ENVIRONMENTAL ASSESSMENT

StarPlus Energy, LLC
Battery Plants, Kokomo, IN

Department of Energy Loan Programs Office
Advanced Technology Vehicles Manufacturing

DOE/EA-2263

September 2024

CONTENTS

1.0 PURPOSE AND NEED 1
1.1 Introduction 1
1.2 Purpose and Need for Agency Action 1
1.3 Background 2
1.4 Scope of Environmental Assessment 2
1.4.1 Project Overview and Development Status 3
1.4.2 Resources Considered 3
2.0 DESCRIPTION OF THE PROPOSED ACTION 5
2.1 Project Buildout and Installation 5
2.2 Project Operations 8
2.2.1 Manufacturing Process Summary 8
2.2.2 Staffing and Operational Timeframe 9
2.2.3 Shipping and Receiving 10
2.2.4 Waste Management 10
3.0 ENVIRONMENTAL CONSEQUENCES 11
3.1 Introduction 11
3.1.1 Cultural Resources 11
3.1.2 Native American Interests 11
3.1.3 Water Resources 12
3.1.4 Air Quality 12
3.1.5 Noise 14
3.1.6 Transportation 16
3.1.7 Socioeconomics and Environmental Justice 17
3.1.8 Health and Safety 21
3.1.9 Waste Management 22
4.0 CUMULATIVE EFFECTS 25
4.1 Greenhouse Gas Emissions and Climate Change 25
4.1.1 Impacts Associated with Greenhouse Gas Emissions and Climate Change 26
4.2 StarPlus Energy Battery Plant – Kokomo, Indiana 27
4.2.1 Air Quality 27
4.2.2 Socioeconomics and Environmental Justice 27
4.2.3 Traffic and Transportation 27
5.0 FINDING 29
6.0 REFERENCES 30
6.1 Personal Communication 31
7.0 LIST OF PREPARERS 32
7.1 DOE 32
7.2 Applicant 32

Appendix A Agency and Tribal Correspondence
Appendix B Permits and Approvals

LIST OF TABLES

Table 1 Potential to Emit and PSD Applicability after Permit Issuance (tpy) 13
Table 2 Population, Ethnicity, and Poverty 19
Table 3 EPA's EJ Screen Report 19
Table 4 Waste Stream Detail 23
Table 5 Total GHG Emissions Displaced 26

LIST OF FIGURES

Figure 1 Site Location Map 6
Figure 2 Project Site with Aerial Imagery 7
Figure 3 Battery Manufacturing Process 8
Figure 4 Suppliers, Utilities, and Neighborhood Map 15
Figure 5 Census Block-Group Map 20

ACRONYMS AND ABBREVIATIONS

ATVM Program	Advanced Technology Vehicle Manufacturing Loan Program
BMPs	best management practices
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO	carbon monoxide
CO_2	carbon dioxide
EA	environmental assessment
EJ	environmental justice
EPA	U.S. Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
EV	electric-vehicle
GHG	greenhouse gas
GHGs	greenhouse gases
GWh	gigawatt hours
HAPs	hazardous air pollutants
HVAC	heating, ventilation, and air-conditioning
IAC	Indiana Administrative Code
IDEM	Indiana Department of Environmental Management
INDOT	Indiana Department of Transportation
Kokomo MPO	Kokomo and Howard County Governmental Coordinating Council
LPO	Loan Programs Office
MSW	municipal solid waste
NAAQS	National Ambient Air Quality Standards
NATA	National-Scale Air Toxics Assessment
NCA	nickel, cobalt, and aluminum
NEPA	National Environmental Policy Act
NEPA	National Environmental Policy Act
NFPA	National Fire Protection Association
NMP	N-methyl pyrrolidone
NRHP	National Register of Historic Places
NSR	New Source Review
PDVF	polyvinylidene fluoride
PM	particulate matter
PM10	diameter of less than 10 micrometers

PM2.5	diameter of less than 2.5 micrometers
PMA	Primary Market Area
PSD	prevention of significant deterioration
RCRA	Resource Conservation and Recovery Act
READI	Regional Economic Acceleration and Development Initiative
SBR	styrene-butadiene rubber
SHPO	Indiana State Historic Preservation Office
StarPlus Energy	StarPlus Energy, LLC
SWPPP	Stormwater Pollution Prevention Plan
TIP	Transportation Improvement Program
TIP	Transportation Improvement Program
tpy	tons per year
TRI	Toxic Release Inventory
TSCA	Toxic Substances Control Act
VOCs	volatile organic compounds

1.0 PURPOSE AND NEED

1.1 Introduction

Stellantis and Samsung SDI established a joint venture called StarPlus Energy, LLC (StarPlus Energy and Applicant), forming a partnership in the battery manufacturing sector. The StarPlus Energy joint venture will focus on establishing battery manufacturing plants in key regions, including North America, Europe, and China. The joint venture's initial focus will be on establishing two electric-vehicle (EV) battery manufacturing plants in Kokomo, Indiana (the Project).

The StarPlus Energy battery plants, located at 2724 County Road (CR) N 50E, Kokomo, IN 46901, will include new battery production, assembly, and ancillary facilities, producing approximately 67 gigawatt hours (GWh) of EV battery cell capacity annually, a production total that aligns with Stellantis' global battery-electric-vehicle (BEV) plan, which calls for at least 240 GWh of battery cell capacity globally by 2030. Based on an average BEV battery pack capacity of 70 kilowatt hours, the Project will support the battery needs of approximately 350,000 BEVs annually once full-scale operations are achieved.

StarPlus Energy has applied for a loan under DOE's Advanced Technology Vehicle Manufacturing Loan Program (ATVM Program), which was created by the Energy Independence and Security Act of 2007 to provide incentives, including funds for engineering costs, for projects that retrofit, expand, or create manufacturing facilities in the United States for advanced-technology vehicles or qualifying components. The primary goal of the ATVM Program is to improve fuel economy for light-duty vehicles and thereby reduce emissions of ozone precursors, greenhouse gases (GHGs), and particulates associated with vehicle fuel combustion. The ATVM Program is designed to stimulate production of the technology required to meet program objectives. The ATVM Program is administered by DOE's Loan Programs Office (LPO). LPO originates, underwrites, and services loans to eligible automotive manufacturers and component manufacturers. LPO has reviewed StarPlus Energy's application and determined that it is eligible for a potential loan (10 Code of Federal Regulations [CFR] Parts 611.100, 611.101 and 611.102).

The decision as to whether to provide a loan (i.e., federal financial assistance) constitutes a major federal action, requiring DOE to conduct an environmental review under the National Environmental Policy Act (NEPA). LPO has prepared this environmental assessment (EA) in accordance with NEPA (42 United States Code [U.S.C.] 4321 et seq.), the Council on Environmental Quality NEPA implementing regulations (40 CFR Parts 1500–1508), and the DOE NEPA implementing regulations (10 CFR Part 1021). LPO is using the NEPA process to inform its decision as to whether to issue a loan to the Applicant to support the Project.

1.2 Purpose and Need for Agency Action

The purpose and need for DOE's proposed action, issuance of a federal loan, is to implement DOE's authority under Section 136 of the Energy Independence and Security Act of 2007, which is to finance projects that reequip, expand, or establish manufacturing facilities in the United States to produce qualified advanced technology vehicles or qualifying components, along with the engineering integration costs associated with such projects (42 U.S.C. 17013, as amended).

The Project's new battery production, assembly, and ancillary facilities will produce the lithium-ion batteries needed to power Stellantis' fleet of BEVs. These zero-emission vehicles will help reduce emissions of the ozone precursors, GHGs, and particulates that contribute to global warming, consistent with the primary goal of the ATVM Program. Financially supporting the Project will help increase the use of BEVs, thereby reducing overall national emissions of air pollutants and human-caused GHGs.

1.3 Background

The ATVM Program is central to LPO's mission to serve as a "bridge to bankability" for manufacturing projects that are critical to achieving decarbonization of the transportation sector. Through the ATVM Program, LPO can support projects that improve the fuel economy of ultra-efficient vehicles, light-duty vehicles, medium-duty vehicles, and heavy-duty vehicles or involve low- or zero-emission trains or locomotives, maritime vessels, aircraft, and hyperloop technologies, thereby reducing ozone precursors, greenhouse gas (GHG) emissions, and particulate matter associated with vehicle emissions. DOE has published an Interim Final Rule (2017) and a Direct Final Rule (2024) that establish the procedures and requirements for the ATVM loan program (10 CFR Part 611).

Using private funds, StarPlus Energy has already completed overall site development activities by installing foundations, erecting buildings, and developing utility connection corridors. To fund a portion of its Project, StarPlus Energy applied to the DOE ATVM Program for financial assistance. This will allow StarPlus Energy to complete interior buildout at its two battery plants—specifically, purchase and install battery manufacturing equipment, associated general equipment, and mechanical systems; startup of the facilities would also be funded. LPO determined that the application is substantially complete per the rules governing the ATVM Program in 10 Code of Federal Regulations (CFR) Part 611. StarPlus Energy was subsequently invited to enter into the LPO's due diligence process.

1.4 Scope of Environmental Assessment

In accordance with the National Environmental Policy Act (NEPA), DOE/LPO is preparing this environmental assessment (EA) to evaluate StarPlus Energy's request for DOE funding to complete interior buildout at two battery plants, Battery Plant 1 and Battery Plant 2 (collectively referred to as the Project or Proposed Action)—specifically, financial support for the purchase and installation of battery manufacturing equipment, associated general equipment, and mechanical systems; startup of the facilities in Kokomo would also be funded (see Section 3.2 for the analysis).

DOE has prepared this EA to comply with NEPA, Council on Environmental Quality regulations implementing NEPA (40 CFR Parts 1500−1508), and DOE NEPA Implementing Procedures (10 CFR Part 1021). If no significant impacts are identified during preparation of this EA, DOE will issue a Finding of No Significant Impact. If potentially significant impacts are identified, DOE will prepare an environmental impact statement.

The Proposed Action is buildout of the interior of Battery Plants 1 and 2, followed by startup of the facilities. For this Project, several factors influenced the scope of the issues analyzed in this EA. This section is organized as follows:

- Section 1.4.1 provides an overview of the Project and describes the privately funded site development and construction activities that have been completed. These activities are not the subject of federal financial support from LPO.
- Section 1.4.2 establishes the scope of the environmental review, given LPO's Proposed Action (i.e., a federal loan guarantee for the purchase and installation of battery manufacturing equipment, associated general equipment, and mechanical systems for the interior of the buildings, along with startup costs), existing site conditions, and permit status. Based on the scope of the environmental review, the natural, physical, and socioeconomic resources that may be subject to potentially significant environmental issues are identified, as are resources that would not be subject to potentially significant environmental issues.

1.4.1 Project Overview and Development Status

StarPlus Energy initiated construction of the 3,882,219-square-foot battery plants in August 2022, before applying for DOE's ATVM Program. The installation of underground utilities to the first battery plant was started in the summer of 2023. Installation of the electrical substation was completed in early 2024. Substantial completion of construction/certificate of occupancy is expected near the end of 2024 for Battery Plant 1. Construction of Battery Plant 2 is expected to start in 2024 and last approximately 23 months. Since acquisition of the Project site, StarPlus Energy has completed the construction activities listed below; these activities are not subject to the Proposed Action (i.e., are not included within the scope of LPO's proposed financial support to StarPlus Energy). The following activities, as initiated by StarPlus Energy, provide a baseline for existing conditions at the Project site:

- Constructing 34 buildings for both battery plants (89.1 acres)
- Clearing, grubbing, excavating, and performing initial mass grading of the Project site (387 acres)
- Installing construction stormwater management controls and perimeter fencing
- Creating laydown areas, parking lots, sidewalks, and berms
- Establishing topsoil stockpile areas
- Pouring concrete slabs and elevated floor slabs
- Connecting subsurface utilities, such as wastewater/sanitary sewer service that is available along CR 300 N, CR N 50 E, and State Route 931/Reed Street
- Applying intumescent paint (a form of passive fire protection that reacts to high temperatures by swelling and creating a thick char barrier layer of foam to insulate the structure behind the paint from fire and smoke)
- Installing landscaping, including trees and low-maintenance ground cover
- Performing miscellaneous steel work

The development and construction activities listed above are not subject to the federal financial support request under review by LPO.

StarPlus Energy has obtained all applicable permits from the appropriate federal, state, or local regulating authority. In addition, StarPlus Energy will apply for an individual federal U.S. Environmental Protection Agency (EPA) identification number for the disposal of waste from the facility (see Chapter 3 and Appendix B).

1.4.2 Resources Considered

Based on LPO's review of the scope of the Proposed Action, existing site conditions, and preconstruction permitting, the resource areas listed below were identified as potentially being affected by the Project. Each was assessed to determine the nature, extent, and significance of those impacts (see Chapter 3).

- Cultural resources, including Native American interests
- Water resources
- Air quality

- Noise
- Transportation
- Socioeconomics and environmental justice
- Health and safety
- Waste management

This EA examines the direct, indirect (see Chapter 3), and cumulative effects (see Chapter 4) of the Project. The assessment combined desktop research and an analysis of existing available information with select field studies, including site assessments related to the scope of the Project. Resources not included in this EA are related to aesthetic and visual resources; biological resources, including threatened and endangered species; soils and prime farmland; recreation; floodplains/floodways; airport hazards; coastal barriers/coastal zones; sole-source aquifers; and wild and scenic rivers.

Specifically:

- Impacts to aesthetic and visual resources are not anticipated. This resource area is not included in the scope of the EA because the Project would occur within existing structures.
- Impacts on biological resources, including threatened and endangered species, are not anticipated. This resource area is not included by the scope of the EA because the Project would have no effect on threatened or endangered species or designated critical habitat.
- Impacts on soils and prime farmland are not anticipated. This resource area is not included in the scope of the EA because the Project would occur within existing structures.
- Impacts on recreation sites are not anticipated. This resource area is not included in the scope of this EA because the Project site is outside centers of urban development; it is within a larger agricultural and industrial setting with no nearby parks.
- Federal Emergency Management Agency Flood Insurance Rate Maps indicate that the Project site is outside of mapped floodplains and floodways.
- The Federal Aviation Administration provided two letters, both dated July 27, 2022 (see Appendix A), stating that Project structures would not exceed obstruction standards and would not be a hazard to air navigation.
- The Project is not within the Coastal Zone boundary for Lake Michigan.
- According to the EPA sole-source aquifer map, the Project is not in an area that has been designated as being supported by a sole-source aquifer.
- There are no designated wild and scenic rivers in Indiana.

2.0 DESCRIPTION OF THE PROPOSED ACTION

The Proposed Action will involve interior buildout and startup of two new battery manufacturing plants (Battery Plants 1 and 2) in Kokomo, Indiana (see **Figure 1**). The facilities will produce nickel, cobalt, and aluminum (NCA) batteries to support StarPlus Energy's BEV production. NCA batteries are a type of lithium-ion battery. **Figure 2** provides the overall footprint and site plan for the facilities, both existing and to be built. However, none of the existing structures or ground disturbance on-site will be subject to federal financial support.

LPO's Proposed Action involves providing federal financial assistance to StarPlus Energy for the purchase and installation of manufacturing equipment, associated general equipment, and mechanical systems within and on facility structures, along with startup of the facilities.

2.1 Project Buildout and Installation

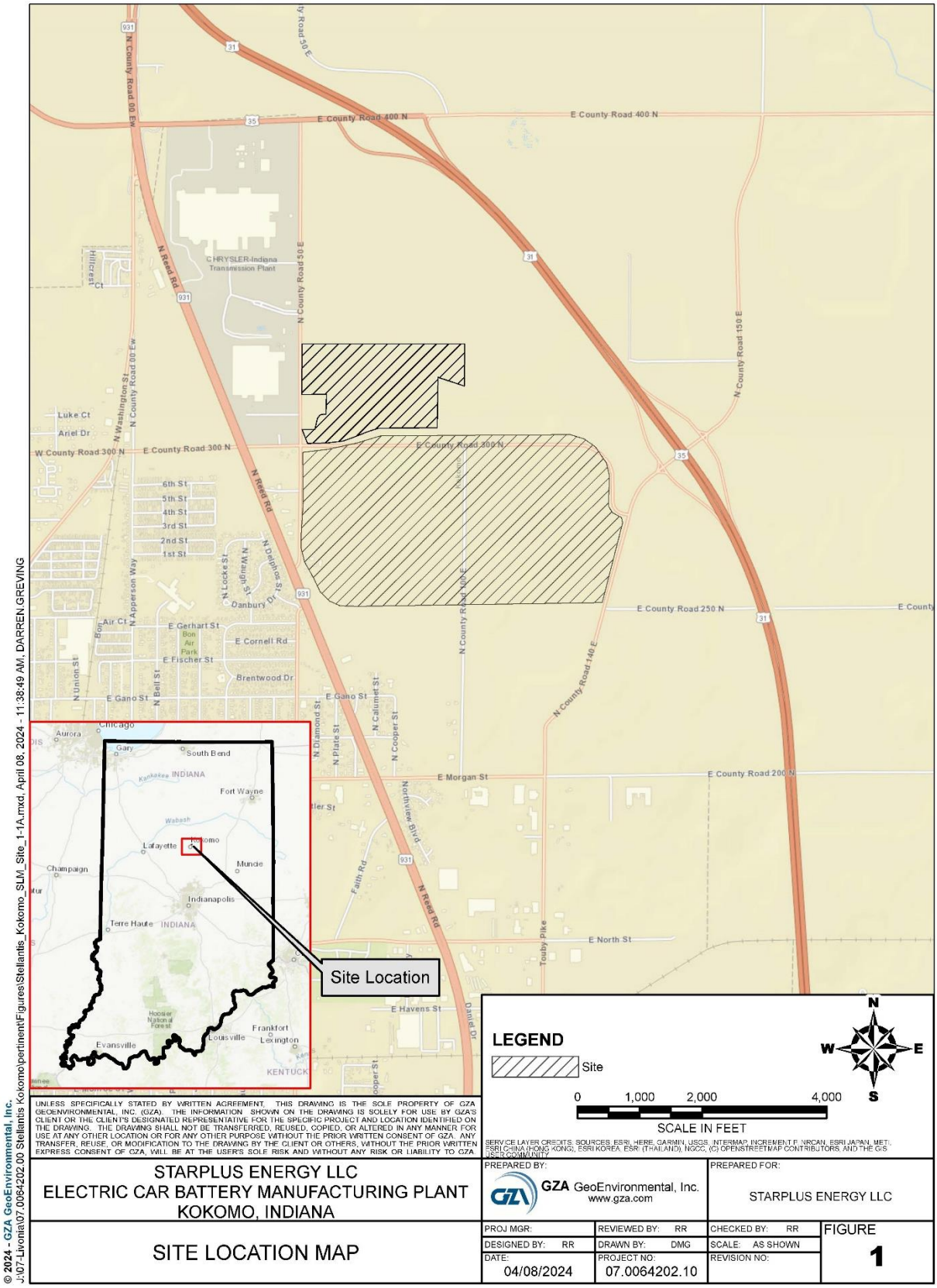
Interior buildout activities subject to federal financing (LPO's Proposed Action) include:

- Installation of structural supports for internal walls and thermal/moisture protection systems, along with flooring systems, doors, elevators, millwork, finishes, and furniture
- Installation of mechanical support systems, including heating, ventilation, and air-conditioning (HVAC) systems, as well as manufacturing area–specific components such as scrubbers, process exhaust systems, and a dust collector system; also includes installation of a computer control system
- Installation of all internal electrical systems
- Installation of above- and belowground plumbing as well as mechanical and process piping
- Installation of waste collection and treatment system (equipment/tanks)
- Installation of Project-wide fire alarms, a fire suppression system, and an automatic sprinkler system throughout the main production facilities
- Installation of all other equipment needed to support the manufacturing process, such as storage tanks and associated supply pumps; control valves, flow meters, pressure transmitters, and gauges; boilers, ovens, stockers, and roll presses; lamination and testing equipment; stacking and packaging equipment; and associated conveyors

The subsections that follow describe the activities associated with the Proposed Action (i.e., included within the scope of LPO's proposed financial support to StarPlus Energy). The Proposed Action will include interior installation of equipment and machinery (tooling) at Battery Plant 1 and Battery Plant 2 within the Project site.

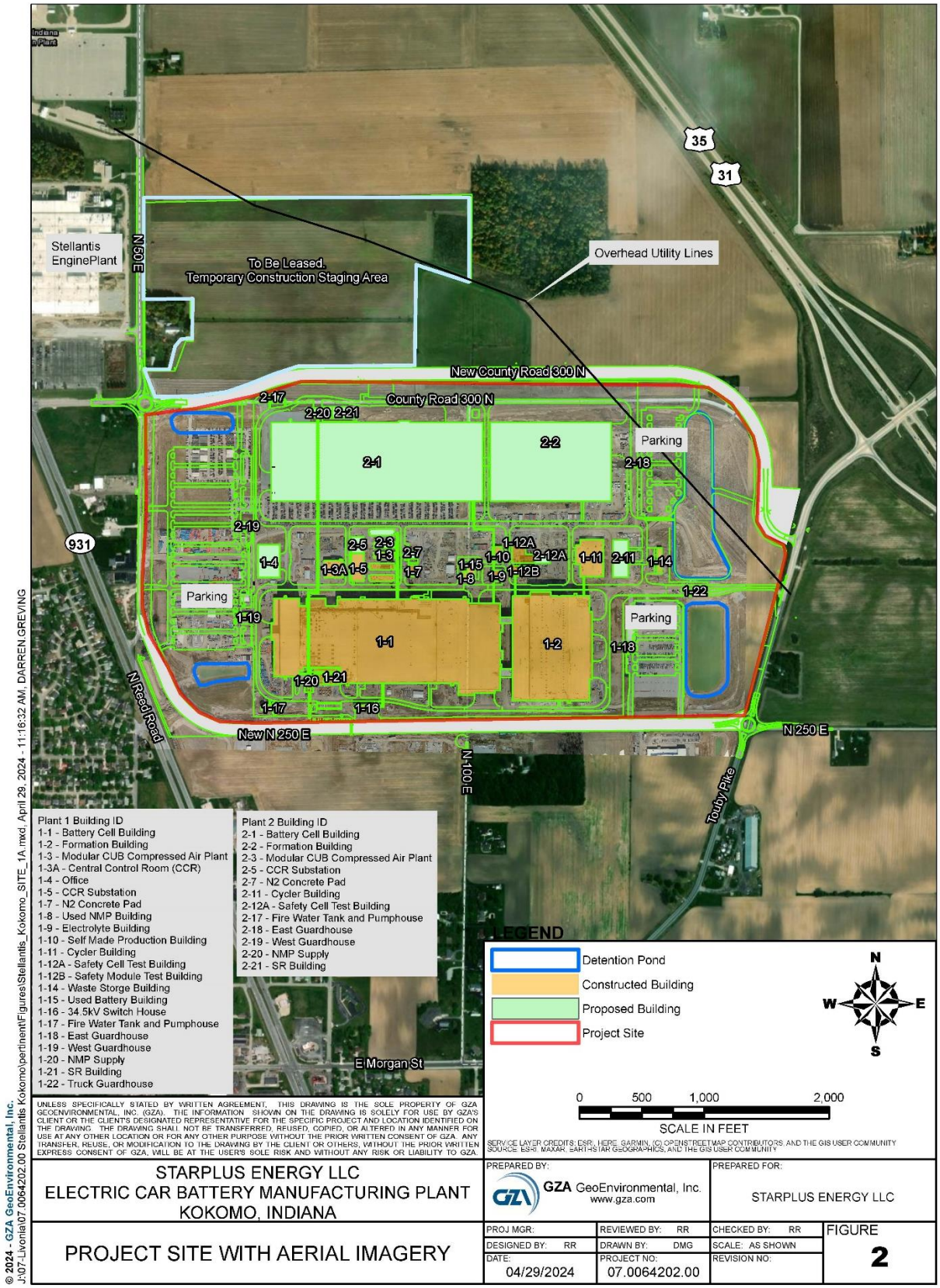
During interior buildout and equipment installation, site access will be provided primarily from U.S. 31/U.S. 35, which has an interchange at Touby Pike, approximately 0.2 mile east of the Project site, and State Route 931 is less than 0.1 mile west of the Project site from CR 300 N (Smith Road) or CR N 50 E (see **Figure 2**). Traffic associated with construction employees and equipment will occur throughout the active construction period and therefore temporarily affect operations along U.S. 31/U.S. 35, State Route 931, and other surface access routes. However, construction worker activity and travel will vary throughout the period when equipment and machinery are being installed.

Figure 1: Site Location Map



STARPLUS ENERGY LLC ELECTRIC CAR BATTERY MANUFACTURING PLANT KOKOMO, INDIANA	PREPARED BY: GZA GeoEnvironmental, Inc. www.gza.com		PREPARED FOR: STARPLUS ENERGY LLC	
SITE LOCATION MAP	PROJ MGR:	REVIEWED BY: RR	CHECKED BY: RR	FIGURE 1
	DESIGNED BY: RR	DRAWN BY: DMG	SCALE: AS SHOWN	
	DATE: 04/08/2024	PROJECT NO: 07.0064202.10	REVISION NO:	

Figure 2: Project Site with Aerial Imagery



The Project site is in Howard County, IN, approximately 40 miles north of Indianapolis, IN, via U.S. 31. During the construction phase of the Project, StarPlus Energy estimates that peak construction will require approximately 3,200 workers. Based on preliminary construction planning, it is anticipated that approximately 20 percent of this manpower will be sourced from the local workforce; the rest will be from outside Howard County.

Utilities and services for the Project site have been coordinated with the City of Kokomo (City). These include stormwater management, domestic water, sanitary discharge, electrical power (Duke Energy), natural gas (NIPSCO), and roadways (see Section 3.2.6).

2.2 Project Operations

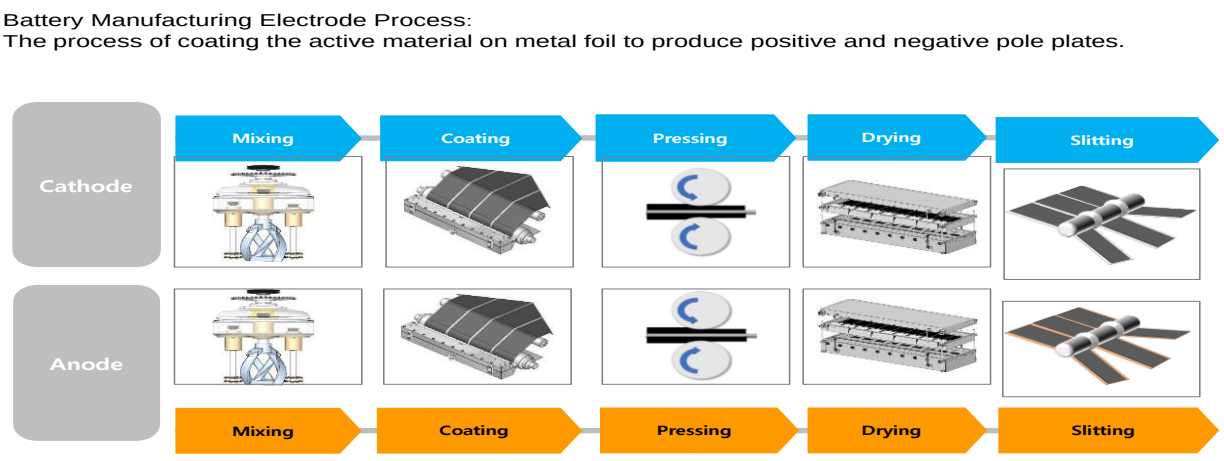
Upon commencement of operations, the StarPlus Energy battery plants will house raw material receiving and battery manufacturing processes. The buildings will be organized around sequential processing areas for mixing, electrode manufacturing, assembly, formation, and transport to battery tray assembly. Raw materials will be received and prepared in the mixing area. Electrode production will involve slurry mixing, coating, and drying. Assembly will entail cell construction, terminal addition, electrolyte filling, and cell sealing. Formation will consist of the initial charging and discharging of the cells. The cells will then be assembled into modules and prepared for transfer to Stellantis' vehicle assembly plants for installation in Stellantis' fleet of BEVs.

2.2.1 Manufacturing Process Summary

The battery manufacturing line will be divided into five major processes: electrode, notching-stack, assembly, formation, and module. Four production lines will be in operation at both Battery Plant 1 and Battery Plant 2.

The electrode process relies on production lines to produce cathode and anode foils; this involves the following: mixing, coating, pressing, drying, and slitting (see **Figure 3**). Active cathode and anode products, along with carbon, graphite, and other powder products, are weighed and fed into a mixer. N-methyl pyrrolidone (NMP) is used as a solvent in the cathode mixer, and deionized water is used as a solvent in the anode mixer. A slurry is then prepared and uniformly applied to the aluminum (cathode) and copper (anode) foils and then dried. The dried slurry is compressed in a rolling mill to increase the energy density of the cathode and anode electrodes. Slitter equipment is used to cut the cell to the desired width. When the slitting is complete, the stacking process begins.

Figure 3: Battery Manufacturing Process



The notching-stack process begins by cutting the electrode foils into single sheets. The notching oil used in the process is then machine evaporated. After the sheets are produced, they move to the stack stage by conveyor. At this stage, the anode and cathode electrode sheets are stacked using a “Z-folding” technique. Specifically, cathode and anode sheets are evenly stacked between each side of a separator in a zigzag manner to produce a jelly roll. Once the machine stacks the required number of sheets, the jelly roll moves to the next process for binding with bonding material and tape. The jelly rolls then move on a tray to the assembly process after they are inspected.

The assembly process is when all the parts that go inside the battery are assembled. This includes terminal welding, can-cap welding, electrolyte injection, and temporarily sealing and cleaning the injection ports. Terminal welding, or laser plate welding, allows current to flow inside the jelly roll as the positive/negative current collector of the cap plate and the positive/negative electrode of the jelly roll are welded. Afterward, the jelly roll is placed inside a square can. The can and cap plate are welded with a laser; this is called *can-cap welding*. Next, electrolyte is injected into a hole on top of the cap plate. The injection hole is then blocked with a temporary sealing pin and the cell is sent to the formation process.

Formation involves activating and inspecting the battery cells. First, the cell is left at room temperature so that the electrolyte can permeate the electrode and become pre-charged. A vacuum tube is used to exhaust any gas generated during charging. After pre-charging is completed, the injection hole on the cell is again sealed. The cell is then completely charged and then discharged; the capacity of the cell is also checked. While charging and discharging the cell, the cell is chemically activated to function as a battery. The completed battery cells are checked for voltage, thickness, and appearance. Cells that have been inspected are shipped for module production.

The module process involves assembling individual cells into a functional and reliable energy storage device. Individual battery cells are carefully chosen according to specific performance criteria, including capacity, voltage, and discharge characteristics. The cell stacking step arranges the selected cells in series or in parallel, forming sets that exhibit similar electrical characteristics. The module component assembly step involves attaching endplates and various side plates, parts, etc., to ensure module rigidity. The bus-bar assembly step interconnects cells within the module using precision welding or other bonding techniques. The design of these interconnections is crucial to achieving optimal electrical conductivity and uniform load distribution. The module inspection step includes rigorous testing to ensure reliability and performance. This includes electrical component and insulation testing as well as dimensional and visual inspections. Once the final quality inspection is complete, the modules are packaged for delivery to end-users or integration into larger systems.

2.2.2 Staffing and Operational Timeframe

During the operational phase of the Project, once full production is reached, StarPlus Energy estimates that total employment at the battery plants will amount to 2,600 hourly employees and 900 salaried employees. Full production and staffing are expected to be reached in 2025 at Battery Plant 1 and 2027 at Battery Plant 2.

The StarPlus Energy battery plants will have four rotating 12-hour shifts at full production. For example, a shift schedule will from be from 8:00 a.m. to 8:00 p.m. and then 8:00 p.m. to 8:00 a.m. Worker traffic will be split throughout the day and will not occur at one time. No overlapping traffic is anticipated between shifts because all incoming workers will be at the facility before the shift hour begins, and all outgoing workers will leave the facility after the shift hour ends.

2.2.3 Shipping and Receiving

Chemicals used in the manufacturing process will be delivered to the facility by truck, using a variety of packaging methods, including tanks, drums, supersacks, and pallets.

Finished battery modules will be transferred to Stellantis' vehicle assembly plants for installation in Stellantis' fleet of BEVs. These modules will be shipped off-site by truck. The anticipated volume of truck traffic is twenty-eight 53-foot container trucks per day.

2.2.4 Waste Management

The Project will generate waste from on-site employee activities as well as process operations. The majority of process wastes will be recovered and recycled for reuse in the manufacturing process. All wastes will be collected, managed, and recycled/disposed of in accordance with regulatory requirements, using existing solid waste management minimization and removal procedures (see Section 3.2.9 for additional information on waste management).

Prior to the commencement of operations, StarPlus Energy determined its facility generator category, as required by the Resource Conservation and Recovery Act (RCRA) and completed the appropriate registration for obtaining an EPA identification number (INR000153510). Based on the regulatory status determination, a Hazardous Waste Contingency Plan will be developed that covers the various hazardous streams, including storage, waste labeling, training, and inspection.

It is anticipated that the following waste streams and disposal methods are reasonably foreseeable, although all final determinations will based be on detailed regulatory review prior to the commencement of operations:

- Non-hazardous waste (transported off-site and transported to an incinerator designed and permitted to accept both industrial and municipal waste)
- Hazardous waste (accumulated and transported off-site for disposal at a permitted hazardous waste management facility)
- Breached or scrapped batteries, metals, and miscellaneous recyclable materials (collected and recycled off-site)
- Process NMP (collected in a recovery system for reuse)
- Contaminated NMP (collected and disposed of per hazardous waste management requirements)

Wastewater would be stored in three storage tanks and collected daily by a licensed wastewater treatment company. The Project is projected to produce 24,000 gallons of industrial wastewater each day. The three storage tanks, a 20,000-gallon tank, a 35,000-gallon tank, and a 60,000-gallon tank, would have the capacity to store 115,000 gallons of wastewater. After collection, wastewater would be transported in two trucks each day for off-site consignment treatment.

3.0 ENVIRONMENTAL CONSEQUENCES

3.1 Introduction

The environmental consequences of the Project are examined in the sections that follow. The Proposed Action would involve the interior installation of equipment and machinery (tooling) at Battery Plant 1 and Battery Plant 2. StarPlus Energy has been completing exterior and building construction activities at the Project site; these are not subject to the Proposed Action (i.e., are not included within the scope of LPO's proposed financial support to StarPlus Energy). See Section 1.3.1 for more detail on what is not covered in the Project scope. Specific resource areas are addressed (as outlined in Section 1.3) using both qualitative and, where applicable, quantitative information to describe the nature and characteristics of the resource that may be affected by the Project as well as the potential direct and indirect impacts on that resource from the Project, given Project controls. A conclusion regarding the significance of impacts is provided for each resource area (see Appendix A for agency and tribal correspondence and Appendix B for a list of Project permits and approvals).

3.1.1 Cultural Resources

There are no properties on the Project site that have been listed in the National Register of Historic Places (NRHP). Furthermore, the Howard County Interim Report by the Historic Landmarks Foundation of Indiana does not show any contributing, notable, or outstanding sites in the Project area (Historic Landmarks Foundation of Indiana 2003). A review of the Miami quadrangle in the State Historical Architectural and Archaeological Research Database did not find any listings for cultural resources on the Project site (Indiana Department of Natural Resources 2023).

Coordination with the Indiana State Historic Preservation Office (SHPO) was initiated by the Applicant. State Form 55031, from the Indiana Department of Natural Resources, Division of Historic Preservation and Archeology, was completed and submitted to the SHPO on May 12, 2023 (Appendix A). The SHPO responded with a letter on June 6, 2023 (Appendix A). On March 18, 2024, the SHPO concurred that the undisturbed sites south of CR 300 N do not appear eligible for inclusion in the NRHP and that no further archaeological investigations are necessary. On March 26, 2024, the SHPO concurred that the undisturbed sites north of CR 300 N do not appear eligible for inclusion in the NRHP and that no further archaeological investigations are necessary (Appendix A). Based on the previous findings, LPO consulted with the SHPO on the federal undertaking (i.e., a federal loan for the purchase and installation of manufacturing equipment). On June 17, 2024, the SHPO issued its concurrence with LPO's determination that LPO's undertaking would have no adverse effect on historic properties within the Area of Potential Effect, as defined in 36 CFR Part 800.5(d)(1), because of the scope of the undertaking and previous ground disturbance (see Appendix A).

3.1.2 Native American Interests

On December 14, 2023, as part of its Section 106 review process, DOE sent initiation letters to the following three federally recognized tribes regarding the area around the Project site (see sample request letter in Appendix A):

- Eastern Shawnee Tribe of Oklahoma
- Miami Tribe of Oklahoma
- Pokagon Band of Potawatomi Indians

None of the federally recognized tribes responded to the initiation letters. Because of the absence of adverse impacts within and surrounding the Project site, impacts on cultural resources as a result of the Project would not be significant.

3.1.3 Water Resources

3.1.3.1 Groundwater and Surface Water

The Project site is in an agricultural/ industrial area. There are no named rivers, streams, lakes, or ponds on or near the Project site.

The facility would implement best management practices (BMPs) for stormwater discharges and obtain coverage under a stormwater discharge permit issued by the Indiana Department of Environmental Management (IDEM) (Appendix B). A construction stormwater permit was issued on February 21, 2024. In addition, IDEM would require a stormwater permit 1 year after the start of plant operations. Detention ponds would be created within the Project site to control stormwater discharges from the Project site before, during, and after construction.

Potable and process water for the Project would be supplied by Indiana American Water for both construction and operation. Indiana American Water draws its water supply from groundwater (16 wells) and surface water (Wildcat Creek) sources. Project operation would require a maximum flow rate of approximately 3,300 gallons per minute, or approximately 2.59 million gallons per day, which would not exceed the supply capacity of Indiana American Water, which has an additional 5.8 million gallons per day of capacity available (Indiana American Water pers. comm.). In addition, StarPlus would evaluate water recycling opportunities to reduce dependence on water supplied by Indiana American Water.

Because there would be no direct impacts on groundwater or surface waters, and because plans exist for municipal water use and the collection of wastewater by a licensed wastewater treatment company, impacts on water resources would not be significant.

3.1.4 Air Quality

3.1.4.1 Setting

Pursuant to the Clean Air Act (CAA), EPA established National Ambient Air Quality Standards (NAAQS) to control a limited number of widely occurring criteria pollutants, including carbon monoxide (CO), nitrogen dioxide, ozone, particulate matter (PM) with a diameter of less than 2.5 micrometers ($PM_{2.5}$), PM with a diameter of less than 10 micrometers (PM_{10}), and sulfur dioxide. Primary air quality standards were developed for these pollutants to protect public health, including sensitive populations such as children, the elderly, and asthmatics, and secondary standards were developed to protect the nation's welfare, including protection against decreased visibility and damage to animals, crops, and vegetation. EPA has concluded that the current NAAQS protect public health, including at-risk populations of older adults, children, and people with asthma, with an adequate margin of safety. The airshed that contains the Project site in Howard County is in attainment or unclassifiable for the NAAQS, meaning none of the ambient concentrations of criteria pollutants exceed the air quality standards.

To protect air quality, several permitting programs under the CAA regulate point-source air emissions. Under the New Source Review (NSR) permitting program, a major stationary source is one of the 28 listed facility types that has the potential to emit 100 tons per year (tpy) or more of a regulated NSR pollutant or an unlisted facility that has the potential to emit 250 tpy or more of a regulated NSR pollutants. The Project would not be subject to major prevention of

significant deterioration (PSD) permitting because it would not be one of the 28 listed facility types and all criteria pollutant emissions would be below the PSD major-source threshold of 250 tpy. The Project would be subject to the Title V permitting program and considered a Title V major source for volatile organic compounds (VOCs), PM, PM_{10}, $PM_{2.5}$, and CO. The IDEM administers this permitting program and would issue the permit to construct and operate the facility.

StarPlus Energy submitted the application for an initial new-source construction (i.e., minor PSD) Title V permit for Battery Plant 1 on July 28, 2022 (Tetra Tech 2022). The application demonstrated compliance with all regulatory requirements, emissions control thresholds, and ambient impact assessments. The Title V permit for Battery Plant 1 was issued on September 12, 2023, by IDEM. StarPlus Energy submitted a permit application to IDEM for Battery Plant 2, together with a source modification application for Plant 1, on March 4, 2024 (StarPlus Energy 2024). The Title V permit for Battery Plant 2, together with the source modification, was issued on June 18, 2024. The air pollutant loads reflected in **Table 1** represent the Project's potential-to-emit (PTE) air pollutants from all emission sources.[1] All permit limits for permitted units have been accounted for in this PTE total. Because the Project's PTE would exceed 100 tpy, the Project would be subject to the CAA Title V operating permit program.

3.1.4.2 Emissions Analysis

Air emissions would result from construction and operation of the Project. During interior buildout, air emissions would be generated from mobile sources (e.g., trucks, automobiles) and fugitive dust. Emissions from workers' vehicles and construction equipment would be temporary and transient in nature. Various BMPs, such as watering for fugitive dust control and the use of temporary construction entrances, would be implemented to reduce potential impacts.

Because of the BMPs that would be implemented during Project construction, impacts on air quality as a result of construction of the Project would not be significant.

Table 1: Potential to Emit and PSD Applicability after Permit Issuance (tpy)

Plant Name	PM	PM_{10}	$PM_{2.5}$	SO_2	NO_X	VOC	CO	Total HAPs
Battery Plant 1	107.91	102.11	91.86	1.23	58.65	107.09	70.07	8.51
Battery Plant 2	96.40	95.68	91.84	1.23	58.65	107.09	70.07	8.51
Jaewon Plant 1	6.83	7.62	7.62	0.58	17.28	16.33	13.28	0.27
Total emissions	211.14	205.41	191.32	3.05	134.58	230.51	153.43	17.29
Major-source PSD threshold	250	250	250	250	250	250	250	25*
PSD applies? (yes/no)	No	No	No	No	No	No	No	No
Title V major-source threshold	100	100	100	100	100	100	100	25*
Title V applies? (yes/no)	Yes	Yes	Yes	No	Yes	Yes	Yes	No

CO = carbon monoxide; NO_X = nitrogen oxides; PM = particulate matter; PM_{10} = particulate matter with diameters 10 microns and smaller; $PM_{2.5}$ = particulate matter with diameters 2.5 microns and smaller; PSD = prevention of significant deterioration; SO_2 = sulfur dioxide; tpy = tons per year; VOC = volatile organic compound
**The threshold for any single HAP is 10; the threshold for total emissions is 25. All single HAPs would be below 10, and total emissions would be below 25.*

1 Emission sources include Battery Plants 1 and 2 as well as a Jaewon plant, a supplier plant. IDEM included the Jaewon plant in the air permit because it would recycle materials from the Project and be adjacent to the Project site (see **Figure 4** for a map of Project suppliers and Chapter 4 for detailed information regarding suppliers).

Operation of the battery manufacturing plants would create several sources of air pollutant emissions, resulting in the emission levels presented in **Table 1**. A Title V (Part 70) operating permit is required for facilities that meet the definition of a major source, according to 40 CFR Part 70.2. Indiana has incorporated the federal Part 70 program in 326 Indiana Administrative Code (IAC) 2-7. A facility with criteria pollutant emissions greater than 100 tpy is a major source under the Title V permitting program. Project emissions would exceed the 100 tpy threshold for VOC, PM, PM_{10}, $PM_{2.5}$, and CO and therefore would be subject to Title V permitting. Furthermore, 326 IAC 2-7-4 requires submittal of a complete application for a Title V permit within 12 months of commencing operation.

The Project would not be a major source of hazardous air pollutants (HAPs), as defined in 40 CFR 63.2, because HAP emissions would be less than 10 tons per year for any single HAP and less than 25 tons per year when combined. Furthermore, the battery plants would have operational air emissions controls. For VOC control, StarPlus Energy would use a solvent recovery unit, consisting of a condenser and a wet scrubber, and regularly monitor the parameters of the control unit. In addition, carbon adsorbers would be used to remove VOCs from process lines. For PM control, StarPlus Energy would use filter bags to remove PM, PM_{10}, and $PM_{2.5}$.

A discussion of cumulative air quality impacts can be found in Chapter 4. Included is a discussion of the GHG emission benefits from replacing internal-combustion engines with BEVs.

Because of the location of the Project site; existing air quality conditions (e.g., the county is attainment/ unclassifiable with respect to the NAAQS); the level of anticipated air emissions, which would be below PSD applicability thresholds; and the controls that would be implemented during operation to meet applicable emission standards, impacts on air quality as a result of the Project would not be significant.

3.1.5 Noise

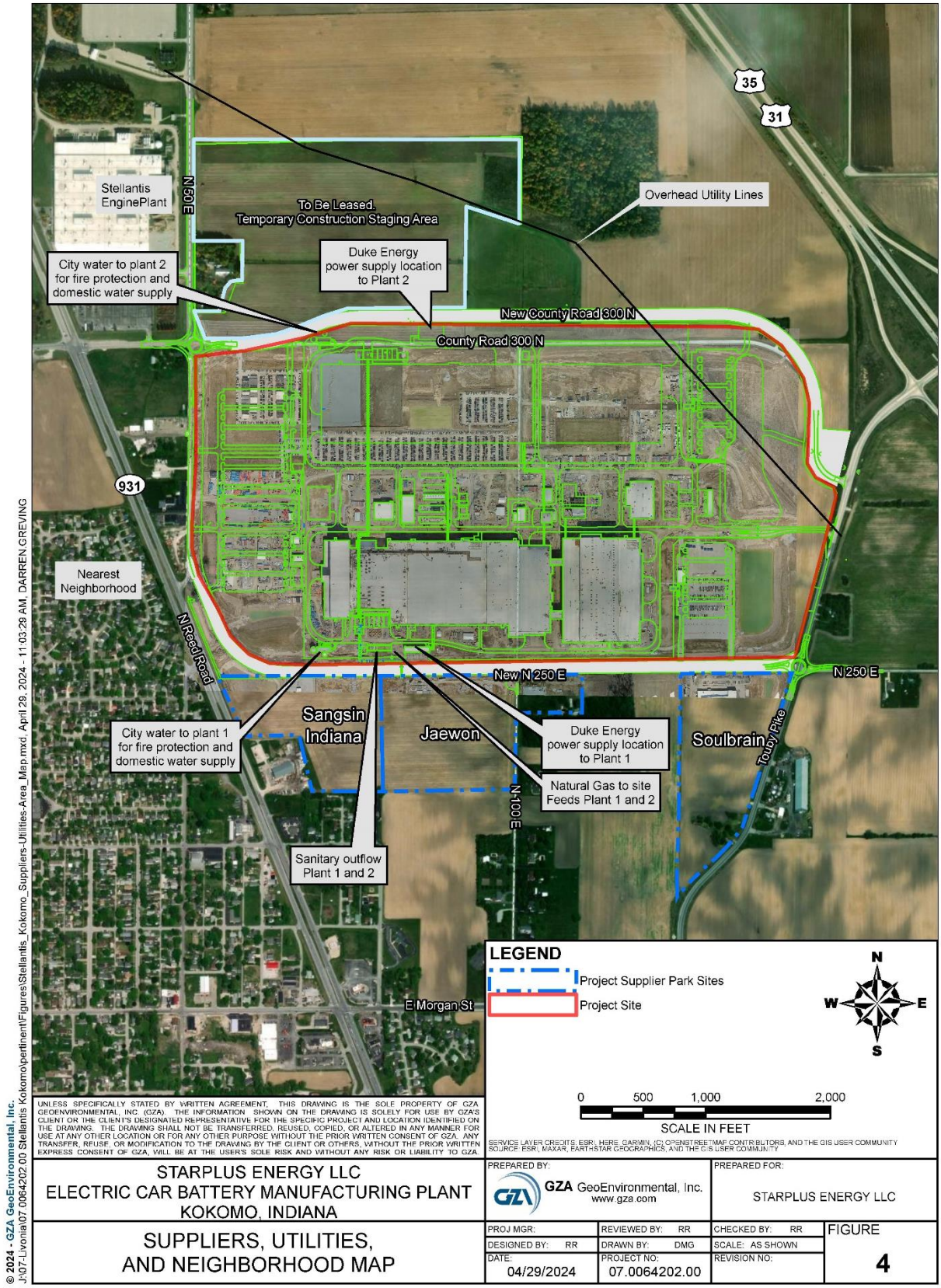
Noise is any unwanted sound that penetrates the environment or interferes with normal communication or activities. Overall, the surrounding area remains mostly undeveloped, with commercial use only to the west and existing Stellantis manufacturing plants to the northwest. All of the land within the Project area has been zoned “High-Intensity Industrial/Heavy Manufacturing.”

The Project site is bounded by two major thoroughfares, with State Route 931 less than 0.1 mile to the west and U.S. 31/U.S. 35 approximately 0.2 mile to the east. The region has limited residential land uses. Existing sources of noise are limited to vehicular traffic and farm machinery.

City’s noise ordinance is found in Chapter 132 of its Code of Ordinances. It generally limits excessive noise and would be applicable to Project construction and operation. However, applicable exemptions contained in the noise ordinance include “[s]ounds associated with the normal conduct of legally established non-transient businesses, organizations, and governmental entities, when such sounds are customary, incidental and within the normal range appropriate for such use.” Project-related noise and sound levels would be typical of new industrial construction activities. They would also be intermittent and limited to the construction phase. See Section 1.3.1 for the construction schedule.

A limited number of residences could be exposed to noise impacts from Project construction and operation. The closest neighborhood is west of State Route 931, a four-lane divided highway (see **Figure 4**). This existing noise source, State Route 931, is between the residences and the Project site. Although State Route 931 could mask noise from construction activities within the Project site, residents could experience short-term adverse impacts from noise generated during construction of the Project.

Figure 4: Suppliers, Utilities, and Neighborhood Map



STARPLUS ENERGY LLC ELECTRIC CAR BATTERY MANUFACTURING PLANT KOKOMO, INDIANA	PREPARED BY: GZA GeoEnvironmental, Inc. www.gza.com		PREPARED FOR: STARPLUS ENERGY LLC	
SUPPLIERS, UTILITIES, AND NEIGHBORHOOD MAP	PROJ MGR:	REVIEWED BY: RR	CHECKED BY: RR	FIGURE
	DESIGNED BY: RR	DRAWN BY: DMG	SCALE: AS SHOWN	4
	DATE: 04/29/2024	PROJECT NO: 07.0064202.00	REVISION NO:	

Industrial processes/manufacturing operations at the Project site would not add to local ambient noise levels because manufacturing processes would be conducted within an enclosed building and consistent with the current intended use for the area, which has been zoned “High-Intensity Industrial/Heavy Manufacturing.” Noise from vehicular traffic associated with commuting workers and material receiving and shipping operations would be consistent with the intended use for the area where the Project would be located. The battery plants would operate four 12-hour shifts 24 hours a day. For example, one shift would from be from 8:00 a.m. to 8:00 p.m. and another would be from 8:00 p.m. to 8:00 a.m. Noise from manufacturing operations inside the buildings would be consistent throughout the 24-hour day. Although noise from commuting workers and material receiving and shipping operations would occur at all hours of the day, such noise would be proportionally higher during daytime hours because of the larger volume of overall activity occurring during daytime hours.

Because manufacturing processes would be conducted within interior spaces and the Project would be consistent with the current intended use for the area, and because manufacturing facilities and major roadways already exist in the area, noise impacts as a result of the Project would not be significant.

3.1.6 Transportation

The primary routes to the Project site are State Route 931, which is less than 0.1 mile west of the Project site, and U.S. 31/U.S. 35, approximately 0.2 mile to the east. State Route 931 is a four-lane divided highway. The U.S. 31/U.S. 35 bypass interchange is fully access controlled and relatively new, having been built in 2014 by the Indiana Department of Transportation (INDOT). The U.S. 31/U.S. 35 bypass interchange at Touby Pike is about 0.1 mile from the Project site.

In preparation for development of the Project, the City has proposed relocation of CR 300 N (Smith Road) from CR N 50 E to Touby Pike. The CR 300 N project is listed in the Transportation Improvement Program (TIP) for Kokomo and Howard County as a Metropolitan Planning Organization– (MPO-) funded project (Kokomo Howard County Governmental Coordinating Council 2023). In addition to relocation of CR 300 N (Smith Road), a new road would be built along the southern boundary of the Project site. This new road would be an extension of CR N 250 E (Sparks Road). Combined with the CR 300 N (Smith Road) project, this new roadway would form a ring around the proposed development for improved capacity and improved connectivity to the various parking and support areas on the Project site (see Chapter 4, *Cumulative Effects*, for more information on the City’s projects).

The City is also planning intersection improvements. Two new roundabouts, at the intersection of CR 300 N and CR N 50 E as well as the intersection of CR N 250 E (Sparks Road) and Touby Pike, would be constructed. The intersection improvements would make left turns safer compared to operations at stop-controlled intersections under existing conditions.

The StarPlus Energy battery plants are anticipated to employ 2,600 hourly workers and 900 salaried workers. There would be four shifts at full production. The shift with the most employees would be the first day shift. That shift is expected to have 1,100 workers. Worker traffic would be split among different times throughout the day and would not occur at one time. Overlapping traffic is not anticipated between shifts because all incoming workers would be at the facility before the shift hour begins, and all outgoing workers would leave the facility after the shift hour ends. The number of deliveries should not exceed 200 a day; these would most likely not coincide with shift changes.

It is anticipated that local workers in Kokomo would approach the Project site from the south, from State Route 931 or other local roadways, then use CR 300 N to access the site. Trips originating outside of Kokomo are anticipated to take U.S. 31 to the Touby Pike exit, then travel

west to either CR 300 N or CR N 250 E (Sparks Road) to access the Project site. Under existing conditions, fewer than 20,000 vehicles per day use either U.S. 31 or State Route 931, routes that could accommodate twice as many vehicles without experiencing unsatisfactory delay. Because both regional roadways have excess capacity during peak hours, they could accommodate the additional traffic generated by development. Furthermore, circulatory roadways (i.e., CR 300 N and CR N 250 E) would provide multiple routes to Project facilities, depending on the destination within the site. With the inclusion of roundabouts, left turns would be accommodated safely at low-speed intersections. The roadway network surrounding the Project site would be able to accommodate the traffic generated by development during peak hours.

Because road improvements associated with development of the Project have already occurred, additional road improvements are proposed to occur in conjunction with Project development, and overlapping traffic between shifts is not anticipated, transportation impacts as a result of the Project would not be significant.

3.1.7 Socioeconomics and Environmental Justice

3.1.7.1 Socioeconomics

The Project site is in Howard County, approximately 40 miles north of Indianapolis. During the construction phase of the Project, StarPlus Energy estimates that peak construction would require approximately 3,200 workers. Based on preliminary construction planning, it is anticipated that approximately 20 percent of this manpower would be sourced from Howard County. The remainder would be temporarily transferred to the Project area from South Korea and other parts of the United States.

Once full production is reached, StarPlus Energy estimates that the battery plants would employ 2,600 hourly employees and 900 salaried employees. Full production and staffing are expected to be reached in 2025 for Battery Plant 1 and 2027 for Battery Plant 2.

In a November 2022 *Kokomo Tribune* newspaper article, it was reported that Howard County had the highest unemployment rate of any of the 92 counties in Indiana, at 4.8 percent, according to the Indiana Department of Workforce Development (*Kokomo Tribune* 2022). The state average was 2.8 percent. According to STATS Indiana, the annual unemployment rate for Howard County is 5.0 percent; the February 2024 unemployment rate was 5.8 percent. This was the highest annual unemployment rate and the second-highest February unemployment rate in Indiana. The state average was 3.1 percent (Indiana Department of Workforce Development n.d.).

The 2017 Kokomo Comprehensive Plan stated that the number of individuals in the county's labor force had decreased by 3,212 over a 10-year period (Kokomo/American Structurepoint 2017). In addition, the unemployment rate remained above the average unemployment rates for Indiana and U.S., indicating that individuals in the labor force continued to experience difficulty in finding jobs. However, the Project would generate new manufacturing jobs and have a beneficial impact on the community.

The State of Indiana created the Regional Economic Acceleration and Development Initiative (READI) to promote strategic investments and encourage community partnerships through state appropriations. At Ivy Tech Kokomo, READI funds would be used for a $2 million "Industry 4.0 Training Lab" to help prepare the region's workforce for the future—specifically, manufacturing, a sector that continues to modernize operations and integrate smart technologies and processes. The initiative would enable the region to proactively develop an educated workforce pipeline and upskill its current workers, thereby supporting Industry 4.0 and fueling the future of

manufacturing (North Central Indiana Regional Planning Council 2021). There are also plans for new housing developments that would use READI grant funding. See Section 4.2.3 for additional information on housing in the Project area.

A housing feasibility study, prepared for the City of Kokomo on March 20, 2023, stated that "estimates and projections indicate the Primary Market Area (PMA) will experience an increase of 1.8 percent in total population from the 2010 census to 2028. Between 2023 and 2028, it is estimated that 143 renter households and 340 owner households will be added to the market" (MMA 2023). The study included assumptions that the StarPlus Energy plant and other new manufacturing facilities would add 1,761 jobs in the area. The PMA, referred to in the quote above, is defined as the Kokomo Metropolitan Statistical Area, which is Howard County.

The study indicated that the population projections in the PMA would be mostly stable, with only a slight increase. Estimates and projections indicate that the PMA would experience a 1.8 percent increase in total population (i.e., from the time of the 2010 census to 2028), which is much lower than the state average. Over the same time period, estimates and projections for Indiana show an increase of 7.3 percent.

The study also indicated that, in 2023, an estimated 4,020 housing units were vacant in Howard County, which is approximately 10.1 percent of all housing units and higher than the statewide average of 8.9 percent. The study also indicated that there were 137 vacant rental units in March 2022. Some of the employees who would take the added jobs would most likely come from outside the county. The study found that 14.44 percent of the workforce in Howard County lives outside the county and commutes.

Because of the vacant housing units in Howard County, the slower population growth in Howard County compared with the state, and the ability of workers to live outside the county and commute, cumulative impacts on housing would not be significant.

Extensive health care and public safety resources exist within the greater Project region. StarPlus Energy would continue to review methodologies with respect to contractual obligations for these resources if required to bolster existing resources.

Given the extensive job creation that would occur during construction and operation of the Project, the availability of a regional workforce, the proactive workforce training, and the housing and public services available in the greater Kokomo region, significant adverse socioeconomic impacts would not be expected.

3.1.7.2 Environmental Justice

LPO's review of environmental justice (EJ) issues focuses on Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations; the National-Scale Air Toxics Assessment (NATA) cancer risk and respiratory hazard index, as defined in EPA's EJ screening tool; and site-specific population centers (e.g., schools, day-care centers) near the Project site.

Executive Order 12898 directs federal agencies to address environmental and human health conditions in minority and low-income communities. The evaluation of EJ is dependent on determining if high and adverse impacts from the Project would disproportionately affect minority or low-income populations in the affected community.

In accordance with EPA's EJ guidelines, minority populations should be identified when either 1) the minority population of the affected area exceeds 50 percent or 2) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis.

The ethnic and racial composition of the county and the state is presented in **Table 2**. Minorities make up approximately 16.6 percent of the population in the county, which is below the minority percentage for the state. At the census block-group level (i.e., where the Project is located), percentages for people of color range from 8 to 18 percent, which is below the state average of 22 percent (see **Table 3**).

Table 2: Population, Ethnicity, and Poverty

	Howard County	Indiana
Total population	83,574	6,862,199
Race/ethnicity	—	—
White	86.7%	84.0%
Black or African American	8.2%	10.3%
American Indian and Alaska Native	0.5%	0.4%
Asian	1.4%	2.8%
Native Hawaiian and other Pacific Islander	0.1%	0.1%
Two or more races	3.1%	2.4%
Hispanic or Latino	4.1%	7.9%
White alone, not Hispanic or Latino	83.4%	77.0%
Poverty	11.9%	12.2%

Note: Population and ethnicity data gathered from the U.S. Census Bureau web page (accessed: February 13, 2024).

Table 3: EPA's EJ Screen Report

	East Side of Project[a]	West Side of Project[a]	State Average	Percentile in State	U.S. Average	Percentile in U.S.
NATA* cancer risk (lifetime risk per million)	20	20	23	0	28	< 50th
NATA* respiratory hazard index	0.3	0.3	.29	86	0.36	< 50th
People-of-color population	8%	18%	22%	42–61	40%	21–36
Low-income population	22%	33%	31%	34–55	30%	39–59

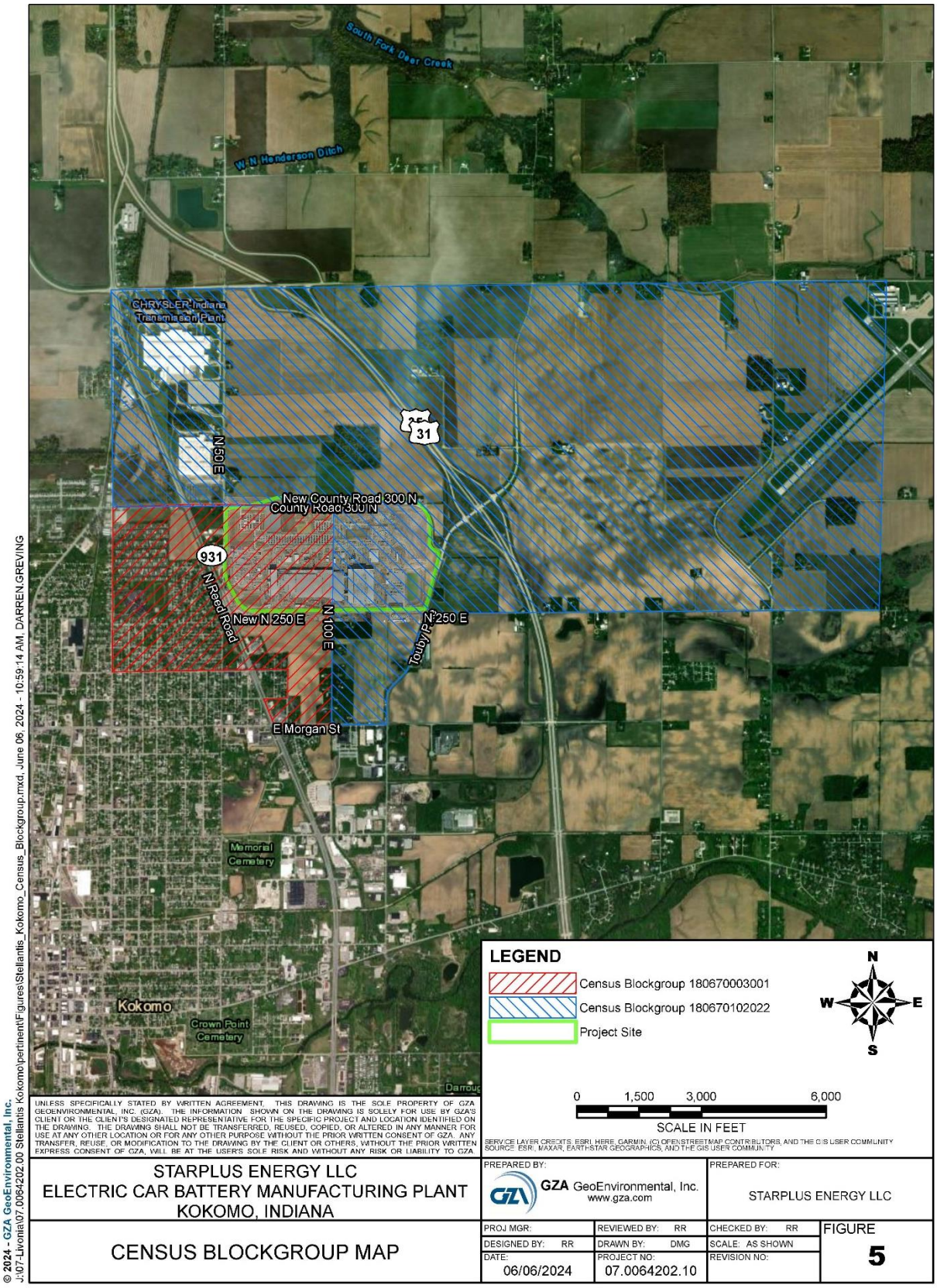
[a] *The east side of the Project area includes the area east of County Road N 100E in Block Group 180670102022; approximate population: 1,448. The west side of the Project area includes the area west of County Road N 100E in Block Group 180670003001; approximate population: 1,301.*

** More information on the NATA can be found at https://www.epa.gov/national-air-toxics-assessment.*

The percentage of persons in poverty is approximately 0.3 percent lower in Howard County (11.9 percent) than in the rest of the state (12.2 percent) (see **Table 2**). In EPA's EJ screening tool (**Table 3**), the low-income population ranges from 22 to 33 percent, which is below the state average of 31 percent for the block group on the east side of the Project area and not meaningfully different from the state average for the block group on the west side of the Project area. The block groups on the east and west sides of the Project area are also below or not meaningfully different from the U.S. average of 30 percent (see **Figure 5** for a map of the census block-group locations).

The NATA cancer risk and respiratory hazard indices are a way to see how local residents compare to everyone else in the state as well as the entire U.S. For the NATA respiratory hazard index, the region is in the 86th percentile relative to the state but only 0.01 higher than the state average and below the 50th percentile relative to the U.S.

Figure 5: Census Block-Group Map



For the NATA cancer risk index (i.e., lifetime risk per million), the Project is in an area that is in the 0 percentile relative to the state and below the 50th percentile relative to the U.S.

The nearest school is Bon Air Elementary School, approximately ⅓ mile southwest of the Project site; there are no known day-care centers within 0.5 mile of the Project site. Because schools and/or day-care centers are more than ⅓ mile away from the Project site and the minority population and poverty rates in the Project area are lower or not meaningfully different from those of the county, state, and U.S., no impacts are anticipated that would give rise to disproportionate impacts on minority or low-income populations in the affected area. Therefore, EJ impacts would not be significant.

3.1.8 Health and Safety

The construction contractor developed a site-specific occupational health and safety plan for construction activities and is implementing the plan (Walbridge 2023).

Operations would be governed by a global corporate health and safety program that would require review and approval of all novel processes and activities. The health and safety program would require employee training, proper protective equipment, engineering controls, monitoring, and internal assessments of ongoing safety activities.

In general, four main processes in the plant would use chemicals: anode and cathode mixing, NMP use and recycling, electrolyte addition, and solvent-based cleaning. During the process in which the anode and cathode slurries are mixed, various dry powders are combined with liquids. The NMP used in the cathode slurry is reclaimed during a solvent recovery process and reused. When chemical concentrations in the air are above Occupational Safety and Health Administration permissible exposure limits (29 CFR 1910.134), a respiratory protection program would be followed. All employees potentially exposed to levels greater than the permissible exposure limit would be part of the program and provided training, medical evaluations, and respirators. The recently revised EPA risk determination for NMP would be closely monitored throughout public comment, and all changes and requirements determined necessary by EPA would be adhered to.

Electrolyte would be added to the cells in the assembly process. Discharges from cells that are discarded during the manufacturing process would be emptied into a dedicated sump pit. Acetone and isopropyl alcohol would be used for cleaning parts. All processes would occur as part of an engineered assembly process to minimize health and safety risks.

Chemicals used in the manufacturing process would be delivered to the Project site by truck, using a variety of packaging methods, including tanks, drums, supersacks, and pallets. During preparation for Project operations, an emergency action plan that covers spills, fires, floods, active shooters, and evacuation routes would be developed, as would a Stormwater Pollution Prevention Plan (SWPPP) that covers chemical management, routes of possible spills, and spill prevention measures. Safety data sheets for all chemicals would be followed and available on-site.

The Project site would have storage tanks for materials used at the facility, including fresh and waste NMP, collected purge solvent, and electrolyte. All storage tanks would be aboveground tanks. Current codes and standards, including National Fire Protection Association (NFPA) 30, would be followed to comply with requirements regarding flammable liquids in tanks (National Fire Protection Association 2024).

Standard BMPs and applicable federal, state, and local regulations and standards for construction and operation of the facility would be implemented to ensure the safety of workers and the public. This would include compliance with federal Occupational Safety and Health Administration regulations as well as Indiana Occupational Safety and Health Administration regulations.

Various hazardous chemicals would be used throughout the battery cell manufacturing process. Regulated substances, per Section 112(r) of the CAA (Risk Management Plan), either would not be used or would be used in small quantities that would not trigger risk management plan requirements. A software program would be used to track chemical purchases and report the use of any chemicals that triggered CAA Section 112 requirements. Chemicals used in manufacturing would be continuously reviewed for compliance with the Toxic Substances Control Act (TSCA), including the requirements for premanufacture notice for chemicals not on the TSCA inventory, following the Significant New Use Rules, and quadrennial chemical data reporting, covering applicable chemical manufacture and import data. All chemicals would be in compliance with TSCA. The battery plants would employ a chemical control process that would evaluate all new chemicals for environmental and safety regulatory implications prior to that chemical being brought on-site.

Per the Emergency Planning and Community Right-to-Know Act (EPCRA), the battery plants would produce and submit chemical threshold reports, site plans, and site emergency response plans and participate in local emergency planning meetings. The battery plants would also develop emergency response procedures applicable to the transport of dangerous goods and materials. The reporting of chemical activities covered under the Toxic Release Inventory (TRI), per EPCRA Section 313, would also be conducted as applicable. The chemicals that are anticipated to meet the reporting requirements under the TRI include the following: NMP, electrolyte solution, Solef® polyvinylidene fluoride (PDVF) binder, styrene-butadiene rubber (SBR) binder, dimethyl carbonate, TE-SD, lithium NCA oxide, and graphite.

The local fire department would be informed of potential hazards associated with the facility and provided Project construction and layout information, ensuring that first responders and the public would be protected from exposure to potentially hazardous situations (e.g., toxic smoke or vapors) in the event of a fire or industrial accident. Fire extinguishers would be placed on shop floors and at risk points. The facility would also be protected by a sprinkler system.

Because of measures to address health and safety issues, including BMPs; compliance with federal, state, and local regulations and standards; plans for preventing chemical spills and the mishandling of hazardous materials; and the experience gained from handling and using hazardous materials at existing facilities, impacts related to health and safety from Project construction and operation would not be significant.

3.1.9 Waste Management

Hazardous waste would not be produced during construction, and Waste produced during construction would be placed in a dumpster and removed by a waste management company. Construction waste would consist of packaging material from uncrating equipment. Waste materials would include wooden crates and pallets, plastic coverings, steel c-channels for packaging, and stainless steel. The battery plants would generate waste as refuse from on-site employee activity and process operations is collected. **Table 4** provides estimations of the waste types, generation volumes, transportation methods, and packaging, along with the expected disposal method. The majority of process wastes could be recovered and recycled for reuse in the manufacturing process. However, some wastes would require off-site treatment and disposal. This includes wastewater discharges, as detailed in Section 3.2.3. Wastes associated with plant activities would not be disposed of on-site but, rather, transported to appropriate waste management facilities for treatment and/or disposal. Solid waste would be managed by the current private providers in the area. All wastes would be collected, managed, and recycled/disposed of in accordance with regulatory requirements, using the proponents' existing solid waste management minimization and removal procedures.

Prior to the commencement of operations, StarPlus Energy determined the facility generator category, as required by the RCRA, and completed the appropriate registration process to obtain an EPA identification number (INR000153510). In addition, a Hazardous Waste Management Plan would be developed that covers handling, storing, and transporting hazardous waste. The facility would also have an Episode Plan, containing all possible emergency response scenarios, including spills.

It is anticipated that the following general categories for waste streams and disposal methods would be considered reasonably foreseeable, although all final determinations would be based on detailed regulatory review prior to commencement of operations:

- Non-hazardous waste (transported off-site and transported to an incinerator designed and permitted to accept both industrial and municipal waste)
- Hazardous waste (accumulated and transported off-site for disposal of at a licensed hazardous waste management facility)
- Breached or scrapped batteries, metals, and miscellaneous recyclable materials (collected and recycled off-site)
- Process NMP (collected in a recovery system for reuse)
- Contaminated NMP (collected and disposed per hazardous waste requirements)

In addition to the above waste categories, **Table 4** provides more detailed estimations of the waste types, generation volumes, transportation methods, and packaging, along with the expected disposal method. General municipal solid waste (MSW) would be transported to the Covanta facility at 2320 S. Harding Street, Indianapolis, IN 46221.

Table 4: Waste Stream Detail

Waste Type	Packaging – Transport	Phase	L = gpy* S = tpy*	Expected Disposal Method
NCA-contaminated packaging waste	FIBC to truck	S	2,677	Reclaim
Used NMP	Aboveground piping	L	1,280,320	Reclaim
Process contact wastewater	Tank to truck	L	7,464,250	Water reclamation
Salt water	Tank to truck	L	1,972,825	Water reclamation
Washing fluid	Tank to truck	L	16,460	Water reclamation
Cathode slurry	Tote to truck	L	90,385	Reclaim
Anode (NMP) slurry	Tote to truck	L	232,970	Water reclamation
Wastewater sludge	Tote to truck	L	139,576	Reclaim
Waste oils	Drum to truck	L	3,001	Reclaim
Electrolyte	Tank to truck	L	3,534	Reclaim
Exhausted activated carbon	Tote to Truck	S	5,871	Reclaim
Cardboard	Bales to truck	S	3	Recycle
Plastic	Bales to truck	S	458	Recycle
Wood pallets and packaging	Truck	S	2,714	Recycle
Product waste from process	FIBC to truck	S	1,073	Reclaim
Scrap batteries	Truck	S	1,113	Reclaim
Copper foil	FIBC to truck	S	286	Recycle
Aluminum foil	FIBC to truck	S	274	Recycle

Waste Type	Packaging – Transport	Phase	L = gpy* S = tpy*	Expected Disposal Method
Steel	Roll-off to truck	S	117	Recycle
Stainless	Roll-off to truck	S	19	Recycle
General waste	Compactor to truck	S	581	0 landfill waste to energy

FIBC = flexible intermediate bulk container
L = liquid S = solid gpy = gallons per year tpy = tons per year

Because of planned waste management practices that would align with all applicable state and federal regulations prior to waste generation and a dedicated program to minimize waste and enhance material recycling, impacts related to waste management would not be significant.

4.0 CUMULATIVE EFFECTS

Cumulative impacts are potential effects on the environment from the incremental impact of the Project when added to other past, present, and reasonably foreseeable future actions undertaken by other agencies (federal or nonfederal) or persons (40 CFR Part 1508.1[g]). The existing setting, as presented for the Project location, takes into account past actions. The present and future actions that may contribute to a cumulative effect were identified through a review of active project lists and planning documents from the following:

- City of Kokomo
- Howard County
- Kokomo and Howard County Governmental Coordinating Council (Kokomo MPO)
- INDOT

The review identified present and reasonably foreseeable future projects in proximity to the Project site:

- Road reconstruction on CR 300 N (Smith Road) by the City of Kokomo from CR N 50 E to Touby Pike is listed in the Transportation Improvement Program (TIP) for Kokomo and Howard County as a MPO-funded project. The CR 300 N project is expected to be built in 2025.
- Construction of a new road, an extension of CR N 250 E on the south side of Battery Plant 1 by the City of Kokomo, is ongoing. The construction area extends from the intersection where the existing CR N 250 E ends at Touby Pike to a point southeast of Battery Plant 1. The road is being extended to the west to connect to CR N 50 E on the west side of the Battery Plant 1. The CR N 250 E project is expected to be completed in the spring of 2024.
- Jaewon Industrial is building a $102 million, 65,000-square-foot chemical recycling plant on 30 acres south of CR N 250 E and west of Touby Pike in Kokomo to serve lithium-ion battery manufacturers. Jaewon Industrial will be a supplier to the StarPlus Energy battery plants and create up to 100 new jobs. There are also plans for a 150,000-square-foot facility on the same site (see Figure 4 for an exhibit showing the location of the Project suppliers).
- Sangsin Indiana is building an approximately $26 million manufacturing facility to serve lithium-ion battery manufacturers. Sangsin Indiana will be a supplier to the StarPlus Energy battery plants. The approximately 82,000-square-foot building will be on an 11-acre site south of CR N 250 E and east of SR 931. Sangsin Indiana will employ approximately 217 people.
- Soulbrain is building a $75 million manufacturing facility that will make electrolyte. Soulbrain will be a supplier to the StarPlus Energy battery plants. The 30,000-square-foot facility will be on an approximately 23-acre site on North Touby Pike, south of CR N 250 E, and create up to 75 jobs by the end of 2025.

4.1 Greenhouse Gas Emissions and Climate Change

The review of cumulative impacts associated with the overall Project found that the impacts of GHG emissions and climate change are geographically broad, whereas the impacts associated with other resources (e.g., traffic and transportation, socioeconomic and environmental justice, air quality, aesthetic and visual resources) are specific to the region and locality of the Project. The discussion of cumulative impacts that follows begins with the impacts associated with GHG emissions and climate change from the overall Project, then provides a review of the regional cumulative impacts associated with the Project location.

The contemporary understanding and agreement among the scientific community is that anthropogenic sources of GHGs have been the dominant cause of global temperature increases since the mid-20th century (Intergovernmental Panel on Climate Change 2013). The growth in industrial activity over the past two centuries has increased concentrations of GHGs, such as carbon dioxide (CO_2), nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, in the atmosphere. The dominant GHG contributed from fossil-fuel combustion, in terms of global warming impact, is CO_2. In the past century, changes in regional weather patterns and climate have been observed and attributed to increasing global temperatures. These changes involve precipitation (e.g., high and low extremes in rainfall, flooding, droughts), rising sea levels, polar ice melt, and more severe and frequent heat waves (Intergovernmental Panel on Climate Change 2013). Scientific evidence is clear that steadily increasing atmospheric GHG concentrations have had significant impacts on Earth's climate (Council on Environmental Quality 2016).

4.1.1 Impacts Associated with Greenhouse Gas Emissions and Climate Change

The battery plants will be designed to produce approximately 67 GWh of EV battery cell capacity annually. The manufacturing of batteries for use in EVs will allow the replacement of gasoline-powered vehicles, with an associated displacement in GHG emissions. The Project's construction-related GHG emissions would be minimal in comparison to the overall GHG emissions displaced by the EVs brought to market. The 67 GWh of battery manufacturing capacity would support an estimated 350,000 vehicles per year. The associated displacement in GHG emissions is calculated using U.S. government figures for CO_2 emissions per vehicle per year, as shown in **Table 5**.

Table 5: Total GHG Emissions Displaced

Value	Description
350,000 vehicles per year	Annual battery production, expressed as equivalent number of vehicles
13,476 miles	Average miles driven per vehicle per year[a]
21.75 miles per gallon	Average gasoline fuel efficiency of existing highway vehicles (2020 data)[b]
619.6 gallons per vehicle per year	Calculated gallons of gasoline displaced per vehicle per year
217 million gallons per year	Calculated total gallons of gasoline displaced per year from full production
19.37 pounds CO_2 per gallon of gas	Mass of CO_2 emissions per gallon of gasoline[c]
4,201 million pounds CO_2 per year	Calculated equivalent GHG displacement from annual battery production and use in EVs
1,905,352 metric tonnes CO_2 per year	

[a.] *U.S. Bureau of Transportation Statistics, 2022.*
[b.] *U.S. Bureau of Transportation Statistics, 2022.*
[c.] *U.S. Energy Information Administration, 2022.*

The above calculations demonstrate that the Project will result in the displacement of approximately 1.9 million metric tonnes of CO_2 annually from the replacement of gasoline-powered vehicles with battery-powered vehicles. Specifically, operation of the Project will result in the annual emission of approximately 46,000 metric tonnes of CO_2, resulting in a potential overall reduction in CO_2 of approximately 1.86 million metric tonnes from EV integration. In general, reducing CO_2 emissions would reduce GHG concentrations and the associated climate-change impacts (e.g., increases in atmospheric temperatures, changes in precipitation, increases in the frequency and intensity of extreme weather events, rising sea levels).

Because the Project would result in an overall benefit by reducing GHG concentrations through displacement, it is anticipated that significant adverse cumulative effects related to GHGs and climate change would not occur.

4.2 StarPlus Energy Battery Plant – Kokomo, Indiana

The discussion that follows presents the cumulative impacts associated with the Project when added to other past, present, and reasonably foreseeable future actions undertaken by other agencies (federal or nonfederal) or persons. Cumulative impacts are evaluated for air quality, socioeconomic and environmental justice, traffic and transportation, and housing.

4.2.1 Air Quality

The Project's construction phase would result in air emissions, primarily from fugitive dust associated with earthmoving and exhaust from fuel combustion. However, emissions resulting from construction would be temporary and minimized through the use of BMPs. The Project would support the proliferation of EVs, thereby reducing emissions from fuel combustion. Although the construction phase would have temporary impacts on air quality, the long-term effect of increased EV implementation would outweigh impacts from construction and result in a net benefit.

The potential exists for the Project to result in cumulative impacts on regional air quality. As discussed in Section 3.2.4, *Air Quality*, Howard County is in attainment or unclassifiable for all of the NAAQS; in accordance with the CAA, Indiana has developed a State Implementation Plan to maintain compliance with the NAAQS. Any new emissions in the airshed, including those of the identified projects, that would be subject to CAA permitting would have to comply with CAA regulations and be reviewed to ensure that air quality in the region would be in compliance with the NAAQS. Therefore, the cumulative impacts on air quality associated with operation of the Project and the other projects in the region would not be significant because of regulatory oversight.

4.2.2 Socioeconomics and Environmental Justice

The planned Jaewon Industrial, Sangsin Indiana, and Soulbrain facilities will create approximately 400 new jobs in the Kokomo and Howard County area. This is in addition to the 2,600 hourly positions and 900 salaried positions that the Project is expected to create. More than $200 million will be spent on property improvements at these facilities.

The Project is anticipated to have a beneficial impact on the local economy. A detailed analysis of EJ impacts is provided in Section 3.2.7.2, which concluded that EJ impacts would not be significant, given the economic benefit projected to be created during both construction and operation. The Project would represent a benefit to the regional economy, as well as poverty metrics, without disproportionate impacts on minority or low-income populations in the area.

4.2.3 Traffic and Transportation

No INDOT-funded transportation expansion projects are planned in the area near the Project site. The INDOT 2045 Long-Range Transportation Plan and the INDOT Statewide TIP 2024–2028 have no future state highway expansion or modernization projects, no new interchanges, or road projects on new alignments listed near the Project area.

The City plans to reconstruct/relocate 1.0 mile of CR 300 N (Smith Road) from CR N 50 E to Touby Pike. This is a two-lane roadway. In addition, the City plans to extend CR N 250 E 1.0 mile west of Touby Pike to CR N 50 E. This is also a two-lane roadway. The City is also

planning intersection improvements—specifically, two new roundabouts—at CR 300 N and CR N 50 E as well as CR N 250 E and Touby Pike. As previously discussed in Section 3.2.6, under existing conditions, fewer than 20,000 vehicles per day use either U.S. 31 or State Route 931, which could accommodate twice as many vehicles without experiencing unsatisfactory delay. Both regional roadways have excess capacity during peak hours and could accommodate the additional traffic generated by the development.

The Project, in conjunction with the identified projects in the region, would lead to an incremental increase in overall traffic; however, no significant adverse cumulative effects on the region's overall transportation network are anticipated.

5.0 FINDING

Based on this EA, DOE has determined that providing a federal loan to StarPlus Energy, LLC, to support the procurement and installation of battery manufacturing equipment (tooling), the construction of Battery Plant 2, and operation of Battery Plants 1 and 2 to produce lithium nickel, cobalt, and aluminum batteries in Kokomo, Indiana, will not have a significant effect on the human environment. Preparation of an environmental impact statement is therefore not required, and DOE is issuing this Finding of No Significant Impact.

TODD STRIBLEY

Digitally signed by TODD STRIBLEY
Date: 2024.09.04 15:28:47 -06'00'

Todd Stribley, NEPA Compliance Officer
Director, Environmental Compliance; U.S. Department of Energy, Loan Programs Office

6.0 REFERENCES

City of Kokomo/American Structurepoint, Inc. 2017. *Kokomo Comprehensive Plan*. Keep Kokomo Current – Shifting the Perception.

Historic Landmarks Foundation of Indiana. 2003. *Howard County Interim Report*. May.

Indiana Department of Natural Resources. 2023*. State Historical Architectural and Archaeological Research Database.* Division of Historic Preservation and Archaeology. May.

Indiana Department of Workforce Development. n.d. *STATS Indiana*. Available: https://www.stats.indiana.edu/profiles/profiles.asp?scope_choice=a&county_changer=18067. Accessed: April 15, 2024.

Intergovernmental Panel on Climate Change. 2013. *Climate Change 2013: The Physical Science Basis.* Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. T.F. Stocker, D. Qin, G.K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex, and P.M. Midgley (eds.). Cambridge University Press, Cambridge, United Kingdom, and New York, NY, USA, 1,535 pp.

Kokomo Howard County Governmental Coordinating Council. 2023. *Transportation Improvement Program, 2024–2028.* July 1. Available: https://www.kokomompo.com/project/transportation-improvement-program-tip-draft-2024-2028/.

Kokomo Tribune. 2022. Howard County Continues Unemployment Rate Reign. November 23. Available: https://www.kokomotribune.com/news/local_news/howard-county-continues-unemployment-rate-reign/article_d99f396a-6a89-11ed-97ad-9ff2c7e3e42f.html.

MMA, Inc. 2023. *Housing Feasibility Study*. Prepared for the City of Kokomo. March 20.

National Fire Protection Association. 2024. *NFPA 30, Flammable and Combustible Liquids Code.*

North Central Indiana Regional Planning Council. 2021. *North Central Indiana 21st-Century Innovation Region, Regional Development Plan*. September 15.

StarPlus Energy, LLC. 2024. *Significant Source Modification/Permit Modification*. March 4.

Tetra Tech, Inc. 2022. *Application for Initial Title V Permit, StarPlus Energy, LLC, Kokomo Lithium-Ion Battery Plant*. July 28.

U.S. Bureau of Transportation Statistics. 2022. *U.S. Vehicle Miles Dataset Table* (01_35_021522.xls). Available: https://www.bts.gov/content/us-vehicle-miles.

U.S. Council on Environmental Quality. 2016. *Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews.*

U.S. Energy Information Administration. 2022. *Carbon Dioxide Emissions Coefficients*. Available: https://www.eia.gov/environment/emissions/co2_vol_mass.php.

Walbridge. 2023. *StarPlus Energy Project, HSE Program*. December 1.

6.1 Personal Communication

Indiana American Water. May 3, 2024—email regarding water capacity.

7.0 LIST OF PREPARERS

7.1 DOE

Kara J. Harris, M.P.A., Environmental Science and Policy, 23 years' experience

7.2 Applicant

Richard Ray, PTP, GZA GeoEnvironmental, Inc., M.S., Urban and Regional Planning, 27 years' experience

Maria Milescu, CHMM, StarPlus Energy, LLC, M.Sc. Mechanical Engineering, MBA, 35 years' experience

Melissa Michaels, P.G., CHMM, Stellantis, B.S., Geology, 32 years' experience

James Novak, PWS, GZA GeoEnvironmental, Inc., B.A., Geography and Environmental Studies, 37 years' experience

Timothy M. Kelly, PE, GZA GeoEnvironmental, Inc., B.S., General Engineering, 16 years' experience

Lailah Reich, PWS, ISA Certified Arborist, GZA GeoEnvironmental, Inc., Biological Sciences, 21 years' experience

Rachel V. Lawrence, M.A., RPA, formerly with Chronicle Heritage, M.A., Archaeology, 8 years' experience

Frank Carvino, M.A., RPA, Chronicle Heritage, M.A., Archaeology, 16 years' experience

Robert E. Ahlrichs, PhD, RPA, Chronicle Heritage, PhD Archaeology, 15 years' experience

APPENDIX A AGENCY AND TRIBAL CORRESPONDENCE

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-AGL-15367-OE

Issued Date: 07/27/2022

Mark Perou
W.G. Yates & Sons Construction Company
2885 Democrat Rd.
Memphis, TN 38118

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Commercial Use Building Building #02 Formation Building
Location:	Kokomo, IN
Latitude:	40-30-57.64N NAD 83
Longitude:	86-06-15.42W
Heights:	829 feet site elevation (SE)
	125 feet above ground level (AGL)
	954 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

This determination expires on 01/27/2024 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

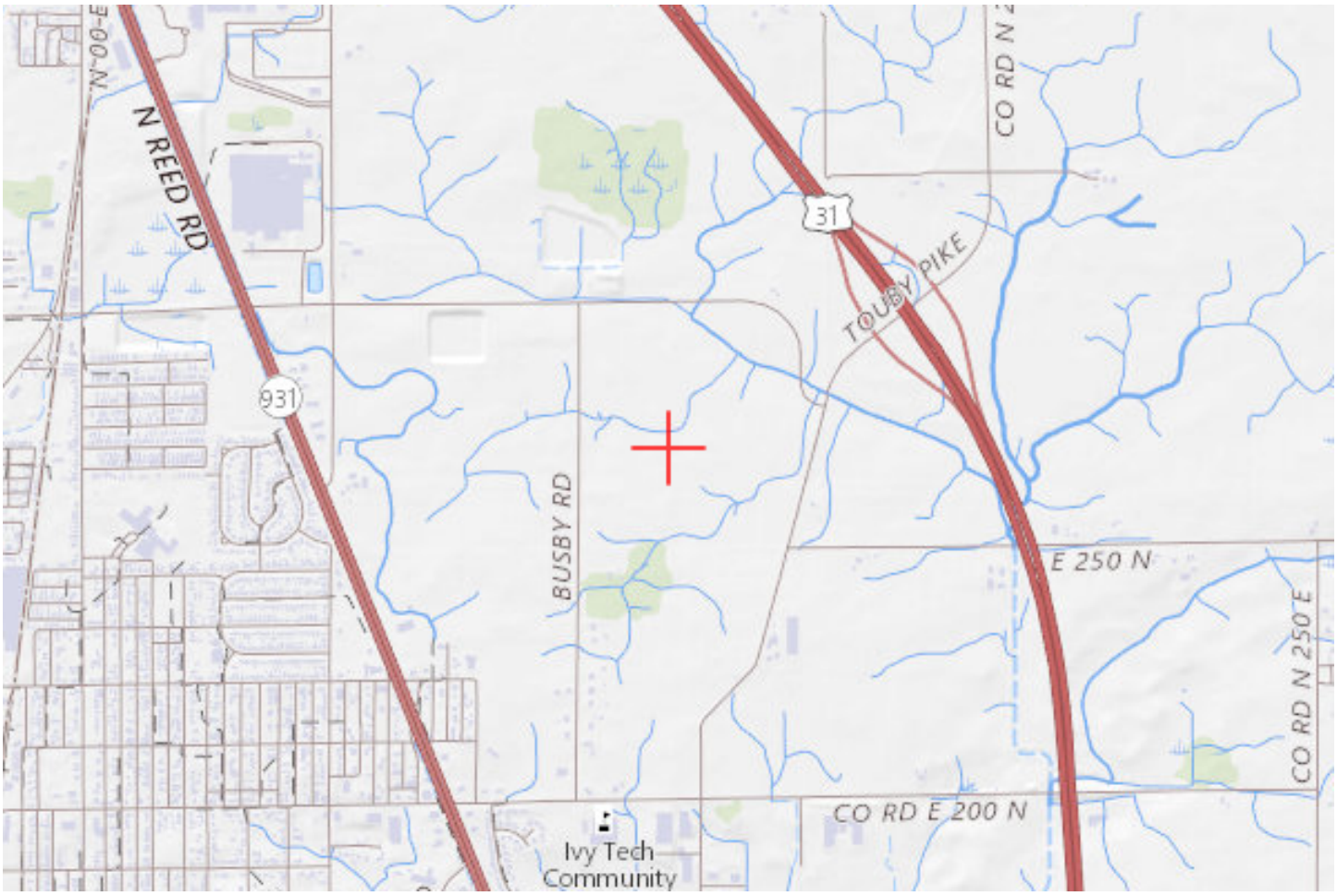
This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (847) 294-7575, or vivian.vilaro@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-AGL-15367-OE.

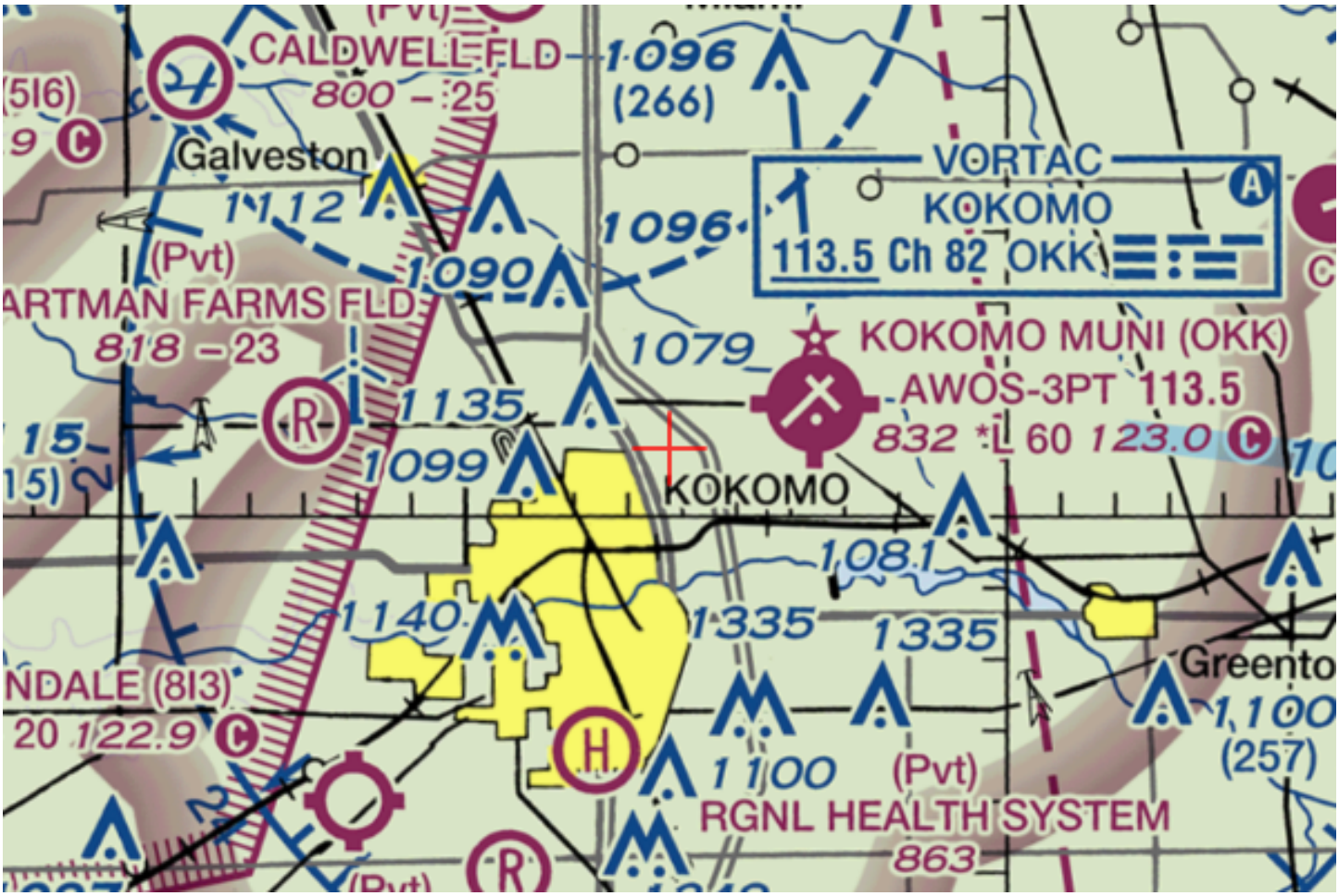
Signature Control No: 541705966-545514150 (DNE)
Vivian Vilaro
Specialist

Attachment(s)
Map(s)

TOPO Map for ASN 2022-AGL-15367-OE



Sectional Map for ASN 2022-AGL-15367-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-AGL-15366-OE

Issued Date: 07/27/2022

Mark Perou
W.G. Yates & Sons Construction Company
2885 Democrat Rd.
Memphis, TN 38118

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Commercial Use Building Building #01 Battery Cell Building
Location:	Kokomo, IN
Latitude:	40-30-57.03N NAD 83
Longitude:	86-06-24.65W
Heights:	829 feet site elevation (SE)
	121 feet above ground level (AGL)
	950 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

This determination expires on 01/27/2024 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

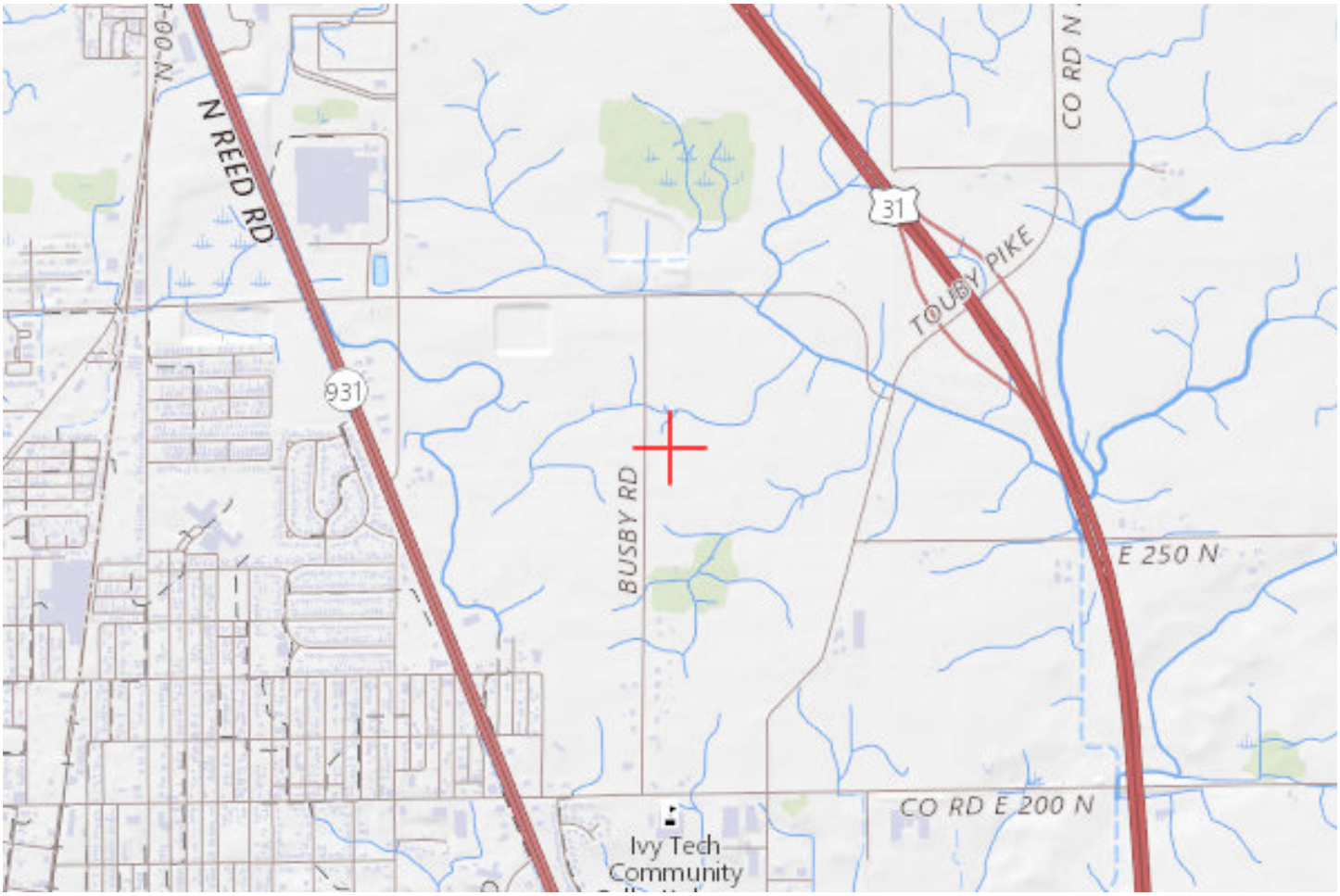
This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (847) 294-7575, or vivian.vilaro@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-AGL-15366-OE.

Signature Control No: 541705965-545514151 (DNE)
Vivian Vilaro
Specialist

Attachment(s)
Map(s)

TOPO Map for ASN 2022-AGL-15366-OE



Sectional Map for ASN 2022-AGL-15366-OE

Department of Energy
Washington, DC 20585

May 22, 2024

Beth K. McCord
Director, Division of Historic Preservation & Archaeology
Indiana Department of Natural Resources
402 W. Washington Street, W274
Indianapolis, IN 46204-2739

SUBJECT: U.S. Department of Energy, StarPlus Energy LLC in Kokomo, Indiana; National Historic Preservation Act Section 106 Initiation (DHPA #31989)

Dear Director McCord:

Pursuant to its authority under Section 136 of the Energy Independence and Security Act of 2007, which established the Advanced Technology Vehicles Manufacturing Loan (ATVM) program, the U.S. Department of Energy (DOE), Loan Programs Office (LPO) is evaluating whether to provide a Federal loan to StarPlus Energy LLC (StarPlus or Applicant) to finalize development of two electric vehicle (EV) battery manufacturing plants (Project), in Kokomo, Indiana (DOE's proposed action and undertaking). The Project is located at 2724 County Road N 50E, Kokomo, IN 46901 (Attachment 1).

The purpose of this letter is to initiate consultation with the Division of Historic Preservation and Archaeology under Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations (36 CFR Part 800), present the DOE undertaking, present the archaeological and architectural areas of potential effects (APEs), and seek your concurrence with DOE's finding of *No Historic Properties Affected* for this project.

DOE is using the National Environmental Policy Act (NEPA) process to assist in determining whether to issue a loan to support completion of the Project. The DOE LPO is preparing an Environmental Assessment to evaluate and inform DOE's consideration of providing a federal loan to complete the buildout of the facilities.

DOE Undertaking and APE

DOE's undertaking is the issuance of the proposed Federal loan to StarPlus to complete interior buildout of the facilities, specifically installation of the manufacturing equipment and associated general building equipment and systems, and the startup of the facility. Activities subject to DOE funding would occur on previously disturbed land and within existing structures; no new surface or sub-surface disturbance would occur as a result of the federal loan.

The Applicant's project includes activities that are and are not subject to DOE LPO funding. Using private funds that are not subject to the federal loan under review by DOE, the Applicant has already completed or is in the process of completing the overall site development activities. Additionally, the Applicant has installed foundations, erected buildings, and developed utility connection corridors (Attachments 2 and 3).

The archaeological Area of Potential Effect (APE) is limited to DOE's proposed action area that is subject to DOE funding is defined as the interior footprint of the 3,882,219 square feet of structures. DOE-funded interior buildout activities/actions would occur within existing buildings that were constructed with private funding. The 387-acre APE for historic architecture is defined as the footprint of structures subject to DOE funding plus adjacent viewshed. Due to intervening terrain and vegetation, primarily tree lines and the construction of planned berms, the viewshed extends beyond the structure footprints on the property site.

Current DOE Section 106 Activities

In accordance with Section 106, DOE has identified and contacted Native American Tribes with a known an interest in the project area on December 14, 2023. DOE has notified the Eastern Shawnee Tribe of Oklahoma, Miami Tribe of Oklahoma, and Pokagon Band of Potawatomi Indians to see if they have an interest in the project. None of the federally recognized tribes responded to the initiation letters, and no other consulting parties have been identified for the Project.

A portion of the archaeology APE was subjected to two Phase 1 archaeological surveys (Phase IA Archaeology Survey for Star Plus Energy Plant Project, Kokomo, Howard County, Indiana by Robert E. Ahlrichs, RPA of Chronical Heritage; February 2024 and March 2024). The archaeological surveys identified two previously recorded sites 12HO0310 and 12HO0312) and five unrecorded sites (12HO0404, 12HO0405, 12HO0406, 12HO0407, and 12HO0408). All sites are recommended as not eligible for the National Register of Historic Places.

After reviewing the surveys and given that DOE's actions would occur on previously disturbed land within existing buildings and no new surface or sub-surface disturbance would occur, DOE is issuing a finding of *No Historic Properties Affected* for this undertaking and seeks the concurrence of the IDNR Division of Historic Preservation & Archaeology on this finding.

Requesting your Concurrence and Next Steps

As part of the Section 106 process, DOE requests your concurrence on the archaeological and architectural APEs and our proposed determination of "no historic properties affected" as described in 36 CFR §800.4(d)(1). Additionally, we welcome any comments you may have on the proposed action.

We look forward to consulting with your office throughout the Section 106 process. If you have any questions or would like to discuss this project further, please contact me in the DOE Loan Programs Office at (202) 586-8726, or email at LPO_Environmental@hq.doe.gov.

Respectfully,

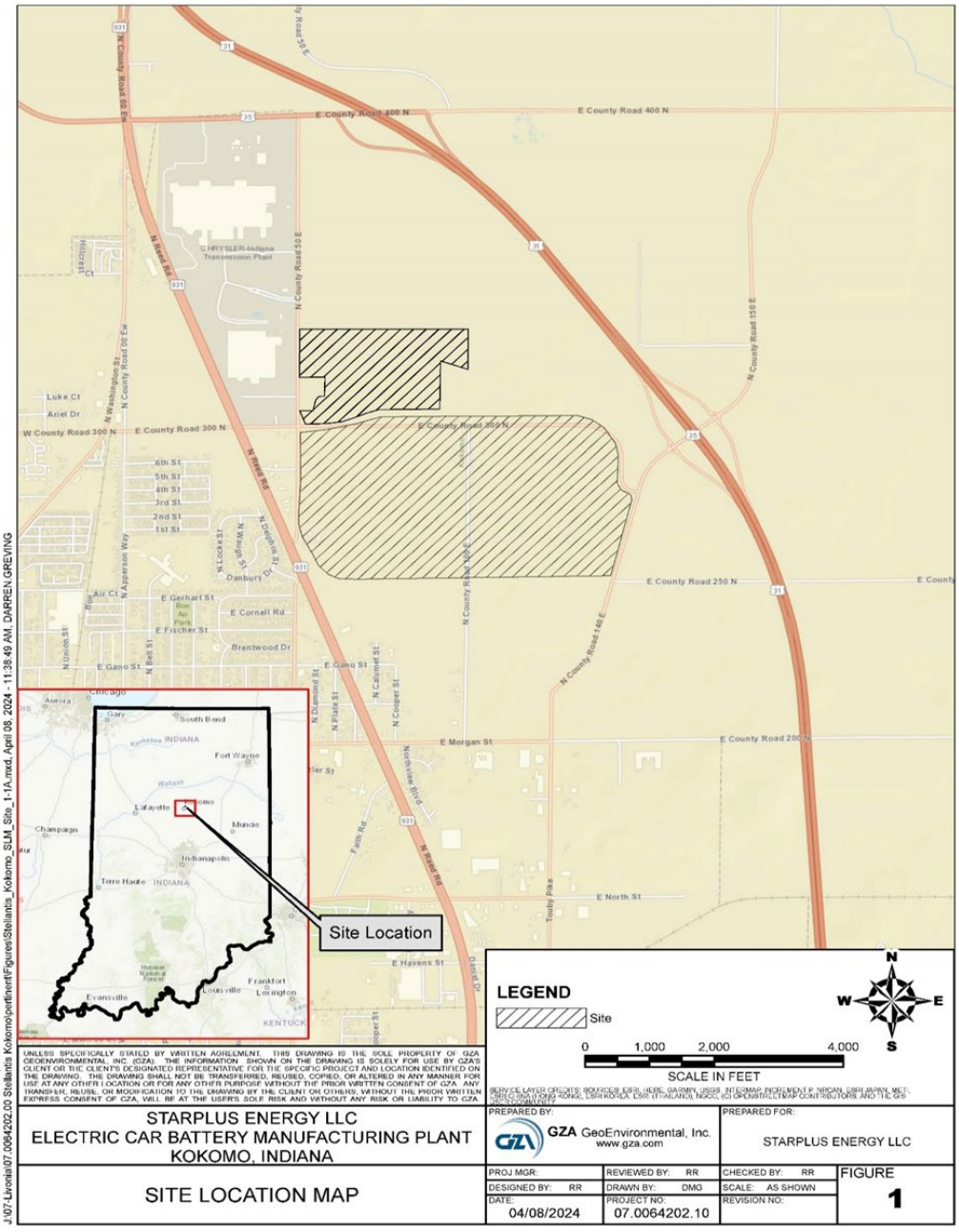
Kara Harris
Environmental Protection Specialist
Loan Program Office

CC: Cathy Draeger-Williams

Attachments:

Attachment 1 Project Location Map
Attachment 2 Project Site Map (DOE funding excludes exterior activities)
Attachment 3 Site Photos (1, 2, and 3)

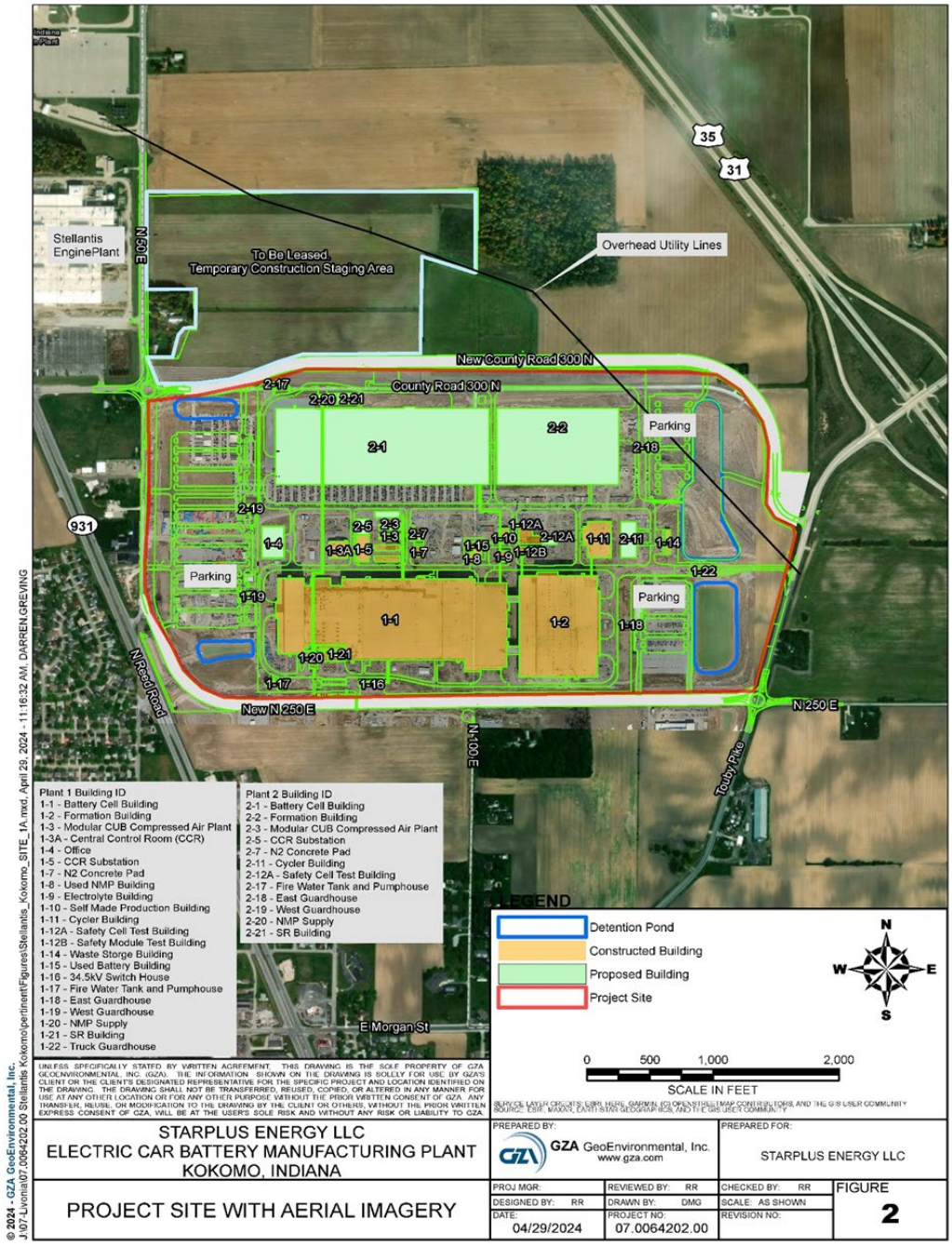
Attachment 1
Project Location Map



SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, GARMIN, USGS, INTERMAP, INCREMENT P, NRCAN, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), ESRI KOREA, ESRI (THAILAND), NGCC, (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

STARPLUS ENERGY LLC ELECTRIC CAR BATTERY MANUFACTURING PLANT KOKOMO, INDIANA	PREPARED BY: GZA GeoEnvironmental, Inc. www.gza.com		PREPARED FOR: STARPLUS ENERGY LLC
SITE LOCATION MAP	PROJ MGR:	REVIEWED BY: RR	CHECKED BY: RR
	DESIGNED BY: RR	DRAWN BY: DMG	SCALE: AS SHOWN
	DATE: 04/08/2024	PROJECT NO: 07.0064202.10	REVISION NO:
			FIGURE 1

Attachment 2
Project Site Map (DOE funding excludes exterior activities)



Attachment 3
Site Photos

Figure 1. Photo from northeast corner of project area facing southwest, as of May 21, 2024.

Figure 2. Photo from north side of project area facing south, as of May 21, 2024.

Figure 3. Photo from southeast side of project area facing northwest. Module and cell facility, as of May 21, 2024.

DNR Indiana Department of Natural Resources

Eric Holcomb, Governor
Daniel W. Bortner, Director

Division of Historic Preservation & Archaeology·402 W. Washington Street, W274·Indianapolis, IN 46204-2739
Phone 317-232-1646·Fax 317-232-0693·dhpa@dnr.IN.gov

June 17, 2024

Kara J. Harris
Environmental Protection Specialist
Loan Programs Office, LP-30
U.S. Department of Energy
1000 Independence Ave., SW
Washington, DC 20585

Federal Agency: U.S. Department of Energy

Re: Project information and the U.S. Department of Energy's finding of "no historic properties affected" for the Star Plus Energy Plant project to be located at 2724 County Road N 50E (DHPA #31989)

Dear Ms. Harris:

Pursuant to Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108) and 36 C.F.R. Part 800, the staff of the Indiana State Historic Preservation Officer ("Indiana SHPO") has conducted an analysis of the materials dated and received on May 22, 2024, for the above indicated project in Kokomo, Howard County, Indiana.

We concur with the U.S. Department of Energy's May 22, 2024 finding that there are no historic buildings, structures, districts, objects, or archaeological resources within the area of potential effects that will be affected by the above indicated project.

If any prehistoric or historic archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and 29) requires that the discovery must be reported to the Department of Natural Resources within two (2) business days. In that event, please call (317) 232-1646. Be advised that adherence to Indiana Code 14-21-1-27 and 29 does not obviate the need to adhere to applicable federal statutes and regulations, including but not limited to 36 C.F.R. 800.

If you have questions about archaeological issues please contact Cathy Draeger-Williams at (317) 234-3791 or cdraeger-williams@dnr.IN.gov. If you have questions about buildings or structures please contact Kim Marie Padgett at (317) 234-6705 or kpadgett@dnr.IN.gov.

Very truly yours,

Beth K. McCord
Deputy State Historic Preservation Officer

BKM:KMP:CDW:cdw

emc: Kara Harris, US Department of Energy

DNR Indiana Department of Natural Resources

Eric Holcomb, Governor
Daniel W. Bortner, Director

Division of Historic Preservation & Archaeology·402 W. Washington Street, W274·Indianapolis, IN 46204-2739
Phone 317-232-1646·Fax 317-232-0693·dhpa@dnr.IN.gov

HISTORIC PRESERVATION AND ARCHAEOLOGY

June 6, 2023

Melissa Michaels
Stellantis
38111 Van Dyke Avenue
Sterling Heights, Michigan 48312

Federal Agency: U.S. Department of Energy

Re: Request for comment on the construction of an electric car battery manufacturing plant located at 2724 N. County Road 50 East (DHPA #30779)

Dear Ms. Michaels:

Pursuant to Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108) and 36 C.F.R. Part 800, the staff of the Indiana State Historic Preservation Officer ("Indiana SHPO") has conducted an analysis of the materials dated May 12, 2023 and received on the same date, for the above indicated project in Kokomo, Center Township, Howard County, Indiana.

It is our understanding that construction and earth moving already started prior to the initiation of a Section 106 review.

Based upon the documentation available to the staff of the Indiana SHPO, we have not identified any historic buildings, structures, districts, or objects listed in or eligible for inclusion in the National Register of Historic Places within the probable area of potential effects.

In terms of archaeological resources, we believe we were not given a reasonable opportunity to comment on the above indicated project. It is possible that there may have been prehistoric or historic archaeological deposits, which may have been impacted by the extensive ground disturbance that has already occurred within the project area.

If any prehistoric or historic archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and 29) requires that the discovery must be reported to the Department of Natural Resources within two (2) business days. In that event, please call (317) 232-1646. Be advised that adherence to Indiana Code 14-21-1-27 and 29 does not obviate the need to adhere to applicable federal statutes and regulations, including but not limited to 36 C.F.R. 800.

The 36 C.F.R. Part 800 regulations governing the Section 106 review process may be found at www.achp.gov. If you have questions about archaeological issues, please contact Beth McCord at (317) 232-3492 or bmccord@dnr.IN.gov. If you have questions about buildings or structures, please contact Chad Slider at (317) 234-5366 or cslider@dnr.IN.gov. Additionally, in all future correspondence regarding the above indicated project, please refer to DHPA #30779.

Very truly yours,

Beth K. McCord
Deputy State Historic Preservation Officer

BKM:CWS:cws

emc: Kara Harris, USDOE
Richard Ray, Huff & Huff

DNR Indiana Department of Natural Resources

Eric Holcomb, Governor
Daniel W. Bortner, Director

Division of Historic Preservation & Archaeology·402 W. Washington Street, W274·Indianapolis, IN 46204-2739
Phone 317-232-1646·Fax 317-232-0693·dhpa@dnr.IN.gov

March 18, 2024

Robert E. Ahlrichs
Chronicle Heritage
4608 Indianola Avenue, Suite C
Columbus, Ohio 43214

Dear Dr. Ahlrichs:

We have reviewed the request for known historical or archaeological information for the Kokomo Industrial Development Project/ Star Plus Energy Plant at CR E 300 N and CR N 100 E, in Kokomo, Center Township, Howard County, Indiana.

If the development activity will be using federal funds, or if a federal permit or license will be required, then it would be necessary for the federal agency that is responsible for funding or approving the activity to conduct a review pursuant to Section 106 of the National Historic Preservation Act (16 U.S.C. § 470f) and 36 C.F.R. Part 800. If, in addition to, or instead of, federal funding or approval, state funding or state land would be involved, then a review and approval under state law (e.g., Indiana Code §§ 14-21-1-14, -16, or -18) may be required. In any of those instances, it would be the responsibility of the federal or state agency (and, indirectly, of the agency's applicant) to identify historic properties within and near the project area and assess the effects that the project may have on historic properties.

Thank you for submitting a copy of the Phase I archaeological survey report (Ahlrichs and Carvino, 2/14/2024) to the State Historic Architectural and Archaeological Research Database (SHAARD) for our review (AR-34-00171). With respect to the archaeological aspects of this project, we note that Dr. Ahlrichs is not currently listed in our qualified professional's registryas a Principal Investigator. However, Mr. Carvino is registered as a Principal Investigator and since he was listed as a co-author and involved in the project we find this acceptable. Based upon the submitted information and the documentation available to the staff of the Indiana SHPO, we concur with the opinion of the archaeologist, as expressed in the submitted archaeological reconnaissance survey report (Ahlrichs and Carvino, 2/14/2024), that sites 12HO404 and 12HO405 do not appear eligible for inclusion in the NRHP and no further archaeological investigations are necessary. Previously recorded site 12HO310 was determined not eligible for inclusion in the NRHP following Phase II evaluation in 2008 and we concur it remains not eligible for inclusion in the NRHP. Thank you for submitting the report and archaeological site survey forms to SHAARD. They have been approved.

In addition, during construction, work crews should be alert to the possible presence of archaeological artifacts (bone, stone tools, pottery, etc.), features (shell or charcoal concentrations, foundations, etc.), or human remains, that may be uncovered during construction. If any archaeological artifacts, features, or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and 29) requires that work must stop and that the discovery must be reported to the Division of Historic Preservation and Archaeology within two (2) business days.

If you have any further questions regarding this determination, please contact the DHPA. Questions about archaeological issues should be directed to Beth McCord at (317) 232-3492 or bmccord@dnr.IN.gov. Questions about historic buildings or structures pertaining to this project should be directed to Chad Slider at (317) 234-5366 or cslider@dnr.in.gov. Additionally, in all future correspondence regarding the above indicated project, please refer to DHPA #31932.

Very truly yours,

Beth K. McCord
Director, Division of Historic Preservation & Archaeology

BKM:CWS:bkm

DNR Indiana Department of Natural Resources

Eric Holcomb, Governor
Daniel W. Bortner, Director

Division of Historic Preservation & Archaeology·402 W. Washington Street, W274·Indianapolis, IN 46204-2739
Phone 317-232-1646·Fax 317-232-0693·dhpa@dnr.IN.gov

March 26, 2024

Robert Ahlrichs
Chronicle Heritage
4608 Indianola Ave. Suite C
Columbus, Ohio 43214

Federal Agency: None

Re: Archaeology report for a Star Plus Energy project (DHPA #31989)

Dear Mr. Ahlrichs:

To our knowledge, there is no direct or indirect jurisdiction of a Federal agency for the above indicated project near Kokomo in Howard County, Indiana.

In terms of archaeological resources, we concur with the archaeology report that sites 12Ho312 and 12Ho406 through 12Ho408 do not appear eligible for inclusion in the National Register of Historic Places. Therefore, no further archaeological investigations appear necessary.

If any archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and 29) requires that the discovery must be reported to the Department of Natural Resources within two (2) business days. In that event, please call (317) 232-1646.

If you are aware of other facts that may invoke application of Federal law or have any further questions, please contact the DHPA.

If you have questions about archaeological issues please contact Cathy Draeger-Williams at (317) 234-3791 or cdraeger-williams@dnr.IN.gov. Additionally, in all future correspondence regarding the above indicated project, please refer to DHPA #31989.

Very truly yours,

Beth K. McCord
Director, Division of Historic Preservation & Archaeology

BKM:CDW:cdw

emc: Robert Ahlrichs, Chronicle Heritage

Department of Energy
Washington, DC 20585

December 14, 2023

Robert Lugar
Assistant Commissioner
Indiana Department of Environmental Management
100 N. Senate Avenue, Room 1316
Indianapolis, IN 46204

SUBJECT: Intent to Prepare an Environmental Assessment for a Proposed Federal Loan to StarPlus Energy LLC for Two Lithium-ion Battery Manufacturing Plants in Kokomo, Indiana

Dear Assistant Commissioner Lugar,

Under Section 136 of the Energy Independence and Security Act of 2007, which established the Advanced Technology Vehicles Manufacturing Loan (ATVM) program, the U.S. Department of Energy (DOE) is evaluating whether to provide a Federal loan to StarPlus Energy LLC (StarPlus) to support the construction of two lithium-ion, electric car battery manufacturing plants in Kokomo, Indiana. The DOE Loan Programs Office (LPO) is preparing an Environmental Assessment (EA) for the project. The decision to prepare an EA was made in accordance with the requirements of the National Environmental Policy Act (NEPA), the Council on Environmental Quality regulations for implementing the procedural provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508), and DOE's implementing procedures for compliance with NEPA (10 CFR Part 1021).

The purpose and need for DOE's action is to comply with our mandate under Section 136 of the Energy Independence and Security Act to select projects for financial assistance that are consistent with the goals of the Act. Pursuant to the Act, the ATVM program was established to provide loans to automobile and automobile parts manufacturers for the cost of re-equipping, expanding, or establishing manufacturing facilities in the United States to produce advanced technology vehicles or qualified components. DOE has determined that the construction of a lithium-ion battery manufacturing facility as proposed by StarPlus is consistent with the goals of the Act, and is using the NEPA process to assist in determining whether to issue a loan to StarPlus to support the proposed project.

The project site consists of approximately 300 acres and will be located at 2724 County Road N 50E, Kokomo, IN 46901. Approximately 92 additional acres will be needed north of County Road 300N (Smith Road) to accommodate the second battery

manufacturing plant (17 acres) and a temporary construction staging area (75 acres). The project site has generally consisted of undeveloped and/or agricultural land prior to 1938 through current date. The facility will produce a maximum of 67 gigawatt hours installed annual capacity for the production of cylindrical lithium-ion batteries for electric vehicles. In addition, the facility will have a maximum production rate of 115.2 million cells per year. The Project will employ local tradespeople during construction, and approximately 2,800 people are anticipated to be needed to operate the plant after construction. A Project Site Map (Figure 1) is attached below.

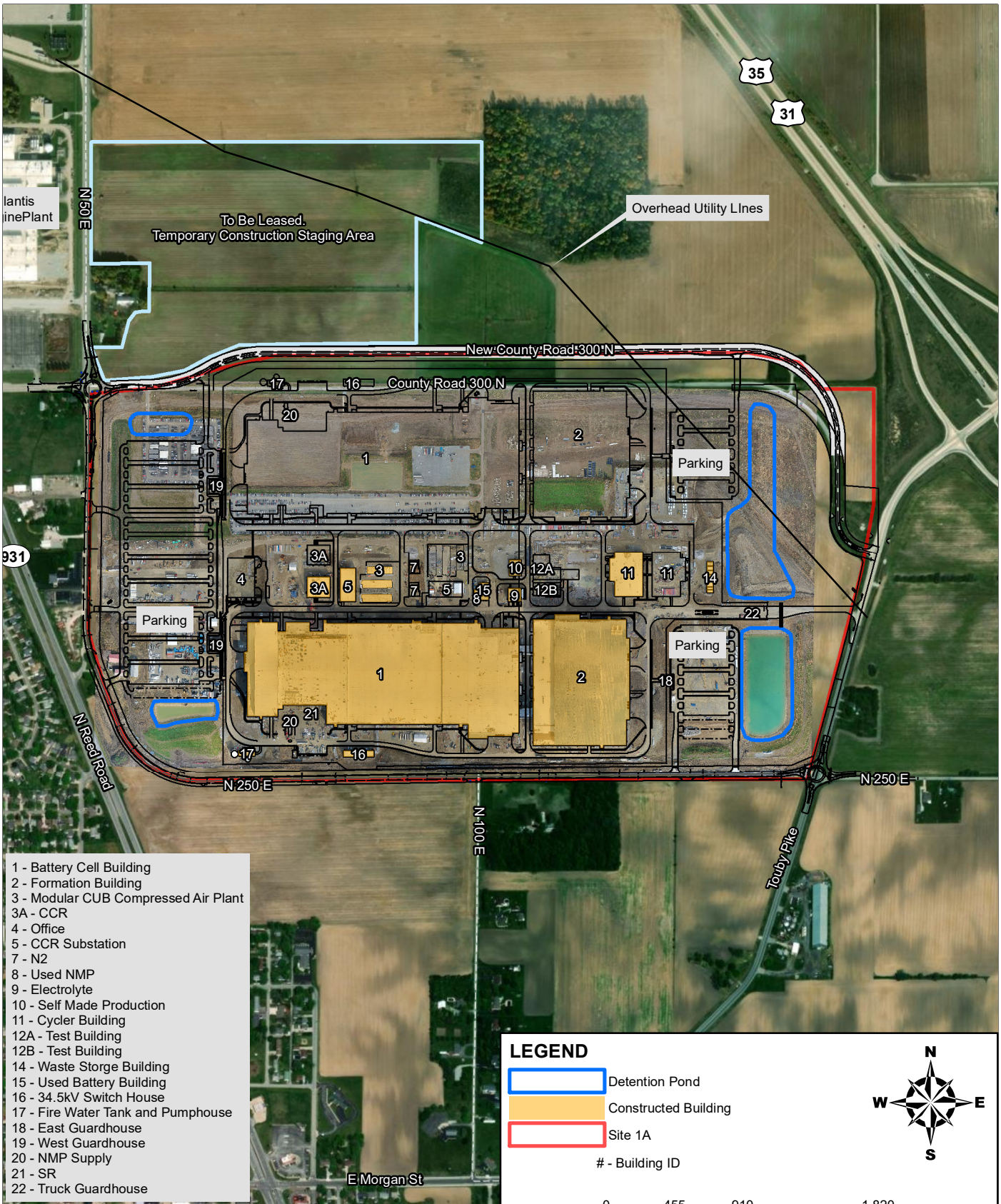
The DOE NEPA regulations provide for the notification of host states of NEPA determinations and for the opportunity for host states to review EAs prior to DOE approval. This process is intended to improve coordination and to facilitate early and open communication. DOE will provide the draft EA to you for your review and comment.

If you or your staff would like to receive further information concerning this project or DOE's NEPA process for ATVM loans, please contact me in the DOE LPO at 202-586-8716 or at LPO_Environmental@hq.doe.gov.

Respectfully,

Kara Harris
Environmental Protection Specialist
Loan Program Office

Attachment:
Figure 1: Project Site Map



SERVICE LAYER CREDITS: ESRI, HERE, GARMIN, (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY
SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY

J:\07-Livonia\07.0064202.00 Stellantis Kokomo\pertinent\Figures\Stellantis_Kokomo_SITE_1A.mxd, December 06, 2023 - 8:58:20 AM, DARREN.GREVING

STARPLUS ENERGY LLC
ELECTRIC CAR BATTERY MANUFACTURING PLANT
KOKOMO, INDIANA

SITE 1A

PREPARED BY: GZA GeoEnvironmental, Inc. www.gza.com

PREPARED FOR: STARPLUS ENERGY LLC

PROJ MGR:	REVIEWED BY: RR	CHECKED BY: RR	FIGURE 3
DESIGNED BY: RR	DRAWN BY: DMG	SCALE: 1 " = 917 FEET	
DATE: 12/06/2023	PROJECT NO: 07.0064202.00	REVISION NO:	

Department of Energy
Washington, DC 20585

December 14, 2023

Glenna Wallace, Chief
Eastern Shawnee Tribe of Oklahoma
127 West Oneida
Seneca, MO 64865

SUBJECT: Intent to Prepare an Environmental Assessment for a Proposed Federal Loan to StarPlus Energy LLC in Kokomo, Indiana.

Dear Chief Wallace,

The U.S. Department of Energy (DOE) is preparing an Environmental Assessment (EA) pursuant to the National Environmental Policy Act (NEPA) to assist in determining whether to issue a Federal loan to StarPlus Energy LLC (StarPlus) to construct two electric car battery manufacturing plants in Kokomo, Indiana. As part of the environmental review process, DOE is also conducting a historic resource review in compliance with Section 106 of the National Historic Preservation (NHPA).

The project site consists of approximately 300 acres and will be located at 2724 County Road N 50E, Kokomo, IN 46901. Approximately 92 additional acres will be needed north of County Road 300N (Smith Road) to accommodate the second battery manufacturing plant (17 acres) and a temporary construction staging area (75 acres). The project site has generally consisted of undeveloped and/or agricultural land prior to 1938 through current date. The battery manufacturing plants will be an approximately five million square foot complex. The facility will produce a maximum of 67 gigawatt hours installed annual capacity for the production of cylindrical Lithium-ion batteries for electric vehicles. In addition, the facility will have a maximum production rate of 115.2 million cells per year. A Project Site Map (Figure 1) is attached below.

This letter is intended to notify you of the proposed Federal project (a potential loan to StarPlus), identify if you have an interest in the proposed project site, and provide you with the opportunity to comment and engage with DOE in government-to-government consultation on the proposed project in Kokomo, Indiana. Any comments or concerns you provide will ensure that DOE considers Tribal interests and complies with NEPA and NHPA Section 106 responsibilities. We want to give you the opportunity to raise any issues and concerns you may have regarding the site. We would greatly appreciate notification if you do or do not have an interest in the project site, as well as any comments or concerns you may have, by **January 29, 2024**. Should you have an interest in the project site, we will provide you with additional information pursuant to NEPA and the NHPA as it becomes available. Please provide your notification of interest and any

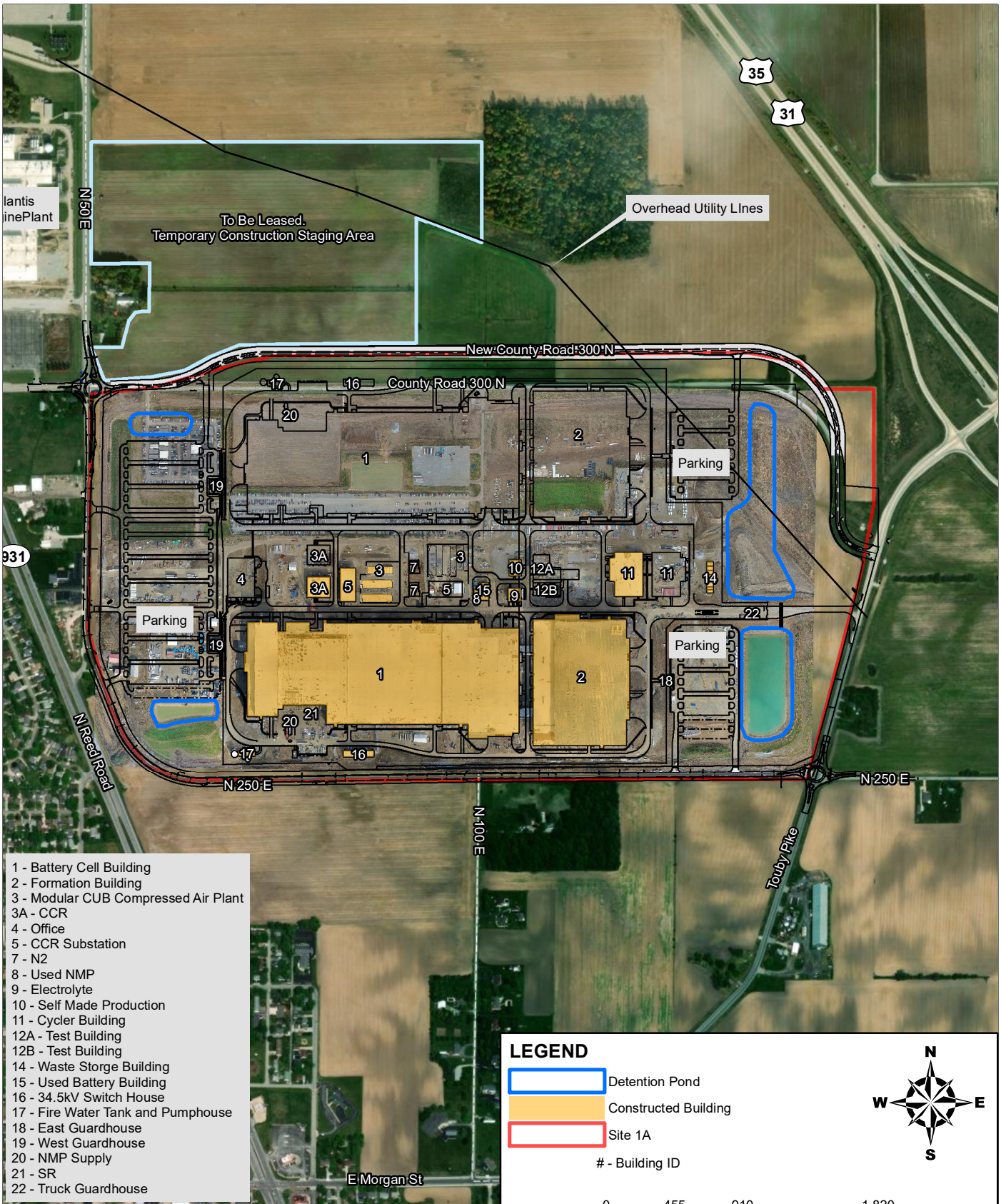
comments or concerns by email to LPO_Environmental@hq.doe.gov, or I can be reached via telephone at 202-586-8716.

Respectfully,

Kara Harris
Environmental Protection Specialist
Loan Programs Office

Attachments:
Figure 1: Project Site Map

CC: Paul Barton, THPO



SERVICE LAYER CREDITS: ESRI, HERE, GARMIN, (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY
SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY

J:\07-Livonia\07.0064202.00 Stellantis Kokomo\pertinent\Figures\Stellantis_Kokomo_SITE_1A.mxd, December 06, 2023 - 8:58:20 AM, DARREN.GREVING

STARPLUS ENERGY LLC
ELECTRIC CAR BATTERY MANUFACTURING PLANT
KOKOMO, INDIANA

SITE 1A

PREPARED BY: GZA GeoEnvironmental, Inc. www.gza.com

PREPARED FOR: STARPLUS ENERGY LLC

PROJ MGR:	REVIEWED BY: RR	CHECKED BY: RR	FIGURE 3
DESIGNED BY: RR	DRAWN BY: DMG	SCALE: 1 " = 917 FEET	
DATE: 12/06/2023	PROJECT NO: 07.0064202.00	REVISION NO:	

Department of Energy
Washington, DC 20585

December 14, 2023

Douglas Lankford, Chief
Miami Tribe of Oklahoma
P.O. Box 1326
Miami, OK 74355

SUBJECT: Intent to Prepare an Environmental Assessment for a Proposed Federal Loan to StarPlus Energy LLC in Kokomo, Indiana.

Dear Chief Lankford,

The U.S. Department of Energy (DOE) is preparing an Environmental Assessment (EA) pursuant to the National Environmental Policy Act (NEPA) to assist in determining whether to issue a Federal loan to StarPlus Energy LLC (StarPlus) to construct two electric car battery manufacturing plants in Kokomo, Indiana. As part of the environmental review process, DOE is also conducting a historic resource review in compliance with Section 106 of the National Historic Preservation (NHPA).

The project site consists of approximately 300 acres and will be located at 2724 County Road N 50E, Kokomo, IN 46901. Approximately 92 additional acres will be needed north of County Road 300N (Smith Road) to accommodate the second battery manufacturing plant (17 acres) and a temporary construction staging area (75 acres). The project site has generally consisted of undeveloped and/or agricultural land prior to 1938 through current date. The battery manufacturing plants will be an approximately five million square foot complex. The facility will produce a maximum of 67 gigawatt hours installed annual capacity for the production of cylindrical Lithium-ion batteries for electric vehicles. In addition, the facility will have a maximum production rate of 115.2 million cells per year. A Project Site Map (Figure 1) is attached below.

This letter is intended to notify you of the proposed Federal project (a potential loan to StarPlus), identify if you have an interest in the proposed project site, and provide you with the opportunity to comment and engage with DOE in government-to-government consultation on the proposed project in Kokomo, Indiana. Any comments or concerns you provide will ensure that DOE considers Tribal interests and complies with NEPA and NHPA Section 106 responsibilities. We want to give you the opportunity to raise any issues and concerns you may have regarding the site. We would greatly appreciate notification if you do or do not have an interest in the project site, as well as any comments or concerns you may have, by **January 29, 2024**. Should you have an interest in the project site, we will provide you with additional information pursuant to NEPA and the NHPA as it becomes available. Please provide your notification of interest and any

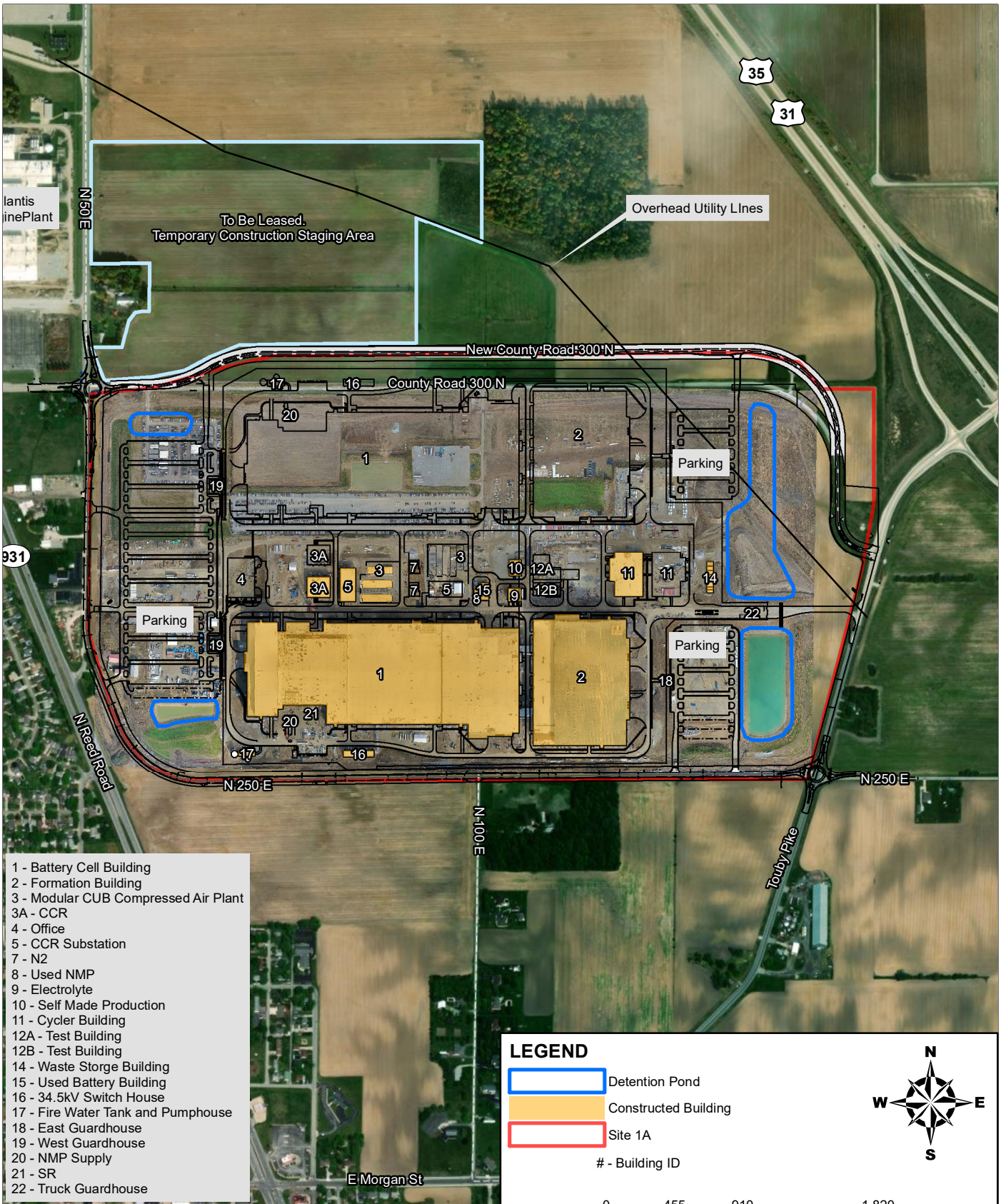
comments or concerns by email to LPO_Environmental@hq.doe.gov, or I can be reached via telephone at 202-586-8716.

Respectfully,

Kara Harris
Environmental Protection Specialist
Loan Programs Office

Attachments:
Figure 1: Project Site Map

CC: Logan York, THPO



SERVICE LAYER CREDITS: ESRI, HERE, GARMIN, (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY
SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY

J:\07-Livonia\07.0064202.00 Stellantis Kokomo\pertinent\Figures\Stellantis_Kokomo_SITE_1A.mxd, December 06, 2023 - 8:58:20 AM, DARREN.GREVING

STARPLUS ENERGY LLC
ELECTRIC CAR BATTERY MANUFACTURING PLANT
KOKOMO, INDIANA

SITE 1A

PREPARED BY: GZA GeoEnvironmental, Inc. www.gza.com

PREPARED FOR: STARPLUS ENERGY LLC

PROJ MGR:	REVIEWED BY: RR	CHECKED BY: RR	FIGURE 3
DESIGNED BY: RR	DRAWN BY: DMG	SCALE: 1 " = 917 FEET	
DATE: 12/06/2023	PROJECT NO: 07.0064202.00	REVISION NO:	

Department of Energy
Washington, DC 20585

December 14, 2023

Rebecca Richards, Chairperson
Pokagon Band of Potawatomi Indians
P.O. Box 180
Dowagiac, MI 49047

SUBJECT: Intent to Prepare an Environmental Assessment for a Proposed Federal Loan to StarPlus Energy LLC in Kokomo, Indiana.

Dear Chairperson Richards,

The U.S. Department of Energy (DOE) is preparing an Environmental Assessment (EA) pursuant to the National Environmental Policy Act (NEPA) to assist in determining whether to issue a Federal loan to StarPlus Energy LLC (StarPlus) to construct two electric car battery manufacturing plants in Kokomo, Indiana. As part of the environmental review process, DOE is also conducting a historic resource review in compliance with Section 106 of the National Historic Preservation (NHPA).

The project site consists of approximately 300 acres and will be located at 2724 County Road N 50E, Kokomo, IN 46901. Approximately 92 additional acres will be needed north of County Road 300N (Smith Road) to accommodate the second battery manufacturing plant (17 acres) and a temporary construction staging area (75 acres). The project site has generally consisted of undeveloped and/or agricultural land prior to 1938 through current date. The battery manufacturing plants will be an approximately five million square foot complex. The facility will produce a maximum of 67 gigawatt hours installed annual capacity for the production of cylindrical Lithium-ion batteries for electric vehicles. In addition, the facility will have a maximum production rate of 115.2 million cells per year. A Project Site Map (Figure 1) is attached below.

This letter is intended to notify you of the proposed Federal project (a potential loan to StarPlus), identify if you have an interest in the proposed project site, and provide you with the opportunity to comment and engage with DOE in government-to-government consultation on the proposed project in Kokomo, Indiana. Any comments or concerns you provide will ensure that DOE considers Tribal interests and complies with NEPA and NHPA Section 106 responsibilities. We want to give you the opportunity to raise any issues and concerns you may have regarding the site. We would greatly appreciate notification if you do or do not have an interest in the project site, as well as any comments or concerns you may have, by **January 29, 2024**. Should you have an interest in the project site, we will provide you with additional information pursuant to NEPA and the NHPA as it becomes available. Please provide your notification of interest and any

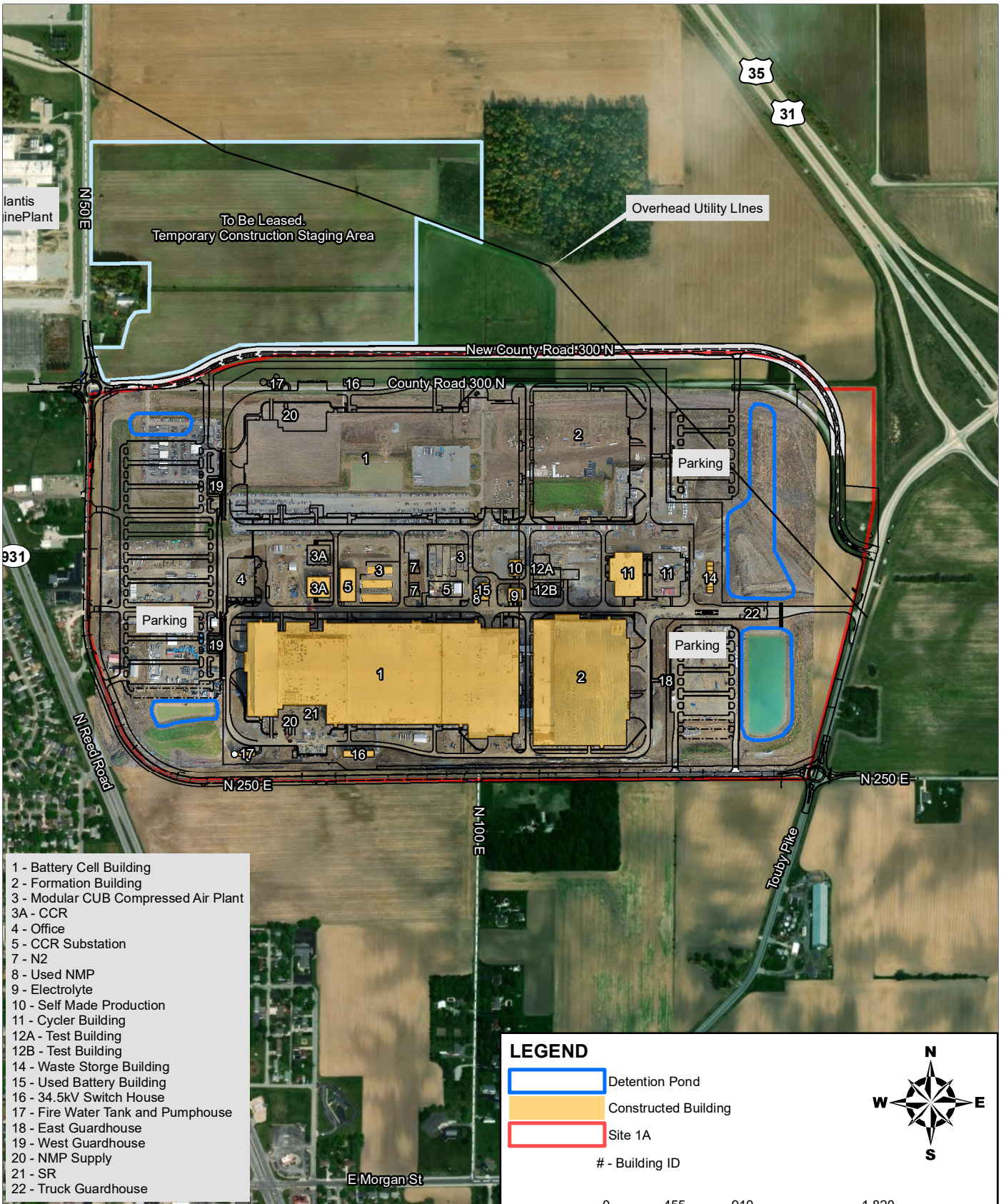
comments or concerns by email to LPO_Environmental@hq.doe.gov, or I can be reached via telephone at 202-586-8716.

Respectfully,

Kara Harris
Environmental Protection Specialist
Loan Programs Office

Attachments:
Figure 1: Project Site Map

CC: Matthew Bussler, THPO



SERVICE LAYER CREDITS: ESRI, HERE, GARMIN, (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY
SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY

J:\07-Livonia\07.0064202.00 Stellantis Kokomo\pertinent\Figures\Stellantis_Kokomo_SITE_1A.mxd, December 06, 2023 - 8:58:20 AM, DARREN.GREVING

STARPLUS ENERGY LLC
ELECTRIC CAR BATTERY MANUFACTURING PLANT
KOKOMO, INDIANA

SITE 1A

PREPARED BY: GZA GeoEnvironmental, Inc. www.gza.com

PREPARED FOR: STARPLUS ENERGY LLC

PROJ MGR:	REVIEWED BY: RR	CHECKED BY: RR	FIGURE 3
DESIGNED BY: RR	DRAWN BY: DMG	SCALE: 1 " = 917 FEET	
DATE: 12/06/2023	PROJECT NO: 07.0064202.00	REVISION NO:	

APPENDIX B PERMITS AND APPROVALS

Table B-1. PROJECT-REQUIRED FEDERAL, STATE, AND LOCAL PERMITS AND AUTHORIZATIONS

Permit/Approval	Agency or Office	Status
Federal		
Section 404 Clean Water Act Consultation – Streams/Wetlands	U.S. Army Corps of Engineers – Louisville District	Complete. U.S. Army Corps of Engineers sent an email on April 10, 2024, stating a Section 404 permit is not needed.
Section 7 Endangered Species Act Consultation and Construction Authorization	U.S. Fish and Wildlife Service	Complete. LPO has determined that the project would have no effect on threatened or endangered species or designated critical habitat. Determination made in 2024.
Farmland Protection Policy Act AD 1006 Farmland Conversion Impact Rating	Natural Resources Conservation Service	Complete. The Natural Resources Conservation Service provided its rating in a letter dated March 26, 2024. The AD 1006 form was completed March 28, 2024.
Section 106 National Historic Preservation Act Clearance	State Historic Preservation Office	Complete. There would be no adverse impacts on eligible properties for the NRHP. Determination issued June 17, 2024.
State		
National Pollutant Discharge Elimination System (NPDES)/SWPPP Construction Permit	IDEM	Complete. Permit issued February 21, 2024.
Title V Air Permit	IDEM	Complete. Permit issued September 12, 2023, for Battery Plant 1 and modified on June 18, 2024, to include project changes and Battery Plant 2.
RCRA Initial Notification and EPA Identification Number	IDEM	Complete. Permit issued June 2023.
NPDES/SWPPP Industrial Permit	IDEM	Permitting process ongoing. IDEM requires a permit 1 year after plant start-up.
Local		
Building Permits	City of Kokomo	Complete. Permit issued October 5, 2022.
Sanitary Discharge Permit	City of Kokomo	Complete. Permit issued May 12, 2024.