

WINSTON ENERGY PROJECT PLANNED UNIT DEVELOPMENT HANDBOOK

APPLICATION SUBMITTAL: PLZ-2025-084

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1. Introduction

Winston FC Solar, LLC is pursuing approval to construct the Winston Energy Project (Project), a 400-megawatt (MW) photovoltaic (PV) solar energy facility (facility) with a Battery Energy Storage System (BESS) located entirely on 2,374.3 acres of privately owned land in Lyon County, Nevada. The Project site is located just east of U.S. Alt Highway 95 (U.S. Hwy 95A), approximately 15 miles northeast of the City of Yerington, and adjacent to the Walker River Substation (f.k.a. Fort Churchill Substation). Ancillary facilities include a substation, collection lines, an operations and maintenance building, and site access roads. Electricity generated by the Project would be connected to NV Energy's transmission system via a newly constructed 4,800 foot 230-kilovolt (kV) generation tie (gen-tie) line to the Walker River Substation, which is adjacent to the Project site.

The project has an estimated a capital investment of \$1.1 billion in land, buildings and equipment, and its employees, this project would generate an estimated \$100 million in net tax revenues after abatements over 40 years. It is estimated that a total of \$28.7 million will be generated in sales & use taxes and \$71.3 million will be generated in property tax revenues.

In 2022, the project obtained a Conditional Use Permit (PLZ-2022-167) for a PV project from Lyon County for 1712.5 acres. However, the NV Energy Greenlink project impacted that footprint requiring additional land. Lyon County regulations have also changed, which require additional approvals.

Surrounding lands are primarily private agricultural, rural, and industrial, in addition to public property administered by the Nevada Division of State Lands and Bureau of Land Management. The Project area is in the Mason Valley Character District, as defined by the 2020 Lyon County Comprehensive Master Plan. The Project located the Heavy Industrial – Suburban (HI-S) and Rural Residential 20 Acre Minimum (RR-20) zone districts.

According to the Lyon County code of regulations, the purpose of a Planned Unit Development (PUD) is to provide a flexible and creative approach to developing large parcels of land in a way that aligns with the county's master plan, while also encouraging high-quality design and a mix of amenities. PUDs allow for integrated land uses to be conveniently located, and for developers to use creative designs that can improve efficiency, reduce development costs, and help preserve open space and environmental resources. Further justification for the use of a PUD can be found in Appendix A.

This PUD Handbook serves as a governing document for the Winston Energy Project, bridging the County's Master Plan, zoning regulations, and other requirements with the specifics of the project. Implementation of the Winston Energy Project will be required to confirm with this document as approved by the Lyon County Commission.

FIGURE 1: PROJECT BOUNDARY

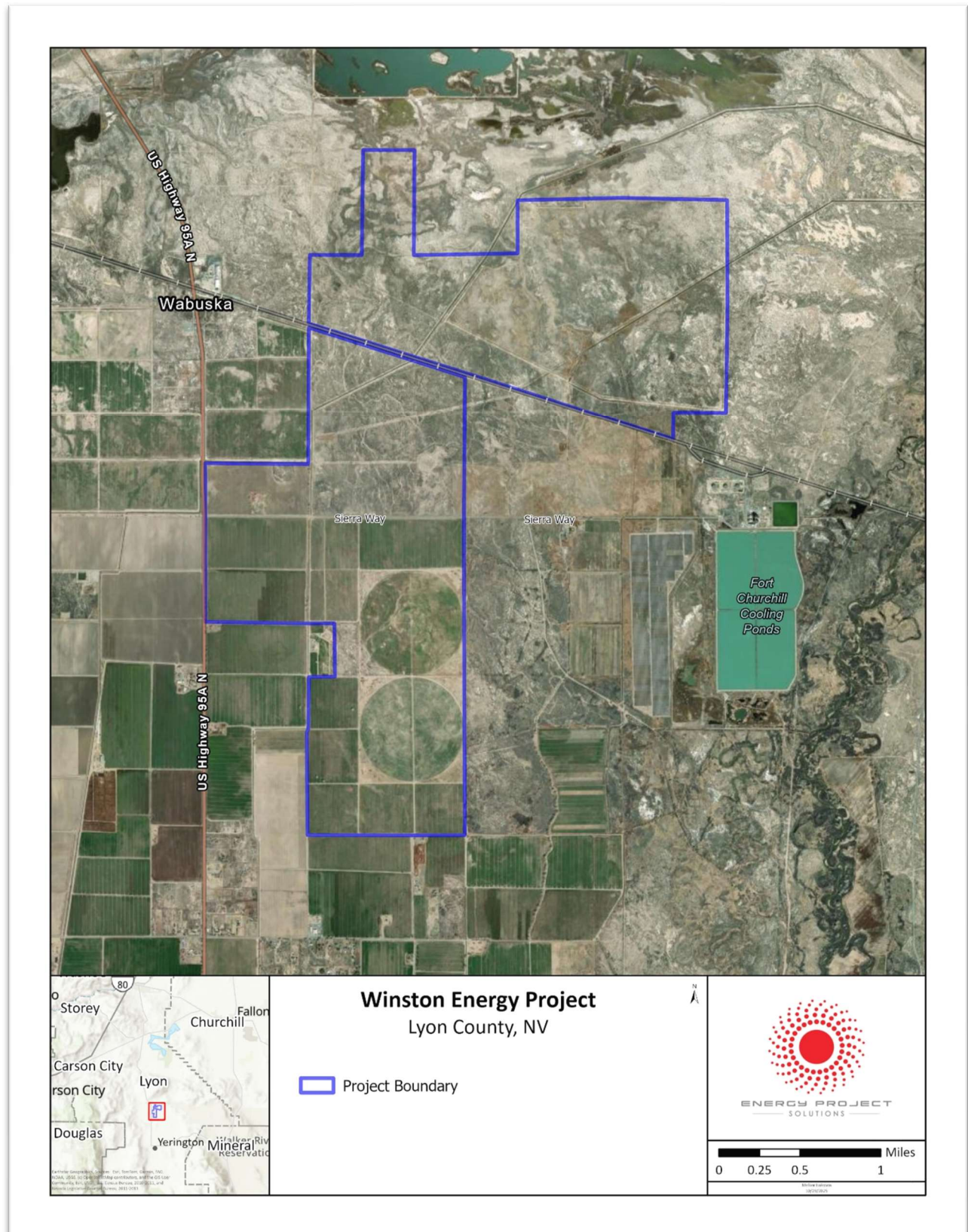


FIGURE 2: CUP APPROVAL/NVE EASEMENTS

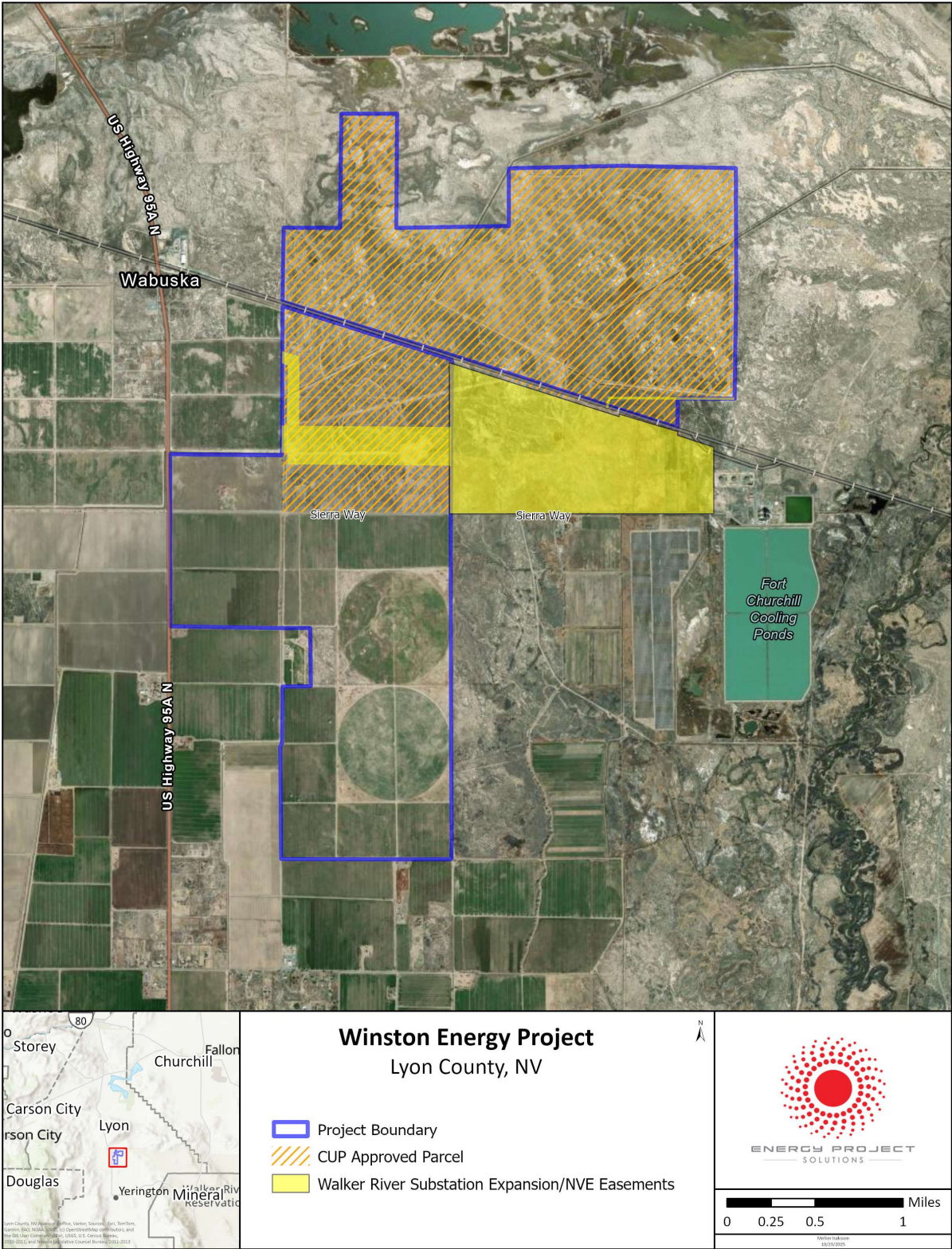


FIGURE 3: LAND USE

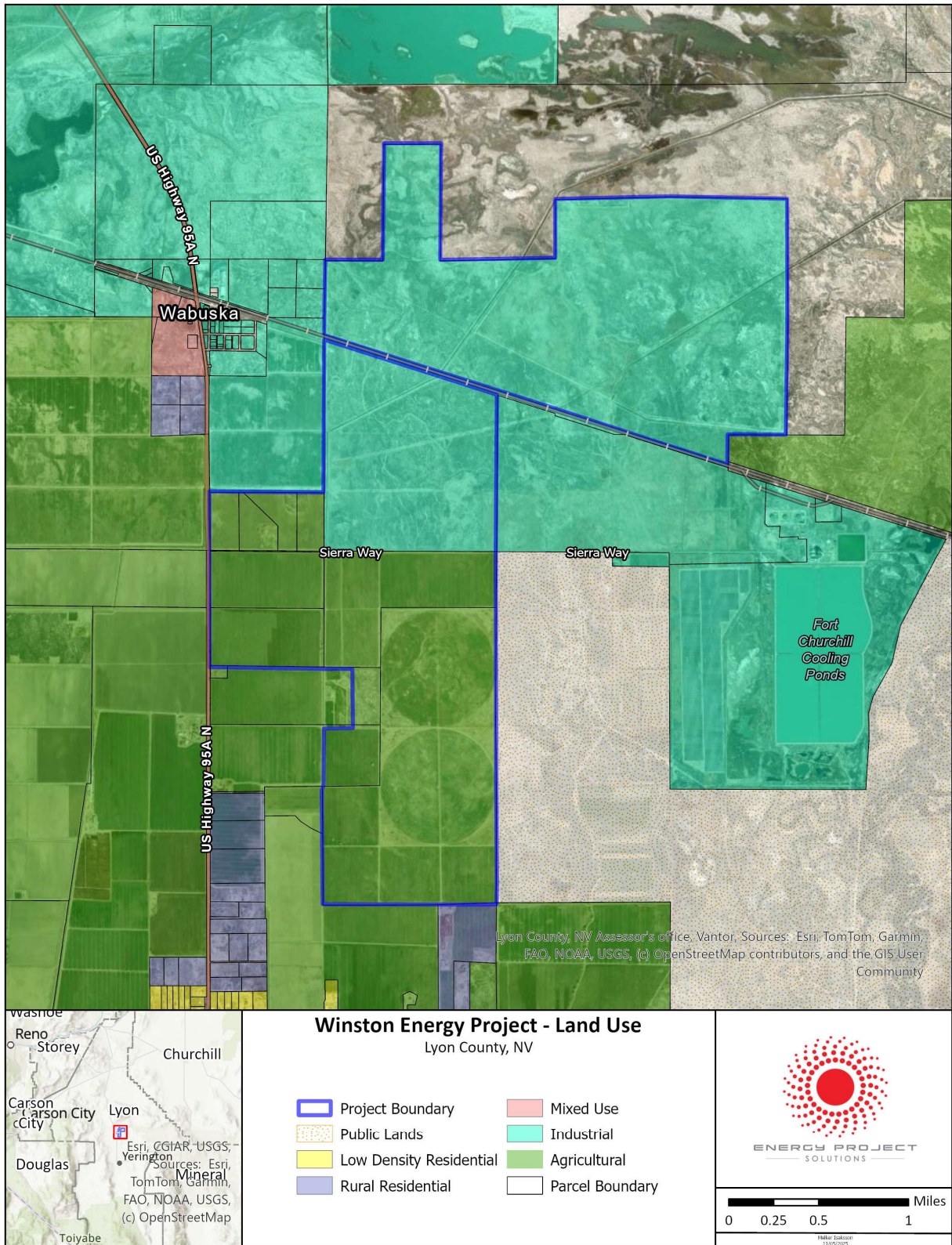
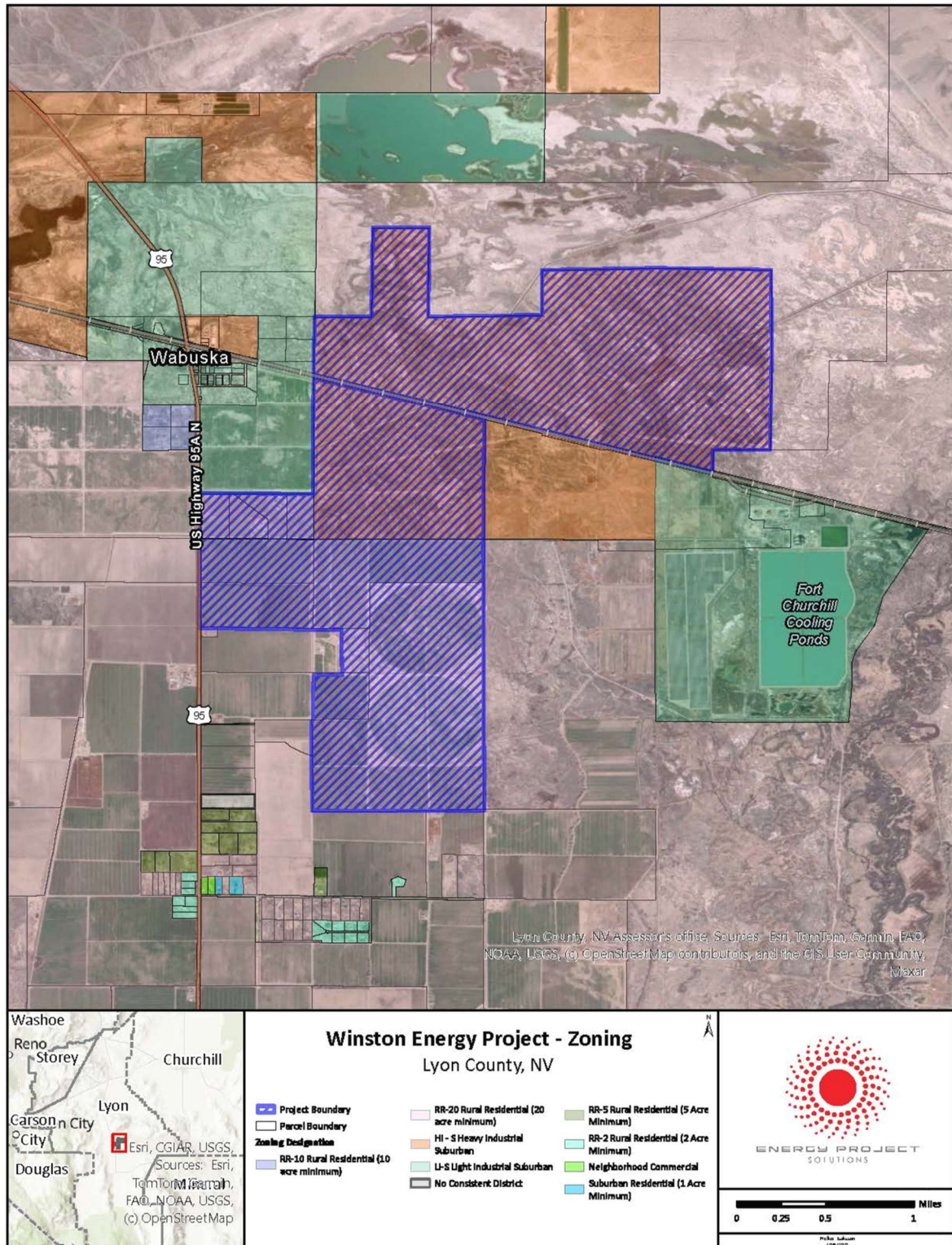


FIGURE 4: ZONING



2. Land Use and Design Standards

The Winston Energy Project is committed to maintaining the standards and criteria noted in Section 15.336.06, 15.336.09, 15.336.12, 15.337.03, 15.401.03 of the Lyon County code with the deviations and its rationale highlighted in Table 1 below.

TABLE 1: STANDARDS AND CRITERIA DEVIATIONS

Standards and Criteria	Description	Deviation from Standards/Proposed PUD Standard	Rationale
15.336.09.E.2 - Setback	Each commercial SECS array must be set a minimum of one half mile (2,640 feet) from a trail easement, highway and/or adjacent properties with an existing residential use. Setback increases to one mile (5,280 feet) from an airport, river, perennial or intermittent stream, and/or lake. An SECS may be placed closer than 2,640 feet from a property with an existing residential use, trail easement, or highway if it is separated by a geologic feature or building of a height sufficient to completely obstruct views of the commercial SECS from a point sixteen (16) vertical feet above the boundary of any Residential Zoning District. The Board of County Commissioners may, at their sole discretion, approve setbacks that are less than the setbacks outlined in this chapter if the project is a part of a Planned Unit Development (PUD).	<ul style="list-style-type: none"> A 300' setback to Highway 95 30' Setback to Residential Zone 	<ul style="list-style-type: none"> Portions of the original 2022 CUP were lost to the NV Energy Walker River Substation project, Requiring the acquisition of additional land well before Lyon County adopted the one-mile setback requirement. Substation and BESS system will maintain a one-mile setback from highway. The project proposes visual screening along Highway 95 to reduce visual impacts of the project. To achieve operational and production efficiencies and financial feasibility, the Project seeks to construct a minimum of 400 MW of solar capacity. This will

			require to recover at least 520 buildable acres for solar development which are currently unavailable for construction under the existing county code.
15.336.06.D.2 - Setback	Each LiBESS must be set a minimum of one mile (5,280 feet) from a trail easement, highway, river, perennial or intermittent stream, lake and/or property with an existing residential use. The Board of County Commissioners may, at their sole discretion, approve setbacks that are less than the setbacks outlined in this chapter if the project is a part of a Planned Unit Development (PUD).	<ul style="list-style-type: none"> • Half a mile setback 	<ul style="list-style-type: none"> • Although one residence falls within the setback, the BESS will be positioned so the substation acts as a natural barrier, minimizing visual and operational impacts.

The general land uses of the Winston Energy Project and their approximate locations are shown in Figure 5 and Figure 6 below and described further in the following sections.

FIGURE 5: LAYOUT

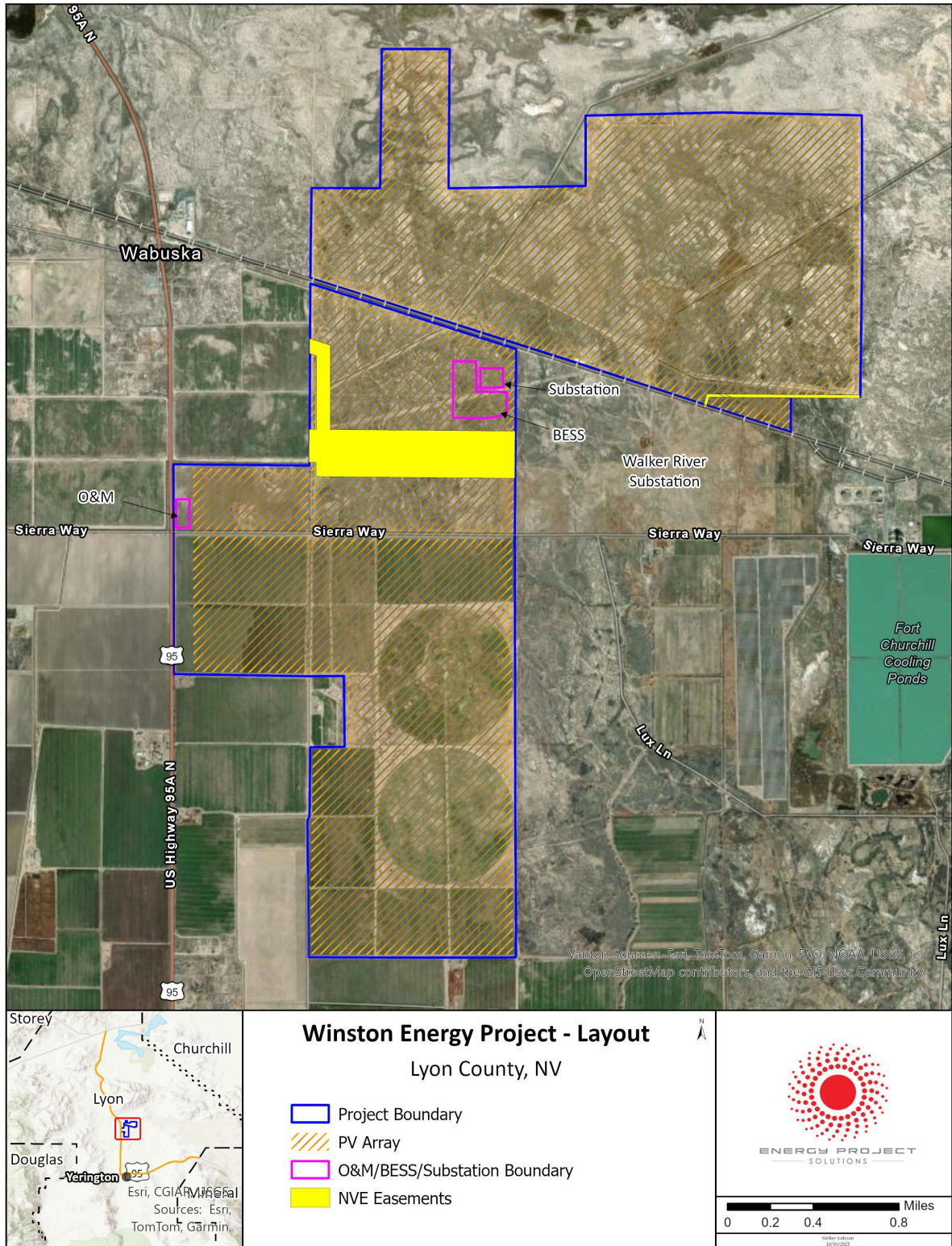
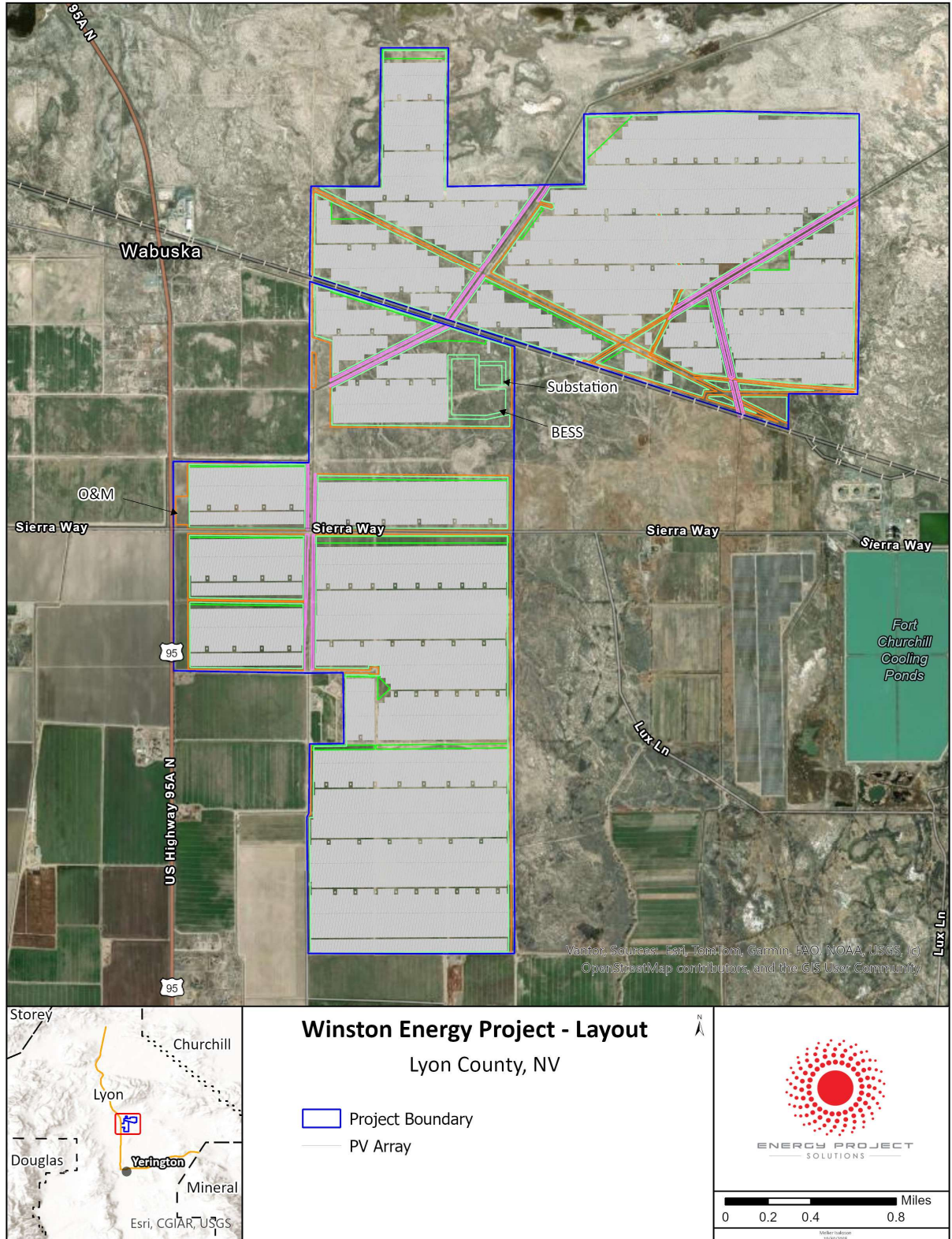


FIGURE 6: DETAILED LAYOUT



2.1. Photovoltaic Array

The Project's solar PV facility would be composed of PV modules (panels), support structures, inverters, collection lines, and meteorological equipment as detailed below. These features would comprise approximately 1,994 acres of the Project site. All disturbances associated with the solar PV facility would be contained to private lands.

The Project's PV modules would utilize crystalline silicon, bi-facial, or thin-film PV panels that would be mounted on single-axis trackers. The panels would be oriented in north-south rows with the panels moving to track the sun as it moves across the sky during the day, which increases the overall efficiency and reliability of the PV modules. Each PV module would be mounted to a tracker system specifically designed to withstand wind, snow, and seismic loads anticipated at the Project site.

The PV modules will be designed using non-reflective materials and coatings to significantly minimize potential glare and reduce visual impacts on surrounding properties and nearby roadways, ensuring that the project blends harmoniously with the existing landscape and

FIGURE 7: PV ARRAY



mitigates any potential visibility or distraction concerns for drivers traveling along Sierra Way and US Highway 95A N.

PV technology converts sunlight directly into direct current (DC) electricity. The DC electricity generated by the solar array is then collected at inverters where it is converted to alternating current (AC). The voltage of the electricity is increased by a transformer at each inverter. Medium voltage electric lines (underground and/or overhead) are then used to collect the electricity from each transformer and transmit it to the facility substation, where the voltage is further increased by a high voltage transformer to be transmitted to the electric grid. Multiple transformers would be connected in parallel via low voltage (12.5kV or 34.5kV) collector lines to the Project substation, where the power from the Project would be stepped up for delivery to the grid via the gen-tie lines described below. The proposed Site Plan showing the detailed Project layout is included in the Appendix D Site plan.

The PV modules, inverters, and transformers would be grouped into array blocks of up to 5 MW DC each occupying approximately 12.5 acres. Inverter and transformer sizes would be selected based on cost and market availability prior to construction. The PV modules deployed for use in the proposed Project would comply with industry standards and would be electrically connected to the facility's grounding system in accordance with local codes and regulations. Final PV module selection would be determined during the detailed engineering phase of development.

The PV modules would be positioned onto a single axis tracking system, allowing the modules to move through the course of the day to track the sun. The highest point on the single-axis trackers it is expected to be 12 feet but it could reach up to a maximum of 18 feet if the site conditions such as topography or vegetation require a higher height, trackers will reach the maximum height during the morning and evening hours when the panels are tilted to face the rising or setting sun. The degree of tilt for each single-axis tracker would change over the course of each day. The PV units would be mounted on driven or pre-drilled H-pile foundations to support the panel mounting system. Site specific soil tests to validate the preliminary engineering would be performed prior to construction.

The Project's inverters and transformers would be housed in enclosures or covered by shade structures approximately 8 to 10 feet high. The Project would also include one or more small meteorological monitoring stations to track solar insolation, temperature, wind direction, and speed. These stations would have a height of approximately 8 to 13 feet and would be located within the solar PV facility boundary.

The perimeter of each continuous area of the solar PV facility would be secured with a 6 to 7-foot tall, chain link metal- fabric security fencing. If determined necessary, up to 2-foot barbed

wire or razor wire may be added to the top. Controlled access gates would be located at the site entrances to each area.

The Project's permanent lighting system would provide operation and maintenance personnel with illumination for both normal and emergency conditions near each main entrance and Fire Alarm Control Panel (FACP). Lighting would be designed to provide the minimum illumination needed to achieve safety and security objectives and would be downward facing and shielded to focus illumination on the desired areas only. There would be no lighting in the solar PV facility. Therefore, light intrusion affecting on surrounding properties, if any, would be minimal. If lighting of individual solar panels or other equipment is needed for night maintenance, portable lighting would be used.

FIGURE 8: INVERTER



2.2 Battery Energy Storage System (BESS)

The Project includes the construction and operation of a lithium Ion BESS that would store power generated by the solar PV facility and allow for the transfer of power to the electrical grid as needed. The BESS containers would be installed in a central location on the Project site, located adjacent to the Project substation.

The BESS would consist of multiple enclosures housing batteries connected in strings and mounted on racks. AC-coupled BESS design standards typically include monitoring equipment,

cooling units, active exhaust venting, multiple fire detection units including gas/heat/smoke detectors, and fire safety systems, which adequately address fire risk associated with the unit. (Fire risk and associated design requirements are addressed further in the Fire Safety Section.) AC-coupled BESS units typically require their own inverters on their own skid.

FIGURE 9: BATTERY ENERGY STORAGE SYSTEM ENCLOSURE



However, some equipment associated with the BESS (e.g., inverters, auxiliary transformer to control the HVAC system) may be adjacent to the enclosure with appropriate spacing considered for O&M access and fire safety.

Because the size of each battery enclosure varies widely by manufacturer, the total number of enclosures to be installed would not be known until a manufacturer has been selected. Each BESS enclosure would house hundreds of battery modules. Typical BESS enclosures are approximately 24 feet long by 8 feet wide by 9.5 feet high; however, these dimensions can vary by manufacturer, the height is not expected to exceed 12 feet. Each BESS enclosure is typically capable of storing between 2 to 5 MWh of energy. The batteries would be charged directly from the PV solar energy generated by the Project. Energy stored in the BESS would then be discharged into the grid when the energy is needed, providing important electrical reliability

services to the local and regional area. The total land disturbance attributed to the BESS facilities under this scenario would be 25 acres, as detailed on the Project's Site Plan

The perimeter of the BESS yard would be secured with a 6 to 7-foot tall, chain link metal- fabric security fencing. If determined necessary, up to 2-foot barbed wire or razor wire may be added to the top. Controlled access gates would be located at the site entrances to the yard.

FIGURE 10: BATTERY ENERGY STORAGE SYSTEM YARD



2.3 Operations and Maintenance Building

The proposed O&M building would be approximately 3,600 square feet with a maximum height of approximately 25 feet. The single-story O&M building would contain administrative offices, parts storage, a maintenance shop, plant security systems, and plant monitoring equipment with 13 adjacent worker parking. The O&M building would have exterior lighting on motion sensors, fire and security alarms, and would comply with all applicable laws and regulations (including applicable Operational Safety and Health Act [OSHA] requirements).

The perimeter of the O&M lot would be secured with a 6 to 7-foot tall, chain link metal- fabric security fencing. If determined necessary, up to 2-foot barbed wire or razor wire may be added to the top. Controlled access gates would be located at the site entrances to the lot.

FIGURE 11: OPERATIONS AND MAINTENANCE BUILDING



2.4 Substation

The Project would also include the construction and operation of an on-site substation. The substation would accommodate a 230-kV gen-tie line, discussed in section 2.5 Transmission Generation Tie-in Line below. The substation equipment would include medium voltage (34.5 kV) to high voltage (230 kV) step-up transformer(s) with mineral oil, breakers, buswork, protective relaying, supervisory control and data acquisition (SCADA).

FIGURE 12: SUBSTATION



The substation equipment would be located within an approximately 7-acre area. The substation would be fenced for safety and security with a 6 to 7-foot tall, chain link metal- fabric security fencing. If determined necessary, up to 2-foot barbed wire or razor wire may be added to the top and designed in accordance with codes and standards applicable to Lyon County, including but not limited to IEEE (Institute of Electrical and Electronics Engineers), ANSI (American National Standards Institute), NEC (National Electrical Code), NESC (National Electrical Safety Code) the fence would be up to 7 ft high. However, one or more structures may be outside the fenced area for the purpose of accessing meters and control equipment. The communication system for the substation may include above- ground fiber optic cable and/or a microwave tower. If a fiber optic line is used, it would be mounted on the gen-tie line structures as one of the shield-wires.

Switching and transformer equipment and control enclosure would also be located at the substation site with a maximum height of 30 feet. The substation equipment would be designed to accommodate necessary setbacks and spacing between pieces of equipment and would include a drainage collection area consistent with local and state regulations. Transformers would be placed within a secondary containment area according to local and state regulations to prevent pollution of soil and water in the event of a spill the estimated height of the transformers is 25 feet.

FIGURE 13: SUBSTATION YARD



The substation would utilize temporary task lighting as necessary to allow inspections and provide for safe movement within the substation and inside the substation fencing. Lighting would be designed to provide the minimum illumination needed to achieve safety and security objectives and would be downward facing and shielded to focus illumination on the desired areas only. All lighting would be shielded downward to minimize contributions to sky glow. Substation lighting would be designed to minimize potential impacts on wildlife and would avoid the casting of light toward surrounding wildlife habitat or surrounding properties in the vicinity of the Project area. The substation would be enclosed by fencing consistent with National Electric Code requirements.

2.5 Transmission Generation Tie-in Line

A new 4,800 foot, 230 kV gen-tie line would be constructed to connect the Project substation to the existing Walker River Substation. Approximately 500 feet of the proposed gen-tie line would be located within the Project area, and the remaining would be located within the Walker River Substation yard, where the electricity generated by the Project can be transmitted to the electrical grid. The Project would use H-frame or single steel pole structures made of self-weathering or galvanized steel. The structures would range in height from 120 feet to 170 feet.

The design, construction, operation, and maintenance of the gen-tie lines will meet requirements of the National Electrical Safety Code (NESC); U.S. Department of Labor, Occupational Safety and Health Standards; and requirements for safety and protection of landowners and their property. Transmission line design will also be consistent with recommendations for reducing negative impacts of power lines on birds found in Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 by Edison Electric Institute and the Avian Power Line Interaction Committee (APLIC) and Reducing Avian Collisions with Power Lines by the U.S. Fish and Wildlife Service and the APLIC.

2.8 Setbacks

As shown in the setback map below, the Winston Energy Project's PV array is designed to comply with Lyon County Code 15.336.09.E.3 by maintaining setbacks around the project boundary. Along the highway frontage, however, a 300-foot setback is proposed to address potential visual and community character concerns. While Lyon County Code 15.336.09.E.2 specifies a minimum one-half mile setback from highways or residential areas, this requirement cannot be fully met in certain parts of the project. The County Code allows for PUD-specific setbacks when they support designs that enhance efficiency and address public interests, which provides a basis for the requested variance.

For the Winston Energy Project, a reduction of the one-half mile setback is necessary along the SR-95 frontage and for two adjacent participant residential properties whose owners have consented to the project. Without these reductions, a significant portion of the PV array would be impacted, making the project infeasible. Further justification for the reduced setback is provided below:

- Optimal Location for Energy Development: The site benefits from partial industrial zoning, immediate adjacency to Nevada's largest energy hub (the Walker River Substation), and proximity to compatible uses such as the Wabuska geothermal facility and the proposed Monarch Data Center.

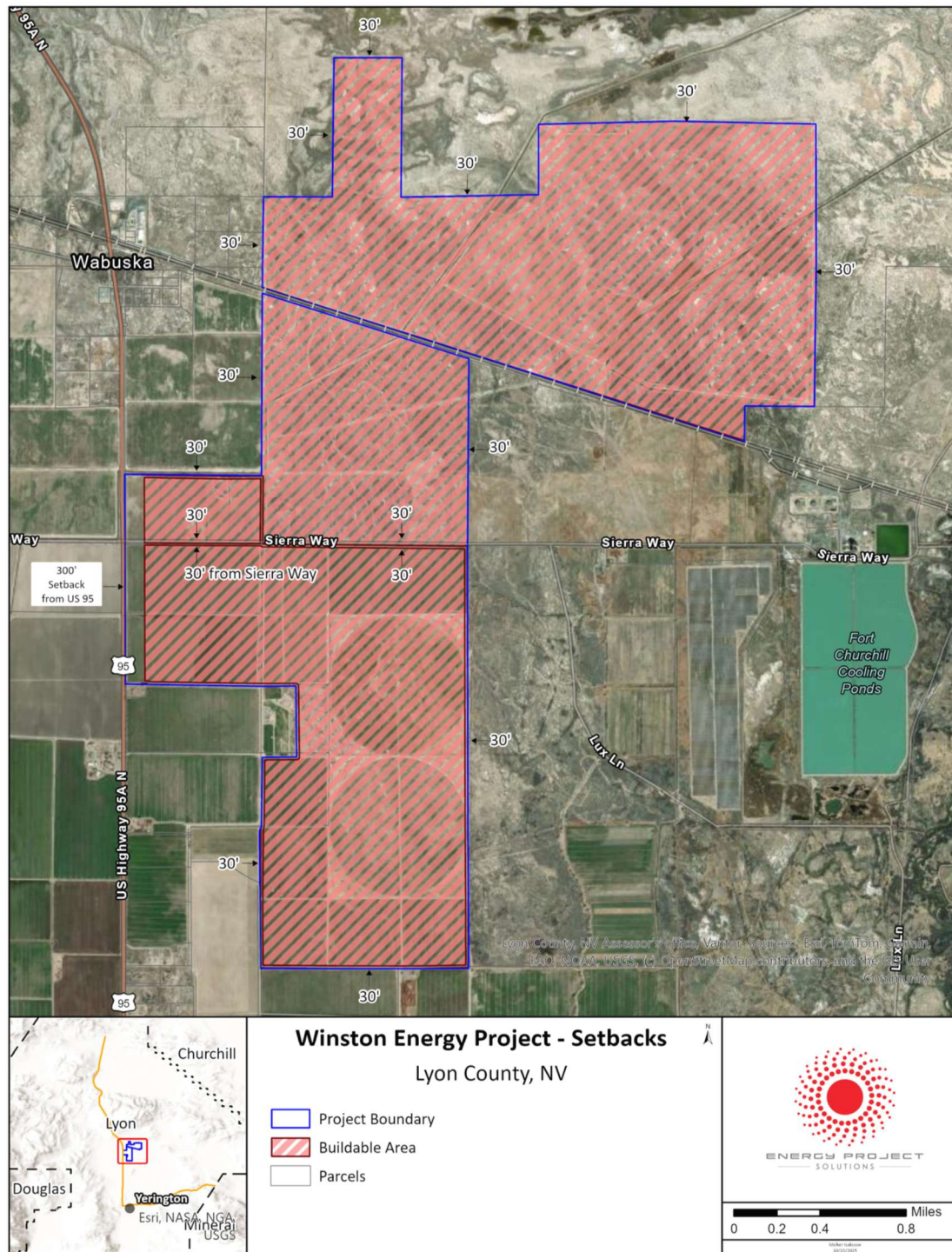
- **Site Expansion and Timing:** Portions of the original 2022 CUP site were lost to the NV Energy Walker River Substation project, requiring the acquisition of additional lands in 2023 and 2024—well before Lyon County adopted the one-mile setback requirement in July 2025. The project also reserves land for continued maintenance and access for the Walker River Irrigation District facilities.
- **Compliance for Major Infrastructure:** The one-half mile setback will still apply to the project's Battery Energy Storage System (BESS) and substation, which are the primary infrastructure elements. Only the PV array would be located within the reduced setback, and the panels are low-profile, low-visibility, low-noise, and low-hazard.
- **Mitigation Measures:** Along SR-95, the project proposes a 300-foot setback enhanced with visual screening and community character improvements, including retention of the existing drainage feature, planting of cottonwood trees, and installation of a landscape screen of native, low-water-demand vegetation.

The requested variance is critical due to the project's unique configuration, which cannot accommodate a 400 MW solar facility under the current one-half mile setback. Additional usable acreage is needed to support the full PV array, associated infrastructure, access roads, and interconnection facilities.

Non-participating residences are located immediately adjacent to the PV array, with the closest residence approximately 1,400 feet from the project boundary and if needed the project is committed to mitigating potential visual impacts.

The project aligns with the 2020 Lyon County Master Plan, which designates the area for partial industrial use, and is consistent with existing and planned utility infrastructure in the vicinity. Granting the setback variance enables a flagship energy project that enhances Lyon County's role as a hub for energy innovation, supports economic development and increased tax revenue, and promotes environmental stewardship, without setting adverse precedent or causing public harm.

FIGURE 14: SETBACK



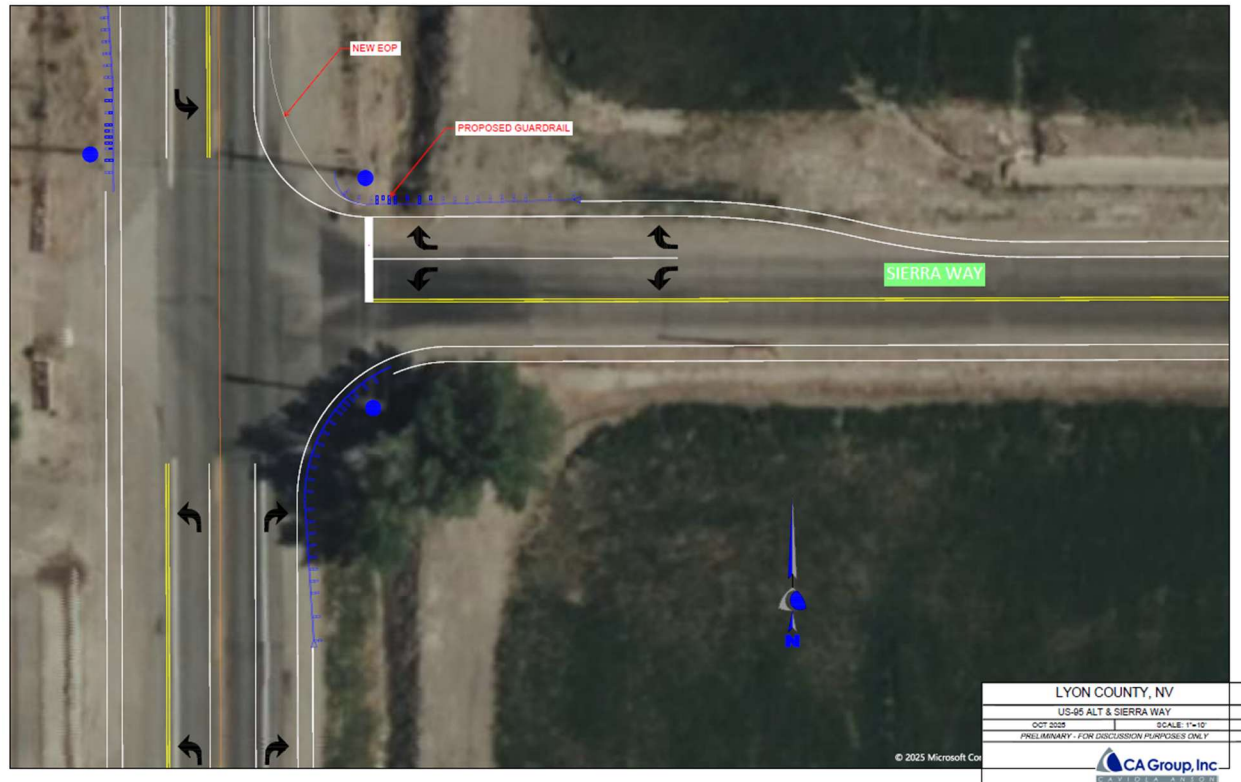
3. Transportation and Circulation

3.1. Site Access

The Project would require vehicular access during construction, operation, maintenance, and decommissioning. An existing public road, Sierra Way, would be used to provide access to the Project site from SR-95. A limited number of access points along Sierra Way would be established for the project which provide entry to the site internal access road network . The access will be used to accommodate equipment deliveries, the construction workforce, and ultimately, the operational needs of the Project.

Construction traffic which primarily consists of construction workers and truck deliveries will necessitate traffic management at the intersection of SR-95 and Sierra Way. This management could be in the form of temporary measures such as temporary signage, flaggers, and a temporary signal. Permanent improvements to the intersection may also be considered such as the installation of turn lanes on SR-95. A traffic management plan will be developed in coordination with the County and NDOT and will be required to the satisfaction of Lyon County prior to the start of significant construction activities for the project.

FIGURE 15: US-95 & SIERRA WAY INTERSECTION



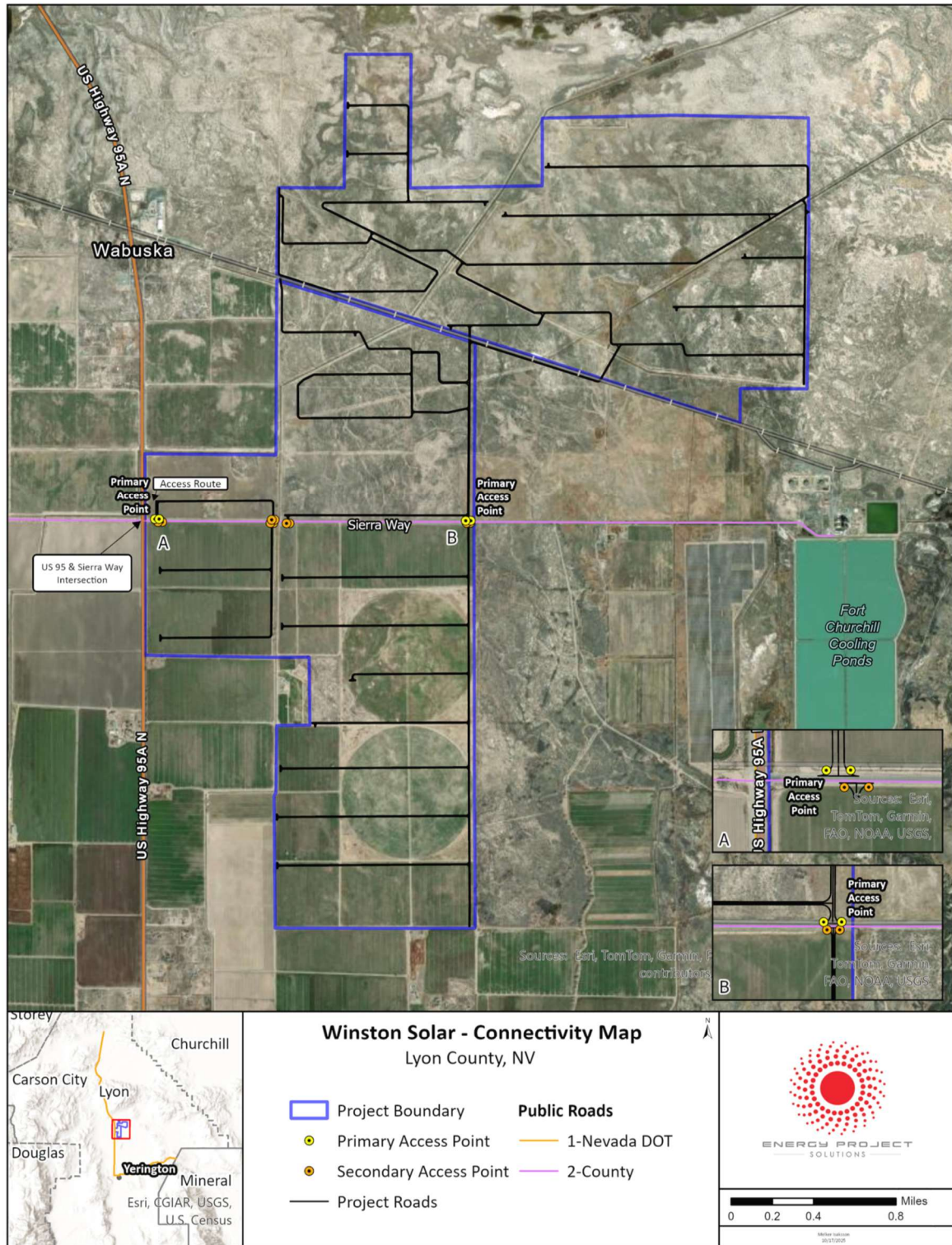
3.2. Internal Access

Internal gravel roadways would be developed throughout the Project area and would take access from Sierra Way. The internal roadway sections would include two travel lanes and would be approximately 20 to 24-feet wide to facility Project vehicles. The Applicant would maintain the internal roads throughout the life of the Project. The Project would require construction of approximately 24 miles of internal access roads. If necessary, water may be applied to work surfaces to aid soil compaction and for dust control. An estimated 150 to 250 acre feet of water would be needed for dust control during Project construction, which is substantially less than the water rights authorized for the properties comprising the Project area.

3.3 Access for other uses.

Access for existing and proposed infrastructure with the project site would also be maintained. This includes the Walker River Irrigation District, railroad, gas pipeline, and NV Energy facilities. As feasible and appropriate, the project will also accommodate access for other adjacent uses.

FIGURE 16: CONNECTIVITY MAP



4. Public Safety

4.1 Project Fire Protection Planning and System

While there is limited potential for wildfire at the Project site, the Applicant would coordinate with the Mason Valley Fire Protection District and other applicable entities, as appropriate, to define measures to mitigate the risk of fire throughout the life of the Project. During Project operation, one or more aboveground water storage tank(s) would be installed on-site, if as required by the Fire Protection District. The tank(s) would be sized to meet the County requirements to supply sufficient water to contain a fire in the event of one taking place and prevent it from propagating across the site. Additional fire protection measures within the O&M building may be included based on collaboration with the Mason Valley Fire Protection District or Lyon County.

The Project's BESS would include self-contained enclosures would have its own fire detection system, which would comply with all local and federal fire code requirements. Each BESS enclosure would include multiple sensors for fire detection or an external fire detection system using infrared sensing capabilities. Additionally, the Project would have a fire alarm control panel located at the site entrance to alert local fire authorities remotely and on the panel itself of any trouble on site. The Project would use battery storage systems that are compliant with the following codes and standards:

- NFPA 855 – Standard for the Installation of Stationary Energy Storage Systems
- NFPA 70 - National Electric Code
- NFPA 72 – National Fire Alarm and Signaling Code
- UL 1973 – Standard for Safety: Batteries for Use in Stationary and Motive Auxiliary Power Applications
- UL 9540 - Standard for Safety: Energy Storage Systems and Equipment
- UL 1741 – Standard for Safety: Inverters

This includes the completion of Large Scale Fire Testing. Large Scale Fire Testing provides empirical data on the risk of fire propagation should a thermal runaway take place. To pass this test the BESS supplier must demonstrate that a fire in one enclosure will not cause thermal runaway to spread into adjacent enclosures.

The battery system will also include explosion prevention schemes, compliant with NFPA 69.

The project would adopt a multi-layered approach to incorporate fire safety into the design, implementation, and operation of energy storage assets. The following strategy will be employed:

- **Technology selection.** Conscious review and selection of energy storage technologies which minimize the risk and exposure of thermal events. The project would select the

technology that is more resistant to thermal runaway and propagation from a failed battery cell to its neighbors

- **Equipment qualification and vendor selection:** All major equipment would go through an exhaustive qualification process to ensure the highest safety, manufacturing, and quality standards are utilized, including strict audits of all its suppliers to evaluate their manufacturing quality and design for safety, vendor selection would require testing due diligence from BESS suppliers to ensure safety of products and completing thorough design reviews at each level of equipment used.
- **Large Scale Fire Testing:** project would require that all BESS vendors conduct large scale fire testing to assess the thermal exposure resulting from an intense fire in a BESS unit, with the aim of understanding the risk of propagation to nearby units or other exposures and require the arrangement for testing to mirror the ultimate installation setup of the BESS, along with any ancillary equipment.
- **Site level design strategies:** Design that minimizes risk of a thermal event, restricts propagation, and supports first responders, following UL and NFPA standards.
- **Training:** Review of all processes for safe operations prior to implementation, and coordination with Mason Valley Fire Protection District as the local first responders to ensure proper training to deal with an event, should one occur.
- **Operations & Maintenance:** Strictly adhering to all maintenance requirements prescribed by equipment suppliers.

Moreover, the project will develop and implement a comprehensive Risk Assessment that would include the engagement of an independent Fire Protection Engineer, with the following deliverables:

- **Hazard Mitigation Analysis (HMA):** systematic method that would identify potential failure modes, causes and effects, and develop mitigation solutions.
- **Failure Mode and Effects Analysis (FMEA):** identifying the ways, or modes, in which something might fail where any errors or defects and studying the consequences of those failures.
- **Fire Risk Assessment (FRA):** identification of potential hazards and risks and recommendations on how to reduce or remove the identified fire risks.
- **Plume Study:** Analysis of the gases emitted from a fire should one occur and the identification of routes that such gases would follow.

4.2 Fire and Emergency Services

To ensure safety for site personnel, communities, and first responders Emergency Preparedness and Response Procedures Plans (EPRP) would be created and adapted to reflect the unique characteristics of project such as the selected technology, specific fire risks and the local regulatory requirements of Lyon County and the Mason Valley Fire Protection District.

The development of the EPRPs will follow this strategy:

- **Coordination and project familiarization:** Project would coordinate with first responders to build familiarity with the layout, equipment, and fire risks specific to the Winston Energy Project, making sure responders understand the potential hazards of the BESS when developing effective response protocols.
- **Joint Development of Emergency Procedures:** This includes fire containment strategies, proper safety perimeters, firefighter entry limitations near energized equipment, and protocols for safely isolating battery and storage systems.
- **Pre-incident Training:** Comprehensive training tailored to the BESS facility will be provided to emergency responders as outlined in similar projects, covering key topics such as thermal runaway management and hazard identification. This ensures responders are equipped and prepared to tackle unique risks related to lithium-ion battery fires.
- **Battery Energy Storage System Safety:** The plan will incorporate fire protection systems designed specifically for the safe operation of lithium-ion batteries. This includes advanced smoke, heat, and gas detection technologies.
- **Comprehensive Emergency Procedures:** The EPRP will outline actions for onsite personnel during fire-related events, prioritizing safety, accountability measures, evacuation, and coordination with offsite responders, a copy of the EPRP will be supplied to the Mason Valley Fire Protection District,
- **Strategic Fire Response:** Emergency protocols will reflect methodologies proven effective for mitigating battery fires, including measures to minimize risks associated with thermal runaway, electrical shock hazards, and structural fire propagation.
- **Site integration and situational awareness tools:** Real-time monitoring systems such as thermal cameras, gas detection devices, and expert-driven onsite integration will be incorporated into incident management. Decision trees will be available to responders for rapid assessment and customized reactions.
- **Onboarding Fire Safety Training:** All project personnel will undergo the proper training on how to respond in the case of an incident including a safe shutdown of the plant and evacuation of the facilities.

4.3 Police Services

Law enforcement at and around the project site would be served by the Lyon County Sheriff. Energy projects have very little demand for law enforcement. Security at the site is achieved primarily through design and structural means in compliance with NERC requirements.

4.4 Spill Prevention and Control

Project construction activities would involve the use of fuels and greasers to ensure construction equipment is sufficiently maintained and operational. Such substances may be stored in temporary aboveground storage tanks or sheds located on the Project site. The fuels stored on site would be in a locked container within a fenced and secure temporary staging area.

The small quantities of substances to be stored at the Project site during construction would include fuels, oils, and chemicals required for equipment and facilities maintenance. These materials would be stored in their appropriate containers in an enclosed and secure location, such as portable outdoor hazardous materials storage cabinets equipped with secondary containment to prevent contact with rainwater. The portable chemical storage cabinets may be moved to different locations around the site as construction activity locations shift. The chemical storage area would not be located immediately adjacent to any drainage. Disposal of excess materials and waste would be performed in accordance with local, state, and federal regulations; excess materials/waste would be recycled or reused to the maximum extent practicable.

If quantities exceed regulatory thresholds, the Applicant would ensure that storage is undertaken in compliance with the Spill Prevention, Control, and Countermeasure Rule and a Hazardous Materials Business Plan, which would be developed prior to construction. The use, storage, transport, and disposal of hazardous materials used during Project construction would be carried out in accordance with federal, state, and county regulations. No extremely hazardous substances are anticipated to be produced, used, stored, transported, or disposed of during construction. Material safety data sheets for all applicable materials would be made readily available to on-site personnel. Construction materials would be sorted on site throughout construction and transported to appropriate waste management facilities. Recyclable materials would be separated from non-recyclable items and stored until they could be transported to a designated recycling facility.

5. Public Infrastructure, Services, and Utilities

5.1 Water Supply

Water consumption for the Project will be divided between construction and operational activities, with the highest use occurring during construction. Water for construction activities, primarily for dust control, will be sourced from an on-site well. During operations, potable water may be provided by the County (if service is available), sourced from an on-site well, or stored in a 15,000-gallon storage tank on-site.

Additionally, non-potable water storage tanks required for fire department use may also be installed on-site as per NFPA requirements. Overall, water consumption during the peak construction period will remain significantly below the total water rights authorized for the properties within the Project area. No water will be used for panel washing.

5.2 Sewer Service

The project plans to utilize an on-site septic tank to manage wastewater, providing a reliable and self-contained solution. By relying on this system, the project can ensure proper sanitation, environmental compliance, and uninterrupted operations throughout the construction period.

5.3 Walker River Irrigation District

The Project site includes irrigation canals that cross the proposed boundary. These canals are managed by the Walker River Irrigation District (WRID). The Project team has been in ongoing coordination and communication with WRID to identify the canals and understand the District's needs and requirements.

Prior to applying for any mass grading or building permits, the Project will obtain WRID's approval for the development and improvement plans. These plans will ensure that the Wabuska Drain continues to fulfill its primary purpose, provides WRID with the necessary easements for maintenance access, and ensures that any proposed improvements do not interfere with WRID's infrastructure or maintenance activities.

5.4 Nevada Energy

The project has obtained a Letter of Intent to Serve from NV Energy, confirming their commitment to provide electrical service to the project site. A copy of this letter has been included in Appendix I.

5.7 Communications

The project intends to use a satellite provider to supply both internet and phone services, ensuring reliable communication capabilities even in remote or undeveloped areas where

traditional infrastructure may be limited or unavailable. By relying on satellite technology, the project can maintain consistent connectivity for operations, data transmission, and coordination among team members.

6. Agency Coordination/Permitting

6.1 County

6.1.1 Conditional Use Permit (CUP)

Lyon County has previously issued a Conditional Use Permit (CUP) for the Winston Energy Project, which includes approval for a Operations & Maintenance (O&M) building, collection lines and up to 200 megawatts of photovoltaic (PV) solar panels within a 1,712-acre project boundary. From this point forward, the BESS, O&M building, collection lines, and PV solar panels will collectively be referred to as the project components. The findings from the 2022 CUP are provided below along with a summary of how the Winston Energy Project will comply with the findings.

- A. The proposed use at the specified location is consistent with the policies embodied in the adopted master plan and the general purpose and intent of the applicable district regulations;
- The Winston Energy Project is located within an established Industrial and Rural Residential zone identified in the Land Use Plan, ensuring compatibility with surrounding uses.
 - The Winston Energy Project is located directly adjacent to the Walker River Substation (f.k.a. Fort Churchill Substation), reducing the infrastructural demand, resources impacts, and visual contrast associated with transmission infrastructure.
 - The development of project components will provide sustainable renewable energy resources to Nevada's Energy's transmission system, serving both Lyon County residents, and residents throughout the state.
 - The development of renewable energy resources in the region will contribute to the long-term resilience of Nevada's energy infrastructure by diversifying the state's energy resources.
 - Unlike fossil fuel development, solar PV facilities require minimal water for operation. Water conservation is especially critical in Lyon County, where water resources are scarce, and better utilized for agricultural purposes.

- The proposed solar arrays will be installed in a manner that allows for the preservation of native vegetation and maintenance of existing soil integrity.
- By generating electricity from sunlight, solar facilities produce no air pollutants or greenhouse gases during operation, offering a clean alternative to fossil fuels. Their success demonstrates the viability of renewable energy, attracting investment, supporting policy goals, and encouraging broader adoption of low-emission technologies across the energy sector.

B. The proposed use is compatible with the character and integrity of adjacent development and neighborhoods and includes improvements or modifications either on-site or within the public rights-of-way (ROW) to mitigate development related adverse impacts, such as traffic, noise, odors, visual nuisances, or other similar adverse effects to adjacent development and neighborhoods;

- The Winston Energy Project will be located within the Heavy Industrial – Suburban (HI-S) and Rural Residential 20 Acre Minimum (RR-20) zone districts, which are located in Lyon County’s Suburban and Residential Character Districts, respectively.
- The BESS and Substation are located near the center of the Project area to minimize visual and noise impacts to surrounding uses.
- Existing infrastructure is sufficient to accommodate construction traffic for project components.

C. The proposed use incorporates roadway improvements, traffic control devices or mechanisms, or access restrictions to control traffic flow or divert traffic as needed to mitigate the development impacts;

- Access to the project site will be limited to Winston FC Solar, LLC personnel during construction hours.
- During the typical construction schedule of the project, no access restrictions are expected to be in place. However, when oversized loads are delivered to the site, flaggers are expected to temporarily stop/slow the traffic while assisting these vehicles in entering and exiting the site via US-95A/Sierra intersection.
- Proposed roadway improvements range from installing a southbound left turn lane on US-95A at Sierra, a northbound right turn lane on US-95A at Sierra,

installing right and left turn lanes on Sierra, and an accel lane on US-95A in the northbound direction at Sierra.

- Proposed traffic control devices range from construction signs installed on the sign posts, changeable message signs that could be installed on either side of Sierra Way on US-95A, temporary traffic signal at the intersection of US-95A and Sierra Way and flaggers that could assist during movement of oversized loads delivering equipment to the site.

D. The proposed use incorporates features to address adverse effects, including visual impacts and noise, of the proposed conditional use on adjacent properties;

- The Winston Energy Project is located directly adjacent to the Walker River Substation (f.k.a. Fort Churchill Substation), reducing the infrastructural demand, resources impacts, and visual contrast associated with transmission infrastructure.
- The Project's solar arrays are setback at least 300 feet from neighboring public ROWs including U.S. Alt 95 and Sierra Way, while larger Project components including the BESS and Substation are located near the center of the Project area to minimize visual and noise impacts to surrounding uses.
- Project's boundary, further minimizing the potential for conflicts with neighboring residents. Finally, the Project was intentionally located adjacent to other industrial uses to minimize impacts to other land use types. Neighboring industrial uses include the Walker River Substation, railroad corridor, and the Lux Solar Center.
- The Winston Energy Project operations require minimal nighttime lighting, and all light fixtures will be shielded and use downward-facing fixtures to prevent light pollution. Since solar energy is generated during daylight hours, the site remains largely inactive at night, preserving the natural night environment and reducing impacts on nearby communities and wildlife.

E. The proposed conditional use complies with all additional standards imposed on it by the particular provisions of this chapter and all other requirements of this title applicable to the proposed conditional use and uses within the applicable base zoning district, including but not limited to, the adequate public facility policies of this title; and

- The Winston Energy Project commits to complying with all standards and requirements that are imposed under this chapter, the findings of the CUP, and other standards and requirements that are included in the Planned Unit Development application and Planned Unit Development Handbook for the Project.

F. The proposed conditional use will not be materially detrimental to the public health, safety and welfare, and will not result in material damage or prejudice to other properties in the vicinity.

- The facility's clean and quiet operation avoids conflicts with nearby land uses and contributes to a safe, orderly industrial environment.
- The Project will not produce waterborne pollutants, protecting surface and groundwater resources, and supports water quality goals.
- Solar energy facilities do not emit air pollutants or greenhouse gas during operation, directly contributing to improved air quality.
- The project includes a fence around all project components ensuring public safety.
- The nearest residential structure is approximately 1,400 feet away from the southern Project's boundary, minimizing the potential for conflicts with neighboring residents.

If the project proposes additional structures such as substations transmission lines, O&M buildings, additional solar panels/generation, or expands the project boundary, a new or modified CUP and additional public hearings would be required. In addition to the CUP, the Project will also require building permits, encroachment permits for driveway cuts affecting public rights-of-way, and other applicable discretionary and non-discretionary permits.

6.2 State

6.2.1 Nevada Department of Transportation (NDOT)

The project will coordinate with NDOT to identify if the project is expected to exceed the threshold that would trigger a Traffic Impact Study (TIS), in the case that NDOT deems that the project exceeds such threshold the project would coordinate with NDOT to review and approve the basis of the report and the, temporally and permanent mitigation measures, mitigation measures required by NDOT would be implemented before construction start.

6.2.2 Nevada Division of Environmental Protection NDEP

The Nevada Division of Environmental Protection (NDEP), Bureau of Water Pollution Control, will require a water pollution control permit for the Project. Based on the scope of the Project, it will also require an NDEP Construction Stormwater General Permit. This permit is mandatory for projects that disturb more than one (1) acre of land during construction, among other requirements.

Before filing a Notice of Intent (NOI) with NDEP, a Stormwater Pollution Prevention Plan (SWPPP) must be prepared. The SWPPP will include, among other things, the identification of a team responsible for overseeing compliance with the permit requirements.

Additionally, the Project will likely need a Surface Area Disturbance (SAD) permit, as it is expected to disturb more than five (5) acres for purposes unrelated to agriculture.

Coordination with NDEP will be necessary to ensure the Project complies with applicable environmental standards for air, water, and land. According to the Lyon County Planning Department, NDEP approval and all required permits must be obtained and submitted during the later stages of the Project, prior to the beginning of construction.

6.2.3 Public Utilities Commission of Nevada (PUCN)

The Project falls under the scope of the Utility Environmental Protection Act (UEPA), which addresses environmental considerations related to the construction of utility facilities, administered and enforced by the PUCN.

The Project qualifies as a utility facility under UEPA because its generation component exceeds the nominal nameplate generating capacity of 70 MW. According to statute, a UEPA construction permit must be issued by the PUCN before construction can commence. The Project's application for a UEPA permit was approved on July 29, 2025.

As part of the UEPA permitting process, the Project was also required to submit a notice to the Nevada Department of Wildlife (NDOW) and provide a \$10,000 deposit to conduct a NDOW site survey. This notice and deposit were submitted to NDOW on March 15, 2023, and the notice was included with the Project's UEPA application to the PUCN.

7. Phasing/Implementation

7.1 Project Approvals

7.2 Construction

Project construction is anticipated to begin in Quarter 1 of 2027, with commercial operations anticipated to commence in Quarter 4 of 2028. Construction of the Project is expected to occur over 18-24 months and would consist of several phases, including mobilization and staging, improvements to access roads, PV facility construction, BESS construction, gen-tie line construction, demobilization of equipment and staging areas, and interim site reclamation.

7.2.1 Construction Workforce

The projected construction work force discussed below includes all personnel required to complete construction of the Project including overall Project and site management, laborers, skilled craft, and startup personnel. The Project's construction workforce is expected to consist of approximately 350 to 450 personnel during peak construction activities and would include both construction workers and support personnel, such as surveyors and project managers. Up to 350 workers are expected to work on the site at its peak. This peak usually occurs during panel installation which can last up to 6 months. Prior to this peak period, there is an approximate 6 month period of site preparation when the workforce is about 50% of peak. After the peak period, the work force quickly ramps down to about 25% of the peak for the final 6 months of the project construction.

Skilled craft and laborers would be drawn from the local area, while construction management and startup functions would be provided by relocated personnel from the Applicant's designated engineering, procurement, and construction (EPC) contracting firm.

7.2.2 Site Preparation and Grading

Site-preparation activities would include surveying, vegetation clearing and grubbing, and grading. Prior to the initiation of any construction, the necessary permits would be obtained.

Vegetation clearing and grubbing for the Project would commence immediately prior to the beginning of construction activities, to minimize the potential for soil erosion. Vegetation would be permanently cleared from roadways, access ways, and at inverter equipment, substation, BESS, and O&M building locations. Within the solar PV facility, native vegetation would be left in place to the extent practicable, with some mowing and selective trimming as needed to create a safe work environment and avoid interference with the movement of the solar panels. Prior to construction, vegetation throughout the solar array areas would be mowed to a height of 18

inches leaving the roots intact to facilitate regrowth during operations. Construction equipment may drive over and crush the vegetation during installation of the arrays.

Following initial site preparation and vegetation removal, grading would be completed with the use of standard heavy equipment, such as bulldozers. Grading activities would conform to accepted slope stability requirements and all Nevada Division of Environmental Protection (NDEP) best management practices (BMP).

The proposed improvements for the facility would be constructed at existing grade where possible. Within the Project area, some grading would be required to accommodate the substation, O&M building, BESS enclosures, internal roads, electrical equipment pads, and where the PV module support foundations are driven or drilled. A small, graded pad may be required within each solar array to accommodate the associated inverter and transformer, or they could be installed on driven piers. Additionally, excavation would be required for trenches for electrically connecting some of the equipment on site. Following construction, all underground trenches would be filled with native soils and/or imported fill and compacted.

A Fugitive Dust Control Plan to reduce fugitive dust during grading would be prepared prior to construction.

7.2.3 Construction Sequencing

Construction activities would occur over an 18-24 month period and would include the following phases and sequencing:

- **Fencing** – Permanent exterior fencing would be installed.
- **Clearing** – Vegetation removal for installation of the solar facilities would be completed only as necessary in advance of equipment installation. Clearing would be conducted to minimize the amount of disturbed ground surface at any one time.
- **Site Grading** – Because of the relatively flat topography at the site, relatively minimal volumes of soil would be moved for grading, however, minor grading activities may be required for the development of substation, O&M building, BESS enclosures, internal roads, electrical equipment pads, and other ancillary equipment
- **Parking and Laydown** – Parking areas for construction workers and laydown areas for construction materials would be prepared inside the Project area. Detailed information regarding the location of the laydown and parking areas for the Project would be developed after an EPC is hired to construct the facility.
- **Site Roads** – The internal site roads would be constructed in phases throughout the construction period. All internal access roads would be maintained throughout the life of the Project.

- **Foundation Construction** – Foundations for the substation, inverters and transformers, O&M building, and BESS enclosures would be constructed, and may require some earthen fill.
- **Solar Array Installation** – The solar arrays are installed first by driving piles (including pre-drilling if required by site soil conditions). The tracker is then attached to the piles and then the PV modules (panels) are attached to the tracker. Generally, at the same time the substation equipment, inverters, and BESS are installed. This also includes running cables between all equipment. Cables between the PV panels and inverter are commonly routed through hangers or trays. Cables from the inverters to the substation would be underground (installed by trenching, laying the cable, and backfilling).
- **BESS installation** – Grade the pad, install the foundation, set the BESS and exterior electrical equipment, run conduit and wiring between the equipment, trench to the substation, and test/commission the BESS once the grid requirements have been met.
- **Gen-tie Construction** – Structure assembly and conductor installation would be performed from the Project substation to the Point of Interconnection (POI) at Walker River Substation.
- **Testing and Commissioning** – Testing of subsystems would be conducted as they are completed. Modules would be tested once all supporting subsystems are installed and tested.
- **Site Stabilization/Reclamation** – Disturbed areas would be stabilized during construction to minimize wind and water erosion and fugitive dust by watering and/or use of dust palliatives. Cleared and graded surfaces that would not be subject to future disturbance would be restored.
- **Demobilization** – Any temporary fabrication and construction facilities would be removed from the site once construction is complete.

7.3 Operations

O&M activities would begin once Project construction is complete and the facility has been commissioned. O&M activities associated with the Project would be minimal. The Project would be expected to collectively require up to 12 personnel, including both full-time employees and contractors throughout the operational life of the Project. Maintenance and administrative staff would typically work 8-hour days, Monday through Friday. During periods when non-routine maintenance or major repairs are in progress, the maintenance force could work longer hours, and contract labor could be utilized as necessary.

Long-term maintenance schedules would be developed to include periodic maintenance and equipment replacement in accordance with manufacturer recommendations. Solar panels are designed for a 40-year Project life; however, PV modules and BESS components would be replaced as necessary. Moving parts, such as motors and tracking module drive equipment would be serviced on a regular basis, and unscheduled maintenance would be conducted as necessary.

No heavy equipment would be used during normal plant operation. Operation and maintenance vehicles would include trucks (pickups, flatbeds, dump trucks), forklifts, and loaders for routine and unscheduled maintenance. Large heavy-haul transport equipment may be brought to the site infrequently for equipment repair or replacement.

Operation of the Project would only be expected to generate up to 10 to 15 round trips per day from maintenance and security personnel. Potable water may be supplied by the County (if service is available), a well, or could be stored on-site in a 15,000-gallon storage tank. Additional non-potable water tanks for fire department use may also be stored onsite per NFPA requirements.

O&M activities associated with the Project would require the use of standard traffic and safety signage on-site. Traffic and/or safety signs may be placed on the Project site as required to ensure safe use of the roadways and access to the facility. Traffic and safety signage would be maintained as part of the overall Project operation.

7.4 Project Decommissioning and Reclamation

The Project has an anticipated operational life of up to 40 years, after which the Project proponent may choose to update site technology and recommission, or to decommission the site and remove the systems and their components. All decommissioning and restoration activities would adhere to the requirements of the appropriate governing authorities and in accordance with all applicable federal, state, and County regulations. At the end of the proposed Project site's operational term, the applicant may determine that the proposed Project site should be decommissioned and deconstructed, or it may seek an extension of its permits. Because the PV arrays' supporting equipment would sit on the surface of the land, the land would be largely unaltered from its natural state when the arrays are removed after the proposed Project's lifetime. The Applicant would work with the County to comply with the local regulations and requirements to ensure the decommissioning of the proposed Project site after its productive lifetime. The Project would use BMPs to ensure the collection and recycling of materials and to avoid the potential for modules and batteries to be disposed of as municipal waste.

Appendix

Appendix A – PUD Justification

Appendix B – ALTA and Title Reports

Appendix C – Project Legal Description and Vesting Deed

Appendix D – Site Plan

Appendix E – Basis of Design

Appendix F – Soils Report

Appendix G – Property Tax Status

Appendix H – Visual Report/Simulation

Appendix I – Intent to Serve