



PLANNING & ZONING STAFF SUMMARY REPORT

MEETING DATE: September 20, 2022

CASE # ETZ 2022-17

ACTING BOARD	ROSWELL-CHAVES COUNTY EXTRATERRITORIAL PLANNING AND ZONING COMMISSION
ACTION REQUESTED:	Zone Change from C-1 Commercial District to I-1 Industrial for a Community Solar Project
LAND OWNER & AGENT:	Thomas and Tasia Ramage Soltage NM DevCo LLC
LOCATION & LEGAL:	5700 block of Green Court (vacant) Parcels 3, 4, 5A, 7 and 8 of Ramage-Owen 2008 Boundary Survey
ITEM SUMMARY	Mr. and Mrs. Ramage and Soltage NM DevCo LLC are proposing a 2.5 Mw community solar project located east of South Main Street and North of Hobson Road at 5700 block of Green Court
SUPPORTING DOCUMENTS	Staff Report, Application, Warranty Deed, Development Plan & Soltage NM DevCo LLC . Information, Vicinity Map.

SUMMARY BY: Louis Jaramillo –Planning & Zoning Director

STAFF'S REPORT

CASE # ETZ 2022-17

Mr. and Mrs. Ramage and Soltage NM DevCo LLC are requesting a zone change to I-1 Industrial for the operation of a 2.5 MW community solar facility. Per Section 14.2.23, of the Roswell-Chaves County ETZ Ordinance 80-1, the ETZ Commission has determined that Solar Facilities may be permitted in the Industrial District with Conditions of Approval. The proposed solar facility would be located east of South Main Street and North of Hobson Road on 5700 block of Green Court. The proposed site is of sufficient size for a 2.5-MW solar facility, as it consists of five individual parcels totaling approximately 31 acres in size.

Soltage NM DevCo LLC has provided a development plan that is included in Staff Report. The solar facility will be fenced for security purposes. (See Project Description for details.) The facility will tie into the overhead electric line that runs along Hobson Road. Xcel Energy has not stated if their distribution line is sufficient for the 2.5-megawatt community solar facilities. The nearest Xcel substation is located just to the east about 0.20 miles on Hobson Rd.

The proposed site area, along with the area to the southwest were approved in 1987 for commercial zoning but have remained vacant. The area to the southwest is zoned C-1 Commercial District. The properties to the south and northwest are zoned I-1 Industrial District. The properties to the north and east are zoned Rural Suburban District. There are multiple commercial and industrial developments along South Main Street and Hobson Road. The properties to the south, along Hobson Road, are being used as an airplane recycling facility.

Staff is in favor of the zone change to I-1 Industrial and recommends the following Conditions of Approval:

1. Soltage NM DevCo LLC shall apply for any necessary building and electrical permits for construction of the community solar facility within one year of being awarded the solar project by the State.
2. Soltage NM DevCo LLC shall utilize the existing electric transmission lines in the area.
3. Soltage NM DevCo LLC shall provide a de-commissioning and restoration plan for this property.
4. All lighting used on-site shall be shielded from traffic, surrounding properties and shall comply with the NM Night Sky Act.

5. Prior to construction of the community solar facility Soltage NM DevCo LLC shall construct Green Court from Hobson Road-north to the solar facility entrance as show on the Soltage site plan. The construction of the road shall be in complies with Chaves County Road Standards and shall be approved by the Chaves County Road Department upon completion
6. All solar panels and their foundations shall be setback from all property lines a minimum of fifty (50) feet.
7. A twenty-four (24) feet wide hard pack, weather proof, service road shall be required within the facility along with an adequate turn around area at the midway point of the facility and at the further northern end of the facility for fire and other emergency vehicles.

Findings of Fact:

1. The proposed solar facility would be a low impact industrial use in a vacant area and would be an economic benefit to the community with rising utility costs, and to assist in the costly and limited space for personal solar facilities on one's private property.
2. The proposed I-1 District is compatible with the adjoining properties in both use and zoning designation.
3. The proposed solar facility is not within the F-2 Flight Overlay District as stated in Article 17 of the Roswell-Chaves County ETZ Ordinance 80-1.
4. Owner's within 100 feet of the proposed zone change have been notified by certified mail, per Section 2.5 of the Roswell-Chaves County Extraterritorial Zoning Ordinance No. 80-1. No protest letters have been received at the time of this writing.
5. Planning and Zoning Staff have advertised this meeting in the local Roswell Daily Record 15 days prior to today's public hearing per the Roswell-Chaves County Extraterritorial Zoning Ordinance No. 80-1.



ROSWELL- CHAVES COUNTY ETZ/ CHAVES COUNTY ZONING APPLICATION

Case Number: ETZ 2022-017 Date Received: _____ Fee: \$ 350⁰⁰

Type of Request: Rezoning Special Use Variance Change of Use

Owner's Name: Thomas Kyle Ramage and Tasia L. Ramage

Mailing Address: 503 Tierra Berrenda Dr., Roswell, NM 88201

Phone Number: 575-626-7277

Agent's Name: Soltage LLC - Joy Crossman or Marc Miller

Mailing Address: 333 Washington Street, Suite 401, Jersey City, NJ 07403

Phone Number Joy 702-575-8300
Marc 201-214-7644

Roswell-Chaves County ETZ Chaves County

Case Address: Unassigned or 207 E. Hobson Rd. Roswell, NM 88203

Legal Description: See page 2 for legal description.

Parcel Number: R000325, R000326, R012946, R000329, R000330

Present Land Use: Vacant

Intended Land Use: Solar array

Present Zoning: C-1 Requested Zoning: I-1

Reason for Requested: (Attach Letter if necessary) Letter attached.

PLEASE INCLUDE ALL DEVELOPMENT PLANS, SITE PLANS, AND /OR BUSINESS PLANS

I ACKNOWLEDGE THAT I HAVE BEEN INFORMED OF THE DATES, TIMES, AND LOCATIONS OF THE PUBLIC HEARINGS FOR WHICH I OR MY AGENT SHALL ATTEND IN ORDER TO FULFILL THE REQUIREMENTS OF THIS APPLICATION.

DocuSigned by:
Thomas Kyle Ramage and Tasia L. Ramage
Owner's Signature

8/10/2022
Date

Legal Description:

PARCELS THREE, FOUR, SEVEN and EIGHT (3, 4, 7 & 8) of RAMAGE- OWEN 2008 BOUNDARY SURVEY of a part of the SW1/4 of Section 28, Township 11 South, Range 24 East, N.M.P.M., in the County of Chaves and State of New Mexico, as shown on the Survey filed in the Chaves County Clerk's Office on October 13, 2008 and recorded in Book S16 of Survey Records, Chaves County, New Mexico, at Pages 7-8.

AND

TRACT FIVE A (SA) of RAMAGE - OWEN -RODIBAUGH BOUNDARY ADJUSTMENT SURVEY of a part of the SW1/4 of Section 28, Township 11 South, Range 24 East, N.M.P.M., in the County of Chaves and State of New Mexico, as shown on the Survey filed in the Chaves County Clerk's Office on May 1, 2006 and recorded in Book S10 of Survey Records, Chaves County, New Mexico, at Pages 43-44.

**SPECIAL WARRANTY DEED
(Joint Tenants)**

BOOK 0644 PAGE 0498

Johnny O. Owen and Ruth A. Warrer Owen, Trustees of the Johnny and Ruth Owen Trust under Trust Agreement dated November 28, 1995, an undivided 1/2 interest, Thomas D. Ramage and Judith N. Ramage, husband and wife, an undivided 1/2 interest, for consideration paid, grant(s) to

Thomas Kyle Ramage and Tasia L. Ramage, husband and wife,

whose address(es) is/are: 28-11-24, Roswell, NM 88203

as joint tenants, the following described real estate in Chaves County, New Mexico:

Parcels 2, 3, 4, 7 and 8 of the Ramage-Owen 2008 Boundary Survey of Part of Section 28, Township 11 South, Range 24 East of New Mexico Principal Meridian, in the County of Chaves and State of New Mexico by Todd P. Wagener, filed October 13, 2008 in Survey Book S16, Pages 007 and 008

AND

Tract 6A of the Ramage-Owen-Rodbaugh Boundary Adjustment Survey of Part of Section 28, Township 11 South, Range 24 East of the New Mexico Principal Meridian, in the County of Chaves and State of New Mexico by Todd P. Wagener, filed May 1, 2003 and recorded in Survey Book S10, Pages 43 and 44.

SELLER reserves 50% of all mineral and water rights, if any, and do not warrant anything above, on or below the ground

SUBJECT TO all patent and mineral reservations, restrictive covenants, restrictions and reservations of easements and rights-of-way of record, and all applicable zoning regulations, restrictions and requirements and all other matters of record and to taxes for the year 2009 and subsequent years;

with special warranty covenants.

Witness my four hands this date: July 1, 2009

Owen Trust, Johnny and Ruth

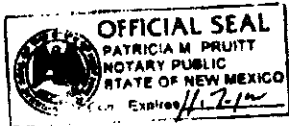
Johnny O. Owen
By: Johnny O. Owen, Trustee
Ruth Warrer Owen
By: Ruth Warrer Owen, Trustee
Thomas D. Ramage
Thomas D. Ramage
Judith N. Ramage
Judith N. Ramage

ACKNOWLEDGMENT

STATE OF NEW MEXICO

COUNTY OF CHAVES

This instrument was acknowledged before me on July 7, 2009, by Johnny O. Owen and Ruth A. Warrer Owen, Trustees of the Johnny and Ruth Owen Trust under Trust Agreement dated November 28, 1995, an undivided 1/2 interest, Thomas D. Ramage and Judith N. Ramage, husband and wife, an undivided 1/2 interest.



Patricia M. Pruitt
Notary Public
My Commission Expires: 11-7-12

Warranty Deed - 10/1 Statutory Form

Page 1 of 1

Rev. 01/07



STATE OF NEW MEXICO, COUNTY OF CHAVES, ss
FILE FOR RECORD Jul 8, 2009 at 04:24:47 o'clock PM
Receipt No. 318788 Fee \$ 9.88
Book 644 Page 498 Pages 1
To Whom Returned: LAWYERS TITLE
WILL PICK UP

RHODA C. CONKLEY, COUNTY CLERK

By *Petty Spea* Deputy



Zone Change Application, Plan of Development, and Other Required Information

Ironhorse 2.5 MWac Community Solar Project
Chaves County, New Mexico

Prepared for:

Chaves County

Prepared by:

Wood Group, USA

August 10, 2022

Copyright and non-disclosure notice

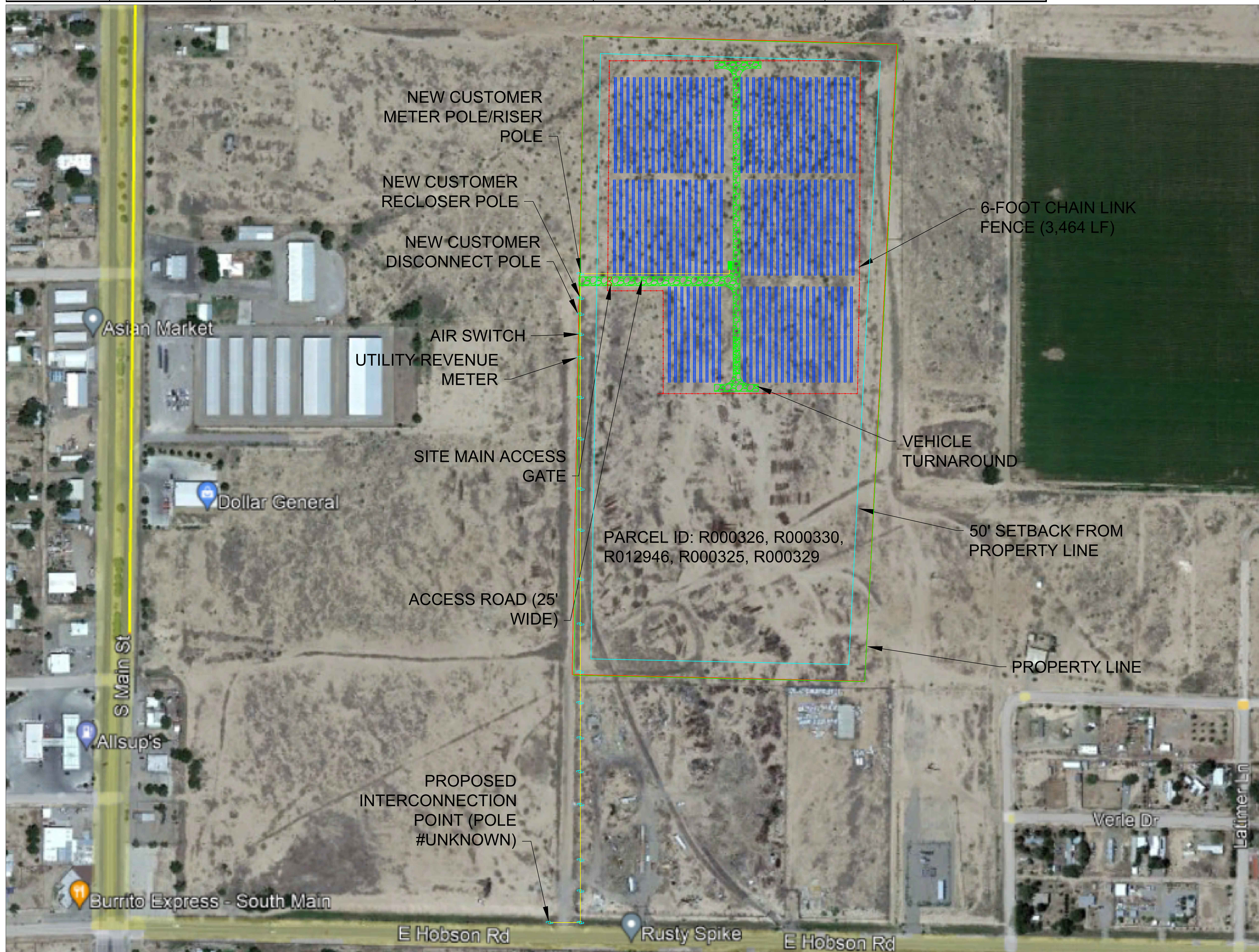
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POWER TABLE										
ARRAY				MOUNT			INVERTER			
LOCATION	# OF MODULES	MODULE TYPE	kWp	AZIMUTH	PITCH	TYPE	MODEL	SIZE (kW)	QTY	KW AC
ARRAY 1	8,424	415	3495.96	180	+/- 55 DEGREES	SINGLE-AXIS TRACKER	SUNNY HIGHPOWER PEAK 3 150	150	17	2,500
TOTAL	8,424		3,495.96							2,500

DATE:	08/26/22
SCALE:	1"=150'
PROJ #:	XXX
DRAWN BY:	JC
REV BY:	XX
REVISION	
NO.	COMMENTS



IRON HORSE 1
 SOUTH OF ROSWELL RELIEF ROUTE
 ROSWELL, NM 88203
 3,495.96KW DC GROUND MOUNT (2,500 KWAC)
 PHOTOVOLTAIC GROUND MOUNT ARRAY LAYOUT

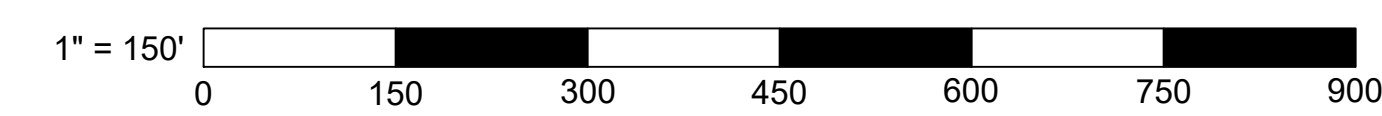


Soltage, LLC
 66 York Street, 5th Floor
 Jersey City, NJ
 07302
 Tel: (201) 432 1786
 Fax: (201) 432 1010

**FIGURE 2 -
 SITE PLAN**

IRON HORSE 1

SCALE: 1"=150' WHEN PRINTED 36" x 24"



1.0 Solar Energy Plan of Development

This solar energy Plan of Development (POD) describes construction, operations, and maintenance aspects of the Ironhorse 2.5 MWac community solar project (project). Additionally, it describes potential impacts on environmental resources that may be present on site (i.e., biological, surface water) as well as describes potential impacts associated with glint/glare and heat island impacts. Finally, this POD describes reclamation activities that would occur after the project reaches the end of its design life.

2.0 Project Summary

Soltage NM DevCo, LLC (the Applicant), a direct wholly-owned subsidiary of Soltage, LLC, is proposing the construction and operation of a 2.5 MWac solar (photovoltaic modules), electrical generation facility on approximately 30 acres of private land (account numbers R000325, R000326, R000329, R000330, R012946) located in Chaves County, New Mexico, **Figure 1, Site Map. Appendix A** includes information about Soltage as a veteran developer of community solar project in the United States (web site here [Home - Soltage](#)).

The Project would include approximately 8,424 solar modules, rated at 415 watts direct current per module, and mounted on single axis trackers. A single access tracker tracks the movement of the sun from sunrise to sunset. The design life of the Project is anticipated to be 40 years. Construction and long-term maintenance access to the project site would be along E. Hobson Road then along an unnamed dirt road on the southern side of the project site. A 13.47kV distribution line would be constructed on 50-foot wooden poles for approximately 1300-feet from the project transformer to the point of interconnect (POI) along E. Hobson Road. This short interconnect would require approximately 12-15 wooden poles along the east side of the unnamed dirt road then a short span along the north side of E. Hobson Road, **Figure 2, Site Layout**.

2.1 Proposed Project Components

2.1.1 Solar Modules

The Project consists of the installation of individual solar panels mounted on single-access tracking technology. These individual panels are grouped to create "strings". These strings are grouped into blocks further grouped into arrays. The approximate separation distance of each solar array is 15-20 feet. The precise panel count is dependent on the panel electrical output and electrical capacity of the solar field. Types of panels that may be installed include crystalline silicon panels/bi-facial or other commercially available solar technology.

Structures supporting the solar modules would consist of steel piles (e.g., cylindrical pipes, H-beams, or similar). For a single-axis tracking system, piles typically would be installed approximately 4 feet above grade (depending on potential flood elevation heights). The tracking arrays would be oriented along a north-south axis with panels tracking east to west to follow the movement of the sun throughout the day.

Solar modules would be manufactured at an off-site location and transported via truck to the Project site. Steel piles supporting the solar modules would be driven into the soil using pneumatic techniques. Following pile installation for the single-axis tracking system, the associated motors, torque tubes, and other components would be placed and secured. Some designs allow for solar panels to be secured directly to the torque tubes using appropriate panel clamps. For some single-axis tracking systems, a

galvanized metal racking system that secures the solar panels to the installed foundations would then be field-assembled and attached according to the manufacturer's guidelines.

2.1.2 Equipment and Inverter Stations

The Project would include the installation of inverters containing electrical equipment to serve each block of solar panel arrays. These inverters would convert DC electricity to AC electricity. Panels would be electrically connected into panel strings using wiring secured to the panel racking system. Underground cables, either rated for direct bury or installed in polyvinyl chloride conduit, would be installed to convey the direct current electricity from the panels via combiner boxes throughout the solar arrays to inverters to convert the DC to AC. The output voltage of the inverters would be stepped up to the collection system voltage via transformers in proximity to the inverters. If portions of the Project are located in floodplains, cables would be encased in flood-proof conduit (HDPE or typical) or installed above the flood elevation, above ground. Additionally, inverters and other equipment would be constructed above floodplain elevations.

2.1.3 Interconnection

The Project would include construction of a new 13.47kV interconnection that would be located along an unnamed dirt road south to E. Hobson Road. This interconnection would be approximately 1300-feet in length and connect the project to the electrical grid. The interconnect would be sited within a 25-40-foot right-of-way along the eastern edge of an unnamed dirt road south of the project site to E. Hobson Road.

2.1.4 Access Roads

The on-site roadway system, within the Project site, would consist of access and internal roads. The interior roads would be approximately 15-20 feet wide with widths and surfacing designed to be consistent with County requirements and applicable standards (i.e., vertical clearance, first responder requirements, Knox Box). These roads would be surfaced with gravel, compacted dirt, or another commercially available surface. The roads would accommodate Project O&M activities, such as cleaning of solar panels, providing a fire buffer, and facilitating on-site circulation for emergency vehicles. Project access roads would be treated to create a durable, dustless surface for use during construction and operation. Dust abatement treatments would likely involve surfacing access roads with gravel, compaction of soils, or use of a dust palliative. Lime would not be used for dust abatement. The main entrance access road to the Project would be paved in accordance with County standards, if required. See **Section 2.2.3** for more information on road design and emergency vehicle turnarounds.

2.1.5 Fencing

A 6-foot-tall chain link fence would be installed around the perimeter of the Project site for public safety and facility security. The project would be locked and gated. If first responders need to access the site for any reason a key will be available for them in a Knox box of some other approved method.

2.1.6 Lighting

Motion activated lighting would be installed and calibrated to moving objects greater than 50 pounds. This would limit use to only those times when people walk or drive vehicles onto the site and would not

create sustained lighting. Security project lighting would be hooded and directed downward to minimize off-site light and glare.

2.2 Project Construction

Project construction would require the use of graders, trenchers, small tractors, a crane, and miscellaneous equipment. After initial site grading, a hydraulic driver would be used to drive metal supports into the ground that support the solar panel racking.

The Project would create an average of approximately 30 temporary jobs per month for up to 2 months with a peak of around 65 construction jobs. An estimated average of 5 construction vehicle trips per day, with a peak of around 8 vehicle trips per day, would be required for import/construction of solar module materials, inverter, racking equipment, and interconnect materials (e.g., poles, conductors etc.)

The Project would comply with County requirements for construction and earthmoving activities. A construction Stormwater Pollution Prevention Plan (SWPPP) would be in effect for the Project to prevent impacts on adjacent properties from stormwater generated on-site. Stormwater runoff would be retained on-site. An ingress and egress encroachment permit would be obtained from Chaves County, as required, prior to issuance of a building permit.

2.2.1 Schedule

The construction of the Project would take between 3-4 months. It is anticipated the Project would be constructed Monday through Saturday. Construction would include site civil work (i.e., grading and trenching), on-site assembly and installation of solar panels, construction of foundations (e.g., inverters), and construction of the substation and gen-tie, if needed. Construction would commence upon acquisition of the necessary permits, approvals, and financing. Upon completion of each phase of construction, the site would be stabilized (e.g., erosion control, dust abatement) and commissioning would ensue. It is anticipated that construction would begin in early 2023 with completion by summer of 2023.

2.2.2 Material Staging

Construction would require temporary staging and storage areas for materials and equipment. The material staging and storage areas would be on-site. Construction debris would be properly disposed of at the appropriate waste management facilities.

2.2.3 Construction Access and Turnarounds

Materials for construction would be delivered by heavy haul trucks via. The majority of the truck traffic would occur on designated truck routes and major streets. It is anticipated that construction would require a daily average of approximately 5 heavy haul truck vehicle trips. It is anticipated construction trucks would exit State Route 285 on E. Hobson Road then to the project site. Project roads will comply with WB50 associated with heavy truck and emergency vehicle turnarounds and road design. See here, [Roadway Design Manual: Minimum Designs for Truck and Bus Turns \(txdot.gov\)](https://www.txdot.gov/roadway-design-manual/minimum-designs-for-truck-and-bus-turns).

2.2.4 Grading

The Project site is flat. Minimal heavy grading will be required where the solar modules would be installed. Less than 20 percent of the site would be heavy graded, as required for roads and inverter pad. The soil would be compacted, as required.

2.2.5 Construction Sequencing

2.2.5.1 Phase 1: Site Preparation

It is assumed that the entire solar site would be disturbed. Across most of the site, a low-impact mow and roll technique would be used to remove surface vegetation. This practice minimizes dust generation and the associated water requirements related to dust suppression. In addition, this practice allows for faster regeneration of vegetation cover rather than re-seeding alone. In some areas, grubbing and grading would be required to level particularly rough areas of the Project site and to prepare soils for concrete foundation for the inverter. Access roadbeds would also be grubbed, graded, and compacted. The site fence lines would be shallowly excavated and graded to create a level surface for proper fence installation.

A SWPPP would be prepared by a qualified engineer or erosion control specialist and would be submitted to the County for review and approval before being implemented during construction. The SWPPP would be designed to reduce potential impacts related to erosion and surface water quality during construction activities and throughout the life of the Project. Additionally, a dust permit would be applied for and adhered to during construction. Best Management Practices would include stormwater runoff quality control measures, concrete waste management, watering for dust control, and construction of perimeter silt fences, as needed.

2.2.5.2 Phase 2: Photovoltaic Panel System

The structure supporting the solar module arrays would consist of steel piles (e.g., cylindrical pipes, H-beams, or similar), which would be driven into the soil using pneumatic techniques. The piles typically are spaced 20 feet apart. For a single-axis tracking system, piles typically would be installed to a reveal height of approximately 4 feet above grade. For single axis tracking systems, following pile installation, the associated motors, torque tubes, and drivelines would be placed and secured. Some designs allow for solar panels to be secured directly to the torque tubes using appropriate panel clamps. A galvanized metal racking system, which secures the solar panels to the driven pile, would then be field-assembled and attached according to the manufacturer's guidelines.

2.2.5.3 Phase 3: Inverters, Transformers, Electrical Collector System, and Interconnection

Underground cables to connect panel strings would be installed using ordinary trenching techniques, which typically include a rubber-tired backhoe excavator or trencher. Wire depths would be in accordance with local, state, and federal requirements, and would likely be buried within excavated trenches approximately 18 inches wide and 3 feet below grade to accommodate the conduits or direct buried cables. After excavation, cables rated for direct burial or cables installed inside a PVC or HDPE conduit would be installed in the trench with the excavated soil likely to be used to fill the trench and lightly compressed.

The inverter and electrical transformer would be placed on concrete foundation structures or steel skids. In lieu of steel skids or pre-cast concrete foundations, foundations for the transformer and inverter locations would be formed with plywood and reinforced with structural rebar. Commissioning of

equipment would include testing, calibration of equipment, and troubleshooting. The inverter, collector system, and solar array systems would be tested prior to commencement of commercial operations. Upon completion of successful testing, the equipment would be energized.

2.2.6 Hazardous Materials and Waste Management

The Project will not generate or dispose of hazardous waste during construction activities. Petroleum products would be used on-site. Diesel, oil, and lubricants would be transported to the site in portable containers (e.g., tanks in the pickup trucks for diesel fuel) but would not be stored on-site. Trucks and construction vehicles would be serviced at off-site facilities. The use, storage, transport, and disposal of hazardous materials used in construction of the Project would be carried out in accordance with federal, state, and county regulations.

Construction waste 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. Wooden construction waste (e.g., wood from wood pallets) would be sold, recycled, or chipped and composted.

Non-hazardous construction materials that cannot be reused or recycled would likely be disposed of at a regulated landfill. Contractors and workers would be educated about waste sorting, appropriate recycling storage areas, and how to reduce landfill waste.

2.2.7 Soil Conservation

No soils would be removed from the Project site during construction or operation. As stated previously, the relatively flat nature of the site reduces the need for heavy grading, which would be limited to access roads, inverter pad, and power line poles. Soils removed from these areas would be redistributed around and retained elsewhere on the Project site (i.e., along solar panel support rack alignments). Beyond grading, soil disturbance would occur in association with trenching for emplacement of electrical conduits along each alignment of panel racks. Trenching would be limited in scale and is anticipated to require an 18-inch wide and 3-foot-deep trench with a 4-inch conduit cable, which is not anticipated to displace significant soils.

2.3 Project Operations

2.3.1 Operations Activities

The Project would operate 7 days a week and 365 days per year. Monitoring would be conducted utilizing a SCADA system. The project will be unmanned and no septic field or waste disposal systems will be required.

2.3.2 Maintenance Workforce and Activities

Project operation and maintenance is anticipated to require approximately 22 vehicle trips per year. This estimate includes up to 2 trips per day during the 10 total days of panel washing activities per year and approximately 2 trips per year to address security or maintenance issues. In addition to biannual panel washing activities, emergency repair events, and occasional security checks.

Solar panel washing would occur approximately twice a year (5 days/washing event) depending on the amount of rainfall in a given year. The washing of the panels is similar to common window washing and would employ no harsh chemicals or solvents. Minor on-site trash generated through maintenance activities would be hauled away by maintenance crews and disposed of at an approved recycling facility or landfill.

2.3.3 Project Water Demand

Minimal water use is required for the project. Water would be trucked in during construction and panel washing.

2.3.4 Project Wastewater

The Project would not require a permanent liquid waste disposal, treatment system, or connection to an existing sewer system. Temporary portable toilets, serviced by a licensed provider, would be transported to the site for employee use during construction and removed upon commissioning of the Project.

2.4 Project Decommissioning and Reclamation

Decommissioning of the solar project will occur at the end of the project's useful life. That is, at the termination of the lease agreement with the landowners or at the end of project operation, whichever is earlier. Soltage decommissioning responsibilities will include removal of all solar project equipment and improvements from the project site in accordance with this plan. All refuse and recycled materials will be disposed of at an off-site waste facility conforming to state and federal regulations by licensed waste haulers. Decommissioning shall include the following activities:

- Physical removal of all components of the solar energy development, including the solar panels, racking structures, foundations, electrical equipment and connections, utility poles, vaults, security barriers, and fencing to a depth of 24 inches or bedrock, whichever is less.
- Disposal of all solid waste and recyclable materials from the site in accordance with local, state, and federal waste disposal regulations.
- Restoration of the site shall include grading and stabilization of disturbed areas as necessary to prevent erosion and contamination of the stormwater runoff with sediment.

Prior to decommissioning, a qualified engineer shall prepare a final updated decommission plan. This final decommissioning plan will require the completion of the following tasks.

- REMOVAL OF SOLAR MODULES
- DEMOLITION AND REMOVAL OF SOLAR MODULE RACKING SUPPORT SYSTEM
- REMOVAL OF ALL TRANSFORMERS AND ELECTRICAL EQUIPMENT
- DEMOLITION AND REMOVAL OF CONCRETE FOUNDATIONS
- REMOVAL OF PROJECT FENCING
- RE-GRADING OF DISTURBED PORTIONS OF THE PROJECT SITE
- SEEDING OF SOILS DISTURBED DURING THE DECOMMISSIONING PROCESS
- TRANSPORT MATERIALS TO RECYCLING CENTER

A large portion of the site will not be significantly disturbed during the decommissioning process. The racking support removal is normally accomplished by pulling the posts with a small excavator or the same post driving equipment used to install the posts. For the portions of the site disturbed during the decommissioning process, such as the transformer locations, the disturbed areas will be regraded, seeded and mulched. Regrading and revegetation shall be managed in a fashion that prevents erosion or off-site sediment transfer.

2.5 Heat Island Effect

It is widely understood that solar arrays can increase ambient temperatures surrounding the field by 5 to 7 degrees Fahrenheit; however, there are three important factors to consider:

1. the higher temperature range is based on urban settings where heat is captured within the built environment;
2. this increase in temperature dissipates quickly in rural settings as heat is not captured within the built environment; and
3. at a distance of 100-feet from the array, there is no detectable increase in temperature.

Citations are located [here](#) and [here](#). There are no existing homes or operating land uses within 100-feet of the solar array. The nearest resident is located approximately 500-feet southeast of the site. There are no existing land uses or residences that would be impacted by the project by the heat island effect.

2.6 Glint and Glare Analysis

Please see **Appendix B** for the analysis of potential glint and glare from the project. The project would have no adverse effects on any sensitive viewers (i.e., residences, travelers along roads, or flight patterns).

2.7 Environmental Resources

The Applicant conducted preliminary environmental investigations at the site. The following section summarizes environmental resources in and around the project:

Elevations at the property are relatively even and range from 3,636 to 3,326 with a gentle slope from the west to the east. Elevations of surrounding lands show a general trend of sloping toward the east and the Pecos River. Land immediately surrounding the property is mainly unimproved except for a rail line along the southern portion of the western property boundary. Residences and associated yards occur to the northwest and south/southeast in the surrounding area. Cultivated parcels are present to the east. Small commercial properties are located to the west along South Main Street. An Xcel Energy substation is present to the southeast along East Hobson Rd. The Roswell Airport/Industrial Airfield, with runways oriented in a southwest to northeast direction, is located approximately 3,400 feet to the south/southwest. Roswell Airfield Flight Zone Overlay District (ETZ Ordinance, Article 17) is a zone near the airfield with restricted uses and building heights. The parcel does not appear to be within the overlay district based on a drawn map provided in the ETZ Ordinance. A review of the FEMA Flood Insurance Rate Map (FIRM) Map Panel 35005C1635D and the National Flood Hazard layer indicate that the parcel is within FEMA Zone X. The Zone X designation is an area of minimal flood hazard. No protected species or their associated habitats are expected to be impacted with the development of the site. No wetlands or other drainages that the United States Corps of Engineers could claim jurisdiction on occur within the site.

Photographs 1 and **2** were taken during a field review in 2021 (see following page).



Photograph 1 – Taken on site facing north.

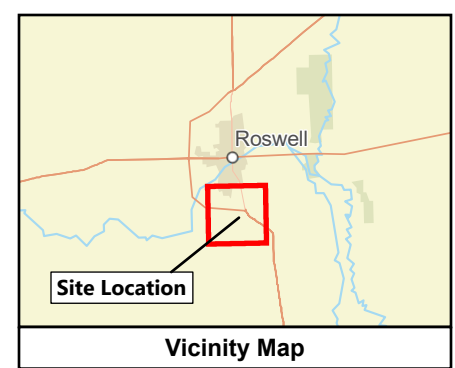
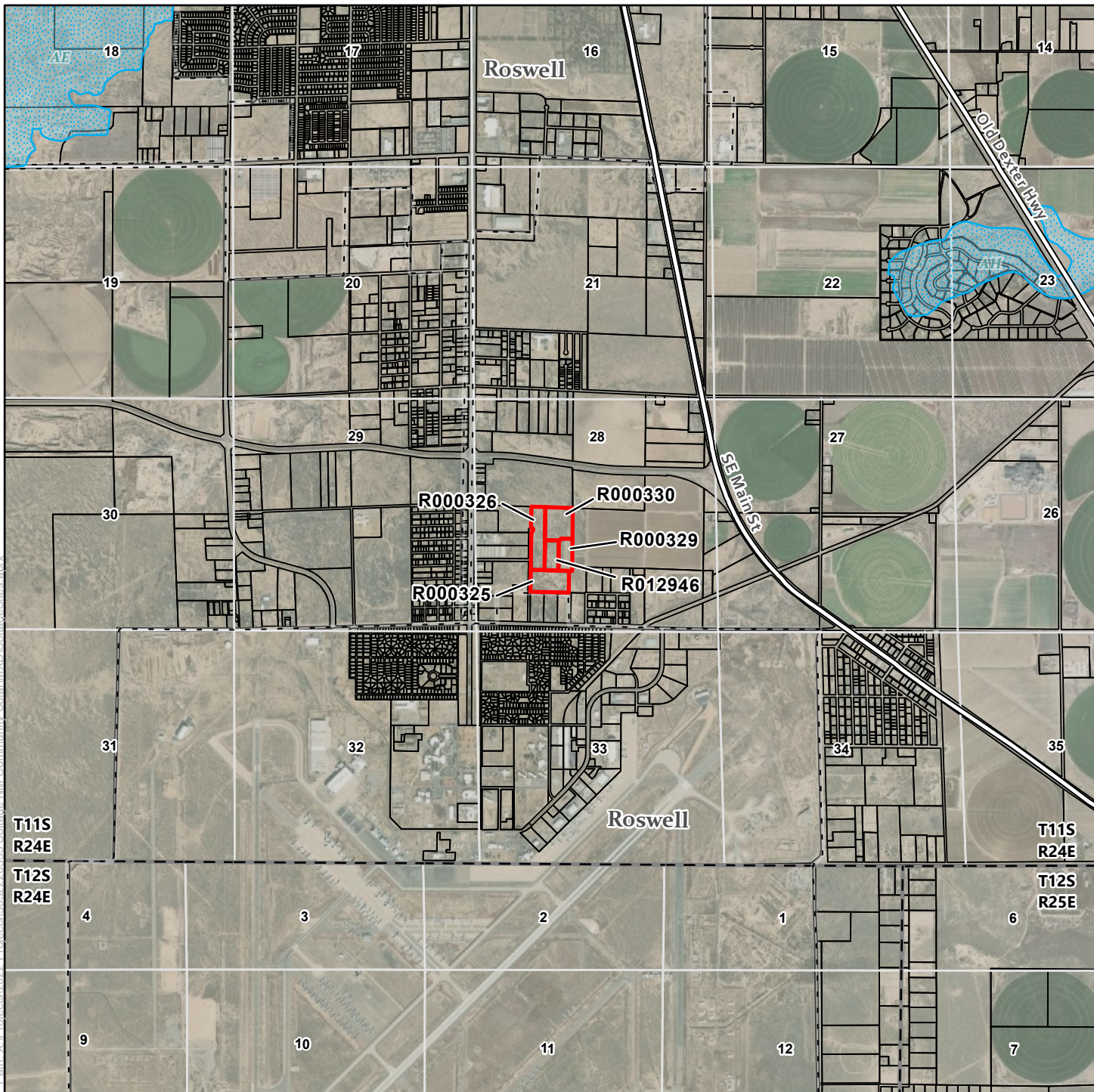


Photograph 2 – Facing northeast from the southwest corner of the site. Rail line in the foreground.

2.8 Lease Option, Deed, and Zone Change Application

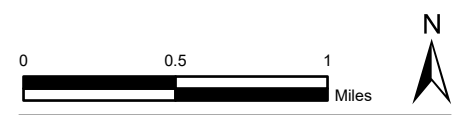
Please see **Appendix C** for the lease option agreement between the landowner and Soltage, **Appendix D** for the property deed, and **Appendix E** for the Zone Change Application.

Path: X:\Projects\2022\Projects\36522\0353_Soltage_NM_Community_Solar\MXD\SoltageSite.aprx



- Legend**
- Proposed Project Boundary - 41.6 acres
 - Parcels
 - Special Flood Hazard Area
 - Surface Ownership**
 - Private
 - City of Roswell
 - Township & Range Boundary
 - Section Boundary

NOTE: This site lies within the Roswell ETZ.



Soltage Ironhorse 2 Site Map Chaves County, New Mexico	
FIGURE 1	Site Map
Job No. 36-5222-0353 PM: RK Date: 2/23/2022 Scale: 1"= 0.6 mi	wood.
The map shown here has been created with all due and reasonable care and is strictly for use with Wood Environment & Infrastructure Solutions, Inc. Project Number 36-5222-0353. This map has not been certified by a licensed land surveyor, and any third party use of this map comes without warranties of any kind. Wood Environment & Infrastructure Solutions, Inc. assumes no liability, direct or indirect, whatsoever for any such third party or unintended use.	



Soltage Overview

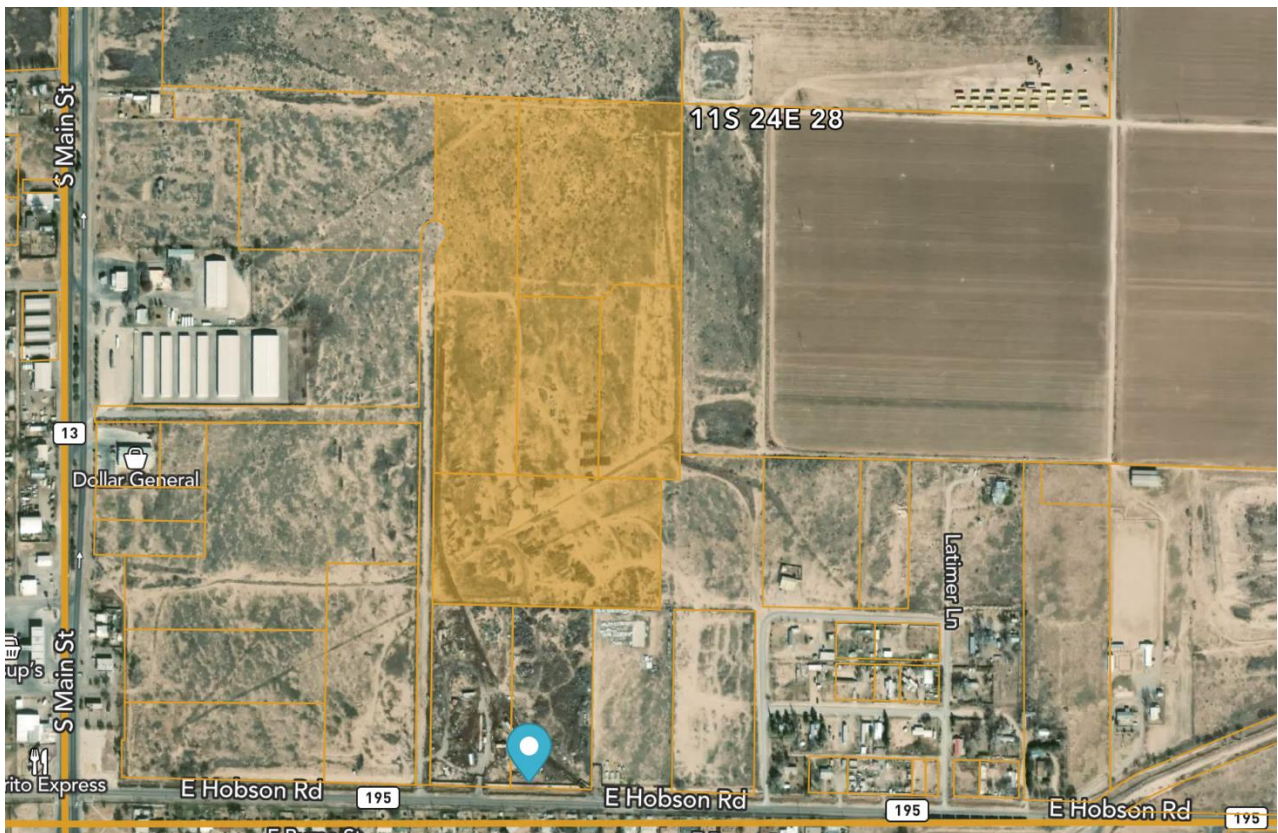


August 10, 2022
Contact: Joy Crossman | jcrossman@soltage.com

EXHIBIT A TO OPTION AND LEASE AGREEMENT

Delineation of Project Area
(“Premises”)

Property highlighted below and located in 28 of 11S, 24E which is in Chaves County, New Mexico, being Parcel R000325 containing 10.1 acres, Parcel R000326 containing 10.5 acres, Parcel R012946 containing 5.0 acres, Parcel R000329 containing 5.3 acres, and Parcel R000330 containing 10.6 acres, all Parcels combined being approximately 41.5 acres, save and except the road located along the western boundary line of said 41.5 acre tract.



“Tenant acknowledges that Landlord does not want the project to directly interfere with Tenants personal roadway on the property, and both parties will mutually agree on the final location of the solar farm subject to current use, environmental considerations and engineering design of the solar facility”.