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DATE: December 4, 2024

TO: Sustainable Land Development Code Hearing Officer

FROM: Dominic J. Sisneros Building and Development Services Supervisor

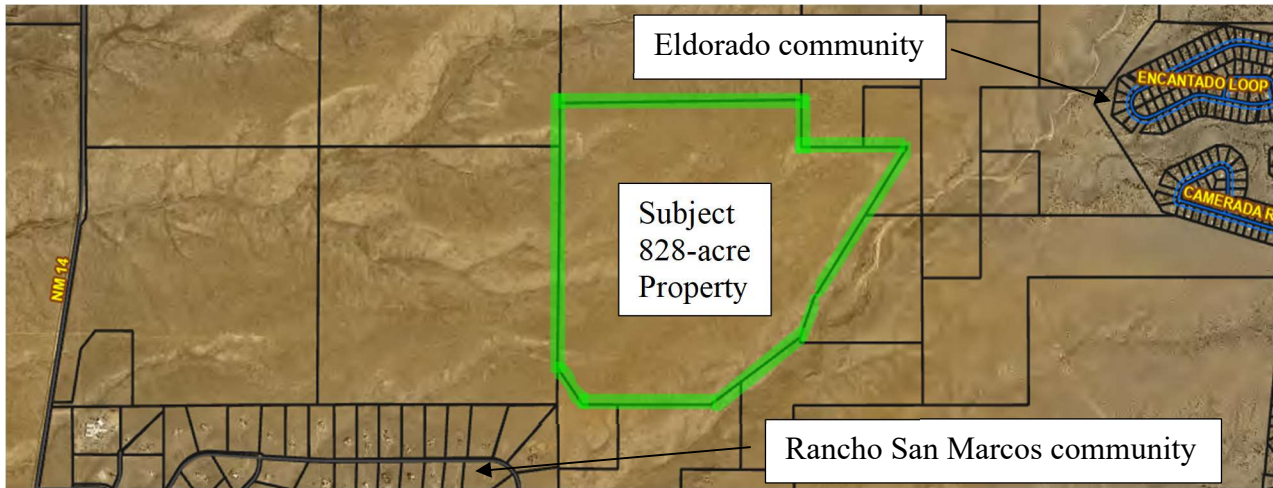
VIA: Alexandria Ladd, Growth Management Director
Jordan A. Yutzy, Building and Development Services Land Use Administrator

FILE REF.: Case # 24-5200 Rancho Viejo Solar, LLC Conditional Use Permit (CUP)

ISSUE:

Rancho Viejo Solar, LLC Conditional Use Permit (CUP). Rancho Viejo Limited Partnership, Rancho Viejo Solar, LLC; AES Clean Energy Development, LLC (jointly, the Applicant), request approval of a CUP to allow a 96-Megawatt solar facility on 684+/- acres of an 828-acre tract. The site is zoned Rural Fringe (RUR-F). Appendix B, Use Matrix of the Sustainable Land Development Code (Ordinance 2016-9, hereafter SLDC) illustrates that a commercial solar energy production facility is a conditional use within RUR-F zoning. The site is addressed at 211 Twilight Way which will be accessed via Hwy. 14, SDA-2 (Commission District 5). Parcel ID # 99312727.

Vicinity Map:



SUMMARY / HISTORY:

The 828-acre parcel is currently vacant. The subject property is surrounded by vacant land with the southwestern corner of the parcel being over 550-feet away from the Rancho San Marcos subdivision and the most easterly corner of the subject parcel being more than 4,000-feet away from the community of Eldorado.

The Applicant is requesting approval of a Conditional Use Permit (CUP) to allow a 96-Megawatt solar facility on an 828-acre tract. The proposed solar facility will consist of a 680-acre solar facility, a 1-acre collector substation, a 3-acre battery energy storage system (BESS) containing no more than 38 CEN 40-foot containers, a 30,000-gallon above ground water tank for fire protection, a maximum 5,000-gallon above ground water tank for potable water, and a 1,400-square foot operations building approximately 18-feet in height with an onsite septic system. Offsite and onsite improvement will consist of a 2.3-mile generation tie-in line (gen-tie) with either 70-foot-tall steel monopoles or 50-foot-tall steel H-Frame poles within existing easements, and a 2.1-mile access road also within an existing easement. If the request for a CUP is granted, the Applicant expects to request a 12-month extension to the 24-month expiration deadline that is set forth at SLDC § 4.9.6.10.

The subject property is zoned Rural Fringe (RUR-F). Appendix B, Use Matrix of Ordinance 2016-9, the Sustainable Land Development Code (SLDC) illustrates that a commercial solar energy production facility is a Conditional Use within RUR-F zoning. Section 7.12.1.3 of the SLDC, states, “above-ground electric utility lines that transmit electricity at a voltage greater than or equal to 46 kilovolts shall be designed and constructed at the minimum height necessary for the proposed structure to function properly and for public health, safety and welfare, as demonstrated by the applicant.” If a CUP approval is granted, Section 4.9.6.10 of the SLDC allows the Planning Commission to extend the expiration of the permit an additional 12 –months, with no further extension allowed under any circumstance.

Applicable SLDC design standards:

ACCESS (section 7.4) ROAD DESIGN (section 7.11) and TRAFFIC IMPACT (section 6.6)

The Applicant proposes a design that will comply and conform with applicable access and easement requirements with a 60-foot-wide access easement, 20-foot-wide road, and 20-foot-wide internal drive aisles/interior roads. The property currently has an existing gated access point off of NM 14 approximately 350 feet north of the existing Turquoise Trail Charter School. This entry will be improved, as specified in the approved permit, to facilitate traffic for the construction of the solar facility and the ongoing operations and maintenance. No additional public road construction is planned as a part of this project.

Bohannon Huston submitted a Site Threshold Analysis (STA) to NMDOT District 5 in support of the NMDOT Access Permit, which was approved on May 31, 2023. The STA examined existing roadway volumes and anticipated site trip generation for the purpose of determining if additional analyses are required as defined by the District Traffic Engineer. Per the STA, NM 14, at Milepost 41.5, has a Roadway ADT of 5,841. Based on the State Access Management Manual (SAMM), a TIA is required for developments that generate 100 or more peak hour total trips. Based on an

analysis of the projects trip generation both during the temporary 12-month construction period and ongoing operations and maintenance, Bohannon Huston has determined that additional traffic impact studies (TIA) are not warranted per the SAMM. This project was submitted to NM DOT for review by staff, but no comments were returned. The Applicant states that access to and from the solar facility will be in conformance with Project-specific NM State Highway access permit issued by the New Mexico Department of Transportation on May 31, 2023. NM DOT indicated on the issued permit that a gate, cattle guard, additional fence, drainage structure will be required, which owner agrees to furnish and hereafter maintain in good repair and close off to livestock. The Applicant will also be required to submit a construction traffic control plan to NM DOT for approval. (Exhibit O)

The SLDC requires that all development shall provide access for ingress and egress, utility service, and fire protection whether by public access and utility easement or direct access to a public right-of-way. No structures are permitted to be built within or obstructing a platted access easement.

WATER SUPPLY (Section 7.13 and Section 6.5) AND WATER CONSERVATION (Section 7.13)

Santa Fe County Utility Water is not available as there is no nearby connection. No well use is being proposed as there is no existing onsite well. The Applicant states that Rancho Viejo Solar will not require a significant long-term water supply. Water will be delivered to the Project site by water trucks. Water may be acquired from the following offsite sources, or a combination thereof: Santa Fe County bulk water station commercial pipe water; Ranchland Utility Company Class A reclaimed water; Santa Fe County reclaimed water; or any other legally permitted commercial water sales. Construction water will be used for equipment washing and dust abatement and to support general construction activities (concrete foundations, etc.).

Water for construction would be approximately 100 to 150 acre-feet over a 12-month construction period. Long term water uses would be approximately 2 to 3 acre-feet per year and would be associated with periodic panel washing, which would occur approximately once per quarter, and to supply potable water to the 5,000-gallon potable water tank at the Operations Building. Portable toilets would be used during construction. Once constructed, a septic tank will be included to meet wastewater needs of the operations building.

Table 7-17.1: When Connection Required to County Utility Water¹¹

Development Type	Property Location		
	SDA-1	SDA-2	SDA-3
Nonresidential Use that Would Otherwise be Supplied Water for Domestic Purposes from a New Domestic well	if within 200 feet	if within service area and within 200 feet	if within service area and within 200 feet

The Applicant does not address water harvesting in their report or on their plans. As described in the SLDC, water catchment will be required. Since no new landscaping is being required the Applicant will be allowed to implement a passive water harvesting system as per Section 7.13.11.7.3.b.iv.

7.13.11.7 Water Harvesting.

1. Rainwater Catchment Systems. Rainwater catchment systems are required for all new residential and all new or remodeled nonresidential development, including a change of use from residential to nonresidential, as required below.
2. Overflow from a cistern shall be directed into a designated retention pond or landscaped area.
3. The requirements of this Section shall not apply where a development proposes to utilize grey water recycling for all outdoor landscaping.

b. Catchment Requirements, Nonresidential structures:

- i. Systems shall be designed to capture rainwater from all of the roofed area.
- ii. Cisterns shall be buried, partially buried or insulated and shall be connected to a pump and a drip irrigation system to serve landscaped areas. Alternatively, if captured water is to be used for domestic purposes, appropriate plumbing and pumps may be used to convey that water to the point of use.
- iii. Cisterns shall be sized to hold a minimum of 1.5 gallons per square foot of roofed area or the equivalent of a one month supply of captured water, as determined by the Administrator.
- iv. Where no new landscaping is required, the Administrator may approve the use of rain barrels or other water catchment system including passive water harvesting and infiltration techniques, berms, swales, and tree wells to capture rainwater.

LIQUID WASTE

No Santa Fe County Utility Sewer, Public Sewer or Publicly Regulated Sewer connection is located nearby. The Applicant states that portable toilets would be used during construction. Once constructed, an NMED approved septic system will be included to meet wastewater needs of the operations building.

Table 7-17.2: When Connection Required to County Utility Sewer^[2]

Development Type	Wastewater Property Location		
	SDA-1	SDA-2	SDA-3
Nonresidential Use	if lot abuts the sewage connection system	if lot abuts the sewage connection system	if lot abuts the sewage connection system

Table 7-18.2: When Connection Required to Public Sewer or Publicly-Regulated Sewer^[2]

Development Type	Wastewater Property Location		
	SDA-1	SDA-2	SDA-3
Non-Residential Use	if lot abuts the sewage connection system	if lot abuts the sewage connection system	if lot abuts the sewage connection system

EIR (Section 6.3)

An EIR was required and submitted by the Applicant. The EIR is being reviewed by third party consultant Glorieta Geoscience, Inc. No review comments have been received yet. (Exhibit J)

APFA (Section 6.4)

An APFA was required and submitted by the Applicant. This Adequate Public Facilities & Services Assessment (APFA) was prepared to support Rancho Viejo's Conditional Use Permit (CUP) application to Santa Fe County for compliance with Santa Fe County's Sustainable Land Development Code (SLDC), which was adopted in Ordinance 2016-9 on December 13, 2016. The APFA includes an assessment of Santa Fe County public facilities and services to the anticipated demand that may result from development of the Project, as specified in Section 6.4 of the SLDC. (Exhibit N)

FIA (Section 6.7)

An FIA was not required as it was deemed unnecessary as changes in revenues and costs of local government jurisdictions will not occur.

FIRE PROTECTION (Section 7.5)

The project has been designed to include 20-foot wide internal roads with fire lanes, minimum inside turning radii of 28-feet, gates that will be equipped with emergency unlocking/opening systems (Knox Box), and a 30,000 gallon above ground water storage tank for fire protection. In addition, AES is working with appropriate third parties to provide safety and fire management training for fire departments located within the vicinity of the project. This training will occur prior to the completion and energization of the facility. The training will also include "train the trainer" sessions for future emergency response teams. A Preliminary Hazard Mitigation Analysis (HMA) has been prepared for the project. A Final HMA will be performed as part of the detailed engineering process. This HMA will include site and product specific fire risk assessment and a first responder plan. Local first responders will have access to these reports. Rancho Viejo will provide on-site and in-person training to the local responders prior to commercial operation of the system. There are no special materials required to respond to a fire event for the containerized BESS units. Only standard water application to the adjacent BESS containers is required, and this is only in the case where all internal fire suppression systems may fail. All information required by the first responders will be included in the first responder plan part of the HMA. If a battery fire is initiated, the enclosures planned for this site would release fire suppressant in large concentrations directly into the initiating cell, removing heat and preventing thermal runaway throughout the enclosure. UL 9540 certification addresses safety and requires UL 9540a test results to be available for review. The UL 9540a tests of this system indicate adequate prevention of thermal runaway. The AES Energy Storage solution will achieve UL 9540 certification prior to site commercial operation. State what the applicant proposes for fire protection (e.g. a hydrant on the northwest side of the property, 50ft from the proposed structure, a turnaround within the proposed parking area which will provide access to the hydrant / a water tank and draft hydrant / a sprinkler system within the structure / include road or driveway width to allow for emergency access / life safety within the building.

The application was sent to the Santa Fe County Fire Department in addition to third party reviewer Atar Fire LLC. The conditional use permit application has been deemed complete by the Santa Fe County Fire Department. Based on Atar Fire's detailed review letter, both Atar Fire and Santa Fe County Fire Department have concluded that a sufficient level of information has been provided to validate the issuance of a Conditional Use Permit, as it pertains to the reviewed fire and life safety codes. However, all the items included in the review letter must be satisfactorily addressed prior to commissioning of the facility. Atar Fire review does not constitute all possible recommendations associated with this installation, as deferred submittals and additional documentation is required prior to the commissioning of this facility, should a CUP approval be granted.

LANDSCAPING AND BUFFERING (Section 7.6)

No new landscaping is being proposed as part of the proposed project. A request to remove the landscaping requirements has been submitted to the Land Use Administrator.

The SLDC allows the Administrator to approve the removal of required landscaping as identified below for the following circumstances.

7.6.8.6 Alternative Landscaping. The Administrator may approve the submittal of an alternative landscaping plan in conjunction with the site development plan, which modifies or removes required landscaping, in the following circumstances:

- 1. in open lands characterized by an absence of significant natural vegetation;*

FENCES AND WALLS (Section 7.7)

The Applicant proposes that the perimeter of the solar project will be enclosed by an agricultural style fence, which is wildlife friendly, and a maximum of 8-feet tall. The on-site collector substation and BESS will more than likely be enclosed by a chain-link fence that will be a maximum of 8-feet in height.

7.7.4.1 Location and Height. Fence and wall locations and heights shall be as follows unless otherwise specified in the SLDC:

- 1. The maximum height of walls or fences shall not exceed eight feet; provided, however, that the height of pedestrian door or gate portals built into a wall or fence may be up to 11 feet.*

7.7.4.2 Materials. A fence may be constructed of permanent material, such as wood (including coyote fences and similar), chain link, stone, rock, concrete block, masonry brick, brick, decorative wrought iron, adobe, straw bale or other materials that are similar in durability. The following materials shall not be used for fencing subject to this Section:

- 1. Cast-off, secondhand, or other items not originally intended to be used for constructing or maintaining a fence, except that such materials may be used to provide artistic decoration or enhancement so long as the primary materials are consistent with this Section;*

2. *Plywood, particle board, paper, and visqueen plastic, pallets, plastic tarp, or similar material; or*
3. *In subdivisions along the perimeter of a tract or parcel that abuts a collector or arterial road, barbed wire, razor wire, and other similar fencing materials capable of inflicting significant physical injury.*

LIGHTING (Section 7.8)

The Applicant proposes that there will be motion sensor, downcast shaded security lighting at the access gate, battery storage and substation location, operations building, and solar pads. Lighting will be downcast shaded, per the state and local ordinance. Downcast lighting protects the ability to view the night sky by restricting unnecessary upward projection of light.

A lighting analysis was not required as the proposed lighting will be considered minimal compared to the overall size of the subject property and where the lighting is being proposed.

7.8.2 General Standards. All outdoor lighting fixtures shall be designed, installed, located and maintained to conform to the standards of this Section. Glare onto adjacent properties or roads shall not be permitted.

7.8.2.1 Fixtures (electrical luminaries). All outdoor light sources shall be concealed within cut-off fixtures, except as otherwise specified herein. Fixtures shall be mounted in such a manner that their cones of light are directed down or toward a surface, but never towards an adjacent residence or public road.

7.8.2.2 Lamp (Light Source or Bulb) and Shielding Requirements. Lamps, light sources or bulbs shall be shielded and shall comply with the light source and shielding requirements of Table 7-3. Spillover of lighting onto adjacent properties shall not exceed 0.50 footcandle measured at any point on a property line. No outdoor lighting shall be directed towards any adjacent residential use or public road.

Table 7-3: Shielding Requirements		
Lamp Type	Shielding	Special Requirements
LED	Full	None
Metal halide	Full with translucent filter	Subject to timing devices or restricted hours of operation. Limited to recreational facilities, sporting events, and special displays.
Fluorescent and quartz	Full	None
Any light 900 lumens or less	None	None, unless a group of such lamps produce cumulative lighting levels in excess of the levels set forth in Section <u>7.8.3.6</u> [Section <u>7.8.2.6</u>] and Table 7-4.
Halogen	Full with translucent filter	For outdoor display of merchandise or sporting events; may be subject to timing devices or restricted hours of operation.

Table 7-3: Shielding Requirements

Lamp Type	Shielding	Special Requirements
		Limited to recreational facilities, sporting events, and special displays.
Other sources	As approved by Planning Commission	May be conditioned as part of development approval/agreement or Temporary Use Permit.

7.8.2.3 Fixture (electrical luminaries). All outdoor light sources shall be concealed within cut-off fixtures, except as otherwise specified herein.

- 1. Fixtures shall be mounted in such a manner that their cones of light are directed down or toward a surface.*
- 2. Spillover of lighting to adjacent properties shall not exceed 0.50 footcandle measured at any point on a property line.*
- 3. No outdoor lighting shall be directed towards any adjacent residential use or public road.*

7.8.2.4 Fixture Height. The lowest fixture height that can serve the lighting purpose shall be used in all cases; lighting specifically focused on paths and other items needing illumination shall be preferred to broadcast floodlighting over large areas. Maximum fixture height above adjacent grade for all fixtures shall be as follows:

- 1. Any pole-mounted lighting shall have a maximum height of twenty-five (25) feet. In or within thirty-five (35) feet of any residential zoning district and all light fixtures shall not exceed sixteen (16) feet in height.*
- 2. Building-mounted light fixtures shall be attached only to walls and the top of the fixture shall not be higher than the top of the parapet or roof, whichever is higher. Said lights shall be shielded and directed downward.*
- 3. Street light standards (upright supports) on a two-lane road shall not exceed the height limitations of the zoning district.*

SIGNS (Section 7.9)

The Applicant states that a small facility identification sign may be posted at the project entry gate. Within the Project site, and adjacent to the water storage tank, signage will be placed along the road, 40-feet apart and centered on the water storage tank, that states: “No Parking – Fire Lane.”

An address sign that meets standards with a minimum 3-inch-tall numerals will also need to be incorporated.

7.9.1 Purpose. All signage shall comply with the requirements of this Section in order to:

- 7.9.1.1 improve pedestrian and motorist safety by minimizing distractions and obstacles to clear views of the road and of directional or warning signs used for traffic safety;*

7.9.1.2 provide businesses with effective and efficient opportunities for identification by reducing competing demands for visual attention;

7.9.1.3 protect and enhance economic viability by assuring that Santa Fe County will be a visually pleasant place in which to live or to visit;

7.9.1.4 protect views of the natural landscape and sky;

7.9.1.5 allow for expression by signage required by state and federal law; and

7.9.1.6 protect the community by ensuring emergency vehicles are able to identify and respond to emergency situations by having all structures in Santa Fe County identified with numerical street address markings that are easily identifiable.

7.9.3 Placement. Signs may not be placed on or over public roads or rights-of-way without approval from the Administrator, who shall ensure that traffic safety is maintained. Signs may not be placed in road or access easements, except for traffic signs and safety warning signs. On private property, signs may be placed in private utility easements.

7.9.11.1 Nonresidential signs in a Residential Zoning District. Nonresidential signs are permitted in a Residential Zoning District in accordance with table 7-5.4 below and the standards of this Section.

Table 7-5.4 Nonresidential Signs Allowed in a Residential Zoning District					
	Size (sq. ft.)	Location	Number of Signs	Height from ground	Permit Required
Permanent	32	See Table 7-5.7	2*	See Table 7-5.7	Yes
Temporary – A/R, RUR	32	See Table 7-5.7	2 per event/subject*	See Table 7-5.7	No
Temporary – All other Res Districts	16	See Table 7-5.7	2 per event/subject	See Table 7-5.7	No
Window	Not Allowed				
Flag	15	5 ft. Setback	2*	14 ft	No

Table 7-5.7 Allowable Height for Permanent Signs.		
Distance from R-O-W (feet)		Max. height (feet)
at least	but less than	
5	25	5.0

Table 7-5.7 Allowable Height for Permanent Signs.		
Distance from R-O-W (feet)		Max. height (feet)
at least	but less than	
25	50	10.0
50	75	15.0
75	100	20.0
More than 100		25.0

PARKING AND LOADING (Section 7.10)

During operations, employee and visitor parking would occur at the Operations Building and any loading activities would generally occur during the hours of 7:00 a.m. to 7:00 p.m., Monday through Friday, with the potential for work to occur from 7:00 a.m. to 7:00 p.m. on Saturday.

The Applicant is proposing a graveled parking area with 7 spots but are not identifying any accessible spaces. Minimum parking spaces are being met but the minimum accessible parking space requirements currently are not.

Table 7-6: Parking		
Use classification	Specific use	Minimum # of spaces required
Residential Buildings		
Retail, Service and Commercial Use Categories		
Office	All offices not listed below	1.0 per 200 sq. ft.
	Banks and other financial institutions	1.0 per 200 sq. ft.
	Offices	1.0 per 200 sq. ft.
	Research/development	1.0 per 200 sq. ft.

7.10.8 Space Identification. Parking spaces shall be permanently and clearly marked. Parking facilities shall be clearly marked with appropriate signs, and shall otherwise provide for orderly and safe parking, loading and unloading of vehicles. All markings, including pavement striping, directional arrows and signs shall be properly maintained in a highly visible condition at all times.

7.10.9 Surfacing and Maintenance. Parking lots of forty or more spaces shall be paved, and parking lots containing fewer than forty spaces shall have a properly compacted base course surface. Where paved parking is required, permeable pavement may be used. Parking areas shall be maintained in a dust-free, well-drained, serviceable condition at all times.

7.10.10 Dimensions. Parking spaces shall comply with Table 7-7. The minimum dimension on all parking spaces shall be at least 8.5' by 18'.

Table 7-7: Parking Space Minimum Dimensions		
Use	Type of space	Dimensions
Residential	All	8.5' x 18'
Nonresidential	Angle spaces	8.5' x 18'
All	Parallel spaces	8.5' x 20'

7.10.15 Accessibility Requirements. A portion of the total number of parking spaces shall be specifically designated, located and reserved for use by persons with physical disabilities. The minimum number of accessible spaces to be provided for all development, except for single-family residential, is set forth in Table 7-9.

Table 7-9: Accessible Parking Spaces		
Total parking spaces provided	Minimum # of accessible spaces	Minimum # of van-accessible spaces
1–25	1	1

7.10.15.1 Location. Accessible parking spaces shall be located on the shortest accessible route of travel from adjacent parking to an accessible building or pedestrian entrance.

7.10.15.2 Minimum Dimensions. All parking spaces reserved for persons with disabilities shall comply with the parking space dimension standards of this section, provided that access aisles shall be provided immediately abutting such spaces, as follows:

1. Car-Accessible Spaces. Car-accessible spaces shall have at least a five-foot-wide access aisle located abutting the designated parking space.
2. Van-Accessible Spaces. Van-accessible spaces shall have at least an eight-foot-wide access aisle located abutting the designated parking space.

7.10.15.3 Surfacing. All accessible parking spaces and associated access aisles shall be paved or of other hard surface, even if the remainder of the parking lot is unpaved.

7.10.15.4 Signs and Marking. Required spaces for persons with disabilities shall be identified with signs and pavement markings identifying them as reserved for persons with disabilities. Signs shall

be posted directly in front of the parking space at a height of no less than 42 inches and no more than 72 inches above pavement level.

OPEN SPACE (Section 7.15)

The Applicant indicates that the project will be located on land that is zoned as Rural Fringe (RUR-F) and is outside of designated open space areas. Out of the 828-acres tract, approximately 340-acres will remain as natural open space (some of which is within the 680-acre solar facility) which meets the minimum requirements of the SLDC.

7.15.3.3 Minimum required open space.

- 1. Natural and/or passive: Minimum 30% of gross acreage; and*
- 2. Developed: 1 acre per 100 population (based on 2.57 persons per dwelling unit). Any proposed subdivision over 24 lots with a population less than 100 shall provide at least one (1) acre of developed open space.*

PROTECTION OF HISTORIC RESOURCES (Section 7.16)

An archaeology report was submitted. The Archaeological District is Medium Potential with a lot size of 828-acres. SWCA Environmental Consultants (SWCA) was contracted to conduct an intensive, pedestrian cultural resources inventory of all land within the proposed project area. Fifteen archaeological sites were identified within the proposed analysis area during the cultural resources survey. Consultation with SHPO (HPD Log No.118484) after the cultural resource survey determined that 13 of these sites are not eligible to the NRHP and two (LA 200751 and LA 200755) are of undetermined eligibility. Sites of undetermined eligibility should be treated as eligible pending further testing and investigation. Rather than proceed with testing of these sites, Rancho Viejo has designed the Project to avoid these resources by at least 100 feet.

In the initial letter from SHPO dated November 29, 2022 (HPD Log No. 118484), SHPO concurred with the initial findings and recommendations of SWCA's cultural resource survey with the exception of the eligibility for LA 200751 and LA 200755 (NMCRIS 150271). SHPO determined that these sites should have an undetermined status until further testing could be conducted. The site plan had already been designed to avoid LA 200751. To avoid LA 200755, adjustments were made to the access road and additional surveying was conducted. No cultural materials were identified during this survey. The report was submitted to SHPO and in a second letter, dated March 16, 2023 (HPD Log No. 119282), SHPO concurred with the report results. A third survey was conducted to accommodate another shift in the proposed Project access road. During the third and final survey of the area, an additional two archaeological sites were identified and recommended as not eligible. In a third letter, dated April 4, 2024 (HPD Log No. 122238), SHPO concurred with the findings and recommendations in SWCA's cultural resource survey report. After the completion of all three surveys for this Project, a total of 17 sites were identified. Based on the avoidance of the two unevaluated sites (LA 200751 and LA 200755) and the remaining 15 sites being listed as not eligible, SHPO concluded that the Project will have no effect on historic properties. The potential for subsurface cultural material within the analysis area is low; however, in the event that a previously undocumented burial site is discovered during Project construction, the appropriate

authorities will be notified, which includes notifying HPD (SHPO) of an unanticipated discovery, ceasing work within the discovery footprint, and developing and following an Unanticipated Discoveries Plan. With the avoidance of the two undetermined resources, there will be no effect to any historic resources.

TERRAIN MANAGEMENT (Section 7.17) and FLOOD CONTROL (Section 7.18)

The Applicant states the project has been sited to avoid existing drainages. During construction, a Storm Water Pollution Prevention Plan (SWPPP) would be developed and implemented, which would meet the construction stormwater discharge permit requirements of the New Mexico Environmental Department (NMED) Surface Water Quality Bureau. The SWPPP would include several measures to control runoff and to reduce erosion and sedimentation at construction sites. Stormwater best management practices (BMPs) included in the SWPPP would be used during construction to reduce potential impacts from erosion, sedimentation, and turbidity in surface waters during construction. BMPs would generally include the placement of silt fences and/or straw wattles along the downgradient perimeter of the project to minimize stormwater sedimentation from leaving the site, and minimizing grading and vegetation removal, and limit surface disturbance during construction to the time just before solar module support structure installation.

Bohannon Huston completed a Hydrologic and Hydraulic (H&H) Study of the project site to estimate existing condition flow depths, flow velocities, and scour potential for 10-year, 100-year-, and 500-year storm events. The H&H Study results indicate that flow depths, flow velocities, and scour that are significant enough to impact the layout of proposed solar improvements are generally limited to three unnamed arroyos that flow from east to west through the Rancho Viejo Solar site. Following completion of the H&H Study the project design was refined to avoid placement of solar arrays within the unnamed arroyos. With the exception of approximately 0.5 acre of the proposed gen-tie corridor (an overhead transmission line), the project avoids Zone A floodplain. Zone A floodplains are defined as areas with a 1% annual chance flood event (FEMA 2022).

SOLID WASTE (Section 7.20)

The Applicant states that solid waste generated during construction will be transported for disposal by a private contractor at a licensed waste management facility. Solid waste generated during project operation will be minimal and will be disposed of at a licensed waste management facility. At the conclusion of the approximate 30-year life of the project, the facility will be decommissioned and removed, and materials will be recycled or disposed of in accordance with federal, state, and local requirements.

The Applicant shall utilize either a solid waste collection service or haul all solid waste to the Caja Del Rio Landfill which is nearest in proximity to the proposed solar facility.

7.20.2.2 All subdivisions within SDA-2 or SDA-3 and all nonresidential, multifamily and manufactured home communities shall be served by County curbside collection and recycling as prescribed by separate ordinance, if applicable, or, if inapplicable, utilize one of the following:

- 1. A solid waste collection service; or*
- 2. The nearest existing sanitary landfill or transfer station.*

AIR QUALITY AND NOISE (Section 7.21)

Air Quality

Project emissions would be greatest during the construction period, which is estimated to be approximately 12 months. Equipment use and ground disturbance associated with the facilities would result in a low level of localized emissions of regulated air pollutants, including PM10, PM2.5, during the construction period. While an air quality permit is not required for the Project, construction activities are governed by the applicable rules and regulations of the NMED Air Quality Bureau rules for fugitive dust emissions from construction activities and clearing of land. These include reasonable precautions to prevent dust from becoming airborne, including 1) using water or chemicals to control dust where possible, 2) covering open-bodied trucks at all times while transporting materials likely to produce airborne dusts, 3) establishing vehicle speed controls, 4) installing wind fences, and 5) promptly removing earth or material from paved streets. In addition to the dust management strategies listed above, Rancho Viejo would implement protection measures to reduce emissions from construction vehicles and equipment by decreasing idling time and maintaining equipment properly. Only minimal, short-term emissions would be expected from equipment use and fugitive dust from access road travel during the operations and maintenance phase, which consist of a small crew accessing the site once every quarter for visual inspections and routine maintenance actions. Decommissioning emissions would be similar to those emitted during initial construction in character and would be temporary.

Noise

The Rancho Viejo Solar Project is located in a semi-rural area with low existing noise levels. The construction of the Rancho Viejo Solar Project will result in a temporary increase in ambient noise levels during the construction period as construction equipment noise levels will be expected to dissipate to below background levels within approximately 0.15 mile to 1.2 miles of the Project area. In addition, environmental protection measures are proposed to minimize these impacts. Once in operation, the Project will have a negligible effect on ambient noise levels beyond the immediate vicinity of the Project area as the human perception for change in sound level (i.e., potential increase above ambient) the estimated increase at the property boundary is 2.2 dBA during daytime hours and 4.4 dBA during nighttime hours. According to established thresholds for human perception, an increase of 2–3 dBA is considered barely perceptible, while an increase of 5 dBA is readily noticeable. Therefore, the daytime increase would be barely perceptible to the average human observer, and the nighttime increase would be at the upper end of "barely perceptible" but not reach the threshold of a "readily noticeable" change. Based on noise attenuation, construction equipment noise levels will be expected to dissipate to below background levels (assumed to be 38.4 dBA) within approximately 0.5-miles to 1.7 miles of the Project area. The closest sensitive noise receptor, a residence located approximately 1,400 feet (0.27 miles) away, will experience a temporary increase in ambient outdoor noise levels during the 12-month construction period. At this distance, noise levels from equipment operating at 85 dBA are estimated to attenuate to approximately 56 dBA, comparable to the noise level of a normal conversation in a quiet room or light office noise. (Exhibit J)

7.21.2 *General.* Nonresidential construction shall utilize standard techniques available in order to minimize noise, vibration, smoke and other particulate matter, odorous matter, toxic or noxious matter; radiation hazards; fire and explosive hazards, or electromagnetic interference.

7.21.4 *Noise.* Any actual or projected measurement that exceeds the average conditions calculated over a thirty (30) minute period, at the property line, of the limits shown in Table 7-21 shall be grounds for denial of a development application or imposition of noise mitigation efforts sufficient to ensure that the development will not exceed the applicable noise limits.

Table 7-21: Noise Limits		
Zoning District	Daytime 7:00 a.m. to 10:00 p.m.	Nighttime 10:00 p.m. to 7:00 a.m.
All Other Districts	55 dBA, or 5 dBA above ambient; whichever is less	45 dBA, or 5 dBA above ambient; whichever is less

ADMINISTRATIVE HISTORY:

On November 4, 2021, as required by Table 4-1 and Section 4.4.3 the applicant presented the proposed CUP to the Technical Advisory Committee (TAC) at the regularly scheduled bi-monthly meeting. (Exhibit E)

On August 22, 2024, as required by Table 4-1 and Section 4.4.4 of the SLDC, the applicant conducted a pre-application neighborhood meeting on the CUP. The applicant notified surrounding property owners as well as Certified Organizations (CO) and Registered Organizations (RO), 140 individuals attended the meeting. The applicant presented the history of the development and presented, in detail, the proposal for the CUP in the meeting the attendee’s had questions and commented about safety risks, fire danger, ground water contamination, power purchase agreement, infrastructure/technology, conditional use permit application process, environmental impacts, insurance, property values and funding. AES addressed most questions and comments the best they could and tried to provide input to the public. (Exhibit F)

Notice requirements were met as per SLDC Section 4.6.3., General Notice of Application Requiring a Public Hearing. In advance of a hearing on the application, the applicant provided an affidavit of posting of notice of the hearing, confirming that public notice posting regarding the application was made for fifteen days on the property, beginning on November 13, 2024. Additionally, notice of hearing was published in the Santa Fe New Mexican on November 19, 2024, as evidenced by a copy of that notice contained in the record. The notice of the hearing was sent to owners of land within 1,120’ of the previous bigger parcel of which the 828-acre parcel was derived from (which exceeds the required owners of land within 500’ of the subject property) as well as any pertinent CO’s and RO’s. A list of persons sent a mailing is contained in the record. (Exhibit R)

This Application was submitted on August 30, 2024.

CONDITIONAL USE PERMIT CODE SECTIONS

SLDC, Section 4.9.6. Conditional Use Permits (CUP). For approval of certain conditional uses as set forth in the Use Matrix and elsewhere in the SLDC, pursuant to this Section.

SLDC, Section 4.9.6.1. Purpose and Findings. *This Section provides for certain uses that, because of unique characteristics or potential impacts on adjacent land uses, are not permitted in zoning districts as a matter of right but which may, under appropriate standards and factors set forth herein, be approved. These uses shall be permitted through the issuance of a conditional use permit (CUP).*

SLDC, Section 4.9.6.2. Applicability. *The provisions of this Section apply to any application for approval of a CUP as required by the Use Matrix. Conditional uses are those uses that are generally compatible with the land uses permitted by right in a zoning district but that require individual review of their location, design and configuration, and the imposition of conditions or mitigations in order to ensure the appropriateness of the use at a particular location within a given zoning district. Only those uses that are enumerated as conditional uses in a zoning district, as set forth in the use matrix, may be authorized by the Planning Commission. No inherent right exists to receive a CUP. Concurrent with approval of a CUP, additional standards, conditions and mitigating requirements may be attached to the development order. Additionally, every CUP application shall be required to comply with all applicable requirements contained in the SLDC.*

SLDC, Section 4.9.6.5, Approval Criteria. *CUPs may only be approved if it is determined that the use for which the permit is requested will not:*

- 1. be detrimental to the health, safety and general welfare of the area;*
- 2. tend to create congestion in roads;*
- 3. create a potential hazard for fire, panic, or other danger;*
- 4. tend to overcrowd land and cause undue concentration of population;*
- 5. interfere with adequate provisions for schools, parks, water, sewerage, transportation or other public requirements, conveniences or improvements;*
- 6. interfere with adequate light and air; and*
- 7. be inconsistent with the purposes of the property's zoning classification or in any other way inconsistent with the spirit and intent of the SLDC or SGMP.*

In response to the Section 4.9.6.5 CUP Criteria, the Applicant states the following:
(Exhibit B)

1. not be detrimental to the health, safety and general welfare of the area;

The Rancho Viejo Solar project is designed and implemented to not adversely impact the health, safety and welfare of the surrounding area. The Rancho Viejo Solar project is a static, non-obtrusive, use of land that will be compatible with surrounding land uses.

- *Solar projects do not create significant noise, light, traffic, or other operational impacts.*
- *This project will not endanger the public health or safety in the location proposed.*

Staff response: The project will be required to be developed to meet and comply with all applicable requirements contained in the SLDC as well as all applicable state and federal laws, and all codes and standards as adopted in Santa Fe County, New Mexico:

- International Fire Code, 2021 Edition
- NFPA 855, Standard for the Installation of Stationary Energy Storage Systems, 2023 Edition

2. not tend to create congestion in roads;

Access to and from the solar facility will be in conformance with NM State Highway access permit standards. The property currently has an existing gated access point on NM 14 approximately 350 feet north of the existing Turquoise Trail Charter School. This entry will be improved to facilitate traffic for the construction of the solar facility and the ongoing operations and maintenance. Bohannon Huston submitted a Site Threshold Analysis (STA) to NMDOT District 5 in support of the NMDOT Access Permit, which was approved on May 31, 2023. The STA examined existing roadway volumes and anticipated site trip generation for the purpose of determining if additional analyses are required as defined by the District Traffic Engineer. Per the STA, NM 14, at Milepost 41.5, has a Roadway ADT of 5,841. Based on the State Access Management Manual (SAMM) a TIA is required for developments that generate 100 or more peak hour total trips. Based on an analysis of the projects trip generation both during the temporary 12-month construction period and ongoing operations and maintenance, Bohannon Huston has determined that additional traffic impact studies (TIA) are not warranted per the SAMM. On October 25, 2022, NMDOT accepted the STA as submitted and requested application for a NMDOT Access Permit. On December 19, 2022, NMDOT Environmental Design Division provided environmental clearance of the application. On January 18, 2023, the NMDOT Drainage Design Bureau provided acceptance of the application. On May 31, 2023, the NMDOT Access Permit was approved.

Construction Phase

- *Temporary, 12-month period.*
- *Construction is anticipated to require approximately 200 workers on-site per day. The personnel will be encouraged to carpool to the site each day.*
- *Typical construction work schedules are expected to be from 7:00 a.m. to 7:00 p.m., Monday through Friday, with the potential for work to occur from 7:00 a.m. to 7:00 p.m. on Saturday. Work on the gen-tie may occur at night to minimize outages. In addition, certain activities,*

such as concrete pours, may occur outside of the specified hours when heat conditions are conducive to the activity.

Operations & Maintenance

- *Operations and maintenance of the Project will be performed by qualified personnel, including 4 technicians which will work out of the onsite Operations Building generally during the hours of 7:00 a.m. to 7:00 p.m., Monday through Friday, with the potential for work to occur from 7:00 a.m. to 7:00 p.m. on Saturday.*
- *Maintenance of the solar facility may include periodic washing of solar panels, general equipment maintenance, and vegetation trimming.*
- *As a result, the number of employee vehicle trips generated by the site during typical operations is considered negligible.*

In summary, this project will have higher traffic volume during construction but ultimately have exceptionally low traffic generations once operational.

Staff response: The bulk of any added traffic to NM-14, which will be utilized as access to the proposed site, will be for the construction of the proposed solar facility, 2.1-mile access road, and 2.3-mile generation tie-in line (gen-tie). The added traffic will only occur until the completion of the project. After the facility is operational, traffic will be minimal as there will be 4 technicians working onsite Monday through Friday and potentially Saturdays as mentioned by the Applicant, as well as periodic maintenance of the solar facility.

3. not create a potential hazard for fire, panic, or other danger;

Rancho Viejo Solar LLC shall comply with the most current applicable codes adopted by the State of New Mexico, Santa Fe County, and other entities, including but not limited to the following:

- *International Fire Code, 2021 edition, as adopted by 10.25.2 NMAC ("Fire Prevention and Public Occupancy") and 2021 International Wildland Urban-Interface Code (IWUIC) as amended Santa Fe County Ordinance 2023-06.*
- *Santa Fe County Ordinance 2023-06 as adopted by the Board of County Commissioners.*
- *Santa Fe County Ordinance 2023-09 as adopted by the Board of County Commissioners*
- *National Fire Protection Association (NFPA) 855, Standard for the Installation of Energy Storage Systems (2023 edition)*
- *New Mexico Commercial Building Code as adopted by 14.7.2 NMAC ("2009 New Mexico Commercial Building Code") which adopts by reference the 2009 International Building Code.*
- *Proactively, Rancho Viejo Solar LLC has been working closely with Santa Fe County Fire Department to design and construct the project's access, circulation and emergency measures.*

Staff response: The proposed site will include 20-foot-wide drive aisles, 28-foot turning radii, and a 30,000-gallon on-site water tank. The BESS containers will be equipped with internal fire suppression systems. Only standard water application to the adjacent BESS containers is required,

and this is only in the case where all internal fire suppression systems may fail. All information required by the first responders will be included in the first responder plan part of the final approved Hazard Mitigation Analysis (HMA). The Applicant will provide on-site and in-person training to the local responders prior to commercial operation of the system.

4. not tend to overcrowd land and cause undue concentration of population;

This project will not be detrimental to the use or development of adjacent land, and in fact is entirely harmonious with its rural agricultural character. The Rancho Viejo Solar project is a static, non-obtrusive, use of land that will not overcrowd the land nor cause undue concentration of population. The facility will not change any of the existing population patterns.

Staff response: The proposed site will have _ acres of designated natural open space which meets the requirements of the SLDC. The owner of the subject property also owns the surrounding properties and has expressed interest in the Transfer of Development Rights (TDR) program which could potentially remove future development rights from these surrounding properties. The only subsequent development allowed would have to be compatible with the proposed preservation uses such as grazing, agricultural or ranching.

5. not interfere with adequate provisions for schools, parks, water, sewerage, transportation or other public requirements, conveniences or improvements;

As compared to the permitted uses in the Rural Fringe Zone District (RUR-F), this project will provide a net positive impact to Santa Fe County services such as schools, parks, water, sewerage, transportation or other public requirements, conveniences or improvements. In terms of water and sewer requirements,

- *Rancho Viejo Solar will not require a significant long-term water supply. Water for construction would be approximately 100 to 150 acre-feet over a 12-month construction period and will be delivered to the Project site by water trucks. Water may be acquired from the following offsite sources, or a combination thereof: Santa Fe County bulk water station commercial pipe water; Ranchland Utility Company Class A reclaimed water; Santa Fe County reclaimed water; or any other legally permitted commercial water sales. Construction water will be used for equipment washing and dust abatement and to support general construction activities (concrete foundations, etc.). Long term water uses would be approximately 2 to 3 acre-feet per year and would be associated with periodic panel washing, which would occur approximately once per quarter, and to supply potable water to the 5,000-gallon potable water tank at the Operations Building.*
- *Portable toilets would be used during construction. Once constructed, a septic tank will be included to meet wastewater needs of the Operations Building.*

Staff response: The proposed solar facility is in a remote area of Santa Fe County and will not interfere with adequate provisions for schools, parks, water, sewerage, transportation or other public requirements.

6. not interfere with adequate light and air;

Lighting – Any required lighting will be downcast, and comply with the lighting standards outlined in Section 7.8 of the SLDC. This project will not impact the County’s night sky ordinance.

Air – Only minimal, short-term emissions would be expected from equipment use and fugitive dust from access road travel during the operations and maintenance phase.

Staff response: The proposed solar facility includes what is considered minimal lighting that will be used mainly for security at the access gate, battery storage and substation location, operations building, and solar pads. All lighting will be required to meet SLDC requirements and be shielded and downlit. The “Monopole” or “H-frame” structures allows for air and wind to flow through with minimal obstruction. The poles will be required to blend into the natural landscape and shall be non-reflective. Staff’s recommendation is to utilize the “Monopole” due to the minimal visual impact.

7. not be inconsistent with the purposes of the property's zoning classification or in any other way inconsistent with the spirit and intent of the SLDC or SGMP;

The project site is within the Rural Fringe (RUR-F) zoning district and the gen-tie corridor extends into the Community College District (CCD) for approximately 1 mile.

The RUR-F zone accommodates primarily large lot residential, ecotourism, equestrian uses and renewable resource-based activities, seeking a balance between conservation, environmental protection and reasonable opportunity for development. Density transfers and clustered development shall be allowed in order to support continued farming and/or ranching activities, conserve open space or protect scenic features and environmentally sensitive areas. Per Appendix B of the SLDC, commercial solar energy production facilities are permitted within the RUR-F zoning district only after review and approval of a Conditional Use Permit.

Staff response: A commercial solar energy production facility within the Rural Fringe (RUR-F) Zoning District is an allowed use with the approval of a Conditional Use Permit. Chapter 7 of the SGMP explicitly supports the development and distribution of renewable energies at a regional scale.

Based on the Visual Impact Assessment Technical Report, the visual Impact of the proposed project is expected to have both long-term and short-term visual impacts. Short-term visual impacts will range from low to moderate due to the presence of construction activity, and installation of permanent project components. The long-term visual impacts will include operation and maintenance of the project. Overall, these new elements would initially be dominant compared to the existing landscape characteristic but with the proximity of viewers to the project, it is expected that the new elements would be subordinate compared to the existing landscape. (Exhibit M)

AGENCY REVIEW COMMENTS: (Exhibits P & Q)

<u>Agency</u>	<u>Review Comment</u>
County Fire Marshal/Atar Fire	Sent on 9-6-2024/Received 10-11-2024
Glorieta Geoscience, Inc	Sent on /Anticipated receipt on 12-2-2024
County Public Works	No review needed
County Utilities	No review needed
SHPO	Sent on 2-18-2023/Received 3-16-2023
NMDOT	Sent on 2-18-2023/Review not received

Building and Development Services staff has reviewed this project for compliance with pertinent SLDC requirements and has found that the facts presented support the request for a Conditional Use Permit (CUP) to allow a 96-Megawatt solar facility on an 828-acre Tract within the Rural Fringe (RUR-F) zoning district. The use is compatible with the current development within the affected Zoning Districts; the use will not impact adjacent land uses; and the Application satisfies the submittal requirements set forth in the SLDC inclusive of the Conditional Use Criteria set forth in Chapter 4, Section 4.9.6.5.

The review comments from Santa Fe County Fire, 3rd party reviewer Atar Fire, State Historical Preservation Office (SHPO), and reviews from County staff have established findings that this application to allow a 96-Megawatt solar facility on an 828-acre Tract within the Rural Fringe (RUR-F) zoning district is in compliance with pertinent design standards set forth in the SLDC.

RECOMMENDATION:

Staff reviewed the CUP application and have determined that all criteria for the CUP have been met to allow a 96-Megawatt solar facility on an 828-acre tract within the Rural Fringe (RUR-R) zoning district, subject to the following conditions:

CONDITIONS OF APPROVAL:

1. Compliance with all Reviewing Agencies' comments.
2. The drilling or use of individual and/or shared wells for this use on this property is prohibited.
3. The Applicant shall provide proper buffering and screening by installing a paneled fence to a portion of the proposed 8' tall fence that will be located on the southwest portion of the property.
4. Construction fencing will be required around all designated archeological sites to preserve the integrity of these areas.
5. Prior to the recordation of the CUP site development plan, the access road and internal roads shall be permitted through Santa Fe County, built out and inspected, or bonded for 125% of the construction cost.

6. The CUP site development plan showing the site layout and any other conditions that may be imposed through the approval process shall be recorded at the expense of the Applicant in the office of the County Clerk in accordance with Chapter 4, Section 4.9.6.8.
7. Utilization of the 70-foot-tall steel monopoles will be required, as they have less of a visual impact. The poles will be required to blend into the natural landscape and shall be non-reflective.
8. A decommissioning bond (may contain salvage value) will be required prior to recordation of the CUP site development plan, and must be in place for the life of the project.
9. Applicant will be required to apply for all applicable Development Permits after the CUP recordation.
10. Prior to the submittal of any applicable Development Permit the Applicant will be required to renew its access permit from NMDOT.
11. Applicant shall obtain an approved liquid waste permit from NMED prior to the submittal for a Development Permit.
12. The Applicant is required to work in consultation with the appropriate flood zone authorities to address the requirements specified in Chapter 7, Section 7.18.9.1. of the SLDC for any steel monopole located within a Zone A flood hazard area and submit the findings to staff for the record.
13. Construction activity to be limited to a Monday-through Friday 7am to 7pm work schedule. Any deviation from these construction hours will require 48 hours' notice to Santa Fe County and neighboring property owners.
14. Prior to operating the Applicant shall obtain a Santa Fe County Business License.

This Report and the Exhibits listed below are hereby submitted as part of the hearing record.

EXHIBITS:

- A. Submitted CUP Application
- B. CUP Written Report
- C. Legal lot of record
- D. Letter of consent
- E. TAC Follow-up Letter
- F. Pre-application Neighborhood Meeting Material
- G. CUP/Site Development Plans
- H. NM DOT access permit
- I. Water availability Letter
- J. Environmental Impact Report
- K. Aquatic Resources Inventory Report

- L. Biological Survey Report
- M. Visual Impact Report
- N. Adequate Public Facilities Assessment
- O. Site Threshold Analysis
- P. State Historical Preservation Office (SHPO) Review
- Q. Santa Fe County Fire & Atar Fire Review
- R. Legal Notice
- S. Applicable Code Requirements
- T. Old Letters of Opposition/Concern (via link on Board Docs due to size)
- U. New Letters of Opposition/Concern (via link on Board Docs due to size)
- V. Old Letters of Support (via link on Board Docs due to size)
- W. New Letters of Support (via link on Board due to size)