *Perimyotis subflavus*

Proposed Endangered

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515

General project design guidelines:

 $\underline{https://ipac.ecosphere.fws.gov/project/BCAQMTCATNCSBFVLDTVLDKOLQA/}$

documents/generated/7127.pdf

REPTILES

NAME STATUS

Alligator Snapping Turtle *Macrochelys temminckii*

Proposed Threatened

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4658

species profile. <u>intps://ecos.tws.gov/ecp/species</u>

General project design guidelines:

 $\underline{https://ipac.ecosphere.fws.gov/project/BCAQMTCATNCSBFVLDTVLDKOLQA/}$

documents/generated/7127.pdf

INSECTS

NAME STATUS

Monarch Butterfly *Danaus plexippus*

Proposed

There is **proposed** critical habitat for this species. Your location does not overlap the critical

Threatened

habitat.

Species profile: https://ecos.fws.gov/ecp/species/9743

General project design guidelines:

https://ipac.ecosphere.fws.gov/project/BCAQMTCATNCSBFVLDTVLDKOLQA/

documents/generated/7127.pdf

CRITICAL HABITATS

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

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

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

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

BALD & GOLDEN EAGLES

Project code: 2025-0039199

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act ² and the Migratory Bird Treaty Act (MBTA) ¹. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

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

THERE ARE NO BALD AND GOLDEN EAGLES WITHIN THE VICINITY OF YOUR PROJECT AREA.

MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) ¹ prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service). The incidental take of migratory birds is the injury or death of birds that results from, but is not the purpose, of an activity. The Service interprets the MBTA to prohibit incidental take.

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

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Brown-headed Nuthatch Sitta pusilla	Breeds Mar 1 to Jul
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation	15
Regions (BCRs) in the continental USA	
https://ecos.fws.gov/ecp/species/9427	
Chimney Swift Chaetura pelagica	Breeds Mar 15 to
This is a Bird of Conservation Concern (BCC) throughout its range in the continental	Aug 25
USA and Alaska.	3
https://ecos.fws.gov/ecp/species/9406	

Project code:	2025-0039199
---------------	--------------

NAME	BREEDING SEASON
Coastal (waynes) Black-throated Green Warbler Setophaga virens waynei This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/11879	Breeds May 1 to Aug 15
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10
Rusty Blackbird <i>Euphagus carolinus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9478	Breeds elsewhere
Wood Thrush <i>Hylocichla mustelina</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9431	Breeds May 10 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

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

Probability of Presence (■)

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

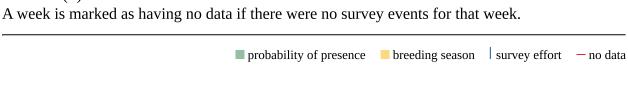
Breeding Season (

Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

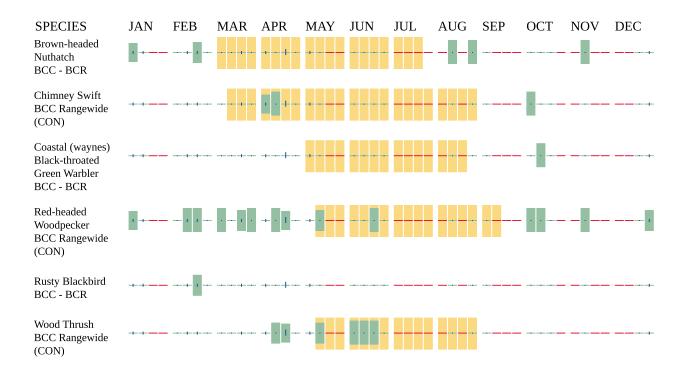
Survey Effort (|)

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

No Data (-)



Project code: 2025-0039199



Additional information can be found using the following links:

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

Project code: 2025-0039199 02/11/2025 17:33:12 UTC

IPAC USER CONTACT INFORMATION

Agency: Environmental Corporation of America

Name: Ryan Edson

Address: 1375 Union Hill Industrial Ct.

City: Alpharetta

State: GA Zip: 30004

Email ryan.edson@eca-usa.com

Phone: 7706672040

LEAD AGENCY CONTACT INFORMATION

Lead Agency: National Telecommunications and Information Administration





NATURAL RESOURCES REVIEW UPDATE

November 4, 2024

Site Identifier: US-MS-5200 / Old Pearson Rd

Site Address: 2622 S Pearson Road, Richland, Mississippi, 39218

EBI Project #: 011697-PR

EBI Consulting (EBI) has prepared the following Natural Resources Review Update (NR Update) letter for the above-referenced proposed wireless communications facility. The potential impacts of this facility on natural resources were originally evaluated by EBI in a November 2, 2022 Natural Resources Review (NR Review). The purpose of this NR Update is to either evaluate revisions to the original design and/or location of this facility or to obtain updated data used in the original assessment, which may no longer be valid or reliable. Specifically, EBI evaluated whether the original NR Review findings remain valid.

Project Scope

As of the date of this NR Update, modifications to the proposed communications facility design include:

- The tower will no longer be constructed by Verizon Wireless. The tower will now be constructed by The Towers, LLC.
- A 1' by 100' barrier silt fence will be constructed to the west of the lease area.
- A 3'-wide swale will be installed within a 5' by 90' installation area, to the south of the lease area.
- A 3'-wide swale will be installed within a 5' by 80' installation area, to the north of the lease area. The swale will cut across the proposed access and utility easement.

Please see the attached drawings for complete details.

Additionally, the location of the proposed facility has not shifted from the original proposed location.

Protected Species

As part of this NR Update, EBI utilized the USFWS Information for Planning and Consultation ¹ (IPaC) online project review tool to identify species that are federal-listed or proposed for listing under the Endangered Species Act (ESA), and that are known to occur within the vicinity of the Project Site. This updated IPaC project review indicated that the northern long-eared bat and wood stork are no longer listed as being within the project vicinity. This new IPaC project review identified the following species:

1. https://ipac.ecosphere.fws.gov/



Species Name (Scientific Name)		Habitat Description	Effect Determination
	FP/ NL	as lichen clumps but also uses caves, mines, rock crevices and even old buildings. Preferred foraging habitat is near riparian areas.	No Effect – No potential habitat for this species is located at the Project Site, and no tree trimming/removal is proposed. Note that potentially suitable habitat is present within 1,000 feet of the Project Site. Please see below the table for more details.
Alligator Snapping Turtle (Macrochelys temminckii)	FP/ FT	This species is usually associated with slow-moving, deep water in rivers, sloughs, oxbows, canals, or lakes. May also be found in swamps, bayous, ponds or shallow creeks near suitable rivers. Highly aquatic but may travel onto land to nest. Nest in sand mounds along riverbanks to sandbars within the stream, to a 1.5 m high steep cut bank.	No Effect – The preferred habitat for this species was not observed within or in the immediate vicinity of the Project Site.
,	FC/ NL	Monarch butterflies lay their eggs on milkweed host plants in temperate climates in the breeding season.	Candidate species are not afforded protection under the ESA.

FE = Federal Endangered; FT = Federal Threatened; FP = Federal Proposed; FC = Federal Candidate; CH = Critical Habitat; SE = State Endangered; ST = State Threatened; SP = State Proposed; NL = Not Listed

On October 25, 2024, EBI ran and submitted the Northern Long-eared Bat and Tricolored Bat Range-wide Determination Key (DKey) and the USFWS, in an online concurrence letter (Project Code: 2025-0011061), noted that the proposed project 'may affect - not likely to adversely affect' the tricolored bat. No further USFWS consultation is required at this time, however, should the tricolored bat be listed as endangered under the ESA prior to construction, agencies must review projects that received a NLAA determination from the DKey to confirm that the determination is still accurate.

Proposed endangered species are not protected by the take prohibitions of Section 9 of the ESA, and under Section 7 the USFWS must only be consulted if the proposed action will jeopardize the continued existence of the species. However, on October 23, 2024, the USFWS released final guidance and tools that facilitate compliance under the ESA for development projects that can impact the endangered northern long-eared bat and the proposed endangered tricolored bat (TCB) where they are found. The final tools and guidance will also support regulatory compliance for the proposed endangered TCB. Under ESA conferencing provisions for proposed species, the regulatory determinations provided by these tools for the TCB can satisfy ESA consultation requirements should the TCB be listed.

EBI submitted this information to the MDWFP and in a response dated October 7, 2022, concluded that there are no records of rare, threatened, or endangered species or communities in the vicinity of the proposed cell tower project. However, the MDWFP recommends best management practices (BMPs) be property implemented, maintained, and monitored (particularly measures to prevent, or at least, minimize negative impacts to water quality). Due to the minor increase in size of the proposed development, and the existing conditions at the site, cleared land, EBI concluded that no further consultation with MDWFP is necessary as part of this NR Update.

Based on the review completed as part of this NR Update, EBI makes no changes to the original finding of 'no effect'. Please refer to the attached updated species data.

Flood Zones

Based on the review completed as part of this NR Update, EBI makes no changes to the original finding that the proposed facility is not located within a 100-year flood zone. Please refer to the attached revised flood map.

Wetlands

A review of the NWI map did not identify wetlands within 300 feet of the Project Site. However, the client provided CDs indicate that an existing pond is located approximately 15-feet west of the proposed lease area. Although wetlands were identified within 300 feet of the Project Site, no direct effects are anticipated. However, best management practices (BMPs) (i.e. silt fencing, wattles, erosion controls, etc.) should be employed during construction to ensure stormwater runoff does not carry construction related debris into nearby wetland features.

Conclusion

Based on the results of EBI's review as summarized herein, the proposed communications facility is:

- Anticipated to have 'no effect' on listed species or associated critical habitats,
- Not within the boundaries of, or within one mile of federal lands noted above (i.e. wildlife preserves, wilderness areas, etc.);
- Not within the boundaries of a FEMA-designated 100-year flood zone; and
- Not anticipated to result in a significant change to surface features, provided BMPs are implemented during construction to minimize negative impacts to water quality.

As such, EBI recommends no further review with regard to the potential for impacts on the natural resources evaluated in this report.

Limitations

The Report was completed according to the terms and conditions authorized by you. There are no intended or unintended third-party beneficiaries to this Report, unless specifically named. EBI is an independent contractor, not an employee of either the property owner or the project proponent, and its compensation was not based on the findings or recommendations made in the Report or on the closing of any business transaction.

Thank you for the opportunity to prepare this Report and assist with this project. Please call us if you have any questions or if we may be of further assistance.

Sincerely, **EBI Consulting**

Aurora Betzer / Scientist I

Swon Bezer

Jesse Redd / Senior Biologist jredd@ebiconsulting.com 757-350-0214

Jen A. Redd

Attachments:
Updated Supporting Documentation
Qualifications

Appendix A Updated Supporting Documentation





United States Department of the Interior



FISH AND WILDLIFE SERVICE

Mississippi Ecological Services Field Office 6578 Dogwood View Parkway, Suite A Jackson, MS 39213-7856 Phone: (601) 965-4900

In Reply Refer To: 10/25/2024 14:14:54 UTC

Project Code: 2025-0011061

Project Name: US-MS-5200 Old Pearson Rd

Subject: List of threatened and endangered species that may occur in your proposed project

location or may be affected by your proposed project

To Whom It May Concern:

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

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

Project code: 2025-0011061

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

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

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

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office. Please email consultation requests to MSFOSection7Consultation@fws.gov.

Project code: 2025-0011061 10/25/2024 14:14:54 UTC

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds

OFFICIAL SPECIES LIST

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

This species list is provided by:

Mississippi Ecological Services Field Office 6578 Dogwood View Parkway, Suite A Jackson, MS 39213-7856 (601) 965-4900

PROJECT SUMMARY

Project Code: 2025-0011061

Project Name: US-MS-5200 Old Pearson Rd

Project Type: Communication Tower New Construction

Project Description: New tower and compound.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@32.21489835,-90.1295045762161,14z



Counties: Rankin County, Mississippi

ENDANGERED SPECIES ACT SPECIES

Project code: 2025-0011061

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME **STATUS**

Tricolored Bat Perimyotis subflavus

Proposed No critical habitat has been designated for this species. Endangered

Species profile: https://ecos.fws.gov/ecp/species/10515

General project design guidelines:

https://ipac.ecosphere.fws.gov/project/MGWXNY7RIFEYNHT24TPNXVZXT4/

documents/generated/7127.pdf

REPTILES

NAME **STATUS**

Alligator Snapping Turtle *Macrochelys temminckii*

No critical habitat has been designated for this species.

Species profile: https://ecos.fws.gov/ecp/species/4658

General project design guidelines:

https://ipac.ecosphere.fws.gov/project/MGWXNY7RIFEYNHT24TPNXVZXT4/

documents/generated/7127.pdf

INSECTS

NAME **STATUS**

Monarch Butterfly *Danaus plexippus*

No critical habitat has been designated for this species.

Species profile: https://ecos.fws.gov/ecp/species/9743

General project design guidelines:

https://ipac.ecosphere.fws.gov/project/MGWXNY7RIFEYNHT24TPNXVZXT4/

documents/generated/7127.pdf

CRITICAL HABITATS

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

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

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

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

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

Proposed

Threatened

Candidate

BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act¹ and the Migratory Bird Treaty Act².

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats³, should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

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

THERE ARE NO BALD AND GOLDEN EAGLES WITHIN THE VICINITY OF YOUR PROJECT AREA.

MIGRATORY BIRDS

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

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats³ should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

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

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

NAME

Breeds Mar 1 to Jul
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation
Regions (BCRs) in the continental USA

BREEDING SEASON

Breeds Mar 1 to Jul
15

https://ecos.fws.gov/ecp/species/9427

NAME	BREEDING SEASON
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25
Coastal (waynes) Black-throated Green Warbler Setophaga virens waynei This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/11879	Breeds May 1 to Aug 15
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10
Rusty Blackbird <i>Euphagus carolinus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9478	Breeds elsewhere
Wood Thrush <i>Hylocichla mustelina</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9431	Breeds May 10 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

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

Probability of Presence (■)

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

Breeding Season (

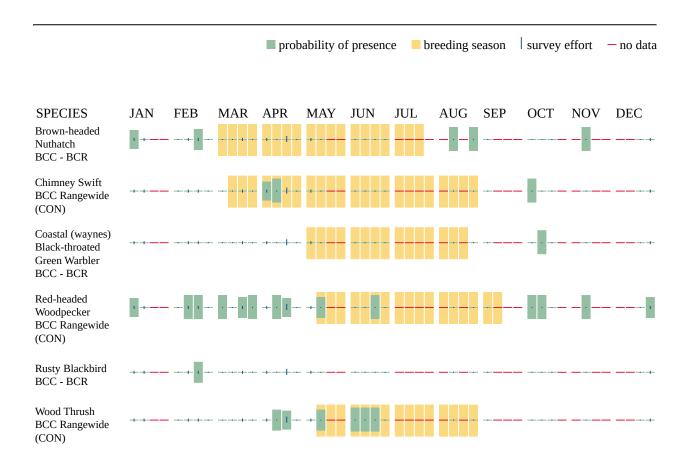
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

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

No Data (-)

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



Additional information can be found using the following links:

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

Project code: 2025-0011061 10/25/2024 14:14:54 UTC

IPAC USER CONTACT INFORMATION

Agency: EBI Consulting Name: Aurora Betzer

Address: 6876 Susquehanna Trail S

City: York State: PA Zip: 17403

Email abetzer@ebiconsulting.com

Phone: 5705945131



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Mississippi Ecological Services Field Office 6578 Dogwood View Parkway, Suite A Jackson, MS 39213-7856 Phone: (601) 965-4900

In Reply Refer To: 10/25/2024 14:19:37 UTC

Project code: 2025-0011061

Project Name: US-MS-5200 Old Pearson Rd

Federal Nexus: yes

Federal Action Agency (if applicable): Federal Communications Commission

Subject: Federal agency coordination under the Endangered Species Act, Section 7 for 'US-

MS-5200 Old Pearson Rd'

Dear Aurora Betzer:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on October 25, 2024, for 'US-MS-5200 Old Pearson Rd' (here forward, Project). This project has been assigned Project Code 2025-0011061 and all future correspondence should clearly reference this number. **Please carefully review this letter. Your Endangered Species Act (Act) requirements may not be complete.**

Ensuring Accurate Determinations When Using IPaC

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into IPaC must accurately represent the full scope and details of the Project.

Failure to accurately represent or implement the Project as detailed in IPaC or the Northern Long-eared Bat and Tricolored Bat Range-wide Determination Key (DKey), invalidates this letter. Answers to certain questions in the DKey commit the project proponent to implementation of conservation measures that must be followed for the ESA determination to remain valid. Note that conservation measures for northern long-eared bat and tricolored bat may differ. If both bat species are present in the action area and the key suggests more conservative measures for one of the species for your Project, the Project may need to apply the most conservative measures in order to avoid adverse effects. If unsure which conservation measures should be applied, please contact the appropriate Ecological Services Field Office.

Determination for the Northern Long-Eared Bat and Tricolored Bat

Based on your IPaC submission and a standing analysis completed by the Service, you determined the proposed Project will have the following effect determinations:

Species	Listing Status	Determination
Tricolored Bat (<i>Perimyotis subflavus</i>)	Proposed	NLAA
	Endangered	

Federal agencies must consult with U.S. Fish and Wildlife Service under section 7(a)(2) of the Endangered Species Act (ESA) when an action *may affect* a listed species. Tricolored bat is proposed for listing as endangered under the ESA, but not yet listed. For actions that may affect a proposed species, agencies cannot consult, but they can *confer* under the authority of section 7(a) (4) of the ESA. Such conferences can follow the procedures for a consultation and be adopted as such if and when the proposed species is listed. Should the tricolored bat be listed, agencies must review projects that are not yet complete, or projects with ongoing effects within the tricolored bat range that previously received a NE or NLAA determination from the key to confirm that the determination is still accurate.

Unless the Service advises you within 15 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that consultation on the Action is <u>complete</u> for northern long-eared bat and/or tricolored bat and no further action is necessary unless either of the following occurs:

- new information reveals effects of the action that may affect the northern long-eared bat or tricolored bat in a manner or to an extent not previously considered; or,
- the identified action is subsequently modified in a manner that causes an effect to the northern long-eared bat or tricolored bat that was not considered when completing the determination key.

15-Day Review Period

As indicated above, the Service will notify you within 15 calendar days if we determine that this proposed Action does not meet the criteria for a "may affect, not likely to adversely affect" (NLAA) determination for the northern long-eared bat and/or tricolored bat. If we do not notify you within that timeframe, you may proceed with the Action under the terms of the NLAA concurrence provided here. This verification period allows the identified Ecological Services Field Office to apply local knowledge to evaluation of the Action, as we may identify a small subset of actions having impacts that we did not anticipate when developing the key. In such cases, the identified Ecological Services Field Office may request additional information to verify the effects determination reached through the Northern Long-eared Bat and Tricolored Bat DKey.

Other Species and Critical Habitat that May be Present in the Action Area

The IPaC-assisted determination key for the northern long-eared bat and tricolored bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

• Alligator Snapping Turtle *Macrochelys temminckii* Proposed Threatened

Project code: 2025-0011061 10/25/2024 14:19:37 UTC

Monarch Butterfly Danaus plexippus Candidate

You may coordinate with our Office to determine whether the Action may affect the species and/ or critical habitat listed above. Note that reinitiation of consultation would be necessary if a new species is listed or critical habitat designated that may be affected by the identified action before it is complete.

If you have any questions regarding this letter or need further assistance, please contact the Mississippi Ecological Services Field Office and reference Project Code 2025-0011061 associated with this Project.

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

US-MS-5200 Old Pearson Rd

2. Description

The following description was provided for the project 'US-MS-5200 Old Pearson Rd':

New tower and compound.

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@32.21489835,-90.1295045762161,14z



DETERMINATION KEY RESULT

Based on the answers provided, the proposed Action is consistent with a determination of "may affect, but not likely to adversely affect" for a least one species covered by this determination key.

QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of listed bats or any other listed species?

Note: Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

No

2. Is the action area wholly within Zone 2 of the year-round active area for northern long-eared bat and/or tricolored bat?

Automatically answered

No

3. Does the action area intersect Zone 1 of the year-round active area for northern long-eared bat and/or tricolored bat?

Automatically answered

Yes

4. Your project overlaps with an area where northern long-eared bats or tricolored bats may be present and roosting in trees year-round.

Do you understand that your project may impact bats roosting in trees at any time during the year?

Yes

5. Does any component of the action involve leasing, construction or operation of wind turbines? Answer 'yes' if the activities considered are conducted with the intention of gathering survey information to inform the leasing, construction, or operation of wind turbines.

Note: For federal actions, answer 'yes' if the construction or operation of wind power facilities is either (1) part of the federal action or (2) would not occur but for a federal agency action (federal permit, funding, etc.).

No

6. Is the proposed action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

Yes

7. Is the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), or Federal Transit Administration (FTA) funding or authorizing the proposed action, in whole or in part?

No

8. Are you an employee of the federal action agency or have you been officially designated in writing by the agency as its designated non-federal representative for the purposes of Endangered Species Act Section 7 informal consultation per 50 CFR § 402.08?

Note: This key may be used for federal actions and for non-federal actions to facilitate section 7 consultation and to help determine whether an incidental take permit may be needed, respectively. This question is for information purposes only.

Yes

9. Is the lead federal action agency the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC)? Is the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC) funding or authorizing the proposed action, in whole or in part?

Yes

10. [Semantic] Is the action area located within 0.5 miles of a known bat hibernaculum?

Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

Automatically answered

No

11. Does the action area contain any winter roosts or caves (or associated sinkholes, fissures, or other karst features), mines, rocky outcroppings, or tunnels that could provide habitat for hibernating bats?

No

12. Does the action area contain (1) talus or (2) anthropogenic or naturally formed rock shelters or crevices in rocky outcrops, rock faces or cliffs?

Nο

13. Will the action cause effects to a bridge?

Note: Covered bridges should be considered as bridges in this question.

No

14. Will the action result in effects to a culvert or tunnel at any time of year?

15. Are trees present within 1000 feet of the action area?

Note: If there are trees within the action area that are of a sufficient size to be potential roosts for bats answer "Yes". If unsure, additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines.

Yes

16. Does the action include the intentional exclusion of bats from a building or structure?

Note: Exclusion is conducted to deny bats' entry or reentry into a building. To be effective and to avoid harming bats, it should be done according to established standards. If your action includes bat exclusion and you are unsure whether northern long-eared bats or tricolored bats are present, answer "Yes." Answer "No" if there are no signs of bat use in the building/structure. If unsure, contact your local Ecological Services Field Office to help assess whether northern long-eared bats or tricolored bats may be present. Contact a Nuisance Wildlife Control Operator (NWCO) for help in how to exclude bats from a structure safely without causing harm to the bats (to find a NWCO certified in bat standards, search the Internet using the search term "National Wildlife Control Operators Association bats"). Also see the White-Nose Syndrome Response Team's guide for bat control in structures.

No

- 17. Does the action involve removal, modification, or maintenance of a human-made structure (barn, house, or other building) **known or suspected to contain roosting bats?**No
- 18. Will the action cause construction of one or more new roads open to the public?

For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

No

19. Will the action include or cause any construction or other activity that is reasonably certain to increase average daily traffic permanently or temporarily on one or more existing roads?

Note: For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

20. Will the action include or cause any construction or other activity that is reasonably certain to increase the number of travel lanes on an existing thoroughfare?

For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

No

21. Will the proposed Action involve the creation of a new water-borne contaminant source (e.g., leachate pond, pits containing chemicals that are not NSF/ANSI 60 compliant)?

Note: For information regarding NSF/ANSI 60 please visit https://www.nsf.org/knowledge-library/nsf-ansi-standard-60-drinking-water-treatment-chemicals-health-effects

No

22. Will the proposed action involve the creation of a new point source discharge from a facility other than a water treatment plant or storm water system?

No

23. Will the action include drilling or blasting?

No

- 24. Will the action involve military training (e.g., smoke operations, obscurant operations, exploding munitions, artillery fire, range use, helicopter or fixed wing aircraft use)?

 No
- 25. Will the proposed action involve the use of herbicides or other pesticides other than herbicides (e.g., fungicides, insecticides, or rodenticides)?

 No
- 26. Will the action include or cause activities that are reasonably certain to cause chronic or intense nighttime noise (above current levels of ambient noise in the area) in suitable summer habitat for the northern long-eared bat or tricolored bat during the active season?

Chronic noise is noise that is continuous or occurs repeatedly again and again for a long time. Sources of chronic or intense noise that could cause adverse effects to bats may include, but are not limited to: road traffic; trains; aircraft; industrial activities; gas compressor stations; loud music; crowds; oil and gas extraction; construction; and mining.

Note: Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines.

27. Does the action include, or is it reasonably certain to cause, the use of permanent or temporary artificial lighting within 1000 feet of suitable northern long-eared bat or tricolored bat roosting habitat?

Note: Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines.

Yes

28. Will the action cause an increase in the extent of suitable forested habitat exposed to artificial lighting?

No

29. Will the action include tree cutting or other means of knocking down or bringing down trees, tree topping, or tree trimming?

No

30. Will the proposed action result in the use of prescribed fire?

Note: If the prescribed fire action includes other activities than application of fire (e.g., tree cutting, fire line preparation) please consider impacts from those activities within the previous representative questions in the key. This set of questions only considers impacts from flame and smoke.

Nο

31. Does the action area intersect the tricolored bat species list area?

Automatically answered

Yes

32. [Semantic] Is the action area located within 0.25 miles of a culvert that is known to be occupied by northern long-eared or tricolored bats?

Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

Automatically answered

No

33. Your project overlaps with an area where tricolored bats may be present and roosting in trees year-round.

Has a presence/probable absence survey for the tricolored bat following the Service's Range-wide Indiana Bat and Northern Long-Eared Bat Survey Guidelines been conducted within the project area? If unsure, answer "No."

34. Your project overlaps with an area where tricolored bats may be present and roosting in trees year-round.

Is suitable tricolored bat habitat present within 1000 feet of project activities? Note: If there are trees within the action area that may provide potential roosts for tricolored bats (e.g., clusters of leaves in live and dead deciduous trees, Spanish moss (*Tillandsia usneoides*), clusters of dead pine needles of large live pines) answer "Yes." Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines.

Yes

35. Do you have any documents that you want to include with this submission? *No*

Project code: 2025-0011061 10/25/2024 14:19:37 UTC

PROJECT QUESTIONNAIRE

Project code: 2025-0011061 10/25/2024 14:19:37 UTC

IPAC USER CONTACT INFORMATION

Agency: EBI Consulting Name: Aurora Betzer

Address: 6876 Susquehanna Trail S

City: York State: PA Zip: 17403

Email abetzer@ebiconsulting.com

Phone: 5705945131

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Communications Commission

CONAME	NAME CAT 1	SNAME	SCOMNAME	G RANK	S RANK	Fed_Status	State_Stat
Rankin		Alosa alabamae	Alabama Shad	G2G3	S1	C C	<u>state_stat</u>
Rankin	Invertebrate Animal	Anodontoides radiatus	Rayed Creekshell	G2G3	S2	C	
Rankin	Vertebrate Animal	Graptemys pearlensis	Pearl River Map Turtle	G2G3	S2	C	C
Rankin	Vertebrate Animal	Macrochelys temminckii	Alligator Snapping Turtle	G3	S3	c	
Rankin	Invertebrate Animal	Obovaria unicolor	Alabama Hickorynut	G3	S1S2	С	
Rankin	Invertebrate Animal	Pleurobema riddellii	Louisiana Pigtoe	G1	S2	C	
Rankin	Invertebrate Animal	Procambarus barbiger	Jackson Prairie Crayfish	G2	S2	С	
Rankin	Vertebrate Animal	Perimyotis subflavus	Tri-colored Bat	G2G3	S3S4	LE	С
Rankin	Vertebrate Animal	Acipenser oxyrinchus desotoi	Gulf Sturgeon	G3T2T3	S1	LT	LE
Rankin	Vertebrate Animal	Graptemys oculifera	Ringed Map Turtle	G2	S2	LT	LE
Rankin	Invertebrate Animal	Potamilus inflatus	Inflated Heelsplitter	G1G2Q	S1	LT	LE
Rankin	Vertebrate Animal	Lasiurus cinereus	Hoary Bat	G3G4	S2?	PS	
Rankin	Vertebrate Animal	Ambloplites rupestris	Rock Bass	G5	S1		
Rankin		Anas rubripes	American Black Duck	G5	S2N		
Rankin	Vertebrate Animal	Anhinga anhinga	Anhinga	G5	S3B,S1N		
Rankin	Vascular Plant	Antennaria solitaria	Single-head Pussytoes	G5	S3S4		
Rankin	Invertebrate Animal	Arcidens confragosus	Rock Pocketbook	G4	S3		
Rankin	Vascular Plant	Camassia scilloides	Wild Hyacinth	G4G5	S2		
Rankin	Vascular Plant	Campanulastrum americanum	Tall Bellflower	G5	S3S4		
Rankin	Vascular Plant	Carex decomposita	Cypress-knee Sedge	G3G4	S3		
Rankin	Vascular Plant	Carex fissa var. aristata	Hammock Sedge	G4?T4?	S1		
Rankin	Vascular Plant	Carya glabra var. hirsuta	Swamp Hickory	G5T3T5	S3		
Rankin	Invertebrate Animal	Celithemis amanda	Amanda's Pennant	G5	S2		
Rankin	Vascular Plant	Cheilanthes lanosa	Hairy Lipfern	G5	S1S2		
Rankin	Vertebrate Animal	Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	G3G4	S3		
Rankin	Vertebrate Animal	Cycleptus meridionalis	Southeastern Blue Sucker	G3G4	S3		
Rankin	Invertebrate Animal	Cyclonaias refulgens	Purple Pimpleback	G3G4	S3S4		
Rankin	Vascular Plant	Dasistoma macrophylla	Mullein Foxglove	G4	S3S4		
Rankin	Vascular Plant	Echinacea purpurea	Eastern Purple Coneflower	G4	S3		
Rankin	Vertebrate Animal	Egretta caerulea	Little Blue Heron	G5	S2B,S2N		
Rankin	Vascular Plant	Eleocharis parvula	Small Spikerush	G5	S3S4		
Rankin	Vertebrate Animal	Euphagus carolinus	Rusty Blackbird	G4	S2N		
Rankin	Vertebrate Animal	Fundulus dispar	Northern Starhead Topminnow	G4	S3		
Rankin	Invertebrate Animal	Gryllotalpa major	Prairie Mole Cricket	G3	SH		
Rankin	Vertebrate Animal	Haliaeetus leucocephalus	Bald Eagle	G5	S3B,S2N		
Rankin	Vertebrate Animal	Helmitheros vermivorum	Worm-eating Warbler	G5	S2B		
Rankin	Vertebrate Animal	Ichthyomyzon castaneus	Chestnut Lamprey	G4	S2S3		
Rankin	Vertebrate Animal	Ictiobus niger	Black Buffalo	G5	S3		
Rankin	Vertebrate Animal	Ixobrychus exilis	Least Bittern	G4G5	S2B		
Rankin	Vascular Plant	Juglans cinerea	Butternut	G3	S2		
Rankin Rankin	Invertebrate Animal	Lasmigona complanata	White Heelsplitter	G5 G4	S3		
	Vertebrate Animal	Limnothlypis swainsonii	Swainson's Warbler		S2S3B		
Rankin Rankin	Vascular Plant	Lobelia appendiculata	Ear-flower Lobelia	G4G5 G3	S3 S3		
	Vascular Plant	Marshallia trinervia	Broad-leaf Barbara's Button	G3 G4	S3		
Rankin Rankin	Vascular Plant Vascular Plant	Matelea carolinensis Melanthium virginicum	Carolina Anglepod Virginia Bunchflower	G5	S3S4		
Rankin	Vascular Plant	Mikania cordifolia	Florida Keys Hempweed	G5	S3S4 S3S4		
Rankin		Myotis austroriparius	Southeastern Myotis	G4	S3S4		
Rankin	Vertebrate Animal	Nyctanassa violacea	Yellow-crowned Night-Heron	G5	S2B,S1N		
Rankin	Invertebrate Animal	Obovaria arkansasensis	Southern Hickorynut	GNR	S1		
Rankin	Vertebrate Animal	Ophisaurus attenuatus	Slender Glass Lizard	G5	S2S3		
Rankin	Vascular Plant	Panax quinquefolius	American Ginseng	G3G4	S3		
Rankin	Vertebrate Animal	Pandion haliaetus	Osprey	G5	S3B,S1S2N		
Rankin	Vertebrate Animal	Parkesia motacilla	Louisiana Waterthrush	G5	S2S3B		
Rankin	Vertebrate Animal	Peucaea aestivalis	Bachman's Sparrow	G3	S3B,S3S4N		
Rankin	Vascular Plant	Platanthera cristata	Yellow-crested Orchid	G5	S3S4		
Rankin	Invertebrate Animal	Pleurobema beadleianum	Mississippi Pigtoe	G3	S3?		
Rankin	Vertebrate Animal	Polyodon spathula	Paddlefish	G4	S3		
Rankin		Porphyrio martinicus	Purple Gallinule	G5	S2B		
Rankin	Vascular Plant	Ptelea trifoliata	Common Hoptree	G5	S3S4		
Rankin	Vascular Plant	Quercus oglethorpensis	Oglethorpe's Oak	G3	S2		
Rankin	Vertebrate Animal	Rallus elegans	King Rail	G4	S3		
Rankin	Vertebrate Animal	Rana areolata	Crawfish Frog	G4	S2		
Rankin	Vascular Plant	Rhapidophyllum hystrix	Needle Palm	G4	S3		
Rankin		Sander vitreus	Walleye	G5	S2?		
			1		· · · · · · · · · · · · · · · · · · ·	1	

Rankin	Vascular Plant	Schisandra glabra	Bay Starvine	G3	C2	ı	
Kankin		ŭ		G3	33		
Rankin	Vascular Plant	Staphylea trifolia	American Bladdernut	G5	S3		
Rankin	Vascular Plant	Stewartia malacodendron	Silky Camellia	G4	S3S4		
Rankin	Morone saxatilis	Striped Bass	Vertebrate Animal	G5	SH		
Rankin	Invertebrate Animal	Stylurus laurae	Laura's Clubtail	G4	S3		
Rankin	Vascular Plant	Triphora trianthophoros	Nodding Pogonia	G4?	S2		
Rankin	Invertebrate Animal	Truncilla truncata	Deertoe	G5	S3		
Rankin	Vertebrate Animal	Tyrannus forficatus	Scissor-tailed Flycatcher	G5	S1B,S1N		
Rankin	Vertebrate Animal	Tyto alba	Common Barn-owl	G5	S3		
Rankin	Vascular Plant	Ulmus serotina	September Elm	G4	S2		
Rankin	Invertebrate Animal	Uniomerus declivis	Tapered Pondhorn	G5	S3		
Rankin	Vertebrate Animal	Ursus americanus luteolus	Louisiana Black Bear	G5T2	S1		LE
Rankin	Invertebrate Animal	Utterbackiana hartfieldorum	Cypress Floater	G4	S3S4		
Rankin	Vascular Plant	Verbesina walteri	Carolina Crownbeard	G4	S3S4		

Natural Resources Review

617087433 / Old_Pearson_Rd_CGC

2622 S Pearson Road Richland, Mississippi

EBI Project No. 6122007817

November 2, 2022

Prepared for:

Verizon Wireless 1400 Center View Drive, 3rd Floor Little Rock, Arkansas 72211

Prepared by:





21 B Street Burlington, MA 01803 Tel: (781) 273-2500 Fax: (781) 273-3311 www.ebiconsulting.com

November 2, 2022

Subject: Natural Resources Review for a Proposed Wireless Communications Facility

617087433 / Old_Pearson_Rd_CGC

2622 S Pearson Road, Richland, Rankin County, Mississippi 39218

32° 12' 53.13" N / 90° 7' 46.29" W EBI Project No. 6122007817

OVERVIEW

EBI Consulting (EBI) has prepared this Natural Resource Review (*NR Review*) for the above-referenced proposed wireless communications facility (herein, the Facility). This *NR Review* supports a National Environmental Policy Act (NEPA) review of the proposed Facility, completed in accordance with Federal Communications Commission (FCC) NEPA implementing procedures set forth in 47 CFR 1.1301-1.1320.

The purpose of this NR Review is to determine whether further environmental review may be required in accordance with 47 CFR 1.1307(a)(1), (2), (3), (6), and (7) of FCC NEPA Rules. Specifically, this NR Review focuses on evaluating whether the proposed Facility will result in potential significant impacts to federal lands, federal-listed species, flood zones, or other significant changes to surface features.

EBI prepared this NR Review using readily available online resources and visual observations made during EBI's field survey. This NR Review is designed to provide a baseline evaluation of the potential for the proposed Facility to significantly affect the above-referenced natural resources (including federal-listed species) and to determine if additional review, specialized on-site surveys, or consultation is required.

PROJECT SUMMARY

As of the date of this NR Review, the proposed project consists of the construction of a new communications facility. Specifically, the proposed installation will consist of a 200-foot self-support lattice tower (211-feet with lighting rod) and support equipment within a proposed 50-foot by 50-foot fenced compound within an 80-foot by 80-foot lease area. Access will be gained via a proposed 12-foot wide gravel access road within a 30-foot wide access/utility easement emanating south from an existing gravel road for approximately 100 feet to the proposed facility. The 30-foot wide access/utility easement continues to extend east to Old Pearson Road. Proposed utilities will follow the access route and the existing gravel road to Old Pearson Road. Please see the attached site drawings for complete details.

PROPERTY AND VICINITY DESCRIPTION

The property on which the Facility is proposed (herein, the Subject Property) primarily consists of undeveloped wooded land and grassland, totaling approximately 16.76 acres.

The area of the Subject Property on which the installation is proposed (herein, the Project Site), currently consists of land previously cleared of all trees (circa 2021) with early successional shrub growth. Land immediately surrounding the Project Site consists of undeveloped wooded land.

FEDERAL LANDS REVIEW

EBI reviewed available online mapping resources to determine if the proposed Facility location is inside the boundaries of, or within one mile of certain classifications of federal land. Applicable data is depicted on EBI's 'Land Resources Map' (see attached). The following table summarizes EBI's review.

FEDERALLY-PROTECTED LAND Jurisdictional Agency / Resource	Within Boundary	Within I-mile	Not Within I-mile
Wilderness Area [47 CFR §1.1307(a)(1)] National Wilderness Preservation System (NWPS) National Park Service (NPS); U.S. Forest Service (USFS); U.S. Fish and Wildlife Service (USFWS); Bureau of Land Management (BLM) https://www.arcgis.com/apps/webappviewer/index.html?id=a415bca07f0a4bee9f0e894b0db5c3b6			\boxtimes
Wildlife Preserve [47 CFR §1.1307(a)(2)] National Wildlife Refuge System (NWRS) NPS; USFS; USFWS; BLM http://www.fws.gov/refuges			
Wild & Scenic Rivers NPS; USFS; USFWS; BLM http://www.rivers.gov			
National Scenic Trails NPS and Managing Systems and Trails Organization (MSTO) https://www.nps.gov/subjects/nationaltrailssystem/national-scenic-trails.htm			

Based on a review of the above-referenced resources, the proposed facility is not located within the boundaries of, or within one mile of any of the above-referenced federal lands.

PROTECTED SPECIES REVIEW

Federally Listed Species and Critical Habitats

EBI utilized the USFWS Information for Planning and Consultation¹ (IPaC) online project review tool to identify species that are federally listed or proposed for listing under the Endangered Species Act (ESA), and that are known to occur within the project vicinity. Based on EBI's research of online files maintained by the USFWS, two such federal-listed (i.e. endangered or threatened) species and one federal candidate species are known to occur within the project vicinity.

Additionally, EBI utilized the USFWS online Critical Habitat Portal² online mapping tool and determined that the proposed Facility location is not within a designated critical habitat.

State Protected Species

EBI also reviewed online resources maintained by the Mississippi Department of Wildlife, Fisheries, and Parks (MDWFP, https://www.mdwfp.com/museum/seek-study/natural-heritage-program/nhp-online-data/) to identify any state-protected (threatened or endangered) species that are known to occur within proximity of the proposed Project Site. Based on EBI's review of these online resources, one non-aquatic state-protected species is known to occur within this Rankin County, MS. EBI submitted this information to the MDWFP and in a response dated

USFWS Information and Consultation URL: http://ecos.fws.gov/ipac

² USFWS Critical Habitat Portal URL: http://criticalhabitat.fws.gov

October 7, 2022, concluded that there are no records of rare, threatened, or endangered species or communities in the vicinity of the proposed cell tower project. However, the MDWFP recommends best management practices (BMPs) be property implemented, maintained, and monitored (particularly measures to prevent, or at least, minimize negative impacts to water quality).

A review of the identified species and their associated habitats with respect to the proposed Site is provided in the following table.

SPECIES LISTING Common Name (Scientific Name)	FEDERAL / STATE STATUS	HABITAT DESCRIPTION	DETERMINATION OF EFFECT
Northern long-eared bat (Myotis septentrionalis)	FT / SE	Winter habitat includes large caves or mines; Summer habitat includes roost under or in cavities of both live and dead trees. Foraging habitats include riparian areas, upland forests, ponds, and fields. Forested landscapes supporting suitable habitat (trees > 3-inches diameter at breast height (dbh) are the most important habitat.	No Effect – Habitat at the Site has been cleared and currently consists of early successional growth with no trees to be removed.
Wood stork (Mycteria americana)	FT / SE	Chiefly freshwater situations: marshes, swamps, lagoons, ponds, flooded fields; depressions in marshes are important during drought; also occurs in brackish wetlands. Nests mostly in upper parts of cypress trees, mangroves, or dead hardwoods over water or on islands along streams or adjacent to shallow lakes.	No Effect – Habitat at the Site prior to disturbance, and currently does, not consist of suitable habitat (i.e. marsh/swamp/deep still water wetlands) capable of supporting the listed species.
Monarch butterfly (Danaus plexippus)	FC	Commonly found across north America wherever suitable habitat exists. Require native milkweed species and nectar plants.	No Determination – Not afforded protection by the Endangered Species Act as a Candidate species.
FE = Federal Endangered;	FT = Federal Th	reatened; FP = Federal Proposed; CH = Critical Habitat	

SE = State Endangered; ST = State Threatened; SR = State Rare

As noted in the table above, suitable habitats capable of supporting the listed species were not noted at the proposed Project Site. As such, the proposed installation is anticipated to have 'No Effect' on the identified species.

Migratory Bird Treaty Act

Consideration should also be given to the potential impacts of the construction and ongoing operation of the proposed Facility, on species protected under the Migratory Bird Treaty Act (MBTA; 16 U.S.C. 703-712). The USFWS issued "Recommended Best Practices for Communications Tower Design, Siting, Construction, Operation, Maintenance and Decommissioning" to provide avoidance and minimization measures to reduce the risk of avian mortality as a result of communications towers.

The proposed tower will be an approximately 211-foot, self-support (i.e. no guy wires) lattice tower with lighting. As such, it meets some of the USFWS's tower siting and design recommendations, with the exception of the tower height and the use of tower lighting. The proposed tower height is required to meet operational and service coverage objectives. However, the tower will also subsequently accommodate future antenna collocations, thereby reducing the need for future towers in the immediate vicinity. The proposed lighting to be installed is currently required under Federal Aviation Administration (FAA) regulations.

Bald & Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (BGEPA; 16 U.S.C. 668-668d) prohibits the "taking" of bald and golden eagles in the absence of a permit issued by the Secretary of the Interior. Based on EBI's on-site observations, assessment of habitat, and review of publicly available occurrence data, the proposed installation is not anticipated to result in the "take" of any Bald or Golden Eagles. No further review is required.

³ https://www.fws.gov/migratorybirds/pdf/management/usfwscommtowerguidance.pdf

FEMA FLOOD ZONE

Based on EBI's review of the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (www.fema.gov; Map# 28121C0309F), the proposed facility is located within an area identified as Zone X, and therefore is not located within a 100-year flood plain. As such, in accordance with §1.1307(a)(6) of FCC NEPA Rules, an Environmental Assessment is **not** required.

In accordance with §1.1307(a)(6) of FCC NEPA Rules, an Environmental Assessment is required if a proposed facility is to be located within a 100-year flood zone and will not be elevated at least one-foot above the BFE.

SIGNIFICANT CHANGES TO SURFACE FEATURES

Wetlands

EBI did not observe readily identifiable wetlands (e.g. running water, hydrophytic vegetation, soil saturation and inundation, drainage patterns and sediment deposition) at the Project Site. A review of the USFWS National Wetlands Inventory (NWI) map (see attached) did not identify any wetlands within the vicinity of the Project Site.

EBI also reviewed the United States Department of Agriculture (USDA), Natural Resource Conservation Service (NRCS) Web Soil Survey (WSS) for the Project Site and immediate vicinity. According to EBI's review, soil at the Project Site consists of: (1) Tippah silt loam, 2 to 5 percent slopes, eroded, moderately well drained, with a depth to water table at approximately 80 inches, and a with a depth to restrictive layer ranging from 24 to 30 inches; and (2) Smithdale-Providence complex, 8 to 17 percent slopes, well drained (Smithdale) to moderately well drained (Providence); and with a depth to water table and restrictive layer at more than 80 inches (Smithdale); and with a depth to water table ranging from approximately 18 to 36 inches, and a depth to restrictive layer ranging from 18 inches (Providence). These soil listed hydric the **NRCS** 38 types are (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/use/hydric/).

Based on EBI's review as summarized above, the proposed communications facility installation is not anticipated to impact identified wetlands.

FINDINGS AND CONCLUSIONS

Based on the results of EBI's review as summarized herein the proposed communications facility is:

- Anticipated to have 'no effect' on listed protected species associated or critical habitats, however BMPs are recommended to minimize negative impacts to water quality;
- Not within the boundaries of, or within one mile of federally-protected land (i.e. wildlife preserves, wilderness areas, etc.);
- Not within the boundaries of a FEMA-designated 100-year flood zone; and
- Not anticipated to result in a significant change to surface features

As such, EBI recommends no further review with regard to the potential for impacts on the natural resources evaluated in this report.

EBI is an independent contractor, not an employee of either the property owner or the project proponent, and its compensation was not based on the findings or recommendations made in this *Review* or on the closing of any business transaction.

Sincerely,

Mr. Jason Stayer Senior Biologist

J. R. S. Tyr

Ms. Tama Bucher NEPA Specialist Direct# (717) 991-9541

Tome Busher

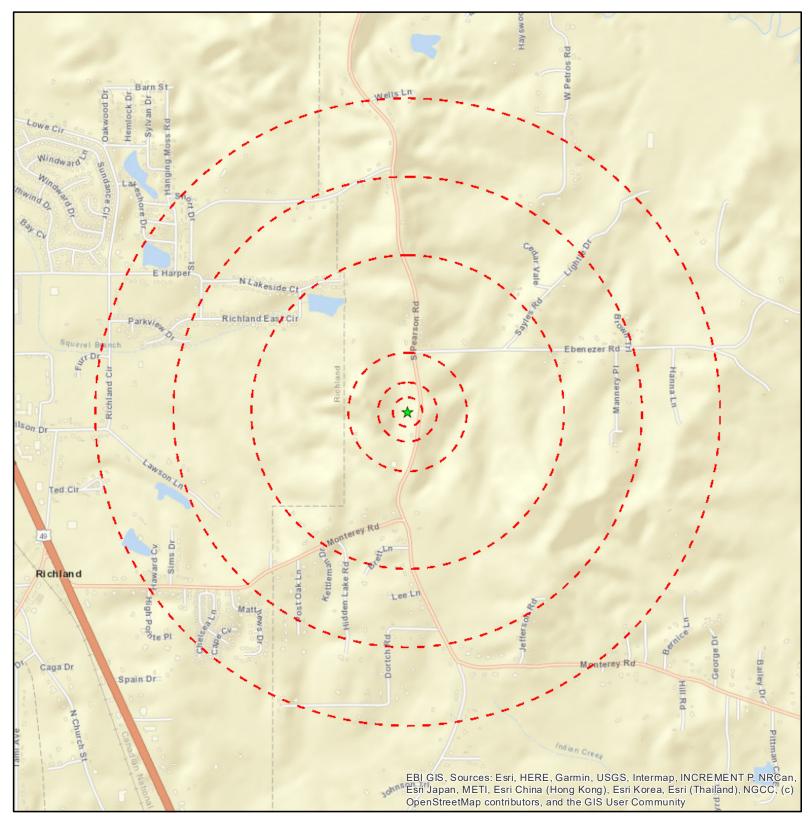
Attachments: Figures & Drawings

Photographs

Species Review Documentation Supporting Documentation

Qualifications





Legend

Project Site

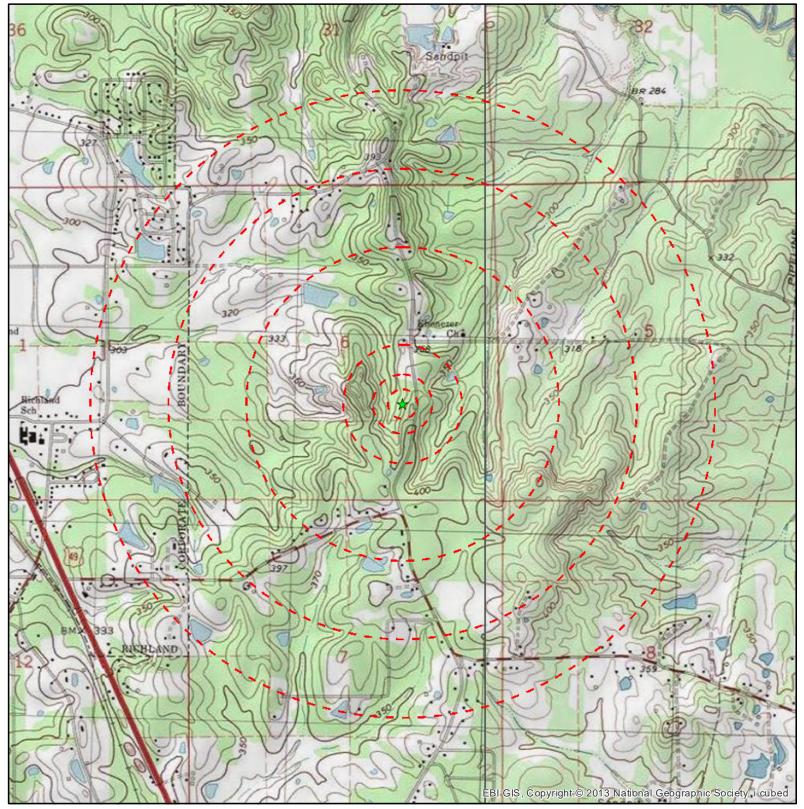
Site Radius at 250', 500', 1000', ½, ¾ & 1 mile

Figure 1: Site Location Map

617087433 OLD_PEARSON_RD_CGC **2622 S PEARSON ROAD** RICHLAND, MS 39218



Date: 8/3/2022



Legend

★ Project Site

くじ

Note Note: Note:

USGS 24K Quad: Florence, MS 1986, Whitfield, MS 1986

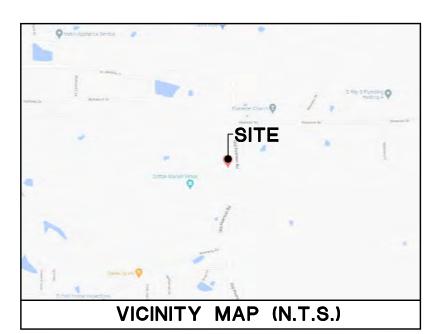
Figure 2 - Topographic Map

617087433 OLD_PEARSON_RD_CGC 2622 S PEARSON ROAD RICHLAND, MS 39218



Date: 8/3/2022

SITE NAME: OLD PEARSON ROAD LOCATION CODE: 704922



FROM JACKSON, MS HEAD WEST ON E PEARL ST TOWARD S LAMAR ST, 446 FT. TURN LEFT ONTO S LAMAR ST, 381 FT. USE THE LEFT 2 LANES TO TURN LEFT AT THE 1ST CROSS STREET ONTO E PASCAGOULA ST, 1.0 MILES. KEEP RIGHT AT THE FORK, FOLLOW SIGNS FOR I-55 S/MCCOMB AND MERGE ONTO I-55 S, 1.0 MILES. USE THE RIGHT 2 LANES TO TAKE EXIT 94 TO MERGE ONTO I-20 E TOWARD MERIDIAN, 2.9 MILES. TAKE EXIT 48 FOR MS-468 TOWARD PEARL, 0.2 MILES. KEEP RIGHT AT THE FORK AND MERGE ONTO MS-468 E/S PEARSON RD, 1.1 MILES. SLIGHT RIGHT TOWARD S PEARSON RD, 213 FT. SLIGHT RIGHT ONTO S PEARSON RD, 1.7 MILES. CONTINUE ONTO OLD PEARSON RD, 0.8 MILES. SITE IS ON THE RIGHT.

PROJECT INFORMATION

ENGINEER:

TOWER ENGINEERING, INC. 556 JEFFERSON ST. SUITE 201 LAFAYETTE, LA 70501 TEL: (337) 886-7176

SURVEYOR:

TURNER SURVEYS, LLC 1128 AVENUE SAINT GERMAIN COVINGTON, LA 70433 TEL: (504) 952-0290

PROPERTY OWNER:

2260 ALMAR ROAD FLORENCE, MS 39073 TEL: (601) 621-2032

PROJECT DATA:

PARISH/COUNTY RANKIN COLINTY

: RE-1A (RESIDENTIAL ESTATE MIX)
: II-B ZONING TYPE OF CONSTRUCTION

: 2018 : SEE SHEET C-1 LEASE AREA

GEOGRAPHIC COORDINATES:

LONGITUDE : 90° 07' 46.29" W

UTILITIES:

POWER COMPANY:

(888) 713-0035

FIBER COMPANY:

(800) 288-2020

PROJECT DESCRIPTION:

RAWLAND SITE WITH A PROPOSED 200' SELF-SUPPORT TOWER. INSTALL CONCRETE EQUIPMENT SLAB AND CONCRETE SLAB WITH DIESEL GENERATOR.

PROJECT INFORMATION

TITLE SHEET AND PROJECT INFORMATION

SURVEY:

SITE SURVEY SU-1 SU-2 SITE SURVEY

CIVIL:

PLOT PLAN AFRIAI OVFRI AY C-1A C-2 SITE PLAN ENLARGED SITE PLAN C-3 DETAILED EQUIPMENT LAYOUT

TOWER ELEVATION

Know what's below Call before you dig.



THESE DRAWINGS AND/OR THE ACCOMPANYING SPECIFICATION ARE THE EXCLUSIVE PROPERTY OF TOWER ENGINEERING, INC. AND THEIR USE AND PUBLICATION SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY ARE PREPARED. REUSE, REPRODUCTION OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED EXCEPT BY WRITTEN PERMISSION FROM TOWER ENGINEERING, INC.

TOWER ENGINEERING. INC.



556 JEFFERSON ST. SUITE 201 LAFAYETTE, LA 70501 (337) 886-7176 TEL.

2920 KINGMAN ST. SUITE 201 METAIRIE, LA 70006 (504) 756-3112 TEL.

	REVI:	SION		
NO.	DESCRIPTION	BY	DATE	
\wedge	ZONING CDs	NAS	06/22/2022	
∇		_		
Ζ,		_		
\sim		_		
Ώ.				
Δ.				
\wedge				
Ζ,		_		
<u> </u>				

SITE NUMBER:

704922

SITE NAME:

OLD PEARSON ROAD

SITE ADDRESS: 2622 S PEARSON ROAD RICHLAND, MS 39218

	0112 112, 1110 00210	
STAMP	ACKE	
	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
- ~1	ACK	
1,	M. TOTES!	
23	PROF	2
2.7	· SEL	i
- T		•
- 0:	ENGINEER 🕏 💆	
		•
-	14320	
- a		
73	Λ 🐼	
11/1	ENJ 1167 N	
	JAH MISTIN	

6-22-22

DRAWN BY: NAS DMA CHECKED BY: DATE DRAWN: 06/22/2022 TEI JOB NO: 2122-120-1001-015

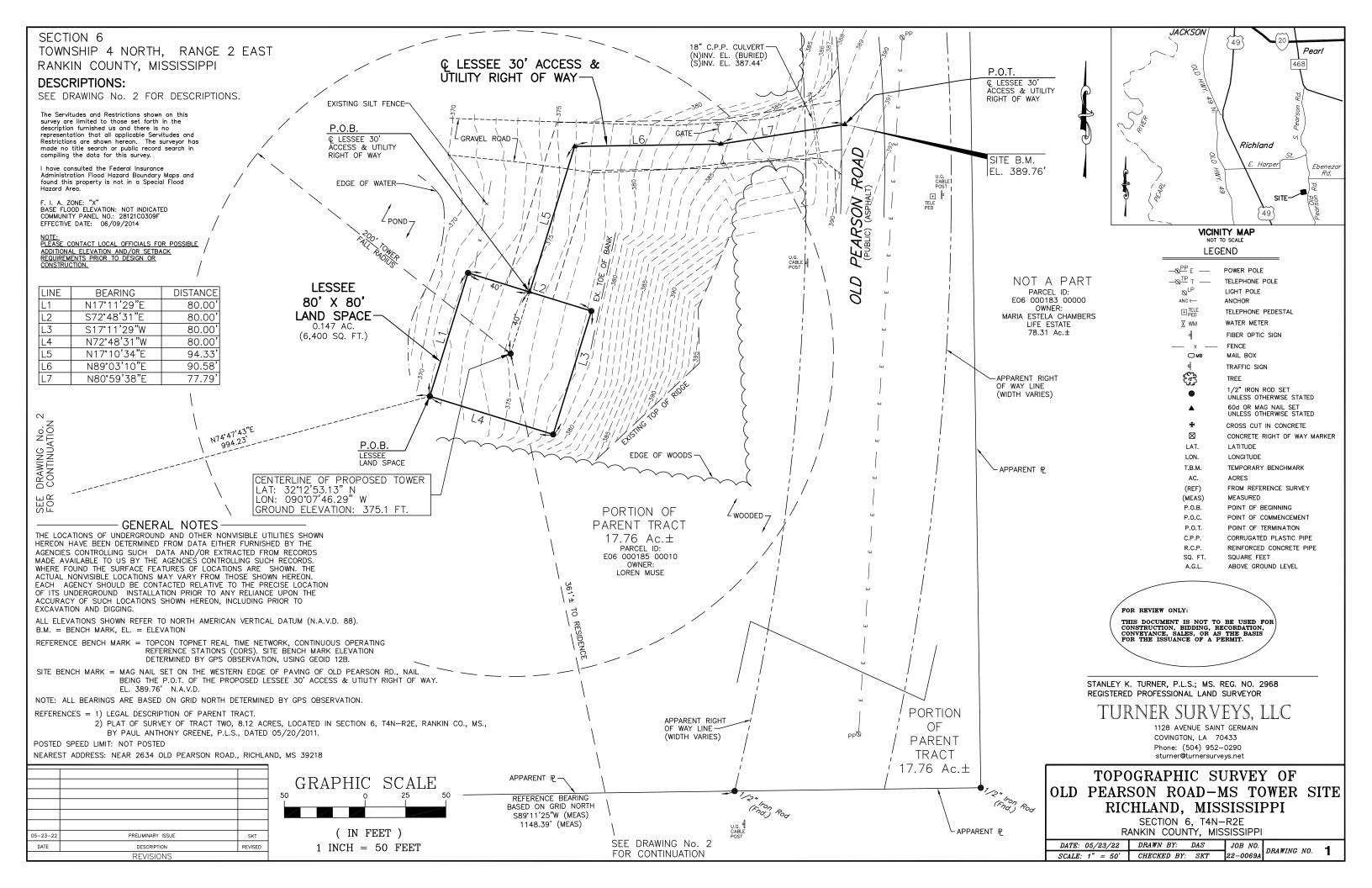
SHEET TITLE:

TITLE SHEET AND **PROJECT INFORMATION**

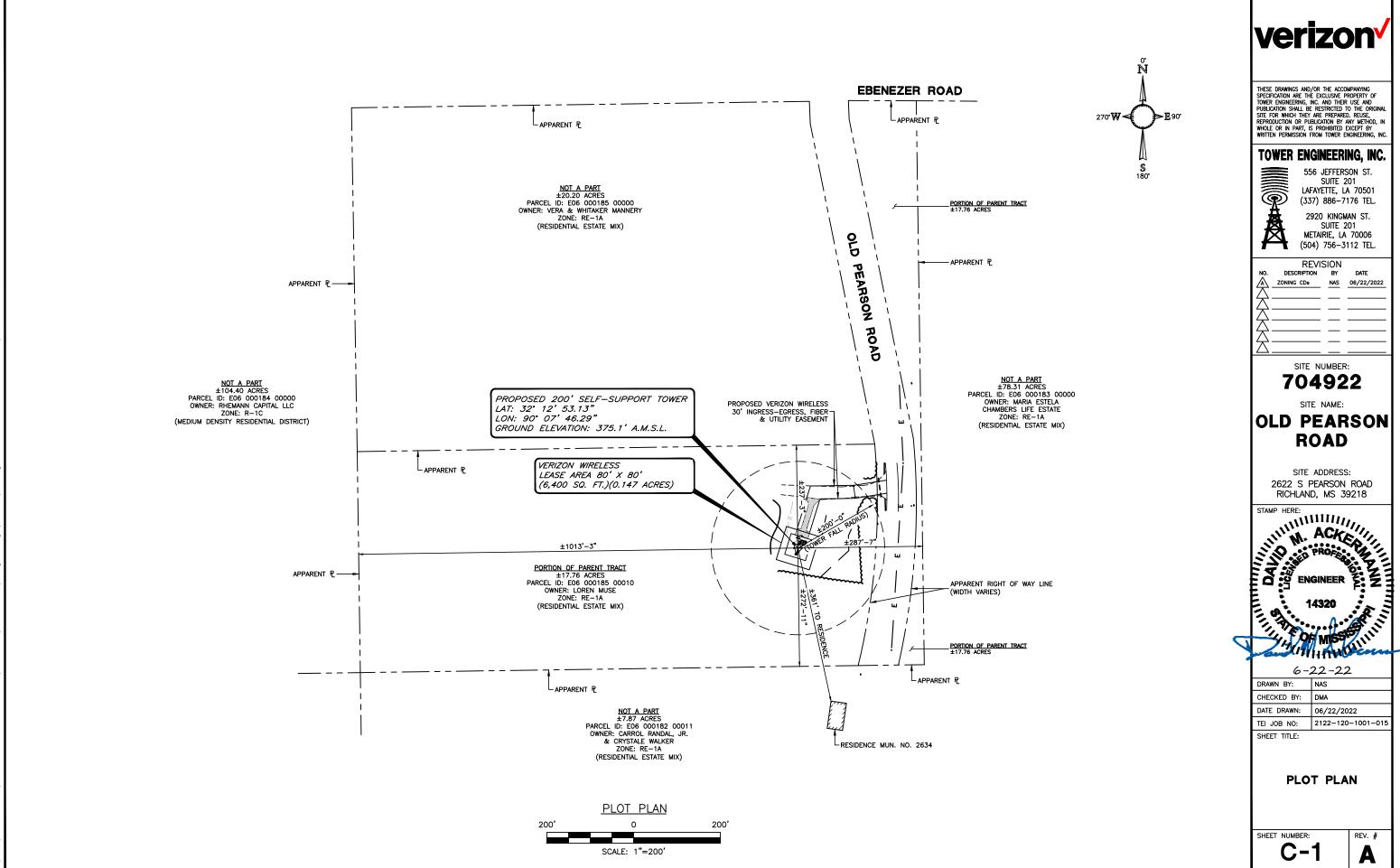
SHEET NUMBER:

T-1





DESCRIPTIONS: LEGEND SECTION 6 LESSEE 80' X 80' LAND SPACE TOWNSHIP 4 NORTH, RANGE 2 EAST POWER POLE A CERTAIN PIECE OR PARCEL OF LAND LOCATED IN SECTION 6, TOWNSHIP 4 NORTH, RANGE 2 EAST, COUNTY OF RANKIN, STATE OF MISSISSIPPI, MORE PARTICULARLY —⊗<u>⊤P</u> T TELEPHONE POLE RANKIN COUNTY, MISSISSIPPI DESCRIBED AS FOLLOWS: $\varnothing_{\mathsf{LP}}$ LIGHT POLE ANC ← ANCHOR COMMENCING AT A FOUND 1/2 INCH SQUARE ROD AT AN EXISTING FENCE CORNER AT ± TELE TELEPHONE PEDESTAL THE APPARENT SOUTHWEST CORNER OF THE PARENT TRACT, SAID ROD IS REPORTED TO BE THE NORTHWEST CORNER OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 6, TOWNSHIP 4 NORTH, RANGE 2 EAST, RANKIN COUNTY, MISSISSIPPI; WATER METER X ww EBENEZER ROAD 4 FIBER OPTIC SIGN THENCE N74'47'43"E A DISTANCE OF 994.23 FEET TO A 1/2 INCH IRON ROD SET FOR A POINT OF BEGINNING; THENCE N17'11'29"E A DISTANCE OF 80.00 FEET TO A 1/2 INCH FENCE IRON ROD SET; THENCE S72°48'31"E A DISTANCE OF 80.00 FEET TO A 1/2 INCH IRON Омв MAIL BOX APPARENT P ROD SET; THENCE S17'11'29"W A DISTANCE OF 80.00 FEET TO A 1/2 INCH IRON ROD TRAFFIC SIGN PORTION SET; THENCE N72°48'31"W A DISTANCE OF 80.00 FEET TO THE POINT OF BEGINNING, 500 CONTAINING 0.147 ACRE (6,400 SQUARE FEET), AND IS SUBJECT TO ALL SERVITUDES AND RESTRICTIONS THAT MAY BE OF RECORD. OF 1/2" IRON ROD SET UNLESS OTHERWISE STATED PARENT LESSEE 30' ACCESS & UTILITY RIGHT OF WAY 60d OR MAG NAIL SET UNLESS OTHERWISE STATED TRACT A CERTAIN PIECE OR PARCEL OF LAND LOCATED IN SECTION 6, TOWNSHIP 4 NORTH, RANGE 2 EAST, COUNTY OF RANKIN, STATE OF MISSISSIPPI, MORE PARTICULARLY 17.76 CROSS CUT IN CONCRETE \boxtimes CONCRETE RIGHT OF WAY MARKER Ac.± LAT. LATITUDE COMMENCING AT A FOUND 1/2 INCH SQUARE ROD AT AN EXISTING FENCE CORNER AT LONGITUDE LON. THE APPARENT SOUTHWEST CORNER OF THE PARENT TRACT, SAID ROD IS REPORTED TO BE THE NORTHWEST CORNER OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER T.B.M. TEMPORARY BENCHMARK OF SECTION 6, TOWNSHIP 4 NORTH, RANGE 2 EAST, RANKIN COUNTY, MISSISSIPPI; AC. ACRES THENCE N74'47'43"E A DISTANCE OF 994.23 FEET TO A 1/2 INCH IRON ROD SET AT (REF) FROM REFERENCE SURVEY THE SOUTHWEST CORNER OF THE LESSEE 80' X 80' LAND SPACE; THENCE N17'11'29"E A NOT A PART (MEAS) MEASURED DISTANCE OF 80.00 FEET TO A 1/2 INCH IRON ROD SET; THENCE S72*48'31"E A POINT OF BEGINNING P.O.B. DISTANCE OF 40.00 FEET TO A 60d NAIL SET ON THE NORTHERN LINE OF SAID LESSEE PARCEL ID: OLD 80' X 80' LAND SPACE AND THE POINT OF BEGINNING FOR THE CENTERLINE OF THE E06 000185 00000 P.O.C. POINT OF COMMENCEMENT LESSEE 30' ACCESS AND UTILITY RIGHT OF WAY; THENCE N17'10'34"E A DISTANCE OF OWNER: P.O.T. POINT OF TERMINATION VERA & WHITAKER MANNERY 94.33 FEET TO A 60d NAIL SET; THENCE N89'03'10"E A DISTANCE OF 90.58 FEET TO A C.P.P. CORRUGATED PLASTIC PIPE 20.20 Ac.± 60d NAIL SET; THENCE N80°59'38"E A DISTANCE OF 77.79 FEET TO A MAG NAIL SET ON REINFORCED CONCRETE PIPE σ THE WESTERN EDGE OF PAVING OF OLD PEARSON ROAD, A PUBLIC ASPHALT ROAD, AND SQ. FT. SQUARE FEET THE POINT OF TERMINATION FOR THE CENTERLINE OF THE LESSEE 30' ACCESS AND ARSON (ASPHAL ABOVE GROUND LEVEL A.G.L. UTILITY RIGHT OF WAY, AND IS SUBJECT TO ALL SERVITUDES AND RESTRICTIONS THAT - APPARENT P P.O.T. © LESSEE 30' PARENT TRACT ACCESS & UTILITY 17.76 AC. IN THE NW 1/4 OF SE 1/4, SECTION 6, T4N, R2E, RANKIN COUNTY, MISSISSIPPI RIGHT OF WAY PARCEL #: E6 185 10, PPIN: 73548 LESSEE 30' ACCESS & UTILITY RIGHT OF WAY 0 P.<u>O.B.</u> À NOT A PART C LESSEE 30' ĂCCESS & UTILITY PARCEL ID: E06 000183 00000 RIGHT OF WAY OWNER: NOT A PART MARIA ESTELA CHAMBERS APPARENT P PARCEL ID: E06 000184 00000 LIFE ESTATE 78.31 Ac.± OWNER: LESSEE RHEMANN CAPITAL LLC SITE B.M. PORTION OF 104.40 Ac.± 80' X 80' EL. 389.76' PARENT TRACT LAND SPACE 17.76 Ac.± 0.147 AC. PARCEL ID: (6,400 SQ. FT.) E06 000185 00010 OWNER: LOREN MUSE APPARENT RIGHT → APPARENT P OF WAY LINE P.O.B. (WIDTH VARIES) N74°47'43"E LESSEE LAND SPACE PORTION OF CENTERLINE OF PROPOSED TOWER LAT: 32°12'53.13" N LON: 090°07'46.29" W PARENT TRACT 17.76 Ac.± GROUND ELEVATION: 375.1 FT. APPARENT P-REFERENCE BEARING (Fnd.) NOT A PART FOR REVIEW ONLY: S89'11'25"W (MEAS) THIS DOCUMENT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING, RECORDATION, CONVEYANCE, SALES, OR AS THE BASIS FOR THE ISSUANCE OF A PERMIT. PARCEL ID: 1148.39' (MEAS) E06 000180 00000 RESIDENCE - APPARENT P OWNER: MUN. No. 2634 BILLY RAY & VERMELL MAGNUM 35.75 Ac.± NOT A PART PARCEL ID: E06 000182 00011 STANLEY K. TURNER, P.L.S.; MS. REG. NO. 2968 1/2" SQUARE ROD FOUND AT OWNER: REGISTERED PROFESSIONAL LAND SURVEYOR CARROL RANDAL, JR. & CRYSTALE WALKER 7.87 Ac.± FENCE CORNER, REPORTED TO BE THE NW CORNER OF THE SW 1/4 TOPOGRAPHIC SURVEY OF OF THE SE 1/4 OF SECTION 6, T4N - R2E, RANKIN COUNTY, MS GRAPHIC SCALE OLD PEARSON ROAD-MS TOWER SITE 200 TURNER SURVEYS, LLC RICHLAND, MISSISSIPPI 1128 AVENUE SAINT GERMAIN SECTION 6, T4N-R2E COVINGTON, LA 70433 (IN FEET) RANKIN COUNTY, MISSISSIPPI PRELIMINARY ISSUE 5-23-22 SKT Phone: (504) 952-0290 DATE: 05/23/22 DRAWN BY: DAS JOB NO. SCALE: 1" = 200' CHECKED BY: SKT 22-0069B DRAWING NO. 2 DATE DESCRIPTION 1 INCH = 200 FEETsturner@turnersurveys.net REVISIONS





THESE DRAWINGS AND/OR THE ACCOMPANYING SPECIFICATION ARE THE EXCLUSIVE PROPERTY OF TOWER ENGINEERING, INC. AND THEIR USE AND PUBLICATION SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY ARE PREPARED. REUSE, REPRODUCTION OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED EXCEPT BY WRITTEN PERMISSION FROM TOWER ENGINEERING, INC.

TOWER ENGINEERING, INC.

	REVIS	SION	
NO.	DESCRIPTION	BY	DATE
\wedge	ZONING CDs	NAS	06/22/2022
$\overline{\mathcal{A}}$			
$^{\prime}$		_	
\prec		_	
$\stackrel{\leftarrow}{\sim}$			
Δ			
\triangle			
Δ			

OLD PEARSON **ROAD**

SITE ADDRESS: 2622 S PEARSON ROAD RICHLAND, MS 39218

6-,	22-22
DRAWN BY:	NAS
CHECKED BY:	DMA
DATE DRAWN:	06/22/2022
TEI JOB NO:	2122-120-1001-015
CUEET TITLE	

A

REV. #



THESE DRAWINGS AND/OR THE ACCOMPANYING SPECIFICATION ARE THE EXCLUSIVE PROPERTY OF TOWER ENGINEERING, INC. AND THEIR USE AND PUBLICATION SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY ARE PREPARED. REUSE, REPRODUCTION OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED EXCEPT BY WRITTEN PERMISSION FROM TOWER ENGINEERING, INC.

TOWER ENGINEERING, INC.



556 JEFFERSON ST. SUITE 201 LAFAYETTE, LA 70501 (337) 886-7176 TEL.

2920 KINGMAN ST. SUITE 201 METAIRIE, LA 70006 (504) 756–3112 TEL.

	REVI:	SION	
NO.	DESCRIPTION	BY	DATE
\wedge	ZONING CDs	NAS	06/22/2022
1×1		_	
1×1		—	
 			
ĮΔ.			
$ \wedge $			
		_	
1×1		_	
└△.			

SITE NUMBER:

704922

SITE NAME:

OLD PEARSON ROAD

SITE ADDRESS: 2622 S PEARSON ROAD RICHLAND, MS 39218

RICHLAND, MS COLL.

STAMP HERE:

ACA

PROPERTY

STAMP HERE:

14320

6-22-22				
DRAWN BY:	NAS			
CHECKED BY:	DMA			
DATE DRAWN:	06/22/2022			
TEL IOD NO.	2122-120-1001-0			

SHEET TITLE:

AERIAL OVERLAY

SHEET NUMBER:

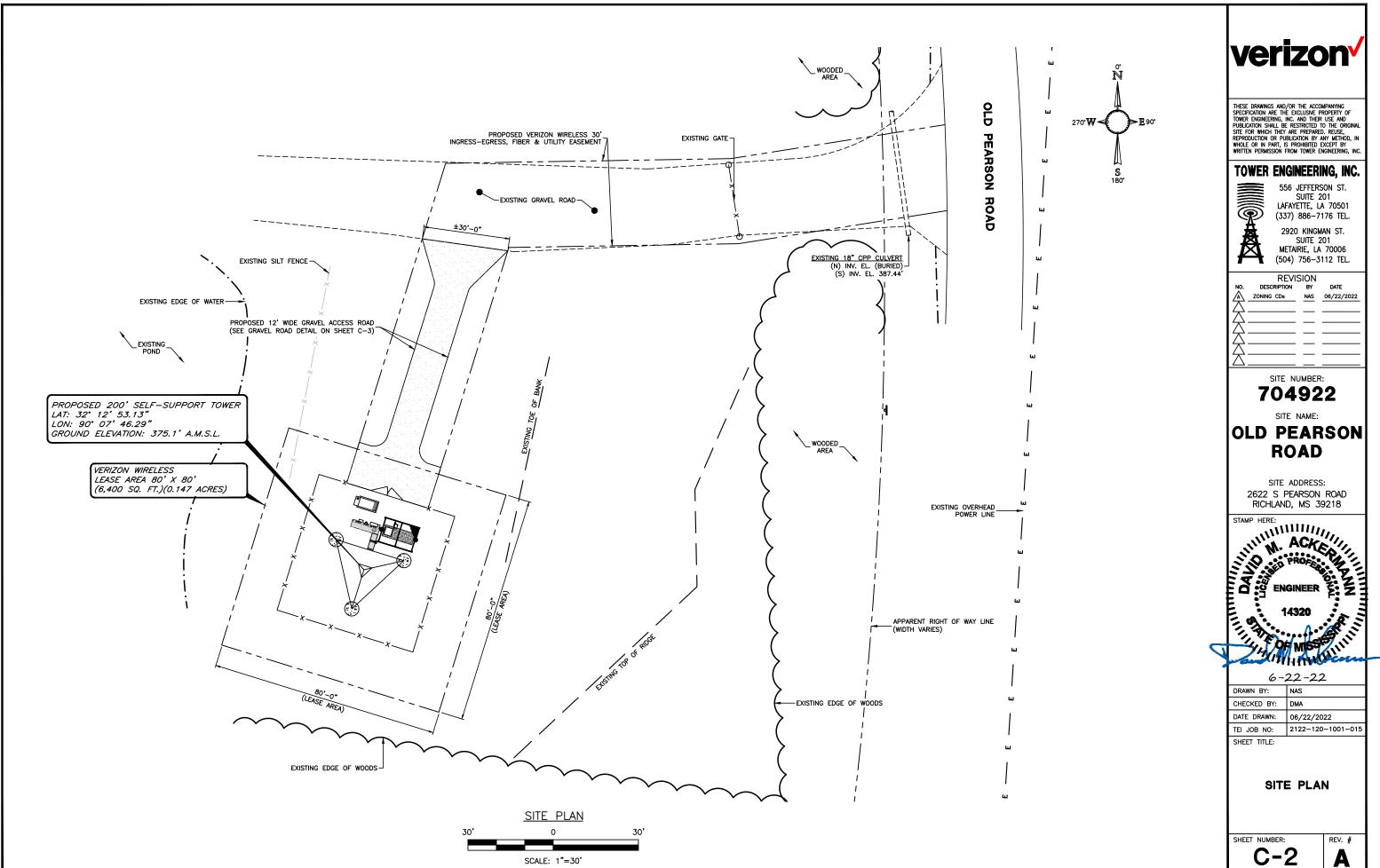
REV. #

T:\2122\120 = verizon\1001 = verizon new site builds\015 = old pearson road\zoning drawings\DWG R1\C

AERIAL OVERLAY

' 0 200'

SCALE: 1"=200'



verizon

THESE DRAWINGS AND/OR THE ACCOMPANYING SPECIFICATION ARE THE EXCLUSIVE PROPERTY OF TOWER ENGINEERING, INC. AND THEIR USE AND PUBLICATION SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY ARE PREPARED. REUSE, REPRODUCTION OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED EXCEPT BY WRITTEN PERMISSION FROM TOWER ENGINEERING, INC.

TOWER ENGINEERING, INC.

556 JEFFERSON ST. SUITE 201 LAFAYETTE, LA 70501 (337) 886-7176 TEL.

2920 KINGMAN ST. SUITE 201 METAIRIE, LA 70006 (504) 756–3112 TEL.

REVISION							
NO.	DESCRIPTION	BY	DATE				
A.	ZONING CDs	NAS	06/22/2022				
Δ.							
Δ.							
Δ							
Δ							
∇	_						
Δ							

SITE NUMBER:

704922

SITE NAME:

OLD PEARSON **ROAD**

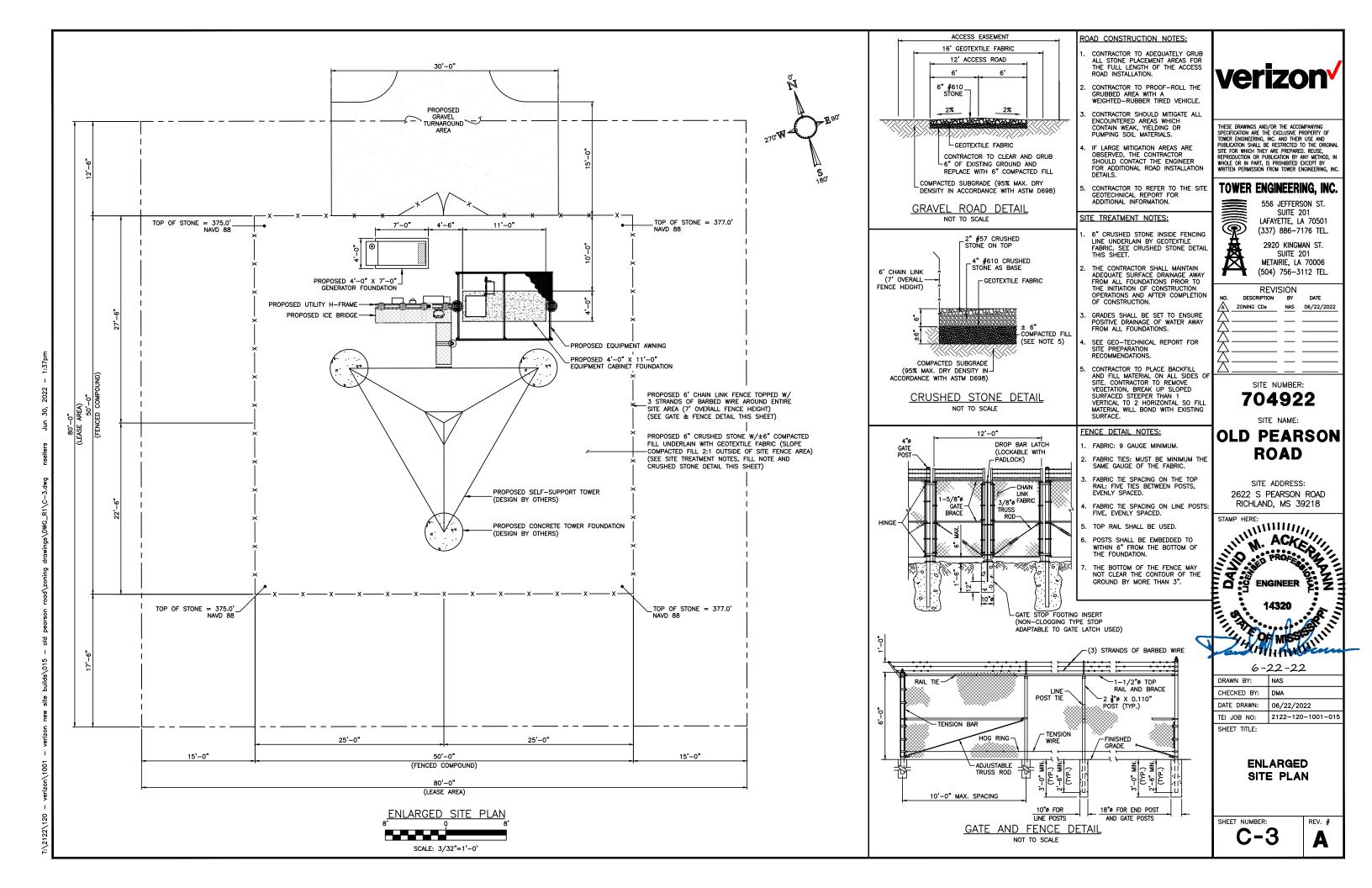
SITE ADDRESS: 2622 S PEARSON ROAD RICHLAND, MS 39218

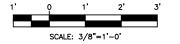
6-,	<i></i>
DRAWN BY:	NAS
CHECKED BY:	DMA
DATE DRAWN:	06/22/2022
TEI JOB NO:	2122-120-1001-015
OUEST TITLE	

SITE PLAN

C-2

REV. # A





verizon

THESE DRAWINGS AND/OR THE ACCOMPANYING SPECIFICATION ARE THE EXCLUSIVE PROPERTY OF TOWER ENGINEERING, INC. AND THEIR USE AND PUBLICATION SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY ARE PREPARED. RELISE, REPRODUCTION OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED EXCEPT BY WRITTEN PERMISSION FROM TOWER ENGINEERING, INC.

TOWER ENGINEERING, INC.



556 JEFFERSON ST. SUITE 201 LAFAYETTE, LA 70501 (337) 886-7176 TEL.

2920 KINGMAN ST. SUITE 201 METAIRIE, LA 70006 (504) 756-3112 TEL.

	REVISION					
NO.	DESCRIPTION	BY	DATE			
\wedge	ZONING CDs	NAS	06/22/2022			
T						
$ \mathcal{T} $						
		_				
+		—				
\downarrow						
Δ						
ΙΔ						
=						

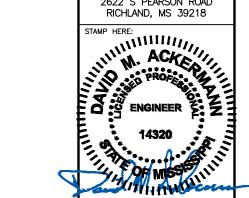
SITE NUMBER:

704922

SITE NAME:

OLD PEARSON ROAD

SITE ADDRESS: 2622 S PEARSON ROAD RICHLAND, MS 39218



6-22-22				
DRAWN BY:	NAS			
CHECKED BY:	DMA			
DATE DRAWN:	06/22/2022			
TEI JOB NO:	2122-120-1001-01			

SHEET TITLE:

DETAILED EQUIPMENT LAYOUT

SHEET NUMBER:

REV. #

DETAILED EQUIPMENT LAYOUT

- PROPOSED 10' LIGHTNING ROD TOP OF TOWER STEEL PROPOSED VERIZON WIRELESS ANTENNA LOCATION ELEV: ±196' A.G.L. FUTURE WIRELESS ANTENNA LOCATION ELEV: ±185' A.G.L. FUTURE WIRELESS ANTENNA LOCATION ELEV: ±175' A.G.L. 201'-0" PROPOSED FAA APPROVED TOWER SIDE LIGHTS -PROPOSED 200' SELF-SUPPORT TOWER TOP OF FOUNDATION -PROPOSED FENCE

RF NOTE:

VERIFY RF DESIGN SPECIFICATIONS WITH RFDS PROVIDED BY CONSTRUCTION ENGINEER.

TOWER NOTES:

- 1. TOWER AND/OR ANTENNA SHALL BE DESIGNED IN ACCORDANCE WITH LATEST REVISION OF THE TIA-222 STANDARDS.
- 2. TOWER SHALL BE DESIGNED TO MEET SEISMIC REQUIREMENTS AS PER 2015 IBC.
- 3. TOWER SHALL BE DESIGNED TO WITHSTAND A WIND SPEED OF 110 MPH.
- 4. PROPOSED EQUIPMENT WILL ABIDE BY ALL FAA AND FCC REGULATIONS.
- 5. THE TOWER SITE IS IN COMPLIANCE WITH THE RULES AND REGULATIONS OF OTHER FEDERAL OR STATE AGENCIES THAT MAY REGULATE TOWER SITING, DESIGN AND CONSTRUCTION.
- 6. THE TOWER SITE IS IN COMPLIANCE WITH CURRENT RADIO FREQUENCY EMISSIONS STANDARDS OF THE FEDERAL COMMUNICATIONS COMMISSION (FCC); AND WILL NOT INTERFERE WITH ANY PUBLIC SAFETY COMMUNICATIONS AND THE USUAL AND CUSTOMARY TRANSMISSION OR RECEPTION OF RADIO AND TELEVISION SERVICE ENJOYED BY ADJACENT RESIDENTIAL AND NON RESIDENTIAL PROPERTIES.
- 7. THE TOWER SHALL HAVE A GALVANIZED FINISH.

NOTE:

ALL IMPROVEMENTS NOT SHOWN FOR CLARITY.

verizon

THESE DRAWINGS AND/OR THE ACCOMPANYING SPECIFICATION ARE THE EXCLUSIVE PROPERTY OF TOWER ENGINEERING, INC. AND THEIR USE AND PUBLICATION SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY ARE PREPARED. REUSE, REPRODUCTION OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED EXCEPT BY WRITTEN PERMISSION FROM TOWER ENGINEERING, INC.

TOWER ENGINEERING, INC.



556 JEFFERSON ST. SUITE 201 LAFAYETTE, LA 70501 (337) 886-7176 TEL.

2920 KINGMAN ST. SUITE 201 METAIRIE, LA 70006 (504) 756-3112 TEL.

	REVI:	SION	
NO.	DESCRIPTION	BY	DATE
\wedge	ZONING CDs	NAS	06/22/2022
X			
Δ			
Δ.			
ļД.		_	
ĮД.		_	
\triangle			

SITE NUMBER:

704922

SITE NAME:

OLD PEARSON ROAD

SITE ADDRESS: 2622 S PEARSON ROAD RICHLAND, MS 39218

STAMP HERE:

ACA
PROPERTY
PROPERTY
14320

6-22-22				
DRAWN BY:	NAS			
CHECKED BY:	DMA			
DATE DRAWN:	06/22/2022			
TEI JOB NO:	2122-120-1001-01			

SHEET TITLE:

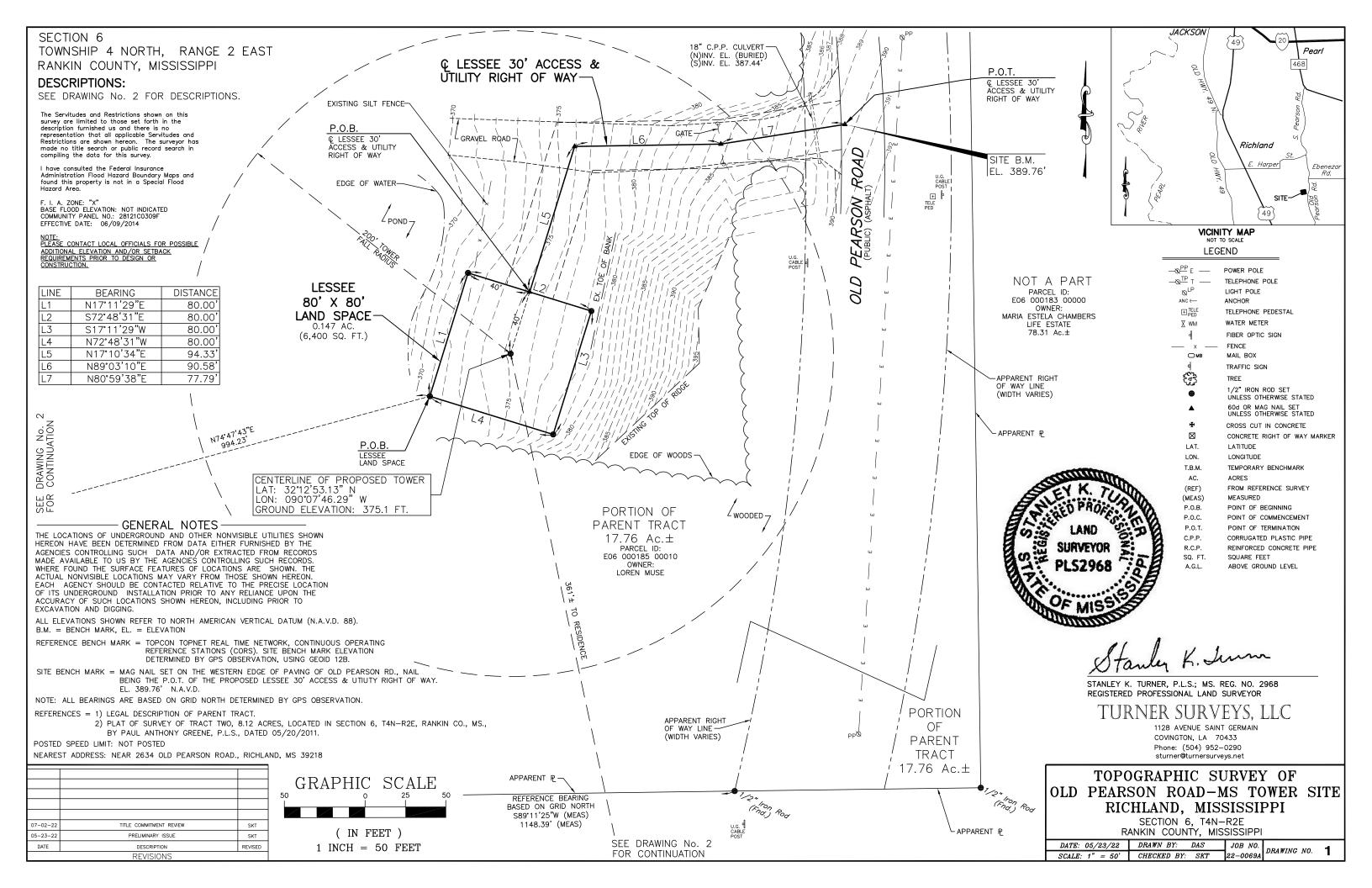
TOWER ELEVATION

SHEET NUMBER:

C-5

REV. #

TOWER ELEVATION NOT TO SCALE



DESCRIPTIONS: LEGEND SECTION 6 LESSEE 80' X 80' LAND SPACE TOWNSHIP 4 NORTH, RANGE 2 EAST A CERTAIN PIECE OR PARCEL OF LAND LOCATED IN SECTION 6, TOWNSHIP 4 NORTH, RANGE 2 EAST, COUNTY OF RANKIN, STATE OF MISSISSIPPI, MORE PARTICULARLY RANKIN COUNTY, MISSISSIPPI DESCRIBED AS FOLLOWS: ω_{LP} ANC ← COMMENCING AT A FOUND 1/2 INCH SQUARE ROD AT AN EXISTING FENCE CORNER AT THE APPARENT SOUTHWEST CORNER OF THE PARENT TRACT, SAID ROD IS REPORTED TO BE THE NORTHWEST CORNER OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 6, TOWNSHIP 4 NORTH, RANGE 2 EAST, RANKIN COUNTY, MISSISSIPPI; ± TELE X ww EBENEZER ROAD 4 THENCE N74'47'43"E A DISTANCE OF 994.23 FEET TO A 1/2 INCH IRON ROD SET FOR A POINT OF BEGINNING; THENCE N17"11'29"E A DISTANCE OF 80.00 FEET TO A 1/2 INCH IRON ROD SET; THENCE S72°48'31"E A DISTANCE OF 80.00 FEET TO A 1/2 INCH IRON Омв APPARENT P ROD SET; THENCE S17'11'29"W A DISTANCE OF 80.00 FEET TO A 1/2 INCH IRON ROD PORTION SET; THENCE N72°48'31"W A DISTANCE OF 80.00 FEET TO THE POINT OF BEGINNING, 500 CONTAINING 0.147 ACRE (6,400 SQUARE FEET), AND IS SUBJECT TO ALL SERVITUDES AND RESTRICTIONS THAT MAY BE OF RECORD. OF PARENT LESSEE 30' ACCESS & UTILITY RIGHT OF WAY TRACT A CERTAIN PIECE OR PARCEL OF LAND LOCATED IN SECTION 6, TOWNSHIP 4 NORTH, RANGE 2 EAST, COUNTY OF RANKIN, STATE OF MISSISSIPPI, MORE PARTICULARLY 17.76 \boxtimes Ac.± LAT. COMMENCING AT A FOUND 1/2 INCH SQUARE ROD AT AN EXISTING FENCE CORNER AT THE APPARENT SOUTHWEST CORNER OF THE PARENT TRACT, SAID ROD IS REPORTED TO BE THE NORTHWEST CORNER OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER LON. T.B.M. OF SECTION 6, TOWNSHIP 4 NORTH, RANGE 2 EAST, RANKIN COUNTY, MISSISSIPPI; AC. THENCE N74'47'43"E A DISTANCE OF 994.23 FEET TO A 1/2 INCH IRON ROD SET AT THE SOUTHWEST CORNER OF THE LESSEE 80' X 80' LAND SPACE; THENCE N17'11'29"E A NOT A PART (MEAS) DISTANCE OF 80.00 FEET TO A 1/2 INCH IRON ROD SET; THENCE S72*48'31"E A P.O.B. DISTANCE OF 40.00 FEET TO A 60d NAIL SET ON THE NORTHERN LINE OF SAID LESSEE PARCEL ID: OLD 80' X 80' LAND SPACE AND THE POINT OF BEGINNING FOR THE CENTERLINE OF THE E06 000185 00000 P.O.C. LESSEE 30' ACCESS AND UTILITY RIGHT OF WAY; THENCE N17'10'34"E A DISTANCE OF OWNER: P.O.T. VERA & WHITAKER MANNERY 94.33 FEET TO A 60d NAIL SET; THENCE N89'03'10"E A DISTANCE OF 90.58 FEET TO A C.P.P. 20.20 Ac.± 60d NAIL SET; THENCE N80°59'38"E A DISTANCE OF 77.79 FEET TO A MAG NAIL SET ON σ THE WESTERN EDGE OF PAVING OF OLD PEARSON ROAD, A PUBLIC ASPHALT ROAD, AND SQ. FT. THE POINT OF TERMINATION FOR THE CENTERLINE OF THE LESSEE 30' ACCESS AND ARSON (ASPHA) A.G.L. UTILITY RIGHT OF WAY, AND IS SUBJECT TO ALL SERVITUDES AND RESTRICTIONS THAT - APPARENT P P.O.T. C LESSEE 30' PARENT TRACT ACCESS & UTILITY RIGHT OF WAY 17.76 AC. IN THE NW 1/4 OF SE 1/4, SECTION 6, T4N, R2E, RANKIN COUNTY, MISSISSIPPI PARCEL #: E6 185 10, PPIN: 73548 LESSEE 30' ACCESS & UTILITY RIGHT OF WAY 0 P.<u>O.B.</u> REPORT OF TITLE NOTES ÀĎ TURNER SURVEYS, LLC HAS REVIEWED THE REPORT OF TITLE BY U.S. TITLE SOLUTIONS, FILE NO. NOT A PART C LESSEE 30' UST71453, DATE OF REPORT: MAY 27. 2022, REFERENCE NO. 3000009 900213 FOR SITE, "OLD ACCESS & UTILITY PARCEL ID: E06 000183 00000 PEARSON RD-MS". THE LESSEE LAND SPACE IS 80' X 80', AND 30' ACCESS & UTILITY RIGHT OF WAY ARE LOCATED ON A CERTAIN TRACT SITUATED ON A CERTAIN 17.76 ACRE TRACT IN THE NW RIGHT OF WAY OWNER: 1/4 OF THE SE 1/4 OF SECTION 6, TOWNSHIP 4 NORTH, RANGE 2 EAST, RANKIN COUNTY, MARIA ESTELA CHAMBERS MISSISSIPPI, NOW OR FORMERLY, PARENT TRACT FOR LAND SPACE AND 30' ACCESS & UTILITY APPARENT P LIFE ESTATE RIGHT OF WAY IS OWNED BY LOREN MUSE 78.31 Ac.± LESSEE THE SURVEYOR MAKES NOTE OF THE FOLLOWING ITEMS IN THIS REPORT: SITE B.M. PORTION OF 80' X 80' EL. 389.76' 4.1 EASEMENT BY JAMES MANNERY AND JENNY MANNERY TO SOUTH CENTRAL BELL TELEPHONE PARENT TRACT COMPANY, DATED APRIL 28, 1979, RECORDED NOVEMBER 20, 1979, IN BOOK 394, PAGE 671. LAND SPACE NOTES: UTILITY EASEMENT. FALLS ON EAST SIDE OF PEARSON ROAD, DOES NOT AFFECT 80' X 17.76 Ac.± 0.147 AC. 80' LAND SPACE OR ACCESS AND UTILITY RIGHT OF WAY. PARCEL ID: (6,400 SQ. FT.) NOT A PART E06 000185 00010 OWNER: PARCEL ID: LOREN MUSE E06 000184 00000 OWNER: APPARENT RIGHT SURVEYOR → APPARENT P RHEMANN CAPITAL LLC OF WAY LINE P.O.B. (WIDTH VARIES) 104.40 Ac.± N74°47'43"E LESSEE LAND SPACE PORTION OF CENTERLINE OF PROPOSED TOWER PARENT TRACT LAT: 32°12'53.13" N LON: 090°07'46.29" W 17.76 Ac.± GROUND ELEVATION: 375.1 FT. APPARENT P-REFERENCE BEARING NOT A PART S89'11'25"W (MEAS) PARCEL ID: 1148.39' (MEAS) E06 000180 00000 APPARENT P RESIDENCE OWNER: MUN. No. BILLY RAY & VERMELL MAGNUM 35.75 Ac.± NOT A PART PARCEL ID: E06 000182 00011 STANLEY K. TURNER, P.L.S.; MS. REG. NO. 2968 1/2" SQUARE ROD FOUND AT OWNER: REGISTERED PROFESSIONAL LAND SURVEYOR CARROL RANDAL, JR. & CRYSTALE WALKER 7.87 Ac.± FENCE CORNER, REPORTED TO BE THE NW CORNER OF THE SW 1/4 OF THE SE 1/4 OF SECTION 6, T4N - R2E, RANKIN COUNTY, MS

7-02-22 TITLE COMMITMENT REVIEW SKT 5-23-22 PRELIMINARY ISSUE SKT DATE REVISIONS

GRAPHIC SCALE 200 (IN FEET) 1 INCH = 200 FEET

TURNER SURVEYS. LLC 1128 AVENUE SAINT GERMAIN

COVINGTON, LA 70433 Phone: (504) 952-0290 sturner@turnersurveys.net

TOPOGRAPHIC SURVEY OF OLD PEARSON ROAD-MS TOWER SITE RICHLAND, MISSISSIPPI

POWER POLE

LIGHT POLE

ANCHOR

FENCE

MAIL BOX

LATITUDE

ACRES

MEASURED

SQUARE FEET

LONGITUDE

TRAFFIC SIGN

TELEPHONE POLE

TELEPHONE PEDESTAL WATER METER

1/2" IRON ROD SET UNLESS OTHERWISE STATED

60d OR MAG NAIL SET UNLESS OTHERWISE STATED

CONCRETE RIGHT OF WAY MARKER

CROSS CUT IN CONCRETE

TEMPORARY BENCHMARK

FROM REFERENCE SURVEY

POINT OF COMMENCEMENT

CORRUGATED PLASTIC PIPE

REINFORCED CONCRETE PIPE

POINT OF TERMINATION

ABOVE GROUND LEVEL

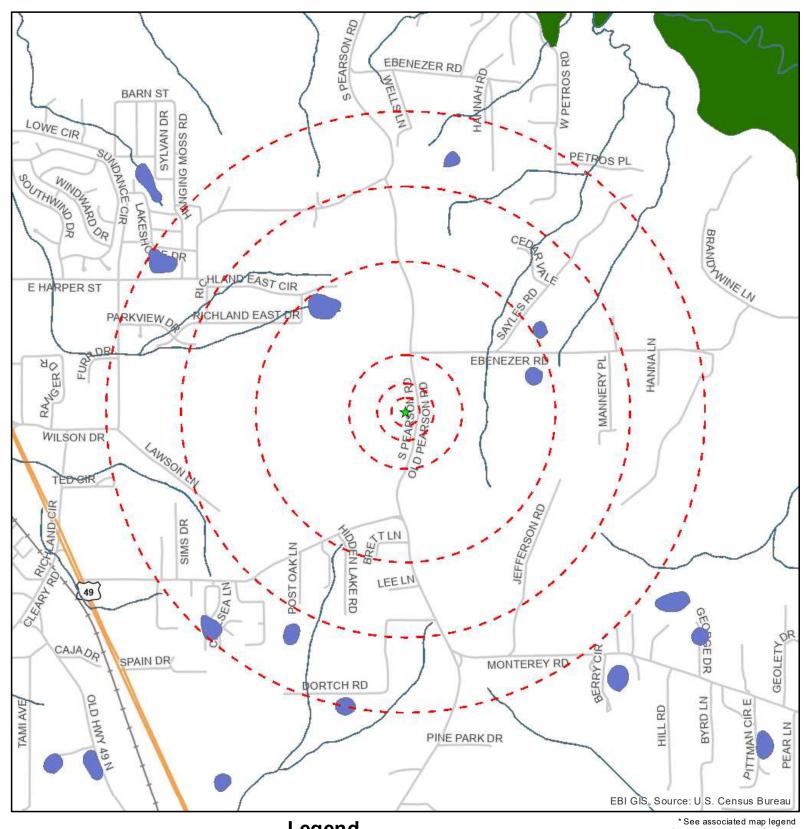
POINT OF BEGINNING

FIBER OPTIC SIGN

SECTION 6, T4N-R2E RANKIN COUNTY, MISSISSIPPI

DATE: 05/23/22 | DRAWN BY: DAS | JOB NO.

SCALE: 1" = 200' CHECKED BY: SKT 22-0069B DRAWING NO.



Legend

for additional source information.

Project Site

Site Radius at 250', 500', 1000', ½, ¾ & 1 mile

Date: 9/7/2022

Land Resources Map

617087433 OLD_PEARSON_RD_CGC **2622 S PEARSON ROAD RICHLAND, MISSISSIPPI 39218**



Land Resources Legend

Scenic Parkways, Rivers & Trails

National Scenic Parkway

National Park Service Trail / Appalachian Trail

AZ - BLM Historic Trail

CT - DEP Trail

MT- Lewis & Clark Trail

NY - Trails

NY - Scenic Landmark Area NY - Statewide Area of Scenic Significance National Wild, Scenic River

CA, MT, PA - Wild or Scenic River

Sources: National Park Service http://www.nps.gov/gis/data_info/; Bureau of land management http://www.blm.gov/wo/st/en.html; CT DEP http://www.ct.gov/deep/cwp/view.asp?a=2698&q=323342&deepNav_GID=1707%20; NY GIS Clearinghouse http://gis.ny.gov/; National W & S Rivers http://www.rivers.gov/rivers/mapping-gis.php; Montana GIS http://nris.mt.gov/gis; California Atlas http://atlas.ca.gov/

State Conservation, Lands & Wildlife Areas

CT - DEP Property

CO - Public Access Wildlife Area

FL - Wildlife Management Area

MT - National Wildlife Refuge

NH - WMNF Management Area

ME - Conservation Land

TN - Wildlife Resource Land

TX - State Park or Wildlife Mgt Area

TX - Audubon Sanctuary

CT - DEP Municipal and Open Space

NH - Conservation Land

NY - DEC State Lands

NY - Agricultural District

Sources: CT DEP http://www.ct.gov/deep/cwp/view.asp?a=2698&q=323342&deepNav GID=1707%20 CO Wildlife Space http://ndis.nrel.colostate.edu/ftp/ftp_response.asp; Florida Fish and Wildlife www.MyFWC.com; Montana GIS http://nris.mt.gov/gis; NH GRANIT ttp://www.granit.unh.edu/data/downloadfreedata; ME GIS http://megis.maine.gov/catalog; TN GIS http://www.state.tn.us/environment/parks/gis/data/; TX GIS http://www.glo.state.tx.us/nri/data/index.html; NY GIS Clearinghouse http://gis.ny.gov/

US FWS NWI

Estuarine and Marine Deepwater

Wetland Type

Estuarine and Marine Wetland



Freshwater Emergent Wetland



Freshwater Forested/Shrub Wetland

Freshwater Pond



Lake



Other



Riverine

State Endangered Threatened & Protected Species

AZ - Areas of Environmental Concern

CA - Spotted Owl Territory

CA - NDDB T & E Species

CT - NDDB Area Feature

CT - DEP Critical Habitat

MA - NHESP Estimated Habitats of Rare Wildlife

TX - Protected Species

MA - NHESP Priority Habitats of Rare Species

FL - Conservation Species

MA - NHESP Certified Vernal Pool

ME - Candidate Vernal Pool

NY - Important Bird Area

TX - Ecologically Unique Rivers Streams

Sources: AZ BLM Page http://www.blm.gov/az/st/en/prog/maps/gis_files.html; CNDDB http://www.dfg.ca.gov/biogeodata/cnddb/; CT DEP http://www.ct.gov/deep/cwp/view.asp? a=2698&q=323342&deepNav_GID=1707%20; MAGIS http://www.mass.gov/mgis/laylist.htm TX GIS http://www.glo.state.tx.us/nri/data/index.html; Florida Fish and Wildlife www.MyFWC.com;

Federal & National Coverage Data Layers

USFWS Critical Habitat

FEMA Q3 Flood Zone 2006

USFWS Critical Habitat Area

National Park Service

National Wildlife Area or Refuge

Federally Owned Land

500-year inundation area.

100-year inundation area.

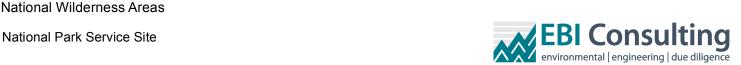
100-year inundation area with velocity hazard.

Undetermined but possible flood hazard area.

Floodway area, including watercourse extent.

No Flood Data No Flood Data Available

Sources: National Park Service http://www.nps.gov/gis/data_info/; USFWS http://crithab.fws.gov/; National Park Service http://science.nature.nps.gov /nrdata/index.cfm; The National Map http://nationalmap.gov/; Wilderness.net http://www.wilderness.net/; FEMA - Q3 Flood Data https://msc.fema.gov







I. View south toward the Project Site.



2. View west toward the Subject Property access road.



3. View of area to the north of the access road.



4. View east from the Project Site.



5. View south from the Project Site.



6. View west from the Project Site.



7. View north from the Project Site.



8. Continuation of access road west of the Subject Property.





United States Department of the Interior



FISH AND WILDLIFE SERVICE

Mississippi Ecological Services Field Office 6578 Dogwood View Parkway, Suite A Jackson, MS 39213-7856 Phone: (601) 965-4900 Fax: (601) 965-4340

In Reply Refer To: September 07, 2022

Project Code: 2022-0083080

Project Name: Old_Pearson_Rd_CGC

Subject: List of threatened and endangered species that may occur in your proposed project

location or may be affected by your proposed project

To Whom It May Concern:

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

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

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

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

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

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office. Please email consultation requests to MSFOSection7Consultation@fws.gov.

09/07/2022

Attachment(s):

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

Official Species List

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

This species list is provided by:

Mississippi Ecological Services Field Office 6578 Dogwood View Parkway, Suite A Jackson, MS 39213-7856 (601) 965-4900

Project Summary

Project Code: 2022-0083080

Project Name: Old_Pearson_Rd_CGC

Project Type: Communication Tower New Construction

Project Description: Construction of a 196-foot monopole tower (211-feet with lighting rod)

and support equipment within a proposed 50-foot by 50-foot fenced compound within a 100-foot by 100-foot lease area. Access will be gained via a proposed 12-foot wide gravel access road within a 30-foot wide access/utility easement emanating south from an existing gravel road for approximately 100 feet to the proposed facility. Proposed utilities will

follow the access route.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@32.21484445,-90.12947272400012,14z



Counties: Rankin County, Mississippi

Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME STATUS

Northern Long-eared Bat Myotis septentrionalis

Threatened

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045

Birds

NAME STATUS

Wood Stork Mycteria americana

Threatened

Population: AL, FL, GA, MS, NC, SC No critical habitat has been designated for this species.

Species profile: https://ecos.fws.gov/ecp/species/8477

Insects

NAME STATUS

Monarch Butterfly Danaus plexippus

Candidate

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743

Critical habitats

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

09/07/2022

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

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

09/07/2022

Migratory Birds

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

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

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

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

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

NAME	BREEDING SEASON
Brown-headed Nuthatch <i>Sitta pusilla</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 1 to Jul 15
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10

Rusty Blackbird *Euphagus carolinus*This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation
Regions (BCRs) in the continental USA

Wood Thrush *Hylocichla mustelina*This is a Bird of Conservation Concern (BCC) throughout its range in the continental
USA and Alaska.

Breeds elsewhere

Breeds May 10 to
Aug 31

Probability Of Presence Summary

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

Probability of Presence (■**)**

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

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

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

Breeding Season (

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

Survey Effort (|)

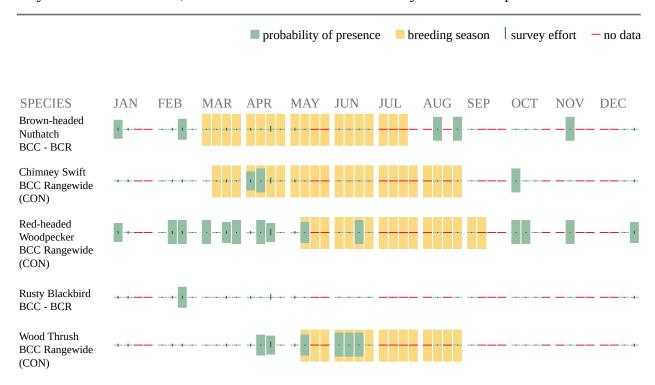
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

No Data (-)

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

Survey Timeframe

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



Additional information can be found using the following links:

- Birds of Conservation Concern https://www.fws.gov/program/migratory-birds/species
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

Migratory Birds FAQ

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

<u>Nationwide Conservation Measures</u> describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly

important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. <u>Additional measures</u> or <u>permits</u> may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

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

The Migratory Bird Resource List is comprised of USFWS <u>Birds of Conservation Concern</u> (<u>BCC</u>) and other species that may warrant special attention in your project location.

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

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

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

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

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

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

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

What are the levels of concern for migratory birds?

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

1. "BCC Rangewide" birds are <u>Birds of Conservation Concern</u> (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);

- 2. "BCC BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
- 3. "Non-BCC Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

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

Details about birds that are potentially affected by offshore projects

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

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

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to <u>obtain a permit</u> to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

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

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

09/07/2022

Wetlands

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

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

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

WETLAND INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED. PLEASE VISIT https://www.fws.gov/wetlands/data/mapper.html OR CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

09/07/2022

IPaC User Contact Information

Agency: EBI Consulting Name: Jason Stayer

Address: 1005 Elmwood Trl

City: Cedar Park

State: TX Zip: 78613

Email jstayer@ebiconsulting.com

Phone: 5129148615

Critical Habitat for Threatened & Endangered Species [USFWS]



A specific geographic area(s) that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection.

200ft

U.S. Fish and Wildlife Service | Maxar, Microsoft

This list is not meant as a comprehensive listing of all animal species. Rather the animals listed below are recognized as species of "special concern" for

REDindicates endangered federal status.

GREENindicates threatened federal status.

County	Scientific Name	Common Name	Global Rank	State Rank	State Status	Туре
Rankin	Acipenser oxyrinchus desotoi	Gulf Sturgeon	G3T2	S1	LE	Animal
Rankin	Alosa alabamae	Alabama Shad	G2G3	S1		Animal
Rankin	Anas rubripes	American Black Duck	G5	S2N		Animal
Rankin	Anhinga anhinga	Anhinga	G5	S3B,S1N		Animal
Rankin	Anodontoides radiatus	Rayed Creekshell	G2G3	S2		Animal
Rankin	Arcidens confragosus	Rock Pocketbook	G4	S3		Animal
Rankin	Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	G3G4	S3		Animal
Rankin	Egretta caerulea	Little Blue Heron	G5	S2B,S2N		Animal
Rankin	Euphagus carolinus	Rusty Blackbird	G4	S2N		Animal
Rankin	Fundulus dispar	Northern Starhead Topminnow	G4	S3		Animal
Rankin	Graptemys oculifera	Ringed Map Turtle	G2	S2	LE	Animal
Rankin	Gryllotalpa major	Prairie Mole Cricket	G3	SH		Animal
Rankin	Haliaeetus leucocephalus	Bald Eagle	G5	S3B,S2N		Animal
Rankin	Helmitheros vermivorum	Worm-eating Warbler	G5	S2B		Animal
Rankin	lchthyomyzon castaneus	Chestnut Lamprey	G4	S2S3		Animal
Rankin	Ictiobus niger	Black Buffalo	G5	S3		Animal

Rankin	Ixobrychus exilis	Least Bittern	G5	S2B		Animal
Rankin	Lasionycteris noctivagans	Silver-haired Bat	G3G4	SNA		Animal
Rankin	Lasmigona complanata	White Heelsplitter	G5	S3		Animal
Rankin	Limnothlypis swainsonii	Swainson's Warbler	G4	S2S3B		Animal
Rankin	Macrochelys temminckii	Alligator Snapping Turtle	G3G4	S3		Animal
Rankin	Myotis austroriparius	Southeastern Myotis	G4	S3S4		Animal
Rankin	Nyctanassa violacea	Yellow-crowned Night- Heron	G5	S2B,S1N		Animal
Rankin	Obovaria arkansasensis	Southern Hickorynut	GNR	S1		Animal
Rankin	Obovaria unicolor	Alabama Hickorynut	G3	S1S2		Animal
Rankin	Ophisaurus attenuatus	Slender Glass Lizard	G5	S2S3		Animal
Rankin	Pandion haliaetus	Osprey	G5	S3B,S1S2N		Animal
Rankin	Parkesia motacilla	Louisiana Waterthrush	G5	S2S3B		Animal
Rankin	Peucaea aestivalis	Bachman's Sparrow	G3	S3B,S3S4N		Animal
	Pleurobema beadleianum	Mississippi Pigtoe	G3	S3?		Animal
Rankin	Polyodon spathula	Paddlefish	G4	S3		Animal
Rankin	Porphyrio martinicus	Purple Gallinule	G5	S2B		Animal
Rankin	Potamilus inflatus	Inflated Heelsplitter	G1G2Q	SH	LE	Animal
Rankin	Procambarus barbiger	Jackson Prairie Crayfish	G2	S2		Animal
Rankin	Rallus elegans	King Rail	G4	S3		Animal
Rankin	Rana areolata	Crawfish Frog	G4	S2		Animal
Rankin	Truncilla truncata	Deertoe	G5	S3		Animal

Rankin	Tyrannus forficatus	Scissor-tailed Flycatcher	G5	S1B,S1N	Animal
Rankin	Tyto alba	Common Barn-owl	G5	S3	Animal
Rankin	Uniomerus declivis	Tapered Pondhorn	G5Q	S3	Animal

This list is not meant as a comprehensive listing of all animal species.

Rather the animals listed below are recognized as species of "special concern" for

REDindicates endangered (http://museum.mdwfp.com/science/global_state_ranking.html? global_state_ranking_text.html#LE) federal status.

GREENindicates threatened (http://museum.mdwfp.com/science/global_state_ranking.html? global_state_ranking_text.html#LT) federal status.

County	Scientific Name	Common Name	Global Rank	State Rank	State Status	Туре
Rankin	Camassia scilloides	Wild Hyacinth	G4G5	S2		Plant
Rankin	Carex decomposita	Cypress-knee Sedge	G3G4	S3		Plant
Rankin	Carex fissa var. aristata	Hammock Sedge	G4?T4?	S1		Plant
Rankin	Carya glabra var. hirsuta	Swamp Hickory	G5T3T5	S3		Plant
Rankin	Cheilanthes lanosa	Hairy Lipfern	G5	S1S2		Plant
Rankin	Echinacea purpurea	Eastern Purple Coneflower	G4	S3		Plant
Rankin	Juglans cinerea	Butternut	G4	S2		Plant
Rankin	Lobelia appendiculata	Ear-flower Lobelia	G4G5	S3		Plant
Rankin	Marshallia trinervia	Broad-leaf Barbara's Button	G3	S3		Plant
Rankin	Matelea carolinensis	Carolina Anglepod	G4	S3		Plant
Rankin	Panax quinquefolius	American Ginseng	G3G4	S3		Plant
Rankin	Quercus oglethorpensis	Oglethorpe's Oak	G3	S2		Plant
Rankin	Rhapidophyllum hystrix	Needle Palm	G4	S3		Plant

Rankin	Schisandra glabra	Bay Starvine	G3	S3	Plant
Rankin	Staphylea trifolia	American Bladdernut	G5	S3	Plant
Rankin	Triphora trianthophoros	Nodding Pogonia	G3G4	S2	Plant
Rankin	Ulmus serotina	September Elm	G4	S2	Plant



Mississippi Department of Wildlife, Fisheries, and Parks

Lynn Posey
Executive Director

October 07, 2022

EBI Consulting 1005 Elmwood Trl Cedar Park, AL 78613

Re: Old_Pearson_Rd_CGC

Rankin County, MS

Project # 6122007817

Internal Id 3290

To Jason Stayer:

In response to your request for information dated **September 07, 2022**, we have searched our database for occurrences of state or federally listed species and species of special concern that occur within 2 miles of the site of the proposed project. Please find our concerns and recommendations below.

The following species of concern may occur within 2 miles of the proposed project area:

Scientific Name Common Name Federal Status State Status State Rank

State Rank

- S1 Critically imperiled in Mississippi because of extreme rarity (5 or fewer occurrences or vey few remaining individuals or acres) or because of some factor(s) making it vulnerable to extirpation.
- **S2** Imperiled in Mississippi because of rarity (6 to 20 occurrences or few remaining individuals or acres) or because of some factor(s) making it vulnerable to extirpation.
- **S3** Rare or uncommon in Mississippi (on the order of 21 to 100 occurrences).

State and Federal Status

- LE Endangered A species which is in danger of extinction throughout all or a significant portion of its range.
- LT Threatened A species likely to become endangered in foreseeable future throughout all or a significant portion of its range.

Based on the information provided, we conclude that if best management practices are properly implemented, monitored, and maintained (particularly measures to prevent, or at least, minimize negative impacts to water quality), the proposed project likely poses no threat to listed species or their habitats.

Recommendations:

We do not currently have any records of rare, threatened, or endangered species or communities in the vicinity of your proposed cell tower project in Richland, MS (32.21475, -90.12952). The quantity and quality of data collected by the

Mississippi Natural Heritage Program are dependent on the research and observations of many individuals and organizations and, in many cases, this information is not the result of comprehensive or site-specific field surveys. Many of the state's listed species are on the decline because of degradation or destruction of essential habitat needed to support them. Our main concern for this project are the possibility of sediment deposition, turbidity, exhaust runoff from roads, increased herbicide and pesticide load, and other unintentional introduction of pollutants being introduce to nearby streams and bodies of water that runs adjacent to the project site. These factors may negatively impact habitat conditions by detrimentally affecting respiration, feeding, and reproduction of amphibians, bats, birds, crayfishes, fishes, insects, mussels, turtles, and vegetation. Furthermore, maintenance of natural floodplain vegetation and hydrology are important factors contributing to the survival these species. If this proposed project is approved, we recommend that best management practices be properly implemented, maintained, and monitored regularly for compliance. Specific emphasis should be placed on measures that help minimize the occurrence of excess sedimentation, suspended particulate matter, and contaminants at the project site and surrounding areas from leaving in stormwater run-off or from direct entry into nearby streams and waterbodies. Please check MS Department of Environmental Quality for BMP. We also recommend that the communication tower be designed to comply with USFWS Recommended Best Practices for Communications Tower Design, Siting, Construction, Operation, Maintenance, and Decommissioning (https://www.fws.gov/birds/birdenthusiasts/threats-to-birds/collisions/communication-towers.php).

Please feel free to contact us if we can provide any additional infromation, resources, or assistance that will help minimize negative impacts to the species and/or ecological communities identified in this review. We are happy to work with you to ensure that our state's precious natural heritage is conserved and preserved for future Mississippians.

Completed by Quentin Fairchild

The Mississippi Natural Heritage Program (MNHP) has compiled a database that is the most complete source of information about Mississippi's rare, threatened, and endangered plants, animals, and ecological communities. The quantity and quality of data collected by MNHP are dependent on the research and observations of many individuals and organizations. In many cases, this information is not the result of comprehensive or site-specific field surveys; most natural areas in Mississippi have not been thoroughly surveyed and new occurrences of plant and animal species are often discovered. Heritage reports summarize the existing information known to the MNHP at the time of the request and cannot always be considered a definitive statement on the presence, absence or condition of biological elements on a particular site.

Appendix F Historic and Cultural Resources





November 05, 2024

Mississippi Department of Archives and History Attn: Historic Preservation Division Review and Compliance Officer P.O. Box 571 Jackson, MS, 39205-0571

Subject: Addendum to FCC Form 620

US-MS-5200 Old Pearson Rd

2622 S Pearson Road, Richland, Rankin County, Mississippi 39218

EBI Project No.: 011697-PR E106 Filing No.: 0010206198

Dear Historic Preservation Division:

EBI Consulting (EBI) is preparing an environmental review on behalf of The Towers, LLC for the property noted above as part of its regulatory review by the Federal Communications Commission (FCC). The review is focused on the National Environmental Policy Act (NEPA) compliance and includes an evaluation of whether historic properties or archaeological sites may be affected by the proposed telecommunications facility at the address noted above under Section 106 of the National Historic Preservation Act (NHPA).

On September 16, 2022, EBI submitted an FCC Form 620 to your office regarding our "No Historic Properties in the Area of Potential Effects-Direct Effects" and "No Historic Properties in the Area of Potential Effects-Visual Effects" determination for the above-referenced telecommunications installation project. On October 19, 2022, EBI received a response from your office indicating concurrence with our determination.

Subsequent to the previous submission, EBI has received revised project drawings. The previous project design called for the installation of a 211-foot self-support tower with antennas installed at a centerline height of 196 feet; support equipment at grade within an 80-foot by 80-foot lease area; and a proposed 12-foot wide gravel road within a 30-foot wide access and utility easement from the lease area east to Old Pearson Road. The revised design calls for the installation of an additional 1-foot by 100-feet barrier silt fence constructed to the west of the lease area; a 3-foot wide swale within a 5-feet by 90-feet installation area to the south of the lease area; a 3-foot wide swale within a 5-feet by 80-feet installation area to the north of the lease area that cuts across the proposed access and utility easement; and two culverts are proposed, within the limits of the original access and utility easement. Please note, the client has changed from Verizon Wireless to The Towers, LLC. These additional installations do not significantly alter the visual profile of the tower or antennas. Changes to the project design have been taken into consideration and EBI's determination remains "No Historic Properties in the Area of Potential Effects-Visual Effects".

On behalf of The Towers, LLC, I would appreciate your comments on this proposed telecommunications installation in a letter to my attention at EBI Consulting, 21 B Street, Burlington, MA 01803.



Sincerely,

EBI Consulting

Miriam Burkett

Senior Architectural Historian

463.336.4142

mburkett@ebiconsulting.com

Previous SHPO Response



P.O. Box 571 Jackson, MS 39205-0571 601-576-6850 mdah.ms.gov

October 19, 2022

Ms. Maureen Bowman EBI Consulting 6876 Susquehanna Trail South York, Pennsylvania 17403

RE: Phase I Archaeological Survey Report, Old Pearson Road, CGC/617087433,

2622 S. Pearson Road, Richland, (FCC) MDAH Project Log #09-131-22,

Report #22-0371, Rankin County

Dear Ms. Bowman:

We have reviewed the September 7, 2022, cultural resources survey, by Christopher Grant, Principal Investigator, received on September 19, 2022, for the above referenced undertaking, pursuant to our responsibilities under Section 106 of the National Historic Preservation Act and 36 CFR Part 800. After reviewing the information provided, we concur that no cultural resources listed in or eligible for listing in the National Register of Historic Places will be directly or visually affected. Therefore, we have no reservations with the undertaking.

There remains the possibility that unrecorded cultural resources may be encountered during the project. Should this occur, we would appreciate your contacting this office immediately in order that we may offer appropriate comments under 36 CFR 800.13.

If you need further information, please contact us at (601) 576-6940.

Sincerely,

Hal Bell

Review and Compliance Officer

FOR: Katie Blount

Hal Bell

State Historic Preservation Officer

Maureen Bowman

From: towernotifyinfo@fcc.gov

Sent: Thursday, September 15, 2022 3:46 PM

To: Maureen Bowman

Subject: Section 106 New Filing Submitted- Email ID #7471132

The following new Section 106 filing has been submitted:

File Number: 0010206198 TCNS Number: 254587

Purpose: New Tower Submission Packet

Notification Date: 7AM EST 09/16/2022

Applicant: Verizon Wireless

Consultant: EnviroBusiness Inc. d/b/a EBI Consulting (EBI 6122007817)

Positive Train Control Filing Subject to Expedited Treatment Under Program Comment: No

Site Name: Old_Pearson_Rd_CGC Site Address: 2622 S Pearson Road

Detailed Description of Project: Proposed construction of a new telecommunications self-support tower and compound

resulting in ground disturbance. Please see Attachment 4 of this filing for project design details. 617087433

(6122007817)

Site Coordinates: 32-12-53.1 N, 90-7-46.3 W

City: Richland County: RANKIN

State:MS

Lead SHPO/THPO: Mississippi Dept of Archives & History

Consultant Contact Information:

Name: EnviroBusiness Inc. d/b/a EBI Consulting (EBI 6122007817)

Title: Senior Architectural Historian

PO Box:

Address: 6876 Susquehanna Trail South

City: York State: PA Zip: 17403

Phone: 617-909-9035

Fax:

Email: mbowman@ebiconsulting.com

NOTICE OF FRAUDULENT USE OF SYSTEM, ABUSE OF PASSWORD AND RELATED MISUSE

Use of the Section 106 system is intended to facilitate consultation under Section 106 of the National Historic Preservation Act and may contain information that is confidential, privileged or otherwise protected from disclosure under applicable laws. Any person having access to Section 106 information shall use it only for its intended purpose. Appropriate action will be taken with respect to any misuse of the system.

Updated Archaeology, including updated plans





October 25, 2024

Mississippi Department of Archives and History Historic Preservation Division Review and Compliance Officer P.O. Box 571 Jackson, MS 39205-0571

Subject: Archaeology Addendum to FCC Form 620

US-MS-5200 Old Pearson Rd

2622 S Pearson Road

Richland, Mississippi 39218

Rankin County

EBI Project No.: 011697-PR (formerly 6122007817)

MDAH Project Log #: 09-131-22

EBI Consulting (EBI) is preparing an environmental review on behalf of The Towers, LLC for the property noted above as part of its regulatory review by the Federal Communications Commission (FCC). The review is focused on the National Environmental Policy Act (NEPA) compliance and includes an evaluation of whether Historic Properties or archaeological sites may be affected by the proposed telecommunications facilities at the address noted above under Section 106 of the National Historic Preservation Act (NHPA).

Project History

The above-referenced telecommunications facility project was submitted to the Mississippi Department of History & Archives (MDAH) for review on September 19, 2022 with a recommended finding of, "No Historic Properties in the Area of Potential Effects-Direct Effects". The MDAH responded on October 19, 2022 that, they "concur that no cultural resources listed in or eligible for listing in the National Register of Historic Places will be irectly or visually affected" (see Appended Correspondence).

The Revised Project and Project Area

Subsequently, revised documents for the project provided by The Towers, LLC indicate the following changes to the proposed design:

- The tower will no longer be constructed by Verizon Wireless. The tower will now be constructed by The Towers, LLC.
- A 1' by 100' (0.3m by 30.48m) barrier silt fence will be constructed to the west of the lease area.
- A 3' (0.9m)-wide swale will be installed within an approximate 5' by 90' (1.5m by 27.4m) installation area, to the south of the lease area.



- A 3' (0.9m)-wide swale will be installed within an approximate 5' by 80' (1.5m by 24.4m) installation area, to the north of the lease area. The swale will cut across the proposed access and utility easement.
- Two culverts are proposed, within the limits of the original access and utility easement.

Specifically, The Towers, LLC proposes to install a 211' (64.3m) self-support lattice tower and support equipment within a 80' by 80' (24.4 by 24.4m) lease area. An access and utility easement that measures approximately 250' (76.2m) in length and 30' (9.14m) in width is proposed from Old Pearson Road west then southwest to the lease area. This easement will be routed over an existing gravel road, a proposed gravel drive, and two proposed culverts. A 1' by 100' (0.3m by 30.48m) barrier silt fence will be constructed to the west of the lease area. A 3' (0.9m)-wide swale will be installed within a 5' by 90' (1.5m by 27.4m) installation area, to the south of the lease area. A 3' (0.9m)-wide swale will be installed within a 5' by 80' (1.5m by 24.4m) installation area, to the north of the lease area, across the proposed access and utility easement (Site Plans, Figures 1 and 2).

Due to these changes, the area of ground to be disturbed will increase from approximately 0.32 acres (0.13 hectare) to 0.34 acres (0.14 hectare) (see Site Plans, Figures 1 and 2).

Updated Class I Research

Due to the age of the original Class I Research, an updated review of files maintained by the Mississippi Department of History & Archives (MDAH) was completed by Christopher Grant, M.A.. RPA, Archaeologist II, on October 22, 2024.

Known Archaeological Sites

The results of this review indicate that no archaeological sites have been newly recorded within the 1 mile (1.6km) research radius since the original Class I Research conducted in 2022.

Prior Cultural Resource Surveys

This same review of files maintained by the Mississippi Department of History & Archives (MDAH) indicated that one additional cultural resource survey has been conducted within the 1 mile (1.6km) research radius since the original Class I Research was completed in 2022. Survey 22-0371 consisted of pedestrian survey and subsurface testing of the APE-DE for the original proposed telecommunications project, which was negative for cultural materials and noted disturbed and eroded conditions (see table below).

Additional Cultural Resource Surveys Identified by Class I Research							
Survey Number	Title	Distance from APE-DE					
	Phase I Archaeological Survey Report Old Pearson Rd CGC /617087433 2622 S Pearson Road Richland, Mississippi	Encompasses the APE-DE					

Conclusions and Recommendations

I, Christopher Grant, M.A., RPA, Archaeologist II with EBI have reviewed the previous archaeological assessment, new site plans, updated site file research, and MDAH correspondence for the proposed telecommunications facility at the above-referenced location. It is my professional opinion that the alterations to the project plans do not significantly alter the archaeological findings of EBI dated September 7, 2022.

Regarding the Project Area and vicinity EBI stated:

The sensitivity of the APE-DE for precontact resources is low. A review of previously recorded archaeological sites demonstrated no documented use of the vicinity of the Project Area during the precontact period. Locations in closer proximity to perennial water resources would likely have been more attractive for long term use and resource procurement. Therefore, it is unlikely that significant precontact archaeological resources would be present within the APE-DE.

The sensitivity of the APE-DE for historic resources is also low. A review of historic maps and aerial images indicates that the Project Area remained undeveloped into the 21st century. The Subject Property and adjacent properties were cleared and graded, possibility for use as a borrow pit, in the early 21st century. Areas to the west of the Subject Property are shown with extensive grading and clearing. By 2021, the APE-DE has been extensively cleared and graded, with the existing gravel access road in place by that time. Clearing, grading, and construction for S Pearson Road and the existing access road, as well as vehicular traffic through the Project Area as part of nearby mining activity, appears to have extensively disturbed the APE-DE. Therefore, it is unlikely that significant historic archaeological resources would be present within the APE-DE.

In light of the available information, it is my professional opinion that the APE-DE for the present project possess low sensitivity for the presence of significant precontact and/or historical archaeological resources due to the undeveloped nature of the Project Area, lack of known archaeological sites in the vicinity and negative results of the archaeological fieldwork conducted at the Project Area, and prior land clearing activities. No Historic Properties were identified by this survey. No further archaeological work is recommended for this project.

Though the Project Area is being revised, it will still be located within the same limited environmental and disturbed contexts observed during the archaeological fieldwork on August 31, 2022. Due to the low archaeological sensitivity and prior disturbance, EBI's recommendation of, "No Historic Properties in the Area of Potential Effects-Direct Effects" continues to apply.

Sincerely,

EBI Consulting



Archaeology Addendum EBI Project # 011697-PR

US-MS-5200 Old Pearson Rd Richland, Mississippi

Christopher Grant, M.A., RPA Archaeologist II University of Chicago 2013 cgrant@ebiconsulting.com

References

Google

2024 Google Earth. http://www.earth.google.com. Accessed October 22, 2024.



Appendix A Figures





Figure I. 2024 Google Aerial Image with Original Project Area Details. Not to Exact Scale; for Illustrative Purposes.



Figure 2. 2024 Google Aerial Image with Revised Project Area Details. Not to Exact Scale; for Illustrative Purposes.

Appendix B SHPO Correspondence





P.O. Box 571 Jackson, MS 39205-0571 601-576-6850 mdah.ms.gov

October 19, 2022

Ms. Maureen Bowman EBI Consulting 6876 Susquehanna Trail South York, Pennsylvania 17403

RE: Phase I Archaeological Survey Report, Old Pearson Road, CGC/617087433,

2622 S. Pearson Road, Richland, (FCC) MDAH Project Log #09-131-22,

Report #22-0371, Rankin County

Dear Ms. Bowman:

We have reviewed the September 7, 2022, cultural resources survey, by Christopher Grant, Principal Investigator, received on September 19, 2022, for the above referenced undertaking, pursuant to our responsibilities under Section 106 of the National Historic Preservation Act and 36 CFR Part 800. After reviewing the information provided, we concur that no cultural resources listed in or eligible for listing in the National Register of Historic Places will be directly or visually affected. Therefore, we have no reservations with the undertaking.

There remains the possibility that unrecorded cultural resources may be encountered during the project. Should this occur, we would appreciate your contacting this office immediately in order that we may offer appropriate comments under 36 CFR 800.13.

If you need further information, please contact us at (601) 576-6940.

Sincerely,

Hal Bell

Review and Compliance Officer

FOR: Katie Blount

Hal Bell

State Historic Preservation Officer

FCC Form 620

FCC Wireless Telecommunications Bureau New Tower ("NT") Submission Packet

Notification Date: 7AM EST 09/16/2022

File Number: 0010206198

Approved by OMB 3060 – 1039 See instructions for public burden estimates

General Information

				oau	•			
1) (Select only one) (NE) NE – New	UA – Upd	ate of A	application	WD – \	Vitho	drawal of Application	1	
If this application is for an Updaturently on file.	ate or Withdraw	al, ente	er the file numbe	er of the pendi	ing a	application	File Number:	
			Applican	t Informat	ion			
3) FCC Registration Number (FRI	N): 00128453	43						
4) Name: Verizon Wireless								
Contact Name				I				1
5) First Name: Lucas			6) MI:	7) Last Nan	ne: (Conder		8) Suffix:
9) Title: VZW-HQ - NEPA Reg	julatory Com	plianc	e					
Contact Information								
10) P.O. Box:	And /Or	11) S	treet Address:	5055 North	Poi	int Parkway, NP2	NE Network En	gineering
12) City: Alpharetta	•				,	13) State: GA	14) Zip Code: 30022	
15) Telephone Number: (908)5	59-5097			16) Fax	16) Fax Number:			
17) E-mail Address: vzwnpa-ne	epa@verizon	wirele	ss.com	•				
			Consult	ant Inform	nati	on		
18) FCC Registration Number (FF	RN): 0016385	759						
19) Name: EnviroBusiness In	c. d/b/a EBI	Consu	Iting (EBI 612	22007817)				
Principal Investigator								
20) First Name: Maureen			21) MI: A	22) Last Na	ame:	Bowman		23) Suffix:
24) Title: Senior Architectural	l Historian		I	<u>I</u>				
Principal Investigator Contact	t Information	1						
25) P.O. Box:	And /Or		treet Address:	6876 Susqu	ıeha	anna Trail South		
27) City: York		1			2	28) State: PA	29) Zip Code	: 17403
30) Telephone Number: (617)90	9-9035			31) Fax	Num	nber:		
32) E-mail Address: mbowman	@ebiconsul	ting.co	om					

Professional Qualification			
33) Does the Principal Investigator satisfy the Secret	ary of the Interi	or's Professional Qualification Standards?	(x) <u>Y</u> es () <u>N</u> o
34) Areas of Professional Qualification:			•
() Archaeologist			
(X) Architectural Historian			
() Historian			
() Architect			
() Other (Specify)			
Additional Staff			
35) Are there other staff involved who meet the Profe	ssional Qualific	cation Standards of the Secretary of the Interior?	(X) <u>Y</u> es () <u>N</u> o
"YES," complete the following:			
36) First Name: Chritopher	37) MI:	38) Last Name: Grant	39) Suffix:
40) Title: Archaeologist II	1		1
41) Areas of Professional Qualification:			
(X) Archaeologist			
() Architectural Historian			
() Historian			
() Architect			
() Other (Specify)			
36) First Name: Casey	37) MI:	38) Last Name: Sharp	39) Suffix:
40) Title: Archaeologist II			
41) Areas of Professional Qualification:			
(X) Archaeologist			
() Architectural Historian			
() Historian			
() Architect			

) Other (Specify) _

36) First Name: Alexander	37) MI:	38) Last Name: O'Gorman	39) Suffix:			
40) Title: Historian						
41) Areas of Professional Qualification:						
() Archaeologist						
() Architectural Historian						
(X) Historian						
() Architect						
() Other (Specify)						

Site Information

Tower Construction Notification System		
1) TCNS Notification Number: 254587		
Site Information		
2) Positive Train Control Filing Subject to Expedited Treatment Under Program Comm	nent: () <u>Y</u> es (X) <u>N</u>	lo
3) Site Name: Old_Pearson_Rd_CGC		
4) Site Address: 2622 S Pearson Road		
5) Detailed Description of Project:		
Proposed construction of a new telecommunications self-support towe Please see Attachment 4 of this filing for project design details. 617087		Ilting in ground disturbance.
6) City: Richland	7) State: MS	8) Zip Code: 39218
9) County/Borough/Parish: RANKIN		
10) Nearest Crossroads: Old Pearson Road and Ebenezer Road		
11) NAD 83 Latitude (DD-MM-SS.S): 32-12-53.1	(X) <u>N</u> or () <u>S</u>
12) NAD 83 Longitude (DD-MM-SS.S): 090-07-46.3	() <u>E</u> or (X) <u>W</u>
Tower Information		
13) Tower height above ground level (include top-mounted attachments such as lightni	ng rods): _64.3	() Feet (X) Meters
14) Tower Type (Select One):		
() Guyed lattice tower		
(X) Self-supporting lattice		
() Monopole		
() Other (Describe):		
Project Status		
15) Current Project Status (Select One):		
(X) Construction has not yet commenced		
() Construction has commenced, but is not completed Con	nstruction commenced on:	
() Construction has been completed Con	struction commenced on:	
Construction completed on:		

Determination of Effect

14)	Direct Effects (Select One):
(X	() No Historic Properties in Area of Potential Effects (APE)
() No Effect on Historic Properties in APE
() No Adverse Effect on Historic Properties in APE
() Adverse Effect on one or more Historic Properties in APE
15)	Visual Effects (Select One):
,	Visual Effects (Select One): () No Historic Properties in Area of Potential Effects (APE)
,	
,	No Historic Properties in Area of Potential Effects (APE)

Have Indian Tribes or Native Hawaiian Organization significance to historic properties which may be affeeffects?			(X) <u>Y</u> es () <u>N</u> o			
2a) Tribes/NHOs contacted through TCNS Notification	Number: 2545	Number of Tribes/NHOs: 1	1			
2b) Tribes/NHOs contacted through an alternate system			Number of Tribes/NHOs: _0			
Tribe/NHO Contacted Through TCNS						
3) Tribe/NHO FRN:						
4) Tribe/NHO Name: Alabama Quassarte Tribal	Town					
Contact Name						
5) First Name: Mary	6) MI:	7) Last Name: Tiger	8) Suffix:			
9) Title: Second Chief		1				
Dates & Response						
10) Date Contacted	11) Date	Replied				
(X)No Reply						
() Replied/No Interest						
() Replied/Have Interest						
() Replied/Other						
Tribe/NHO Contacted Through TCNS						
3) Tribe/NHO FRN:						
4) Tribe/NHO Name: Alabama-Coushatta Tribe	of Texas					
Contact Name						
5) First Name: Bryant	6) MI: J	7) Last Name: Celestine	8) Suffix:			
9) Title: Historic Preservation Officer						
Dates & Response						
10) Date Contacted	11) Date	Replied				
(X) No Reply						
() Replied/No Interest						
() Replied/Have Interest						
() Replied/Other						

Have Indian Tribes or Native Hawaiian Organizations significance to historic properties which may be affected effects?			(X) <u>Y</u> es () <u>N</u> o				
2a) Tribes/NHOs contacted through TCNS Notification N	Number: 25458	Number of Tribes/NHOs:11					
2b) Tribes/NHOs contacted through an alternate system: Number of Tribes/NHOs:							
Tribe/NHO Contacted Through TCNS							
3) Tribe/NHO FRN:							
4) Tribe/NHO Name: Bad River Band of Lake Sup	perior Tribe of	f Chippewa Indians					
Contact Name							
5) First Name: Edith	6) MI:	7) Last Name: Leoso	8) Suffix:				
9) Title: THPO			•				
Dates & Response							
10) Date Contacted	 11) Date F	Replied					
(χ)No Reply			1				
() Replied/No Interest							
() Replied/Have Interest							
() Replied/Other							
Tribe/NHO Contacted Through TCNS							
3) Tribe/NHO FRN:							
4) Tribe/NHO Name: Cherokee Nation							
Contact Name							
5) First Name: Gwen	6) MI:	7) Last Name: Terrapin	8) Suffix:				
9) Title:							
Dates & Response							
10) Date Contacted	11) Date F	Replied					
(X)No Reply							
() Replied/No Interest							
() Replied/Have Interest							
() Replied/Other							

Have Indian Tribes or Native Hawaiian Organiza significance to historic properties which may be effects?			(X) <u>Y</u> es () <u>N</u> o			
2a) Tribes/NHOs contacted through TCNS Notificat	tion Number: 254	Number of Tribes/NHOs	s: 11			
2b) Tribes/NHOs contacted through an alternate sy			Number of Tribes/NHOs: _0			
Tribe/NHO Contacted Through TCNS						
3) Tribe/NHO FRN:						
4) Tribe/NHO Name: Choctaw Nation of Okla	homa					
Contact Name						
5) First Name: Vangie	6) MI:	7) Last Name: Robinson	8) Suffix:			
9) Title: TCNS Review Specialist	1		-			
Dates & Response						
10) Date Contacted	11) Date	Replied				
(X)No Reply						
() Replied/No Interest						
() Replied/Have Interest						
() Replied/Other						
Tribe/NHO Contacted Through TCNS						
3) Tribe/NHO FRN:						
4) Tribe/NHO Name: Coushatta Indian Tribe						
Contact Name						
5) First Name: Kristian	6) MI:	7) Last Name: Poncho	8) Suffix:			
9) Title: THPO	1					
Dates & Response						
10) Date Contacted	11) Date	Replied				
(X)No Reply						
() Replied/No Interest						
() Replied/Have Interest						
() Replied/Other						

Have Indian Tribes or Native Hawaiian Organization significance to historic properties which may be affects?	ons (NHOs) been fected by the und	n identified that may attach religious and cultural dertaking within the APEs for direct and visual	(X) <u>Y</u> es () <u>N</u> o
2a) Tribes/NHOs contacted through TCNS Notification	on Number: _25 4	Number of Tribes/NHOs:	
2b) Tribes/NHOs contacted through an alternate syst		Number of Tribes/NHOs:	: <u>0</u>
Tribe/NHO Contacted Through TCNS			
3) Tribe/NHO FRN:			
4) Tribe/NHO Name: Crow Creek Sioux Tribe			
Contact Name			
5) First Name: Merle	6) MI:	7) Last Name: Marks	8) Suffix:
9) Title: THPO			
Dates & Response			
10) Date Contacted	11) Date	e Replied	
()No Reply			
(X) Replied/No Interest			
() Replied/Have Interest			
() Replied/Other			
Tribe/NHO Contacted Through TCNS	_		
3) Tribe/NHO FRN:			
4) Tribe/NHO Name: Jena Band of Choctaw In	dians		
Contact Name			
5) First Name: Lillie	6) MI:	7) Last Name: Williamson	8) Suffix:
9) Title: TCNS Representative			•
Dates & Response			
10) Date Contacted 08/24/2022	11) Date	e Replied	
(X)No Reply			
() Replied/No Interest			
() Replied/Have Interest			
() Replied/Other			

 Have Indian Tribes or Native Hawaiian Organi significance to historic properties which may be effects? 			(X) <u>Y</u> es () <u>N</u> o
2a) Tribes/NHOs contacted through TCNS Notific	cation Number: _254	Number of Tribes/NHOs: 1	1
2b) Tribes/NHOs contacted through an alternate		Number of Tribes/NHOs: 0	
Tribe/NHO Contacted Through TCNS			
3) Tribe/NHO FRN:			
4) Tribe/NHO Name: Mississippi Band of C	hoctaw Indians		
Contact Name			
5) First Name: Kenneth	6) MI: H	7) Last Name: Carleton	8) Suffix:
9) Title: THPO			•
Dates & Response			
10) Date Contacted	11) Date	Replied	
(X) No Reply			
() Replied/No Interest			
() Replied/Have Interest			
() Replied/Other			
Tribe/NHO Contacted Through TCNS			
3) Tribe/NHO FRN:			
4) Tribe/NHO Name: Red Cliff Band of Lake	Superior Chippe	wa Indians of Wisconsin	
Contact Name			
5) First Name: Marvin	6) MI:	7) Last Name: DeFoe	8) Suffix:
9) Title: THPO			
Dates & Response			
10) Date Contacted	11) Date	Replied	
(X)No Reply			
() Replied/No Interest			
() Replied/Have Interest			
() Replied/Other			

Have Indian Tribes or Native Hawaiian Organizations significance to historic properties which may be affect effects?				()	X) <u>Y</u> es () <u>N</u> o
2a) Tribes/NHOs contacted through TCNS Notification N	umber: 25458	87	Number of Tribes/NHOs:	11		
2b) Tribes/NHOs contacted through an alternate system:	2b) Tribes/NHOs contacted through an alternate system:			0		
Tribe/NHO Contacted Through TCNS						
3) Tribe/NHO FRN:						
4) Tribe/NHO Name: Tunica-Biloxi Tribe of LA						
Contact Name						
5) First Name: Earl	6) MI: J	7) Last Name: E	Barbry		8) Suffix: J	r
9) Title: THPO						
Dates & Response						
10) Date Contacted	11) Date R	Replied				
(X) No Reply						
() Replied/No Interest						
() Replied/Have Interest						
() Replied/Other						

Other Tribes/NHOs Contacted

Tribe/NHO Information								
1) FCC Registration Number (FRN):								
2) Name:								
L Contact Name								
3) First Name:			4) MI:	5) Last Name	ə:		6) Suffix:	
7) Title:								
Contact Information								
8) P.O. Box:	And /Or	9) Str	reet Address:					
10) City:					11) State:	12) Zip Code	:	
13) Telephone Number:				14) Fax N	lumber:			
15) E-mail Address:								
16) Preferred means of communication:								
() E-mail								
() Letter								
() Both								
Dates & Response							_	
17) Date Contacted	-		18) Date R	Replied				
() No Reply								
() Replied/No Interest								
() Replied/Have Interest								
() Replied/Other								

Historic Properties

Pro	nartiae	Identified	
	บษาเนษอ	IUCIIIIICU	

Properties Identified					
1) Have any historic properties been identified within the APEs for direct and visual effect		() <u>Y</u> es ()	() <u>N</u> o	
Has the identification process located archaeological materials that would be directly cultural or religious significance to Tribes/NHOs?	of	() <u>Y</u> es ()	() <u>N</u> o	
3) Are there more than 10 historic properties within the APEs for direct and visual effect if "Yes", you are required to attach a Cultural Resources Report in lieu of adding the			() <u>Y</u> es ()	() <u>N</u> o
Historic Property					
4) Property Name:					
5) SHPO Site Number:					
Property Address					
6) Street Address:					
7) City:	8) State:	9) Zip C	ode:		
10) County/Borough/Parish:					
Status & Eligibility					
11) Is this property listed on the National Register?					
Source:			() <u>Y</u> es () <u>N</u> o
12) Is this property eligible for listing on the National Register?		-		-	-
Source:			() <u>Y</u> es () <u>N</u> o
13) Is this property a National Historic Landmark?			() <u>Y</u> es () <u>N</u> o
14) Direct Effects (Select One):					
() No Effect on this Historic Property in APE					
() No Adverse Effect on this Historic Property in APE					
() Adverse Effect on this Historic Property in APE					
15) Visual Effects (Select One):					
() No Effect on this Historic Property in APE					
() No Adverse Effect on this Historic Property in APE					
() Adverse Effect on this Historic Property in APE					

Local Government Involvement

Local Government Agency									
1) FCC Registration Number (FRN):									
2) Name: Community Development									
Contact Name									
3) First Name: Renee 4) MI: 5) Last Name: Lawrence 6) Suffix:									
7) Title:									
Contact Information									
8) P.O. Box:	And /Or	9) Stre	et Address: 20	03 E Go	vern	ment St, Suite 205			
10) City: Brandon						11) State: MS	12) Zip Code:	39042	
13) Telephone Number: (601)824-2570)			14) F	ax Nu	umber:			
15) E-mail Address: rlawrence@rank	incount	y.org							
16) Preferred means of communication:									
(X) E-mail									
() Letter									
() Both									
Dates & Response									
17) Date Contacted 08/31/2022			18) Date R	eplied _					
(X) No Reply									
() Replied/No Interest									
() Replied/Have Interest									
() Replied/Other									
Additional Information									
19) Information on local government's role or interest (optional):									

Other Consulting Parties

Other Consulting Parties Contacted				iting i air				
1) Has any other agency been contacted and invited to become a consulting party? (X) Yes ((X) <u>Y</u> es () <u>N</u> o	
Consulting Party								
2) FCC Registration Number (FRN):								
3) Name: Rankin County Historical	Societ	ty						
Contact Name								
4) First Name: Society		5) MI:	6) Last Name	: Members		7) Suffix:	
8) Title:		<u> </u>						
Contact Information								
9) P.O. Box: 841	And /Or	10) Street Add	ress:					
11) City: Brandon					12) State: MS	13) Zip (Code: 39042	
14) Telephone Number: (601)825-2672	2			15) Fax Nu	umber:			
16) E-mail Address: rchsinc@aol.com	n							
17) Preferred means of communication:								
(X) E-mail								
() Letter								
() Both								
Dates & Response								
18) Date Contacted 08/31/2022		19)	Date Rep	lied				
(X) No Reply								
() Replied/No Interest								
() Replied/Have Interest								
() Replied/Other								
Additional Information								
20) Information on other consulting partie	s' role o	r interest (option	nal):					

Designation of SHPO/THPO

1) Designate the Lead State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO) based on the location of the tower.

SH	HPO/THPO		
	Name: Mississippi Dept of Archives & History		

2) You may also designate up to three additional SHPOs/THPOs if the APEs include multiple states. If the APEs include other countries, enter the name of the National Historic Preservation Agency and any state and provincial Historic Preservation Agency.

SHPO/THPO Name:	
SHPO/THPO Name:	
SHPO/THPO Name:	

Certification

	0011	inoution						
I certify that all representations on this FCC Form 620 Submission Packet and the accompanying attachments are true, correct, and complete.								
Party Authorized to Sign								
First Name: Maureen	MI: A	Last Name: Bowman		Suffix:				
Signature: Maureen A Bowman Date: 09/15/2022								
EAULUDE TO SIGN THIS ADDITICATION MAY DESLUT IN DISMISSAL OF THE ADDITICATION AND EODEFITUDE OF ANY FEES DAID								

WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. Code, Title 18, Section 1001) AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. Code, Title 47, Section 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503).

Attachments:

Туре	Description	Date Entered
Resumes/Vitae	Attachment 1	09/15/2022
Photographs	Attachment 2	09/15/2022
Map Documents	Attachment 3	09/15/2022
Additional Site Information	Attachment 4	09/15/2022
Area of Potential Effects	Attachment 5	09/15/2022
Tribal/NHO Involvement	Attachment 6	09/15/2022
Historic Properties for Direct Effects	Attachment 7	09/15/2022
Historic Properties for Visual Effects	Attachment 8	09/15/2022
Local Government Involvement	Attachment 9	09/15/2022
Public Involvement	Attachment 10	09/15/2022
State-Specific Forms	Attachment 11	09/15/2022

NT SUBMISSION PACKET -- FCC FORM 620

Approved by OMB 3060-1039
See instructions for public burden estimates

Attachment I. Consultant Information

Provide a current copy of the résumé or curriculum vitae for the Principal Investigator and any researcher or other person who contributed to, reviewed, or provided significant input into the research, analysis, writing or conclusions presented in this filing.

The résumé for the Principal Investigator and any researcher or other person who contributed to, reviewed, or provided significant input into the research, analysis, writing or conclusions are presented in this submission.

Applicant's Name:
Project Name:
Project Number:

Verizon Wireless

Old_Pearson_Rd_CGC

617087433

FCC Form 620



Samantha Bert

Project Scientist 21 B Street Burlington, MA 01803 Mobile: 774-488-4176

Summary of Experience

Samantha Bert is a Project Scientist I specializing in Phase I Environmental Site Assessments and National Environmental Policy Act (NEPA) for the Telecommunications Industry throughout the Northeast.

EBI CONSULTING- Burlington, MA **Project Scientist-** June 2022- Present

Education

High School Diploma – Bristol County Agricultural High School

Bachelors in Environmental Science, Toxicology – University of Massachusetts Amherst



Maureen A. Bowman

Senior Architectural Historian 21 B Street Burlington, MA 01803 Mobile: 617-909-9035

Summary of Experience

Maureen A. Bowman has 15 years of experience and extensive work in Section 106 consultation and NEPA compliance reviews. In addition, she has experience in architectural field surveys, cultural resources surveys, assessing National Register eligibility of historic structures and sites, National Register Nominations, building documentation and building condition assessment.

EBI CONSULTING- Burlington, MA

Senior Architectural Historian - December 2019 - Present

Ms. Bowman's duties at EBI Consulting include facilitating the environmental review process to ensure client's compliance with Federal Communications Commission (FCC) requirements under the National Environmental Policy Act (NEPA). Ms. Bowman's compliance work, on behalf of clients, has resulted in her directly working with federal and state agencies including the Advisory Council on Historic Preservation, the National Register Division of the National Park Service, the Federal Communications Commission, and many State Historic Preservation and Tribal Preservation offices.

SEARCH, Inc- Orlando, FL

Architectural Historian – April 2018 - December 2019

Ms. Bowman's duties at SEARCH included research and field work to evaluate properties for National Register of Historic Places eligibility under the provisions of Section 106 of the National Historic Preservation Act.

EBI CONSULTING- Burlington, MA

Senior Architectural Historian – February 2006 – January 2017

Ms. Bowman developed a thorough understanding of federal regulations to provide technical assistance to wireless industry clients. Facilitated NEPA compliance process for numerous telecommunications projects, with emphasis on those requiring SHPO/THPO consultation. Worked with state and local commissions to develop memoranda of agreements (MOA) to mitigate adverse effects of telecommunications installations.

Relevant Project Experience

SEARCH, Inc. – Principal Investigator for historic resources survey and report preparation for the New England Clean Energy Connect transmission line corridor, multiple counties, Maine. Conducted survey and documentation of historic properties along proposed transmission line routes, made recommendations for further intensive survey and evaluation.

SEARCH, Inc. – Principal Investigator for Ocean Wind offshore wind farm, multiple towns, New Jersey. Conducted survey and documentation of historic properties along proposed utility routes to bring power to shore; and performed visibility assessment of wind turbines from onshore historic resources. Made recommendations for further intensive survey and evaluation.



Maureen A. Bowman

Senior Architectural Historian 21 B Street Burlington, MA 01803 Mobile: 617-909-9035

EBI Consulting - Performed a Cultural Landscape Study for the Cascade County Historic Preservation Commission, Great Falls, MT as part of a MOA. Performed Determination of Eligibility assessments for properties in Massachusetts and Maine. Performed historic district survey update for 100 properties in the Plymouth Historic District for Town of Plymouth, MA

Eastern Michigan University, thesis project - Successful National Register nomination of the Suncook Village Historic Commercial/Civic District for the Town of Pembroke, New Hampshire and a preliminary preservation plan for the downtown area.

Mount Auburn Cemetery, Cambridge, MA - Involved in developing a field survey form to document and assess the condition of the monuments and memorials. Implemented the field survey and helped develop a Microsoft Access database to record the collected information. Performed photographic documentation of all mausoleums in the cemetery.

Education

2004 M.S., Historic Preservation - Eastern Michigan University
1998 B.A., Art History and Studio Art - Indiana University
2009 Coursework for Graduate Certificate, Sustainable Design - Boston Architectural College

Professional Affiliations

Historic New England
National Trust for Historic Preservation
Society of Architectural Historians
Vernacular Architecture Forum



Christopher Grant, M.A. RPA

Archaeologist II – Principal Investigator 231 S. White St. New Orleans, LA 70119 Office: 504.325.9679 Email: cgrant@ebiconsulting.com

Summary of Experience

Mr. Grant completed his formal education in archaeology and meets and/or exceeds the qualifications as outlined in the Secretary of the Interior's Professional Guidelines. He is a Register of Professional Archaeologists (RPA) member experienced in Section-106 Compliance as it pertains to archaeological Phase I, II, and III excavations. He has been employed in the field of cultural resource management since 2008 and has experience working on both precontact and historic sites across the United States and internationally. He has been involved with archaeological research, writing, and curation since 2006. His focus is material culture studies and historic archaeology of the Southeast.

Mr. Grant's responsibilities at EBI include helping clients navigate the environmental review process to ensure compliance with Federal Communications Commission (FCC) requirements under the National Environmental Policy Act (NEPA). In his role as Project Archaeologist and Principal Investigator for EBI Consulting, Mr. Grant is responsible for completing archaeological evaluations and mitigations for telecoms projects in the Central and Southeastern United States to the standards of relevant State Historic Preservation Offices in accordance with FCC guidelines.

Education

M.A.	June 2013	Anthropology	University of Chicago Chicago, IL
M.A.	June 2010	Anthropology (Archaeology track)	Stanford University Stanford, CA
B.A.	June 2008	Anthropology	University of Chicago Chicago, IL

EBI CONSULTING- Burlington, MA

Archaeologist II - Principal Investigator - August 2020 - Present

Please see above for details.

Relevant Project Experience (EXPANDED CV IS AVAILABLE UPON REQUEST)

UNIVERSITY OF CHICAGO - Chicago, IL

Principal Investigator – June 2015-August 2020

In his role as Principal Investigator, Mr. Grant was responsible for research design and implementation of archaeological testing and excavation at 1427 Ursulines Street in historic Faubourg Tremé, New Orleans, Louisiana. Mr. Grant conducted artifact processing and analysis, zooarchaeological analysis, GIS survey, curation, and report writing.



Christopher Grant, M.A. RPA

Archaeologist II — Principal Investigator
231 S. White St.
New Orleans, LA 70119
Office: 504.325.9679
Email: cgrant@ebiconsulting.com

ELOS ENVIRONMENTAL – Hammond, LA

Project Archaeologist - October 2020-December 2020

In his role as Project Archaeologist, Mr. Grant was responsible for directing and leading Phase I and II cultural resource management surveys and excavations at the St. Rosalie Plantation Site in Plaquemines Parish, Louisiana. Additional responsibilities included archaeological monitoring on an active construction site and human osteology.

UNIVERSITY OF CHICAGO - Chicago, IL

Project Archaeologist - June 2012-August 2014

In his role as Project Archaeologist, Mr. Grant conducted archaeological testing and excavations at the site of the Old Ursuline Convent in New Orleans, Louisiana. Additional responsibilities included soil analysis and archaeobotanical processing, laboratory processing, artifact analysis, and report writing.

UNIVERSITY OF NEW ORLEANS - New Orleans, LA

Project Archaeologist – June 2015-August 2016

In his role as Project Archaeologist, Mr. Grant conducted archaeological testing and excavations at 810 Royal Street in New Orleans, Louisiana. He was also responsible for supervising undergraduates at the University of New Orleans Archaeological Field School.

UNIVERSITY OF NEW ORLEANS - New Orleans, LA

Project Archaeologist – June 2013-August 2013

In his role as Project Archaeologist, Mr. Grant conducted archaeological testing and excavations at the site of the Iberville Housing Project in New Orleans, Louisiana. He was also responsible for supervising undergraduates at the University of New Orleans Archaeological Field School.

UNIVERSITY OF CHICAGO - Chicago, IL

Project Archaeologist – June 2008-September 2009

In his role as Project Archaeologist, Mr. Grant was responsible for archaeological testing and excavations at St. Louis Cathedral in New Orleans, Louisiana. Additional responsibilities included artifact processing and analysis and report writing.

GREAT LAKES ARCHAEOLOGICAL RESEARCH CENTER - Milwaukee, WI

Field Technician - June 2008-December 2008

In his role Field Technician, Mr. Grant conducted Phase I archaeological excavations at Midewin National Tallgrass Prairie in Wilmington, Illinois.

Professional Affiliations

Register of Professional Archaeologists Society for Historical Archaeology Louisiana Archaeological Society



Casey Sharp, M.A. RPA

Archaeologist II — Principal Investigator 1439 Beatie Ave SW Atlanta, GA 30310 Mobile: 404.956.0182 Email: csharp@ebiconsulting.com

Summary of Experience

Mr. Sharp completed his formal education in archaeology and meets and/or exceeds the qualifications as outlined in the Secretary of the Interior's Professional Guidelines. He is a Register of Professional Archaeologists (RPA) member experienced in Section-106 Compliance as it pertains to archaeological Phase I and II excavations. He has been employed in the field of cultural resource management since 2018, and he has worked on both precontact and historic sites across the United States and internationally since 2009. His focus is material culture studies and the history of religious and cultural traditions.

Mr. Sharp's responsibilities at EBI include helping clients navigate the environmental review process to ensure compliance with Federal Communications Commission (FCC) requirements under the National Environmental Policy Act (NEPA). In his role as Archaeologist II and Principal Investigator for EBI Consulting, Mr. Sharp is responsible for completing archaeological evaluations and mitigations for telecom projects across the United States to meet all standards of relevant State Historic Preservation Offices and other consulting parties in accordance with FCC guidelines.

Education

M.A.	May 2015	Archaeology	University of Haifa Haifa, Israel
M.A.	May 2012	Religion Minor in Anthropology	University of Georgia Athens, GA
B.A.	May 2010	Religion and Philosophy	University of Georgia Athens, GA

EBI CONSULTING – Burlington, MA **Archaeologist II** – **Principal Investigator** – June 2022 – Present Please see above for details.

Relevant Project Experience (EXPANDED CV IS AVAILABLE UPON REQUEST)

ENVIRONMENTAL CORPORATION OF AMERICA - Alpharetta, GA

Archaeologist and Project Manager – August 2018 – April 2022

In his role as an Archaeologist and Project Manager, Mr. Sharp was responsible for conducting surveys and producing various report types including: NEPA, Section 106, Fish and Wildlife, state specific archaeological site forms, archaeological assessments, tribal monitoring reports, and Phase I environmental reports. Mr. Sharp worked in over 30 states and US territories with a focus on telecom projects, as well as some state DOT contracts. As part of this work, he established new direct connections with SHPO offices, such as Puerto Rico. He also assisted with artifact processing, analysis, and curation.



Casey Sharp, M.A. RPA

Archaeologist II — Principal Investigator 1439 Beatie Ave SW Atlanta, GA 30310 Mobile: 404.956.0182 Email: csharp@ebiconsulting.com

TEL BURNA EXCAVATION PROJECT - Shephelah region, Israel

Area Supervisor – March 2012 – June 2018 (ongoing part time research project)

Mr. Sharp served as an Area Supervisor during summer excavations leading a broad team of international specialists, students, and volunteers. As a core staff member, Mr. Sharp has been a part of numerous publications and professional conference presentations from the project. He has also worked closely with specialists for the collection of geological data, floatation collection and analysis, zooarchaeology, osteoarcheology, and ceramic analysis, among other disciplines. He also organized the field laboratory and prepared artifacts for analysis, curation, and publication.

S.H.A.R.E. - Israel / Palestine

Area Supervisor – April 2011 – August 2018 (part time / volunteer)

Mr. Sharp cofounded the Society for Humanitarian Archaeological Research and Exploration (SHARE) bringing together Israeli and Palestinian youth on professional excavations to collaborate, foster dialogue, and work with one another on the latest research of their shared cultural heritage. SHARE has successfully hosted mixed groups of students on excavations in Ashkelon, Tel Akko, and Jisr ez-Zarqa. The program also conducted numerous lectures and field trips to significant sites, such as ongoing excavations in East Jerusalem.

University of Georgia - Athens, GA

Graduate Instructor – April 2010 – August 2012

Mr. Sharp served as an instructor for the Religion department at UGA. He created his own curriculum for general introductory courses on world religions and western religious traditions and led classes of 25 or more students. He also served as a teaching assistant for larger lecture courses.

Professional Affiliations

Register of Professional Archaeologists



Alexander O'Gorman, Μ Δ

Historian 21 B Street Burlington, MA 01803 Mobile:908-458-3192

Summary of Experience

Alexander (Alex) O'Gorman, M.A., Historian, has five years' experience in historic preservation. He meets the Secretary of the Interior's Professional Qualifications Standards as specified in 36 CFR Part 61 for History. Throughout his five years' experience, Mr. O'Gorman upheld various positions such as a research specialist at three of Preservation Virginia's historic sites — Patrick Henry's Scotchtown, The John Marshall House, and Bacon's Castle; Assistant to the Director of Property Management at the Fairmount Park Conservancy; and as a Historian I with AECOM, Cultural Resources and Historic Preservation. In 2017, Mr. O'Gorman received a Bachelor of Arts in History from Randolph-Macon College, Ashland, VA; and in 2021, he received a Master of Arts in History, concentrating in Public History, from Temple University, Philadelphia, PA. At Temple University, Mr. O'Gorman studied eighteenth and nineteenth century American history, focusing on encounters between Native American and European groups in North America, and the development of the built environment in eighteenth and nineteenth century America. In addition to experience, Mr. O'Gorman holds skills in technical report writing, primary and secondary source research and interpretation, field documentation, architectural assessments, and report production.

At EBI Consulting, Mr. O'Gorman completes all aspects of FCC National Environmental Policy Act (NEPA) compliance reviews and specializes in Section 106 compliance and other cultural resource reviews.

Education

2021 M.A. History, Concentration in Public History, Temple University, Philadelphia, PA
Thesis: Teedyuscung, A Man, A Statue: Folklore, Stories, and Native American Commemorative
Statues and Monuments

2017 B.A. History, Randolph-Macon College, Ashland, VA

Relevant Project Experience (expanded CV available upon request)

EBI CONSULTING- Burlington, MA **Architectural Historian** – October 2021 – Present

AECOM, HISTORIC PRESERVATION AND CULTURAL RESOURCE MANAGEMENT-

Burlington, NJ

Historian I - June 2019 - January 2021

At AECOM, Mr. O'Gorman conducted genealogical research compliant with the National Historic Preservation Act, Section 106, examining deeds, titles, directories, atlas maps, newspapers, archeological materials, and architectural sources towards completing genealogical research reports.



Alexander O'Gorman,

Historian 21 B Street Burlington, MA 01803 Mobile:908-458-3192

THE FAIRMOUNT PARK CONSERVANCY- Philadelphia, PA

Assistant to the Director of Property Management – May 2020 – August 2020

At the Fairmount Park Conservancy, Mr. O'Gorman assisted the Director of Property Management in examining the interior and exterior of 13 historic homes leased by the Fairmount Park Conservancy; and created a Property Inspection Report for each home in compliance with the Secretary of the Interior's Preservation Standards for Treatment of Historic Properties.

PRESERVATION VIRGINIA

Bacon's Castle, Surry County, VA
The John Marshall House, Richmond, VA
Patrick Henry's Scotchtown, Scotchtown, VA
Research Specialist – June 2016 – May 2017

With Preservation Virginia, Mr. O'Gorman completed three research projects for three of Preservation Virginia's preserved heritage sites. At Bacon's Castle, he researched the proprietors of Bacon's Castle, Arthur Allen Senior and Arthur Allen II, and created an unpublished site research report. At The John Marshall House, he led research on free Black societies in Richmond, 1780-1835, and created an unpublished site research report and directory of sources. And, at Patrick Henry's Scotchtown, he designed and developed a tour which included the histories of Patrick Henry and Nez Perce's, Chief Joseph.

Professional Affiliations

The National Council of Public History
American Cultural Resources Association
PA Museums
Friends of the Wissahickon
The Fairmount Park Conservancy

NT SUBMISSION PACKET -- FCC FORM 620

Approved by OMB 3060-1039 See instructions for public burden estimates

Attachment 2. **Site Information - Photographs**

You are required to provide photographs and maps as part of this filing. Additional site information can be provided in an optional attachment.

Photograph Requirements:

Except in cases where no Historic Properties were identified within the Areas of Potential Effects, submit photographs as described below. Photographs should be in color, marked so as to identify the project, keyed to the relevant map or text, and dated; the focal length of the lens and the height of the camera should be noted. The source of any photograph included but not taken by the Applicant or its consultant (including copies of historic images) should be identified on the photograph.

- a. Photographs taken from the collocation site should show views from the proposed location in all directions. The direction (e.g., north, south, etc.) should be indicated on each photograph, and, as a group, the photographs should present a complete (360 degree) view of the area around the communications tower or non-tower structure.
- b. Photographs of all listed and eligible properties within the Areas of Potential Effects.
- c. If any listed or eligible properties are visible from the proposed collocation site, photographs looking at the site from each historic property. The approximate distance in feet (meters) between the site and the historic property should be included. If any listed or eligible properties are within the APE, photos looking at each historic property should be included.

Include aerial photos of the APE for visual effects, if available. There are a variety of publicly available websites that provide aerial photographs.

Please see the attached Photographs, taken on August 31st, 2022. A photograph location map is included within this attachment.

> Applicant's Name: <u>Verizon Wireless</u> Project Name: Old_Pearson_Rd_CGC Project Number: __

617087433

FCC Form 620

TRIBAL CORRESPONDENCE SUMMARY TABLE



Site:Old Pearson Road Site ID: US-MS-5200

TCNS Number: 254587 TCNS Initial Notification Date: 8/26/2022

TCN3 Number: 234387				Tens mittal Notification Date. of 20/2022			
Tribe	TCNS Auto Response	Request from Tribe	Invitation to Comment Letter Sent	Follow Up Contact Attempt	Tribe Response	FCC Referral	Comments / Required Actions
Crow Creek Sioux Tribal Council	No interest in collocations	None	None	None	No interest		No Further Action
	August 26, 2022				August 24, 2022	N/A	
alabama-Coushatta Tribe of exas	None	None	Required project information sent	Follow-Up Correspondence Sent	None	October 27, 2022	No Further Action
	August 26, 2022		9/21/2022; Update sent 10/31/2024	October 12, 2022		Tribe Referred to the FCC - No Response within 15 Days	
Coushatta Indian Tribe	None	None	Required project information sent	Follow-Up Correspondence Sent	None	October 27, 2022	No Further Action
	August 26, 2022		9/21/2022; Update sent 10/31/2024	October 12, 2022		Tribe Referred to the FCC - No Response within 15 Days	
lena Band of Choctaw Indians	Requests to review project	None	Required project information sent	None	Concurrence / Clearance		No Further Action
	August 26, 2022		9/21/2022; Update sent 10/31/2024		9/30/2022; 11/7/2024	N/A	
Mississippi Band of Choctaw Indians	None	None	Required project information sent	Follow-Up Correspondence Sent	None	October 27, 2022	No Further Action
	August 26, 2022		9/21/2022; Update sent 10/31/2024	October 12, 2022		Tribe Referred to the FCC - No Response within 15 Days	
Bad River Band of Lake Superior Tribe of Chippewa Indians	No interest if no response within 30 days	None	None	None	None		No Further Action
	August 26, 2022					N/A	
Red Cliff Band of Lake Superior Chippewa Indians of Wisconsin	Requests to review project	None	Required project information sent	Follow-Up Correspondence Sent	None	October 27, 2022	No Further Action
	August 26, 2022		9/21/2022; Update sent 10/31/2024	October 12, 2022		Tribe Referred to the FCC - No Response within 15 Days	

TRIBAL CORRESPONDENCE SUMMARY TABLE



Site:Old Pearson Road Site ID: US-MS-5200

TCNS Number: 254587 TCNS Initial Notification Date: 8/26/2022

Tribe	TCNS Auto Response	Request from Tribe	Invitation to Comment Letter Sent	Follow Up Contact Attempt	Tribe Response	FCC Referral	Comments / Required Actions
Choctaw Nation of Oklahoma	None		Required project information sent	None	Concurrence / Clearance		No Further Action
	August 26, 2022		9/21/2022; Update sent 10/31/2024		9/21/2022; 11/19/2024	N/A	
Cherokee Nation	Requests to review project		Required project information sent	None	No interest		No Further Action
	August 26, 2022		9/21/2022; Update sent 10/31/2024		September 23, 2022	N/A	
Alabama Quassarte Tribal Town	Clearance per NOO instructions	None	None	None	None		No Further Action
	August 26, 2022					N/A	
	No interest if no response within 30 days	None	None	None	None	None	
	August 26, 2022						N/A

From: <u>Lillie Williamson</u>
To: <u>Kristian Clark</u>

Subject: Re: UPDATE: TCNS 254587 (011697-PR, previously 6122007817) Richland, MS

Date: Thursday, November 7, 2024 3:46:45 PM

Attachments: image003.png image010.png

To Whom It May Concern:

Thank you for the update and additional information that was sent regarding TCNS# 254587, 2622 S PEARSON ROAD, RICHLAND, RANKIN COUNTY, MS.

After reviewing the updated information of (new plans have been received calling for the installation of an additional 1 foot by 100 feet barrier silt fence constructed to the west of the lease area; a 3 foot wide swale within a 5 feet by 90 feet installation area to the south of the lease area; a 3 foot wide swale with a 5 feet by 80 feet installation area to the north of the lease area that cuts across the proposed access and utility easement; and two culverts are proposed, within the limits of the original access and utility easement. in addition, the client has changed from Verizon Wireless to The Towers, LLC.), our original concurrence of this project is still in effect.

The Tribe's original reply was sent on <u>9-30-2022</u> and an email was sent to the person on file with the FCC: **ROSE M. DAUGHERTY.**

For your files, below is the original response for this project.

"We are unaware of any sacred sites or significant cultural resources in this area. However, if the applicant discovers archaeological remains or resources during construction, the Applicant should immediately stop construction and notify the appropriate Federal Agency and the Tribe.

If you have any comments or questions, please feel free to contact me.

Please refer to the contact information below.

Thank you

From: Vangie P. Robinson
To: Kristian Clark

Subject: TCNS 254587 (011697-PR, previously 6122007817) Richland, MS UPDATE:

Date: Tuesday, November 19, 2024 11:37:07 AM

November 19, 2024

Kristian Clark

The Choctaw Nation of Oklahoma has reviewed the additional information submitted for the above referenced project. We have concluded that all installations will not change the area of potential effect so the proposed undertaking continues to have (no historic Properties effected) on historic properties.

Thank you

TCNS Review Specialist

Vangie Robinson

Choctaw Nation of Oklahoma Historic Preservation Office

P.O. Box 1210 Durant, Ok 74701 (580) 924-8280 Ext. 2590 (580) 920-3181 Fax

vrobinson@choctawnation.com



This message is intended only for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential and exempt from disclosure. If you have received this message in error, you are hereby notified that we do not consent to any reading, dissemination, distribution or copying of this message. If you have received this communication in error, please notify the sender immediately and destroy the transmitted information. Please note that any view or opinions presented in this email are solely those of the author and do not necessarily represent those of the Choctaw Nation.



Project Number: All Tribal

Contact Name: Joy Montgomery/ Delvin Johnson Contact Title: Historic Consultant/Historic Preservation

Officer

Organization: Alabama-Coushatta Tribe of Texas

Address: 571 State Park Road 56

City: Livingston

EBI Contact: Angela Blankenship

Project Name: Date: 5/16/2024 Time: 10:30am

Phone: 936-577-9626

Email:

joy.montgomery@actribe.org / Delvin.johnson@actribe.org

Sate: TX Zip: 77351

Results:

Delvin Johnson, Historic Preservation Officer of the Alabama-Coushatta Tribe of Texas, has confirmed that all project materials should be sent to him at Delvin.Johnson@actribe.org as well as Joy Montgomery, Section 106 Historic Consultant, at joy.montgomery@actribe.org

Follow-up Action Required:

None



Project Number: All Projects Contact Name: Marvin DeFoe

Contact Title: Tribal Historic Preservation Officer Organization: Red Cliff Band of Lake Superior

Chippewa Indians of Wisconsin Address: 88455 Pike Road, HWY 13

State: WI Zip: 54814

Date: 4/5/2024 Time: 3:00AM EST

Project Name: All Projects

Email: marvin.defoe@redcliff-nsn.gov

Phone: 717-779-3761

Address: 88455 Pike Road, HWY 13 City: Bayfield

EBI Contact: Kristian Clark, Tribal Coordinator

Results:

As of April 5, 2024, the Red Cliff Band of Lake Superior Chippewa Indians of Wisconsin have updated their NOO contact to include THPO Assistant Chanell Curran at chanell.curran@redcliff-nsn.gov.

Going forward, all project information should be sent to both chanell.curran@recliff-nsn.gov, as well as to THPO Marvin DeFoe at marvin.defoe@redcliff-nsn.gov.

The contact listed on older NOOs, Edwina Buffalo Reyes, Edwina.buffalo-reyes@redcliff-nsn.gov is no longer valid.

Follow-up Action Required: None



Project Number: All Projects

Date: 11/13/2024

EBI Contact: Steff Dansereau, Tribal Consultation Operations Manager

Results:

When sending Tribal Updates, it is EBI Consulting's policy to contact all Native American Tribal Nations who were originally consulted, including federally-recognized American Indian Tribes, state-recognized American Indian Tribes, Alaska Native Villages, and Native Hawaiian Organizations, as applicable to the proposed project. EBI will not open new consultation with tribes who did not receive initial project documentation.

Project documentation will be sent to the most up-to-date contact via their preferred delivery method, which may not be the information reflected on the project's original FCC TCNS Notice of Organizations.

From: Kristian Clark

Bcc: Delvin Johnson; joy.montgomery@actribe.org; kdawsey@coushatta.org; dakotajohn@coushatta.org; Lillie Williamson;

Section106; marvin.defoe@redcliff-nsn.gov; chanell.curran@redcliff-nsn.gov; vrobinson@choctawnation.com; grpUd-

<u>LawandJustice HistoricPreservation; Gwen Terrapin</u>

Subject: UPDATE: TCNS 254587 (011697-PR, previously 6122007817) Richland, MS

Date: Thursday, October 31, 2024 1:11:00 PM
Attachments: 011697-PR SHPO Addendum Letter.pdf

image003.png image010.png

RE: Update to Invitation to Comment in Section 106 Consultation Process

TCNS Reference #: 254587 TCNS Date: August 26, 2022

Site Identifier: US-MS-5200 Old Pearson Road (New Site Name)

Site Address: 2622 S Pearson Road

Richland, Rankin County, MS 39218

EBI Project Number: 011697-PR, previously 6122007817

Project Description: Proposed construction of a new telecommunications self-support tower

and compound resulting in ground disturbance.

UPDATE: New plans have been received calling for the installation of an additional I-foot by 100-feet barrier silt fence constructed to the west of the lease area; a 3-foot wide swale within a 5-feet by 90-feet installation area to the south of the lease area; a 3-foot wide swale within a 5-feet by 80-feet installation area to the north of the lease area that cuts across the proposed access and utility easement; and two culverts are proposed, within the limits of the original access and utility easement. Additionally, the client has changed from Verizon Wireless to The Towers, LLC.

Please see attached SHPO addendum for more details.

Greetings,

EBI Consulting (EBI) has been retained to conduct a review of the above proposed wireless telecommunications facility project for compliance with the Federal Communications Commission's (FCC) National Environmental Policy Act (NEPA) implementing procedures and guidance contained within the Second Report and Order dated May 3, 2018.

As part of this review, a notice was sent to your Tribe via the Tower Construction Notification System (TCNS) (Notification ID 254587 on August 26, 2022). However, subsequent to the TCNS Notification, there has been a revision to the project. Please see attached drawings and documentation for updated information.

EBI would appreciate your comments on the proposed project's potential effect on Historic Properties of religious or cultural significance to your tribe. Please do not hesitate to contact me if you have any questions or concerns about the proposed project.

EBI greatly appreciates your time and consideration of this matter.

Respectfully submitted,



Kristian Clark
Tribal Coordinator II

Email: kclark@ebiconsulting.com
Phone: 417-251-0754



21 B Street | Burlington, MA | 01803 www.ebiconsulting.com

Kristian Clark

From: Microsoft Outlook < MicrosoftExchange329e71ec88ae4615bbc36ab6ce41109e@ebiconsulting.com > To:

Delvin Johnson; joy.montgomery@actribe.org; kdawsey@coushatta.org; dakotajohn@coushatta.org;

Lillie Williamson; Section106; marvin.defoe@redcliff-nsn.gov; chanell.curran@redcliff-nsn.gov; vrobinson@choctawnation.com; grpUd-LawandJustice_HistoricPreservation; Gwen Terrapin

Sent: Thursday, October 31, 2024 1:13 PM

Relayed: UPDATE: TCNS 254587 (011697-PR, previously 6122007817) Richland, MS Subject:

Delivery to these recipients or groups is complete, but no delivery notification was sent by the destination server:

Delvin Johnson (delvin.johnson@actribe.org)

joy.montgomery@actribe.org (joy.montgomery@actribe.org)

kdawsey@coushatta.org (kdawsey@coushatta.org)

dakotajohn@coushatta.org (dakotajohn@coushatta.org)

Lillie Williamson (Iwilliamson@jenachoctaw.org)

Section106 (section106@choctaw.org)

marvin.defoe@redcliff-nsn.gov (marvin.defoe@redcliff-nsn.gov)

chanell.curran@redcliff-nsn.gov (chanell.curran@redcliff-nsn.gov)

vrobinson@choctawnation.com (vrobinson@choctawnation.com)

grpUd-LawandJustice HistoricPreservation (historicpreservation@cherokee.org)

Gwen Terrapin (gwen-terrapin@cherokee.org)

Subject: UPDATE: TCNS 254587 (011697-PR, previously 6122007817) Richland, MS

UPDATE: TCNS 254587 (011697...

TRIBAL CORRESPONDENCE SUMMARY TABLE



Site: Old_Pearson_Rd_CGC Site ID: 617087433

TCNS Number: 254587 TCNS Initial Notification Date: 8/26/2022

Tribe	TCNS Auto Response	Request from Tribe	Invitation to Comment Letter Sent	Follow Up Contact Attempt	Tribe Response	FCC Referral	Comments / Required Actions
Crow Creek Sioux Tribal Council	No interest in collocations	None	None	None	No interest	N/A	No Further Action
	August 26, 2022				August 24, 2022		
Alabama-Coushatta Tribe of Texas	None	None	Required project information sent	Follow-Up Correspondence Sent	None	October 27, 2022 Tribe Referred to the FCC - No	No Further Action
	August 26, 2022		September 21, 2022	October 12, 2022		Response within 15 Days	
Coushatta Indian Tribe	None	None	Required project information sent	Follow-Up Correspondence Sent	None	October 27, 2022	No Further Action
	August 26, 2022		September 21, 2022	October 12, 2022		Tribe Referred to the FCC - No Response within 15 Days	
Jena Band of Choctaw Indians	Requests to review project	None	Required project information sent	None	Concurrence / Clearance		No Further Action
	August 26, 2022		September 21, 2022		September 30, 2022	N/A	
Mississippi Band of Choctaw Indians	None	None	Required project information sent	Follow-Up Correspondence Sent	None	October 27, 2022	No Further Action
	August 26, 2022		September 21, 2022	October 12, 2022		Tribe Referred to the FCC - No Response within 15 Days	
	No interest if no response within 30 days	None	None	None	None		No Further Action
	August 26, 2022					N/A	
Red Cliff Band of Lake Superior Chippewa Indians of Wisconsin	Requests to review project	None	Required project information sent	Follow-Up Correspondence Sent	None	October 27, 2022	No Further Action
	August 26, 2022		September 21, 2022	October 12, 2022		Tribe Referred to the FCC - No Response within 15 Days	

Tribe	TCNS Auto Response	Request from Tribe	Invitation to Comment Letter Sent	Follow Up Contact Attempt	Tribe Response	FCC Referral	Comments / Required Actions
Choctaw Nation of Oklahoma	None	None	Required project information sent	None	Concurrence / Clearance		No Further Action
	August 26, 2022		September 21, 2022		September 21, 2022	N/A	
Cherokee Nation	Requests to review project	None	Required project information sent	None	No interest		No Further Action
						N/A	
	August 26, 2022		September 21, 2022		September 23, 2022		
Alabama Quassarte Tribal Town	Clearance per NOO instructions	None	None	None	None		No Further Action
						N/A	
	August 26, 2022						
	No interest if no response within 30 days	None	None	None	None	None	
	August 26, 2022						N/A

Rose Daugherty

From: towernotifyinfo@fcc.gov

Sent: Friday, August 26, 2022 2:01 AM

To: Rose Daugherty
Cc: tcnsweekly@fcc.gov

Subject: NOTICE OF ORGANIZATION(S) WHICH WERE SENT PROPOSED TOWER

CONSTRUCTION NOTIFICATION INFORMATION - Email ID #8272444

Dear Applicant:

Thank you for using the Federal Communications Commission's (FCC) Tower Construction Notification System (TCNS). The purpose of this electronic mail message is to inform you that the following authorized persons were sent the notification that you provided through TCNS, which relates to your proposed antenna structure. The information was forwarded by the FCC to authorized TCNS users by electronic mail and/or regular mail (letter). We note that the review period for all parties begins upon receipt of the Submission Packet pursuant to Section VII.A of the NPA and notifications that do not provide this serve as information only.

Persons who have received the notification that you provided include leaders or their designees of federally-recognized American Indian Tribes, including Alaska Native Villages (collectively "Tribal Nations"), Native Hawaiian Organizations (NHOs), and State Historic Preservation Officers (SHPOs). For your convenience in identifying the referenced Tribal Nations and NHOs and in making further contacts, the City and State of the Seat of Government for each Tribal Nation and NHO, as well as the designated contact person, is included in the listing below. We note that Tribal Nations may have Section 106 cultural interests in ancestral homelands or other locations that are far removed from their current Seat of Government. Pursuant to the Commission's rules as set forth in the Nationwide Programmatic Agreement for Review of Effects on Historic Properties for Certain Undertakings Approved by the Federal Communications Commission (NPA), all Tribal Nations and NHOs listed below must be afforded a reasonable opportunity to respond to this notification, consistent with the procedures set forth below, unless the proposed construction falls within an exclusion designated by the Tribal Nation or NHO. (NPA, Section IV.F.4).

The notification that you provided was forwarded to the following Tribal Nations and NHOs. A Tribal Nation or NHO may not respond until a full Submission Packet is provided. If, upon receipt, the Tribal Nation or NHO does not respond within a reasonable time, you should make a reasonable effort at follow-up contact, unless the Tribal Nation or NHO has agreed to different procedures (NPA, Section IV.F.5). In the event a Tribal Nation or NHO does not respond to a follow-up inquiry, or if a substantive or procedural disagreement arises between you and a Tribal Nation or NHO, you must seek guidance from the Commission (NPA, Section IV.G). These procedures are further set forth in the FCC's Second Report and Order released on March 30, 2018 (FCC 18-30).

1. THPO Merle Marks - Crow Creek Sioux Tribe - (PO Box: 286) Ft Thompson, SD - cchistory@midstatesd.net - 605-245-2221 - electronic mail

Exclusions: The Crow Creek Sioux Tribe has no interest in collocation projects. The Crow Creek Sioux Tribe requests the following states be removed from our geographic areas of interest, Arkansas , Virginia , South Carolina , Ohio , North Carolina, Michigan, Illinois

2. Historic Preservation Officer Bryant J Celestine - Alabama-Coushatta Tribe of Texas - 571 State Park Road 56 Livingston, TX - Celestine.bryant@actribe.org - 936-563-1100 - electronic mail
3. THPO Kristian Poncho - Coushatta Indian Tribe - (PO Box: 10) Elton, LA - kponcho@coushatta.org - 337-584-1401 - electronic mail
4. TCNS Representative Lillie Williamson - Jena Band of Choctaw Indians - (PO Box: 14) Jena, LA - lwilliamson@jenachoctaw.org - 318-992-8258 - electronic mail Exclusions: All FCC correspondence should be sent electronically to the e-mail lwilliamson@jenachoctaw.org
5. THPO Kenneth H Carleton - Mississippi Band of Choctaw Indians - 101 Industrial Road (PO Box: 6010) Choctaw, MS - kcarleton@choctaw.org - 601-650-7316 - electronic mail
6. THPO Edith Leoso - Bad River Band of Lake Superior Tribe of Chippewa Indians - (PO Box: 39) Odanah, WI - thpo@badriver-nsn.gov; THPOAsst@badriver-nsn.gov - 715-682-7123 - electronic mail
If the applicant/tower builder receives no response from the Bad River Band of Lake Superior Tribe of Chippewa Indians within 30 days after notification through TCNS, the Bad River Band of Lake Superior Tribe of Chippewa Indians has no interest in participating in pre-construction review for the proposed site. The Applicant/tower builder, however, must immediately notify the Bad River Band of Lake Superior Tribe of Chippewa Indians in the event archaeological properties or human remains are discovered during construction, consistent with Section IX of the Nationwide Programmatic Agreement and applicable law.
7. THPO Marvin DeFoe - Red Cliff Band of Lake Superior Chippewa Indians of Wisconsin - 88455 Pike Road, HWY 13 Bayfield, WI - Marvin.DeFoe@redcliff-nsn.gov; Edwina.Buffalo-Reyes@redcliff-nsn.gov - 715-779-3761 - electronic mail Exclusions: Boozhoo, we do not have the Red Cliff Portal site online anymore and apologize for the inconvenience. If you have a project that has already been paid for or would like to voluntarily pay for, please email documents for project review to THPO@redcliff-nsn.gov. This address is only to be used by Consultants who are voluntarily paying for
projects. If you have any questions, please contact Marvin Defoe, THPO Manager at (715) 779-3700 Ext. 4244 or Edwina Buffalo-Reyes, THPO Assistant at (715) 779-3700Ext. 4243.

8. TCNS Review Specialist Vangie Robinson - Choctaw Nation of Oklahoma - Drawer 1210 Durant, OK - vrobinson@choctawnation.com - 580-924-8280 (ext: 2590) - electronic mail

9. Gwen Terrapin - Cherokee Nation - (PO Box: 948) Tahlequah, OK - historicpreservation@cherokee.org; gwenterrapin@cherokee.org - 918-772-4165 - electronic mail

Exclusions: Please email all review documents for FCC Form 620/621 (i.e. archeologist report, photos, SHPO response, etc.) to historicpreservation@cherokee.org or gwen-terrapin@cherokee.org. You may also mail a cover letter and a CD or flash drive containing the review documents and FCC forms to: Cherokee Nation: Attn: Gwen Terrapin, PO Box 948, Tahleguah, OK 74465. Should you have any questions, please do not hesitate to email or call 918.772.4165.

Wado, Cherokee Nation

10. Second Chief Mary Tiger - Alabama Quassarte Tribal Town - (PO Box: P.O. Box 187) Wetumka, OK - mary.tiger@alabama-quassarte.org - 405-452-3987 - electronic mail

Exclusions: The Alabama Quassarte Tribal Town is unaware of any cultural or sacred sites located within the immediate project area. The AQTT's Historic Preservation Department concurs that there should be no adverse effect to any known historic properties and that work should proceed as planned. However, as the project is located in an area that is general historic interest to the Tribe, we request that work be stopped and our office contacted immediately if any Native American cultural materials or human remains are encountered.

If you have any questions, please contact our office at the number below.

Respectfully,

Alabama Quassarte Tribal Town P.O. Box 187 Wetumka,Ok 74883 (P) 405-452-3881 (F) 405-452-3889

11. THPO Earl J Barbry Jr - Tunica-Biloxi Tribe of LA - Tunica-Biloxi Historic Preservation Office Attn: Earl, Jr., CERC (PO

Box: 1589) Marksville, LA - earlii@tunica.org - 318-240-6451 - electronic mail

Exclusions: Email all requests for review rather than mailing hard copy.

If the applicant/tower builder receives no response from the Tunica-Biloxi Tribe of LA within 30 days after notification through TCNS, the Tunica-Biloxi Tribe of LA has no interest in participating in pre-construction review for the proposed site. The Applicant/tower builder,

however, must immediately notify the Tunica-Biloxi Tribe of LA in the event archaeological properties or human remains are discovered during construction, consistent with Section IX of the Nationwide Programmatic Agreement and applicable law.

The notification that you provided was also forwarded to the following SHPOs in the State in which you propose to construct and neighboring States. The information was provided to these SHPOs as a courtesy for their information and planning. You need make no effort at this time to follow up with any SHPO that does not respond to this notification. Prior to construction, you must provide the SHPO of the State in which you propose to construct (or the Tribal Historic Preservation Officer, if the project will be located on certain Tribal lands), with a Submission Packet pursuant to Section VII.A of the NPA unless the project is excluded from SHPO review under Section III D or E of the NPA.

- 15. Deputy SHPO Ken Grunewald Department of Arkansas Heritage 323 Center Street Suite 1500 Little Rock, AR keng@arkansasheritage.org 501-324-9357 electronic mail
- 16. SHPO Katie Blount Mississippi Dept of Archives & History (PO Box: 571) Jackson, MS kblount@mdah.state.ms.us 601-359-6850 electronic mail
- 17. Deputy SHPO Kenneth H P'Pool Division of Historic Preservation (PO Box: 571) Jackson, MS kppool@mdah.state.ms.us 601-359-6940 electronic mail

TCNS automatically forwards all notifications to all Tribal Nations and SHPOs that have an expressed interest in the geographic area of a proposal. However, if a proposal for PTC wayside poles falls within a designated exclusion, you need not expect any response and need not pursue any additional process with that Tribal Nation or SHPO. In addition, a particular Tribal Nation or SHPO may also set forth policies or procedures within its details box that exclude from review certain facilities (for example, a statement that it does not review collocations with no ground disturbance; or that indicates that no response within 30 days indicates no interest in participating in pre-construction review).

Please be advised that the FCC cannot guarantee that the contact(s) listed above have opened and reviewed an electronic or regular mail notification. If you learn that any of the above contact information is no longer valid, please contact the FCC by emailing tcnshelp@fcc.gov. The following information relating to the proposed tower was forwarded to the person(s) listed above:

Notification Received: 08/19/2022

Notification ID: 254587

Excluded from SHPO Review: No

Tower Owner Individual or Entity Name: Verizon Wireless

Consultant Name: Rose M Daugherty

Street Address: 18 Olivia St

City: Enterprise State: ALABAMA Zip Code: 36330 Phone: 615-708-6967

Email: rdaugherty@ebiconsulting.com

Structure Type: LTOWER - Lattice Tower Latitude: 32 deg 12 min 53.1 sec N Longitude: 90 deg 7 min 46.3 sec W Location Description: 2622 S Pearson Road

City: Richland State: MISSISSIPPI County: RANKIN

Detailed Description of Project: Proposed construction of a new telecommunications self-support tower and compound

resulting in ground disturbance. Please see Attachment 4 of this filing for project design details. 617087433

(6122007817)

Ground Elevation: 114.3 meters

Support Structure: 61.3 meters above ground level Overall Structure: 64.3 meters above ground level

Overall Height AMSL: 178.6 meters above mean sea level

If you have any questions or comments regarding this notice, please contact the FCC using the electronic Help Request form located on the FCC's website at:

https://www.fcc.gov/wireless/available-support-services

You may also call the FCC Support Center at (877) 480-3201 (TTY 717-338-2824). Hours are from 8:00 a.m. to 6:00 p.m. Eastern Time, Monday through Friday (except Federal holidays). To provide quality service and ensure security, all telephone calls are recorded.

Thank you,

Federal Communications Commission



TCNS Certification

C: N / 51.75 // OLL D	2 666 (1707422	
Site Name / FUZE #: Old Pearson F	Rd_CGC / 61/08/433	
TCNS #:254587		
All notified Tribes either responded the was referred to the FCC through the T		•
This also certifies that should I receive you immediately.	e in the future any Tribal req	uest regarding this site, I will notify
Date:	Consultant Name/Address:	Rose Daugherty
		EBI Consulting
		6876 Susquehanna Trail So.
		York, PA 17403



Rose Daugherty

From: towernotifyinfo@fcc.gov

Sent: Wednesday, August 24, 2022 10:42 AM

To: Rose Daugherty

Cc: tcns.fccarchive@fcc.gov; cchistory@midstatesd.net

Subject: Reply to Proposed Tower Structure (Notification ID: 254587) - Email ID #8276468

Dear Rose M Daugherty,

Thank you for using the Federal Communications Commission's (FCC) Tower Construction Notification System (TCNS). The purpose of this email is to inform you that an authorized user of the TCNS has replied to a proposed tower construction notification that you had submitted through the TCNS.

The following message has been sent to you from THPO Merle Marks of the Crow Creek Sioux Tribe in reference to Notification ID #254587:

We have no interest in this site. However, if the Applicant discovers archaeological remains or resources during construction, the Applicant should immediately stop construction and notify the appropriate Federal Agency and the Tribe.

For your convenience, the information you submitted for this notification is detailed below.

Notification Received: 08/19/2022

Notification ID: 254587

Tower Owner Individual or Entity Name: Verizon Wireless

Consultant Name: Rose M Daugherty

Street Address: 18 Olivia St

City: Enterprise State: ALABAMA Zip Code: 36330 Phone: 615-708-6967

Email: rdaugherty@ebiconsulting.com

Structure Type: LTOWER - Lattice Tower Latitude: 32 deg 12 min 53.1 sec N Longitude: 90 deg 7 min 46.3 sec W

Location Description: 2622 S Pearson Road

City: Richland State: MISSISSIPPI County: RANKIN Detailed Description of Project: Proposed construction of a new telecommunications self-support tower and compound resulting in ground disturbance. Please see Attachment 4 of this filing for project design details. 617087433 (6122007817)

Ground Elevation: 114.3 meters

Support Structure: 61.3 meters above ground level Overall Structure: 64.3 meters above ground level

Overall Height AMSL: 178.6 meters above mean sea level

Rose Daugherty

From: towernotifyinfo@fcc.gov

Sent: Friday, September 30, 2022 3:23 PM

To: Rose Daugherty

Cc: tcns.fccarchive@fcc.gov; lwilliamson@jenachoctaw.org

Subject: Reply to Proposed Tower Structure (Notification ID: 254587) - Email ID #8318861

Dear Rose M Daugherty,

Thank you for using the Federal Communications Commission's (FCC) Tower Construction Notification System (TCNS). The purpose of this email is to inform you that an authorized user of the TCNS has replied to a proposed tower construction notification that you had submitted through the TCNS.

The following message has been sent to you from TCNS Representative Lillie Williamson of the Jena Band of Choctaw Indians in reference to Notification ID #254587:

To Whom It May Concern:

We are unaware of any sacred sites or significant cultural resources in this area. However, if the applicant discovers archaeological remains or resources during construction, the Applicant should immediately stop construction and notify the appropriate Federal Agency and the Tribe.

If you have any comments or questions, please feel free to contact me.

Please refer to the information below.

Thank you.

Lillie Williamson TCNS Representative Jena Band of Choctaw Indians P. O. Box 14 Jena, LA 71342

ph: 318-992-8258 fax: 318-992-8244

email: lwilliamson@jenachoctaw.org

For your convenience, the information you submitted for this notification is detailed below.

Notification Received: 08/19/2022

Notification ID: 254587

Tower Owner Individual or Entity Name: Verizon Wireless

Consultant Name: Rose M Daugherty

Street Address: 18 Olivia St

City: Enterprise State: ALABAMA Zip Code: 36330 Phone: 615-708-6967

Email: rdaugherty@ebiconsulting.com

Structure Type: LTOWER - Lattice Tower Latitude: 32 deg 12 min 53.1 sec N Longitude: 90 deg 7 min 46.3 sec W

Location Description: 2622 S Pearson Road

City: Richland State: MISSISSIPPI County: RANKIN

Detailed Description of Project: Proposed construction of a new telecommunications self-support tower and compound

resulting in ground disturbance. Please see Attachment 4 of this filing for project design details. 617087433

(6122007817)

Ground Elevation: 114.3 meters

Support Structure: 61.3 meters above ground level Overall Structure: 64.3 meters above ground level

Overall Height AMSL: 178.6 meters above mean sea level

Rose Daugherty

Sent: Wednesday, September 21, 2022 2:28 PM

To: Rose Daugherty

Subject: TCNS No. 254587 (6122007817) - Old_Pearson_Rd_CGC, Richland, MS

September 21, 2022

Rose Daugherty

The Choctaw Nation of Oklahoma has reviewed the information provided on the (OLD_PEARSON_RD_CGC) (TCNS# 254587) Telecommunications Tower located in (Richland, Rankin County, Mississippi) The Choctaw Nation Historic Preservation Department concurs that there should be (no historic properties effect) to any known historic properties and that work should proceed as planned. However, as the project is located in an area that is of general historic interest to the Tribe, we request that work stop, and our office be contacted immediately if any Native American cultural materials or human remains are encountered. If you have any questions, please contact our office at 580-924-8280 ext. 2559.

Thank you

Vangie Robinson TCNS Review Specialist

Choctaw Nation of Oklahoma Historic Preservation Office

P.O. Box 1210 Durant, Ok 74701 (580) 924-8280 Ext. 2590 (580) 920-3181 Fax

vrobinson@choctawnation.com



This message is intended only for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential and exempt from disclosure. If you have received this message in error, you are hereby notified that we do not consent to any reading, dissemination, distribution or copying of this message. If you have received this communication in error, please notify the sender immediately and destroy the transmitted information. Please note that any view or opinions presented in this email are solely those of the author and do not necessarily represent those of the Choctaw Nation.

Rose Daugherty

From: towernotifyinfo@fcc.gov

Sent: Friday, September 23, 2022 12:01 PM

To: Rose Daugherty

Cc: tcns.fccarchive@fcc.gov; historicpreservation@cherokee.org; gwen-

terrapin@cherokee.org

Subject: Reply to Proposed Tower Structure (Notification ID: 254587) - Email ID #8313351

Dear Rose M Daugherty,

Thank you for using the Federal Communications Commission's (FCC) Tower Construction Notification System (TCNS). The purpose of this email is to inform you that an authorized user of the TCNS has replied to a proposed tower construction notification that you had submitted through the TCNS.

The following message has been sent to you from Gwen Terrapin of the Cherokee Nation in reference to Notification ID #254587:

We have no interest in this site. However, if the Applicant discovers archaeological remains or resources during construction, the Applicant should immediately stop construction and notify the appropriate Federal Agency and the Tribe.

For your convenience, the information you submitted for this notification is detailed below.

Notification Received: 08/19/2022

Notification ID: 254587

Tower Owner Individual or Entity Name: Verizon Wireless

Consultant Name: Rose M Daugherty

Street Address: 18 Olivia St

City: Enterprise State: ALABAMA Zip Code: 36330 Phone: 615-708-6967

Email: rdaugherty@ebiconsulting.com

Structure Type: LTOWER - Lattice Tower Latitude: 32 deg 12 min 53.1 sec N Longitude: 90 deg 7 min 46.3 sec W

Location Description: 2622 S Pearson Road

City: Richland State: MISSISSIPPI County: RANKIN Detailed Description of Project: Proposed construction of a new telecommunications self-support tower and compound resulting in ground disturbance. Please see Attachment 4 of this filing for project design details. 617087433 (6122007817)

Ground Elevation: 114.3 meters

Support Structure: 61.3 meters above ground level Overall Structure: 64.3 meters above ground level

Overall Height AMSL: 178.6 meters above mean sea level

FCC TCNS & REFERRAL DOCUMENTATION

Rose Daugherty

From: towernotifyinfo@fcc.gov

Sent: Thursday, October 27, 2022 8:01 AM

To: Rose Daugherty
Cc: tcnsweekly@fcc.gov

Subject: Proposed Construction of Communications Facilities Notification of Final Contacts -

Email ID #32722

Verizon Wireless Rose M Daugherty 18 Olivia St Enterprise, AL 36330

Dear Applicant:

This letter addresses the proposed communications facilities listed below that you have referred to the Federal Communications Commission (Commission) for purposes of contacting federally recognized Indian Tribes, including Alaska Native Villages (collectively Indian Tribes), and Native Hawaiian Organizations (NHOs), as specified by Section IV.G of the Nationwide Programmatic Agreement (NPA). Consistent with the procedures outlined in the Commission's Wireless Infrastructure Second Report and Order (1), we have contacted the Indian Tribes or NHOs identified in the attached Table for the projects listed in the attached Table. You referred these projects to us between 10/20/2022 and 10/27/2022. Our contact with these Tribal Nations or NHOs was sent on 10/27/2022.

Thus, as described in the Wireless Infrastructure Second Report and Order (2), if you or Commission staff do not receive a statement of interest regarding a particular project from any Tribe or NHO within 15 calendar days of 10/27/2022, your obligations under Section IV of the NPA with respect to these Tribal Nations or NHOs are complete. If a Tribal Nation or NHO responds that it has concerns about a historic property of traditional religious and cultural significance that may be affected by the proposed construction within the 15 calendar day period, the Applicant must involve it in the review as set forth in the NPA, and may not begin construction until the process set forth in the NPA is completed.

You are reminded that Section IX of the NPA imposes independent obligations on an Applicant when a previously unidentified site that may be a historic property, including an archeological property, is discovered during construction or after the completion of review. In such instances, the Applicant must cease construction and promptly notify, among others, any potentially affected Tribal Nation or NHO. A Tribal Nation's or NHO's failure to express interest in participating in pre-construction review of an undertaking does not necessarily mean it is not interested in archeological properties or human remains that may inadvertently be discovered during construction. Hence, an Applicant is still required to notify any potentially affected Tribal Nation or NHO of any such finds pursuant to Section IX or other applicable law.

Sincerely,
Jill Springer
Federal Preservation Officer
Federal Communications Commission
jill.springer@fcc.gov

¹⁾ See Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Deployment, Second Report and Order, FCC 18-30 (Mar. 30, 2018) (Wireless Infrastructure Second Report and Order).

²⁾ See id. at paras. 111-112.

LIST OF PROPOSED COMMUNICATIONS TOWERS

TCNS# 253451 Referred Date: 10/25/2022 Location: NW 199th Street, Miami Gardens, FL

Detailed Description of Project: Proposed installation of new small cell wireless facility resulting in minimal ground

disturbance. Please see Attachment 4 of this filing for project design details. 616464956 (6122007279)

Tribe Name: Muscogee (Creek) Nation

TCNS# 253864 Referred Date: 10/25/2022 Location: 3701 Lake Worth Road, Palm Springs, FL

Detailed Description of Project: Proposed installation of new small cell wireless facility resulting in minimal ground

disturbance. Please see Attachment 4 of this filing for project design details. (6122007434)

Tribe Name: Muscogee (Creek) Nation

TCNS# 254261 Referred Date: 10/25/2022 Location: 423 Everwood Drive, Kissimmee, FL

Detailed Description of Project: Proposed installation of new small cell wireless facility resulting in minimal ground

disturbance. Please see Attachment 4 of this filing for project design details. (6122007571)

Tribe Name: Muscogee (Creek) Nation

TCNS# 253860 Referred Date: 10/25/2022 Location: 19033 Biscayne Boulevard, Aventura, FL

Detailed Description of Project: Proposed installation of new small cell wireless facility resulting in minimal ground

disturbance. Please see Attachment 4 of this filing for project design details. (6122007427)

Tribe Name: Muscogee (Creek) Nation

TCNS# 254244 Referred Date: 10/25/2022 Location: 299 Seal Street, Kissimmee, FL

Detailed Description of Project: Proposed installation of new small cell wireless facility resulting in minimal ground

disturbance. Please see Attachment 4 of this filing for project design details. (6122007567)

Tribe Name: Muscogee (Creek) Nation

TCNS# 253454 Referred Date: 10/25/2022 Location: 10 Nickerson Ave, Middleborough, MA

Detailed Description of Project: Antenna modification/upgrade on existing building with no ground disturbance. Please

see Attachment 4 of this filing for project design details. 4BS0712B (6122007307)

Tribe Name: Red Cliff Band of Lake Superior Chippewa Indians of Wisconsin

Tribe Name: Wampanoag Tribe of Gay Head-Aquinnah

TCNS# 254664 Referred Date: 10/25/2022 Location: 1452 Government Street, Mobile, AL

Detailed Description of Project: Proposed installation of new small cell wireless facility resulting in minimal ground

disturbance. Please see Attachment 4 of this filing for project design details. 617278646 (6122008208)

Tribe Name: Alabama-Coushatta Tribe of Texas

Tribe Name: Coushatta Indian Tribe Tribe Name: Kialegee Tribal Town

Tribe Name: Mississippi Band of Choctaw Indians

Tribe Name: Shawnee Tribe

Tribe Name: Thlopthlocco Tribal Town

TCNS# 254921 Referred Date: 10/25/2022 Location: 628 W 45th Street, New York, NY

Detailed Description of Project: New wireless telecommunications antennas on an existing building with no proposed

ground disturbance. Please see Attachment 4 of this filing for project design details. (6122008243)

Tribe Name: Delaware Nation

Tribe Name: Red Cliff Band of Lake Superior Chippewa Indians of Wisconsin

Tribe Name: Shinnecock Nation Tribe Name: Wyandotte Nation

TCNS# 254262 Referred Date: 10/25/2022 Location: 490 Elkwood Court, Kissimmee, FL

Detailed Description of Project: Proposed installation of new small cell wireless facility resulting in minimal ground

disturbance. Please see Attachment 4 of this filing for project design details. (6122007572)

Tribe Name: Muscogee (Creek) Nation

TCNS# 254265 Referred Date: 10/25/2022 Location: 101 Fiesta Drive, Kissimmee, FL

Detailed Description of Project: Proposed installation of new small cell wireless facility resulting in minimal ground

disturbance. Please see Attachment 4 of this filing for project design details. (6122007574)

Tribe Name: Seminole Tribe of Florida Tribe Name: Thlopthlocco Tribal Town

TCNS# 254563 Referred Date: 10/25/2022 Location: 1502 NW 19th Street, Fort Lauderdale, FL

Detailed Description of Project: Proposed installation of new small cell wireless facility resulting in minimal ground

disturbance. Please see Attachment 4 of this filing for project design details. (6122007713)

Tribe Name: Seminole Tribe of Florida Tribe Name: Thlopthlocco Tribal Town

TCNS# 254573 Referred Date: 10/25/2022 Location: 1800 NE 123rd Street, North Miami, FL

Detailed Description of Project: Proposed installation of new small cell wireless facility resulting in minimal ground

disturbance. Please see Attachment 4 of this filing for project design details. (6122007714)

Tribe Name: Seminole Tribe of Florida

TCNS# 254587 Referred Date: 10/25/2022 Location: 2622 S Pearson Road, Richland, MS

Detailed Description of Project: Proposed construction of a new telecommunications self-support tower and compound

resulting in ground disturbance. Please see Attachment 4 of this filing for project design details. 617087433

(6122007817)

Tribe Name: Alabama-Coushatta Tribe of Texas

Tribe Name: Coushatta Indian Tribe

Tribe Name: Mississippi Band of Choctaw Indians

Tribe Name: Red Cliff Band of Lake Superior Chippewa Indians of Wisconsin

TCNS# 254661 Referred Date: 10/25/2022 Location: 1824 Carlisle Dr E, Mobile, AL

Detailed Description of Project: Proposed installation of new small cell wireless facility resulting in minimal ground

disturbance. Please see Attachment 4 of this filing for project design details. 617273653 (6122008201)

Tribe Name: Alabama-Coushatta Tribe of Texas

Tribe Name: Coushatta Indian Tribe Tribe Name: Kialegee Tribal Town

Tribe Name: Mississippi Band of Choctaw Indians

Tribe Name: Shawnee Tribe

Tribe Name: Thlopthlocco Tribal Town

TCNS# 255802 Referred Date: 10/25/2022 Location: 1340 W Gray Street, Houston, TX

Detailed Description of Project: Proposed installation of new small cell wireless facility resulting in minimal ground disturbance. This installation meets NPA Exclusion E. Please see attached Alternative Submission Packet. 617336298

(6122008601) Actual pole height: 18.5 feet

Tribe Name: Alabama-Coushatta Tribe of Texas

Tribe Name: Apache Tribe of Oklahoma

Tribe Name: Comanche Nation
Tribe Name: Coushatta Indian Tribe
Tribe Name: Kiowa Indian Tribe THPO
Tribe Name: Mescalero Apache Tribe

Tribe Name: Tonkawa Tribe

TCNS# 254923 Referred Date: 10/25/2022 Location: 2135 Broadway, New York, NY

Detailed Description of Project: New wireless telecommunications antennas on an existing building with no proposed

ground disturbance. Please see Attachment 4 of this filing for project design details. (6122008302)

Tribe Name: Delaware Nation

Tribe Name: Red Cliff Band of Lake Superior Chippewa Indians of Wisconsin

Tribe Name: Shinnecock Nation Tribe Name: Wyandotte Nation

TCNS# 254904 Referred Date: 10/25/2022 Location: 329 East 29th Street, New York, NY

Detailed Description of Project: New wireless telecommunications antennas on an existing building with no proposed

ground disturbance. Please see Attachment 4 of this filing for project design details. (6122008241)

Tribe Name: Delaware Nation

Tribe Name: Red Cliff Band of Lake Superior Chippewa Indians of Wisconsin

Tribe Name: Shinnecock Nation Tribe Name: Wyandotte Nation

TCNS# 255537 Referred Date: 10/25/2022 Location: 1029 N. St. Mary's, San Antonio, TX

Detailed Description of Project: Proposed installation of new small cell wireless facility resulting in minimal ground disturbance. This installation meets NPA Exclusion E. Please see attached Alternative Submission Packet. (6122008487)

Tribe Name: Alabama-Coushatta Tribe of Texas

Tribe Name: Apache Tribe of Oklahoma

Tribe Name: Comanche Nation Tribe Name: Coushatta Indian Tribe Tribe Name: Kiowa Indian Tribe THPO Tribe Name: Mescalero Apache Tribe

Tribe Name: Tonkawa Tribe

LEGEND:

* - Notification numbers are assigned by the Commission staff for sites where initial contact was not made through TCNS.

Rose Daugherty

From: towernotifyinfo@fcc.gov

Sent: Tuesday, October 25, 2022 7:32 PM

To: Rose Daugherty

Subject: Confirmation - Referral of a Proposed Tower Construction Notification - Email ID #

Dear Rose M Daugherty,

Your referral of a proposed tower structure notification has been successfully submitted via the Tower Construction Notification System. The Federal Communications Commission (FCC) will be processing this referral for purposes of contacting federally recognized Indian Tribes, including Alaska Native Villages, and Native Hawaiian Organizations as specified by Section IV.G of the Nationwide Programmatic Agreement and the Wireless Infrastructure Second Report and Order dated March 30, 2018. You will receive a Proposed Construction of Communications Facilities Notification of Final Contacts when the FCC has completed processing this referral. Below are the details you provided in the referral of the tower you have proposed to construct:

Notification Received: 08/19/2022 Notification Referred: 10/25/2022

Notification ID: 254587

Tower Owner Individual or Entity Name: Verizon Wireless

Consultant Name: Rose M Daugherty

Street Address: 18 Olivia St

City: Enterprise State: ALABAMA Zip Code: 36330 Phone: 615-708-6967

Email: rdaugherty@ebiconsulting.com

Structure Type: LTOWER - Lattice Tower Latitude: 32 deg 12 min 53.1 sec N Longitude: 90 deg 7 min 46.3 sec W

Location Description: 2622 S Pearson Road

City: Richland State: MISSISSIPPI County: RANKIN

Detailed Description of Project: Proposed construction of a new telecommunications self-support tower and compound

resulting in ground disturbance. Please see Attachment 4 of this filing for project design details. 617087433

(6122007817)

Ground Elevation: 114.3 meters

Support Structure: 61.3 meters above ground level Overall Structure: 64.3 meters above ground level

Overall Height AMSL: 178.6 meters above mean sea level

Entities Who Have Not Responded:
Alabama-Coushatta Tribe of Texas Contact Date: 08/24/2022
Coushatta Indian Tribe Contact Date: 08/24/2022
Mississippi Band of Choctaw Indians Contact Date: 08/24/2022
Red Cliff Band of Lake Superior Chippewa Indians of Wisconsin Contact Date: 08/24/2022
**Note that the FCC will assign a unique Notification ID number for a site where the initial contact was not made through TCNS. You will need to reference this Notification ID number when you update your project's Status with us.





21 B Street Burlington, MA 01803 Tel: (781) 273-2500 Fax: (781) 273-3311 www.ebiconsulting.com

Project:	All Projects	_					
Contact Name:	Bryant J. Celestine	_Date:	3/19/2021				
Contact Title:_	Tribal Historic Preservation Officer	_Time:	11:00 AM				
Organization:	Alabama-Coushatta Tribe of Texas	_Phone:	936-563-1100				
Address:	571 State Park Road 56	_E-mail:	Celestine.Bryant@actribe.org				
City:	Livingston	_State:	TX Zip Code: 77351				
EBI Contact:	Juanita Colorado, Tribal Coordinator	_					
Results:							
Bryant Celestine, THPO of Alabama-Coushatta Tribe of Texas, informed EBI that all project documentation should be sent to the email celestine.bryant@actribe.org and histpres@actribe.org .							
Follow-up Action	on Required:						
None							



21 B Street Burlington, MA 01803 Tel: (781) 273-2500 Fax: (781) 273-3311 www.ebiconsulting.com

Project:	All projects	_					
Contact Name:_	Kristian Poncho	_Date:	12/16/2021				
Contact Title:	Acting THPO/Secretary-Treasurer	_Time:	I:04 P.M.				
Organization:	Coushatta Indian Tribe	_Phone:	337-275-1350				
Address:	PO BOX: 10	_E-mail:	KPoncho@coushatta.org				
City:	Elton	State: LA	Zip Code: 70532				
EBI Contact:	Juanita Colorado	_					
Results:							
Kristian Poncho, Acting THPO of the Coushatta Indian Tribe, has informed EBI that all project information should be emailed to him at KPoncho@coushatta.org as well as Deputy THPO Dakota John, at DakotaJohn@Coushatta.org and Section 106 Coordinator Kassie Dawsey, at KDawsey@coushatta.org							
The contact information listed on the NOO, THPO Linda Langley at llangley@coushattatribela.org , is no longer valid.							
Follow-up Actio	n Required:						
None							

From: Rose Daugherty

Bcc: celestine.bryant@actribe.org; histpres@actribe.org; kponcho@coushatta.org; kdawsey@coushatta.org;

dakotajohn@coushatta.org; lwilliamson@jenachoctaw.org; Carleton, Ken; marvin.defoe@redcliff-nsn.gov; Edwina

<u>Buffalo-Reyes</u>; <u>Vangie P. Robinson</u>; <u>historicpreservation@cherokee.org</u>; <u>gwen-terrapin@cherokee.org</u>

Subject: Invitation to Comment: TCNS No. 254587 (6122007817) - Old_Pearson_Rd_CGC, Richland, MS - E106 Attached

Date: Wednesday, September 21, 2022 11:37:00 AM

Attachments: <u>image001.png</u> <u>image002.png</u>

<u>imageuuz.png</u> 6122007817 E106.pdf

RE: Invitation to Comment in Section 106 Consultation Process

TCNS Reference #: 254587 TCNS Date: August 26, 2022

Site Identifier: Old Pearson Rd CGC / 617087433

Site Address: 2622 S Pearson Road

Richland, Rankin County, MS 39218

EBI Project Number: 6122007817

Project Description: Proposed construction of a new telecommunications self-support tower

and compound resulting in ground disturbance. Please see Attachment 4

of this filing for project design details.

Pursuant to Section 106 of the National Historic Preservation Act, the regulations promulgated thereunder and interagency agreements developed thereto, EBI Consulting, Inc., on behalf of the Applicant, provides this notice of a proposed telecommunications facility installation at the address listed above.

EBI would like to inquire if you would be interested in commenting on this proposed project. In accordance with the Federal Communications Commission's (FCC) guidance contained within the Second Report and Order dated May 3, 2018, EBI has attached a complete copy of the FCC Form (or appropriate alternative) and its required attachments. The information contained in this documentation meets the requirements outlined by the FCC.

Specifically, EBI is seeking comments related to the proposed project's potential effect to Historic Properties of religious or cultural significance to your tribe. Please forward any comments, questions, or concerns you may have to me at the phone number or email address below.

Respectfully submitted,

Rose Daugherty

Tribal Coordinator P: 615.708.6967

21 B Street | Burlington, MA | 01803

rdaugherty@ebiconsulting.com

Visit our website: www.ebiconsulting.com

Rose Daugherty

Sent:

From: Microsoft Outlook

To: celestine.bryant@actribe.org; histpres@actribe.org; kponcho@coushatta.org;

kdawsey@coushatta.org; dakotajohn@coushatta.org; lwilliamson@jenachoctaw.org; Carleton, Ken; marvin.defoe@redcliff-nsn.gov; Edwina Buffalo-Reyes; Vangie P. Robinson; historicpreservation@cherokee.org; gwen-terrapin@cherokee.org

Wednesday, September 21, 2022 11:38 AM

Subject: Relayed: Invitation to Comment: TCNS No. 254587 (6122007817) -

Old Pearson Rd CGC, Richland, MS - E106 Attached

Delivery to these recipients or groups is complete, but no delivery notification was sent by the destination server:

celestine.bryant@actribe.org (celestine.bryant@actribe.org)

histpres@actribe.org (histpres@actribe.org)

kponcho@coushatta.org (kponcho@coushatta.org)

kdawsey@coushatta.org (kdawsey@coushatta.org)

dakotajohn@coushatta.org (dakotajohn@coushatta.org)

lwilliamson@jenachoctaw.org (lwilliamson@jenachoctaw.org)

Carleton, Ken (KCarleton@choctaw.org)

marvin.defoe@redcliff-nsn.gov (marvin.defoe@redcliff-nsn.gov)

Edwina Buffalo-Reyes (edwina.buffalo-reyes@redcliff-nsn.gov)

Vangie P. Robinson (vrobinson@choctawnation.com)

historicpreservation@cherokee.org (historicpreservation@cherokee.org)

gwen-terrapin@cherokee.org (gwen-terrapin@cherokee.org)

Subject: Invitation to Comment: TCNS No. 254587 (6122007817) - Old_Pearson_Rd_CGC, Richland, MS - E106 Attached

 \checkmark

Invitation to Comment: TCN... From: Rose Daugherty

Bcc: "celestine.bryant@actribe.org"; "histpres@actribe.org"; "kponcho@coushatta.org"; "kdawsey@coushatta.org";

"dakotajohn@coushatta.org"; "Carleton, Ken"; "marvin.defoe@redcliff-nsn.gov"; "Edwina Buffalo-Reyes" Follow Up: TCNS No. 254587 (6122007817) - Old_Pearson_Rd_CGC, Richland, MS - E106 Attached

 Subject:
 Follow Up: TCNS No. 254587 (6122007817) - Old_Pearson_I

 Date:
 Wednesday, October 12, 2022 6:08:00 PM

Attachments: <u>image003.png</u>

image004.png image005.png

RE: Follow Up to Invitation to Comment in Section 106 Consultation Process

TCNS Reference #: 254587 TCNS Date: August 26, 2022

Site Identifier: Old_Pearson_Rd_CGC / 617087433

Site Address: 2622 S Pearson Road

Richland, Rankin County, MS 39218

EBI Project Number: 6122007817

Project Description: Proposed construction of a new telecommunications self-support tower

and compound resulting in ground disturbance. Please see Attachment 4 of

this filing for project design details.

The purpose of this letter is to follow up on your interest in providing comments on the above-referenced proposed wireless telecommunications facility's potential to affect Historic Properties.

In accordance with the Federal Communications Commission's (FCC) guidance contained within the Second Report and Order dated May 3, 2018, EBI has provided a complete copy of the FCC Form (or appropriate alternative) and its required attachments. The information contained in the provided documentation meets the requirements outlined by the FCC.

Additionally, as noted in the FCC's Second Report and Order Paragraph 99, the FCC clarified that it does not require its Applicants to pay upfront fees to participate in the Section 106 consultation process, and we have not been authorized to pay such fees at this time.

EBI would appreciate your comments on the proposed project's potential effect to Historic Properties of religious or cultural significance to your tribe. Please let me know if you should need an additional copy of the previously provided documentation and EBI will resend.

Please do not hesitate to contact me if you have any questions or concerns about the proposed project.

EBI greatly appreciates your time and consideration of this matter.

Respectfully submitted,

Rose Daugherty

Tribal Coordinator

P: 615.708.6967

21 B Street | Burlington, MA | 01803

rdaugherty@ebiconsulting.com

Visit our website: www.ebiconsulting.com

Rose Daugherty

From: Microsoft Outlook

To: celestine.bryant@actribe.org; histpres@actribe.org; kponcho@coushatta.org;

kdawsey@coushatta.org; dakotajohn@coushatta.org; Carleton, Ken;

marvin.defoe@redcliff-nsn.gov; Edwina Buffalo-Reyes

Sent: Wednesday, October 12, 2022 6:09 PM

Subject: Relayed: Follow Up: TCNS No. 254587 (6122007817) - Old_Pearson_Rd_CGC, Richland,

MS - E106 Attached

Delivery to these recipients or groups is complete, but no delivery notification was sent by the destination server:

celestine.bryant@actribe.org (celestine.bryant@actribe.org)

histpres@actribe.org (histpres@actribe.org)

kponcho@coushatta.org (kponcho@coushatta.org)

kdawsey@coushatta.org (kdawsey@coushatta.org)

dakotajohn@coushatta.org (dakotajohn@coushatta.org)

Carleton, Ken (KCarleton@choctaw.org)

marvin.defoe@redcliff-nsn.gov (marvin.defoe@redcliff-nsn.gov)

Edwina Buffalo-Reyes (edwina.buffalo-reyes@redcliff-nsn.gov)

Subject: Follow Up: TCNS No. 254587 (6122007817) - Old_Pearson_Rd_CGC, Richland, MS - E106 Attached

 \vee

Follow Up: TCNS No. 254587 (6...

Appendix G List of Preparers

Name	Organization	Discipline/Expertise	Years of Experience	Role in Preparing EA
Ryan Edson	Environmental Corporation of America	NEPA / Cultural Resources	6 years	Document preparation
Eric Johnson	Environmental Corporation of America	NEPA/Environmental Sciences	14 years	Principal review and document preparation
Ashley Bean	Environmental Corporation of America	Biology/Environmental Sciences	1 year	Document preparation
Ben Salter	Environmental Corporation of America	NEPA/Biology/Environmental Sciences	23 years	Principal review and oversight
Shannon Lowman	Environmental Corporation of America	Cultural Resources	6 years	Document preparation
Dina Bazzill	Environmental Corporation of America	NEPA / Cultural Resources	15 years	Principal review and oversight