# COUNTY OF TULARE RESOURCE MANAGEMENT AGENCY



5961 South Mooney Boulevard Visalia, CA 93277

Tulare CSG 2 Solar Project (PSP 23-023)

July 2023

Prepared by
County of Tulare Resource Management Agency
Economic Development and Planning Branch
Environmental Planning Division

# INITIAL STUDY CHECKLIST

1. **Project Title:** Tulare CSG 2 Solar Project (PSP 23-059)

**2. Lead Agency:** County of Tulare

Resource Management Agency

5961 S. Mooney Blvd. Visalia, CA 93277

3. Contact Persons: Aaron Bock, Planning Director – 559-624-7000

Hector Guerra, Chief, Environmental Planning Division – 559-624-7121

**4. Project Location:** Northeast of Avenue 160 and Road 180 southern San Joaquin Valley approximately 1.25 miles southeast of the unincorporated community of Woodville. The Project is located within Section 21, Township 21 S, Range 27 E, MDBM at coordinates 36°04'55.2"N (latitude) and 119°09'58.4W (longitude).

**5. Applicant:** Tulare CSG 2 LLC

11100 Santa Monica Blvd., Ste. 780

Los Angeles, CA, 90025

**6. Owner/Agent** Dudek c/o Angela Zhang (Agent)

2280 Historic Decatur Rd., Ste. 200

Sab Diego, CA, 92106

7. General Plan Designation: Valley Agricultural

**8. Zoning:** AE-40 (Exclusive Agriculture-40- acre minimum)

9. Description of Project (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.). The Applicant (Tulare CSG 2 LLC) proposes to construct and operate the Tulare CSG 2 Solar Project (Project); a single-axis tracker ground mounted photovoltaic (PV) community solar and battery storage facility, approximately 6.6MWdc/5MWac in capacity, on approximately 31 acres of the approximately 77 acres of leased inactive (fallow) farmland. The proposed Project (Project) would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear), access roads, and fencing. The Project would be located on a privately-owned parcel in Tulare County, California. Tulare CSG 2 LLC is requesting Special Use Permit approval from Tulare County in order to proceed with construction of the project. The purpose of the Project is to construct and operate a PV solar array with attached battery storage, which will generate and store clean and renewable solar energy, with electricity offtake sold to residential customers within Tulare County and the larger Southern California Edison ("SCE") Utility Territory. The Project is proposed under the California Assembly Bill 2316 (AB2316), adopted by the California legislature in 2022. AB 2316 (Ward) Community Renewable Energy Program (CREP) instructs the California Public Utilities Commission to establish a new community solar program by March 2024 which will bolster the reliability of the electrical grid while benefitting those who cannot put solar on their roofs. The Project is anticipated to have a life of 30 years and includes a Reclamation Plan. When a decommissioning event occurs, the solar site will be reclaimed as required by a County approved Decommissioning and Reclamation Plan (and attendant bond). This Reclamation Plan will provide financial assurances along with a detailed plan to remediate soils and return the land to its original pre-construction condition upon termination of the Project. At the time of re-use, the zoning/land use designations will be used to determine the Project site's use. The Project would benefit Tulare County by providing clean and renewable solar energy generation.

# 10. Surrounding land uses and setting (Brief description):

North: Orchard and fallow land;

South: Orchard

East: Orchard, agricultural structures, rural residence

West: Orchard

- 11. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement): Regional Water Quality Control Board, San Joaquin Valley Unified Air Pollution Control District, other TBD.
- 12. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that include, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.? Pursuant to AB 52, a Sacred Land File request was submitted to the Native American Heritage Commission on July 14, 2023 (results have not yet been received as of July 18, 2023). On July 14, 2023, tribal consultation notices were sent to 15 tribal contacts representing eight (8) Native American tribes. The 30-day period for tribes to request consultation is open as of the writing of this document. The County has received one (1) response, from the tribes within the 30-day response time. Mitigation measures have been included in the project to reduce potential impacts on tribal cultural resources in the unlikely event that any are unearthed during construction-related activities.

Figure 1
Regional Vicinity Map

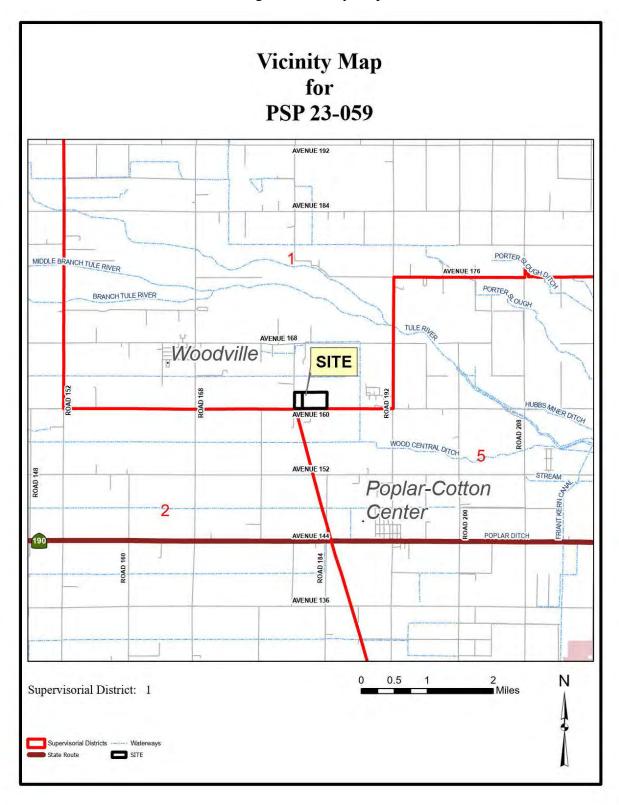


Figure 2
Location and Site Map

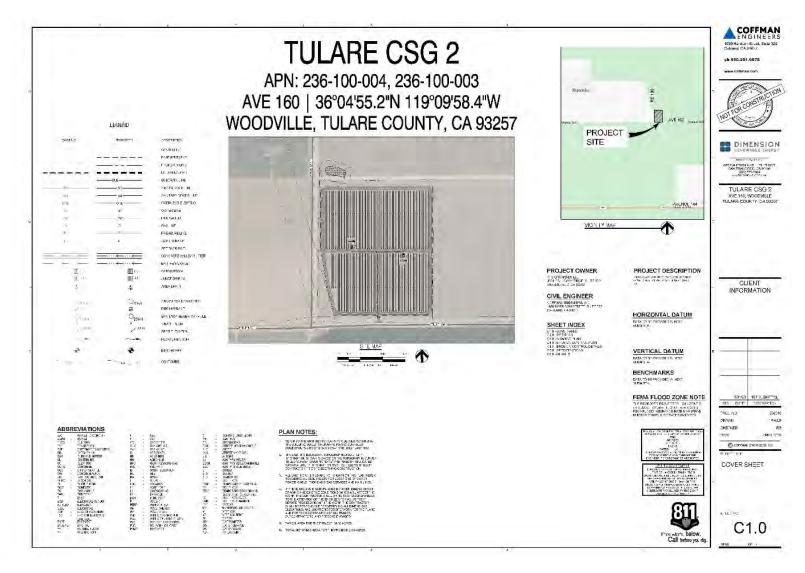


Figure 3-A Site Plan

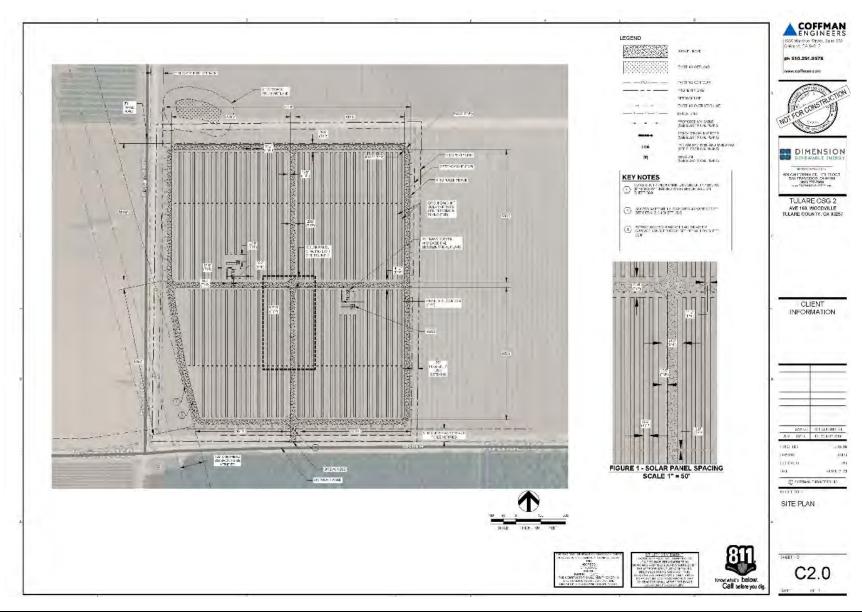


Figure 3-B Site Plan

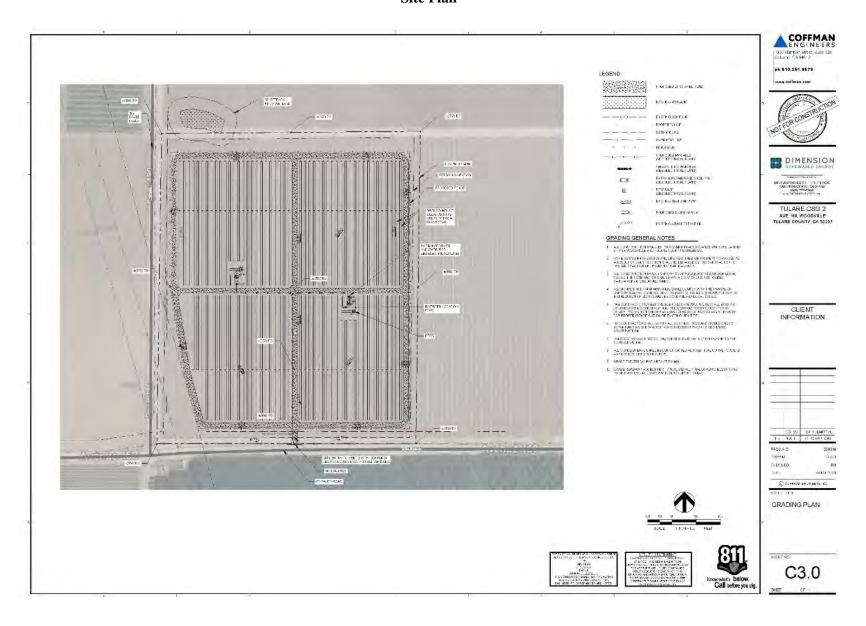


Figure 3-C Site Plan

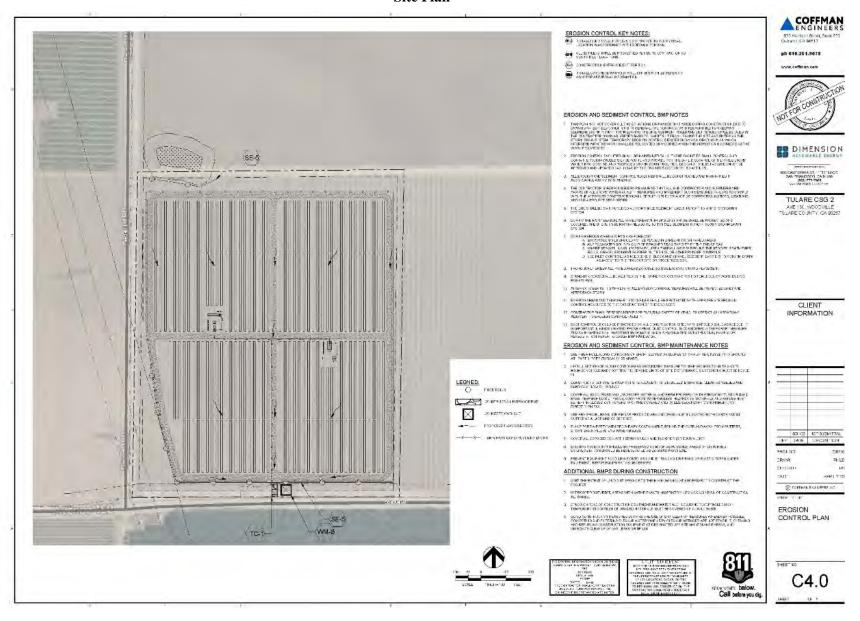


Figure 3-D Site Plan

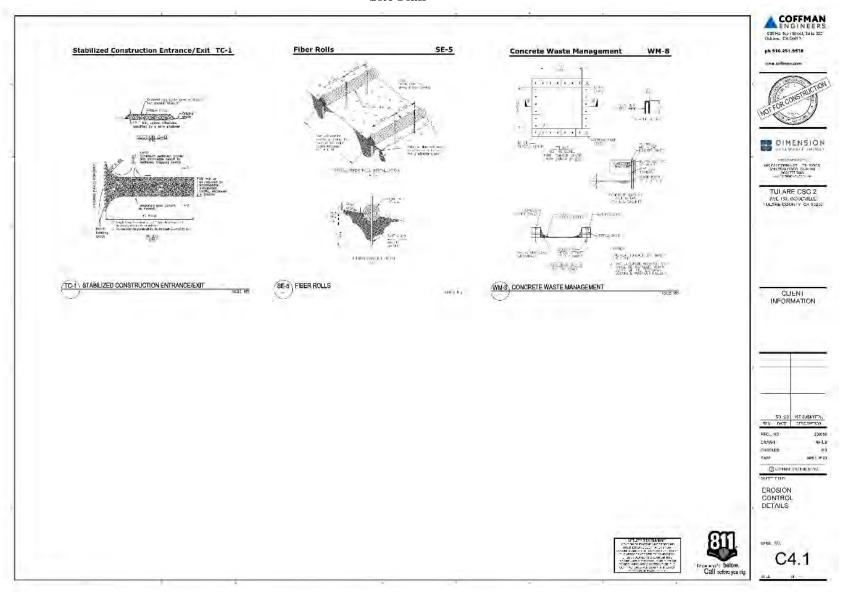


Figure 3-E Site Plan

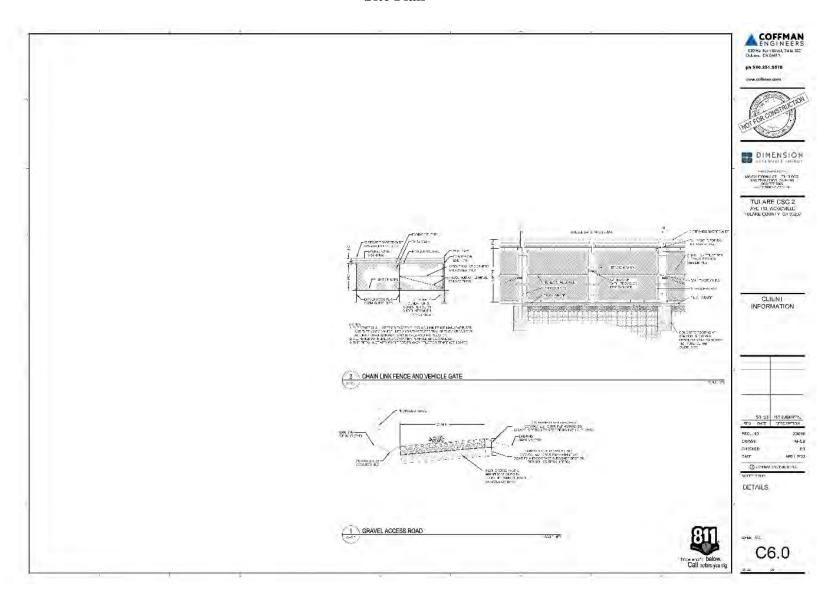


Figure 3-F Site Plan

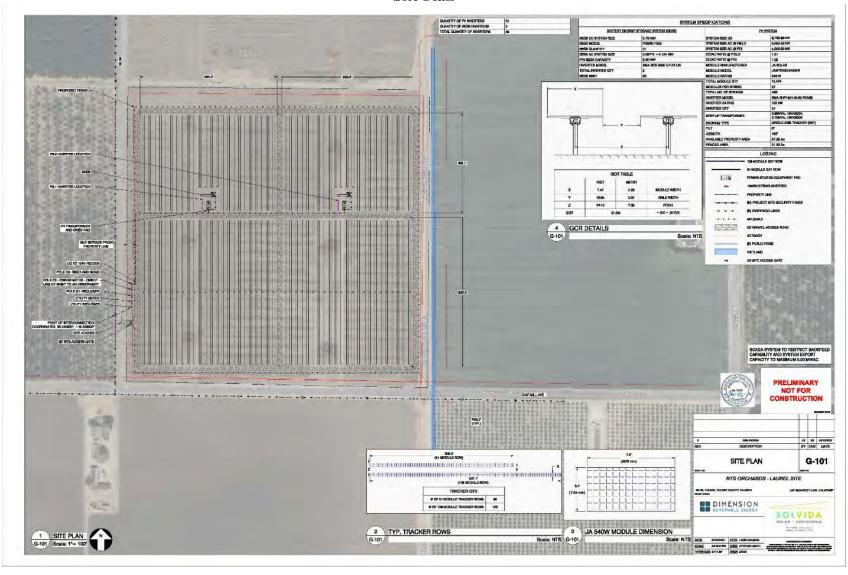
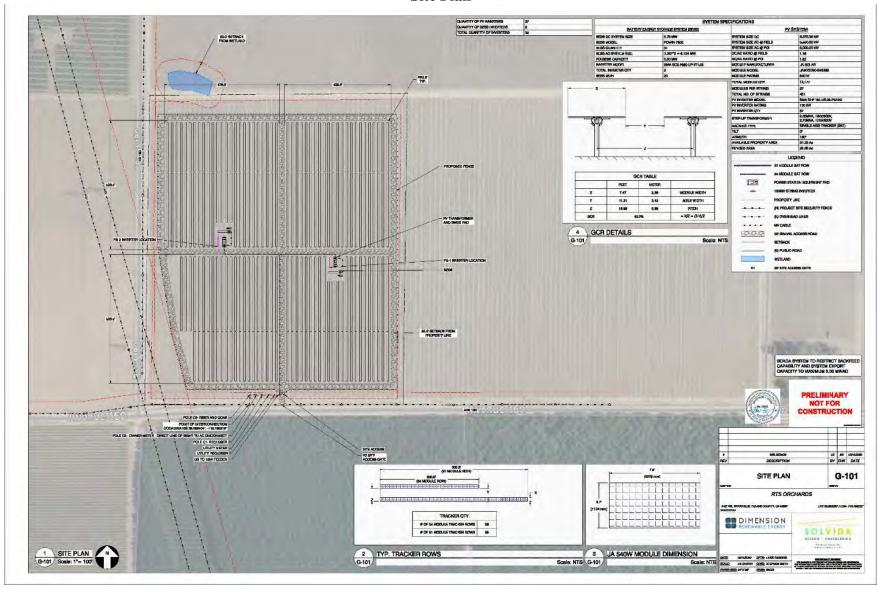


Figure 3-G Site Plan



#### ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED A. The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages. $\boxtimes$ $\Box$ Aesthetics Agriculture / Forestry Resources Air Quality $\boxtimes$ $\boxtimes$ **Biological Resources** Cultural Resources Energy $\boxtimes$ Geology / Soils Greenhouse Gas Emissions Hazards and Hazardous Materials Mineral Resources Hydrology / Water Quality Land Use / Planning $\boxtimes$ Noise Population / Housing **Public Services** $\boxtimes$ Recreation Transportation Tribal Cultural Resources $\boxtimes$ Wildfire Mandatory Findings of Utilities / Service Systems Significance **DETERMINATION** B. On the basis of this initial evaluation: I find that the proposed project COULD NOT have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared. X I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because revisions in the project have been made or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared. I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE **DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature: Signature:	Date: 7/18/23
Hector Guerra	Chief Environmental Planner
Printed Name	Title
Signature:	Date: 7/13/23
Reed Schenke, P.E. Printed Name	Environmental Assessment Officer Title

## C. EVALUATION OF ENVIRONMENTAL IMPACTS

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a) Earlier Analysis Used. Identify and state where they are available for review.
  - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
  - a) the significance criteria or threshold, if any, used to evaluate each question; and
  - b) the mitigation measure identified, if any, to reduce the impact to less than significance.

## I. AESTHETICS

Wou	ld the project:	SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	No Impact
a)	Have a substantial adverse effect on a scenic vista?			$\boxtimes$	
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				$\boxtimes$
c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations				
d)	governing scenic quality?  Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			$\boxtimes$	

The discussions regarding Environmental Setting, Regulatory Setting, CEQA requirements, Aesthetics, etc.; contained in the Tulare County General Plan 2030 Update, Tulare County General Plan Background Report, and the Tulare County General Plan 2030 Update EIR are incorporated herein in their entirety. Where necessary and if available, additional site-specific facts, data, information, etc., are included in this discussion.

#### **Environmental Setting**

"Tulare County is located in a predominately agricultural region of central California. The terrain in the County varies, with flat agricultural areas in the western portion of the County that gradually transform to the foothills and the Sierra Nevada mountain range to the east. Many communities are small and rural, surrounded by agricultural uses such as row crops, orchards, and dairies. From several locations on major roads and highways throughout the County, electric towers and telephone poles are noticeable. Mature trees, development, utility structures, and other vertical forms are highly visible in the region because of the flat terrain. Although, where such vertical elements are absent, views are expansive. The prevailing colors in the County are the greens and browns associated with agricultural land use. Most new structures are small, usually one story in height, through occasionally two-story structures can be seen. Exceptions can be found in the downtown commercial areas of urban locations and in industrial agricultural complexes. Although the County provides a wide range of views from both mobile and stationary locations, a typical range of views is provided in Figures 3.1-3 through 3.1-6 [of the RDEIR]."

The proposed Project site is located on the San Joaquin Valley floor in an unincorporated area approximately 1.25 miles southeast of the unincorporated community of Woodville, northeast of Avenue 160 and Road 180. The aesthetic features of the existing visual environment in the Project area are relatively uniform, with broad, flat, agricultural setting landscapes. The Project site is located approximately 60 miles east of the Pacific Coast Range and approximately seven (7) miles west of foothills of the Sierra Nevada Mountain Range. Topographically, the Project site is flat (less than 2 percent slope across the site) with an average elevation of approximately 360 feet above mean sea level and has historically been used for grazing and irrigated row crop cultivation. Based on a search of Department of Conservation, Farmland Mapping and Monitoring Program (FMMP) maps on June 14, 2023, the Activity/Project site is located on Prime Farmland.<sup>2</sup> Surrounding land is predominantly of similar rating for quality of agricultural land.

Tulare County 2030 General Plan. Recirculated Draft EIR (RDEIR). Page 3.1-11. Accessed July 2023 at: http://generalplan.co.tulare.ca.us/documents/generalplan2010/RecirculatedDraftEIR.pdf or generalplan.co.tulare.ca.us/documents/generalplan2010/RecirculatedDraftEIR.pdf

<sup>&</sup>lt;sup>2</sup> California Department of Conservation (DOC). FMMP. Available by request to DOC. Accessed July 2023 at: <a href="https://www.conservation.ca.gov/dlrp/fmmp/Pages/Tulare.aspx">https://www.conservation.ca.gov/dlrp/fmmp/Pages/Tulare.aspx</a>

As noted earlier and summarized here, the proposed Activity/Project consists of construction and operation of a solar and battery storage facility on approximately 25 of the 77 acres being leased. The life of the Project is anticipated to be 30 years.

## **Regulatory Setting**

**Federal** 

Aesthetic resources are protected by several federal regulations, none of which are relevant to this Project because it will not be located on lands administered by a federal agency nor is the Project applicant requesting federal funding or any federal permits.

State

## Title 24 Outdoor Lighting Standards

"The 2019 Building Energy Efficiency Standards improve upon the 2016 Energy Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. Buildings whose permit applications are dated on or after January 1, 2020, must comply with the 2019 Standards. The California Energy Commission updates the standards every three years." Title 24 Outdoor Lighting Standards were adopted by the State of California Energy Commission (Commission) (Title 24, Parts 1 and 6, Building Energy Efficiency Standards (Standards) went into effect on January 1, 2020. The changes focus on "four key areas: smart residential photovoltaic systems, updated thermal envelope standards (preventing heat transfer from the interior to exterior and vice versa), residential and nonresidential ventilation requirements, and nonresidential lighting requirements." "The significant changes for outdoor lighting systems in the 2019 update to the Energy Standards include:

- Changes to outdoor lighting power allowances with the allowance values based on LED lighting technologies. Revisions to the general hardscape lighting values in Tables 140.7-A and the specific lighting application values in Table 140.7-B for all Lighting Zones (LZ) Lighting Zone 1 thru Lighting Zone 4.
- Add separate lighting power allowance values for concrete-surfaced and for asphalt-surfaced hardscape lighting application in Table 140.7-A.
- Add new lighting power allowances for narrow band spectrum light sources used in applications for minimizing outdoor lighting impacts on professional astronomy and nocturnal habitat. (Table 140.7-A)
- Revision and streamlining outdoor lighting control requirements. (§130.2(c))
- Healthcare facilities overseen by the California Office of Statewide Health Planning and Development (OSHPD) have to comply with the Energy Standards including the outdoor lighting requirements for all outdoor areas of healthcare facilities."

# Nighttime Sky/Outdoor Lighting Zones

"The basic premise of the Energy Standards is to base allowable outdoor lighting power on the brightness of the surrounding conditions. The Energy Standards contain lighting power allowances for new lighting installations and specific alterations that are dependent on the lighting zone in which the project is located.

Five categories of outdoor lighting zones are defined, and they are LZ0, LZ1, LZ2, LZ3 and LZ4. Lighting zones with lower numbers are darker from LZ0 which is in national parks and other areas intended to be very dark at night to LZ4 for high intensity nighttime use, such as entertainment or commercial districts or areas with special security considerations requiring very high light levels. The eyes adapt to darker surrounding conditions and less light is required to properly see; when the surrounding conditions get brighter, more light is needed to see."

"The least power is allowed in Lighting Zone 1 and increasingly more power is allowed in Lighting Zones 2, 3, and 4. Lighting Zone 0 is intended for undeveloped spaces in parks and wildlife preserves and is very low ambient illumination.

The following summarizes the default locations for outdoor lighting zones as specified in §10-114:

<sup>&</sup>lt;sup>3</sup> California Energy Commission (CEC). Accessed July 2023 at: <a href="https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency

<sup>&</sup>lt;sup>4</sup> CEC. Energy Commission Adopts Standards Requiring Solar Systems for New Homes, First in Nation. Accessed July 2023 at: https://www.energy.ca.gov/news/2018-05/energy-commission-adopts-standards-requiring-solar-systems-new-homes-first

<sup>&</sup>lt;sup>5</sup> CEC. Outdoor Lighting – Overview. 6.1. Overview. What's new for the 2019 California Energy Code. Page 6-1Accessed July 2023 at: https://www.energy.ca.gov/sites/default/files/2020-05/06\_OutdoorLighting.pdf

<sup>&</sup>lt;sup>6</sup> Ibid. Outdoor Lighting Zones. 6-4.

- Lighting Zone 0 areas are undeveloped areas of government designated parks, recreation areas, and wildlife preserves;
- Lighting Zone 1 areas are developed portions of government designated parks, recreation areas and wildlife preserves;
- Rural areas are Lighting Zone 2;
- Urban areas are Lighting Zone 3;
- Lighting Zone 4 is a special use district that may be created by a local government through application to the Energy Commission."<sup>7</sup>

# California Scenic Highway Program

The California Scenic Highway Program was established by the state Legislature in 1963 for the purpose of protecting and enhancing the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. The State Scenic Highway System includes a list of highways that are either eligible for designation as scenic highways or have been officially designated. The state laws governing the scenic highways program are found in The Streets and Highways Code Sections 260-263.<sup>8</sup> In Tulare County, portions of State Routes 180, 190, and 198 are designated as state scenic highways.<sup>9</sup>

Local

Tulare County General Plan 2030 Update

The Tulare County General Plan Update 2030 Part 1: Goals and Policies Report (GPR) (August 2012) includes a number of goals and policies relating to scenic protection of County resources. The Goals and Policies Report Framework Concept No. 3 addresses Scenic Landscapes:

"The scenic landscapes in Tulare County will continue to be one of the County's most visible assets. The Tulare County General Plan emphasizes the enhancement and preservation of these resources as critical to the future of the County. The County will continue to assess the recreational, tourism, quality of life, and economic benefits that scenic landscapes provide and implement programs that preserve and use this resource to the fullest extent." <sup>10</sup>

The Tulare County General Plan 2030 Update: Chapter 7 – Scenic Landscapes, contains the following goals and policies that relate to aesthetics, preservation of scenic vistas and daytime lighting/nighttime glare and which have potential relevance to the Project's CEQA review: *SL-1.1 Natural Landscapes* which requires new development to not significantly impact or block views of Tulare County's natural landscapes; *SL-1.2 Working Landscapes* which requires that new non-agricultural structures and infrastructure located in or adjacent to croplands, orchards, vineyards, and open rangelands be sited so as to not obstruct important viewsheds and to be designed to reflect unique relationships with the landscape; *SL-2.1 Designated Scenic Routes and Highways* which is intended to protect views of natural and working landscapes along the County's highways and roads by maintaining a designated system of County scenic routes and State scenic highways;.

"Tulare County's existing General Plan identifies State designated scenic highways and County designated eligible highways. There are three highway segments designated as eligible by the State. These include State Route 198 from Visalia to Three Rivers, State Route 190 from Porterville to Ponderosa, and State Route 180 extending through Federal land in the northern portion of Tulare County. State Route 198 closely follows around Lake Kaweah and the Kaweah River, while State Route 190 follows around Lake Success and the Tule River. Both Scenic Highways travel through agricultural areas of the valley floor to the foothills and the Sierra Nevada Range. Additionally, the General Plan Update identifies preserving the rural agricultural character of SR 99 and SR 63 as valuable to the County and communities." 11

#### **Project Impact Analysis:**

8 California Department of Transportation (Caltrans). Scenic Highway Program. Frequently Asked Questions. Accessed July 2023 at: Scenic Highways - Frequently Asked Questions | Caltrans or https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways/lap-liv-i-scenic-highways-faq2.

<sup>10</sup> Ibid. C. Environment. Environmental Landscapes. Concept 1: Scenic Landscapes. C-1.

art%20I%20and%20Part%20II/GENERAL%20PLAN%202012.pdf

<sup>&</sup>lt;sup>7</sup> Op. Cit.

<sup>&</sup>lt;sup>11</sup> Tulare County General Plan 2030 Update. August 2012. Recirculated Draft EIR. Page 3.1-11. Accessed in July 2023 at: <a href="http://generalplan.co.tulare.ca.us/documents/generalplan2010/RecirculatedDraftEIR.pdf">http://generalplan.co.tulare.ca.us/documents/generalplan2010/RecirculatedDraftEIR.pdf</a>

- a) Less Than Significant Impact: The Project would result in construction and operation of the Tulare CSG 2 Solar Project (Project); a single-axis tracker ground mounted photovoltaic (PV) community solar and battery storage facility, approximately 6.6MWdc/5MWac in capacity, on 31 acres of the 77 acres of leased inactive (fallow) farmland. The Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear), access roads, and fencing. For the purposes of this proposed Project (Project), a scenic vista is defined as an area that is designated, signed, and accessible to the public for the purpose of viewing and sightseeing. The Project site is located on the floor of the San Joaquin Valley in generally undeveloped area on the floor of the San Joaquin Valley, with the exception of scattered dairies and rural residence in the vicinity of the Project. The area surrounding the Project site is primarily rural agricultural land (i.e., active irrigated row crops, dairies, and scattered rural residences). Tulare County General Plan designates the Project site and surrounding land as Valley Agriculture, with the Project site and surrounding lands zoned Exclusive Agriculture, 20- or 40-acre Minimum (AE-20 and AE-40). The Project would be low-profile (that is, no building will be greater than 50' feet in height). Zoning height limitations would restrict structures to not more than 50 feet to the uppermost part of the roof. No parts of the Project would obstruct local scenic views, be visually intrusive or incompatible with the surrounding area, or be visible to large numbers of sensitive receptors. installation of solar modules with associated equipment and inverter stations, an energy storage component, access roads, and lighting and fencing around the perimeter of the proposed development area. The developed area would occupy approximately 31 acres of the 77 acres of leased inactive (fallow) farmland. Approximately 52 acres would remain undeveloped with the option of the property owners to continue agricultural uses. No parts of the Project would obstruct local scenic views or be visually intrusive or incompatible with the surrounding area. There are no designated scenic vistas within visible distance of the Project site (County of Tulare, 2010). When a decommissioning event occurs, the solar site will be reclaimed as required by a County approved Decommissioning and Reclamation Plan (and attendant bond). This Reclamation Plan will provide financial assurances along with a detailed plan to remediate soils and return the land to its original pre-construction condition upon termination of the Project. At the time of re-use, the zoning/land use designations will be used to determine the Project site's use. Therefore, the Project would have a less than significant impact on a scenic vista.
- b) No Impact: There are no rock outcroppings, historic buildings, or other designated scenic resources within or near the Project site. The California Scenic Highway Program allows counties to nominate an eligible scenic highway to be approved by the California Department of Transportation and placed under the scenic corridor protection program. In Tulare County, there is currently one officially designated scenic highway, and two highways that are eligible for designation. Approximately two miles of the officially designated Scenic Highway (State Route) 180 passes through northern Tulare County, but this segment of SR 180 is approximately 40 miles north of the Project site. Additionally, there are two Candidate State Scenic Highways, SR 198 (beginning east of SR 99, approximately eight miles north), and SR 190, approximately 11 miles south of the Project site. As such, the Project is not located within the viewshed of any of the listed designated or eligible highway segments.

Additionally, the County of Tulare identified a number of County Scenic Roads in its 2012 General Plan 2030 Update; however, these roads are not near or within the vicinity of the Project site. As a result, the Project would have no impact on existing scenic resources or highways. As noted earlier, the Project is located in a relatively flat area and does not contain scenic resources such as significant trees, rock outcroppings, or historic buildings. Therefore, there would be no impact to an eligible or designated state scenic highway or other scenic resources as a result of the Project.

- c) Less Than Significant Impact: As noted earlier, the Project site is located in an isolated, rural, predominantly agricultural area. The remoteness of the site, the absence of persons (there are only a few scattered, rural residences near the site), and the likely low average daily vehicle trips per day (based on the absence of traffic generating uses, for example, commercial, industrial, higher residential, etc.) do not avail the site to a significant number of opportunities for the site to result in an adverse impact to public views or vantage points viewing. As such, even though the Project location is in a non-urbanized area, it would not substantially degrade the existing visual character or quality of the site and its surroundings. Therefore, the Project would not conflict with applicable zoning and other regulations governing scenic quality resulting in no impact to this resource.
- d) Less Than Significant Impact: As noted in Item a) of this resource, the applicant will install motion activated lighting which would be hooded and directed downward to minimize off-site light and glare. As such, the Project will not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area resulting in a less than significant impact to this resource.

**Cumulative Impact Analysis:** Less Than Significant Impact – The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, Tulare County General Plan Background Report, and the Tulare County General Plan 2030 Update EIR.

The Project will only contribute to cumulative impacts related to this Checklist Item if Project specific impacts were to occur. There are no designated scenic vistas on the Project site or within the Project vicinity. Although the Project will result in a change to the existing visual setting, the Project will not substantially degrade the existing visual character or quality of the site and its surroundings. As noted earlier, when a decommissioning event occurs, the solar site will be reclaimed as required by a County approved Decommissioning and Reclamation Plan (and attendant bond). This Reclamation Plan will provide financial assurances along with a detailed plan to remediate soils and return the land to its original pre-construction condition upon termination of the Project. At the time of re-use, the zoning/land use designations will be used to determine the Project site's use. As with the Project, other cumulative projects will be required to comply with Tulare County requirements (i.e., setbacks) to minimize potential visual impacts. The Project will not create a new source of substantial light or glare that will adversely affect day or nighttime views in the area. All lighting associated with the Project will be subject to County approval and compliance with Tulare County requirements. Therefore, a less than significant cumulative impact will occur related to aesthetics.

Mitigation Measure(s): None Required.

## II. AGRICULTURAL AND FOREST RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the Rural Valley Lands Plan point evaluation system prepared by the County of Tulare as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources. including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air

#### LESS THAN Resources Board. **SIGNIFICANT** LESS THAN IMPACT WITH **SIGNIFICANT** No SIGNIFICANT Would the project: **IMPACT MITIGATION** IMPACT **IMPACT** Convert Prime Farmland, Unique Farmland, or a) Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the X Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use? Conflict with existing zoning for agriculture use, b) $\boxtimes$ П or a Williamson Act contract? c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources code 12220(g), timberland (as defined $\times$ in Public Resource Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? Result in the loss of forest land or conversion of d) Xforest land to non-forest use? Involve other changes in the existing environment e) which, due to their location or nature, could result П $\boxtimes$ in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

The discussions regarding Environmental Setting, Regulatory Setting, CEQA requirements, Agriculture and Forest Resources, etc.; contained in the Tulare County General Plan 2030 Update, Tulare County General Plan Background Report, and the Tulare County General Plan 2030 Update EIR are incorporated herein in their entirety. Where necessary and if available, additional site-specific facts, data, information, etc., are included in this discussion.

# **Environmental Setting**

As noted earlier and summarized here, the proposed Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear. The life of the Project is anticipated to be 30 years.

As the Project site is located in the San Joaquin Valley portion of Tulare County, this area is characterized by rich, highly productive farmland. Agriculture is the most important sector in Tulare County's economy, and agriculture and related industries make Tulare County one of the two most productive agricultural counties in the United States, according to Tulare County Farm Bureau statistics. <sup>12</sup> "Agricultural lands (crop and commodity production and grazing) also provide the County's most visible

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<sup>12</sup> Tulare County Farm Bureau, "Agricultural Facts," Accessed July 2023 at: <a href="http://www.tulcofb.org/index.php?page=agfacts">http://www.tulcofb.org/index.php?page=agfacts</a>

source of open space lands. As such, the protection of agricultural lands and continued growth and production of agriculture industries is essential to all County residents."<sup>13</sup>

The 2021 Tulare County Annual Crop and Livestock Report stated "Tulare County's total gross production value for 2021 is \$8,089,621,300. This represents an increase of \$949,544,800 or 13.3% above 2020's value of \$7,140,076,500. Milk continues to be the leading agricultural commodity in Tulare County; with a gross value of \$1,943,043,000, an increase of \$76,347,000 or 4%. Milk represents 23% of the total crop and livestock value for 2021. Total milk production increased by 1%. Livestock and Poultry's gross value of \$732,406,000 represents an increase of 9% above that of 2020, mostly due to the higher per unit value for both cattle and poultry. The total value of all Field Crop production in 2021 was \$571,436,000, an increase of 13% from the previous year. This increase is mostly attributed to better yields and prices for several field crops. Fruit and Nut commodities were valued at \$4,607,905,000 an increase of 20%. This increase can be partially attributed to the increase in Almond, Pistachio, and Tangerine acreage. Nursery Products increased by 9% compared to 2020 with an overall value of \$118,779,000. Vegetable crops were valued at \$20,544,000, representing a 22% decrease. This can be attributed to a decrease in acreage for Sweet Corn compared to 2020.

Tulare County's agricultural strength is based on the diversity of the crops produced. The 2021 crop report covers more than 150 different commodities, 42 of which have a gross value in excess of \$1,000,000. Although individual commodities may experience difficulties from year to year, Tulare County continues to produce high-quality crops that provide food and fiber to more than 90 countries throughout the world." <sup>14</sup>

The most recent statewide California Farmland Conversion Report (CFCR) from the California Department of Conservation Farmland Mapping and Monitoring Program (FMMP) assesses statewide farmlands from the period 2014-2016. However, Tulare County specific data from the period 2014-2016 indicates that agricultural lands in Tulare County in 2014 included 859,171 acres of important farmland (designated as FMMP Prime, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance) and 439,961 acres of grazing land, for a total of 1,299,132 acres of agricultural land. <sup>15</sup>

Table 2-1 <sup>16</sup> 2014 Tulare County Lands under Williamson Act or Farmland Security Zone Contracts			
Acres Category			
565,190	Total prime = Prime active + NR Prime		
505,645	Total Nonprime = Nonprime active + NR Prime		
11,101	Farmland Security Zone		
1,081,936 TOTAL ACRES in Williamson Act and Farmland Security Zone contracts			

Farmlands of Statewide Importance are defined as "lands similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date." <sup>17</sup>

# Important Farmland Trends

Using data collected by the FMMP, farmland acreage has been consistently decreasing for each two-year period since 1998<sup>18</sup>. In the 2010 FMMP analysis, Tulare County lost 17,502 acres of Farmland of Statewide Importance, and 17,748 acres of Farmland of Local Importance between 2008 and 2010; 13,815 acres of Farmland of Statewide Importance, and 14,216 acres of Farmland of Local Importance between 2010 and 2012; and 17,441 acres of Farmland of Statewide Importance, and 17,678 acres of Farmland of Local Importance between 2012 and 2014. However, as recent as 2014-2016, Tulare County gained 1,469 acres

<sup>&</sup>lt;sup>13</sup> Tulare County General Plan 2030 Update. Page 3-4.

<sup>14 2021</sup> Tulare County Annual Crop and Livestock Report. September 2021. Cover letter from Tom Tucker, Agricultural Commissioner. Accessed July 2023 at: https://agcomm.co.tulare.ca.us/pest-exclusion-standardization/crop-reports1/crop-reports-2021-2030/crop-and-livestock-report-2021/

<sup>15</sup> California Department of Conservation (CA DOC). Division of Land Resource Protection. Farmland Mapping and Monitoring Program, *Table 2014-2016*. Table A-44, Part I. Accessed July 2023 at: <a href="http://www.conservation.ca.gov/dlrp/fmmp/Pages/Tulare.aspx">http://www.conservation.ca.gov/dlrp/fmmp/Pages/Tulare.aspx</a>. The California Farmland Conversion Report 2014-2016 Accessed July 2023 at: <a href="https://www.conservation.ca.gov/dlrp/fmmp/Pages/2014-2016">https://www.conservation.ca.gov/dlrp/fmmp/Pages/2014-2016</a> Farmland Conversion Report.aspx.

<sup>&</sup>lt;sup>16</sup> Ibid.

<sup>&</sup>lt;sup>17</sup> Ibid.

<sup>&</sup>lt;sup>18</sup> CA DOC. Division of Land Resource Protection. "Williamson Act Status Report (2010)". Page 14. Accessed July 2023 at <a href="https://www.conservation.ca.gov/dlrp/wa/Pages/stats\_reports.aspx">https://www.conservation.ca.gov/dlrp/wa/Pages/stats\_reports.aspx</a>.

<sup>&</sup>lt;sup>19</sup> CA DOC. Tulare County Land Use Conversion Tables 2008-2010, 2010-2012, 2012-2014, and 2014-2016. Table A-44, Part III. Accessed July2023 at:

of Farmland of Statewide Importance, but also lost 2,513 acres of Farmland of Local Importance.<sup>20</sup> Between 2016 and 2018, the county lost 106 acres of Farmland of Statewide Importance while overall gaining 94 acres across all agricultural land.<sup>21</sup> **Table 2-** 2 summarizes Farmland Category acreage between 2000-2018.

	Table 2-2 Tulare County FMMP-Designated Land (2000-2018)								
Farmland				Tota	ıl Acres Inver	ntoried			
Category	200022	2002 <sup>23</sup>	2004 <sup>24</sup>	2006 <sup>25</sup>	2010 <sup>26</sup>	2012 <sup>27</sup>	2014 <sup>28</sup>	2016 <sup>29</sup>	201830
Prime Farmland	393,030	387,620	384,340	379,760	370,249	368,527	366,414	366,136	365,943
Farmland of Statewide Importance	301,720	345,760	339,580	332,160	323,599	321,296	320,886	322,305	326,476
Unique Farmland	11,720	12,750	12,530	12,220	11,593	11,474	11,421	11,691	11,812
Important Farmland Subtotal	756,470	746,130	736,450	724,140	705,441	701,297	859,171	858,119	858,013
Farmland of Local Importance	124,140	126,820	137,440	143,830	154,550	158,823	160,450	157,937	Not Available
Grazing Land	434,050	440,550	440,620	440,140	440,042	439,940	439,961	439,934	440,213
Total	1,254,660	1,253,500	1,254,560	1,308,110	1,300,033	1,300,060	1,299,132	1,298,053	1,298,226

**Table 2-3** shows soil information for both the Project site.

TABLE 2-3 SOIL INFORMATION FOR PROJECT SITE			
Map Unit Symbol	Map Unit Name	Non-Irrigated Capability Class	Acreage/Site Percentage
137	Tagus loam, 0 to 2% slopes	4c	100%

https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx or Web Soil Survey (usda.gov)

The Tagus series consists of very deep, well drained soils formed in alluvium derived from granitic rock sources. Tagus soils are on terraces and have slopes of 0 to 2 percent. The average annual precipitation is about 10 inches, and the average annual temperature is about 63 degrees F. Tagus loam soil is coarse-loamy, mixed, superactive, thermic Calcic Haploxerolls. Elevations are 230 to 400 feet. The climate is semiarid and has hot, dry summers and cool, moist winters. The average annual precipitation

http://www.conservation.ca.gov/dlrp/fmmp/Pages/Tulare.aspx.

<sup>&</sup>lt;sup>20</sup> CA DOC. Tulare County Land Use Conversion Tables 2014-2016. Table A-44, Part I. Accessed July 2023 at: <a href="https://www.conservation.ca.gov/dlrp/fmmp/Pages/Tulare.aspx">https://www.conservation.ca.gov/dlrp/fmmp/Pages/Tulare.aspx</a>.

<sup>&</sup>lt;sup>21</sup> CA DOC. Tulare County Land Use Conversion Tables 2016-2018. Accessed July 2023 at: <a href="https://www.conservation.ca.gov/dlrp/fmmp/Pages/Tulare.aspx">https://www.conservation.ca.gov/dlrp/fmmp/Pages/Tulare.aspx</a>.

<sup>&</sup>lt;sup>22</sup> Ibid.

<sup>&</sup>lt;sup>23</sup> Op. Cit.

<sup>&</sup>lt;sup>24</sup> Op. Cit.

<sup>25</sup> Op. Cit.

<sup>&</sup>lt;sup>26</sup> Tulare County Resource Management Agency. Tulare County Subvention Report for Fiscal Year 2012-2013 (submitted to Department of Conservation, November 2012).

<sup>&</sup>lt;sup>27</sup> Ibid.

<sup>&</sup>lt;sup>28</sup> California Department of Conservation, Division of Land Resource Protection. Farmland Mapping and Monitoring Program, *Table 2014-2016. Table A-44*, Part I. Accessed July 2023at: <a href="https://www.conservation.ca.gov/dlrp/fmmp/Pages/Tulare.aspx">https://www.conservation.ca.gov/dlrp/fmmp/Pages/Tulare.aspx</a>.

<sup>&</sup>lt;sup>29</sup> Ibid.

<sup>30</sup> California Department of Conservation, Division of Land Resource Protection. Farmland Mapping and Monitoring Program. Table A-44, Part I. 2016-2018 Land Use Conversion. Accessed July 2023 at: <a href="https://www.conservation.ca.gov/dlrp/fmmp/Pages/Tulare.aspx">https://www.conservation.ca.gov/dlrp/fmmp/Pages/Tulare.aspx</a>.

is 9 to 12 inches. The mean annual temperature is 62 degrees to 65 degrees F. The frost-free period is 250 to 300 days. Well drained; negligible to low runoff; moderate permeability. This soil is used for irrigated cropland to grow cotton, corn, wheat, barley, walnuts, almonds and alfalfa. It is also used for dairy and cattle production and building site development.<sup>31</sup>

#### Forest Lands

"Timberlands that are available for harvesting are located in the eastern portion of Tulare County in the Sequoia National Forest. Hardwoods found in the Sequoia National Forest are occasionally harvested for fuel wood, in addition to use for timber production. Since most of the timberlands are located in Sequoia National Forest, the U.S. Forest Service has principal jurisdiction, which encompasses over 3 million acres. The U.S. Forest Service leases these federal lands for timber harvests." 32

As the Project is located on the Valley floor, there is no timberland or forest in the Project vicinity.

# **Regulatory Setting**

**Federal** 

Federal regulations for agriculture and forest resources are not relevant to this project because it is not a federal undertaking (the Project site is not located on lands administered by a federal agency, and the Project applicant is not requesting federal funding or any federal permits).

State

# California Environmental Quality Act (CEQA) Definition of Agricultural Lands

Public Resources Code Section 21060.1 defines "agricultural land" for the purposes of assessing environmental impacts using the FMMP. The FMMP was established in 1982 to assess the location, quality, and quantity of agricultural lands and the conversion of these lands. The FMMP serves as a tool to analyze agricultural land use and land use changes throughout California. As such, this Project is being evaluated using the FMMP pursuant to CEQA.

# California Department of Conservation, Division of Land Resource Protection Farmland Mapping and Monitoring Program

The California Department of Conservation (DOC) applies the Natural Resources Conservation Service (NRCS) soil classifications to identify agricultural lands. These agricultural designations are used in planning for the present and future of California's agricultural land resources. Pursuant to the DOC's FMMP, these designated agricultural lands are included in the Important Farmland Maps (IFM). As noted earlier the FMMP was established in 1982 to assess the location, quality and quantity of agricultural lands, and the conversion of these lands. The FMMP serves as tool to analyze agricultural land use and land use changes throughout California. The DOC has a minimum mapping unit of 10 acres, with parcels that are smaller than 10 acres being absorbed into the surrounding classifications.

The following list provides a comprehensive description of all the categories mapped by the DOC. Collectively, lands classified as Prime Farmland, Farmland of Statewide Importance, and Unique Farmland are referred to as Farmland.<sup>33</sup>

- Prime Farmland. Farmland that has the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- Farmland of Statewide Importance. Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- Unique Farmland. Farmland of lesser quality soils used for the production of the State's leading agricultural crops. This land is usually irrigated, but may include non-irrigated groves or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.

<sup>31</sup> USDA. Official Series Description - Tagus Series. Accessed July 2023 at: https://soilseries.sc.egov.usda.gov/OSD\_Docs/T/TAGUS.html.

<sup>&</sup>lt;sup>32</sup> Tulare County General Plan Background Report, Page 4-20.

<sup>&</sup>lt;sup>33</sup> California Department of Conservation. FMMP – Important Farmland Map Categories. Accessed July 2023 at: <a href="https://www.conservation.ca.gov/dlrp/fmmp/Pages/Important-Farmland-Categories.aspx">https://www.conservation.ca.gov/dlrp/fmmp/Pages/Important-Farmland-Categories.aspx</a>

- Farmland of Local Importance. Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.
- Grazing Land. Land on which the existing vegetation is suited to the grazing of livestock. This category was developed
  in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other
  groups interested in the extent of grazing activities. The minimum mapping unit for Grazing Land is 40 acres.
- Urban and Builtup Land. Land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, institutional, public administrative purposes, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.
- Other Land. Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines and borrow pits; and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

# California Land Conservation Act (Williamson Act)

The Williamson Act, also known as the California Land Conservation Act of 1965, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value. The Department of Conservation assists all levels of government, and landowners in the interpretation of the Williamson Act related government code. The Department also researches, publishes and disseminates information regarding the policies, purposes, procedures, and administration of the Williamson Act according to government code. Participating counties and cities are required to establish their own rules and regulations regarding implementation of the Act within their jurisdiction. These rules include but are not limited to: enrollment guidelines, acreage minimums, enforcement procedures, allowable uses, and compatible uses.<sup>34</sup>

Williamson Act Contracts are formed between a county or city and a landowner for the purpose of restricting specific parcels of land to agricultural or related open space use. Private land within locally-designated agricultural preserve areas are eligible for enrollment under a contract. The minimum term for contracts is ten years. However, since the contract term automatically renews on each anniversary date of the contract, the actual term is essentially indefinite. Landowners receive substantially reduced property tax assessments in return for enrollment under a Williamson Act contract. Property tax assessments of Williamson Act contracted land are based upon generated income as opposed to potential market value of the property.<sup>35</sup>

# Forestry Resources

State regulations regarding forestry resources are not relevant to the Project because no forestry resources exist at the Project site.

Local

# County of Tulare

On February 26, 2013, per Resolution No. 2013-0104, Tulare County adopted a two-level review process for evaluating the siting of public and private utility structures on agricultural zoned land to analyze potential agricultural conversion impacts. The first level of review pertains to all agricultural zoned lands, while the second level applies to lands under Williamson Act contract. Level II states that a project should adhere to all the criteria noted in Level I.

# Level I: Agricultural Zoned Lands

a) Public and private utility structures on lands other than irrigated prime farmland, as defined in Level 1, Section C, may be permitted subject to findings and conditions. Desired locations include marginal or impaired lands, land with insufficient water supplies for viable agricultural production or in the UDB, UAB, HOB areas of the County for agricultural buffers. The Project is consistent with the "other than irrigated prime farmland" criterion because the 77 acres (100%) of the Project site historically mapped as Farmland of Statewide Importance will not be permanently

<sup>&</sup>lt;sup>34</sup> California Department of Conservation. Williamson Act Program. Accessed July 2023 at: <a href="https://www.conservation.ca.gov/dlrp/wa">https://www.conservation.ca.gov/dlrp/wa</a>.

<sup>35</sup> California Department of Conservation. Williamson Act Contracts. Accessed July 2023 at: https://www.conservation.ca.gov/dlrp/wa/Pages/contracts.aspx.

removed as agricultural acreage, it is being re-purposed for an anticipated 30-year timeframe thereby preserving the land for future cropland use.

- b) Should be in proximity to the electrical grid/corridor/electrical substation or end user. The Project will establish a new distribution interconnect power line to the existing Southern California Edison (SCE) line located adjacent to Project site.
- c) Should not support, unless a unique proposal is approved by the Board of Supervisors, the siting of public and private solar utility structures located outside of UDB, UAB, HOB areas of the County on irrigated prime farmland as defined by any of the following criteria:
  - i. Identified as Prime farmland by the FMMP. As noted above, 100 percent of the entire Project site's approximately 77 acres is considered Farmland of Statewide Importance as rated by the Natural Resources Conservation Service (NRCS).
  - ii. Identified as Class I Soil by the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS). The Project site is classified to be Farmland of Statewide Importance for its approximately 77 acres of the entire sire; although only 31 acres will be developed for the Project with the remain 52 acres would remain undeveloped with the option for the property owner to continue agricultural uses. The NRCS Non-Irrigated Land Capability Classification System evaluates the suitability of soils for most types of field crops. Soils are then grouped in capability classes that describe the limitations that the soil class might present for crop cultivation. The Class groups are numbered from 1 through 8 (USDA/NRCS, 2018). The capability class of the soil type of the Project site is presented in **Table 2-3**. Although the Tagus loam soil (which make up 100% of the soils within the Project site) is rated as "Farmland of Statewide Importance" by the NRCS, this classification only applies if the area is irrigated and either protected from flooding or not frequently flooded during the growing season. If left unirrigated, the soil is not considered as Prime Farmland.

As noted earlier, the Project site is rated as Class 4 soil which is suited for irrigated cropland to grow cotton, corn, wheat, barley, walnuts, almonds and alfalfa. It is also used for dairy and cattle production and building site development.

- iii. Land having been actively farmed in permanent crops at least one year during the past ten years. The land has been planted to row crops. Therefore, solar development of the site does not require removal of any permanent crops (such as orchards or vineyards)
- d) Should not support the removal of permanent crops when there is sufficient water available for continued crop production on lands outside of UDB, UAB and HOB areas of the County regardless of soil capability classification. As noted earlier, the Project site has been planted to row crops and would not result in the removal of permanent crops. This amount represents less water per year than row crops would use as one-acre foot of water is 325,851.427 gallons and the Project would use less water to wash the solar panels than to irrigate the entire 77 acres of crops.
- e) Identify sources of water not limited to well, irrigation canal, water transfer and conduct water availability analysis demonstrating either (1) the insufficiency of adequate water supplies for continued crop production, or (2) the infeasibility of continued agricultural activities on the subject property. This analysis must include input from the water district, or other water authority. The Project is not supplied by, or located within, any urban water management planning area. Nor is it located within any agricultural or urban water districts, or other public or private utilities that deliver water to the end user. The Project would import water via trucks to supply water as necessary (that is, to supply watering trucks used to minimize dust during construction-related activities and for solar panel washing approximately two times per year).
- f) Analyze the potential negative impacts on neighboring farming operations and mitigate for those impacts including, but not limited, to increases in invertebrate and vertebrate pest and invasive plant species. Conditions of approval will require removal of combustible material from the site; the submission of a soil reclamation plan; fencing; dust management; on-site parking; etc. These measures will ensure impacts on neighboring farm operations will be less-than-significant. Therefore, the Project is consistent with the "neighboring farming operations" criterion.
- Should not impede or reduce the productive agricultural capacity of the land for future uses. Thus, reclamation of the land to its previous agricultural condition is crucial and appropriate financial assurances are essential. The proposed

Project represents a conversion of farmland with a life of approximately 30 years. It is unknown at this time if the Project may extend beyond 30 years. As a condition of approval, a Reclamation Plan would be submitted as a part of the permit application materials. This Reclamation Plan would provide financial assurances along with a detailed plan to remediate soils and return the land to its original pre-construction condition upon termination of the Project.

As described in the Project Description, the life of the Project is 30 years. The Applicant would finalize and submit to the County for approval, a Decommissioning and Reclamation Plan, and attendant bond. The Decommissioning and Reclamation Plan would include the methods for removing all solar panels, demolishing and removing all support racks and structures, and removal of all infrastructure (road, foundations), that is assured according to the lease agreement with the property owner and through the agreement on and posting of a reclamation bond with the County.

The Project site would be leveled where needed and the onsite soil would be reclaimed to a condition that would again support agriculture. The Decommissioning and Reclamation Plan would include a summary of specific measures to restore the soil to its pre-Project condition, including removal of all fixtures, equipment, non-agricultural roads, and restoration of compacted soil. Reclamation would be completed within 120 days of the expiration of the County special use permit. The modules and ancillary materials would be sold and reused or recycled to minimize impact on the environment.<sup>36</sup>

At the time of re-use, the zoning/land use designations will be used to determine the Project site's highest and best use. As a result, the Project would result in a less than significant impact on this item.

- h) Require developer agreements that include cost recovery, loss of crop production and/or subvention funds, removal of facility and reclamation requirements, and other Tulare County financial incentives. A condition of approval will require the Project proponent to enter into the "Developer Agreement and Reclamation Plan for the Solar Photovoltaic Electric Generating Facility", adopted on August 31, 2010 by Board of Supervisors Resolution 2010-0717. Therefore, the Project is consistent with the "developer agreement" criterion.
- i) Require Sales and Use Tax Agreements to maximize capture of sales and use tax revenue. A condition of approval will require the Project proponent to enter into the "Agreement for Allocation of Sales and Use Tax Revenues and Limitations on Transfer of the Project to Nontaxable or Tax Exempt Entities", adopted by the Board of Supervisors on February 28, 2012 by Resolution 2012-0187. Therefore, the Project is consistent with the "Sales and Use Tax Agreements" criterion.

# Level II: Agricultural Zoned Lands Under Williamson Act Contracts

- a) Adhere to all criteria noted in Level I to be completed. Please see above.
- b) Review Resolution No. 89-1275 Uniform Rules for Agricultural Preserves and Resolution No. 99-0620 establishing Rules for Farmland Security Zones to insure compatibility. The Tulare County Board of Supervisors defined allowable uses on contracted lands in Resolution No. 89-1275, which established Uniform Rules for Agricultural Use. Resolutions No. 89-1275 and No. 99-0620 established the construction of gas, electric, water, and community utility facilities as compatible uses for lands under a Williamson Act Contract. Public and private utility structures were determined to be a compatible use on lands under Williamson Act Contract with Resolution No 2010-0717. Under Resolution No. 2010-0590, the Tulare County Board of Supervisors determined that solar generating facilities are a compatible use in Exclusive Agriculture Zone Districts subject to conditions of approval set forth in Special Use Permits.
- Review Williamson Act Contract Contents to insure compatibility. Williamson Act Land Conservation Contracts Nos. 3528 and 3529 were recorded February 2, 1970 (Box 2879, Pages 227 and 232, respectively). The Tulare County Board of Supervisors defined allowable uses on contracted lands in Resolution No. 89-1275, which established Uniform Rules for Agricultural Use. Resolutions No. 89-1275 and No. 99-0620 established the construction of gas, electric, water, and community utility facilities as compatible uses for lands under a Williamson Act Contract. Public and private utility structures were determined to be a compatible use on lands under Williamson Act Contract with Resolution No 2010-0717. Under Resolution No. 2010-0590, the Tulare County Board of Supervisors determined that solar generating facilities are a compatible use in Exclusive Agriculture Zone Districts subject to conditions of approval set forth in Special Use Permits. The Project is therefore compatible with the Williamson Act contracts applicable to the Project site.

<sup>&</sup>lt;sup>36</sup> Op. Cit. 11.

## **Project Impact Analysis:**

- a) Less Than Significant Impact: As noted earlier, the Tulare County Board of Supervisors (Board) approved Resolution No. 2013-0104 on February 26, 2013, whereby Tulare County adopted a two-level review process for evaluating the siting of public and private utility structures on agricultural zoned land to analyze potential agricultural conversion impacts. As indicated above, the proposed Project is consistent with the Board adopted resolutions. As such, the Project would not result in the Conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use. Upon ultimate decommissioning of the site, it will be reclaimed to the extent that agricultural production may be re-initiated. Implementation of the site's Reclamation Plan would result in a less than significant impact to this resource.
- b) Less Than Impact: The Project site is currently zoned AE-40 (Exclusive Agriculture- 40 acre minimum). Additionally, the Project site is under Williamson Act Contract. The Williamson Act enables local governments to enter into contracts with private landowners that restrict land use to agricultural or related uses in return for lower property tax assessments. Local governments are responsible for the implementation of this program; therefore, the rules that determine compatible uses within a contract vary by jurisdiction. As noted earlier, The Tulare County Board of Supervisors defined allowable uses on contracted lands in Resolution No. 89-1275, which established Uniform Rules for Agricultural Use. Resolutions No. 89-1275 and No. 99-0620 established the construction of gas, electric, water, and community utility facilities as compatible uses for lands under a Williamson Act Contract. Public and private utility structures were determined to be a compatible use on lands under Williamson Act Contract with Resolution No 2010-0717. Under Resolution No. 2010-0590, the Tulare County Board of Supervisors determined that solar generating facilities are a compatible use in Exclusive Agriculture Zone Districts subject to conditions of approval set forth in Special Use Permits.

Resolutions 2010-0717 and 2013-0104 subsequently created a two-level process through which solar facility projects can be found as a compatible use on Williamson Act Contracted lands. This allows impaired agricultural lands to be put to the highest and best use without cancelling the Williamson Act Contract, therefore preserving the option to return to farming the land in the future. Pending the approval of the Special Use Permit for the Project and the approval of findings of compatibility under the Williamson Act, the Project would present a temporary change in land use that has been found to be compatible with the terms of the existing Williamson Act contract on the Project site. Therefore, the Project would not conflict with existing zoning or a Williamson Act Contract and no impact would occur.

- c) and d) No Impact: The Project will not occur on land zoned as forest land or timberland or result in a loss of forest land. As such, the Project would not conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources code 12220(g), timberland (as defined in Public Resource Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)). There is no impact.
- e) No Impact: The Project site is not located near land zoned as forest land or timberland and therefore would not result in any changes in the environment that might convert forest land to non-forest land. The Project would result in the use of approximately 77 acres of farmland although only 31 acres will be developed for the Project to a non-agricultural use for approximately 30 years. However, as discussed earlier, this conversion is planned as temporary and in accordance with existing land use policies and regulations. Land surrounding the Project site is predominantly agriculturally productive lands, dairies, and scattered rural residences. As discussed in the Project Description (see Attachment "E"), construction-, operation-, maintenance-, and decommissioning-related activities would take place within Project site boundaries. The Project is not anticipated to involve changes to the environment that would vary from impacts to the environment originating from agricultural production. Additionally, during construction- and decommissioning-related activities, Best Management Practices such as erosion prevention measures and dust-minimization measures (including those required by the San Joaquin Valley Air Pollution Control District) would be employed to limit the impact of the Project on adjacent properties. Maintenance activities during Project operation would be minimal and limited to maintenance of facility components and washing the panels periodically. Therefore, no other changes to the environment are anticipated that could result in the conversion of farmland to non-farmland. There would be no impact on this item.

## **Cumulative Impact Analysis:** Less Than Significant Impact

The geographic area of this cumulative analysis is the entire State of California. This cumulative analysis is based on provisions of the California Land Conservation Act of 1965 (Williamson Act) and on Tulare County allowed uses in agricultural zones.

As indicated above, this Project is consistent with the Board adopted resolutions. As such, the Project would not result in the Conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use. As noted earlier, the Tulare County Board of Supervisors defined allowable uses on contracted lands in Resolution No. 89-1275, which established Uniform Rules for Agricultural Use. Resolutions No. 89-1275 and No. 99-0620 established the construction of gas, electric, water, and community utility facilities as compatible uses for lands under a Williamson Act Contract; Via Resolution No. 2010-0717, Public and private utility structures were determined to be a compatible use on lands under Williamson Act Contract; while via Resolution No. 2010-0590, the Tulare County Board of Supervisors determined that solar generating facilities are a compatible use in Exclusive Agriculture Zone Districts subject to conditions of approval set forth in Special Use Permits. The Project will not occur on land zoned as forest land or timberland or result in a loss of forest land. As such, the Project would not conflict with existing zoning for, or cause rezoning of, forest land or timberland. Lastly, no other changes to the environment are anticipated that could result in the conversion of farmland to non-farmland.

Mitigation Measure(s): None Required.

# III. AIR QUALITY

Where available, the significance criter the applicable air quality management pollution control district may be relied following determinations.	district or air	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	No Impact
Would the project:				
a) Conflict with or obstruct impler applicable air quality plan?	mentation of the			$\boxtimes$
b) Result in a cumulatively considered of any criteria pollutant for white region is non-attainment under federal or state ambient air quality.	ch the project an applicable		$\boxtimes$	
c) Expose sensitive receptors to su concentrations?	ubstantial pollutant		$\boxtimes$	
d) Result is other emissions (such odors adversely affecting a subspeople?			$\boxtimes$	

The discussions regarding Environmental Setting, Regulatory Setting, CEQA requirements, Air Quality Resource, etc.; contained in the Tulare County General Plan 2030 Update, Tulare County General Plan Background Report, and the Tulare County General Plan 2030 Update EIR are incorporated herein in their entirety. Where necessary and if available, additional site-specific facts, data, information, etc., are included in this discussion.

# **Environmental Setting**

The proposed Project is located in the San Joaquin Valley Air Basin (SJVAB), a continuous inter-mountain air basin. The Sierra Nevada Mountain Range forms the eastern boundary; the Coast Range forms the western boundary; and the Tehachapi Mountains form the southern boundary. These topographic features restrict air movement through and beyond the SJVAB. The SJVAB is comprised of San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, and Tulare Counties and the valley portion of Kern County; it is approximately 25,000 square miles in area. Tulare County lies within the southern portion of the SJVAB. Air resources in the SJVAB is managed by the San Joaquin Valley Unified Air Pollution Control District (Air District, District, or SJVAPCD).

As noted earlier and summarized here, the Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear. The life of the Project is anticipated to be 30 years.

# Ambient Air Quality Standards

Both the federal government through the United State Environmental Protection Agency (EPA), and the State of California through the California Air Resources Board (CARB or ARB), have established health-based ambient air quality standards (AAQS) for six air pollutants, commonly referred to as "criteria pollutants." The six criteria pollutants are: carbon monoxide (CO), ozone (O3), sulfur dioxide (SO2), nitrogen dioxide (NO2), particulate matter (PM10 and PM2.5), and lead (Pb). The National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) were developed independently with differing purposes and methods, although both processes are intended to avoid health-related effects. As a result, the federal and state standards differ in some cases. In general, the California state standards are more stringent. NAAQS and CAAQS are provided in **Table 3-1**.

	State and Federal A	Table 3-1 mbient Air Quality Stand	dards <sup>37</sup>			
Pollutant	Averaging Time	aging Time California Standards		National Standards		
1 Onutant	Averaging Time		Primary	Secondary		
Ozone (O <sub>3</sub> )	1-hour	0.09 ppm (180 μg/m³)		Same as Primary		
Ozone (O <sub>3</sub> )	8-hour	0.070 ppm (137 μg/m³)	0.070 ppm $(137 \mu g/m^3)$	Same as Filmary		
Respirable Particulate Matter	24-hour	$50 \mu g/m^3$	$150  \mu g/m^3$			
(PM <sub>10</sub> )	Annual Arithmetic Mean	$20~\mu g/m^3$		Same as Primary		
	24-hour		$35 \mu g/m^3$	Same as Primary		
Fine Particulate Matter (PM <sub>2.5</sub> )	Annual Arithmetic Mean	12 μg/m <sup>3</sup>	$12 \mu\text{g/m}^3$	$15 \mu g/m^3$		
Corbon Monovido (CO)	1-hour	20 ppm (23 mg/m <sup>3</sup> )	35 ppm (40 mg/m <sup>3</sup> )			
Carbon Monoxide (CO)	8-hour	9.0 ppm (10 mg/m <sup>3</sup> )	9 ppm (10 mg/m <sup>3</sup> )			
	1-hour	0.18 ppm (339 μg/m³)	100 ppb (188 μg/m³)	a D.		
Nitrogen Dioxide (NO <sub>2</sub> )	Annual Arithmetic Mean	0.030 ppm (57 µg/m³)	$0.053 \text{ ppm}$ $(100 \mu\text{g/m}^3)$	Same as Primary		
	1-hour	0.25 ppm (655 μg/m <sup>3</sup> )	75 ppb (196 μg/m <sup>3</sup> )			
G 16 D: :1 (GQ.)	3-hour			0.5 ppm (1300 μg/m <sup>3</sup> )		
Sulfur Dioxide (SO <sub>2</sub> )	24-hour	0.04 ppm (105 μg/m³)	0.14 ppm (certain areas)			
	Annual Arithmetic Mean		0.030 ppm (certain areas)			
	30-day Average	$1.5  \mu g/m^3$				
Lead (Pb)	Calendar Quarter		1.5 µg/m <sup>3</sup> (certain areas)	Sama as Drimary		
	Rolling 3-month Average		$0.15  \mu g/m^3$	Same as Primary		
Visibility Reducing Particles	8-hour	instrumental equivalents "extinction of 0.23 per kilometer"				
Sulfates	24-hour	$25  \mu g/m^3$	No National Standards			
Hydrogen Sulfide (H <sub>2</sub> S)	1-hour	0.03 ppm (42 µg/m³)				
Vinyl Chloride	24-hour	0.01 ppm (26 µg/m³)				

#### **Attainment Status**

Air basins are designated as attainment or nonattainment for both federal and state AAQS. Attainment is achieved when monitored ambient air quality data is in compliance with the standards for a specified pollutant. Non-compliance with an established standard will result in a nonattainment designation and an unclassified designation indicates insufficient data is available to determine compliance for that pollutant.

The SJVAB is considered to be in attainment for federal and state air quality standards for carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>); attainment for federal and non-attainment for state air quality standards for respirable particulate matter (PM<sub>10</sub>); and non-attainment of state and federal air quality standards for ozone (O<sub>3</sub>) and fine particulate matter (PM<sub>2.5</sub>). Attainment status for listed federal and state criteria pollutant standards in the SJVAB can be found in **Table 3-2**.

<sup>&</sup>lt;sup>37</sup> California Air Resources Board. Ambient Air Quality Standards. Accessed July 2023 at: <a href="https://ww2.arb.ca.gov/sites/default/files/2020-07/aaqs2.pdf">https://ww2.arb.ca.gov/sites/default/files/2020-07/aaqs2.pdf</a>.

Table 3-2 SJVAB Attainment Status <sup>38</sup>					
Dellutent	Designation/Classification				
Pollutant	Federal Standards	State Standards			
Ozone – one hour	No Federal Standard <sup>1</sup>	Nonattainment/Severe			
Ozone – eight hour	Nonattainment/Extreme <sup>2</sup>	Nonattainment			
PM <sub>10</sub>	Attainment <sup>3</sup>	Nonattainment			
PM <sub>2.5</sub>	Nonattainment <sup>4</sup>	Nonattainment			
СО	Attainment/Unclassified	Attainment/Unclassified			
Nitrogen Dioxide	Attainment/Unclassified	Attainment			
Sulfur Dioxide	Attainment/Unclassified	Attainment			
Lead	No Designation/Classification	Attainment			
Hydrogen Sulfide	No Federal Standard	Unclassified			
Sulfates	No Federal Standard	Attainment			
Vinyl Chloride	No Federal Standard	Attainment			
Visibility Reducing Particles	No Federal Standard	Unclassified			

<sup>1</sup> Effective June 15, 2005, the U.S. EPA revoked the federal 1-hour ozone standard, including associated designations and classifications. However, EPA had previously classified the SJVAB as extreme nonattainment for this standard. Many applicable requirements for extreme 1-hour ozone nonattainment areas continue to apply to the SJVAB.

- 2 Though the Valley was initially classified as serious nonattainment for the 1997 8-hour ozone standard, EPA approved Valley reclassification to extreme nonattainment in the Federal Register on May 5, 2010 (effective June 4, 2010)
- 3 On September 25, 2008, EPA redesignated the San Joaquin Valley to attainment for the PM<sub>10</sub> National Ambient Air Quality Standard (NAAOS) and approved the PM<sub>10</sub> Maintenance Plan.
- 4 The Valley is designated nonattainment for the 1997 PM<sub>2.5</sub> NAAQS. EPA designated the Valley as nonattainment for the 2006 PM2.5 NAAQS on November 13, 2009 (effective December 14, 2009).

#### Criteria Pollutants Assessed

The following criteria air pollutants were assessed in the Technical Memo (included in Attachment "A" of this document): reactive organic gases (ROG), oxides of nitrogen (NOx), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), particulate matter less than 10 microns in diameter (PM10), and particulate matter less than 2.5 microns in diameter (PM2.5). Note that the Project would emit ozone precursors ROG and NOx. However, the Project would not directly emit ozone since it is formed in the atmosphere during the photochemical reaction of ozone precursors. General descriptions and most relevant effects from pollutant exposure of the criteria pollutants of concern are listed in **Table 3-3**.

<sup>&</sup>lt;sup>38</sup> San Joaquin Valley Air Pollution Control District. Ambient Air Quality Standards & Valley Attainment Status. Accessed July 2023 at: <a href="http://www.valleyair.org/aqinfo/attainment.htm">http://www.valleyair.org/aqinfo/attainment.htm</a>.

	Table 3-3 Descriptions of Criteria Pollutants of Concern <sup>39</sup>					
Criteria Pollutant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure			
Ozone	Ozone is a photochemical pollutant as it is not emitted directly into the atmosphere, but is formed by a complex series of chemical reactions between volatile organic compounds (VOC), nitrous oxides (NOx), and sunlight. Ozone is a regional pollutant that is generated over a large area and is transported and spread by the wind.	Ozone is a secondary pollutant; thus, it is not emitted directly into the lower level of the atmosphere. The primary sources of ozone precursors (VOC and NO <sub>X</sub> ) are mobile sources (on-road and off-road vehicle exhaust).	Irritate respiratory system; reduce lung function; breathing pattern changes; reduction of breathing capacity; inflame and damage cells that line the lungs; make lungs more susceptible to infection; aggravate asthma; aggravate other chronic lung diseases; cause permanent lung damage; some immunological changes; increased mortality risk; vegetation and property damage.			
Particulate matter $(PM_{10})$ Particulate matter $(PM_{2.5})$	Suspended particulate matter is a mixture of small particles that consist of dry solid fragments, droplets of water, or solid cores with liquid coatings. The particles vary in shape, size, and composition. PM <sub>10</sub> refers to particulate matter that is between 2.5 and 10 microns in diameter, (one micron is one-millionth of a meter). PM <sub>2.5</sub> refers to particulate matter that is 2.5 microns or less in diameter, about one-thirtieth the size of the average human hair.	Stationary sources include fuel or wood combustion for electrical utilities, residential space heating, and industrial processes; construction and demolition; metals, minerals, and petrochemicals; wood products processing; mills and elevators used in agriculture; erosion from tilled lands; waste disposal, and recycling. Mobile or transportation related sources are from vehicle exhaust and road dust. Secondary particles form from reactions in the atmosphere.	Short-term exposure (hours/days): irritation of the eyes, nose, throat; coughing; phlegm; chest tightness; shortness of breath; aggravate existing lung disease, causing asthma attacks and acute bronchitis; those with heart disease can suffer heart attacks and arrhythmias.     Long-term exposure: reduced lung function; chronic bronchitis; changes in lung morphology; death.			
Nitrogen dioxide (NO <sub>2</sub> )	During combustion of fossil fuels, oxygen reacts with nitrogen to produce nitrogen oxides—NO <sub>X</sub> (NO, NO <sub>2</sub> , NO <sub>3</sub> , N <sub>2</sub> O, N <sub>2</sub> O <sub>3</sub> , N <sub>2</sub> O <sub>4</sub> , and N <sub>2</sub> O <sub>5</sub> ). NO <sub>X</sub> is a precursor to ozone, PM <sub>10</sub> , and PM <sub>2.5</sub> formation. NO <sub>X</sub> can react with compounds to form nitric acid and related small particles and result in particulate matter (PM) related health effects.	NO <sub>X</sub> is produced in motor vehicle internal combustion engines and fossil fuel-fired electric utility and industrial boilers. Nitrogen dioxide forms quickly from NO <sub>X</sub> emissions. NO <sub>2</sub> concentrations near major roads can be 30 to 100 percent higher than those at monitoring stations.	Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; contributions to atmospheric discoloration; increased visits to hospital for respiratory illnesses.			
Carbon monoxide (CO)	CO is a colorless, odorless, toxic gas. CO is somewhat soluble in water; therefore, rainfall and fog can suppress CO conditions. CO enters the body through the lungs, dissolves in the blood, replaces oxygen as an attachment to hemoglobin, and reduces available oxygen in the blood.	CO is produced by incomplete combustion of carbon-containing fuels (e.g., gasoline, diesel fuel, and biomass). Sources include motor vehicle exhaust, industrial processes (metals processing and chemical manufacturing), residential wood burning, and natural sources.	Ranges depending on exposure: slight headaches; nausea; aggravation of angina pectoris (chest pain) and other aspects of coronary heart disease; decreased exercise tolerance in persons with peripheral vascular disease and lung disease; impairment of central nervous system functions; possible increased risk to fetuses; death.			
Sulfur dioxide (SO <sub>2</sub> )	Sulfur dioxide is a colorless, pungent gas. At levels greater than 0.5 parts per million (ppm), the gas has a strong odor, similar to rotten eggs. Sulfur oxides (SOx) include sulfur dioxide and sulfur trioxide. Sulfuric acid is formed from sulfur dioxide, which can lead to acid deposition and can harm natural resources and materials. Although sulfur dioxide concentrations have been reduced to levels well below state and federal standards, further reductions are desirable because sulfur dioxide is a precursor to sulfate and PM <sub>10</sub> .	Human caused sources include fossil- fuel combustion, mineral ore processing, and chemical manufacturing. Volcanic emissions are a natural source of sulfur dioxide. The gas can also be produced in the air by dimethyl sulfide and hydrogen sulfide. Sulfur dioxide is removed from the air by dissolution in water, chemical reactions, and transfer to soils and ice caps. The sulfur dioxide levels in the State are well below the maximum standards.	Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient sulfur dioxide levels. It is not clear whether the two pollutants act synergistically or one pollutant alone is the predominant factor.			

<sup>&</sup>lt;sup>39</sup> U.S. Environmental Protection Agency (EPA). Criteria Air Pollutants. Accessed July 2023 at: <a href="https://www.epa.gov/criteria-air-pollutants">https://www.epa.gov/criteria-air-pollutants</a>.

#### **Toxic Air Contaminants**

A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations.

The California Almanac of Emissions and Air Quality—2009 Edition presents the relevant concentration and cancer risk data for the ten TACs that pose the most substantial health risk in California based on available data. The ten TACs are acetaldehyde, benzene, 1.3-butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, perchloroethylene, and diesel particulate matter (DPM).

# **DPM**

Some studies indicate that DPM poses the greatest health risk among the TACs listed above. A 10-year research program demonstrated that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic health risk. In addition to increasing the risk of lung cancer, exposure to diesel exhaust can have other health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. Diesel exhaust is a major source of fine particulate pollution as well, and studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems.

For purposes of this analysis, DPM exhaust emissions are represented as PM10.

The Project would generate passenger vehicle and truck trips from employees, visitors, deliveries, and service vehicles traveling to and from the project site. The main source of DPM from the long-term operations of the Project would be from combustion of diesel fuel in diesel-powered engines in on-road trucks, while additional DPM would be emitted from on-site equipment. On-site motor vehicle emissions refer to DPM exhaust emissions from the motor vehicle traffic that would travel and idle within the project site each day.

#### Asbestos

Asbestos is the name given to a number of naturally occurring fibrous silicate minerals that have been mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. The three most common types of asbestos are chrysotile, amosite, and crocidolite. Chrysotile, also known as white asbestos, is the most common type of asbestos found in buildings.

Chrysotile makes up approximately 90 to 95 percent of all asbestos contained in buildings in the United States. Exposure to asbestos is a health threat; exposure to asbestos fibers may result in health issues such as lung cancer, mesothelioma (a rare cancer of the thin membranes lining the lungs, chest, and abdominal cavity), and asbestosis (a non-cancerous lung disease that causes scarring of the lungs). Exposure to asbestos can occur during demolition or remodeling of buildings that were constructed prior to the 1977 ban on asbestos for use in buildings. Exposure to naturally occurring asbestos can occur during soil-disturbing activities in areas with deposits present.

# **Regulatory Setting**

As noted previously, both the federal government (through the United State EPA) and the State of California (through the California ARB) have established health-based ambient air quality standards (AAQS) for six air pollutants, commonly referred to as "criteria pollutants." The six criteria pollutants are: carbon monoxide (CO), ozone (O<sub>3</sub>), sulfur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>), particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), and lead (Pb).

Federal

# Federal Clean Air Act

"The Federal Clean Air Act (CAA), adopted in 1970 and amended twice thereafter (including the 1990 amendments), establishes the framework for modern air pollution control. The act directs the Environmental Protection Agency (EPA) to establish ambient air standards, the National Ambient Air Quality Standards (NAAQS)... for six pollutants: ozone, carbon monoxide, lead, nitrogen

dioxide, particulate matter (less than 10 microns in diameter  $[PM_{10}]$  and less than 2.5 microns in diameter  $[PM_{2.5}]$ ), and sulfur dioxide. The standards are divided into primary and secondary standards; the former are set to protect human health with an adequate margin of safety and the latter to protect environmental values, such as plant and animal life.

Areas that do not meet the ambient air quality standards are called "non-attainment areas". The Federal CAA requires each state to submit a State Implementation Plan (SIP) for non-attainment areas. The SIP, which is reviewed and approved by the EPA, must demonstrate how the federal standards will be achieved. Failing to submit a plan or secure approval could lead to the denial of federal funding and permits for such improvements as highway construction and sewage treatment plants. For cases in which the SIP is submitted by the State but fails to demonstrate achievement of the standards, the EPA is directed to prepare a federal implementation plan or EPA can "bump up" the air basin in question to a classification with a later attainment date that allows time for additional reductions needed to demonstrate attainment, as is the case for the San Joaquin Valley.

SIPs are not single documents. They are a compilation of new and previously submitted plans, programs (such as monitoring, modeling, permitting, etc.), district rules, state regulations and federal controls. The California SIP relies on the same core set of control strategies, including emission standards for cars and heavy trucks, fuel regulations and limits on emissions from consumer products. California State law makes CARB the lead agency for all purposes related to the SIP. Local Air Districts and other agencies, such as the Bureau of Automotive Repair and the Department of Pesticide Regulation, prepare SIP elements and submit them to CARB for review and approval. The CARB forwards SIP revisions to the EPA for approval and publication in the Federal Register."

The Federal CAA classifies nonattainment areas based on the severity of the nonattainment problem, with marginal, moderate, serious, severe, and extreme nonattainment classifications for ozone. Nonattainment classifications for PM range from marginal to serious. The Federal CAA requires areas with air quality violating the NAAQS to prepare an air quality control plan referred to as the State Implementation Plan (SIP). The SIP contains the strategies and control measures that states will use to attain the NAAQS. The Federal CAA amendments of 1990 require states containing areas that violate the NAAQS to revise their SIP to incorporate additional control measures to reduce air pollution. The SIP is periodically modified to reflect the latest emissions inventories, planning documents, rules, and regulations of Air Basins as reported by the agencies with jurisdiction over them. The EPA reviews SIPs to determine if they conform to the mandates of the Federal CAA amendments and will achieve air quality goals when implemented. If the EPA determines a SIP to be inadequate, it may prepare a Federal Implementation Plan (FIP) for the nonattainment area and impose additional control measures.

State

# The California Clean Air Act

"The California CAA of 1988 establishes an air quality management process that generally parallels the federal process. The California CAA, however, focuses on attainment of the State ambient air quality standards (see Table 3.3-1 [of the General Plan RDEIR]), which, for certain pollutants and averaging periods, are more stringent than the comparable federal standards. Responsibility for meeting California's standards is addressed by the CARB and local air pollution control districts (such as the eight county SJVAPCD, which administers air quality regulations for Tulare County). Compliance strategies are presented in district-level air quality attainment plans.

The California CAA requires that Air Districts prepare an air quality attainment plan if the district violates State air quality standards for criteria pollutants including carbon monoxide, sulfur dioxide, nitrogen dioxide, PM2.5, or ozone. Locally prepared attainment plans are not required for areas that violate the State PM10 standards. The California CAA requires that the State air quality standards be met as expeditiously as practicable but does not set precise attainment deadlines. Instead, the act established increasingly stringent requirements for areas that will require more time to achieve the standards."<sup>41</sup>

"The air quality attainment plan requirements established by the California CAA are based on the severity of air pollution caused by locally generated emissions. Upwind air pollution control districts are required to establish and implement emission control programs commensurate with the extent of pollutant transport to downwind districts."

# The California Air Resources Board

<sup>&</sup>lt;sup>40</sup> Tulare County General Plan 2030 Update REIR. Pages 3.3-1 to 3.3-2.

<sup>&</sup>lt;sup>41</sup> Ibid. 3.3-2 to 3.3-3.

<sup>&</sup>lt;sup>42</sup> Op. Cit. 3.3-5.

The ARB is the state agency responsible for implementing the federal and state Clean Air Acts. ARB established CAAQS, which includes all criteria pollutants established by the NAAQS, but with additional regulations for visibility reducing particles, sulfates, hydrogen sulfide (H<sub>2</sub>S), and vinyl chloride.

"The CARB is responsible for establishing and reviewing the State ambient air quality standards, compiling the California SIP and securing approval of that plan from the U.S. EPA. As noted previously, federal clean air laws require areas with unhealthy levels of ozone, inhalable particulate matter, carbon monoxide, nitrogen dioxide, and sulfur dioxide to develop SIPs. SIPs are comprehensive plans that describe how an area will attain NAAQS. The 1990 amendments to the Federal CAA set deadlines for attainment based on the severity of an area's air pollution problem. State law makes CARB the lead agency for all purposes related to the SIP. The California SIP is periodically modified by the CARB to reflect the latest emission inventories, planning documents, and rules and regulations of various air basins. The CARB produces a major part of the SIP for pollution sources that are statewide in scope; however, it relies on the local Air Districts to provide emissions inventory data and additional strategies for sources under their jurisdiction. The SIP consists of the emission standards for vehicular sources and consumer products set by the CARB, and attainment plans adopted by the local air agencies as approved by CARB. The EPA reviews the air quality SIPs to verify conformity with CAA mandates and to ensure that they will achieve air quality goals when implemented. If EPA determines that a SIP is inadequate, it may prepare a FIP for the nonattainment area and may impose additional control measures.

In addition to preparation of the SIP, the CARB also regulates mobile emission sources in California, such as construction equipment, trucks, automobiles, and oversees the activities of air quality management districts and air pollution control districts, that are organized at the county or regional level. The local or regional Air Districts are primarily responsible for regulating stationary emission sources at industrial and commercial facilities within their jurisdiction and for preparing the air quality plans that are required under the Federal CAA and California CAA."

Local

#### San Joaquin Valley Air Pollution Control District

The Air District is the local agency charged with preparing, adopting, and implementing mobile, stationary, and area air emission control measures and standards. The Air District has several rules and regulations that may apply to the Project, following is an example of those rules/regulations which likely apply to this Project:

- ➤ Rule 3135 (Dust Control Plan Fees) This rule requires the project applicant to submit a fee in addition to a Dust Control Plan. The purpose of this rule is to recover the Air District's cost for reviewing these plans and conducting compliance inspections.
- Rule 4002 (National Emission Standards for Hazardous Air Pollutants) Also known as NESHAPs, this rule applies to all sources of hazardous air pollution and requires developers to comply with federal requirements for handling and usage of hazardous air pollutants (HAPs) to protect the health and safety of the public from HAPs such as asbestos.
- > Rule 4101 (Visible Emissions) This rule applies to any source of air contaminants and prohibits the visible emissions of air contaminants.
- ➤ Rule 4102 (Nuisance) This rule applies to any source of air contaminants and prohibits any activity which creates a public nuisance.
- ➤ Rule 4601 (Architectural Coatings) This rule specifies requirements for the storage, cleanup, and labeling of architectural coatings. The rule applies to any person who supplies, sells, offers for sale, applies, or solicits the application of any architectural coating, or who manufactures, blends or repackages any architectural coating for use within the Air District.
- ➤ Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations) This rule applies to the manufacture and use of cutback asphalt, slow cure asphalt and emulsified asphalt for paving and maintenance operations.
- ➤ Regulation VIII (Fugitive PM10 Prohibitions) This regulation is a series of eight rules designed to reduce PM<sub>10</sub> emissions by reducing fugitive dust emissions. Regulation VIII requires implementation of control measures to ensure that visible dust emissions are substantially reduced.

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<sup>&</sup>lt;sup>43</sup> Op. Cit. 3.3-6 to 3.3-7.

➤ Rule 9510 (Indirect Source Review) – Also known as ISR, this rule requires developers to mitigate project emissions through 1) on-site design features that reduce trips and vehicle miles traveled, 2) controls on other emission sources, and 3) with reductions obtained through the payment of a mitigation fee used to fund off-site air quality mitigation projects. Rule 9510 requires construction-related NOx emission reductions of 20 percent and PM10 exhaust reductions of 45 percent and operation-related NOx reductions of 33 percent and PM10 exhaust reductions of 50 percent.

The Air District has established thresholds of significance for criteria pollutant emissions. The Air District has three sets of significance thresholds based on the source of the emissions. Long-term (operational) emissions are separated into permitted and non-permitted equipment and activities. Stationary (permitted) sources that comply or will comply with Air District rules and regulations are generally not considered to have a significant air quality impact. The Air District's significance thresholds are provided in **Table 3-4** (Table 5 in the Memo).

Ta	Table 5. Air District Criteria Pollutant Significance Thresholds <sup>44</sup>					
Pollutant/ Precursor	Construction Emissions	Permitted Fauinment   Non-Permitted Fa				
	Emissions (tpy)	<b>Emissions</b> (tpy)	<b>Emissions</b> (tpy)			
СО	100	100	100			
NOx	10	10	10			
ROG	10	10	10			
SOx	27	27	27			
$PM_{10}$	15	15	15			
PM <sub>2.5</sub>	15	15	15			

## Tulare County General Plan 2030 Update

The following Tulare County General Plan 2030 Update policies for this resource apply to this Project: AQ-1.1 Cooperation with Other Agencies requiring the County to cooperate with other local, regional, Federal, and State agencies (e.g., Air District) in developing and implementing air quality plans to achieve State and federal Ambient Air Quality Standards to achieve better air quality conditions locally and regionally; AQ-1.2 Cooperation with Local Jurisdictions requiring the County to coordinate with regional agencies, such as the Air District, to address cross-jurisdictional air quality issues; AQ-1.3 Cumulative Air Quality Impacts requiring development to be located, designed, and construction in a manner that minimizes cumulative air quality impacts; AQ-1.4 Air Quality Land Use Compatibility requiring the County to evaluate compatibility of proposed land uses; AQ-1.5 California Environmental Quality Act (CEQA) Compliance where the County will ensure that air quality impacts identified during the CEQA review process are consistently and reasonable mitigated when feasible; AQ-2.2 Indirect Source Review regarding mitigating major development projects, as defined by the SJVAPCD, to reasonably mitigate air quality impacts associated with the project. The County shall notify developers of SJVAPCD Rule 9510 – Indirect Source Review requirements and work with SJVAPCD to determine mitigations, as feasible, that may include, but are not limited to the following:

- 1. Providing bicycle access and parking facilities,
- 2. Increasing density,
- 3. Encouraging mixed use developments,
- 4. Providing walkable and pedestrian-oriented neighborhoods,
- 5. Providing increased access to public transportation,
- 6. Providing preferential parking for high-occupancy vehicles, carpools, or alternative fuels vehicles, and
- 7. Establishing telecommuting programs or satellite work centers.

AQ-3.2 Infill near Employment requiring the County of identify opportunities for infill development near employment areas; AQ-3.4 Landscape regarding the use of ecologically based landscape design principles that can improve local air quality by absorbing CO<sub>2</sub>, producing oxygen, providing shade that reduces energy required for cooling, and filtering particulates; AQ-3.6 Mixed Land Uses where the County shall encourage the clustering of land uses that generate high trip volumes, especially when such uses can be mixed with support services and where they can be served by public transportation; AQ-4.1 Air Pollution Control Technology where the County shall utilize the BACM and RACM as adopted by the County to support SJVAPCD air quality attainment plans to achieve and maintain healthful air quality and high visibility standards. These measures shall be applied to new development approvals and permit modifications as appropriate; and AQ-4.2 Dust Suppression Measures regarding

Initial Study/Mitigated Negative Declaration Tulare CSG 2 Solar Project (PSP 23-059)

<sup>&</sup>lt;sup>44</sup> Air District, Air Quality Thresholds of Significance – Criteria Pollutants, accessed July 2023 at: <a href="http://www.valleyair.org/transportation/0714-GAMAQI-Criteria-Pollutant-Thresholds-of-Significance.pdf">http://www.valleyair.org/transportation/0714-GAMAQI-Criteria-Pollutant-Thresholds-of-Significance.pdf</a>.

implementation of dust suppression measures during excavation, grading, and site preparation activities consistent with Air District Regulation VIII – Fugitive Dust Prohibitions. Techniques may include, but are not limited to, the following:

- 1. Site watering or application of dust suppressants,
- 2. Phasing or extension of grading operations,
- 3. Covering of stockpiles,
- 4. Suspension of grading activities during high wind periods (typically winds greater than 25 miles per hour), and
- 5. Re-vegetation of graded areas.

## **Modeling Assumptions**

Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and prevailing weather conditions. Construction emissions result from on-site and off-site activities. On-site emissions principally consist of exhaust emissions from the activity levels of heavy-duty construction equipment, motor vehicle operation, and fugitive dust (mainly PM10) from disturbed soil. Additionally, paving operations and application of coatings would release VOC emissions. Off-site emissions are caused by motor vehicle exhaust from delivery vehicles, worker traffic, and road dust (PM10 and PM2.5). Operational emissions are those emissions that would occur during long-term operations of the Project.

Construction and operational modeling assumptions are discussed and analyzed in detail in the Air Quality and Greenhouse Gas Emissions Technical Memo (Memo) prepared by RMA staff, Jessica Willis, Planner IV (see Attachment "A" of this document). Criteria pollutant emissions calculations are provided in Attachment "A" of the Air Quality and Greenhouse Gas Emissions Technical Memorandum for the Tulare CSG 2 Solar Project prepared by consulting firm Dudek (Dudek Memo) found in Attachment "A" of this document.

A Health Risk Prioritization Screening was completed to evaluate potential health risks associated with the generation of TACs, specifically DPM, during construction activities associated with the Project. Assumptions used in the Prioritization Screening, including Thresholds of Significance, and complete calculation parameters are provided in Attachment "A" of the Dudek Memo, found in Attachment "A" of this document.

# **Project Impact Analysis:**

a) Less Than Significant Impact: Air Quality Plans (AQPs) are plans for reaching attainment of air quality standards. The assumptions, inputs, and control measures are analyzed to determine if the Air Basin can reach attainment for the ambient air quality standards. The Project site is located within the jurisdictional boundaries of the San Joaquin Valley Unified Air Pollution Control District (Air District). To show attainment of the standards, the Air District analyzes the growth projections in the Valley, contributing factors in air pollutant emissions and formations, and existing and adopted emissions controls. The Air District then formulates a control strategy to reach attainment that includes both State and Air District regulations and other local programs and measures. For projects that include stationary sources of emissions, the Air District relies on project compliance with Rule 2201—New and Modified Stationary Source Review to ensure that growth in stationary source emissions would not interfere with the applicable AQP. Projects exceeding the offset thresholds included in the rule are required to purchase offsets in the form of Emission Reduction Credits (ERCs).

The CEQA Guidelines indicate that a significant impact would occur if the project would conflict with or obstruct implementation of the applicable air quality plan. The GAMAQI indicates that projects that do not exceed Air District regional criteria pollutant emissions quantitative thresholds would not conflict with or obstruct the applicable AQP. An additional criterion regarding the project's implementation of control measures was assessed to provide further evidence of the project's consistency with current AQPs. This document proposes the following criteria for determining project consistency with the current AQPs:

- 1. Will the project result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQPs? This measure is determined by comparison to the regional and localized thresholds identified by the District for Regional and Local Air Pollutants.
- 2. Will the project comply with applicable control measures in the AQPs?

The use of the criteria listed above is a standard approach for CEQA analysis of projects in the Air District's jurisdiction, as well as within other air districts, for the following reasons:

- Significant contribution to existing or new exceedances of the air quality standards would be inconsistent with the goal of attaining the air quality standards.
- AQP emissions inventories and attainment modeling are based on growth assumptions for the area within the air district's jurisdiction.
- AQPs rely on a set of air district-initiated control measures as well as implementation of federal and state measures to reduce emissions within their jurisdictions, with the goal of attaining the air quality standards.

## Contribution to Air Quality Violations

The primary source of emissions from the proposed Project are the result of on-site construction equipment and on-road hauling of construction materials. The Air District evaluates significance of short-term (construction) emissions independent of long-term (operational) emissions. As discussed in Impact 3-b) below, Project-related emissions during construction and operations will not exceed the Air District's CEQA significance thresholds for any criteria pollutant. Therefore, the proposed Project would not be considered to obstruct implementation of the applicable air quality plan or be in conflict with the applicable air quality plan.

# Air Quality Plan Control Measures

The AQP contains a number of control measures that are enforceable requirements through the adoption of rules and regulations. The following rules and regulations, including but not limited to, may be relevant to the project:

Rule 2201—New and Modified Stationary Source Review Rule. The review of new and modified Stationary Sources of air pollution and to provide mechanisms including emission trade-offs by which Authorities to Construct such sources may be granted, without interfering with the attainment or maintenance of Ambient Air Quality Standards

Rule 4201—Particulate Matter Concentration. This rule shall apply to any source operation that emits or may emit dust, fumes, or total suspended particulate matter.

Rule 4601—Architectural Coatings. The purpose of this rule is to limit Volatile Organic Compounds (VOC) emissions from architectural coatings. Emissions are reduced by limits on VOC content and providing requirements on coatings storage, cleanup, and labeling. Only compliant components are available for purchase in the San Joaquin Valley.

Rule 4641—Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations. The purpose of this rule is to limit VOC emissions from asphalt paving and maintenance operations. If asphalt paving will be used, then the paving operations will be subject to Rule 4641. This regulation is enforced on the asphalt provider.

Rule 4702—Internal Combustion Engines. The purpose of this rule is to limit the emissions of NOx, carbon monoxide (CO), VOC, and sulfur oxides (SOx) from internal combustion engines. If the project includes emergency generators, the equipment is required to comply with Rule 4702.

Regulation VIII—Fugitive PM10 Prohibitions. This regulation is a control measure that is one main strategies from the 2006 PM10 for reducing the PM10 emissions that are part of fugitive dust. Projects over 10 acres are required to file a Dust Control Plan (DCP) containing dust control practices sufficient to comply with Regulation VIII. Rule 8021 regulates construction and demolition activities, road construction, bulk materials storage, paved and unpaved roads, carryout and trackout, etc. All development projects that involve soil disturbance are subject to at least one provision of the Regulation VIII series of rules.

The Project would be required to comply with all applicable CARB and Air District rules and regulations. Therefore, the Project complies with this criterion and would not conflict with or obstruct implementation of the applicable air quality attainment plan.

## Conclusion

The Project's emissions would be less than significant for all criteria pollutants and would not result in inconsistency with the AQP for this criterion. The Project would comply with all applicable rules and regulations from the applicable air quality plans. Considering the Project's less-than-significant contribution to air quality violations and the project's adherence to

applicable rules and regulations, the Project's would not be considered inconsistent with the AQP; the impact would be less than significant.

b) Less Than Significant Impact: To result in a less than significant impact, emissions of nonattainment pollutants must be below the Air District's regional significance thresholds. This is an approach recommended by the Air District in its GAMAQI. The SJVAB is in nonattainment for ozone, PM10 (State only), and PM2.5. Ozone is a secondary pollutant that can be formed miles from the source of emissions, through reactions of ROG and NOx emissions in the presence of sunlight. Therefore, ROG and NOx are termed "ozone precursors." As such, the primary pollutants of concern during project construction- and operation-related activities are ROG, NOx, PM10, and PM2.5.

### Criteria Pollutant Emissions (Regional)

The Air District's GAMAQI contains thresholds of significance for CO, NO<sub>X</sub>, ROG, SO<sub>X</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. The Air District's guidance states that if project-specific criteria pollutant emissions exceed the thresholds of significance then the Project would be expected to result in a cumulatively considerable net increase of those emissions. As presented in **Table 3-5** (Table 10 in the Memo) project construction- and operational-related emissions would not exceed the Air District annual thresholds of significance for any criteria pollutant. Therefore, the Project would have less than significant impact on a project basis and would not result in a cumulatively considerable net increase of any criteria pollutant.

Table 3-5. Project Emissions <sup>45</sup>								
Emissions Type	Tons per Year							
Emissions Type	ROG	NOx	CO	SO <sub>2</sub>	PM <sub>10</sub> Total	PM <sub>2.5</sub> Total		
Construction	0.08	0.92	1.20	< 0.005	0.11	0.05		
Operation	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005		
Air District Threshold	10	10	100	27	15	15		
Threshold Exceeded?	NO	NO	NO	NO	NO	NO		

# Ambient Air Quality Analysis Screening (Local)

If the project would result in an exceedance of the applicable ambient air quality standards, the project would be considered to have a cumulatively significant impact on air quality. As such, the Air District also provides guidance for the use of Ambient Air Quality Analysis (AAQA) screening to determine whether a project may exceed any federal or state standards. Based on the emissions presented in **Table 3-5**, daily construction and operational criteria pollutant emissions will not exceed the Air District's 100 pounds per day screening threshold. Therefore, the Project would not result in a cumulatively considerable net increase of any criteria pollutant and the Project would have a less than significant impact to this Checklist Item.

### Conclusion

As shown in **Table 3-5**, the Project's regional emissions would not exceed the applicable regional criteria pollutant emissions quantitative thresholds. In addition, any permitted sources will be required to comply with Air District BACT requirements. Therefore, the Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment. The proposed Project will not result in emissions that would exceed the District's annual criteria pollutant thresholds, nor will it cause an exceedance of the Air District's AAQA screening thresholds. Therefore, the Project will have a less than significant impact related to this Checklist Item.

c) Less Than Significant Impact: Emissions occurring at or near the Project have the potential to create a localized impact that could expose sensitive receptors to substantial pollutant concentrations. Sensitive receptors are considered land uses or other types of population groups that are more sensitive to air pollution than others due to their exposure. Sensitive population groups include children, the elderly, the acutely and chronically ill, and those with cardio-respiratory diseases. The SJVAPCD considers a sensitive receptor to be a location that houses or attracts children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Examples of sensitive receptors include hospitals, residences, convalescent facilities, and schools. The nearest existing sensitive receptors to the Project development areas are a rural residence located approximately 1,200 feet south of the Project development area.

# **Localized Criteria Pollutant Impacts**

<sup>&</sup>lt;sup>45</sup> Data was obtained from Tables 4 and 5 of the Dudek Technical Memo provided in Attachment A.

Emissions occurring at or near the Project have the potential to create a localized impact (also referred to as an air pollutant hotspot). Localized emissions are considered significant if when combined with background emissions, they would result in exceedance of any health-based air quality standard. In locations that already exceed standards for these pollutants, significance is based on a significant impact level (SIL) that represents the amount that is considered a cumulatively considerable contribution to an existing violation of an air quality standard. The pollutants of concern for localized impact in the SJVAB are  $NO_2$ ,  $SO_X$ , and CO.

The Air District has provided guidance for screening localized impacts in the GAMAQI that establishes a screening threshold of 100 pounds per day of any criteria pollutant. If a project exceeds 100 pounds per day of any criteria pollutant, then ambient air quality modeling would be necessary. If the project does not exceed 100 pounds per day of any criteria pollutant, then it can be assumed that it would not cause a violation of an ambient air quality standard and health risks would be considered less than significant.

As noted in Checklist Item 3-b) above, Project construction and operational emissions would not exceed the 100 pounds per day screening threshold for each of the criteria pollutants. Therefore, based on the Air District's guidance, the Project would not cause a violation of any ambient air quality standards and an AAQA would not be required. As such, the Project would not expose nearby receptors to substantial criteria pollutant emissions and impacts would be less than significant.

# Toxic Air Contaminants

Diesel particulate matter (DPM) represents the primary toxic air contaminates (TAC) of concern associated with the proposed Project. DPM emissions are primarily the result of the operation of internal combustion engines in equipment (e.g., loaders, backhoes, and cranes, as well as haul trucks) commonly associated with construction-related activities and with on-road diesel fueled truck trips during both construction- and operational-related activities.

The Air District recommends conducting a screening analysis for projects that have the potential to expose sensitive receptors to TAC emissions (e.g. DPM during project construction-related activities) that could pose a significance health risk. The Air District has devolved a prioritization tool to evaluate whether a Health Risk Assessment (HRA) should be prepared, which is based on the California Air Pollution Control Officers Association's (CAPCOA) latest methodology and OEHHA guidance. According to the Air District guidance, projects that obtain a prioritization score of ≥1 or more is considered to be potentially significant and a refined analysis would be required to determine the project's potential health risks.

Since activities associated with the operations of the proposed Project would result in short-term, temporary, and intermittent use of mobile sources of DPM, which are required to comply with all applicable ARB emissions standard rules and regulations, operation-related activities of the proposed Project would not expose nearby sensitive receptors to substantial DPM emissions. Therefore, health risks associated only with proposed Project construction-related activities have been evaluated.

The Air District's prioritization screening tool was used to evaluate the potential health risks of the Project's construction-related activities, specifically DPM emissions. As indicated in the Dudek Memo, the Project resulted in a prioritization score of 4.6 which exceeds the Air District's threshold score of 1. As the prioritization score is less than 10 an HRA is not required; however, the score indicates that a refined analysis is required.

The operation of each piece of equipment within the proposed Project site would not be constant throughout the day and all the equipment would not operate concurrently at the same location of the proposed Project construction-related area. The prioritization screening tool assumes a 70-year exposure and as such, is likely to overestimate potential health risks as Project-related construction activities will be completed within eight (6) months (or 0.7% of the exposure time utilized by the tool). Although the Project is not expected to result in significant health risk to the nearby receptors due to the temporary and intermittent nature of construction activities, a Condition of Approval requiring the Project applicant to consult with the Air District and obtain a refined analysis will be incorporated into the Project. Results of this analysis shall be provided to Tulare County Resource Management Agency's Planning Division prior to Project approval. Therefore, with implementation of the Condition of Approval, Project construction-related activities would result in less than significant health risks. As such, less than significant Project-specific impacts related to this Checklist Item will occur.

# Valley Fever

Valley fever, or coccidioidomycosis, is an infection caused by inhalation of the spores of the fungus, *Coccidioides immitis* (*C. immitis*). The spores live in soil and can live for an extended time in harsh environmental conditions. Activities or conditions that increase the amount of fugitive dust contribute to greater exposure, and they include dust storms, grading, and recreational off-road activities.

The San Joaquin Valley is considered an endemic area for Valley fever. Each year in California, there are around 80 deaths from Valley fever and more than 1,000 people are hospitalized with it. Valley fever is most commonly reported among residents of the counties of the southern Central Valley and Central Coast of California. During 2020-2021, a total of 15,282 new coccidioidomycosis cases were reported in California; statewide annual incidence was 18.2 cases per 100,000 population in 2021 and 20.1 cases per 100,000 population in 2021; the largest increase of new cases occurred in Kern County with the next highest rates reported in Kings, Tulare, San Luis Obispo, Fresno, Merced, and Monterey counties. A total of 309 Valley fever cases were reported in Tulare County in 2020 (an incidence rate of 64.3 per 100,000 in 2020) and 317 cases were reported in 2021 (an incidence rate of 65.8 per 100,000).

The distribution of *C. Immitis* within endemic areas is not uniform and growth sites are commonly small (a few tens of meters) and widely scattered. Known sites appear to have some ecological factors in common suggesting that certain physical, chemical, and biological conditions are more favorable for *C. immitis* growth. Avoidance, when possible, of sites favorable for the occurrence of *C. immitis* is a prudent risk management strategy. Listed below are ecologic factors and sites favorable for the occurrence of *C. immitis*:

- 1) Rodent burrows (often a favorable site for *C. immitis*, perhaps because temperatures are more moderate and humidity higher than on the ground surface)
- 2) Old (prehistoric) Indian campsites near fire pits
- 3) Areas with sparse vegetation and alkaline soils
- 4) Areas with high salinity soils
- 5) Areas adjacent to arroyos (where residual moisture may be available)
- 6) Packrat middens
- 7) Upper 30 centimeters of the soil horizon, especially in virgin undisturbed soils
- 8) Sandy, well-aerated soil with relatively high water-holding capacities

Sites within endemic areas less favorable for the occurrence of *C. immitis* include:

- 1) Cultivated fields
- 2) Heavily vegetated areas (e.g., grassy lawns)
- 3) Higher elevations (above 7,000 feet)
- 4) Areas where commercial fertilizers (e.g., ammonium sulfate) have been applied
- 5) Areas that are continually wet
- 6) Paved (asphalt or concrete) or oiled areas
- 7) Soils containing abundant microorganisms
- 8) Heavily urbanized areas where there is little undisturbed virgin soil.<sup>47</sup>

The Project is located on a currently disturbed site that does not provide a suitable habitat for spores. Specifically, the Project site has been previously and currently remains undisturbed (fallow) and does not include agricultural-related activities typically used to grow any crop types. Therefore, implementation of the Project would have a low probability of the site having *C. immitis* growth sites and exposure to the spores from disturbed soil.

Although conditions are not favorable, construction-related activities could generate fugitive dust that contain *C. immitis* spores. The sed Project will minimize the generation of fugitive dust during construction-related activities by complying with SJVAPCD's Regulation VIII. Therefore, this Regulation, combined with the relatively low probability of the presence of *C. immitis* spores would reduce Valley fever impacts to less than significant.

During operations-related activities, dust emissions are anticipated to be relatively small because most of the Project area where operational-related activities would occur have been previously cultivated and have had commercial fertilizers applied, and would be occupied by solar panels and internal access roads that are required to be stabilized pursuant to Air District dust control regulations. This condition would decrease the possibility of the Project providing habitat suitable for *C. immitis* spores and for generating fugitive dust that may contribute to Valley fever exposure. Impacts would be less than significant.

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<sup>46</sup> California Department of Public Health, Epidemiologic Summary of Valley Fever (Coccidioidomycosis) in California, 2020-2021. Accessed July 2023 at: <a href="https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/CocciEpiSummary2020-2021.pdf">https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/CocciEpiSummary2020-2021.pdf</a>.

<sup>&</sup>lt;sup>47</sup> United States Geological Survey, Operational Guidelines (version 1.0) for Geological Fieldwork in Areas Endemic for Coccidioidomycosis (Valley Fever), 2000, Pages 11-12. Accessed July 2023 at: <a href="https://pubs.usgs.gov/of/2000/0348/pdf/of00-348.pdf">https://pubs.usgs.gov/of/2000/0348/pdf/of00-348.pdf</a>.

## Naturally Occurring Asbestos

A review of the map of areas where naturally occurring asbestos in California are likely to occur does not indicate that the Project area would contain naturally occurring asbestos. Furthermore, the Project would be required to comply with Air District Regulation VIII requirements that would reduce dust emissions. Therefore, development of the Project is not anticipated to expose receptors to naturally occurring asbestos. 48 Impacts would be less than significant.

### Conclusion

In summary, the proposed Project would not exceed SJVAPCD localized emission daily screening levels for any criteria pollutant. The proposed Project is not a significant source of TAC emissions during construction or operation. The posed Project is not in an area with suitable habitat for Valley fever spores and is not in an area known to have naturally occurring asbestos. Therefore, the Project would not result in significant impacts to sensitive receptors.

d) Less Than Significant Impact: Two situations create a potential for odor impact. The first occurs when a new odor source is located near an existing sensitive receptor. The second occurs when a new sensitive receptor locates near an existing source of odor. The Project is of the first type only since it involves a potential new odor source and would not locate any new sensitive receptors.

Odor impacts on residential areas and other sensitive receptors, such as hospitals, day-care centers, schools, etc. warrant the closest scrutiny, but consideration should also be given to other land uses where people may congregate, such as recreational facilities, worksites, and commercial areas.

Although the Project is approximately 1,200 feet from the nearest sensitive receptors, it is not anticipated to be a significant source of odors. The screening levels for these land use types are shown in **Table 3-6** (Table 9 in the Memo).

Table 3-6 <sup>49</sup> Screening Levels for Potential Odor Sources				
Odor Generator	<b>Screening Distance</b>			
Wastewater Treatment Facilities	2 miles			
Sanitary Landfill	1 mile			
Transfer Station	1 mile			
Composting Facility	1 mile			
Petroleum Refinery	2 miles			
Asphalt Batch Plant	1 mile			
Chemical Manufacturing	1 mile			
Fiberglass Manufacturing	1 mile			
Painting/Coating Operations (e.g., auto body shop)	1 mile			
Food Processing Facility	1 mile			
Feed Lot/Dairy	1 mile			
Rendering Plant	1 mile			
Wastewater Treatment Facilities	2 miles			

Construction-related activities would include fuels and other odor sources (such as diesel-fueled equipment) that could result in the creation of objectionable odors. Since construction-related activities would be short-term, temporary, and spatially dispersed (i.e., intermittent), and will occur in a predominantly rural area, these activities would not affect a substantial number of people. Less Than Significant Project-specific Impacts related to this Checklist Item will occur.

# **Cumulative Impact Analysis:** Less Than Significant Impact

The geographic area of this cumulative analysis is the San Joaquin Valley Air Basin. The Project's emissions would be less than significant for all criteria pollutants and would be consistent with the AQP for this criterion. The project would comply with all

<sup>&</sup>lt;sup>48</sup> California Department of Conservation, A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos, August 2000, accessed July 2023 at: https://www.fs.usda.gov/Internet/FSE\_DOCUMENTS/stelprdb5126473.pdf.

<sup>&</sup>lt;sup>49</sup> Air District, Air Quality Thresholds of Significance – Odors, accessed July 2023 at: <a href="https://www.valleyair.org/transportation/GAMAQI-2015/GAMAQI-Criteria-Pollutant-Thresholds-of-Odors.pdf">https://www.valleyair.org/transportation/GAMAQI-2015/GAMAQI-Criteria-Pollutant-Thresholds-of-Odors.pdf</a>.

applicable rules and regulations as specified in the applicable air quality plan(s). The project's less-than-significant contribution to air quality violations and its adherence to applicable rules and regulations would allow the project to remain consistent with the AQP; therefore, the cumulative impact would be less than significant. As shown in **Table 3-5**, the Project's regional emissions would not exceed the applicable regional criteria pollutant emissions quantitative thresholds. In addition, any permitted sources will be required to comply with Air District rules, regulations permit conditions, thresholds, (requirements), as applicable. Although the prioritization score exceeds the Air District's allowed score of 1, it is below the score of 10 which would require the preparation of an HRA; as such, the Project is not expected to result in significant health risk to the nearby receptors. A Condition of Approval requiring the Project applicant to consult with the Air District and obtain a refined analysis will be incorporated into the Project. Therefore, with implementation of the Condition of Approval, Project-related activities would result in less than significant health risks. The project would not generate a significant source of odors. Therefore, cumulative impacts of the Project are less than significant with mitigation.

Mitigation Measure(s): None Required.

## IV. BIOLOGICAL RESOURCES

Woul	d the project:	SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	No Impact
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				$\boxtimes$
c)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				$\boxtimes$
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				$\boxtimes$
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				$\boxtimes$
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				$\boxtimes$

The discussions regarding Environmental Setting, Regulatory Setting, CEQA requirements, Biological Resources, etc. contained in the Tulare County General Plan 2030 Update and Tulare County Environmental Impact Report are incorporated herein in their entirety. Where necessary and if available, additional site-specific facts, data, information, etc., are included in this discussion.

## **Environmental Setting**

The Rural Valley Lands Plan (RVLP) applies "to the Central Valley generally below the 600-foot elevation contour line along the foothills of the Sierra Nevada (including Valley Agricultural Extensions as described in Part II-Chapter 3) outside the County's Urban Development Boundaries (UDBs), Hamlet Development Boundaries (HDBs), Urban Area Boundaries (UABs) for cities, and other adopted land use plans which may include urban corridors, planned communities, and the Kings River Plan. Scenic and regional corridor plans may retain the RVLP subject to the policies developed in those plans (Part II-Figure 1-1: Rural Valley Lands Plan). The RVLP was initiated in order to establish minimum parcel sizes for areas zoned for agriculture and to develop a policy that is fair, logical, legally supportable, and which consistently utilizes resource information to determine the suitability of rural lands for non-agricultural uses."<sup>50</sup>

As noted earlier and summarized here, the Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear. The life of the Project is anticipated to be 30 years.

### **Biological Species Evaluation**

<sup>&</sup>lt;sup>50</sup> Tulare County General Plan 2030 Update, Part II – Area Plan Policies, Chapter 1 – Rural Valley Lands Plan.

The Technical Memorandum "Biological Resources Evaluation for Tulare 40 Generation Facility (PSP 23-012)" (BRE Memo) was completed by RMA Staff (Jessica Willis, Planner IV) in July 2023 to analyze potential impacts on biological species in the Project vicinity (See Attachment "B"). The most recent California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB), RareFind 5 and Biogeographic Information and Observation System (BIOS) mapping applications were accessed in July 2023. <sup>51</sup>

## Special Status Species

Based on the information in the CNDDB and BIOS, there are 40 species and natural communities; however, only 3 recorded special status species are located within the Project quadrangle and none are reported within 0.5 mile of the proposed Project boundaries. (see BRE Memo in Attachment "B").

## **Regulatory Setting**

**Federal** 

# Federal Endangered Species Act

"The U.S. Fish and Wildlife Service (USFWS) administers the Federal Endangered Species Act (16 USC Section 153 et seq.) and thereby has jurisdiction over federally listed threatened, endangered, and proposed species. Projects that may result in a "take" of a listed species or critical habitat must consult with the USFWS. "Take" is broadly defined as harassment, harm, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collection; any attempt to engage in such conduct; or destruction of habitat that prevents an endangered species from recovering (16 USC 1532, 50 CFR 17.3). Federal agencies that propose, fund, or must issue a permit for a project that may affect a listed species or critical habitat are required to consult with the USFWS under Section 7 of the Federal Endangered Species Act. If it is determined that a federally listed species or critical habitat may be adversely affected by the federal action, the USFWS will issue a "Biological Opinion" to the federal agency that describes minimization and avoidance measures that must be implemented as part of the federal action. Projects that do not have a federal nexus must apply for a take permit under Section 10 of the Act. Section 10 of the Act requires that the project applicant prepare a habitat conservation plan as part of the permit application (16 USC 1539)."<sup>52</sup>

"Under Section 4 of the Federal Endangered Species Act, a species can be removed, or delisted, from the list of threatened and endangered species. Delisting is a formal action made by the USFWS and is the result of a determined successful recovery of a species. This action requires posts in the federal registry and a public comment period before a final determination is made by the USFWS."<sup>53</sup>

### **Habitat Conservation Plans**

"Habitat Conservation Plans (HCPs) are required for a non-federal entity that has requested a take permit of a federal listed species or critical habitat under Section 10 of the Endangered Species Act. HCPs are designed to offset harmful effects of a proposed project on federally listed species. These plans are utilized to achieve long-term biological and regulatory goals. Implementation of HCPs allows development and projects to occur while providing conservation measures that protect federally listed species or their critical habitat and offset the incidental take of a proposed project. HCPs substantially reduce the burden of the Endangered Species Act on small landowners by providing efficient mechanisms for compliance with the ESA, thereby distributing the economic and logistic effects of compliance. A broad range of landowner activities can be legally protected under these plans (County of Tulare, 2010 Background Report, pages 9-6 and 9-7, 2010a). There are generally two types of HCPs, project-specific HCPs which typically protect a few species and have a short duration and multi-species HCPs which typically cover the development of a larger area and have a longer duration." <sup>54</sup>

As noted earlier, there are two habitat conservation plans that apply in Tulare County: The Kern Water Habitat Conservation Plan, which applies to an area in Allensworth; and the U.S. Fish and Wildlife's "The Recovery Plan for Upland Species in the San Joaquin Valley," which includes sensitive species in the San Joaquin Valley, several of which may be found in Tulare County. Also as noted earlier, the Project is not in the vicinity of Allensworth, thus the Kern Water Habitat Conservation Plan would not apply to this Project.

<sup>&</sup>lt;sup>51</sup> California Department of Fish and Wildlife (CDFW). Accessed July 2023 at: https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data#43018407-rarefind-5

<sup>&</sup>lt;sup>52</sup> Tulare County 2030 General Plan RDEIR. Page 3.11-1.

<sup>&</sup>lt;sup>53</sup> Ibid.

<sup>&</sup>lt;sup>54</sup> Op. Cit. 3.11-2.

#### Migratory Bird Treaty Act

"The Migratory Bird Treaty Act (MBTA, 16 USC Section 703-711) and the Bald and Golden Eagle Protection Act (16 USC Section 668) protect certain species of birds from direct "take". The MBTA protects migrant bird species from take by setting hunting limits and seasons and protecting occupied nests and eggs. The Bald and Golden Eagle Protection Act (16 USC Sections 668-668d) prohibits the take or commerce of any part of Bald and Golden Eagles. The USFWS administers both acts, and reviews federal agency actions that may affect species protected by the acts." The MBTA implements international treaties devised to protect migratory birds and any of their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. As authorized by the MBTA, the USFWS issues permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits are in 50 CFR part 13 General Permit Procedures and 50 CFR part 21 Migratory Bird Permits. The State of California has incorporated the protection of birds of prey in Sections 3800, 3013, and 3003.5 of the CDFG Code.

# Federal Clean Water Act (CWA)

"Wetlands and other waters of the U.S. are subject to the jurisdiction of the U.S. Army Corp of Engineers (USACE) and U.S. Environmental Protection Agency (U.S. EPA) under Section 404 of the Clean Water Act (33 U.S.C. 1251 et seq., 1972). Together, the EPA and the USACE determine whether they have jurisdiction over the non-navigable tributaries that are not relatively permanent based on a fact-specific analysis to determine if there is a significant nexus. These non-navigable tributaries include wetlands adjacent to non-navigable tributaries that are not relatively permanent and wetlands adjacent to but that does not directly abut a relatively permanent non-navigable tributary." The definition of waters of the United States includes rivers, streams, estuaries, the territorial seas, ponds, lakes, and wetlands. Wetlands are defined as those areas "that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions (33 CFR 328.3 7b)." The U.S. EPA also has authority over wetlands and may override an USACE permit. Substantial impacts to wetlands may require an individual permit. Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or Waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; this certification or waiver is issued by the Regional Water Quality Control Board.

State of California

# California Department of Fish and Wildlife (formerly Dept. of Fish and Game)

The California Department of Fish and Wildlife (DFW) regulates the modification of the bed, bank, or channel of a waterway under Sections 1601-1607 of the California Fish and Game Code. Also included are modifications that divert, obstruct, or change the natural flow of a waterway. Any party who proposes an activity that may modify a feature regulated by the Fish and Game Code must notify DFW before project construction. DFW will then decide whether to enter into a Streambed Alteration Agreement with the project applicant either under Section 1601 (for public entities) or Section 1603 (for private entities) of the Fish and Game Code.

#### California Endangered Species Act

The California Department of Fish and Wildlife (CDFE or DFW) administers the California Endangered Species Act 9 (CESA OR ESA) of 1984 (Fish and Game Code Section 2080), which regulates the listing and "take" of endangered and threatened State-listed species. A "take" may be permitted by California Department of Fish and Game [Wildlife] through implementing a management agreement. "Take" is defined by the California Endangered Species Act as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" a State-listed species (Fish and Game Code Sec. 86). Under State laws, DFW is empowered to review projects for their potential impacts to State-listed species and their habitats.

The DFW maintains lists for Candidate-Endangered Species (SCE) and Candidate-Threatened Species (SCT). California candidate species are afforded the same level of protection as State-listed species. California also designates Species of Special Concern (CSC) that are species of limited distribution, declining populations, diminishing habitat, or unusual scientific,

<sup>&</sup>lt;sup>55</sup> Tulare County 2030 General Plan RDEIR. Page 3.11-2.

<sup>&</sup>lt;sup>56</sup> Ibid. 3.11-1 and -2.

recreational, or educational value. These species do not have the same legal protection as listed species, but may be added to official lists in the future. The CSC list is intended by DFW as a management tool for consideration in future land use decisions (Fish and Game Code Section 2080).<sup>57</sup>

All State lead agencies must consult with DFW under the California Endangered Species Act when a proposed project may affect State-listed species. DFW would determine if a project under review would jeopardize or result in taking of a State-listed species, or destroy or adversely modify its essential habitat, also known as a "jeopardy finding" (Fish and Game Code Sec. 2090). For projects where DFW has made a jeopardy finding, DFW must specify reasonable and prudent alternatives to the proposed project to the State lead agency (Fish and Game Code Sec. 2090 et seq.). <sup>58</sup>

### **Fully Protected Species**

The State of California first began to designate species as fully protected prior to the creation of the CESA and FESA. Lists of fully protected species were initially developed to provide protection to those animals that were rare or faced possible extinction, and included fish, amphibians, reptiles, birds, and mammals. Most fully protected species have since been listed as threatened or endangered pursuant to the CESA and/or FESA. The regulations that implement the Fully Protected Species Statute (CDFG Code Section 4700) provide that fully protected species may not be taken or possessed at any time. Furthermore, the CDFG prohibits any state agency from issuing incidental take permits for fully protected species, except for necessary scientific research.

# Native Plant Protection Act

Regarding listed rare and endangered plant species, the CESA defers to the California Native Plant Protection Act (NPPA) of 1977 (CDFG Code Sections 1900 to 1913), which prohibits importing of rare and endangered plants into California, and the taking and selling of rare and endangered plants. The CESA includes an additional listing category for threatened plants that are not protected pursuant to NPPA. In this case, plants listed as rare or endangered pursuant to the NPPA are not protected pursuant to CESA, but can be protected pursuant to the CEQA. In addition, plants that are not state listed, but that meet the standards for listing, are also protected pursuant to CEQA (Guidelines, Section 15380). In practice, this is generally interpreted to mean that all species on lists 1B and 2 of the CNPS Inventory potentially qualify for protection pursuant to CEQA, and some species on lists 3 and 4 of the CNPS Inventory may qualify for protection pursuant to CEQA. List 3 includes plants for which more information is needed on taxonomy or distribution. Some of these are rare and endangered enough to qualify for protection pursuant to CEQA. List 4 includes plants of limited distribution that may qualify for protection if their abundance and distribution characteristics are found to meet the standards for listing.

# Natural Communities Conservation Planning Act

The Natural Communities Conservation Planning Act allows a process for developing natural community conservation plans (NCCPs) under DFW direction. NCCPs allow for regional protection of wildlife diversity, while allowing compatible development. DFW may permit takings of State-listed species whose conservation and management are provided in a NCCP, once a NCCP is prepared (Fish and Game Code Secs. 2800 et seq.).<sup>59</sup>

# Federally and State-Protected Lands

Ownership of California's wildlands is divided primarily between federal, state, and private entities. State-owned land is managed under the leadership of the Departments of Fish and Game (DFW), Parks and Recreation, and Forestry and Fire Protection (CDF). Tulare County has protected lands in the form of wildlife refuges, national parks, and other lands that have large limitations on appropriate land uses. Some areas are created to protect special status species and their ecosystems. <sup>60</sup>

## California Wetlands Conservation Policy

The California Wetlands Conservation Policy's goal is to establish a policy framework and strategy that will ensure no overall net loss and achieve a long-term net gain in the quantity, quality, and permanence of wetlands acreage and values in California. Additionally, the policy aims to reduce procedural complexity in the administration of State and federal wetlands conservation programs and to encourage partnerships with a primary focus on landowner incentive programs and cooperative planning efforts.

<sup>&</sup>lt;sup>57</sup> General Plan Background Report. Pages 9-7 and 9-8.

<sup>&</sup>lt;sup>58</sup> Ibid. 9-8.

<sup>&</sup>lt;sup>59</sup> Op. Cit.

<sup>60</sup> Op. Cit. 9-9.

These objectives are achieved through three policy means: statewide policy initiatives, three geographically based regional strategies in which wetland programs can be implemented, and creation of interagency wetlands task force to direct and coordinate administration and implementation of the policy. Leading agencies include the Resources Agency and the California Environmental Protection Agency (Cal/EPA) in cooperation with Business, Transportation and Housing Agency, Department of Food and Agriculture, Trade and Commerce Agency, Governor's Office of Planning and Research, Department of Fish and Game, Department of Water Resources, and the State Water Resources Control Board. 61

## Birds of Prey

Birds of Prey are protected under the California Fish and Game Code Section 3503.5, which states:

"It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto."

This includes any construction disturbance that could lead to nest abandonment, which is considered a "taking" by the DFW.

## CEQA and Oak Woodland Protection

CEQA Statute Section 21083.4, "Counties; Conversion of Oak Woodlands; Mitigation Alternatives," requires that counties determine whether a development will have potential impacts on oak woodlands:

21083.4(a): "For purposes of this section, "oak" means a native tree species in the genus Quercus, not designated as Group A or Group B commercial species pursuant to regulations adopted by the State Board of Forestry and Fire Protection pursuant to Section 4526, and that is 5 inches or more in diameter at breast height."

21083.4(b): "...a county shall determine whether a project within its jurisdiction may result in a conversion of oak woodlands that will have a significant effect on the environment. If a county determines that there may be a significant effect to oak woodlands, the county shall require one or more of the following oak woodlands mitigation alternatives to mitigate the significant effect of the conversion of oak woodlands:..."

### Local

The following Tulare County General Plan 2030 Update policies for this resource apply to the Project: *ERM-1.1 Protection of Rare and Endangered Species* which protects environmentally sensitive wildlife and plant life, including those species designated as rare, threatened, and/or endangered by State and/or Federal government, through compatible land use development; *ERM-1.4 Protect Riparian Areas* where the County shall protect riparian areas through habitat preservation, designation as open space or recreational land uses, bank stabilization, and development controls; *ERM-1.6 Management of Wetlands* where the County shall support the preservation and management of wetland and riparian plant communities for passive recreation, groundwater recharge, and wildlife habitats; *ERM-1.7 Planting of Native Vegetation* where the County shall encourage the planting of native trees, shrubs, and grasslands in order to preserve the visual integrity of the landscape, provide habitat conditions suitable for native vegetation and wildlife, and ensure that a maximum number and variety of well-adapted plants are maintained; and *ERM-1.16 Cooperate with Wildlife Agencies* which states that the County shall cooperate with State and federal wildlife agencies to address linkages between habitat areas.

# **Project Impact Analysis:**

a) Less Than Significant Impact: As noted earlier, the Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The life of the Project is anticipated to be 30 years. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The proposed Activity/Project does not propose any new developments or changes to the existing surrounding land uses. According to the applicant, selected vegetation located on the proposed Project site may be removed in order to accommodate the construction of the array and its appurtenances, as well as to prevent

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<sup>61</sup> Op. Cit.

shading on the array during operation. As there are no native trees located on the Project site, the Project will not require removal of any native valley oaks or other trees. Because the solar modules will be placed approximately 2 feet above grade, any vegetation taller than 2 feet or expected to exceed 2 feet in height will be removed. Grass and groundcover may remain between rows and under the solar modules. After construction the ground underneath the array will be reseeded with low growth, native pollinator species to promote soil stability. All cleared vegetation will either be chipped and spread on site or disposed of responsibly.

Consulting firm Dudek prepared a report, dated May 9, 2023, providing documentation regarding the potential impact the proposed Project may have on Swainson's hawk (SWHA; *Buteo swainsoni*). The report was prepared in support of the application submitted for the proposed Project (see Attachment "B"); and a Biological Resources Evaluation (BRE) technical memorandum (see Attachment "B") has been prepared by RMA staff to evaluate potential impacts that the proposed Project may have on any special status plant or animal species on and in the vicinity of the Project site. No special status species (or habitat) are located within the proposed Project area (see Attachment "B"); however, Swainson's hawk flight observations occurred within 0.5 miles away from the site. No jurisdictional waters are located within the proposed Project site (see Attachment "B").

According to the CNDDB search and as described in the Bio Memo in Attachment "B" of this MND, no Special Status plant species, Special Status animal species, or special habitats are known to occur in the Project site. However, because the Project site had been actively farmed until recently (but now fallow), it is unlikely that any special status plant would be present due to the frequently disturbed soils that accompany agricultural-related activities which results in regular disturbance of habitat suitable for special status plant species. Also, no trees are present within the Project site which could be used as nesting or roosting for special status birds.

Therefore, the Project will not significantly impact any biological plant or animal species. The Project will not have a significant direct or cumulative impact, or create an unusual circumstance that will cause the Project to have a significant effect on the biological resources of the area and environment.

b) – d) No Impact: As noted earlier and summarized here, the Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years. The Project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service; would not result in an adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means; and it would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. As noted earlier, no jurisdictional waters are located within the proposed Project site. A Storm Water Pollution Prevention Plan (SWPPP) would be in effect for the Project to prevent impacts on adjacent properties from any storm water generated on-site.

The most recent United States Geological Survey (USGS) National Water Information System (NWIS) and United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) mapping applications were accessed in February, 2023. 62 63 As noted earlier, there are no jurisdictional waters of the State and U.S. bodies of water proximate or within the entire Project site. Also as noted earlier, a SWWP would be in effect for the Project to prevent impacts on adjacent properties from any storm water generated on-site. A grading and drainage plan will be submitted and approved by the Tulare County RMA Engineering Branch. As such, the Project will not result in significant impact to any riparian habitats or other protected wetlands. Therefore, mitigation measures are not required or necessary as a result of the Project.

e) – f) No Impact: The Project will not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinances. Moreover, the Project is not anticipated to conflict with the goals or policies of the Tulare County General Plan 2030 Update that protect biological resources. Also, as the Project is not within or in the vicinity of any approved habitat conservation plans, natural community conservation plans, or regional or state habitat conservation plans in effect, the Project would result in no impact to these resources within the vicinity of the Project site.

<sup>62</sup> USGS. Accessed July 2023 at: https://maps.waterdata.usgs.gov/mapper/index.html

<sup>63</sup> USFWS. Accessed July 2023 at: https://www.fws.gov/wetlands/data/mapper.HTML

Cumulative Impact Analysis: Less Than Significant Impact – The geographic area of this cumulative analysis is the San Joaquin Valley. While the study area is limited to Tulare County, sensitive species with similar habitat requirements may exist in other portions of the San Joaquin Valley, and therefore cumulative impacts would extend beyond Tulare County's jurisdictional boundaries. As noted earlier and summarized here, the Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years.

The Project will only contribute to cumulative impacts related to this Checklist Item if Project specific impacts were to occur. There are no known waters of the U.S., the Project will not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinances; and the Project is not within or in the vicinity of any approved habitat conservation plans, natural community conservation plans, or regional or state habitat conservation plans in effect. Also, a Storm Water Pollution Prevention Plan (SWPPP) would be in effect for the Project to prevent impacts on adjacent properties from any storm water generated on-site. Therefore, the Project's cumulative impacts will be Less Than Significant.

Mitigation Measure(s): None Required.

## V. CULTURAL RESOURCES

Would	I the project:	SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	No Impact
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?		$\boxtimes$		
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		$\boxtimes$		
c)	Disturb any human remains, including those interred outside of formal cemeteries?		$\boxtimes$		

The discussions regarding Environmental Setting, Regulatory Setting, CEQA requirements, Cultural Resources, etc. contained in the Tulare County General Plan 2030 Update and Tulare County Environmental Impact Report are incorporated herein in their entirety. Where necessary and if available, additional site-specific facts, data, information, etc., are included in this discussion.

# **Environmental Setting**

As noted earlier and summarized here, the proposed Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years.

"Tulare County lies within a culturally rich province of the San Joaquin Valley. Studies of the prehistory of the area show inhabitants of the San Joaquin Valley maintained fairly dense populations situated along the banks of major waterways, wetlands, and streams. Tulare County was inhabited by aboriginal California Native American groups consisting of the Southern Valley Yokuts, Foothill Yokuts, Monache, and Tubatulabal. Of the main groups inhabiting the Tulare County area, the Southern Valley Yokuts occupied the largest territory." <sup>64</sup>

"California's coast was initially explored by Spanish (and a few Russian) military expeditions during the late 1500s. However, European settlement did not occur until the arrival into southern California of land-based expeditions originating from Spanish Mexico starting in the 1760s. Early settlement in the Tulare County area focused on ranching. In 1872, the Southern Pacific Railroad entered Tulare County, connecting the San Joaquin Valley with markets in the north and east. About the same time, valley settlers constructed a series of water conveyance systems (canals, dams, and ditches) across the valley. With ample water supplies and the assurance of rail transport for commodities such as grain, row crops, and fruit, a number of farming colonies soon appeared throughout the region."

"The colonies grew to become cities such as Tulare, Visalia, Porterville, and Hanford [in Kings County]. Visalia, the [Tulare] County seat, became the service, processing, and distribution center for the growing number of farms, dairies, and cattle ranches. By 1900, Tulare County boasted a population of about 18,000. New transportation links such as SR 99 (completed during the 1950s), affordable housing, light industry, and agricultural commerce brought steady growth to the valley. The California Department of Finance estimated the 2007 Tulare County population to be 430,167."

# Existing Cultural and Historic Resources

"Tulare County's known and recorded cultural resources were identified through historical records, such as those found in the National Register of Historic Places, the Historic American Building Survey/Historic American Engineering Record

<sup>66</sup>Op. Cit. 8-6.

<sup>&</sup>lt;sup>64</sup> Tulare County General Plan Update 2030. Page 8-5.

<sup>65</sup> Ibid.

(HABS/HAER), the California Register of Historic Resources, California Historical Landmarks, and the Tulare County Historical Society list of historic resources."67

Due to the sensitivity of many prehistoric, ethnohistoric, and historic archaeological sites, locations of these resources are not available to the general public. The Information Center at California State University, Bakersfield houses records associated with reported cultural resources surveys, including the records pertinent to sensitive sites, such as burial grounds, important village sites, and other buried historical resources protected under state and federal laws.

As of the release date of the MND (July 19, 2023), RMA has not received a response from the California Historical Resources Information Center (CHRIS), Southern San Joaquin Valley Historical Resources Information Center (SSJVIC) located at California State University, Bakersfield (Center) regarding a search for the Project location as requested by Tulare County RMA. Typically, the Center searches the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, for the California State Historic Landmarks. The Center also typically The Center also recommended that the NAHC be contacted regarding cultural resources that may not be included in the CHRIS inventory (see Attachment "C"). Also, Tulare County RMA also requested a Sacred Lands File (SLF) search from the California Native American Heritage Commission (NAHC). As of July 19, 2023, the NAHC has not provided a "positive" or "negative" result which would indicate that there are, or are not, any documented Sacred Lands within the Project area. It is likely that response may be received for the CHRIS request, the NAHC request, and local Tribes prior to decision making body's (in this instance, the Tulare County Planning Commission) will be requested to approve this MND. Any comments received will be incorporated into the MND for consideration by the Planning Commission.

### Natural Setting

# The Windmiller Pattern

According to the Society for California Archaeology (SCA), there are many chronological and cultural units (i.e., periods, phases, horizons, stages, traditions, etc.) that define California prehistory. "The literature on prehistoric California contains numerous designations for units referring to chronological, geographical, cultural, technological, or functional diversity in the archaeological record. These dimensions have often been invoked in overlapping or inconsistent ways." <sup>68</sup> The Windmiller pattern was identified in the Sacramento-San Joaquin Delta and is thought to be one of the oldest archaeological complexes (Lillard et al. 1939). As defined by SCA, a Pattern is "A geographically and chronologically extended cultural unit within a region, characterized by similar technology, economy, and burial practices."

The Windmiller pattern is identified as "A middle to late Holocene tradition, pattern, facies, or culture in central California, particularly in the Sacramento delta, dated between 5000-2500 and 2000-500 B.C. The Windmiller tradition has been identified with the Early horizon or period and classified within the late Archaic period. Locally, the Windmiller facies was followed by the Morse, Deterding, Brazil, Need, or Orwood facies. The pattern has been identified with the Utian ethnolinguistic group. The type site is the Windmiller Mound Site (SAC-107). (Beardsley 1954; Bennyhoff and Fredrickson 1994; Chartkoff and Chartkoff 1984; Fredrickson 1994; Lillard et al. 1939; Ragir 1972)." The Windmiller Pattern represents an important facet of Tulare County's prehistory.

# **Regulatory Setting**

#### Federal

Cultural resources are protected by several federal regulations, none of which are relevant to this project because it will not be located on lands administered by a federal agency and the Project applicant is not requesting federal funding and does not require any permits from any federal agencies.

State

# California State Office of Historic Preservation (OHP)

<sup>&</sup>lt;sup>67</sup> Tulare County General Plan 2030 Update *Background Report*. Page 9-56.

<sup>&</sup>lt;sup>68</sup> Society for California Archaeology. Chronological and Cultural Units. A Glossary of Proper Names in California History. Accessed July 2023at: <a href="https://scahome.org/public-resources/glossary-of-terms/chronological-and-cultural-units/">https://scahome.org/public-resources/glossary-of-terms/chronological-and-cultural-units/</a>

<sup>&</sup>lt;sup>69</sup> Ibid.

<sup>70</sup> Ibid.

"The California State Office of Historic Preservation (OHP) is responsible for administering federally and state mandated historic preservation programs to further the identification, evaluation, registration and protection of California's irreplaceable archaeological and historical resources under the direction of the <a href="State Historic Preservation Officer (SHPO)">State Historical Resources Commission</a>. a gubernatorial appointee, and the <a href="State Historical Resources Commission">State Historical Resources Commission</a>.

OHP's responsibilities include:

- Identifying, evaluating, and registering historic properties;
- Ensuring compliance with federal and state regulatory obligations;
- Encouraging the adoption of economic incentives programs designed to benefit property owners; and,
- Encouraging economic revitalization by promoting a historic preservation ethic through preservation education and public awareness and, most significantly, by demonstrating leadership and stewardship for historic preservation in California.

# Architectural Review and Incentives

OHP administers the <u>Federal Historic Preservation Tax Incentives Program</u> and provides architectural review and technical assistance to other government agencies and the general public in the following areas:

- Interpretation and application of the Secretary of the Interior's Standards and Guidelines for the Treatment of Historic Properties;
- General assistance with and interpretation of the California Historical Building Code and provisions for qualified historic properties under the Americans with Disabilities Act;
- Developing and implementing design guidelines;
- Preservation incentives available for historic properties; and,
- Sustainability and adaptive reuse of historic properties."71

# **Information Management**

The California Historical Resources Information System (CHRIS) consists of the California Office of Historic Preservation (OHP), nine Information Centers (ICs), and the State Historical Resources Commission (SHRC). The OHP administers and coordinates the CHRIS and presents proposed CHRIS policies to the SHRC, which approves these polices in public meetings. The CHRIS Inventory includes the State Historic Resources Inventory maintained by the OHP as defined in California Public Resources Code § 5020.1(p), and the larger number of resource records and research reports managed under contract by the nine ICs." "The CHRIS Information Centers (ICs) are located on California State University and University of California campuses in regions throughout the state. The nine ICs provide historical resources information, generally on a fee-for-service basis, to local governments, state and federal agencies, Native American tribes, and individuals with responsibilities under the National Environmental Policy Act, the National Historic Preservation Act, and the California Environmental Quality Act (CEQA), as well as to the general public." Tulare, Fresno, Kern, Kings and Madera counties are served by the Southern San Joaquin Valley Historical Resources Information Center (SSJVC), located at California State University, Bakersfield in Bakersfield, CA. The SSJVIC provides information on known historic and cultural resources to governments, institutions, and individuals.

# "Local Government Assistance

OHP works with California's city and county governments to aid them in integrating historic preservation into the broader context of overall community planning and development activities by adopting a comprehensive approach to preservation planning which combines identification, evaluation, and registration of historical resources with strong local planning powers, economic incentives, and informed public participation.

OHP provides guidance and technical assistance to city and county governments in the following areas:

- Drafting or updating preservation plans and ordinances;
- Planning for and conducting architectural, historical, and archeological surveys;

<sup>71</sup> California State Parks. Office of Historic Preservation. Mission and Responsibilities. Accessed July 2023 at: Mission and Responsibilities (ca.gov)

<sup>&</sup>lt;sup>72</sup> California State Parks, Office of Historic Preservation, Accessed July 2023 at: http://ohp.parks.ca.gov/?page\_id=1068.

<sup>&</sup>lt;sup>73</sup> California State Parks. Office of Historic Preservation. About the CHRIS Information Centers. Accessed July 2023 at: <a href="http://ohp.parks.ca.gov/?page\_id=28730">http://ohp.parks.ca.gov/?page\_id=28730</a>.

- Developing criteria for local designation programs, historic districts, historic preservation overlay zones (HPOZs), and conservation districts:
- Developing design guidelines using the Secretary of the Interior's Standards;
- Developing economic incentives for historic preservation;
- Training local commissions and review boards;
- Meeting CEQA responsibilities with regard to historical resources.

OHP also administers the <u>Certified Local Government (CLG) Program</u> and distributes at least 10% of its annual federal Historic Preservation Fund allocation to CLGs through a competitive grant program to them in achieving their historic preservation goals.

# Environmental Compliance: Section 106, PRC 5024, and CEQA

OHP reviews and comments on thousands of federally sponsored projects annually pursuant to Section 106 of the National Historic Preservation Act and state programs and projects pursuant to Sections 5024 and 5024.5 of the Public Resources Code. OHP also reviews and comments on local government and state projects pursuant to the <u>California Environmental Quality Act (CEQA)</u>.

The purpose of OHP's project review program is to promote the preservation of California's heritage resources by ensuring that projects and programs carried out or sponsored by federal and state agencies comply with federal and state historic preservation laws and that projects are planned in ways that avoid any adverse effects to heritage resources. If adverse effects cannot be avoided, the OHP assists project sponsors in developing measures to minimize or mitigate such effects.

# State and Federal Registration Programs

OHP administers the <u>National Register of Historic Places</u>, the <u>California Register of Historical Resources</u>, the <u>California Historical Landmarks</u>, and the California <u>Points of Historical Interest</u> programs. Each program has different eligibility criteria and procedural requirements; all register nominations must be submitted to the Commission for review and approval.

Eligible and listed resources may be eligible for tax benefits and are recognized as part of the environment under the <u>California</u> Environmental Quality Act (CEQA.<sup>74</sup>

A historical resource may be eligible for inclusion in the California Register of Historical Resources (CRHR) if it meets the following Criteria for Designation:

- Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States (Criterion 1).
- Associated with the lives of persons important to local, California or national history (Criterion 2).
- Embodies the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values (Criterion 3).
- Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation (Criterion 4).<sup>75</sup>

# Native American Heritage Commission (NAHC)

"In 1976, the California State Government passed AB 4239, establishing the Native American Heritage Commission (NAHC) as the primary government agency responsible for identifying and cataloging Native American cultural resources. Up until this point, there had been little government participation in the protection of California's cultural resources. As such, one of the NAHC's primary duties, as stated in AB 4239, was to prevent irreparable damage to designated sacred sites, as well as to prevent interference with the expression of Native American religion in California. Furthermore, the bill authorized the Commission to act in order to prevent damage to and insure Native American access to sacred sites. Moreover, the Commission could request that the court issue an injunction for the site, unless it found evidence that public interest and necessity required otherwise. In addition, the bill authorized the commission to prepare an inventory of Native American sacred sites located on public lands and required the commission to review current administrative and statutory protections accorded to such sites. In 1982, legislation was passed authorizing the Commission to identify a Most Likely Descendant (MLD) when Native American human remains were discovered any place other than a dedicated cemetery. MLDs were granted the legal authority to make recommendations regarding the treatment and disposition of the discovered remains. These recommendations, although they cannot halt work on

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<sup>74</sup> Ibid.

<sup>75</sup> California Register: Criteria for Designation. July 2023 at: <a href="https://ohp.parks.ca.gov/?page\_id=21238">https://ohp.parks.ca.gov/?page\_id=21238</a>

the project site, give MLDs a means by which to ensure that the Native American human remains are treated in the appropriate manner. Today, the NAHC provides protection to Native American human burials and skeletal remains from vandalism and inadvertent destruction. It also provides a legal means by which Native American descendants can make known their concerns regarding the need for sensitive treatment and disposition of Native American burials, skeletal remains, and items associated with Native American burials."

As noted in their website, "The California Native American Heritage Commission (NAHC or Commission), created in statute in 1976 (Chapter 1332, Statutes of 1976), is a nine-member body whose members are appointed by the Governor. The NAHC identifies, catalogs, and protects Native American cultural resources -- ancient places of special religious or social significance to Native Americans and known ancient graves and cemeteries of Native Americans on private and public lands in California. The NAHC is also charged with ensuring California Native American tribes' accessibility to ancient Native American cultural resources on public lands, overseeing the treatment and disposition of inadvertently discovered Native American human remains and burial items, and administering the California Native American Graves Protection and Repatriation Act (CalNAGPRA), among many other powers and duties."

Additional State regulatory requirements regarding tribal cultural resources (such as AB 52 and SB 18 Tribal Consultation Guidelines) can be found at Item 18 Tribal Cultural Resources.

## CEQA Guidelines: Historical Resources Definition

CEQA Guidelines Section 15064.5(a) defines a historical resource as:

- "(1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code §5024.1, Title 14 CCR, Section 4850 et seq.).
- (2) A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- (3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code §5024.1, Title 14 CCR, Section 4852) including the following:
  - (A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
  - (B) Is associated with the lives of persons important in our past;
  - (C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
  - (D) Has yielded, or may be likely to yield, information important in prehistory or history.
- (4) The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1."

#### CEQA Guidelines: Archaeological Resources

Section 15064.5(c) of CEQA Guidelines provides specific guidance on the treatment of archaeological resources as noted below.

"(1) When a Project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource, as defined in subdivision (a).

<sup>&</sup>lt;sup>76</sup> California Native American Heritage Commission. About The Native American Heritage Commission. Accessed July 2023 at: <a href="http://nahc.ca.gov/about/">http://nahc.ca.gov/about/</a>.

<sup>&</sup>lt;sup>77</sup> Ibid. Welcome. Accessed July 2023 at: <a href="http://nahc.ca.gov/">http://nahc.ca.gov/</a>.

<sup>&</sup>lt;sup>78</sup> California Natural Resources Agency. California Environmental Quality Act (CEQA) Guidelines. Section 15064.5(a). Statute and Guidelines - California Association of Environmental Professionals. Accessed July 2023 at: <a href="https://www.califaep.org/statute\_and\_guidelines.php">https://www.califaep.org/statute\_and\_guidelines.php</a>

- If a lead agency determines that the archaeological site is an historical resource, it shall refer to the provisions of Section (2) 21084.1 of the Public Resources Code, and this section, Section 15126.4 of the Guidelines, and the limits contained in Section 21083.2 of the Public Resources Code do not apply.
- If an archaeological site does not meet the criteria defined in subdivision (a), but does meet the definition of a unique (3) archeological resource in Section 21083.2 of the Public Resources Code, the site shall be treated in accordance with the provisions of section 21083.2. The time and cost limitations described in Public Resources Code Section 21083.2 (c-f) do not apply to surveys and site evaluation activities intended to determine whether the Project location contains unique archaeological resources.
- If an archaeological resource is neither a unique archaeological nor an historical resource, the effects of the Project on (4) those resources shall not be considered a significant effect on the environment. It shall be sufficient that both the resource and the effect on it are noted in the Initial Study or EIR, if one is prepared to address impacts on other resources, but they need not be considered further in the CEOA process."<sup>79</sup>

#### CEQA Guidelines: Human Remains

Public Resources Code Sections 5097.94 and 5097.98 provide guidance on the disposition of Native American burials (human remains), and fall within the jurisdiction of the Native American Heritage Commission:

- When an initial study identifies the existence of, or the probable likelihood, of Native American human remains within the Project, a lead agency shall work with the appropriate Native Americans as identified by the Native American Heritage Commission as provided in Public Resources Code Section 5097.98. The applicant may develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any Items associated with Native American burials with the appropriate Native Americans as identified by the Native American Heritage Commission. Action implementing such an agreement is exempt from:
  - The general prohibition on disinterring, disturbing, or removing human remains from any location other than a dedicated cemetery (Health and Safety Code Section 7050.5).
  - The requirements of CEQA and the Coastal Act. 80
- In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps should be taken:
  - There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:
    - (A) The coroner of the county in which the remains are discovered must be contacted to determine that no investigation of the cause of death is required, and
    - (B) If the coroner determines the remains to be Native American:
      - The coroner shall contact the Native American Heritage Commission within 24 hours.
      - The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American.
      - The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98, or
  - Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.
    - (A) The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission.
    - The descendant identified fails to make a recommendation; or
    - The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.81
- As part of the objectives, criteria, and procedures required by Section 21082 of the Public Resources Code, a lead agency should make provisions for historical or unique archaeological resources accidentally discovered during construction. These provisions should include an immediate evaluation of the find by a qualified archaeologist. If the find is determined

<sup>&</sup>lt;sup>79</sup> Ibid. Section 15064.5(c).

<sup>&</sup>lt;sup>80</sup> Op. Cit. Section 15064.5(d).

<sup>&</sup>lt;sup>81</sup> Op. Cit. Section 15064.5 (e).

to be an historical or unique archaeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures or appropriate mitigation should be available. Work could continue on other parts of the building site while historical or unique archaeological resource mitigation takes place."82

# CEQA Guidelines: Paleontological Resources

Public Resources Code Section 5097.5 prohibits excavation or removal of any "vertebrate paleontological site... or any other archaeological, paleontological or historical feature, situated on public lands, except with express permission of the public agency having jurisdiction over such lands."

## CEQA Guidelines Section 15126.4(b)

- "(b) Mitigation Measures Related to Impacts on Historical Resources.
  - (1) Where maintenance, repair, stabilization, rehabilitation, restoration, preservation, conservation or reconstruction of the historical resource will be conducted in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (1995), Weeks and Grimmer, the project's impact on the historical resource shall generally be considered mitigated below a level of significance and thus is not significant.
  - (2) In some circumstances, documentation of an historical resource, by way of historic narrative, photographs or architectural drawings, as mitigation for the effects of demolition of the resource will not mitigate the effects to a point where clearly no significant effect on the environment would occur.
  - (3) Public agencies should, whenever feasible, seek to avoid damaging effects on any historical resource of an archaeological nature. The following factors shall be considered and discussed in an EIR for a project involving such an archaeological site:
    - (A) Preservation in place is the preferred manner of mitigating impacts to archaeological sites. Preservation in place maintains the relationship between artifacts and the archaeological context. Preservation may also avoid conflict with religious or cultural values of groups associated with the site.
    - (B) Preservation in place may be accomplished by, but is not limited to, the following:
      - 1. Planning construction to avoid archaeological sites;
      - 2. Incorporation of sites within parks, greenspace, or other open space;
      - 3. Covering the archaeological sites with a layer of chemically stable soil before building tennis courts, parking lots, or similar facilities on the site.
      - 4. Deeding the site into a permanent conservation easement.
    - (C) When data recovery through excavation is the only feasible mitigation, a data recovery plan, which makes provisions for adequately recovering the scientifically consequential information from and about the historical resource, shall be prepared and adopted prior to any excavation being undertaken. Such studies shall be deposited with the California Historical Resources Regional Information Center. Archeological sites known to contain human remains shall be treated in accordance with the provisions of Section 7050.5 Health and Safety Code. If an artifact must be removed during project excavation or testing, curation may be an appropriate mitigation.
    - (D) Data recovery shall not be required for an historical resource if the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the archaeological or historical resource, provided that the determination is documented in the EIR and that the studies are deposited with the California Historical Resources Regional Information Center."83

# Public Resources Code §5097.5

California Public Resources Code §5097.5 prohibits excavation or removal of any "vertebrate paleontological site...or any other archaeological, paleontological or historical feature, situated on public lands, except with express permission of the public agency having jurisdiction over such lands." Public lands are defined to include lands owned by or under the jurisdiction of the state or any city, county, district, authority or public corporation, or any agency thereof. Section 5097.5 states that any unauthorized disturbance or removal of archaeological, historical, or paleontological materials or sites located on public lands is a misdemeanor.

#### **Human Remains**

<sup>&</sup>lt;sup>82</sup> Op. Cit. Section 15064.5(f).

<sup>83</sup> Op. Cit. Section 15126.4(b).

Section 7050.5 of the California Health and Safety Code states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the remains are discovered has determined whether or not the remains are subject to the coroner's authority. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Native American Most Likely Descendant (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods.

Local

## Tulare County General Plan 2030 Update

The following Tulare County General Plan 2030 Update policies for this resource apply to this Project: ERM-6.1 Evaluation of Cultural and Archaeological Resources which states that the County shall participate in and support efforts to identify its significant cultural and archaeological resources using appropriate State and Federal standards; ERM-6.2 Protection of Resources with Potential State or Federal Designations wherein the County shall protect cultural and archaeological sites with demonstrated potential for placement on the National Register of Historic Places and/or inclusion in the California State Office of Historic Preservation's California Points of Interest and California Inventory of Historic Resources. Such sites may be of Statewide or local significance and have anthropological, cultural, military, political, architectural, economic, scientific, religious, or other values as determined by a qualified archaeological professional; ERM-6.3 Alteration of Sites with Identified Cultural Resources which states that when planning any development or alteration of a site with identified cultural or archaeological resources, consideration should be given to ways of protecting the resources. Development can be permitted in these areas only after a site specific investigation has been conducted pursuant to CEQA to define the extent and value of resource, and mitigation measures proposed for any impacts the development may have on the resource; ERM-6.4 Mitigation – which states that if preservation of cultural resources is not feasible, every effort shall be made to mitigate impacts, including relocation of structures, adaptive reuse, preservation of facades, and thorough documentation and archival of records; ERM-6.7 Cooperation of Property Owners where the County should encourage the cooperation of property owners to treat cultural resources as assets rather than liabilities, and encourage public support for the preservation of these resources; ERM-6.8 Solicit Input from Local Native Americans (which is consistent with AB 52 in regards to Tribal Consultation) wherein the County shall continue to solicit input from the local Native American communities in cases where development may result in disturbance to sites containing evidence of Native American activity and/or to sites of cultural importance; ERM-6.9 Confidentiality of Archaeological Sites which is also consistent with AB 52) where the County shall, within its power, maintain confidentiality regarding the locations of archaeological sites in order to preserve and protect these resources from vandalism and the unauthorized removal of artifacts; and ERM-6.10 Grading Cultural Resources Sites wherein the County shall ensure all grading activities conform to the County's Grading Ordinance and California Code of Regulations, Title 20, § 2501 et. seq.

## **Project Impact Analysis:**

a) - b) Less Than Significant Impact With Mitigation: As noted earlier and summarized here, the Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years. Also as noted previously, cultural resources records search was conducted (requested) on July 14, 2023 from the Southern San Valley Historical Resources Information Center, at California State University, Bakersfield (Center) and the California Native American Heritage Commission (NHAC) Sacred Lands File (SLF) search (search was not completed prior to the release of this MND). The records search typically includes an examination of the National Register of Historic Places, the OHP Built Environment Resources Directory, the California Register of Historical Resources, California Points of Historical Interest, California Inventory of Historic Resources, and California State Historic Landmarks. There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, or the California State Historic Landmarks. There is a possibility that subsurface resources could be uncovered during Project construction-related activities. In such an unlikely event, potentially significant impacts to previously unknown subsurface resources may occur. However, implementation of the Mitigation Measures 5-1 through 5-3 will reduce potential impacts in the unlikely event of encountering an historical or archaeological resource to a less than significant impact with mitigation.

c) Less Than Significant Impact With Mitigation: As noted in Items a) and b), CHRIS, NAHC, SLF searches to date, and consultation with Native American tribes to date, have not been completed. As such, it is unknown if the Project site or vicinity would contain any known remains or formal cemeteries. Given the intensive agricultural activity in the area and the previous agricultural activity within the Project location, it is unlikely that surface cultural resources are or were present. However, there is a possibility that subsurface resources could be uncovered during construction-related activities. In such an unlikely event, potentially significant impacts to previously unknown subsurface resources may occur. With the implementation of Mitigation Measure 5-3, inadvertent disturbance of any human remains (including those interred outside of formal cemeteries) resulting in the discovery of human remains would require work to halt in the vicinity of a find until the County coroner determines whether the remains are Native American in origin and, if they are, contacting the Native American Heritage Commission.

Cumulative Impact Analysis: Less Than Significant Impact With Mitigation – The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and the Tulare County 2030 General Plan EIR.

It not anticipated that cultural resources or Native American remains will be found at the Project site. However, consistent with CEQA requirements, **Mitigation Measures 5-1** through **5-3** are included in the unlikely event that if cultural resources or Native American remains are unearthed/discovered during any ground disturbance activities, such finds will be mitigated to less than significant Project-specific and Cumulative Impacts.

Mitigation Measure(s) See Mitigation Measures 5-1 through 5-3 in Attachment "F" (in their entirety)

**Summary of Mitigation Measures:** 

- 5-1 Discovery.
- 5-2 Cessation of Work/Preservation/Treatment Plan/PRC 21074
- 5-3 Implementation of Health and Safety Code section 7050.5, CEQA Guidelines Section 15064.5, PRC 5097.98

Therefore, implementation of Mitigation Measure 5-1 through 5-3, as applicable, would reduce impacts to less than significant.

## VI. ENERGY

Wou	ld the project:	SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	No Impact
a)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?				$\boxtimes$
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				$\boxtimes$

The discussions regarding Environmental Setting, Regulatory Setting, CEQA requirements, Cultural Resources, etc. contained in the Tulare County General Plan 2030 Update and Tulare County Environmental Impact Report are incorporated herein in their entirety. Where necessary and if available, additional site-specific facts, data, information, etc., are included in this discussion.

### **Environmental Setting**

As noted earlier and summarized here, the proposed Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years.

As noted in the Project Narrative (see Attachment "E" of this MND), Construction equipment such as tractors, backhoes, loaders, dozers, and graders may be needed to clear vegetation from the site, and to grade roads and areas where structures will stand. As noted in the "Transportation Screening Analysis for the Tulare CSG 2 Solar Project" memorandum (see Attachment "D" of this MND), an estimated 82 construction-related vehicle trips per day would be used to import construction workers, vendor trucks and haul trucks. Construction of the entire Project (including grading, construction of access roads, fencing, etc.; and on-site assembly and installation of PV panels) is anticipated to completed in approximately six months. Construction would commence upon acquisition of all necessary permits, approvals, power sale, and financing. Also, following its proposed life of 30 years, the site would be decommissioned and reclaimed as required by the County.

# **Regulatory Setting**

Federal

## Energy Policy Act of 2005

The Energy Policy Act of 2005 seeks to reduce reliance on non-renewable energy resources and provide incentives to reduce current demand on these resources. For example, under the Act, consumers and businesses can obtain federal tax credits for purchasing fuel-efficient appliances and products, including buying hybrid vehicles, building energy-efficient buildings, and improving the energy efficiency of commercial buildings. Additionally, tax credits are available for the installation of qualified fuel cells, stationary microturbine power plants, and solar power equipment.

State

# California Energy Commission

The California Energy Commission (CEC) was created in 1974 to serve as the state's primary energy policy and planning agency. The CEC is tasked with reducing energy costs and environmental impacts of energy use - such as greenhouse gas emissions - while ensuring a safe, resilient, and reliable supply of energy.

State of California Integrated Energy Policy (SB 1389)

In 2002, the Legislature passed Senate Bill 1389, which required the CEC to develop an integrated energy plan every two years for electricity, natural gas, and transportation fuels, for the California Energy Policy Report. The plan calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for Zero Emission Vehicles and their infrastructure needs, and encouragement of urban designs that reduce vehicles miles traveled and accommodate pedestrian and bicycle access. The CEC adopted the 2013 Integrated Energy Policy Report on February 20, 2014. The 2013 Integrated Energy Policy Report provides the results of the CEC's assessment of a variety of issues, including:

- > Ensuring that the state has sufficient, reliable, and sage energy infrastructure to meet current and future energy demands;
- Monitoring publicly-owned utilities' progress towards achieving 10-year energy efficiency targets; defining and including zero-net-energy goals in state building standards;
- Overcoming challenges to increased use of geothermal heat pump/ground loop technologies and procurement of biomethane;
- > Using demand response to meet California's energy needs and integrate renewable technologies;
- > Removing barriers to bioenergy development; planning for California's electricity infrastructure needs given potential retirement of power plants and the closure of the San Onofre Nuclear Generating Station;
- > Estimating new generation costs for utility-scale renewable and fossil-fueled generation;
- ➤ Planning for new or upgraded transmission infrastructure;
- Monitoring utilities' progress in implementing past recommendations related to nuclear power plants;
- > Tracking natural gas market trends;
- Implementing the Alternative and Renewable Fuel and Vehicle Technology Program;
- Addressing the vulnerability of California's energy supply and demand infrastructure to the effects of climate change; and
- Planning for potential electricity system needs in 2030.

### Renewable Portfolio Standard (SB 1078 and SB 107)

Established in 2002 under SB 1078, the State's Renewables Portfolio Standard (RPS) was amended under SB 107 to require accelerated energy reduction goals by requiring that by the year 2010, 20 percent of electricity sales in the state be served by renewable energy resources. In years following its adoption, Executive Order S-14-08 was signed, requiring electricity retail sellers to provide 33 percent of their service loads with renewable energy by the year 2020. In 2011, SB X1-2 was signed, aligning the RPS target with the 33 percent requirement by the year 2020. This new RPS applied to all state electricity retailers, including publicly owned utilities, investor-owned utilities, electrical service providers, and community choice aggregators. All entities included under the RPS were required to adopt the RPS 20 percent by year 2020 reduction goal by the end of 2013, adopt a reduction goal of 25 percent by the end of 2016, and meet the 33 percent reduction goal by the end of 2020. In addition, the Air Resources Board (ARB), under Executive Order S-21-09, was required to adopt regulations consistent with these 33 percent renewable energy targets.

### California Energy Code (Title 24, Part 6, Building Energy Efficiency Standards)

California Code of Regulations Title 24, Part 6 comprises the California Energy Code, which was adopted to ensure that building construction, system design and installation achieve energy efficiency. The California Energy Code was first established in 1978 by the CEC in response to a legislative mandate to reduce California's energy consumption, and apply to energy consumed for heating, cooling, ventilation, water heating, and lighting in new residential and non-residential buildings. The standards are updated periodically to increase the baseline energy efficiency requirements. The 2013 Building Energy Efficiency Standards focus on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings and include requirements to enable both demand reductions during critical peak periods and future solar electric and thermal system installations. Although it was not originally intended to reduce greenhouse gas (GHG) emissions, electricity production by fossil fuels results in GHG emissions and energy efficient buildings require less electricity. Therefore, increased energy efficiency results in decreased GHG emissions.

# California Global Warming Solutions Act of 2006 (Assembly Bill 32)

Assembly Bill 32 (Health and Safety Code Sections 38500–38599; AB 32), also known as the California Global Warming Solutions Act of 2006, commits the state to achieving year 2000 GHG emission levels by 2010 and year 1990 levels by 2020. To achieve these goals, AB 32 tasked the CPUC and CEC with providing information, analysis, and recommendations to the ARB regarding ways to reduce GHG emissions in the electricity and natural gas utility sectors.

"In 2006, the Legislature passed the California Global Warming Solutions Act of 2006 [Assembly Bill 32 (AB 32)], which created a comprehensive, multi-year program to reduce greenhouse gas (GHG) emissions in California. AB 32 required the California Air Resources Board (ARB or Board) to develop a Scoping Plan that describes the approach California will take to reduce GHGs to achieve the goal of reducing emissions to 1990 levels by 2020. The Scoping Plan was first approved by the Board in 2008 and must be updated every five years. The First Update to the Climate Change Scoping Plan was approved by the Board on May 22, 2014. In 2016, the Legislature passed SB 32, which codifies a 2030 GHG emissions reduction target of 40 percent below 1990 levels. With SB 32, the Legislature passed companion legislation AB 197, which provides additional direction for developing the Scoping Plan."<sup>84</sup> California's 2017 Climate Change Scoping Plan was adopted in December 2018. The plan identifies the State's strategy for achieving the 2030 emission reduction targets.

### Clean Energy and Pollution Reduction Act (SB 350)

The Clean Energy and Pollution Reduction Act (SB 350) was passed by California Governor Brown on October 7, 2015, and establishes new clean energy, clean air, and GHG reduction goals for the year 2030 and beyond. SB 350 establishes a GHG target of 40 percent below 1990 levels for the State of California, further enhancing the ability for the state to meet the goal of reducing GHG emissions by 80 percent below 1990 levels by the year 2050.

## Renewable Portfolio Standard (SB 1078 and SB 107)

Established in 2002 under SB 1078, the state's Renewables Portfolio Standard (RPS) was amended under SB 107 to require accelerated energy reduction goals by requiring that by the year 2010, 20 percent of electricity sales in the state be served by renewable energy resources. In years following its adoption, Executive Order S-14-08 was signed, requiring electricity retail sellers to provide 33 percent of their service loads with renewable energy by the year 2020. In 2011, SB X1-2 was signed, aligning the RPS target with the 33 percent requirement by the year 2020. This new RPS applied to all state electricity retailers, including publicly owned utilities, investor-owned utilities, electrical service providers, and community choice aggregators. All entities included under the RPS were required to adopted the RPS 20 percent by year 2020 reduction goal by the end of 2013, adopt a reduction goal of 25 percent by the end of 2016, and meet the 33 percent reduction goal by the end of 2020. In addition, the Air Resources Board, under Executive Order S-21-09, was required to adopt regulations consistent with these 33 percent renewable energy targets.

# Environmental Quality Act (CEQA) Requirements

"In 1974, the Legislature adopted the Warren-Alquist State Energy Resources Conservation and Development Act. (Pub. Resources Code, § 25000 et seq.) That act created what is now known as the California Energy Commission, and enabled it to adopt building energy standards. (See, e.g., id. at § 25402.) At that time, the Legislature found the "rapid rate of growth in demand for electric energy is in part due to wasteful, uneconomic, inefficient, and unnecessary uses of power and a continuation of this trend will result in serious depletion or irreversible commitment of energy, land and water resources, and potential threats to the state's environmental quality." (Id. at § 25002; see also § 25007 ("It is further the policy of the state and the intent of the Legislature to employ a range of measures to reduce wasteful, uneconomical, and unnecessary uses of energy, thereby reducing the rate of growth of energy consumption, prudently conserve energy resources, and assure statewide environmental, public safety, and land use goals"))

The same year that the Legislature adopted Warren-Alquist, it also added section 21100(b)(3) to CEQA, requiring environmental impact reports to include "measures to reduce the wasteful, inefficient, and unnecessary consumption of energy." As explained by a court shortly after it was enacted, the "energy mitigation amendment is substantive and not procedural in nature and was enacted for the purpose of requiring the lead agencies to focus upon the energy problem in the preparation of the final EIR." (People v. County of Kern (1976) 62 Cal.App.3d 761, 774 (emphasis added)). It compels an affirmative investigation of the project's potential energy use and feasible ways to reduce that use.

Though Appendix F of the CEQA Guidelines has contained guidance on energy analysis for decades, implementation among lead agencies has not been consistent. (See, e.g., California Clean Energy Committee v. City of Woodland, supra, 225 Cal.App.4th 173, 209.) While California is a leader in energy conservation, the importance of addressing energy impacts has not diminished since 1974. On the contrary, given the need to avoid the effects of climate change, energy use is an issue that we cannot afford to ignore. As the California Energy Commission's Integrated Energy Policy Report (2016) explains:

<sup>&</sup>lt;sup>84</sup> Air Resources Board. AB 32 Scoping Plan. Accessed July 2023 at: <a href="https://www3.arb.ca.gov/cc/scopingplan/scopingplan.htm">https://www3.arb.ca.gov/cc/scopingplan/scopingplan.htm</a>.

Energy fuels the economy, but it is also the biggest source of greenhouse gas emissions that lead to climate change. Despite California's leadership, Californians are experiencing the impacts of climate change including higher temperatures, prolonged drought, and more wildfires. There is an urgent need to reduce greenhouse gas emissions and increase the state's resiliency to climate change. With transportation accounting for about 37 percent of California's greenhouse gas emissions in 2014, transforming California's transportation system away from gasoline to zero emission and near-zero-emission vehicles is a fundamental part of the state's efforts to meet its climate goals. Energy efficiency and demand response are also key components of the state's strategy to reduce greenhouse gas emissions. (Id. at pp. 5, 8, 10.) Appendix F was revised in 2009 to clarify that analysis of energy impacts is mandatory. OPR today proposes to add a subdivision in section 15126.2 on energy impacts to further elevate the issue, and remove any question about whether such an analysis is required."85

Further, an "Explanation of Proposed Amendments" contained in the Proposed Update (and now adopted amendments) to the CEQA Guidelines documents stated that OPR proposed to add a new subdivision (b) to section 15126.2 which discusses the required contents of an environmental impact report. The new subdivision would specifically address the analysis of a project's potential energy impacts. This addition is necessary for several reasons explained as follows. <sup>86</sup>

"The first sentence clarifies that an EIR must analyze whether a project will result in significant environmental effects due to "wasteful, inefficient, or unnecessary consumption of energy." This clarification is necessary to implement Public Resources Code section 21100(b)(3). Since the duty to impose mitigation measures arises when a lead agency determines that the project may have a significant effect, section 21100(b)(3) necessarily requires both analysis and a determination of significance in addition to energy efficiency measures. (Pub. Resources Code, § 21002.)

The second sentence further clarifies that all aspects of the project must be considered in the analysis. This clarification is consistent with the rule that lead agencies must consider the "whole of the project" in considering impacts. It is also necessary to ensure that lead agencies consider issues beyond just building design. (See, e.g., California Clean Energy Com. v. City of Woodland, supra, 225 Cal.App.4th at pp. 210-212.) The analysis of vehicle miles traveled provided in proposed section 15064.3 (implementing Public Resources Code section 21099 (SB 743)) on transportation impacts may be relevant to this analysis.

The third sentence signals that the analysis of energy impacts may need to extend beyond building code compliance. (Ibid.) The requirement to determine whether a project's use of energy is "wasteful, inefficient, and unnecessary" compels consideration of the project in its context. (Pub. Resources Code, § 21100(b)(3).) While building code compliance is a relevant factor, the generalized rules in the building code will not necessarily indicate whether a particular project's energy use could be improved. (Tracy First v. City of Tracy (2009) 177 Cal.App.4th 912, 933 (after analysis, lead agency concludes that project proposed to be at least 25% more energy efficient than the building code requires would have a less than significant impact); see also CEQA Guidelines, Appendix F, § II.C.4 (describing building code compliance as one of several different considerations in determining the significance of a project's energy impacts).) That the Legislature added the energy analysis requirement in CEQA at the same time that it created an Energy Commission authorized to impose building energy standards indicates that compliance with the building code is a necessary but not exclusive means of satisfying CEQA's independent requirement to analyze energy impacts broadly.

The new proposed [now adopted] subdivision (b) also provides a cross-reference to Appendix F. This cross-reference is necessary to direct lead agencies to the more detailed provisions contained in that appendix. Finally, new proposed subdivision (b) cautions that the analysis of energy impacts is subject to the rule of reason, and must focus on energy demand actually caused by the project. This sentence is necessary to place reasonable limits on the analysis. Specifically, it signals that a full "lifecycle" analysis that would account for energy used in building materials and consumer products will generally not be required. (See also Cal. Natural Resources Agency, Final Statement of Reasons for Regulatory Action: Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB97 (Dec. 2009) at pp. 71-72.)"87

Specifically, Section 15121.6 added new sub-section (b), to wit: "(b) Energy Impacts. If the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary consumption of energy, the EIR shall analyze and mitigate that energy use. This analysis should include the project's energy use for all project phases and

<sup>85</sup> State of California. Governor's Office of Planning and Research. Proposed Update to the CEQA Guidelines. November 2017. Pages 65-66. Accessed July 2023 at: <a href="http://opr.ca.gov/docs/20171127\_Comprehensive\_CEQA\_Guidelines\_Package\_Nov\_2017.pdf">http://opr.ca.gov/docs/20171127\_Comprehensive\_CEQA\_Guidelines\_Package\_Nov\_2017.pdf</a>

<sup>&</sup>lt;sup>86</sup> Ibid. 66.

<sup>87</sup> Op. Cit. 66-67.

components, including transportation-related energy, during construction and operation. In addition to building code compliance, other relevant considerations may include, among others, the project's size, location, orientation, equipment use and any renewable energy features that could be incorporated into the project. (Guidance on information that may be included in such an analysis is presented in Appendix F.) This analysis is subject to the rule of reason and shall focus on energy demand that is caused by the project. This analysis may be included in related analyses of air quality, greenhouse gas emissions or utilities in the discretion of the lead agency."88

# CEQA Thresholds of Significance

- Result in significant environmental effects due to wasteful, inefficient, or unnecessary consumption of energy.
- The project's energy use for all project phases and components, including transportation-related energy, during construction and operation.
- The project's size, location, orientation, equipment use and any renewable energy features that could be incorporated into the project.
- Analysis is subject to the rule of reason and shall focus on energy demand that is caused by the project.

#### Local

The following Tulare County General Plan 2030 Update policies for this resource apply to this Project: *ERM-4.1 Energy Conservation and Efficiency Measures* wherein the County encourages the use of solar energy, solar hot water panels, and other energy conservation and efficiency features; *ERM-4.2 Streetscape and Parking Area Improvements for Energy Conservation* – wherein the County shall promote the planting and maintenance of shade trees along streets and within parking areas of new urban development to reduce radiation heating; and *ERM-4.3 Local and State Programs* wherein the County shall participate, to the extent feasible, in local and State programs that strive to reduce the consumption of natural or man-made energy sources.

# **Project Impact Analysis:**

a) and b) No-to-Less Than Significant Impact: As noted earlier and summarized here, the proposed Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years.

The energy requirements for the Project were determined using the construction- and operational-related estimates generated from the Air Quality and Greenhouse Gas Analysis Technical Memorandum prepared by qualified consultant, Dudek (Dudek Memo), refer to Attachment "A" of Attachment "A" of this document for related CalEEMod output files). Short-term construction-related energy consumption is discussed below. The Project will not have a direct or cumulative impact, or create wasteful, inefficient, or unnecessary consumption of energy resources during project construction-related activities or operations. Also, it will not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The only energy consumed would be through the use of fossil fuels (gasoline and diesel operated equipment) during construction-related activities which will be completed in approximately six months and through the use of water trucks for annual-to-biannual panel washing. As such, construction-related and panel washing activities will be short-term, temporary, and intermittent. The Project will not use any energy per se over the next 30 years of its anticipated life; rather, it will be a renewable energy (electricity) generator. The Project will directly support SB 100, which mandates that 100 percent of electricity in California be obtained by zero-carbon energy sources by 2045 and updates the state's Renewable Portfolio Standards (RPS). Additionally, the Project will support the following Tulare County General Plan Policies because it will assist the County in encouraging the development of renewable energy sources. As the Project is an energy generator, there will be a beneficial impact to the Energy resource. As such, the Project will result in no adverse impact to this resource.

Based on the above information, the Project would not result in the inefficient or wasteful consumption of electricity or natural gas, and impacts would be less than significant. Conversely, the Project would provide a benefit as it would provide emission-free, solar powered electrical energy to the California electrical grid to assist with meeting regional energy demands, State Renewable Portfolio Standards. Also as noted earlier, the purpose of the Project is to construct and operate a

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<sup>88</sup> Op. Cit. 67-68.

PV solar array with attached battery storage, which will generate and store clean and renewable solar energy, with electricity offtake sold to residential customers within Tulare County and the larger Southern California Edison ("SCE") Utility Territory. The Project is proposed under the California Assembly Bill 2256 (AB2256), adopted by the California legislature in 2022. AB 2256 (Ward) Community Renewable Energy Program (CREP) instructs the California Public Utilities Commission to establish a new community solar program by March 2024 which will bolster the reliability of the electrical grid while benefitting those who cannot put solar on their roofs.

**Cumulative Impact Analysis:** Less Than Significant Impact - The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, Tulare County 2030 General Plan EIR, and technical study memorandum in Attachment "A".

As noted earlier and summarized here, the proposed Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years. The Project will only contribute to cumulative impacts related to this Checklist Item if Project-specific impacts were to occur. As noted earlier, the Project will not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Rather, the Project will result in an energy resource benefit. Therefore, there will be no cumulative impacts related to this Checklist Item.

Mitigation Measure(s): None Required.

## VII. GEOLOGY/SOILS

Would	I the project:	SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	No Impact
a) i)	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to			$\boxtimes$	
	Division of Mines and Geology Special Publication No. 42.				
ii)	Strong seismic ground shaking?			$\boxtimes$	
iii)	Seismic-related ground failure, including liquefaction?			$\boxtimes$	
iv)	Landslides?			$\boxtimes$	
b)	Result in substantial soil erosion or the loss of topsoil?			$\boxtimes$	
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				$\boxtimes$
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				$\boxtimes$
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		$\boxtimes$		

The discussions regarding Environmental Setting, Regulatory Setting, CEQA requirements, Geology and Soils, etc.; contained in the Tulare County General Plan 2030 Update and Tulare County Environmental Impact Report are incorporated herein in their entirety. Where necessary and if available, additional site-specific facts, data, information, etc., are included in this discussion.

# **Environmental Setting**

As noted earlier and summarized here, the proposed Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years.

"Tulare County is divided into two major physiographic and geologic provinces: the Sierra Nevada Mountains and the Central Valley. The Sierra Nevada Physiographic Province, in the eastern portion of the county, is underlain by metamorphic and igneous rock. It consists mainly of homogeneous granitic rocks, with several islands of older metamorphic rock. The central and western parts of the county are part of the Central Valley Province, underlain by marine and non-marine sedimentary rocks. It is basically a flat, alluvial plain, with soil consisting of material deposited by the uplifting of the mountains. The foothill area of the county

is essentially a transition zone, containing old alluvial soils that have been dissected by the west-flowing rivers and streams that carry runoff from the Sierra Nevada Mountains. This gently rolling topography is punctured in many areas by outcropping soft bedrock. The native mountain soils are generally quite dense and compact"<sup>89</sup>

"The Central Valley is an asymmetrical structural trough filled with marine and continental sediments up to 15-kilometers (km) thick covering an area of more than 50,000 square kilometers (km²), bounded by the Cascade Range to the north, the Sierra Nevada ranges to the east, the Klamath Mountains and Coast Ranges to the west, and the Tehachapi Mountains to the south. The aquifer system in the Central Valley comprises unconfined, semi-confined, and confined aquifers, which are primarily contained within the upper 300 meters (m; though some wells exceed that depth) of alluvial sediments deposited by streams draining the surrounding Sierra Nevada and Coast Ranges (Page, 1986; California Department of Water Resources, 2003; Faunt, 2009). The [Sacramento] SAC occupies the northern third of the Central Valley and the [San Joaquin Valley] SJV occupies the southern two-thirds of the Central Valley (Fig. 1 [in the Scientific Investigations Report 2019-506]). The SJV is often further divided into the San Joaquin River Basin, which occupies the northern half of the SJV, and the Tulare Basin, which occupies the southern half of SJV. The Tulare Basin is, hydrologically, a closed basin, but it receives imported water from the San Joaquin and Sacramento Rivers. These will collectively be referred to as the SJV. In much of the western side of the SJV, the aquifer system is divided into an upper and lower zone by the Corcoran Clay Member of the Tulare Formation, a regionally extensive clay layer that limits vertical movement of groundwater (Page, 1986; Williamson and others, 1989; Belitz and Heimes, 1990; Burow and others, 2004). Both zones of the aquifer in the area of the Corcoran Clay generally are tapped for groundwater withdrawals (Shelton and others, 2013; Fram, 2017)." <sup>90</sup>

# Geology & Seismic Hazards

Seismic hazards, such as earthquakes, can cause loss of human life and property damage, disrupt the local economy, and undermine the fiscal condition of a community. Secondary seismic hazards, including subsidence and liquefaction, can cause building and infrastructure damage. The following is not an exhaustive discussion of every geologic/seismic hazard; it is merely an overview to provide the reader with a general understanding of considerations of geologic/seismic hazard conditions present within the geographic proximity of the Project. As indicated in the analysis section later in this section, existing state/local codes, standards, plans, policies, regulations, etc., would be sufficient to minimize/mitigate potential impacts from these resources.

### **Seismicity**

"Seismicity varies greatly between the two major geologic provinces represented in Tulare County. The Central Valley is an area of relatively low tectonic activity bordered by mountain ranges on either side. The Sierra Nevada Mountains, partially located within Tulare County, are the result of movement of tectonic plates which resulted in the creation of the mountain range. The Coast Range on the west side of the Central Valley is also a result of these forces, and the continued uplifting of Pacific and North American tectonic plates continues to elevate these ranges. The remaining seismic hazards in Tulare County generally result from movement along faults associated with the creation of these ranges.

Earthquakes are typically measured in terms of magnitude and intensity. The most commonly known measurement is the Richter Scale, a logarithmic scale which measures the strength of a quake. The Modified Mercalli Intensity Scale measures the intensity of an earthquake as a function of the following factors:

- Magnitude and location of the epicenter;
- Geologic characteristics;
- · Groundwater characteristics;
- Duration and characteristic of the ground motion;
- Structural characteristics of a building."91

# **Faults**

"Faults are the indications of past seismic activity. It is assumed that those that have been active most recently are the most likely to be active in the future. Recent seismic activity is measured in a geologic timescale. Geologically recent is defined as having

 $<sup>^{89}</sup>$  Tulare County 2030 General Plan 2030 Update Background Report. Page 8-4 through 8-5.

<sup>&</sup>lt;sup>90</sup> United States Department of the Interior United States Geologic Survey. "Delineation of Spatial Extent, Depth, Thickness, and Potential Volume of Aquifers Used for Domestic and Public Water-Supply in the Central Valley, California. Scientific Investigations Report 2019-5076 (SIR). Page 2. Accessed July 2023 at: <a href="https://pubs.usgs.gov/sir/2019/5076/sir20195076.pdf">https://pubs.usgs.gov/sir/2019/5076/sir20195076.pdf</a>.

<sup>91</sup> Tulare County General Plan 2030 Update. General Plan Background Report. Page 8-5. Accessed July 2023 at: <a href="http://generalplan.co.tulare.ca.us/documents.html">http://generalplan.co.tulare.ca.us/documents.html</a>, locate "Recirculated Draft Environmental Impact Report (February 2010 Draft)" then click on "Appendix B-Background Report."

occurred within the last two million years (the Quaternary Period). All faults believed to have been active during Quaternary time are considered "potentially active." <sup>92</sup>. In general, zones C1, S1, and V1 are safer than zones C2, S2, and V2. Hazards due to groundshaking are considered to be "minimal" in the S1 Zone and "minimal" to "moderate" in the S2 and S2S Zones. Development occurring within the S1 Seismic Zone must conform to the Uniform Building Code-Zone II; while development within the S2 Zone must conform to Uniform Building Code-Zone III. There are three faults within the region that have been, and will be, principal sources of potential seismic activity within Tulare County. In addition to the White Wolf Fault (approximately 55 miles southeast), the San Andreas and Owens Valley faults are the nearest known faults. These faults are described below:

- San Andreas Fault is located approximately 40 miles west of the Tulare County boundary and approximately 70 miles west of the project area. This fault has a long history of activity, and is thus the primary focus in determining seismic activity within the County. Seismic activity along the fault varies along its span from the Gulf of California to Cape Mendocino. Just west of Tulare County lays the "Central California Active Area," section of the San Andreas Fault where many earthquakes have originated.
- Owens Valley Fault Group is a complex system containing both active and potentially active faults, located on the eastern base of the Sierra Nevada Mountains approximately 55 miles east of the project area. The Group is located within Tulare and Inyo Counties and has historically been the source of seismic activity within Tulare County." 93

There are other unnamed faults north of Bakersfield and near Tulare Buttes (about 30 miles north of Porterville). These faults are small and have exhibited activity in the last 1.6 million years, but not in the last 200 years. It is also possible, but unlikely, that previously unknown faults could become active in the area. 94 The Project parcel site is not within an earthquake fault zone. 95 Lastly, no Alquist-Priolo Earthquake Fault Zones or known active faults are in or near the Project area. 96

### Groundshaking

"Ground-shaking is the primary seismic hazard in Tulare County because of the county's seismic setting and its record of historical activity. Thus, emphasis focuses on the analysis of expected levels of ground-shaking, which is directly related to the magnitude of a quake and the distance from a quake's epicenter. Magnitude is a measure of the amount of energy released in an earthquake, with higher magnitudes causing increased ground-shaking over longer periods of time, thereby affecting a larger area. Ground-shaking intensity, which is often a more useful measure of earthquake effects than magnitude, is a qualitative measure of the effects felt by population,"<sup>97</sup> "The San Joaquin Valley portion of Tulare County is located on alluvial deposits. which tend to experience greater ground-shaking intensities than areas located on hard rock. Therefore, structures located in the valley will tend to suffer greater damage from ground-shaking than those located in the foothill and mountain areas. However, existing alluvium valleys and weathered or decomposed zones are scattered throughout the mountainous portions of the county which could also experience stronger intensities than the surrounding solid rock areas. The geologic characteristics of an area can therefore be a greater hazard than its distance to the epicenter of the quake."98 "Older buildings constructed before current building codes were in effect, and even newer buildings constructed before earthquake resistance provisions were included in the current building codes, are most likely to suffer damage in an earthquake. Most of Tulare County's buildings are no more than one or two stories in height and are of wood frame construction, which is considered the most structurally resistant to earthquake damage. Older masonry buildings (without earthquake resistance reinforcement) are the most susceptible to structural failure, which causes the greatest loss of life. The State of California has identified unreinforced masonry buildings (URMs) as a safety issue during earthquakes. In high risk areas ([for example,] Bay Area), inventories and programs to mitigate this issue are required. Because Tulare County is not a high-risk area, state law only recommends that programs to retrofit URMs are adopted by jurisdictions."99 According to information provided by USGS Earthquake Scenario Map (BSSC 2014), the Project area is located within the low shaking potential zone. 100

<sup>92</sup> Ibid.

 $<sup>^{93}</sup>$  Op. Cit. 8-5 through 8-7.

<sup>94</sup> California Department of Conservation (CA DOC). California Geological Survey. Fault Activity Map. Accessed July 2023 at: <a href="https://maps.conservation.ca.gov/cgs/fam/">https://maps.conservation.ca.gov/cgs/fam/</a>

<sup>95</sup> CA DOC. EQ Zapp: California Earthquake Hazards Zone Application. Earthquake Zones of Required Investigation. Accessed July 2023. See: <a href="https://maps.conservation.ca.gov/cgs/EQZApp/app/">https://maps.conservation.ca.gov/cgs/EQZApp/app/</a>

<sup>&</sup>lt;sup>96</sup> CA DOC. Fault Activity Map of California. Accessed July 2023 at: <a href="https://maps.conservation.ca.gov/cgs/fam/app/">https://maps.conservation.ca.gov/cgs/fam/app/</a>.

<sup>&</sup>lt;sup>97</sup> Tulare County General Plan 2030 Update. General Plan Background Report. Page 8-7.

 $<sup>^{98}</sup>$  Ibid.

<sup>&</sup>lt;sup>99</sup> Op. Cit.8-8.

<sup>100</sup> United States Geologic Survey. Earthquake Shaking Potential for California Map (rev. 2016). Accessed July 2023 at:

## Liquefaction

"Liquefaction is a process whereby soil is temporarily transformed to a fluid form during intense and prolonged groundshaking. Areas most prone to liquefaction are those that are water saturated (e.g., where the water table is less than 30 feet below the surface) and consist of relatively uniform sands that are low to medium density. In addition to necessary soil conditions, the ground acceleration and duration of the earthquake must be of sufficient energy to induce liquefaction. Scientific studies have shown that the ground acceleration must approach 0.3g before liquefaction occurs in a sandy soil with relative densities typical of the San Joaquin alluvial deposits."

"Liquefaction during major earthquakes has caused severe damage to structures on level ground as a result of settling, tilting, or floating. Such damage occurred in San Francisco on bay-filled areas during the 1989 Loma Prieta earthquake, even though the epicenter was several miles away. If liquefaction occurs in or under a sloping soil mass, the entire mass may flow toward a lower elevation, such as that which occurred along the coastline near Seward, Alaska during the 1964 earthquake. Also of particular concern in terms of developed and newly developing areas are fill areas that have been poorly compacted. No specific countywide assessments to identify liquefaction hazards have been performed in Tulare County. Areas where groundwater is less than 30 feet below the surface occur primarily in the valley. However, soil types in the area are not conducive to liquefaction because they are either too coarse or too high in clay content. Areas subject to 0.3g acceleration or greater are located in a small section of the Sierra Nevada Mountains along the Tulare-Inyo County boundary. However, the depth to groundwater in such areas is greater than in the valley, which would minimize liquefaction potential as well. Detailed geotechnical engineering investigations would be necessary to more accurately evaluate liquefaction potential in specific areas and to identify and map the areal extent of locations subject to liquefaction."

### **Settlement**

"Settlement can occur in poorly consolidated soils during ground-shaking. During settlement, the soil materials are physically rearranged by the shaking and result in reduced stabling alignment of the individual minerals. Settlement of sufficient magnitude to cause significant structural damage is normally associated with rapidly deposited alluvial soils, or improperly founded or poorly compacted fill. These areas are known to undergo extensive settling with the addition of irrigation water, but evidence due to ground-shaking is not available. Fluctuating groundwater levels also may have changed the local soil characteristics. Sufficient subsurface data is lacking to conclude that settlement would occur during a large earthquake; however, the data is sufficient to indicate that the potential exists in Tulare County."

# Other Geologic Hazards

### Landslides

"Landslides are a primary geologic hazard and are influenced by four factors:

- Strength of rock and resistance to failure, which is a function of rock type (or geologic formation);
- Geologic structure or orientation of a surface along which slippage could occur;
- Water (can add weight to a potentially unstable mass or influence strength of a potential failure surface); and,
- Topography (amount of slope in combination with gravitation forces).

"As of June 2009, the California Geological Survey had not developed landslide hazard identification maps for Tulare County. However, it is reasonable to assume that certain areas in Tulare County are more prone to landslides than other areas... [As such,] There is no risk of large landslides in the valley area of the county due to its relatively flat topography." <sup>101</sup>

# Subsidence

"Subsidence occurs when a large portion of land is displaced vertically, usually due to the withdrawal of groundwater, oil, or natural gas. Soils that are particularly subject to subsidence include those with high silt or clay content. Subsidence caused by groundwater withdrawal generally presents a more serious problem, since it can affect large areas. Oil and gas withdrawal, on

 $https://www.arcgis.com/home/webmap/viewer.html?url=https\%3A\%2F\%2Fgis.conservation.ca.gov\%2Fserver\%2Frest\%2Fservices\%2FCGS\%2FMS48\_ShakingPotential\%2FMapServer\&source=sd$ 

<sup>&</sup>lt;sup>101</sup> Op. Cit. 8-10.

the other hand, tends to affect smaller, localized areas. Some areas of the Central Valley have subsided more than 20 feet during the past 50 years." <sup>102</sup>

# Seiche

"A seiche is a standing wave produced in a body of water such as a reservoir, lake, or harbor, by wind, atmospheric changes, or earthquakes. Seiches have the potential to damage shoreline structures, dams, and levees...Since this is less than wave heights that could be expected from wind induced waves, earthquake-induced seiches are not considered a risk in Tulare County. In addition, the effects from a seiche would be similar to the flood hazard for a particular area, and the risk of occurrence is perceived as considerably less than the risk of flooding." 103

## Volcanic Hazard

"The nearest volcanoes lie to the northeast of Tulare County in Mono County, in the Mammoth Lakes/Long Valley area. The most serious effect on Tulare County of an eruption in the Mammoth Lakes, area according to the California Geological Survey, would be ash deposition." "A volcanic eruption during the winter could result in snowmelt and lead to flooding. The state has formulated a contingency plan, the "Long Valley Caldera Response Plan," designed to notify the public in the event of an earthquake in the Long Valley area (outside of Tulare County)." 105

## **Paleontology**

"Paleontological resources are any fossilized remains, traces, or imprints of organisms, preserved in or on the earth's crust, that are of paleontological interest and that provide information about the history of life on earth, with the exception of materials associated with an archaeological resource (as defined in Section 3(1) of the Archaeological Resources Protection Act of 1979 (16 U.S.C. 470bb[1]), or any cultural item as defined in Section 2 of the Native American Graves Protection and Repatriation Act (25 U.S.C. 3001)." According to the Paleontological Resources Preservation Act (PRPA) of 2009, "Section 6301 defines a paleontological resource as any fossilized remains, traces, or imprints of organisms, preserved in or on the Earth's crust, that are of paleontological interest and provide information about the history of life on Earth." According to the University of California Museum of Paleontology (UCMP), 12 paleontological resources have been recorded in Tulare County, generally within the valley portion of the County. These resources primarily consist of invertebrates, vertebrate, and plant fossils (UCMP, 2009)." CEQA requires that a determination be made as to whether a project would directly or indirectly destroy a unique paleontological resource or site or unique geological feature (CEQA Appendix G(v)(c)). If an impact is significant, CEQA requires feasible measures to minimize the impact (CCR Title 14(3) §15126.4 (a)(1)). California Public Resources Code §5097.5 also applies to paleontological resources.

## Soil Characteristics

"The San Joaquin Valley portion of Tulare County is located on alluvial deposits, which tend to experience greater groundshaking intensities than areas located on hard rock. Therefore, structures located in the valley will tend to suffer greater damage from groundshaking than those located in the foothill and mountain areas. However, existing alluvium valleys and weathered or decomposed zones are scattered throughout the mountainous portions of the county which could also experience stronger intensities than the surrounding solid rock areas. The geologic characteristics of an area can therefore be a greater hazard than its distance to the epicenter of the quake." Resource Item 3 Agricultural Resources and Forestry, provides additional information regarding soil characteristics within the Project area.

# **Regulatory Setting**

#### **Federal**

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102 Op. Cit. 8-10 through 8-11.
103 Op. Cit. 8-11.
104 Op. Cit.
105 Op. Cit.
106 Op. Cit. 9-43.
107 U.S. Department of the Interior. Bureau of Land Management. Fact Sheet. Accessed July 2023 at:
https://www.blm.gov/sites/blm.gov/files/programs_paleontology_quicklinks_PRPA%20fact%20sheet.pdf.
108 Op. Cit. 9-53.
109 Tulare County General Plan 2030 Update. Background Report. Page 8-7.
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None that apply to the Project.

State

# Seismic Hazards Mapping Act

"Under the Seismic Hazards Mapping Act, the State Geologist is responsible for identifying and mapping seismic hazards zones as part of the California Geologic Survey (CGS). The CGS provides zoning maps of non-surface rupture earthquake hazards (including liquefaction and seismically induced landslides) to local governments for planning purposes. These maps are intended to protect the public from the risks associated with strong ground shaking, liquefaction, landslides or other ground failure, and other hazards caused by earthquakes. For projects within seismic hazard zones, the Seismic Hazards Mapping Act requires developers to conduct geological investigations and incorporate appropriate mitigation measures into project designs before building permits are issued." 110

## California Building Code

"The California Building Code is another name for the body of regulations known as the California Code of Regulations (C.C.R.), Title 24, Part 2, which is a portion of the California Building Standards Code. Title 24 is assigned to the California Building Standards Commission, which, by law, is responsible for coordinating all building standards." The 2022 California Building Standards Code (Cal. Code Regs., Title 24) is effective January 1, 2023.

# Alquist-Priolo Earthquake Fault Zoning Act

"The Alquist- Priolo Earthquake Fault Zoning Act (formerly the Alquist- Priolo Special Studies Zone Act), signed into law December 1972, requires the delineation of zones along active faults in California. The purpose of the Alquist-Priolo Act is to regulate development on or near active fault traces to reduce the hazards associated with fault rupture and to prohibit the location of most structures for human occupancy across these traces." 113

# State Water Resources Control Board and Regional Water Quality Control Board

National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activity- Water Quality Order 99-08 DWQ.

Typically, General Construction Storm Water NPDES permits are issued by the RWQCB for grading and earth-moving activities. The General Permit is required for construction activities that disturb one or more acres. The General Permit requires development and implementation of a Storm Water Pollution Prevention Plan (SWPPP), which specifies practices that include prevention of all construction pollutants from contacting stormwater with the intent of keeping all products of erosion form moving off site into receiving waters. The NPDES permits are issued for a five-year term. NPDES general permits require adherence to the Best Management Practices (BMPs) including:

- Site Planning Consideration- such as preservation of existing vegetation.
- Vegetation Stabilization- through methods such as seeding and planting.
- Physical Stabilization- through use of dust control and stabilization measures.
- Diversion of Runoff by utilizing earth dikes and temporary drains and swales.
- Velocity Reduction through measures such as slope roughening/terracing.
- Sediment Trapping/Filtering through use of silt fences, straw bale and sand bag filters, and sediment traps and basins.

### Local

# Tulare County General Plan

<sup>&</sup>lt;sup>110</sup> Op. Cit. 3.6-9.

<sup>&</sup>lt;sup>111</sup> Op. Cit.

<sup>112</sup> California Department of General Services (DGS) Building Standards Commission Accessed July 2023 at: https://www.dgs.ca.gov/BSC/Codes or Codes (ca.gov)

<sup>113</sup> Ibid.

The General Plan has a number of policies that apply to projects within Tulare County. General Plan policies that relate to the Project include: HS-1.2 Development Constraints wherein the County shall permit development only in areas where the potential danger to the health and safety of people and property can be mitigated to an acceptable level; HS-1.3 Hazardous Lands wherein the County shall designate areas with a potential for significant hazardous conditions for open space, agriculture, and other appropriate low intensity uses; HS-1.5 Hazard Awareness and Public Education wherein the County shall continue to promote awareness and education among residents regarding possible natural hazards, including soil conditions, earthquakes, flooding, fire hazards, and emergency procedures; HS-1.11 Site Investigations wherein the County shall conduct site investigations in areas planned for new development to determine susceptibility to landslides, subsidence/settlement, contamination, and/or flooding; HS-2.1 Continued Evaluation of Earthquake Risks wherein the County shall continue to evaluate areas to determine levels of earthquake risk; HS-2.4 Structure Siting The wherein the County shall permit development on soils sensitive to seismic activity permitted only after adequate site analysis, including appropriate siting, design of structure, and foundation integrity; HS-2.7 Subsidence wherein the County shall confirm that development is not located in any known areas of active subsidence; HS-2.8 Alquist-Priolo Act Compliance wherein The County shall not permit any structure for human occupancy to be placed within designated Earthquake Fault Zones; WR-2.2 NPDES Enforcement wherein the County shall continue to support the State in monitoring and enforcing provisions to control non-point source water pollution contained in the U.S. EPA NPDES program as implemented by the Water Quality Control Board; WR-2.3 Best Management Practices wherein the County shall continue to require the use of feasible BMPs and other mitigation measures designed to protect surface water and groundwater from the adverse effects of construction activities, agricultural operations requiring a County Permit and urban runoff in coordination with the Water Quality Control Board; and WR-2.4 Construction Site Sediment Control wherein the County shall continue to enforce provisions to control erosion and sediment from construction sites.

## Subdivision of Land

The County subdivision regulations, contained in Chapter 1 of Part VII of the Ordinance Code, require that preliminary and final geological and hydrological reports be prepared by a registered civil engineer or registered professional geologist for all subdivisions. Section 7-01-1610 requires the preparation of a preliminary report to provide an analysis of potential geological hazards, stability of soils, seismicity, potential erosion and sedimentation. Section 7-01-1725 requires the preparation of a final report which is to include more definitive evaluation of these factors and to recommend solutions for all identified hazards and problems. Section 7-01-1740 provides that if the final geological hydrological report indicates the presence of critically expansive or loosely deposited soils or other soil problems that could lead to structural defects, a soil investigation shall be prepared to recommend corrective action.114

# Tulare County Building and Grading Regulations

The Tulare County Code, at Section 7-15-1066, adopts and incorporates by reference the 2019 Edition of the California Building Code (CBC) as the Tulare County Building Regulations. 115 The CBC is described earlier in this section. Appendix J of the CBC requires the issuance of grading permits prior to commencement of site grading, and provides for the submittal of a soils report and engineering geology report, as required by the Building Official, in support of grading plans. The recommendations contained in the reports and approved by the Building Official are required to be incorporated into the grading plans or specifications.

Ordinance Code Article 7 - Excavation and Grading, sets forth additional requirements including provisions for sediment control and revegetation details. 116 Ordinance Code Article 27 - Storm Water Quality and Regulation, addresses the control of storm water discharges and compliance with the provisions of the County's National Pollutant Discharge Elimination System (NPDES) permit, including preparation of Storm Water Pollution Prevention Plans (SWPPPs) and implementation of Best Management Practices (BMPs). 117 (See Item 10 Hydrology and Water Quality for discussion and analysis related to storm water runoff and water quality.)

## Five County Seismic Safety Element (FCSSE)

The FCSSE report represents a cooperative effort between the governmental entities within Fresno, Kings, Madera, Mariposa and Tulare Counties to develop an adoptable Seismic Safety Element as required by State law. Part I, the Technical Report, is

<sup>114</sup> Tulare County. Chapter 1 of Part VII of the Ordinance Code. ARTICLE 7. PRELIMINARY MAP. Section 7-01-1610; ARTICLE 9 TENTATIVE MAP. Sections 7-01-1725 and 7-01-1740. Accessed July 2023 at:

 $<sup>\</sup>underline{https://www.codepublishing.com/CA/TulareCounty/html/TulareCounty07/TulareCounty0701.html}$ 

<sup>115</sup> Ibid. Section 7-15-1066 ADOPTION OF CALIFORNIA BUILDING CODE, PART 2, AND VOLUMES 1 AND 2, INCLUDING APPENDICES C, F, G, H, I AND J. Accessed July 2023 at: https://www.codepublishing.com/CA/TulareCounty/html/TulareCounty07/TulareCounty0715.html

 $<sup>^{116}\,\</sup>mathrm{Op.}$  Cit. ARTICLE 7 EXCAVATION AND GRADING.

<sup>&</sup>lt;sup>117</sup> Op. Cit. ARTICLE 27 CALIFORNIA REFERENCED STANDARDS CODE, TITLE 24, PART 12

designed to be used when necessary to provide background for the Summary document. Part II, the Summary Report, establishes the framework and rationale for evaluation of seismic risks and hazards in the region. Part II of the Seismic Safety Element, the Policy Report, has been prepared as a "model" report designed to address seismic hazards as delineated in the Technical Report. The intent has been to develop a planning tool for use by county and city governments in implementing their seismic safety elements. The planning process utilized to develop the Element was developed through the efforts of Technical and Policy Committees, composed of both staff and elected representatives from Cities, Counties, and Special Districts or Areawide Planning Organizations in cooperation with the consulting firms of Envicom Corporation and Quinton-Redgate. 118

## **Project Impact Analysis:**

a) Less Than Significant Impact: According to the Tulare County General Plan 2030 Update, the proposed Project area lies in the V-1 seismic study area, characterized by a relatively thin section of sedimentary rock overlying a granitic basement.

The V-1 seismic zone, which is characterized by a relatively thick section of sedimentary rock overlying a granitic basement, has "low" risks for shaking hazards, "minimal" risk for landslides, "low to moderate" risk for subsidence, "low" risks for liquefaction and "minimal" risk for seiching. <sup>119</sup>

The distance to area faults (i.e.; the White Wolf, Owens Valley, and San Andreas faults), the expected sources of significant shaking, is sufficiently great that shaking effects should be minimal.

i) Fault Rupture: Less Than Significant - No substantial faults are known to traverse Tulare County according to the Alquist-Priolo Earthquake Fault Zoning Maps and the State of California Department of Conservation. The nearest major fault line, which lies outside of Tulare County, is the San Andreas fault zones; approximately 40 miles west of the Tulare County line. According to the Five County Seismic Safety Element (FCSSE), Tulare County is located in the V-1 zone. This zone includes most of the eastern San Joaquin Valley and is characterized by a relatively thin section of sedimentary rock overlying a granitic basement. Amplification of shaking that would affect low to medium-rise structures is relatively high, but the distance of the faults that are expected sources of the shaking is sufficiently great that the effects should be minimal. The requirements of Zone II of the Uniform Building Code should be adequate for normal facilities. <sup>120</sup> Amplification of shaking that will affect low to medium-rise structures is relatively high but the distance to either of the fault systems that are expected sources of the shaking is sufficiently great that the effect will be minimal.

Therefore, as noted earlier, no Alquist-Priolo Earthquake Fault Zones or known active faults are in or near the Project area. As such, the risk of rupture of a known earthquake fault will be less than significant.

- ii) Ground Shaking: Less Than Significant The Project area is located in a seismic zone which is sufficiently far from known faults and consists primarily of a stable geological formation. Any impacts regarding strong seismic ground shaking have been discussed in Impact VI-a-i. As such, the impact due to ground shaking would be less than significant.
- **iii)** Ground Failure and Liquefaction: No Impact As noted earlier, the Project site is located in the Five County Seismic Safety Element's V-1 zone, and therefore has a low risk of liquefaction. No subsidence-prone soils or oil or gas production is involved with the Project. Therefore, the potential impact to project structures and improvements due to liquefaction is less than significant.
- **iv**) *Landslides:* The flat terrain of the site and surrounding areas, and the general absence of hills or exposed slopes in the vicinity (such as those found along river terraces, bluffs, and foothills), makes landslides highly unlikely. Therefore, the Project would result in no impact.
- b) Less Than Significant Impact: As noted earlier and summarized here, the proposed Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and

<sup>118</sup> Five County Seismic Safety Element. Fresno, Kings, Madera, Mariposa, & Tulare Counties. 1974. Pages 4-7. Prepared by Envicom Corporation. Available upon request at the RMA Administrative Office.

<sup>119</sup> Envicom Corporation. 1974. Summary of Seismic Hazards & Safety Recommendations. Five County Seismic Safety Element Fresno, Kings, Madera, Mariposa & Tulare Counties. Available at the RMA Administrative Office upon request.

<sup>120</sup> Ibid. Summary & Policy Recommendations II. 1974. Pages 3 and 15. Prepared by Envicom Corporation. Available upon request at the RMA Administrative Office.

Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years. The extent of erosion will vary depending on slope steepness/stability, vegetation/cover, concentration of runoff, and weather conditions. The site has very little slope (i.e., a slight grade from east to west of 0 to 2%) and will have a flat topography after grading. To preserve and restore the agricultural productivity of the Project site to the existing condition during and upon completion of the life of the Project, no soils would be removed from the Project site during construction or operation of the Project. As stated earlier, the Project site is rated as Prime Farmland by NRCS. The prime soil types supported the enrollment of the Project site under Williamson Act contracts for the preservation of agricultural production. As stated above, the relatively flat nature of the site reduces the need for grading which would be limited to approximately 31 acres or approximately 40.3 percent of the Project site. Any soil removed from these areas would be redistributed around and retained elsewhere on the Project site (e.g., 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. The trench to underground the conduit cable would be limited in scale and is not anticipated to displace significant soils (as the typical trench would be approximately 18-inches wide and three (3)-feet deep). After the estimated 30-year life of the Project, if solar production is abandoned, the site would be regraded, and any stockpiled soils would be redistributed to permit the site to be returned to agricultural production after potential removal of solar facilities.

To prevent water and wind erosion during the construction period, a Storm Water Pollution Prevention Plan (SWPPP) will be developed for the Project as required for all projects which disturb more than one acre. As part of the SWPPP, the applicant will be required to provide erosion control measures to protect the topsoil. The Project would comply with SJVAPCD Rule 8021 for construction and earthmoving activities. As a result of these efforts, loss of topsoil and substantial soil erosion during the construction period are not anticipated.

As such, the Project would not result in substantial soil erosion or loss of thereby the impact by the Project would be a less than significant impact.

- No Impact: As noted earlier and summarized here, the Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years. The extent of erosion will vary depending on slope steepness/stability, vegetation/cover, concentration of runoff, and weather conditions. The site has very little slope (i.e., a slight grade from east to west of 0 to 2%) and will have a flat topography after grading. The Project site is not located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. As noted earlier, the entire Project site is located on entirely on Tagus series soils. The Tagus series consists of very deep, well drained soils formed in alluvium derived from granitic rock sources. Tagus soils are on terraces and have slopes of 0 to 2 percent. The average annual precipitation is about 10 inches, and the average annual temperature is about 63 degrees F. Tagus loam soil is coarse-loamy, mixed, superactive, thermic Calcic Haploxerolls. Elevations are 230 to 400 feet. The climate is semiarid and has hot, dry summers and cool, moist winters. The average annual precipitation is 9 to 12 inches. The mean annual temperature is 62 degrees to 65 degrees F. The frost-free period is 250 to 300 days. Well drained; negligible to low runoff; moderate permeability. This soil is used for irrigated cropland to grow cotton, corn, wheat, barley, walnuts, almonds and alfalfa. It is also used for dairy and cattle production and building site development. Therefore, the native soils identified on the site do not contain the characteristics of an expansive soil. As such, the Project would result in a less than significant impact and would not create substantial direct or indirect risks to life or property.
- d) Less Than Significant Impact: As described in Impact 7 c), the entire site is located on Tagus soil which is not considered expansive soils. Substantial grade change will not occur in the topography to the point where the Project will expose people or structures to potential substantial adverse effects on, or offsite, such as landslides, lateral spreading, liquefaction or collapse. Also as noted earlier, this Project is located in the Five County Seismic Safety Element's V-1 zone, as such, the Project site has a low to moderate risk of subsidence or liquefaction. As such, the Project would result in a less than significant impact.
- e) **No Impact:** The Project does not include the installation or use of septic tanks or other alternative waste water disposal systems. As such, the Project would result in no impact.

f) Less Than Significant Impact With Mitigation: There are no known paleontological resources within the Project area, nor are there any known geologic features in the Project area. The CHRIS and NAHC/SLF searches did not identify any paleontological (or cultural) resources. Additionally, no paleontological resources or sites, or unique geologic features have previously been encountered in the Project area. Project construction will not be anticipated to disturb any paleontological resources not previously disturbed; however unlikely, there is a possibility that subsurface resources could be uncovered during construction-related activities. In such an event, potentially significant impacts to previously unknown subsurface resources may occur. With the implementation of Mitigation Measures 5-1 through 5-3, as specified in Item 5 Cultural Resources (as applicable), will ensure that any impact from the Project will be less than significant.

Cumulative Impact Analysis: Less Than Significant Impact With Mitigation - The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, Tulare County General Plan Background Report and/or Tulare County 2030 General Plan EIR. As noted earlier and summarized here, the Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years. The Project will only contribute to cumulative impacts related to this Checklist Item if Project-specific impacts were to occur. As noted earlier, the Project will not result in significant impacts related to fault rupture, groundshaking, liquefaction, and landslides. Based upon the analysis above, including compliance with Tulare County General Plan policies, Tulare Ordinance Code, Building Codes, Regional Water Quality Control Board, San Joaquin Valley Air Pollution Control District rules and Regulations, Mitigation Measures 5-1 through 5-3, etc., the Project will range from no-to-less than significant impacts to this resource.

Mitigation Measure(s) See Mitigation Measures 5-1 through 5-3 (which can be found in their entirety in Attachment "F" of this IS/MND)

**Summary of Mitigation Measures:** 

- 5-1 Discovery.
- 5-2 Cessation of Work/Preservation/Treatment Plan/PRC 21074
- 5-3 Implementation of Health and Safety Code section 7050.5, CEQA Guidelines Section 15064.5, PRC 5097.98

#### VIII. GREENHOUSE GAS EMISSIONS

Wou	ld the project:	SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	No Impact
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			$\boxtimes$	
b)	Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				$\boxtimes$

The discussions regarding Environmental Setting, Regulatory Setting, CEOA requirements, Greenhouses Gases, etc.; contained in the Tulare County General Plan 2030 Update, Tulare County General Plan Background Report, and Tulare County General Plan Environmental Impact Report are incorporated herein in their entirety. Where necessary and if available, additional sitespecific facts, data, information, etc., are included in this discussion.

# **Environmental Setting**

As noted earlier and summarized here, the proposed Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years.

"An increase in the near surface temperature of the earth. Global warming has occurred in the distant past as the result of natural influences, but the term is most often used to refer to the warming predicted to occur as a result of increased emissions of greenhouse gases. Scientists generally agree that the earth's surface has warmed by about 1 degree Fahrenheit in the past 140 years, but warming is not predicted evenly around the globe. Due to predicted changes in the ocean currents, some places that are currently moderated by warm ocean currents are predicted to fall into deep freeze as the pattern changes." 121 "The warming of the earth's atmosphere attributed to a buildup of CO<sub>2</sub> or other gases; some scientists think that this build-up allows the sun's rays to heat the earth, while making the infra-red radiation atmosphere opaque to infrared radiation, thereby preventing a counterbalancing loss of heat. Ibid. Gases that trap heat in the atmosphere are called greenhouse gases (GHGs). The major concern is that increases in GHGs are causing global climate change. Global climate change is a change in the average weather on earth that can be measured by wind patterns, storms, precipitation and temperature. The gases believed to be most responsible for global warming are water vapor, carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>)."122 "Enhancement of the greenhouse effect can occur when concentrations of GHGs exceed the natural concentrations in the atmosphere. Of these gases, CO2 and methane are emitted in the greatest quantities from human activities. Emissions of CO<sub>2</sub> are largely by-products of fossil fuel combustion, whereas methane primarily results from off-gassing associated with agricultural practices and landfills. SF6 is a GHG commonly used in the utility industry as an insulating gas in transformers and other electronic equipment. There is widespread international scientific agreement that human-caused increases in GHGs has and will continue to contribute to global warming, although there is much uncertainty concerning the magnitude and rate of the warming." 123 "Some of the potential resulting effects in California of global warming may include loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (CARB, 2006). Globally, climate change has the potential to impact numerous environmental resources through potential, though uncertain, impacts related to future air temperatures and precipitation patterns. The projected effects of global warming on weather and climate are likely to vary regionally, but are expected to include the following direct effects (IPCC, 2001):

- Higher maximum temperatures and more hot days over nearly all land areas;
- Higher minimum temperatures, fewer cold days and frost days over nearly all land areas;
- Reduced diurnal temperature range over most land areas; o Increase of heat index over land areas; and

<sup>&</sup>lt;sup>121</sup> Tulare County General Plan 2030 Update Background Report. Page 6-31.

<sup>&</sup>lt;sup>122</sup> Ibid. 6-16 and 6-20.

<sup>123</sup> Op. Cit. 6-31.

• More intense precipitation events."124

"Snowpack and snowmelt may also be affected by climate change. Much of California's precipitation falls as snow in the Sierra Nevada and southern Cascades Mountain ranges, and snowpack represents approximately 30 percent of the state's useable annual water supply." 125 "The snowmelt typically occurs from April through July; it provides natural water flow to streams and reservoirs after the annual rainy season has ended." 126 "As air temperatures increase due to climate change, the water stored in California's snowpack could be affected by increasing temperatures resulting in: (1) decreased snowfall, and (2) earlier snowmelt." 127

"In 2007, Tulare County generated approximately 5.2 million tonnes of Carbon Dioxide Equivalent (CO<sub>2</sub>e). The largest portion of these emissions (63 percent) is attributed to dairies/feedlots, while the second largest portion (16 percent) is from mobile sources, the third largest portion (11%) is from electricity sources." Table 6-7 [**Table 8-1** in this document] identifies Tulare County's emissions by sector in 2007." 129

Table 8-1 GHG Emissions by Sector in 2007 <sup>130</sup>					
Sector CO2e (tons/year) % of Total					
Electricity	542,690	11%			
Natural Gas	321,020	6%			
Mobile Sources	822,230	16%			
Dairy/Feedlots	3,294,870	63%			
Solid Waste	227,250	4%			
Total	5,208,060	100%			
Per Capita	36.1				

"In 2030, Tulare County is forecast to generate approximately 6.1 million tonnes of CO2e. The largest portion of these emissions (59%) is attributed to dairies/feedlots, while the second largest portion (20%) is from mobile sources, and third largest portion (11%) is from electricity as shown on Table 6-8 [**Table 8-2** in this document]. Per capita emissions in 2030 are projected to be approximately 27 tonnes of CO2e per resident." <sup>131</sup>

Table 8-2 GHG Emissions by Sector in 2030 <sup>132</sup>					
Sector	CO <sub>2e</sub> (tons/year)	% of Total			
Electricity	660,560	11%			
Natural Gas	384,410	6%			
Mobile Sources	1,212,370	20%			
Dairy/Feedlots	3,601,390	59%			
Solid Waste	246,750	4%			
Total	6,105,480	100%			
Per Capita	27.4				

The Tulare County General Plan 2030 Update contains the following: Enhancement of the greenhouse effect can occur when concentrations of GHGs exceed the natural concentrations in the atmosphere. Of these gases, CO2 and methane are emitted in the greatest quantities from human activities. Emissions of CO2 are largely by-products of fossil fuel combustion, whereas methane primarily results from off-gassing associated with agricultural practices and landfills. SF6 is a GHG commonly used in the utility industry as an insulating gas in transformers and other electronic equipment. There is widespread international

<sup>&</sup>lt;sup>124</sup> Op. Cit.

<sup>125</sup> Op. Cit. 8-85.

<sup>&</sup>lt;sup>126</sup> Op. Cit.

<sup>&</sup>lt;sup>127</sup> Op. Cit.

<sup>128</sup> Op. Cit. 6-36.

<sup>&</sup>lt;sup>129</sup> Op. Cit. 6-38.

 $<sup>^{130}</sup>$  Op. Cit.

<sup>&</sup>lt;sup>131</sup> Op. Cit.

<sup>&</sup>lt;sup>132</sup> Op. Cit.

scientific agreement that human-caused increases in GHGs has and will continue to contribute to global warming, although there is much uncertainty concerning the magnitude and rate of the warming. 133

The San Joaquin Valley Air Pollution Control District (Air District) proposed, and subsequently adopted, the following process for determining the cumulative significance of project specific GHG emissions on global climate change when issuing permits for stationary source projects:

- "Projects determined to be exempt from the requirements of CEQA would be determined to have a less than significant
  individual and cumulative impact for GHG emissions and would not require further environmental review, including
  analysis of project specific GHG emissions. Projects exempt under CEQA would be evaluated consistent with
  established rules and regulations governing project approval and would not be required to implement [Best Performance
  Practices] BPS.
- Projects complying with an approved GHG emission reduction plan or GHG mitigation program which avoids or substantially reduces GHG emissions within the geographic area in which the project is located would be determined to have a less than significant individual and cumulative impact for GHG emissions. Such plans or programs must be specified in law or approved by the lead agency with jurisdiction over the affected resource and supported by a CEQA compliant environmental review document adopted by the lead agency. Projects complying with an approved GHG emission reduction plan or GHG mitigation program would not be required to implement BPS.
- Projects implementing Best Performance Standards would not require quantification of project specific GHG emissions.
   Consistent with CEQA Guideline, such projects would be determined to have a less than significant individual and cumulative impact for GHG emissions.
- Projects not implementing Best Performance Standards would require quantification of project specific GHG emissions and demonstration that project specific GHG emissions would be reduced or mitigated by at least 29%, compared to [Business As Usual] BAU, including GHG emission reductions achieved since the 2002-2004 baseline period, consistent with GHG emission reduction targets established in ARB's AB 32 Scoping Plan. Projects achieving at least a 29% GHG emission reduction compared to BAU would be determined to have a less than significant individual and cumulative impact for GHG.
- Project requiring preparation of an Environmental Impact Report would require quantification of project specific GHG
  emissions. Projects implementing BPS or achieving at least a 29% GHG emission reduction compared to BAU would
  be determined to have a less than significant individual and cumulative impact for GHG."<sup>134</sup>

# **Regulatory Setting**

#### **Federal**

While climate change has been a concern since at least 1988, as evidenced by the establishment of the United Nations and World Meteorological Organization's Intergovernmental Panel on Climate Change (IPCC), the efforts devoted to greenhouse gas (GHG) emissions reduction and climate change research and policy have increased dramatically in recent years.

The USEPA Mandatory Reporting Rule (40 CFR Part 98), which became effective December 29, 2009, requires that all facilities that emit more than 25,000 metric tons CO2-equivalent per year beginning in 2010, report their emissions on an annual basis. On May 13, 2010, the USEPA issued a final rule that established an approach to addressing GHG emissions from stationary sources under the CAA permitting programs. The final rule set thresholds for GHG emissions that define when permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities.

In addition, the Supreme Court decision in Massachusetts v. EPA (Supreme Court Case 05-1120) found that the USEPA has the authority to list GHGs as pollutants and to regulate emissions of GHGs under the CAA. On April 17, 2009, the USEPA found that CO2, CH4, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride may contribute to air pollution and may endanger public health and welfare. This finding may result in the USEPA regulating GHG emissions; however, to date the USEPA has not proposed regulations based on this finding.



<sup>&</sup>lt;sup>133</sup> Op. Cit. 6-31.

<sup>134</sup> SJVAPCD. District Policy. Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as Lead Agency. Page 8 and 9. Accessed in July 2023 at: https://www.valleyair.org/Programs/CCAP/12-17-09/2%20CCAP%20-%20FINAL%20District%20Policy%20CEQA%20GHG%20-%20Dec%2017%202009.pdf

In 2002, with the passage of Assembly Bill 1493 (AB 1493), California launched an innovative and pro-active approach to dealing with GHG emissions and climate change at the state level. AB 1493 requires the Air Resources Board (ARB) to develop and implement regulations to reduce automobile and light truck GHG emissions; these regulations applied to automobiles and light trucks beginning with the 2009 model year.

California has taken action to reduce GHG emissions. In June 2005, Governor Schwarzenegger signed Executive Order S-3-05 to address climate change and GHG emissions in California. This Order sets the following goals for statewide GHG emissions:

- Reduce to 2000 levels by 2010
- Reduce to 1990 levels by 2020
- Reduce to 80 percent below 1990 levels by 2050

"In 2006, the Legislature passed the California Global Warming Solutions Act of 2006 [Assembly Bill 32 (AB 32 Opens in New Window)], which created a comprehensive, multi-year program to reduce greenhouse gas (GHG) emissions in California. AB 32 required the California Air Resources Board (ARB or Board) to develop a Scoping Plan that describes the approach California will take to reduce GHGs to achieve the goal of reducing emissions to 1990 levels by 2020. The Scoping Plan was first approved by the Board in 2008 and must be updated every five years. Since 2008, there have been two updates to the Scoping Plan. Each of the Scoping Plans have included a suite of policies to help the State achieve its GHG targets, in large part leveraging existing programs whose primary goal is to reduce harmful air pollution." 135

"The First Update to the Scoping Plan was approved by the Board on May 22, 2014, and builds upon the initial Scoping Plan with new strategies and recommendations. The First Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The First Update defines ARB's climate change priorities for the next five years, and also sets the groundwork to reach long-term goals set forth in Executive Orders S-3-05 and B-16-2012. The Update highlights California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the initial Scoping Plan. It also evaluates how to align the State's "longer-term" GHG reduction strategies with other State policy priorities for water, waste, natural resources, clean energy, transportation, and land use." 136

"On April 29, 2015, the Governor issued Executive Order B-30-15 establishing a mid-term GHG reduction target for California of 40 percent below 1990 levels by 2030. All state agencies with jurisdiction over sources of GHG emissions were directed to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 targets. ARB was directed to update the AB 32 Scoping Plan to reflect the 2030 target, and therefore, is moving forward with the update process. The mid-term target is critical to help frame the suite of policy measures, regulations, planning efforts, and investments in clean technologies and infrastructure needed to continue driving down emissions." <sup>137</sup>

"This Scoping Plan for Achieving California's 2030 Greenhouse Gas Target (Scoping Plan or 2017 Scoping Plan) identifies how the State can reach our 2030 climate target to reduce greenhouse gas (GHG) emissions by 40 percent from 1990 levels, and substantially advance toward our 2050 climate goal to reduce GHG emissions by 80 percent below 1990 levels. By selecting and pursuing a sustainable and clean economy path for 2030, the State will continue to successfully execute existing programs, demonstrate the coupling of economic growth and environmental progress, and enhance new opportunities for engagement within the State to address and prepare for climate change." 138

"This Scoping Plan builds on and integrates efforts already underway to reduce the State's GHG, criteria pollutant, and toxic air contaminant emissions. Successful implementation of existing programs has put California on track to achieve the 2020 target. Programs such as the Low Carbon Fuel Standard and Renewables Portfolio Standard are delivering cleaner fuels and energy, the Advanced Clean Cars Program has put more than a quarter million clean vehicles on the road, and the Sustainable Freight Action Plan will result in efficient and cleaner systems to move goods throughout the State. Enhancing and implementing these ongoing efforts puts California on the path to achieving the 2030 target. This Scoping Plan relies on these, and other, foundational programs paired with an extended, more stringent Cap-and-Trade Program, to deliver climate, air quality, and other benefits." <sup>139</sup>

# California Environmental Quality Act (CEQA) Requirements

<sup>135</sup> ARB.AB 32 Scoping Plan. Accessed July 2023 at: <a href="https://www.arb.ca.gov/cc/scopingplan/scopingplan.htm">https://www.arb.ca.gov/cc/scopingplan/scopingplan.htm</a>.

<sup>136</sup> ARB. First Update to the AB 32 Scoping Plan. Accessed July 2023 at: https://www.arb.ca.gov/cc/scopingplan/document/updatedscopingplan2013.htm.

<sup>137</sup> ARB. Scoping Plan Update to Reflect 2030 Target. Accessed July 2023 at: <a href="https://www.arb.ca.gov/cc/scopingplan/scopingplan.htm">https://www.arb.ca.gov/cc/scopingplan/scopingplan.htm</a>.

<sup>138</sup> ARB. California's 2017 Climate Change Scoping Plan. Page 1. Accessed July 2023 at: <a href="https://ww3.arb.ca.gov/cc/scopingplan/scoping\_plan\_2017.pdf">https://ww3.arb.ca.gov/cc/scopingplan/scoping\_plan\_2017.pdf</a>. 139 Ibid.

Section 15064.4 Determining the Significance of Impacts from Greenhouse Gas Emissions

- (a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in section 15064. A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:
  - (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model or methodology it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; and/or
- (2) Rely on a qualitative analysis or performance based standards.
  - (b) A lead agency should consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment:
    - (1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;
    - (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
    - (3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.<sup>140</sup>

#### Regional

# California Air Pollution Control Officers Association (CAPCOA)

"In January 2008, the California Air Pollution Control Officers Association (CAPCOA) issued a "white paper" on evaluating GHG emissions under CEQA (CAPCOA, 2008). The CAPCOA white paper strategies are not guidelines and have not been adopted by any regulatory agency; rather, the paper is offered as a resource to assist lead agencies in considering climate change in environmental documents." <sup>141</sup>

The California Association of Air Pollution Control Officers (CAPCOA) represents all thirty-five local air quality agencies throughout California. CAPCOA, which has been in existence since 1975, is dedicated to protecting the public health and providing clean air for all our residents and visitors to breathe, and initiated the Greenhouse Gas Reduction Exchange. 142

"The Greenhouse Gas Reduction Exchange (GHG Rx) is a registry and information exchange for greenhouse gas emissions reduction credits designed specifically to benefit the state of California. The GHG Rx is a trusted source of locally generated credits from projects within California, and facilitates communication between those who create the credits, potential buyers, and funding organizations." Four public workshops were held throughout the state including in the SJVAPCD. The mission is to provide a trusted source of high quality California-based greenhouse gas credits to keep investments, jobs, and benefits instate, through an Exchange with integrity, transparency, low transaction costs and exceptional customer service.

# San Joaquin Valley Unified Air Pollution Control District)

The Air District is made up of eight counties in California's Central Valley: San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare and the San Joaquin Valley Air Basin portion of Kern. "The San Joaquin Valley Air District is a public health

<sup>140</sup> California Environmental Quality Act (CEQA). Section 15064.4 Determining the Significance of Impacts from Greenhouse Gas Emissions. Accessed July 2023 at: <a href="https://www.califaep.org/statute\_and\_guidelines.php">https://www.califaep.org/statute\_and\_guidelines.php</a>

<sup>141</sup> Op. Cit. Page 6-28. Background Report citation: CEQA and Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act. January 2008.

<sup>&</sup>lt;sup>142</sup> California Air Pollution Control Officers Association (CAPCOA). Accessed July 2023 at: <a href="http://www.capcoa.org/">http://www.capcoa.org/</a>.

<sup>143</sup> Ibid. See "CAPCOA GHG RX" tab

<sup>&</sup>lt;sup>144</sup> CAPCOA. CAPCOA Greenhouse Gas Reduction Exchange. Accessed July 2023 at: <a href="http://www.ghgrx.org/">http://www.ghgrx.org/</a>.

agency whose mission is to improve the health and quality of life for all Valley residents through efficient, effective and entrepreneurial air quality-management strategies." <sup>145</sup>

The Air District adopted the *Climate Change Action Plan* (CCAP) in August 2008. "The CCAP directed the District Air Pollution Control Officer to develop guidance to assist Lead Agencies, project proponents, permit applicants, and interested parties in assessing and reducing the impacts of project specific greenhouse gas (GHG) emissions on global climate change.

On December 17, 2009, the San Joaquin Valley Air Pollution Control District (District) adopted the guidance: Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA, and the policy: District Policy – Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency. The guidance and policy rely on the use of performance based standards, otherwise known as Best Performance Standards (BPS), to assess significance of project specific greenhouse gas emissions on global climate change during the environmental review process, as required by CEQA.

Use of BPS is a method of streamlining the CEQA process of determining significance and is not a required emission reduction measure. Projects implementing BPS would be determined to have a less than cumulatively significant impact. Otherwise, demonstration of a 29 percent reduction in GHG emissions, from business-as-usual, is required to determine that a project would have a less than cumulatively significant impact. The guidance does not limit a lead agency's authority in establishing its own process and guidance for determining significance of project related impacts on global climate change." <sup>146</sup>

The Air District's *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Project under CEQA* document provides guidance to lead agencies for evaluating the significance of project-specific and cumulative impacts related to GHG emissions. <sup>147</sup> This guidance established the following process for evaluating the significance of project-specific GHG emissions on global climate change:

- "Projects determined to be exempt from the requirements of CEQA would be determined to have a less than significant
  individual and cumulative impact for GHG emissions and would not require further environmental review, including
  analysis of project specific GHG emissions. Projects exempt under CEQA would be evaluated consistent with
  established rules and regulations governing project approval and would not be required to implement [Best Performance
  Practices] BPS.
- Projects complying with an approved GHG emission reduction plan or GHG mitigation program which avoids or substantially reduces GHG emissions within the geographic area in which the project is located would be determined to have a less than significant individual and cumulative impact for GHG emissions. Such plans or programs must be specified in law or approved by the lead agency with jurisdiction over the affected resource and supported by a CEQA compliant environmental review document adopted by the lead agency. Projects complying with an approved GHG emission reduction plan or GHG mitigation program would not be required to implement BPS.
- Projects implementing Best Performance Standards would not require quantification of project specific GHG emissions.
   Consistent with CEQA Guideline, such projects would be determined to have a less than significant individual and cumulative impact for GHG emissions.
- Projects not implementing Best Performance Standards would require quantification of project specific GHG emissions
  and demonstration that project specific GHG emissions would be reduced or mitigated by at least 29%, compared to
  Business-As-Usual (BAU), including GHG emission reductions achieved since the 2002-2004 baseline period. Projects
  achieving at least a 29% GHG emission reduction compared to BAU would be determined to have a less than significant
  individual and cumulative impact for GHG.
- Notwithstanding any of the above provisions, projects requiring preparation of an Environmental Impact Report for any
  other reason would require quantification of project specific GHG emissions. Projects implementing BPS or achieving
  at least a 29% GHG emission reduction compared to BAU would be determined to have a less than significant individual
  and cumulative impact for GHG."148

<sup>&</sup>lt;sup>145</sup> Air District. About the District. Accessed July 2023 at: Website: <a href="http://www.valleyair.org/General\_info/aboutdist.htm#Mission">http://www.valleyair.org/General\_info/aboutdist.htm#Mission</a>.

<sup>&</sup>lt;sup>146</sup> Air District. Climate Change Action Plan. Accessed July 2023 at: <a href="http://www.valleyair.org/Programs/CCAP/CCAP\_menu.htm">http://www.valleyair.org/Programs/CCAP/CCAP\_menu.htm</a>

Air District. Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Project under CEQA. Accessed July 2023 at: <a href="http://www.valleyair.org/Programs/CCAP/12-17-09/3%20CCAP%20-%20FINAL%20LU%20Guidance%20-%20Dec%2017%202009.pdf">http://www.valleyair.org/Programs/CCAP/12-17-09/3%20CCAP%20-%20FINAL%20LU%20Guidance%20-%20Dec%2017%202009.pdf</a>.

<sup>&</sup>lt;sup>148</sup> Ibid. 4 and 5.

# Tulare County General Plan 2030 Update

The Tulare County General Plan 2030 Update: Chapter 9 – Air Quality contains a number of policies that apply to projects within Tulare County that support GHG reduction efforts and which have potential relevance to the Project's CEQA review: AQ-1.3 Cumulative Air Quality Impacts wherein the County shall require development to be located, designed, and constructed in a manner that would minimize cumulative air quality impacts; AQ-1.5 California Environmental Quality Act (CEQA) Compliance wherein the County shall ensure that air quality impacts identified during the CEQA review process are consistently and reasonably mitigated when feasible; AQ-1.7 Support Statewide Climate Change Solutions wherein the County shall monitor and support the efforts of Cal/EPA, CARB, and the SJVAPCD, under AB 32 (Health and Safety Code §38501 et seq.), to develop a recommended list of emission reduction strategies, as appropriate, the County will evaluate each new project under the updated General Plan to determine its consistency with the emission reduction strategies; AQ-1.8 Greenhouse Gas Emissions Reduction Plan (Plan) that identifies greenhouse gas emissions within the County will develop a Greenhouse Gas Emissions. The Plan will incorporate the requirements adopted by the California Air Resources Board specific to this issue. In addition, the County will work with the Tulare County Association of Governments and other applicable agencies to include the following key items in the regional planning efforts.

- 1. Inventory all known, or reasonably discoverable, sources of greenhouse gases in the County,
- 2. Inventory the greenhouse gas emissions in the most current year available, and those projected for year 2020, and
- 3. Set a target for the reduction of emissions attributable to the County's discretionary land use decisions and its own internal government operations.;

AQ-3.2 Infill near Employment requiring the County of identify opportunities for infill development near employment areas; AQ-3.3 Street Design regarding street designed to encourage transit use, biking, and pedestrian movement; AQ-3.4 Landscape regarding the use of ecologically based landscape design principles that can improve local air quality by absorbing CO<sub>2</sub>, producing oxygen, providing shade that reduces energy required for cooling, and filtering particulates; AQ-3.5 Alternative Energy Design wherein the County shall encourage all new development to incorporate energy conservation and green building practices to maximum extent feasible; ERM-4.1 Energy Conservation and Efficiency Measures wherein the County shall encourage energy conservation and efficiency features in new construction in accordance with State law; and ERM-4.8 Energy Efficiency Standards wherein the County shall encourage new developments to incorporate energy efficiency and conservation measures that exceed State Title 24 standards.

## Tulare County Climate Action Plan

The Tulare County Climate Action Plan (CAP) serves as a guiding document for County of Tulare ("County") actions to reduce greenhouse gas emissions and adapt to the potential effects of climate change. The CAP is an implementation measure of the 2030 General Plan Update. The General Plan provides the supporting framework for development in the County to produce fewer greenhouse gas emissions during Plan buildout. The CAP builds on the General Plan's framework with more specific actions that will be applied to achieve emission reduction targets consistent with California legislation. 149

"The County of Tulare (County) adopted the Tulare County Climate Action Plan (CAP) in August 2012. The CAP includes provisions for an update when the State of California Air Resources Board (CARB) adopts a Scoping Plan Update that provides post-2020 targets for the State and an updated strategy for achieving a 2030 target. Governor Brown signed Senate Bill (SB) 32 on September 8, 2016, which contains the new 2030 target. The CARB 2017 Scoping Plan Update for the Senate Bill (SB) 32 2030 targets was adopted by the CARB on December 14, 2017 which provided new emission inventories and a comprehensive strategy for achieving the 2030 target (CARB 2017a). With the adoption of the 2017 Scoping Plan, the County proceeded with the 2018 CAP Update that is provided in this document.

The 2018 CAP Update incorporates new baseline and future year inventories to reflect the latest information and updates the County's strategy to address the SB 32 2030 target. The 2030 target requires the State to reduce emissions by 40 percent below 1990 levels from the 2017 Scoping Plan and County data. The CAP identifies the County's fair share of reductions required to maintain consistency with the State target." <sup>150</sup>

<sup>&</sup>lt;sup>149</sup> Tulare County Climate Action Plan. Page 1. Accessed July 2023 at: <a href="http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/ClimateActionPlan.pdf">http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/ClimateActionPlan.pdf</a>
<sup>150</sup> Ibid.

# **Project Impact Analysis:**

#### GHG's Assessed

This analysis was restricted to GHGs identified by AB 32, which include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF<sub>6</sub>), and nitrogen trifluoride (NF<sub>3</sub>). The Project would generate a variety of GHGs, including several defined by AB 32 such as CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O.

Water vapor could be emitted from evaporated water used for landscaping and other uses, but this is not a significant impact because water vapor concentrations in the upper atmosphere are primarily due to climate feedbacks rather than emissions from project-related activities.

Ozone is a GHG; however, unlike the other GHGs, ozone in the troposphere is relatively short-lived and can be reduced in the troposphere on a daily basis. Stratospheric ozone can be reduced through reactions with other pollutants.

Certain GHGs defined by AB 32 would not be emitted by the project. Perfluorocarbons and sulfur hexafluoride are typically used in industrial applications. It is not anticipated that the project would emit PFCs; however, the project would result in fugitive SF<sub>6</sub> emissions from equipment installed at the proposed switchgear.

GHG emissions associated with the Project construction as well as future operations were estimated using CO<sub>2</sub> equivalent (CO<sub>2</sub>e) emissions as a proxy for all GHG emissions. In order to obtain the CO<sub>2</sub>e, an individual GHG is multiplied by its Global Warming Potential (GWP). The GWP designates on a pound for pound basis the potency of the GHG compared to CO<sub>2</sub>.

# Thresholds of Significance

#### Air District

The Air District's Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA presents a tiered approach to analyzing project significance with respect to GHG emissions. Project GHG emissions are considered less than significant if they can meet any of the following conditions, evaluated in the order presented:

- Project is exempt from CEQA requirements;
- Project complies with an approved GHG emission reduction plan or GHG mitigation program;
- Project implements Best Performance Standards (BPS); or
- Project demonstrates that specific GHG emissions would be reduced or mitigated by at least 29 percent compared to Business-as-Usual (BAU), including GHG emission reductions achieved since the 2002-2004 baseline period.

The Air District's Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA includes thresholds based on whether the project will reduce or mitigate GHG levels by 29 percent from BAU levels compared with 2005 levels by 2020. <sup>151</sup> This level of GHG reduction is based on the target established by CARB's AB 32 Scoping Plan, approved in 2008. First occupancy at the project site is expected to occur in 2023. This date is past the AB 32 2020 milestone year. Given recent legislative and legal scrutiny on post-2020 compliance, additional discussion is provided to show progress towards GHG reduction goals identified in CARB's 2017 Scoping Plan for the year 2030. Additionally, although not included in a formal GHG reduction plan, Executive Order S-3-05 also includes a goal of reducing GHG emissions 80 percent below 1990 levels by 2050 and Executive Order B-55-18 and the subsequent 2022 Scoping Plan set the goal to achieve carbon neutrality (i.e., reducing anthropogenic emissions to 85 percent below 1990 levels) statewide by 2045.

# Newhall Ranch

The California Supreme Court decision in the *Center for Biological Diversity et al. vs. California Department of Fish and Wildlife, the Newhall Land and Farming Company* (62 Cal.4th 204 [2015], and known as the Newhall Ranch decision), confirmed that the use of BAU analysis (e.g., 29 percent below BAU), a performance-based approach, would be satisfactory. However, for a project-level analysis that uses CARB's statewide BAU targets, substantial evidence must be presented to support the use of those targets for a particular project at a specific location. The court noted that this may require examination of the data behind

<sup>151.</sup> Air District. <a href="https://www.valleyair.org/Programs/CCAP/12-17-09/3%20CCAP%20-%20FINAL%20LU%20Guidance%20-%20Dec%2017%202009.pdf">https://www.valleyair.org/Programs/CCAP/12-17-09/3%20CCAP%20-%20FINAL%20LU%20Guidance%20-%20Dec%2017%202009.pdf</a>. accessed July 2023.

the statewide model and adjustment to the levels of reduction from BAU used for project evaluation. To date, neither CARB nor any lead agencies have provided any guidance on how to adjust AB 32's statewide BAU target for use at the project level. 152

The regulations in the State's 2008 Scoping Plan have been adopted and the State is on track to meet the 2020 target and achieve continued progress towards meeting the 2017 Scoping Plan target for 2030 and the 2022 Scoping Plan target of carbon neutrality by 2045..

In the Newhall case, the Supreme Court was concerned that new development may need to reduce GHG emissions more than existing development to demonstrate it is meeting its fair share of reductions. New development does do more than its fair share through compliance with enhanced regulations, particularly with respect to motor vehicles, energy efficiency, and electricity generation. If no additional reductions are required from an individual project beyond that achieved by regulations, then the amount needed to reach the 2020 target is the amount of GHG emissions a project must reduce to comply with Statewide goals.

#### Project-level Thresholds

Section 15064.4(b) of the CEQA Guidelines' amendments for GHG emissions states that a lead agency may take into account the following three considerations in assessing the significance of impacts from GHG emissions.

- Consideration #1: The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting.
- Consideration #2: Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- Consideration #3: The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of GHG emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an Environmental Impact Report (EIR) must be prepared for the project.

In addition, Section 15064.7(c) of the CEQA Guidelines specifies that "[w]hen adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence" (14 CCR 15064.7(c)). The CEQA Guidelines also clarify that the effects of GHG emissions are cumulative and should be analyzed in the context of CEQA's requirements for cumulative impact analysis (see CEQA Guidelines § 15130(f)).

Per CEQA Guidelines § 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that would avoid or substantially lessen the cumulative problem within the geographic area of the project. To qualify, such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include a "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plans [and] plans or regulations for the reduction of greenhouse gas emissions." Put another way, CEQA Guidelines § 15064(h)(3) allows a lead agency to make a finding of less than significant for GHG emissions if a project complies with adopted programs, plans, policies and/or other regulatory strategies to reduce GHG emissions.

The significance of the project's GHG emissions is evaluated consistent with CEQA Guidelines §15064.4(b)(2) by considering whether the project complies with applicable plans, policies, regulations and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

The Tulare County CAP aims to reduce GHG emissions from development projects in Tulare County. The CAP builds on state and regional policies aimed at reducing GHG emissions consistent with the SB 32 2030 GHG reduction target. The CAP relies on policies of the Tulare County General Plan to guide development projects. In addition, the CAP provides specific guidelines for determining if new development projects are consistent with the CAP. The CAP includes a progress report with metrics and benchmarks for tracking progress toward meeting the GHG reduction targets. The County's progress is on track for all metrics.

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<sup>152</sup> Op. Cit.

The CAP is utilized to determine the significance from the project's contribution of GHG emissions. For informational purposes only, the analysis first quantifies project-related GHG emissions under a BAU scenario, and then compares these emissions with emissions that would occur when all project-related design features are accounted for, and when compliance with applicable regulatory measures is assumed.

a) Less Than Significant Impact: The CAP is utilized to determine the significance from the Project's contribution of GHG emissions. The Air District has determined that projects consistent with an adopted Climate Action Plan (CAP) would be considered to have a less than significant impact on the environment. The Tulare County CAP serves as a guiding document for County actions to reduce GHG emissions and adapt to the potential effects of climate change. The CAP is an implementation measure of the Tulare County General Plan 2030 Update (General Plan) which provides the supporting framework for development in the County. The CAP builds on the General Plan's framework with more specific actions that will be applied to achieve emission reduction targets required by State of California legislation. The General Plan fulfills many sustainability and GHG reduction objectives at the program level. The CAP identifies the County's fair share of reductions required to maintain consistency with the State's 2030 reductions target.

The CAP thresholds for determining consistency with the CAP are 500 dwelling units, 100,000 square feet of retail, or equivalent intensity for other uses. These thresholds are the amounts currently required from development related sources within the County to demonstrate consistency with SB 32 2030 targets As the CAP implements the County's strategy to achieve the State's 2030 reduction targets, projects below the consistency thresholds have been determined to be consistent with the State's targets and do not require GHG emissions quantification. The proposed Project will generate approximately 82 daily vehicle trips during construction and decommissioning phases. The Transportation Screening Analysis indicates that the facility will be operated remotely and that site visits for security, maintenance, and repairs are not expected to occur regularly or produce significant amounts of trips. <sup>153</sup> As such, it would be conservative to assess one (1) vehicle trip per day (260 trips per year) for security, maintenance, and repairs. Assuming panel washing activities are comparative to similar projects, the proposed Project would include 10-20 days of panel washing activities, resulting in approximately 100 trips per year for panel cleaning operations. Based on these assumptions, the proposed Project will generate approximately 360 vehicle trips annually (1.38 average daily trips), which is less intense than the threshold requiring GHG emissions quantification. However, for disclosure purposes, Project construction- and operation-related GHG emissions are provided in **Table 8-3** (Table 11 of the Memo).

Table 11 Project GHG Emissions <sup>154</sup>				
Project Phase	CO <sub>2e</sub> (metric tons per year)			
Construction / Deconstruction	·			
Construction	370.77			
Decommissioning	294.05			
Construction Activity Total	664.82			
Average Emissions over 30 Years	22.16			
Operations				
Area	6.73			
Energy	34.83			
Mobile	2.48			
Water	0.09			
<b>Annual Operational Emissions</b>	44.13			
Project Annual Total	66.29			
Project Total Over 30 Years	1,989			
Annual Displacement	-21,266			
Annual Net Emissions	-19,277			

The electricity generated during the operation of the Project would be added to the power grid and displace electricity generated from fossil fuels. As this Project is a renewable energy project, it will result in a benefit as it will reduce GHG emissions typically generated by other energy producers. As shown in Table 8-3, the annual net GHG emission reductions is 19,277 metric tons per year. Due to the volume of emissions displaced, the GHG emissions generated during construction-

<sup>&</sup>lt;sup>153</sup> Dudek, Transportation Screening Analysis for the Tulare CSG 2 Solar Project, May 2023, page 4.

<sup>154</sup> Data was obtained from Tables 6 and 7 and "Avoided GHG Emissions" discussion of the Dudek Technical Memo provided in Attachment A.

related activities will be nullified when the Project is fully operational. As such, the Project would result in a Less Than Significant Project-specific Impact to this resource.

b) Less Than Significant Impact: As the Project is located within unincorporated Tulare County, the most applicable GHG plan is the Tulare County CAP. The CAP is a strategic planning document that identifies sources of GHG emissions within the County, presents current and future emissions estimates, identifies a GHG reduction target for future years, and presents strategic policies and actions to reduce emissions from the development project subject to CEQA. The CAP builds on the General Plan's framework with more specific actions that will be applied to achieve emission reduction targets required by State of California legislation. The proposed Project will generate approximately 360 vehicle trips annually (1.38 average daily trips), which is less intense than the CAP consistency threshold. As such, the Project is consistent with the CAP. Furthermore, the Project would produce a new renewable source of energy in Tulare County and directly supports the State's target of increasing California's procurement of electricity from renewable sources from 50 percent to 60 percent by 2030. Therefore, Less Than Significant Project-specific Impacts related to this Checklist Item will occur.

# **Cumulative Impact Analysis:** Less Than Significant Impact

The geographic area of this cumulative analysis is the San Joaquin Valley Air Basin. As noted earlier and summarized here, the Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years. the Project is consistent with the Tulare County Climate Action Plan and the reduction goals identified in the State's Scoping Plans. Furthermore, the Project will result in a reduction of 19,277 metric tons of GHG emissions annually. Therefore, the proposed Project does not conflict with any applicable plan, policy or regulation adopted for the purpose of reducing GHG emission. Therefore, the Project will result in less than significant Project-specific and Cumulative impacts for greenhouse gases.

Mitigation Measures: None Required.

#### IX. HAZARDS AND HAZARDOUS MATERIALS

Woul	d the project:	SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			$\boxtimes$	
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				$\boxtimes$
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				$\boxtimes$
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working the project area?				$\boxtimes$
f)	Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?				$\boxtimes$
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				

The discussions regarding Environmental Setting, Regulatory Setting, CEQA requirements, Hazards and Hazardous Materials, etc. contained in the Tulare County General Plan 2030 Update and Tulare County Environmental Impact Report are incorporated herein in their entirety. Where necessary and if available, additional site-specific facts, data, information, etc., are included in this discussion.

# **Environmental Setting**

"A hazardous material is defined by the California Code of Regulations (CCR) as a substance that, because of physical or chemical properties, quantity, concentration, or other characteristics, may either (1) cause an increase in mortality or an increase in serious, irreversible, or incapacitating, illness; or (2) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of (CCR, Title 22, Division 4.5, Chapter 10, Article 2, Section 66260.10)." <sup>155</sup>

"Hazardous wastes are hazardous materials that no longer have practical use, such as substances that have been discarded, discharged, spilled, contaminated, or are being stored prior to proper disposal. According to Title 22 of the CCR, hazardous materials and hazardous wastes are classified according to four properties: toxic, ignitable, corrosive, and reactive (CCR, Title 22, Chapter 11, Article 3)." <sup>156</sup>

<sup>&</sup>lt;sup>155</sup> Tulare County General Plan 2030 Update Background Report. Page 8-26.

<sup>&</sup>lt;sup>156</sup> Ibid. 8-26.

As noted earlier and summarized here, the Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years.

The nearest airport (Mefford Field Airport, in Tulare) is greater than two miles west of the Project site. The nearest operational landfill is Woodville Landfill, approximately 3.5 miles northwest of the Project site.

The nearest elementary school (Woodville Elementary School) is located approximately 1.5 miles northwest of the Project site.

# **Regulatory Setting**

**Federal** 

The NFPA 70®: National Electrical Code® is adopted in all 50 states. It includes requirements for electrical wiring and equipment. Article 705 covers interconnecting generators, windmills, and solar and fuel cells with other power supplies. <sup>157</sup> The federal Resource Conservation and Recovery Act (RCRA) and California Hazardous Waste Control Law regulate the disposal of solar PV cells. The local hazardous waste regulatory authority is the County of Tulare.

State

The California Department of Industrial Relations, Division of Occupational Safety and Health, is the administering agency designed to protect worker health and general facility safety. The California Department of Forestry and Fire Protection (CalFire) has designated the area that includes the project site as a Local Responsibility Area which is defined as an area where the local fire jurisdiction is responsible for emergency fire response. The project area is also defined as "Unzoned," which means that the fire hazard severity of the site has not been determined. <sup>158</sup>

Local

# Tulare County General Plan 2030 Update

The Tulare County General Plan 2030 Update (at Chapter 10 – Health and Safety) contains the following goals and policies that relate to hazards and hazardous materials, and which have potential relevance to the Project's CEQA review: *HS-4.1 Hazardous Materials* wherein the County shall strive to ensure hazardous materials are used, stored, transported, and disposed of in a safe manner, in compliance with local, State, and Federal safety standards, including the Hazardous Waste Management Plan, Emergency Operations Plan, and Area Plan; *HS-4.2 Establishment of Procedures to Transport Hazardous Wastes* wherein the County shall continue to cooperate with the California Highway Patrol (CHP) to establish procedures for the movement of hazardous wastes and explosives within the County; *HS-4.3 Incompatible Land Uses* wherein the County shall prevent incompatible land uses near properties that produce or store hazardous waste; and *HS-4.4 Contamination Prevention* wherein the County shall review new development proposals to protect soils, air quality, surface water, and groundwater from hazardous materials contamination.

# **Project Impact Analysis:**

and b) Less Than Significant Impact: Construction of the proposed Project will require the transport and use of small quantities of hazardous materials in the form of gasoline, diesel, and oil. There is the potential for small leaks due to refueling of the construction equipment; however, standard construction Best Management Practices (BMPs) included in the SWPPP will reduce the potential for accidental release of construction-related fuels and other hazardous materials. These BMPs will prevent, minimize, or remedy storm water contamination from spills or leaks, control the amount of runoff from the site, and require proper disposal or recycling of hazardous materials. Project operations may require the storage of small amounts of hazardous materials, such as fuel and lubricants. The storage, transport, and use of these materials will comply with Local, State, and Federal regulatory requirements.

<sup>157</sup> National Fire Protection Association. 2010. NFPA 70: National Fire Code. Accessed July 2023 at: NFPA 70®: National Electrical Code®

<sup>&</sup>lt;sup>158</sup> California Department of Forestry and Fire Protection. 2007. Draft Fire Severity Zones in LRA Map. Accessed July 2023 at: <a href="https://osfm.fire.ca.gov/media/6832/fhszl06\_1\_map54.pdf">https://osfm.fire.ca.gov/media/6832/fhszl06\_1\_map54.pdf</a>.

As such, the Project will not result in a significant hazard to the public or the environment and impacts will be less than significant.

- c) No Impact: As noted earlier, the nearest school, Woodville Elementary School is located approximately 1.5miles northwest of the Project site. The Project involves construction of a solar energy generations facility including battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) and will not emit hazardous emissions, involve hazardous materials, or create a hazard to the school. There will be no impact.
- d) No Impact: According to the State of California Department of Toxic Substances Control (DTSC) Envirostor Search, there are no hazardous materials sites within or adjacent to the Project site. <sup>159</sup> The Project site is not listed as hazardous materials sites pursuant to Government Code Section 65962.5 and is not included on a list compiled by the Department of Toxic Substances Control per a review of "Identified Hazardous Waste Sites" (conducted on July 14, 2023 by RMA staff). Therefore, as the Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, it would not create a significant hazard to the public or the environment.
- e) No Impact: The nearest airport (Mefford Field Airport in Tulare), is greater than two miles west of the Project site; there are no private airports within the Project vicinity. The Project would not result in the placement of any structures sufficiently tall enough to interfere with the flight path of either airport. The Project will not conflict with Tulare County Comprehensive Airport Land Use Plan (CALUP) policy and it is not within any airport's safety zone. The Project will not result in a safety hazard for people working in the area. As such, the Project would result in no impact to this resource.
- f) No Impact: The Project will not impair the implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. The Project is not located in the vicinity of a principal route of assistance, as described by the Safety Element of the Tulare County General Plan. Access and egress from the Project site would occur from a gated access road off Avenue 160. The perimeter road and main access roads would be approximately 20 feet wide with exact widths and surfacing designed consistent with facility maintenance requirements and Tulare County Fire Department standards. These roads would be surfaced with gravel, compacted dirt, or another commercially available surface. The roads would accommodate Project operations and maintenance activities such as cleaning of solar panels, providing a fire buffer, and facilitating on-site circulation for emergency vehicles. Internal roads would have additional permeable surfaces designed similarly to the perimeter and main access roads, approximately 12 to 15 feet in width or as otherwise required by County fire standards. They would be treated to create a durable, dust-minimizing surface for use during construction and operation. This would not involve lime treatment but would likely involve surfacing with gravel, compacted native soil, or a dust palliative. As such, the Project will not interfere with implementation of an emergency response plan or evacuation.
- g) No Impact: The surrounding land is agricultural (predominantly orchard and row crops) and scattered rural residential uses and is not subject or vulnerable to wildland fires. The Project will not contain any housing or buildings where workers will reside or be stationed that will be at risk of fire. As such, the Project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires and would result in no impact to this resource. See also Item 20 Wildfire.

Cumulative Impact Analysis: Less Than Significant Impact - The geographic area of this cumulative analysis is Tulare County. This cumulative analysis based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR. As noted earlier and summarized here, the Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years.

As discussed earlier, the transportation of hazardous materials will continue to be regulated by federal, state, and regional agencies, and all new development will be subject to independent environmental review and all applicable regulations to minimize any potential health risks associated with freeways. Therefore, through appropriate regulations, potential cumulative

<sup>159</sup> California Department of Toxic Substances Control (DTSC). EnviroStor. Accessed July 2023 at: https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=Tulare+County%2C+CA

Mitigation Measure(s):	None Required.	

# X. HYDROLOGY AND WATER QUALITY

Would	I the project:	SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?			$\boxtimes$	
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i)	Result in substantial erosion or siltation on-or off- site?			$\boxtimes$	
ii)	Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?			$\boxtimes$	
iii)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? Impede or redirect flood flows?				
d)	In flood hazard, tsunami, or seiche zones, risk				$\boxtimes$
e)	release of pollutants due to project inundation? Conflict with or obstruct implementation of water quality control plan or sustainable groundwater management plan?				

The discussions regarding Environmental Setting, Regulatory Setting, CEQA requirements, Hydrology and Water Quality, etc. contained in the Tulare County General Plan 2030 Update and Tulare County General Plan Environmental Impact Report are incorporated herein in their entirety. Where necessary and if available, additional site-specific facts, data, information, etc., are included in this discussion.

# **Environmental Setting**

As noted earlier and summarized here, the Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years.

Hydrology in the Project vicinity is associated with the Tulare Lake Basin, one of three main water subareas in the county. The Tulare Lake Basin is in the northern alluvial fan and basin subarea which is characterized by southwest-to-south flowing rivers, creeks, and irrigation canal systems that convey water from the Sierra Nevada to the west toward the Tulare Lake Bed. The southern portion of the basin is internally drained by the Kings, Kaweah, Tule, and Kern Rivers. <sup>160</sup> The Tulare Lake Basin comprises the drainage area of the San Joaquin Valley south of the San Joaquin River and is essentially a closed basin because

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<sup>160</sup> California Department of Water Resources. Draft California's Groundwater Bulletin 118. 2020. Accessed July 2023 at: <a href="https://water.ca.gov/Programs/Groundwater-Management/Bulletin-118">https://water.ca.gov/Programs/Groundwater-Management/Bulletin-118</a>.

surface water drains north into the San Joaquin River only in years of extreme rainfall. According to the U.S. Geological Survey, the nearest body of water is the South Fork of the Tule River approximately two miles north of the Project site. 161

#### Flooding

"Flooding is a natural occurrence in the Central Valley because it is a natural drainage basin for thousands of watershed acres of Sierra Nevada Mountain Range and Coast Range foothills and mountains. Two kinds of flooding can occur in the Central Valley: general rainfall floods occurring in the late fall and winter in the foothills and on the valley floor; and snowmelt floods occurring in the late spring and early summer. Most floods are produced by extended periods of precipitation during the winter months. Floods can also occur when large amounts of water (due to snowmelt) enter storage reservoirs, causing an increase in the amount of water that is released." 162

"At the federal level, official floodplain maps are maintained by the Federal Emergency Management Agency (FEMA) as an important part of the national flood insurance program. FEMA determines areas subject to flood hazards and designates these areas by relative risk of flooding on maps for each community, known as Flood Insurance Rate Maps (FIRM). A 100-year flood is considered for purposes of land use planning and protection of property and human safety" 163 "The boundaries of the 100-year floodplain are delineated by FEMA on the basis of hydrology, topography, and modeling of flow during predicted rainstorms." 164

"The flood carrying capacity in rivers and streams has decreased as trees, vegetation, and structures (e.g., bridges, trestles, buildings) have increased along the Kaweah, Kings, and Tule Rivers. Unsecured and uprooted material can be carried down a river, clogging channels and piling up against trestles and bridge abutments that can, in turn, give way or collapse, increasing blockage and flooding potential. Flooding can force waters out of the river channel and above its ordinary floodplain. Confined floodplains can result in significantly higher water elevations and higher flow rates during high runoff and flood events." <sup>165</sup>

# **Regulatory Setting**

**Federal** 

# Clean Water Act

The Clean Water Act (CWA) is intended to restore and maintain the chemical, physical, and biological integrity of the nation's waters (33 CFR 1251). The regulations implementing the CWA protect waters of the U.S. including streams and wetlands (33 CFR 328.3). The CWA requires states to set standards to protect, maintain, and restore water quality by regulating point source and some non-point source discharges. Under Section 402 of the CWA, the National Pollutant Discharge Elimination System (NPDES) permit process was established to regulate these discharges.

#### Safe Drinking Water Act

"The Safe Drinking Water Act (SDWA) is the main federal law that ensures the quality of Americans' drinking water. Under SDWA, EPA sets standards for drinking water quality and oversees the states, localities, and water suppliers who implement those standards... SDWA was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply. The law was amended in 1986 and 1996 and requires many actions to protect drinking water and its sources: rivers, lakes, reservoirs, springs, and ground water wells. (SDWA does not regulate private wells which serve fewer than 25 individuals.)" 166

The National Flood Insurance Act (1968) makes available federally subsidized flood insurance to owners of flood-prone properties. To facilitate identifying areas with flood potential, Federal Emergency Management Agency (FEMA) has developed Flood Insurance Rate Maps (FIRM) that can be used for planning purposes.

<sup>&</sup>lt;sup>161</sup> United States Geological Survey (USGS). National Map Viewer. Accessed July 2023 at: The National Map Viewer | U.S. Geological Survey (usgs.gov)

<sup>162</sup> Tulare County General Plan 2030 Update. Recirculated Draft Environmental Impact Report. Page 3.6-28. Accessed July 2023 at: <a href="http://generalplan.co.tulare.ca.us/documents/generalplan2010/RecirculatedDraftEIR.pdf">http://generalplan.co.tulare.ca.us/documents/generalplan2010/RecirculatedDraftEIR.pdf</a>

<sup>&</sup>lt;sup>163</sup> Ibid.

<sup>&</sup>lt;sup>164</sup> Op. Cit. 3.6-30.

<sup>&</sup>lt;sup>165</sup> Op. Cit.

<sup>166</sup> United States Environmental Protection Agency (US EPA or EPA). EPA Drinking Water Requirements for States and Public Water System Drinking Water Regulations. Accessed July 2023 at: <a href="http://water.epa.gov/lawsregs/rulesregs/sdwa/index.cfm">http://water.epa.gov/lawsregs/rulesregs/sdwa/index.cfm</a>.

# **Environmental Protection Agency**

The mission of EPA is to protect human health and the environment.

EPA's purpose is to ensure that:

- > all Americans are protected from significant risks to human health and the environment where they live, learn and work;
- > national efforts to reduce environmental risk are based on the best available scientific information;
- > federal laws protecting human health and the environment are enforced fairly and effectively;
- > environmental protection is an integral consideration in U.S. policies concerning natural resources, human health, economic growth, energy, transportation, agriculture, industry, and international trade, and these factors are similarly considered in establishing environmental policy;
- > all parts of society -- communities, individuals, businesses, and state, local and tribal governments -- have access to accurate information sufficient to effectively participate in managing human health and environmental risks;
- environmental protection contributes to making our communities and ecosystems diverse, sustainable and economically productive; and
- the United States plays a leadership role in working with other nations to protect the global environment." 167

# United States Army Corps of Engineers

"The Department of the Army Regulatory Program is one of the oldest in the Federal Government. Initially it served a fairly simple, straightforward purpose: to protect and maintain the navigable capacity of the nation's waters. Time, changing public needs, evolving policy, case law, and new statutory mandates have changed the complexion of the program, adding to its breadth, complexity, and authority.

The Regulatory Program is committed to protecting the Nation's aquatic resources, while allowing reasonable development through fair, flexible and balanced permit decisions. The Corps evaluates permit applications for essentially all construction activities that occur in the Nation's waters, including wetlands." <sup>168</sup>

State

#### The Porter-Cologne Water Quality Control Act

"The Porter-Cologne Act is the principal law governing water quality regulation in California. It establishes a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and ground water and to both point and nonpoint sources of pollution. Pursuant to the Porter-Cologne Act (California Water Code section 13000 et seq.), the policy of the State is as follows:

- That the quality of all the waters of the State shall be protected,
- That all activities and factors affecting the quality of water shall be regulated to attain the highest water quality within reason, and
- That the State must be prepared to exercise its full power and jurisdiction to protect the quality of water in the State from degradation.

The Porter-Cologne Act established nine Regional Water Boards (based on hydrogeologic barriers) and the State Water Board, which are charged with implementing its provisions and which have primary responsibility for protecting water quality in California. The State Water Board provides program guidance and oversight, allocates funds, and reviews Regional Water Boards decisions. In addition, the State Water Board allocates rights to the use of surface water. The Regional Water Boards have primary responsibility for individual permitting, inspection, and enforcement actions within each of nine hydrologic regions." <sup>169</sup>

# State Water Resources Control Board

The State Water Resources Control Board (the State Water Board) was created by the Legislature in 1967. The mission of the Water Board is to ensure the highest reasonable quality for waters of the State, while allocating those waters to achieve the

<sup>167</sup> US EPA Website. Our Mission and What We Do. Accessed July 2023 at: <a href="https://www.epa.gov/aboutepa/our-mission-and-what-we-do">https://www.epa.gov/aboutepa/our-mission-and-what-we-do</a>

<sup>&</sup>lt;sup>168</sup> U.S. Army Corps of Engineers. Accessed July 2023at: <a href="http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits.aspx">http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits.aspx</a>.

<sup>&</sup>lt;sup>169</sup> California Water Boards. State Laws Porter-Cologne Act. Accessed July 2023at:

https://www.waterboards.ca.gov/water\_issues/programs/nps/encyclopedia/0a\_laws\_policy.html.

optimum balance of beneficial uses. The joint authority of water allocation and water quality protection enables the Water Board to provide comprehensive protection for California's waters.

The Water Board consists of five full-time salaried Members, each filling a different specialty position. Each board member is appointed to a four-year term by the Governor and confirmed by the Senate.

There are nine Regional Water Quality Control Boards (Regional Boards). The mission of the Regional Boards is to develop and enforce water quality objectives and implementation plans that will best protect the beneficial uses of the State's waters, recognizing local differences in climate, topography, geology and hydrology.

Each Regional Board has seven part-time Members also appointed by the Governor and confirmed by the Senate. Regional Boards develop "basin plans" for their hydrologic areas, govern requirements/issue waste discharge permits, take enforcement action against violators, and monitor water quality.

The task of protecting and enforcing the many uses of water, including the needs of industry, agriculture, municipal districts, and the environment is an ongoing challenge for the State and Regional Water Quality Control Boards. 170

# California Department of Water Resources

"This Department's primary mission is to manage the water resources of California in cooperation with other agencies, to benefit the State's people, and to protect, restore, and enhance the natural and human environments." Other goals contained in the Update 2018 California Water Plan include:

- Goal 1 Improve Integrated Watershed Management: California's vision of sustainable water management relies on the continued support of innovative and inclusive integrated water management strategies. Healthy watersheds, headwaters, aquifers, and working landscapes provide critical water supply and ecosystem services.
- Goal 2 Strengthen Resiliency and Operational Flexibility of Existing and Future Infrastructure: Water managers must make plans to address aging infrastructure and impacts associated with climate change, population growth, ecosystem stressors, and funding constraints.
- Goal 3 Restore Critical Ecosystem Functions California is one of the world's great biodiversity hotspots. Anthropogenic influence water management included has impacts on natural resources; and environmental protections for many species has impacts on water management.
- Goal 4 Empower California's Under-Represented or Vulnerable Communities: Equitable water management means reliable, affordable, and safe water supplies and management for all Californians.
- Goal 5 Improve Inter-Agency Alignment and Address Persistent Regulatory Challenges: Improved alignment and communication will more effectively deliver public benefits. Strengthening links between regulation and strategic planning, as well as utilizing restoration management on an ecosystem scale, will help balance environmental needs and human activities over the long term.
- Goal 6 Support Real-Time Decision-Making, Adaptive Management, and Long-Term Planning Effective water management requires access to data and information necessary to understand current conditions, historic challenges, and future challenges. It also requires stable funding sufficient to support State and local sustainability goals. 171

# <u>California Department of Water Resources and State Water Resources Control Board – Sustainable Groundwater Management Act (SGMA)</u>

"On September 16, 2014, Governor Jerry Brown signed into law a three-bill legislative package, composed of AB 1739 (Dickinson), SB 1168 (Pavley), and SB 1319 (Pavley), collectively known as the Sustainable Groundwater Management Act (SGMA). For the first time in its history, California has a framework for sustainable, groundwater management - "management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results."

SGMA requires governments and water agencies of high and medium priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, these basins should reach sustainability within 20 years of

Initial Study/Mitigated Negative Declaration Tulare CSG 2 Solar Project (PSP 23-059)

<sup>170</sup> State of California Water Boards. Water Boards' Structure. Accessed July 2023 at: https://www.waterboards.ca.gov/about\_us/water\_boards\_structure/mission.html

<sup>171</sup> California Natural Resources Agency. Department of Water Resources. California Water Plan Update 2018. Managing Water Resources for Sustainability. June 2019. Pages 3-2 through 3-3 through 3-6. Accessed July 2023 at: <a href="https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/California-Water-Plan/Docs/Update2018/Final/California-Water-Plan-Update-2018.pdf#page=4">https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/California-Water-Plan/Docs/Update2018/Final/California-Water-Plan-Update-2018.pdf#page=4</a>.

implementing their sustainability plans. For critically over-drafted basins, that will be 2040. For the remaining high and medium priority basins, 2042 is the deadline." <sup>172</sup>

#### Regional Water Quality Board

"There are nine Regional Water Quality Control Boards (Regional Boards). The mission of the Regional Boards is to develop and enforce water quality objectives and implementation plans that will best protect the State's waters, recognizing local differences in climate, topography, geology and hydrology. Each Regional Board has seven part-time members appointed by the Governor and confirmed by the Senate. Regional Boards develop "basin plans" for their hydrologic areas, issue waste discharge requirements, take enforcement action against violators, and monitor water quality." 173

"The primary duty of the Regional Board is to protect the quality of the waters within the Region for all beneficial uses. This duty is implemented by formulating and adopting water quality plans for specific ground or surface water basins and by prescribing and enforcing requirements on all agricultural, domestic and industrial waste discharges. Specific responsibilities and procedures of the Regional Boards and the State Water Resources Control Board are contained in the Porter-Cologne Water Quality Control Act." <sup>174</sup>

#### California Water Boards Central Valley - R5

The California Water Boards Central Valley – R5 (Region 5) defines their missions as, "To preserve, enhance, and restore the quality of California's water resources and drinking water for the protection of the environment, public health, and all beneficial uses, and to ensure proper water resource allocation and efficient use, for the benefit of present and future generations." In addition, the CA Water Boards Central Valley – R5 indicates their Duty as, "The primary duty of the Regional Board is to protect the quality of the waters within the Region for all beneficial uses. This duty is implemented by formulating and adopting water quality plans for specific ground or surface water basins and by prescribing and enforcing requirements on all agricultural, domestic and industrial waste discharges. Specific responsibilities and procedures of the Regional Boards and the State Water Resources Control Board are contained in the Porter-Cologne Water Quality Control Act." 176

The Central Valley Regional Water Quality Control Board (RWQCB) administers the NPDES storm water-permitting program in the Central Valley region. Construction activities on one acre or more are subject to the permitting requirements of the NPDES General Permit for Discharges of Storm Water Runoff Associated with Construction Activity (General Construction Permit). The General Construction Permit requires preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The plan will include specifications for Best Management Practices (BMPs) that will be implemented during Project construction to control degradation of surface water by preventing the potential erosion of sediments or discharge of pollutants from the construction area. The General Construction Permit program was established by the RWQCB for the specific purpose of reducing impacts to surface waters that may occur due to construction activities. BMPs have been established by the RWQCB in the California Storm Water Best Management Practice Handbook (2003), and are recognized as effectively reducing degradation of surface waters to an acceptable level. Additionally, the SWPPP will describe measures to prevent or control runoff degradation after construction is complete, and identify a plan to inspect and maintain these facilities or project elements.

# SB 610 (Costa) & SB 221 (Kuehl) 2001

"Senate Bills 610 (Chapter 643, Statutes of 2001) and Senate Bill 221 (Chapter 642, Statutes of 2001) amended state law, effective January 1, 2002, to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 and SB 221 are companion measures which seek to promote more collaborative planning between local water suppliers and cities and counties. Both statutes require detailed information regarding water availability to be provided to the city and county decision-makers prior to approval of specified large development projects. Both statutes also require this detailed information be included in the administrative record that serves as the evidentiary basis for an approval action by the city or county on such projects. Both measures recognize local control and decision making regarding the availability of water for projects and the approval of projects.

<sup>172</sup> State of California Department of Water Resources. SGMA Groundwater Management. Accessed July2023 at: https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management

<sup>1/3</sup> Ibid

<sup>174</sup> The California Water Boards. Central Valley – R5. Our Mission. Our Duty. Accessed July 2023 at: <a href="http://www.swrcb.ca.gov/centralvalley/about\_us/">http://www.swrcb.ca.gov/centralvalley/about\_us/</a>.

<sup>&</sup>lt;sup>175</sup> Ibid.

<sup>&</sup>lt;sup>176</sup> Op. Cit.

Under SB 610, water assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects (as defined in Water Code 10912 [a]) subject to the California Environmental Quality Act. Under SB 221, approval by a city or county of certain residential subdivisions requires an affirmative written verification of sufficient water supply." 177

Local

#### Tulare County Environmental Health Division

"The mission of the Division of Environmental Health is to enhance the quality of life in Tulare County through implementation of environmental health programs that protect public health and safety as well as the environment. We accomplish this goal by overseeing and enforcing numerous different programs, from food facility inspections to hazardous waste. All of our inspectors are licensed and/or certified in the field that they practice in and participate in continuing education to maintain licensure." Tulare County Environmental Health permits and regulates State Small Water Systems, which serve drinking water to between 5 and 14 service connections, and no more than an average of 25 persons no more than 60 days out of the year. There are currently 42 of these systems, throughout Tulare County, which serve about 254 connections and approximately 640 people. These systems are inspected by Tulare County Environmental Health, and are required to routinely monitor their water quality." This division requires water quality testing of public water systems. Any project that involves septic tanks and water wells within Tulare County is subject to approval by this agency. All recommendations provided by this division will be added as mitigation measures to ensure reduction of environmental impacts.

## Tulare County Land Development Regulations

The Tulare County Resource Management Agency (RMA) is responsible for review, approval, and enforcement of planning and land development throughout the unincorporated portions of Tulare County. County of Tulare regulations that direct planning and land development (and related water and wastewater utilities) include the Tulare County General Plan, Zoning Ordinance, Subdivision Ordinance, and CEQA procedures. These responsibilities are divided between Planning Branch, Public Works Branch, and other divisions or departments of RMA, and in coordination with the Environmental Health Division of the Tulare County Health and Human Services Agency, and the Tulare County Fire Department.

The County's flood damage prevention code is intended to promote public health, safety, and general welfare in addition to minimizing public and private losses due to flood conditions. The County code provisions to protect against flooding include requiring uses vulnerable to floods be protected against flood damage at the time of initial construction; controlling the alteration of natural flood plains; and preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other areas. The County flood damage prevention code, most recently amended by Ord. No. 3212 and effective October 29, 1998, is modeled based upon FEMA guidance.

## The Tulare County Flood Control District

The Tulare County Flood Control District, a countywide district governed by the County Board of Supervisors, is the local flood management agency. Tulare County participates in the National Flood Insurance Program Community Rating System, uses FEMA insurance rate maps, and enforces Ordinance Code of Tulare County, Part VII, Chapter 27, Flood Damage Prevention. The County Zoning Ordinance also provides regulations to reduce flood hazards through land use regulations. <sup>180</sup>

# Tulare County General Plan 2030 Update

The Tulare County General Plan 2030 Update (Chapter 10 – Health and Safety and Chapter 11 – Water Resources) contains the following goals and policies that relate to hydrology and water quality and which have potential relevance to the Project's California Environmental Quality Act (CEQA) review: *AG-1.17 Agricultural Water Resources* wherein the County shall seek to protect and enhance surface water and groundwater resources critical to agriculture; *HS-4.4 Contamination Prevention* wherein the County shall review new development proposals to protect soils, air quality, surface water, and groundwater from hazardous

<sup>177</sup> California Department of Water Resources. Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001 to assist water suppliers, cities, and counties in integrating water and land use planning. Page iii. Accessed July 2023 at: <a href="https://cawaterlibrary.net/wp-content/uploads/2017/06/guidebook.pdf">https://cawaterlibrary.net/wp-content/uploads/2017/06/guidebook.pdf</a>

<sup>178</sup> Tulare County Environmental Health Division. Who Are We. Accessed July 2023 at: <a href="https://tularecountyeh.org/eh/about-us/who-are-we">https://tularecountyeh.org/eh/about-us/who-are-we</a> /

<sup>179</sup> Ibid. Water Systems Program. Accessed July 2023 at: <a href="https://tularecountyeh.org/eh/our-services/water-systems-program/">https://tularecountyeh.org/eh/our-services/water-systems-program/</a>

<sup>&</sup>lt;sup>180</sup> Tulare County General Plan 2030 Update. Recirculated Draft Environmental Impact Report. Page 3.6-29. Accessed July 2023 at: <a href="http://generalplan.co.tulare.ca.us/documents/generalplan2010/RecirculatedDraftEIR.pdf">http://generalplan.co.tulare.ca.us/documents/generalplan2010/RecirculatedDraftEIR.pdf</a>

materials contamination; WR-1.1 Groundwater Withdrawal wherein the County shall cooperate with water agencies and management agencies during land development processes to help promote an adequate, safe, and economically viable groundwater supply for existing and future development within the County. These actions shall be intended to help the County mitigate the potential impact on ground water resources identified during planning and approval processes; WR-2.1 Protect Water Quality wherein all major land use and development plans shall be evaluated as to their potential to create surface and groundwater contamination hazards from point and non-point sources. This policy requires the County to confer with other appropriate agencies, as necessary, to assure adequate water quality review to prevent soil erosion; direct discharge of potentially harmful substances; ground leaching from storage of raw materials, petroleum products, or wastes; floating debris; and runoff from the site; WR-2.2 National Pollutant Discharge Elimination System (NPDES) Enforcement wherein the County shall continue to support the State in monitoring and enforcing provisions to control non-point source water pollution contained in the U.S. EPA NPDES program as implemented by the Water Quality Control Board; WR-2.3 Best Management Practices (BMPs) wherein the County shall continue to require the use of feasible BMPs and other mitigation measures designed to protect surface water and groundwater from the adverse effects of construction activities, agricultural operations requiring a County Permit and urban runoff in coordination with the Water Quality Control Board; and WR-2.4 Construction Site Sediment Control wherein the County shall continue to enforce provisions to control erosion and sediment from construction sites.

# **Project Impact Analysis:**

- a) Less Than Significant Impact: As noted earlier and summarized here, the Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years. The State Water Resources Control Board requires any new construction project greater than one acre to complete a Stormwater Pollution Prevention Plan (SWPPP). A SWPPP would be prepared for the proposed Project by a qualified engineer or erosion control specialist as a condition of approval 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. It would include Project information and best management practices (BMP). The BMPs would include dewatering procedures, stormwater runoff quality control measures, concrete waste management, watering for dust control, and construction of perimeter silt fences, as needed. Implementation of the SWPPP will minimize the potential for the Project to substantially alter the existing drainage pattern in a manner that will result in substantial erosion or siltation onsite or offsite. There will be no discharge to any surface or groundwater sources which may impact water quality standards. As such, the Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. Therefore, the Project would result in a less than significant impact to this resource.
- b) Less Than Significant Impact: The Project site is located in the Tulare Lake Basin, an area significantly affected by overdraft. The Department of Water Resources (DWR) has estimated the groundwater by hydrologic region and for the Tulare Lake Basin. DWR estimates a total overdraft of 820,000 acre-feet per year (which is the largest overdraft projected in the state, and approximately 56 percent of the statewide total overdraft). The Project site is located within the Kaweah Sub-basin portion of the regional area. As such, there would be less than significant impacts resulting from decreased groundwater supplies as a result of the Project.

As noted earlier and summarized here, the Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years. The Project would not require a permanent potable supply of water and would not utilize or develop an on-site surface or groundwater supply over the life of the Project. Water would be imported via haul trucked to the Project site during annual (or biannual) panel washing activities. PV panel washing would occur approximately 1 to 2 times per year (depending on the amount of rainfall each year) using imported water. The panel washing is like common window washing and would employ no harsh chemicals or solvents. Therefore, based on the limited, temporary usage of water for dust control purposes during construction-related activities and PV panel washing, the Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

- c) Less Than Significant Impact: Overall, the Project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces.
  - i) Erosion and Siltation: As indicated earlier, the relatively flat nature of the site reduces the need for grading which would be limited to a maximum of approximately 31 acres or approximately 40 percent of the Project site (primarily for access roads and battery storage areas). Any soils removed from these areas would be redistributed and retained elsewhere within the Project site (e.g., 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. This trenching would be limited in scale and anticipated to require an 18-inch wide and 3-foot deep trench with a 4inch conduit cable which is not anticipated to displace significant soils. After the estimated 30-year life of the Project, if solar production is decommissioned, the site would be regraded, and any stockpiled soils would be redistributed to permit the site to be returned to agricultural production after potential removal of solar facilities. A SWPPP would be prepared by a qualified engineer or erosion control specialist as a condition of approval and would be submitted to the County for review and approval before construction. The SWPPP would be designed to reduce potential impacts related to erosion and surface water quality during construction activities and throughout the operational life of the Project. It would include Project information and best management practices (BMP) to reduce adverse impacts, such as dewatering procedures, storm water runoff quality control measures, concrete waste management, watering for dust control, and construction of perimeter silt fences, as needed. Therefore, construction-related activities will minimally disturb the ground surface resulting in a less than significant impact from erosion and siltation.
  - **ii**) Runoff and Flooding: The site will not result in waters capable of flooding either on- or off-site. The site is not subject to flooding and lies within Flood Zone X (area of minimal flooding) per the Federal Emergency Management Agency FIRM map (Panel 06107C1610E). Also, the site will not generate substantial amounts of runoff that would result in on- or off-site flooding due to the nature of the Project as a renewable energy producer (i.e., solar energy). The Project will avoid runoff type water from dust suppression activities and PV panel washing through implementation of conditions of approval and project design features. As such, the Project would result in a less than significant impact to or from this resource Item.
  - iii) Drainage Systems and Polluted Runoff: No Impact. See Items 10 c) i) and ii). The Project will not connect to any existing or planned stormwater drainage system, as such it will not provide any additional sources of polluted runoff. As noted earlier, the very nature of the Project (as a renewable energy producer) does not lend itself as a contributor of polluted runoff. Therefore, the Project would result in no impact to this resource, create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, and as such, would result in no impact.
  - **iv**) *Impede or Redirect Flood Flows:* See items 10 c ii) and iii). As noted earlier, the nearest body of water is the South Fork Tule River located approximately two miles north of the Project site. A Storm Water Pollution Prevention Plan (SWPPP) would be in effect for the Project to prevent impacts on adjacent properties from any storm water generated on-site.
    - Also, the most recent United States Geological Survey (USGS) National Water Information System (NWIS) and United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) mapping applications were accessed in February, 223. 182, 183 Other than the South Fork Tule River, there are no jurisdictional waters of the State and U.S. bodies of water proximate or within the entire Project site. As noted earlier, a SWWP would be in effect for the Project to prevent impacts on adjacent properties from any storm water generated on-site. A grading and drainage plan will be submitted and approved by the Tulare County RMA Engineering Branch. As such, the Project will not result in significant impact to any riparian habitats or other protected wetlands. Therefore, mitigation measures are not required or necessary as a result of the Project.
- d) No Impact: The Project is not located on or near any areas that would result in or be impacted by a flood hazard, tsunami, or seiche zones, that would result in a risk of releasing pollutants due to project inundation. As noted in Item 10 c) ii), the Project does not lie within any Flood Zone per the Federal Emergency Management Agency FIRM map; it is not exposed to or near any river, reservoirs, pond, or lake subject to seiches from earthquake activity; and it is more than 13 miles east of

U.S. DHS. Federal Emergency Management Agency FIRM Panel 06107C1610E June 16, 2009. Accessed July 2023 at: <a href="https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd&extent=-119.43111661234694,36.21814285944302,-119.26494839945653,36.287358109855994</a>

<sup>182</sup> USGS. National Water Information system: Mapper. Accessed July 2023 at: <a href="https://maps.waterdata.usgs.gov/mapper/index.html">https://maps.waterdata.usgs.gov/mapper/index.html</a>

<sup>183</sup> U.S. FWS. National Wetlands Inventory. Accessed July 2023 at: https://www.fws.gov/wetlands/data/mapper.HTML

the nearest coastline that would be subject to tsunami. Therefore, there would be no impact from potential inundation by the flood hazard, tsunami, or seiches.

e) **No Impact:** The nature of the Project (as a renewable energy producer), and the fact that its anticipated 30-year life would temporarily suspend usage of water for irrigation purposes of agricultural lands, leads to a reasonable conclusion that the Project would not conflict with or obstruct implementation of water quality control plan or sustainable groundwater management plan.

**Cumulative Impact Analysis:** Less Than Significant Impact: The geographic area of this cumulative analysis is the Tulare Lake Basin. This cumulative analysis is based on information provided in the Water Quality Control Plan for the Tulare Lake Basin and the requirements of the Tulare County Environmental Health Department.

As noted earlier and summarized here, the Project include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years.

The Project will only contribute to cumulative impacts related to this Checklist Item if Project-specific impacts were to occur. As noted above, the Project will be required to prepare and implement a SWPPP. Implementation of the SWPPP will ensure that impacts on water quality from construction-related activities will be minimized. As noted earlier, the applicant will import water via water trucks to meet the construction- and operational-related requirements (e.g., for dust suppression and panel washing) of the Project. As there will be no employees stationed on site, domestic water will not be necessary. The Project is not expected to interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the San Joaquin Basin or the Tule Subbasin. The Project will not substantially affect the drainage pattern of the site or area. As part of the SWPPP, erosion prevention measures and other BMPs will be implemented during earthmoving-related activities (e.g., site grading). The Project is not located in the coastal zone or near a lake or reservoir; therefore, the Project will not be located in an area subject to inundation by seiche, tsunami, or related mudflow. Lastly, construction or operation of the Project will not conflict with or obstruct implementation of the Basin Plan. Project operation will not include activities which will degrade water quality, violate discharge requirements, or conflict or obstruct with the implementation of the Basin Plan. As such, the Project will result in a less than cumulative impact for hydrology and water quality.

Mitigation Measure(s): None Required.

#### XI. LAND USE AND PLANNING

Would	d the project:	SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	No Impact
a)	Physically divide an established community?				$\boxtimes$
b)	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				$\boxtimes$

The discussions regarding Environmental Setting, Regulatory Setting, CEQA requirements, Land Use and Planning, etc. contained in the Tulare County General Plan 2030 Update and Tulare County General Plan Environmental Impact Report are incorporated herein in their entirety. Where necessary and if available, additional site-specific facts, data, information, etc., are included in this discussion.

# **Environmental Setting**

The Project is in an unincorporated area of southern Tulare County, California. Tulare County is located in the San Joaquin Valley portion of the Great Central Valley of California that lies south of the Sacramento-San Joaquin Delta, and it is comprised of 4,863 square miles. Tulare County is bordered by Fresno County to the north, Kings County to the west; Kern County to the south; and Inyo County to the east.

Existing land uses in Tulare County have been organized into generalized categories that are summarized on Table 11-1. These lands total 3,930 square miles or approximately 81 percent of Tulare County. Open space, which includes wilderness, national forests, monuments and parks, and county parks, encompass 1,230 square miles, or approximately 25 percent of the County. Agricultural uses total over 2,150 square miles or about 44 percent of the entire county. Incorporated cities in Tulare County capture less than three percent of the entire County.

Table 11-1	•				
County of Tulare Summary of Assessed Land by Generalized Use Categories 184					
Generalized Land Use Category	Square Miles <sup>1</sup>	Percentage <sup>2</sup>			
Residential	110	2			
Commercial	10	Less than 1%			
Industrial	10	Less than 1%			
Agriculture	2,150	44			
Public (including airports, charitable organizations, churches, fraternal organizations, government owned land, hospitals and rest homes, institutional facilities, rehab facilities and schools)	420	9			
Open Space (including national forests and parks, timber preserves)	1,230	25			
Classified Subtotal	3,930	81			
Unclassified (includes streets and highways, rivers, canals, etc.)	780	16			
Unincorporated County Subtotal	4,710	97			
Incorporated Cities	130	3			
Total County	4,840	100			
1 One square mile = 640 acres. 2 Percent reflect those estimated for the total land area of the County rounding	and may not equal 1	100 due to			

As noted earlier, the Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or

<sup>&</sup>lt;sup>184</sup> Tulare County General Plan 2030 Update. Background Report. Page 3-53.

medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years.

# **Regulatory Setting**

Federal

Federal regulations for land use are not relevant to the Project because it is not a federal undertaking (the Project site is not located on lands administered by a federal agency, and the project applicant is not requesting federal funding or a federal permit).

State

The Project is being evaluated pursuant to CEQA; however, there are no state regulations, plans, programs, or guidelines associated with land use and planning that are applicable to the Project.

Local

# Tulare County General Plan 2030 Update

The Tulare County General Plan 2030 Update (Chapter 4 – Land Use, Chapter 8 – Environmental Resources Management and Part II Chapter 1 - Rural Valley Lands Plan) contains the following goals and policies that relate to land use and which have potential relevance to the Project's California Environmental Quality Act (CEQA) review: LU-2.1 Agricultural Lands wherein the County shall maintain agriculturally-designated areas for agriculture use and by directing urban development away from valuable agricultural lands to cities, unincorporated communities, hamlets, and planned community areas where public facilities and infrastructure are available; LU-5.1 Industrial Developments wherein the County shall encourage a wide range of industrial development activities in appropriate locations to promote economic development, employment opportunities, and provide a sound tax base; and LU-7.15 Energy Conservation wherein the County shall encourage the use of solar power and energy conservation building techniques in all new development.

# **Project Impact Analysis:**

a) and b) No Impact: The proposed Project is in an unincorporated area of southern Tulare County, California. The Project site is located approximately 1.5 miles southeast of the unincorporated community of Woodville, northwest of Avenue 160 and Road 180. The Project will not physically divide any established community or cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, the Project would result in no impact to these resources.

Cumulative Impact Analysis: Less Than Significant Impact: The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, General Plan Background Report, and/or Tulare County 2030 General Plan EIR.

As noted earlier and summarized here, the Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. Lastly, the life of the Project is anticipated to be 30 years. As such, no cumulative impact related to land use and planning will occur.

Mitigation Measure(s): None Required.

#### XII. MINERAL RESOURCES

Woul	ld the project:	SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	No Impact
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				
b)	Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				$\boxtimes$

The discussions regarding Environmental Setting, Regulatory Setting, CEQA requirements, Mineral Resources, etc.; contained in the Tulare County General Plan 2030 Update, Tulare County General Plan Background Report, and Tulare County General Plan 2030 Update EIR are incorporated herein in their entirety. Where necessary and if available, additional site-specific facts, data, information, etc., are included in this discussion.

#### **Environmental Setting**

As noted earlier and summarized here, the proposed Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years.

Per the Tulare County General Plan Background Report, Tulare County is divided into two major physiographic and geologic provinces: the Sierra Nevada Mountains and the Central Valley. The Sierra Nevada Physiographic Province, in the eastern portion of the Tulare County, is underlain by metamorphic and igneous rock. It consists mainly of homogeneous granitic rocks, with several islands of older metamorphic rock. The central and western parts of the County are part of the Central Valley Province, underlain by marine and non-marine sedimentary rocks. It is basically a flat, alluvial plain, with soil consisting of material deposited by the uplifting of the mountains.

Economically, the most important minerals that are extracted in Tulare County are sand, gravel, crushed rock, and natural gas. Other minerals that could be mined commercially include tungsten, which has been mined to some extent, and relatively small amounts of chromite, copper, gold, lead, manganese, silver, zinc, barite, feldspar, limestone, and silica. Minerals that are present but do not exist in the quantities desired for commercial mining include antimony, asbestos, graphite, iron, molybdenum, nickel, radioactive minerals, phosphate, construction rock, and sulfur.

Aggregate resources are the most valuable mineral resource in Tulare County because it is a major component of the Portland cement concrete (PCC) and asphaltic concrete (AC). PCC and AC are essential to constructing roads, buildings, and providing for other infrastructure needs. There are four streams that have provided the main source of high quality sand and gravel in Tulare County: Kaweah River, Lewis Creek, Deer Creek and the Tule River. The highest quality deposits are located at the Kaweah and Tule Rivers. Lewis Creek deposits are considerably inferior to those of the other two rivers.

#### **Regulatory Setting**

Federal

There are no federal or local regulations pertaining to mineral resources relevant to the Project.

State

California Surface Mining and Reclamation Act of 1975

Enacted by the State Legislature in 1975, the Surface Mining and Reclamation Act (SMARA), Public Resources Code Section 2710 et seq., insures a continuing supply of mineral resources for the State. The act also creates surface mining and reclamation policy to assure that:

- Production and conservation of minerals is encouraged;
- Environmental effects are prevented or minimized;
- Consideration is given to recreational activities, watersheds, wildlife, range and forage, and aesthetic enjoyment;
- Mined lands are reclaimed to a useable condition once mining is completed; and
- Hazards to public safety both now and in the future are eliminated.

Areas in the State (city or county) that do not have their own regulations for mining and reclamation activities rely on the Department of Conservation, Division of Mines and Geology, Office of Mine Reclamation to enforce this law. SMARA contains provisions for the inventory of mineral lands in the State of California. The State Geologist, in accordance with the State Board's Guidelines for Classification and Designation of Mineral Lands, must classify Mineral Resource Zones (MRZ) as designated below:

- MRZ-1. Areas where available geologic information indicates that there is minimal likelihood of significant resources.
- MRZ-2. Areas underlain by mineral deposits where geologic data indicate that significant mineral deposits are located or likely to be located.
- MRZ-3. Areas where mineral deposits are found but the significance of the deposits cannot be evaluated without further exploration.
- MRZ-4. Areas where there is not enough information to assess the zone. These are areas that have unknown mineral resource significance.

SMARA only covers mining activities that impact or disturb the surface of the land. Deep mining (tunnel) or petroleum and gas production is not covered by SMARA.

Local

#### Tulare County General Plan 2030 Update

The Tulare County General Plan 2030 Update: Chapter 8 – Environmental Resources Management contains the following goals and policies that relate to mineral resources and which have potential relevance to the Project's California Environmental Quality Act (CEQA) review: *ERM-2.1 Conserve Mineral Deposits* wherein the County will encourage the conservation of identified and/or potential mineral deposits, recognizing the need for identifying, permitting, and maintaining a 50 year supply of locally available PCC grade aggregate; and *ERM-4.6 Renewable Energy* wherein the County shall support efforts, when appropriately sited, for the development and use of alternative energy resources, including renewable energy such as wind, solar, bio-fuels and co-generation.

#### **Project Impact Analysis:**

a) and b) No Impact: Mineral resources located within Tulare County are predominately sand and gravel resources primarily provided by four streams: Kaweah River, Lewis Creek, Deer Creek, and the Tule River. The Tule River is the nearest of these four streams to the Project site and is located approximately two miles to the north. Due to the distance from the nearest stream, the Project will not result in the loss of an available known mineral resource. The Tulare County General Plan Update (see Figure 8-2 Mineral Resource Zone in the General Plan) indicates the locations of State-designated Mineral Resource Zones. According to the California Geological Survey (CGS), the nearest mineral extraction facility (sand and gravel), is County of Tulare owned/operated Culver Mine located south of Avenue 120 between Roads 224 and 232 (located approximately seven miles southeast of the Activity/Project site). 185 As such, the Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

The Project site is not delineated on a local land use plan as a locally important mineral resource recovery site. Therefore, the proposed Akers Business Park project would not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

<sup>&</sup>lt;sup>185</sup> U.S. Geological Survey (USGS). Accessed July 2023. <a href="https://mrdata.usgs.gov/general/map.html">https://mrdata.usgs.gov/general/map.html</a>.

Cumulative Impact Analysis: No Impact - The geographic area of this cumulative analysis is Tulare County and the City of Tulare. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, Tulare County General Plan Background Report, the Tulare County General Plan 2030 Update EIR. As noted earlier and summarized here, the Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years. As such, no cumulative impact related to mineral resources will occur.

Mitigation Measure(s): None Required.

#### XIII. NOISE

Woul	ld the project result in:	SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	No Impact
a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		$\boxtimes$		
b)	Generation of excessive ground-borne vibration or ground-borne noise levels?			$\boxtimes$	
c)	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				$\boxtimes$

The discussions regarding Environmental Setting, Regulatory Setting, CEQA requirements, Noise Resource, etc.; contained in the Tulare County General Plan 2030 Update, Tulare County General Plan Background Report, and Tulare County General Plan 2030 Update Environmental Impact Report are incorporated herein in their entirety. Where necessary and if available, additional site-specific facts, data, information, etc., are included in this discussion.

# **Environmental Setting**

As noted earlier and summarized here, the proposed Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years.

The Project site is designated and has historically been used for agricultural uses. The proposed solar energy generation facility site has historically been used for grazing and irrigated row crop cultivation. The site is surrounded by scattered rural residences, irrigated row crops and rural agriculture, and convenience store/gas station and flea market. Typically, sensitive receptors on noise-sensitive lands include residences, hospitals, places of worship, libraries and schools, nature and wildlife preserves, and parks. Noise sensitive land uses located in the Project vicinity are rural residences; however, the nearest receptor is located approximately 1,500 feet from the Project site.

Within the Tulare County General Plan Background Report, existing noise levels were recorded within unincorporated areas of County. Noise level data collected during continuous monitoring included the hourly Leq and Lmax and the statistical distribution of noise levels over each hour of the sample period. The community noise survey results indicate that typical noise levels in noise-sensitive areas of the unincorporated areas of Tulare County are in the range of 29-65 dB Ldn. As would be anticipated, the quietest areas are those that are removed from major transportation-related noise sources and industrial or stationary noise sources. 186

"Noise. Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound power levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz). In addition to the actual instantaneous measurement of sound levels, the duration of sound is important since sounds that occur over a long period of time are more likely to be an annoyance or cause direct physical damage or environmental stress. One of the most frequently used noise metrics that considers both duration and sound power level is the equivalent noise

<sup>&</sup>lt;sup>186</sup> County of Tulare General Plan 2030 Update. Background Report. Page 8-77.

level (Leq). The Leq is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time. Typically, Leq is summed over a one-hour period.

Sound pressure is measured on a logarithmic scale with the 0 dB level based on the lowest detectable sound pressure level that people can perceive (an audible sound that is not zero sound pressure level). Based on the logarithmic scale, a doubling of sound energy is equivalent to an increase of 3 dB and a sound that is 10 dB less than the ambient sound level has no effect on ambient noise. Because of the nature of the human ear, a sound must be about 10 dB greater than the reference sound to be judged as twice as loud. In general, a 3 dBA change in community noise levels is noticeable, while 1-2 dBA changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40 to 50 dBA, while noise levels along arterial streets are generally in the 50 to 60+ dBA range. Normal conversational levels are in the 60-65 dBA range, and ambient noise levels greater than that can interrupt conversations.

Noise levels typically attenuate at a rate of 6 dBA per doubling of distance from point sources such as industrial machinery. Noise from lightly traveled roads typically attenuates at a rate of about 4.11 dBA per doubling of distance. Noise from heavily traveled roads typically attenuates at about 3 dBA per doubling of distance.

The actual time period in which noise occurs is also important since noise that occurs at night tends to be more disturbing than that which occurs during the daytime. To evaluate community noise on a 24-hour basis, the day-night average sound level was developed (Ldn). Ldn is the time average of all A-weighted levels for a 24-hour period with a 10 dB upward adjustment added to those noise levels occurring between 10:00 PM and 7:00 AM to account for the general increased sensitivity of people to nighttime noise levels. The Community Noise Equivalent Level (CNEL) is identical to the Ldn with one exception. The CNEL adds 5 dB to evening noise levels (7:00 PM to 10:00 PM). Thus, both the Ldn and CNEL noise measures represent a 24-hour average of A-weighted noise levels with Ldn providing a nighttime adjustment and CNEL providing both an evening and nighttime adjustment.

<u>Vibration</u>. Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Vibration can be a serious concern, causing buildings to shake and rumbling sounds to be heard. In contrast to noise, vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads.

There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings and is usually measured in inches per second. The root mean square (RMS) amplitude is most frequently used to describe the effect of vibration on the human body. The RMS amplitude is defined as the average of the squared amplitude of the signal. Decibel notation (VdB) is commonly used to measure RMS. The decibel notation acts to compress the range of numbers required to describe vibration.

High levels of vibration may cause physical personal injury or damage to buildings. However, groundborne vibration levels rarely affect human health. Instead, most people consider groundborne vibration to be an annoyance that can affect concentration or disturb sleep. In addition, high levels of groundborne vibration can damage fragile buildings or interfere with equipment that is highly sensitive to groundborne vibration (e.g., electron microscopes).

In contrast to noise, groundborne vibration is not a phenomenon that most people experience every day. The background vibration velocity level in residential areas is usually 50 RMS or lower which is well below the threshold of perception for humans (human perception is around 65 RMS). Most perceptible indoor vibration is caused by sources within buildings, such as operation of mechanical equipment, movement of people, or slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel- wheeled trains, and traffic on rough roads. If the roadway is smooth, the vibration from traffic is rarely perceptible.

Noise levels around the Project site are associated with farm equipment and associated agricultural activities, typical noise that emanates from residential uses, and pass-by vehicular noise. Maximum noise levels generated by farm-related tractors typically range from 77 to 85 dB at a distance of 50 feet from the tractor, depending on the horsepower of the tractor and the operating conditions. Due to the seasonal nature of the agricultural industry, there are often extended periods of time when no noise is generated at the Project site, followed by short-term periods of intensive mechanical equipment usage and corresponding noise generation. During periods without noise generated by agricultural production, noise levels would be typical of other noise-sensitive areas in unincorporated Tulare County, as discussed above.

The Tulare County General Plan Background Report Safety section and the Tulare County General Plan 2030 Update serve as the primary policy statement by the County for implementing policies to maintain and improve the noise environment in Tulare County. The General Plan presents Goals and Objectives relative to planning for the noise environment within the County. Future noise/land use incompatibilities can be avoided or reduced with implementation of the Tulare County noise criteria and standards. Tulare County realizes that it may not always be possible to avoid constructing noise sensitive developments in existing noisy areas and therefore provides noise reduction strategies to be implemented in situations with potential noise/land use conflicts. <sup>187</sup>

#### **Regulatory Setting**

Federal

#### Federal Vibration Policies

The Federal Railway Administration (FRA) and the Federal Transit Administration (FTA) have published guidance relative to vibration impacts. According to the FRA, fragile buildings can be exposed to ground-borne vibration levels of 0.5 PPV without experiencing structural damage. <sup>188</sup> The FTA has identified the human annoyance response to vibration levels as 80 RMS (Root Mean Square = The square root of the arithmetic average of the squared amplitude of the signal). <sup>189</sup>

State

The California Noise Control Act was enacted in 1973 (Health and Safety Code § 46010 et seq.), and states that the Office of Noise Control (ONC) should provide assistance to local communities in developing local noise control programs. It also indicates that ONC staff will work with the OPR to provide guidance for the preparation of the required noise elements in city and county General Plans, pursuant to Government Code § 65302(f). California Government Code § 65302(f) requires city and county general plans to include a noise element. The purpose of a noise element is to guide future development to enhance future land use compatibility.

#### Local

Analytical noise modeling techniques, in conjunction with actual field noise level measurements, were used to develop generalized Ldn or Community Noise Equivalent Level (CNEL) contours for traffic noise sources within Tulare County for existing conditions. Traffic data representing annual average daily traffic volumes, truck mix, and the day/night distribution of traffic for existing conditions (1986) and future were obtained from the Tulare County Public Works Department and used in the Tulare County Noise Element. The Tulare County General Plan 2030 Update Health & Safety Element (2012) includes noise and land use compatibility standards for various land uses. These are shown in **Table 13-1** Land Use Compatibility for Community Noise Environments <sup>190</sup>.

## Tulare County General Plan 2030 Update

The Tulare County General Plan 2030 Update: Chapter 10 – Health and Safety contains the following goals and policies that relate to noise and which have potential relevance to the Project's California Environmental Quality Act (CEQA) review: *HS-8.2 Noise Impacted Areas* – wherein the County shall designate areas as noise-impacted if exposed to existing or projected noise levels that exceed 60 dB Ldn (or Community Noise Equivalent Level (CNEL)) at the exterior of buildings; *HS-8.3 Noise Sensitive Land Uses* – wherein the County shall not approve new noise sensitive uses unless effective mitigation measures are incorporated into the design of such projects to reduce noise levels to 60 dB Ldn (or CNEL) or less within outdoor activity areas and 45 dB Ldn (or CNEL) or less within interior living spaces; *HS-8.6 Noise Level Criteria* wherein the County shall ensure noise level criteria applied to land uses other than residential or other noise-sensitive uses are consistent with the recommendations of the California Office of Noise Control (CONC); *HS-8.8 Adjacent Uses* wherein the County shall not permit development of new industrial, commercial, or other noise-generating land uses if resulting noise levels will exceed 60 dB Ldn (or CNEL) at the boundary of areas designated and zoned for residential or other noise-sensitive uses, unless it is determined to be necessary to promote the public health, safety and welfare of the County; *HS-8.11 Peak Noise Generators* wherein the County shall limit

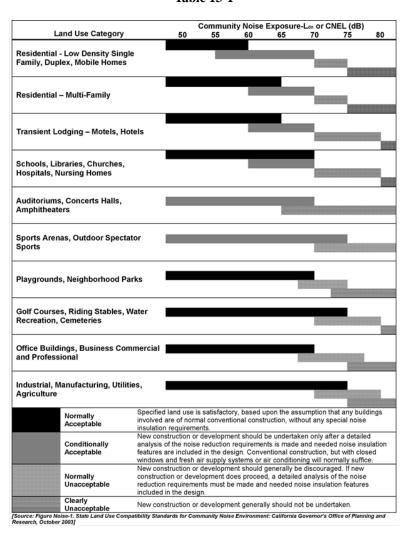
<sup>&</sup>lt;sup>187</sup> Ibid.

U.S. Department of Transportation. Federal Transit Administration. "The Noise and Vibration Impact Assessment Manual". September 2018. FTA Report No. 0123 Federal Transit Administration. Figure 5-4 Typical levels of Ground-Borne Vibration. Pages 112 and 113. Accessed July 2023 at: <a href="https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123\_0.pdf">https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123\_0.pdf</a>.

<sup>&</sup>lt;sup>189</sup> Ibid. 213.

<sup>&</sup>lt;sup>190</sup> Tulare County General Plan 2030 Update. Goals and Policies Report. Page 10-25.

noise generating activities, such as construction, to hours of normal business operation (7 a.m. to 7 p.m.). No peak noise generating activities shall be allowed to occur outside of normal business hours without County approval; *HS-8.6 Noise Level Criteria* wherein the County shall ensure noise level criteria applied to land uses other than residential or other noise-sensitive uses are consistent with the recommendations of the California Office of Noise Control (CONC); *HS-8.8 Adjacent Uses* wherein the County shall not permit development of new industrial, commercial, or other noise-generating land uses if resulting noise levels will exceed 60 dB Ldn (or CNEL) at the boundary of areas designated and zoned for residential or other noise-sensitive uses, unless it is determined to be necessary to promote the public health, safety and welfare of the County; *HS-8.11 Peak Noise Generators* wherein the County shall limit noise generating activities, such as construction, to hours of normal business operation (7 a.m. to 7 p.m.). No peak noise generating activities shall be allowed to occur outside of normal business hours without County approval; *HS-8.18 Construction Noise* wherein the County shall seek to limit the potential noise impacts of construction activities by limiting construction activities to the hours of 7 a.m. to 7 p.m., Monday through Saturday when construction activities are located near sensitive receptors. No construction shall occur on Sundays or national holidays without a permit from the County to minimize noise impacts associated with development near sensitive receptors; and *HS-8.19 Construction Noise Control* wherein the County shall ensure that construction contractors implement best practices guidelines (i.e.; berms, screens, etc.) as appropriate and feasible to reduce construction-related noise-impacts on surrounding land uses.



**Table 13-1** 

# **Project Impact Analysis:**

a) Less Than Significant Impact: As noted earlier and summarized here, the Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The

Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years.

The Project site is zoned for agricultural purposes and is surrounded by irrigated row crops, rural agriculture, and scattered rural residences. The Tulare County General Plan Background Report indicates that typical noise levels in noise-sensitive areas of the unincorporated areas of Tulare County are in the range of 29-65 dB Ldn. The Project will increase ambient noise levels, temporarily, intermittently, and on the short-term, during construction-related activities; however, the increase in noise levels will not be permanent in nature or exceed Tulare County's Maximum Acceptable Ambient Noise Exposure for Various Land Uses. The ambient noise environment in the Project vicinity is dominated by agricultural-related uses, including tractor-intensive work. The magnitude and frequency of the existing ambient noise levels may vary considerably over the course of the day and throughout the week. The variation is caused by different reasons, for example, changing weather conditions, the effects of rotation of agricultural crops, and other human activities.

<u>Project Operational Noise Impacts</u>: The Project would operate seven (7) days a week and 365 days per year. Remote monitoring of the facility would be conducted. Any minor on-site trash generated through maintenance activities would be hauled away by maintenance crews and disposed of at approved recycling facility or landfill. As noted in the Project Narrative at 2.2 Project Operations and Maintenance (see Attachment "E") indicates that facility will be unmanned, and operated remotely. There may be occasional site visits for security, maintenance, and repairs, but these trips are not expected to occur regularly or produce significant amounts of trips. These occasional site visits shall occur during daylight hours and not be constrained by seasonal affects. The trip generation related to operation and periodic maintenance activities would occur throughout the year, however, it would be nominal. Therefore, except for annual (or biannual) panel washing activities, emergency repair events, and occasional security checks, the facility would not require any full-time employees located on or traveling to the site.

Noise from electrical equipment, such as transformers, is characterized as a discrete low frequency hum. The noise from transformers is produced by alternating current flux in the core that causes it to vibrate. As the pad mounted transformers are housed in metal cabinets, the noise levels produced are anticipated to be at or below existing ambient noise levels that the Project site undergoes during current agricultural activities (which include the use of a tractor for the grading of the site).

The County of Tulare's General Plan 2030 Update Health and Safety Element (2012) sets the standard noise threshold of 60 dB Ldn at the exterior of nearby residences. Exterior noise levels in the range of 45-60 dB Ldn or Community Noise Equivalent Level (CNEL) or below are generally considered acceptable for residential land uses and 45-75 dB Ldn (or CNEL) or below are considered acceptable for industrial, manufacturing utilities, and agriculture land uses. There are rural residences and agricultural outbuildings that surround the Project site. The distance to the nearest, existing sensitive receptor (a rural residence) from the edge of the Project's proposed solar arrays will be approximately 1,500 feet from Project's development area.

The Project will employ passive solar power generation that will rotate throughout the day to maximize sun exposure. Noise from a tracker motor ranges from 62 dBA to 63 dBA at one meter distance; however, as noted earlier, the nearest receptor is approximately 1,500 feet from the Project site. As such, there will be no long-term effects on existing ambient noise levels from the operation of the Project.

As discussed earlier, operational noise is anticipated to be below Tulare County General Plan noise standards of 60 dB Ldn (or CNEL) or less at the exterior of nearby residence and 45 dB Ldn (or CNEL) or less within interior living spaces. The impact will be less than significant.

<u>Project Construction-Related Noise Impacts</u>: Project construction-related will include site preparation, grading, installation of the photovoltaic (PV) solar modules, construction of an on-site substation, wiring and inverters, fence, access roads, and a new distribution interconnect power line to the existing Southern California Edison (SCE) transmission line adjacent to the Project site. Construction-related short-term, intermittent, temporary noise levels will be higher than existing ambient noise levels in the Project area, but will no longer occur after construction is completed.

Solar generation facility construction is performed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise-generating characteristics. These various sequential phases will change the character of the noise generated on the Project site. Therefore, the noise levels vary as construction progresses. Despite the variety in the type and size of construction equipment, there are similarities in the dominant noise sources and their anticipated noise levels. **Table 13-2** indicates the anticipated noise levels of the typical construction-related equipment (i.e., graders, trenchers, tractors) based on a distance of 50-feet between the equipment and the sensitive noise receptor. Installation of solar panel

arrays will involve the installation of steel beams using percussive or vibration equipment in a manner similar to installing freeway guardrails. The solar panel installation will include earthwork, grading, and erosion control, and erection of the panels, supports, and associated electrical equipment.

Table 13-2 Typical Construction Noise Levels					
dBA at 50 feet					
Type of Equipment	Without Feasible Noise Control <sup>1</sup>	With Feasible Noise Control			
<b>Dozer or Tractor</b>	80	75			
Excavator	88	80			
Scraper	88	80			
Front End Loader	79	75			
Backhoe	85	75			
Grader	85	75			
Truck	91	75			

Generally, construction-related phasing will occur over three Phases, 1) site preparation; 2) photovoltaic module system; and 3) inverters, transformers, substation, electrical collector system and interconnection. Noise resulting from the construction-related equipment necessary to complete this phase will be temporary, short-term, and intermittent. The applicant anticipates completion of the entire Project site in six (6) months.

The General Plan 2030 Update Health and Safety Element (2012) does not identify short-term, construction-noise-level thresholds. It limits noise generating activities (such as construction) to hours of normal business operation unless specific County approval is given. Construction-related activities will be restricted to daytime hours and will be short-term and temporary in nature.

Construction noise will be similar in character to existing noise in the area resulting from agricultural operations. Construction will occur throughout the Project site, will not be concentrated or confined in the area directly adjacent to sensitive receptors and will result in short-term, temporary periodic increases in noise. Normally, construction-related activities occur in small construction zones with noise emanating from the various points in the area. In several instances, the sensitive receptors located in the Project area are shielded from the construction areas by distance, existing roadways, agricultural vegetation, and agricultural-related structures.

Construction-related activities will adhere to the Tulare County General Plan goals and policies and the Tulare County Zoning Ordinance. As there will be no long-term, on-going, operational noise (outside of equipment used to spray wash the panels and during maintenance activities (as needed), mitigation measures are not required to reduce the short-term, intermittent, and temporary noise from construction-related activities. Therefore, construction activities will have a less than significant impact on nearby receptors.

b) Less Than Significant Impact: "Vibration is an oscillatory motion that can be described in terms of the displacement, velocity, or acceleration. Because the motion is oscillatory, there is no net movement of the vibration element and the average of any of the motion metrics is zero. Displacement is the most intuitive metric. For a vibrating floor, the displacement is simply the distance that a point on the floor moves away from its static position. The velocity represents the instantaneous speed of the floor movement and acceleration is the rate of change of the speed. Although displacement is easier to understand than velocity or acceleration, it is rarely used for describing ground-borne vibration. Most transducers used for measuring ground-borne vibration use either velocity or acceleration. Furthermore, the response of humans, buildings, and equipment to vibration is more accurately described using velocity or acceleration." <sup>191</sup>

"The effects of ground-borne vibration can include perceptible movement of floors in buildings, rattling of windows, shaking of items on shelves or hanging on walls, and low-frequency noise (ground-borne noise). Building damage is not a factor for typical transportation projects, but in extreme cases, such as during blasting or pile-driving during construction, vibration

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<sup>&</sup>lt;sup>191</sup> U.S. DOT. FTA. Transit Noise & Vibration Impact Assessment Manual. September 2022. Page 110. Accessed July 2023 at: <a href="https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123\_0.pdf.">https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123\_0.pdf.</a>

could cause damage to buildings. Although the perceptibility threshold is approximately 65 VdB, human response to vibration is not usually substantial unless the vibration exceeds 70 VdB. A vibration level that causes annoyance is well below the damage risk threshold for typical buildings (100 VdB)." "Ground-borne vibration is almost never a problem outdoors. Although the motion of the ground may be perceived, without the effects associated with the shaking of a building, the motion does not provoke the same adverse human reaction." Table 13-3 presents the human response to different levels of ground-borne vibration and noise. "The vibration level (VdB) is presented with the corresponding frequency assuming that the vibration spectrum peaks at 30 Hz or 60 Hz.(xi) The groundborne noise levels (dBA) are estimated for the specified vibration velocity with a peak vibration spectrum of 30 Hz (Low Freq) and 60 Hz (Mid Freq). Note that the human response differs for vibration velocity level based on frequency. For example, the noise caused by vibrating structural components may cause annoyance even though the vibration cannot be felt. Alternatively, a low frequency vibration can cause annoyance while the ground-borne noise level it generates does not." 194

Table 13-3 Human Response to Different levels of Ground-Bourne Vibration and Noise <sup>195</sup>					
Vibration	Noise Level		Human Dagnanga		
Velocity Level	Low Freq*	Mid Freq**	Human Response		
65 VdB	25 dBA	40dBA	Approximate threshold of perception for many humans. Low frequency sound: usually inaudible. Mid- frequency sound: excessive for quiet sleeping areas.		
75 VdB	30 dBA	50dBA	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find transit vibration at this level annoying. Low-frequency noise: tolerable for sleeping areas. Mid-frequency noise: excessive in most quiet occupied		
85 VdB	45 dBA	60dBA	Vibration tolerable only if there are an infrequent number of events per day. Low-frequency noise: excessive for sleeping areas. Mid-frequency noise: excessive even for infrequent events for some activities.		
*Approximate noise **Approximate noise					

**Table 13-4** presents average source levels in terms of velocity for various types of construction equipment measured under a wide variety of construction activities.

Table 13-4 Vibration Source Levels for Construction Equipment 196					
Equipment		PPV at 25 ft. in/sec	Approximate Lv * at 25 ft		
Dila Duissan (imma at)	upper range	1.518	112		
Pile Driver (impact)	typical	0.644	104		
Pile Driver (sonic)	upper range	0.734	105		
	typical	0.17	93		
Clam shovel drop (slurry wall	)	0.202	94		
Hydromilll (slurry wall)	in soil	0.008	66		
	in rock	0.017	75		
Vibratory Roller		0.21	94		
Hoe Ram		0.089	87		
Large bulldozer		0.089	87		
Caisson drilling		0.089	87		
Loaded trucks		0.076	86		
Jackhammer		0.035	79		
Small bulldozer		0.003	58		
*RMS velocity in decibels, VDB re	e 1 micro-in/sec	•	•		

<sup>&</sup>lt;sup>192</sup> Ibid. 117-118.

<sup>&</sup>lt;sup>193</sup> Op. Cit. 118.

<sup>&</sup>lt;sup>194</sup> Op. Cit. 119.

<sup>&</sup>lt;sup>195</sup> Op. Cit. 120.

<sup>&</sup>lt;sup>196</sup> Op. Cit. 184.

Typical outdoor sources of perceptible ground borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. Construction vibrations can be transient, random, or continuous. The approximate threshold of vibration perception is 65 VdB, while 85 VdB is the vibration acceptable only if there are an infrequent number of events per day.

<u>Construction Related Vibration Impacts</u>: While construction-related activities will result in minor amounts of groundbourne vibration, such groundbourne noise or vibration will attenuate rapidly from the source and will not be generally perceptible outside of the construction areas. As such, impacts to the neighboring sensitive receptor will be less than significant.

<u>Project Operational Vibration Impacts</u>: As described in Impact 13 a), The Project will largely result in typical agricultural/industrial use-related noise. Typical noise will likely result from vehicles accessing and egressing the site, onsite fork lifts and small loaders, etc. Other than these sources there will be no vibrational impacts from Project operation. As such, there will be no exposure of persons to or generation of excessive groundborne vibration.

Therefore, the Project would result in a less than significant impact and would not generate excessive ground-borne vibration or ground-borne noise.

c) No Impact: The nearest public airport or public use or airport, Mefford Field Airport, is located greater than two miles west of the Project site. Therefore, the Project site is located outside of the 55 dB CNEL noise contour. The Project is not within an airport land use plan or within two miles of a public airport or public use airport. The Project will not conflict with Tulare County Airport Land Use Plan policy. The project would not expose people residing or working in the project area to excessive noise levels. Therefore, there will be no impact.

Cumulative Impact Analysis: No-to-Less Than Significant Impact - The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR. As discussed earlier, implementation of the Project will not result in a substantial increase in ambient noise levels as a result of construction and decommissioning related activities, construction related traffic, on site stationary sources, and operational traffic, nor would operations of the Project result in any long term or excessive vibration impacts As a result, the Project will not result in a significant cumulative contribution to noise levels that will adversely affect nearby land uses. As the Project site is not located within area covered by an airport land use plan or within two miles of a public airport or public use airport, the Project will result in a no-to-less than significant impact to noise.

Mitigation Measure(s): None Required.

#### XIV. POPULATION AND HOUSING

Wou	ld the project:	SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	No Impact
a)	Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				$\boxtimes$
b)	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				$\boxtimes$

The discussions regarding Environmental Setting, Regulatory Setting, CEQA requirements, Population and Housing, etc. contained in the Tulare County General Plan 2030 Update and Tulare County associated EIR are incorporated herein in their entirety. Where necessary and if available, additional site-specific facts, data, information, etc., are included in this discussion.

#### **Environmental Setting**

Tulare County is located in a geographically diverse region with the majestic peaks of the Sierra Nevada framing its eastern region, while its western portion includes the San Joaquin Valley floor, which is very fertile and extensively cultivated. In addition to its agricultural production, the County's economic base also includes agricultural packing and shipping operations. Small and medium size manufacturing plants are located in the western part of the county and are increasing in number. Tulare County contains portions of Sequoia National Forest, Sequoia National Monument, Inyo National Forest, and Kings Canyon National Park. Sequoia National Park is entirely contained within the county.

The County encompasses approximately 4,840 square miles of classified lands (lands with identified uses) and can be divided into three general topographical zones: a valley region; a foothill region east of the valley area; and a mountain region just east of the foothills. The eastern half of the county is generally comprised of public lands, including the Mountain Home State Forest, Golden Trout Wilderness area, and portions of the Dome Land and south Sierra Wilderness areas. Federal lands, which include wilderness, national forests, monuments and parks, along with County parks, make up 52 percent of the County, the largest percentage found in the County. Agricultural uses, which include row crops, orchards, dairies, and grazing lands on the Valley floor and in the foothills total over 2,020 square miles or about 43 percent of the entire County. Urban uses such as incorporated cities, communities, hamlets, other unincorporated urban uses, and infrastructure rights-of-way make up the remaining land in the County

As noted earlier and summarized here, the Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years.

The California Department of Finance (DOF) provides population estimates for Tulare County. According to DOF population estimates, between 2020 and 2022, Tulare County grew from 474,032 to 475,014<sup>197</sup> persons; an increase of 1,897 persons. The population between 2010 (442,179) and 2020 (479,403)<sup>198</sup>, the County experienced an increase of 37,224 persons; an average yearly growth of 3,722 persons/year. The 2010-2020 trend is approximately twice the rate of the 2020-2022 trend.

The annual growth rate for the entire County is anticipated to increase from 1.9 percent to 2.4 percent through 2030. While the percentage of the County's population living in incorporated cities is anticipated to increase by 2030, the percentage of persons

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<sup>197</sup> State of California. Department of Finance. E-4 Population Estimates for City, Counties, and the State, 2018-2018. Sacramento, California. November 2012. Accessed in July 2023 at: https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fdof.ca.gov%2Fwp-content%2Fuploads%2Fsites%2F352%2FForecasting%2FDemographics%2FDocuments%2FE-4\_2022\_InternetVersion.xlsx&wdOrigin=BROWSELINK

<sup>198</sup> Ibid. E-4 Population Estimates for Cities, Counties, and the State, 2011-2020 with 2010 Census Benchmark. Accessed July 2023 at: https://dof.ca.gov/forecasting/Demographics/estimates/e-4-population-estimates-for-cities-counties-and-the-state-2011-2020-with-2010-census-benchmark-new/.

living in unincorporated areas in the County will decrease by 2030. The Tulare County Association of Governments (TCAG) projects an additional 313,970 people to be living in Tulare County by 2030 for a total projected population of approximately 742,970. 199

## **Regulatory Setting**

**Federal** 

"HUD's mission is to create strong, sustainable, inclusive communities and quality affordable homes for all. HUD is working to strengthen the housing market to bolster the economy and protect consumers; meet the need for quality affordable rental homes: utilize housing as a platform for improving quality of life; build inclusive and sustainable communities free from discrimination; and transform the way HUD does business." However, as the Project does not propose any housing, HUD or other, federal regulations do not apply.

State

## California Department of Housing and Community Development (HCD)

HCD's mission is to "Promote safe, affordable homes and strong vibrant communities throughout California." "In 1977, the State Department of Housing and Community Development (HCD) adopted regulations under the California Administrative Code, known as the Housing Element Guidelines, which are to be followed by local governments in the preparation of local housing elements. AB 2853, enacted in 1980, further codified housing element requirements. Since that time, new amendments to State Housing Law have been enacted. Each of these amendments has been considered during development of this Housing Element."

#### California Relocation Assistance Act

The State of California adopted the California Relocation Assistance Act (California Government Code §7260 et seq.) in 1970. This State law, which follows the federal Uniform Relocation Assistance and Real Property Acquisition Act, requires public agencies to provide procedural protections and benefits when they displace businesses, homeowners, and tenants in the process of implementing public programs and projects. This State law calls for fair, uniform, and equitable treatment of all affected persons through the provision of relocation benefits and assistance to minimize the hardship of displacement on the affected persons. There are no state regulations that are relevant to this Project.

Local

#### Tulare County Regional Housing Needs Assessment Plan 2014-2023

The Tulare County Association of Governments (TCAG) was responsible for allocating the State's projections to each local jurisdiction within Tulare County including the County unincorporated area, which is reflected in this Housing Element. Tulare County has no control over the countywide population and housing projections provided to TCAG when it prepared the Regional Housing Needs Assessment Plan (RHNA). As the Project does not include (or remove/displace) any housing, the RHNA does not apply.

## Tulare County Regional Blueprint 2009

This Blueprint includes the following preferred growth scenario principals: <sup>202</sup>

- Increase densities county-wide by 25% over the status quo densities;
- Establish light rail between cities;
- Extend Highway 65 north to Fresno County;

 $<sup>^{199} \</sup> Tulare\ County\ General\ Plan\ 2030\ Update.\ General\ Plan\ Background\ Report.\ Table\ 2-16.\ Page\ 2-30\ and\ 2-31.$ 

<sup>&</sup>lt;sup>200</sup> U.S. Department of Housing and Urban Development. Mission. Accessed July 2023 at: <a href="https://www.hud.gov/about/mission">https://www.hud.gov/about/mission</a>.

Tulare County Housing Element 2015 Update. Page 1-3. Accessed July 2023 at: http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/110Part%20I%20Voluntary%20Elements%20Chapters%206,%2012%20and%2015/001CHP%206%20Tulare%20County%20Housing%20Element%20Update%202015/CHP%206%20Tulare%20County%20Housing%20Element%20Update%202015.pdf

<sup>&</sup>lt;sup>202</sup> TCAG. Tulare County Regional Blueprint. May 2009. Page 18. Accessed July 2023 at: <a href="https://tularecog.org/tcag/planning/regional-transportation-plan-rtp/rtp-20181/tulare-county-blue-print/">https://tularecog.org/tcag/planning/regional-transportation-plan-rtp/rtp-20181/tulare-county-blue-print/</a>.

- Expand transit throughout the county;
- Maintain urban separators around cities; and
- Growth will be directed toward incorporated cities and communities where urban development exists and where comprehensive services and infrastructure are or will be provided.

# **Tulare County Housing Authority**

"The Housing Authority of the County of Tulare (HATC) has been officially designated as the local public housing agency for the County of Tulare by the Board of Supervisors and was created pursuant to federal and state laws. ...HATC is a unique hybrid: a public sector agency with private sector business practices. Their major source of income is the rents from residents. The HATC mission is "to provide affordable, well-maintained rental housing to qualified low- and very low-income families. Priority shall be given to working families, seniors and the disabled. Tenant self sufficiency and responsibility shall be encouraged. Programs shall be self-supporting to the maximum extent feasible." 203

HATC provides rental assistance to very low and moderate-income families, seniors and the handicapped throughout the county. HATC offers many different programs, including the conventional public housing program, the housing choice voucher program (Section 8), the farm labor program for families with farm labor income, senior housing programs, and other programs. They also own or manage some individual subsidized rental complexes that do not fall under the previous categories, and can provide information about other affordable housing that is available in Tulare County. All programs are handicap accessible. Almost all of the complexes have 55-year recorded affordability covenants." 204 As noted earlier, the Project does not include (or remove/displace) any public housing, no impact would occur to HATC's objectives/programs.

#### **Tulare County Housing Authority**

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#### Tulare County General Plan/Housing Element Policies

As this is a renewable energy project (i.e., no housing units are proposed), there are no policies from the Tulare County General Plan/Housing Element that would apply to this Project.

#### **Project Impact Analysis:**

and b) No Impact: As noted earlier and summarized here, the Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years.

<sup>&</sup>lt;sup>203</sup> Tulare County Housing Element 2015 Update. Page 5-12. Accessed July 2023 at: <a href="http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%">http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%</a>  $\underline{20Tulare \% 20County \% 20General \% 20Plan \% 20Materials / 110Part \% 20I\% 20Voluntary \% 20Elements \% 20Chapters \% 206, \% 2012\% 20 and \% 2015 / 001 CHP \% 206\% 20Voluntary \% 20Elements \% 20Chapters \% 206, \% 2012\% 20 and \% 2015 / 001 CHP \% 206\% 20Voluntary \% 20Elements \% 20Chapters \% 20Chapt$ 20Tulare%20County%20Housing%20Element%20Update%202015/CHP%206%20TULARE%20COUNTY%20HOUSING%20ELEMENT%20UPDATE% 202015.pdf

 $<sup>^{205}</sup>$  Tulare County Housing Element 2015 Update. Page 5-12.

Total Project construction will take approximately eight continuous months to complete. Construction workers may be drawn from the local and regional area. No employees will be stationed at the site. Workers will only visit the site for occasional cleaning, maintenance, and repair. The site would be monitored remotely and will not require any permanent, on-site employees. The workers are anticipated to be drawn from the nearby, local labor and regional workforce. No substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure) will occur. The Project will not induce population growth will not induce population growth, nor will it displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. Therefore, the Project will not impact this resource Item.

**Cumulative Impact Analysis:** No Impact: The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, Tulare County General Plan Background Report, and Tulare County General Plan 2030 Update EIR.

As previously discussed, the Project does not include development of homes or businesses nor does it propose road extensions or additional infrastructure that will generate adverse population growth as a result of the Project, nor will the Project impact existing housing units or people that will be affected as a result of the Project. The Project will not displace any housing units or people, necessitating the construction of replacement housing elsewhere. As such, no cumulative impact related to population and housing will occur.

Mitigation Measure(s): None Required.

#### XV. PUBLIC SERVICES

impac physic or phy constr environ service	If the project result in substantial adverse physical ts associated with the provision of new or cally altered governmental facilities, need for new visically altered governmental facilities, the function of which could cause significant commental impacts, in order to maintain acceptable e ratios, response times or other performance ives for any of the public services:	SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	No Impact
a)	Fire protection?			$\bowtie$	
b)	Police protection?			$\boxtimes$	
c)	Schools?				$\boxtimes$
d)	Parks?				$\boxtimes$
e)	Other public facilities?				$\boxtimes$

The discussions regarding Environmental Setting, Regulatory Setting, CEQA requirements, Public Services, etc. contained in the Tulare County General Plan 2030 Update and General Plan Environmental Impact Report are incorporated herein in their entirety. Where necessary and if available, additional site-specific facts, data, information, etc., are included in this discussion.

#### **Environmental Setting**

As noted earlier and summarized here, the Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years.

The Tulare County Sheriff's Department provides law enforcement protection services to the unincorporated County. The nearest Sheriff's Office station is the Porterville Sheriff Substation is located approximately eight (8) miles east (at 379 N. 3rd St.) of the Project site; the next nearest Sheriff Substation is located at 161 N. Pine Street (Pixley, CA), approximately 10.15 miles southwest of the Project site. It is not expected that the Project will result in a substantial increase in sheriff calls and response times will be similar to the surrounding commercial facilities. It is noted that Sheriff patrols are constantly circulating/patrolling and it would be speculative to estimate actual police response times.

Tulare County Fire Department provides fire protection services with the nearest substation, Fire Station No. 19 (located at 22315 Avenue 15228 in Porterville, CA), is approximately five (5) miles east of the Project site. CalFire/TCFD uses an "attack" time protocol of less than 10 minutes to respond to 90 percent of the calls on the valley floor and less than 15 minutes on 75 percent of calls in the foothill and mountain areas. The Project site is in the 15-minute response area. Such response times are feasible from the station mentioned. <sup>206</sup>

The nearest elementary school (Woodville Elementary School) is located approximately 1.5 northwest of the Project site. Also, see parks discussion at Item 15 Recreation.

The nearest County owned/operated park is Woodville Park located approximately two (2) miles northwest of the Project site.

# Federal None that are applicable to this Project. State 206 Ibid.

**Regulatory Setting** 

#### California Fire Code and Building Code

The purpose of the California Fire Code (Title 24, Part 9 of the California Code of Regulations) is to establish the minimum requirements consistent with nationally recognized good practices to safeguard the public health, safety and general welfare from the hazards of fire, explosion or dangerous conditions in new and existing buildings, structures and premises, and to provide safety and assistance to fire fighters and emergency responders during emergency operations.<sup>207</sup>

Local

#### Tulare County General Plan 2030 Update

The following Tulare County General Plan 2030 Update, Chapter 14 – Public Facilities and Services, contains the following policies that relate to public services and may apply to this Project: *PFS-7.2 Fire Protection Standards* wherein the County shall require all new development to be adequately served by water supplies, storage, and conveyance facilities supplying adequate volume, pressure, and capacity for fire protection; *PFS-7.5 Fire Staffing and Response Time Standards* wherein the County shall strive to maintain fire department staffing and response time goals consistent with National Fire Protection Association (NFPA) standards; *PFS-7.6 Provision of Station Facilities and Equipment* wherein the County shall strive to provide sheriff and fire station facilities, equipment (engines and other apparatus), and staffing necessary to maintain the County's service goals. The County shall continue to cooperate with mutual aid providers to provide coverage throughout the County;

	Fire Staffing and Reponses Time Standards					
Demographics Staffing/Response Time %						
Urban	> 1,000 people/sq. mi.	15 fire fighters (FF)/9 min.	90			
Suburban	500-100 people/sq. mi.	10 FF/10 min.	80			
Rural	< 500 people/sq. mi.	6 FF/14 min.	80			
Remote*	Travel Dist.>8 min.	4 FF/no specific response time	90			

<sup>\*</sup>Upon assembling the necessary resources at the emergency scene, the fire department should have the capacity to safety commence an initial attach within 2 minutes, 90% of the time.

*PFS-7.9 Sheriff Response Time* wherein the County shall work with the Sheriff's Department to achieve and maintain a response time of:

- 1. Less than 10 minutes for 90 percent of the calls in the valley region; and
- 2. 15 minutes for 75 percent of the calls in the foothill and mountain regions;

and PFS-7.12 Design Features for Crime Prevention and Reduction wherein the County shall promote the use of building and site design features as means for crime prevention and reduction.

#### **Project Impact Analysis:**

- a) Less Than Significant Impact: The County of Tulare will continue to provide fire protection services to the proposed Project site upon development. The proposed is within the service area of the Tulare County Fire Department. The County of Tulare Fire Department has 28 stations that are located throughout the County within its most densely populated areas and currently maintains minimal staffing to meet the requirements set forth under NFPA 1720 1721 for a rural area. As noted earlier, the nearest station is approximately five miles east of the Project site. No residential or office construction is identified with this Project. Vegetation that could present a fire hazard will be removed from the Project site. Additionally, gravel will likely be placed around high voltage equipment to prevent the spread of fire in the unlikely event of an explosion. As a result of these project design features, impacts to fire protection services will be less than significant.
- b) Less Than Significant Impact: The County of Tulare will continue to provide police protection services to the Project site upon development. As noted earlier; the nearest Sherriff's Office is located approximately eight miles east. The Project would not generate new permanent residents, and therefore the number of emergency law enforcement calls originating from the Project site would remain low. As discussed in Item 14 a), no residential or office construction is proposed for this Project. Lighting will be installed along the Project perimeter, 6-feet tall chain-link security fence, lighting on motion sensors, and

<sup>207 2019</sup> California Fire Code (Title 24, Part 9 of the California Code of Regulations). 1.1.2 Purpose. Page 3. Accessed July 2023 at: <u>Building Department - RMA (ca.gov)</u> then click <u>CHAPTER 24 - FLAMMABLE FINISHES</u>, 2019 California Fire Code, Title 24, Part 9 | ICC Digital Codes (iccsafe.org)

remotely viewed monitoring will be present across the facilities to lessen any potential impacts from theft and vandalism. As a result of these measures, any impact to police services will be less than significant.

c)-e) No Impact: The nearest school (Woodville Elementary School), is located approximately 1.5 northwest of the Project site. However, as discussed in Item 14 a), the Project will not include construction of any residential structures which could result in increases of school-aged children, nor change the existing land use. The Project will not result in an increase of population that will require additional school facilities because no employees will be assigned to on-site occupancy. Woodville Park is the nearest park to the Project site and is approximately two (2) miles northwest of the Project site. As the Project will not induce population growth, the Project will not create a need for additional park or recreational services. No employees will be assigned to on-site occupancy at the Project site. There are no other public services (such as wastewater treatment facilities/systems) near the Project site. The Project site's area is provided public utility (i.e., electricity service) by Southern California Edison (SCE). As such, there will be no impact to these resources.

Cumulative Impact Analysis: No-to-Less Than Significant Impact: The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, Tulare County General Plan Background Report, and Tulare County General Plan 2030 Update EIR. In summary, the Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years. As noted earlier, the Project will not result in significant population growth in the area. Impacts to fire and polices services, schools, parks and libraries are generally the result of new residential developments. Since there are no proposed new residential facilities associated with the Project (and the Project proponent anticipates utilizing the existing workforce in the area), there are no-to-less than significant impacts to public services.

Mitigation Measure(s): None Required.

#### XVI. RECREATION

Would the pro	ject:	SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	No Impact
neighb recreat physic	the project increase the use of existing or borhood and regional parks or other cional facilities such that substantial al deterioration of the facility would occur accelerated?				$\boxtimes$
require recreat	he project include recreational facilities or e the construction or expansion of cional facilities which might have an e physical effect on the environment?				$\boxtimes$

The discussions regarding Environmental Setting, Regulatory Setting, CEQA requirements, Recreation, etc. contained in the Tulare County General Plan 2030 Update and Tulare County General Plan Environmental Impact Report are incorporated herein in their entirety. Where necessary and if available, additional site-specific facts, data, information, etc., are included in this discussion.

#### **Environmental Setting**

As noted earlier and summarized here, the proposed Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years.

"Tulare County contains several county, state, and federal parks. Aside from parks in the county, there are many open space areas as well. This section will highlight these various parks and open space areas and identify recreational opportunities within them." Two new parks were completed and became operational in the unincorporated communities of Plainview (Plainview Community Park) in 2016 and Earlimart (Earlimart Community Park) in 2017. In addition to the 15 parks and recreation facilities that are owned and operated by Tulare County, there are State Parks and Forests, National Parks and National Forests, trails, and recreational areas.

#### Federal

#### Lakes Kaweah and Success

"Lake Kaweah was formed after the construction of the Terminus Dam on the Kaweah River in 1962. The lake offers many recreational opportunities including fishing, camping, and boating. Lake Kaweah is located 20 miles east of Visalia on Highway 198 and was constructed by the U.S. Army Corps of Engineers for flood control and water conservation purposes. The lake has a maximum capacity to store 143,000 acre-feet of water. There are a total of 80 campsites at the lake's Horse Creek Campground, which contains toilets, showers and a playground. Campfire programs are also available. Aside from camping, boat ramps are provided at the Lemon Hill and Kaweah Recreation Areas. Both Kaweah and Horse Creek provide picnic areas, barbecue grills and piped water. Swimming is allowed in designated areas. In addition, there is a one-mile hiking trail between Slick Rock and Cobble Knoll, which is ideal for bird watching.

Lake Success was formed by construction of the Success Dam on the Tule River in 1961. The lake offers many recreational activities including fishing, boating, waterskiing, and picnicking. The U.S. Army Corps of Engineers (USACOE) constructed this reservoir for both flood control and irrigation purposes. The lake has a capacity of 85,000 acre-feet of water. The lake is located eight miles east of Porterville in the Sierra Nevada foothills area. Recreational opportunities include ranger programs,

<sup>&</sup>lt;sup>208</sup> Tulare County General Plan 2030 Update Background Report. February 2010. Page 4-1. Accessed July 2023 at: <a href="http://generalplan.co.tulare.ca.us/documents.html">http://generalplan.co.tulare.ca.us/documents.html</a> then scroll to and click on "Appendix B-Background Report"

camping at the Tule campground, which provides 104 sites, boating, fishing, picnic sites, playgrounds and a softball field. Seasonal hunting is also permitted in the 1,400-acre Wildlife Management Area."<sup>209</sup>

#### National Parks and National Forests

"Most of the recreational opportunities in the county are located in Sequoia National Forest, Giant Sequoia National Monument, and in Sequoia and Kings Canyon National Parks (SEKI). Although these parks span adjacent counties, they make a significant contribution to the recreational opportunities that Tulare County has to offer." <sup>210</sup>

# Sequoia National Forest

"Sequoia National Forest takes its name from the Giant Sequoia, which is the world's largest tree. There are more than 30 groves of sequoias in the lower slopes of the park. The park includes over 1,500 miles of maintained roads, 1,000 miles of abandoned roads and 850 miles of trails for hikers, off-highway vehicle users and horseback riders. The Pacific Crest Trail connecting Canada and Mexico, crosses a portion of the forest, 78 miles of the total 2,600 miles of the entire trail. It is estimated that 10 to 13 million people visit the forest each year." 211

## Giant Sequoia National Monument

"The Giant Sequoia National Monument was created in 2000 by President Clinton in an effort to preserve 34 groves of ancient sequoias located in the Sequoia National Forest. The Monument includes a total of 327,769 acres of federal land, and provides various recreational opportunities, including camping, picnicking, fishing, and whitewater rafting. According to the Giant Sequoia National Monument Management Plan EIS, the Monument includes a total of 21 family campgrounds with 502 campsites and seven group campgrounds. In addition, there are approximately 160 miles of system trails, including 12 miles of the Summit National Recreation Trail." 212

## Sequoia and Kings Canyon National Parks (SEKI)

"The U.S. Congress created the Kings Canyon National Park in 1940 and Sequoia National Park in 1890. Because they share many miles of common boundaries, they are managed as one park. The extreme large elevation ranges in the parks (from 1,500 to 14,491 feet above sea level), provide for a wide range of vegetative and wildlife habitats. This is witnessed from exploring Mt. Whitney, which rises to an elevation of 14,491 feet, and is the tallest mountain in the contiguous United States. During the summer months, park rangers lead walks through the parks, and tours of Crystal and Boyden Caves. During the winter, visitors explore the higher elevations of the parks via cross country skis or snowshoes, or hike the trails in the foothills. The SEKI also contains visitor lodges, the majority of which are open year round. According to the National Parks Conservation Association, a combined total of approximately 1.5 million people visit the two parks on an annual basis." <sup>213</sup>

# State

"The Mountain Home State Forest is a State Forest managed by the California Department of Forestry and Fire Protection (CDF). The Forest consists of 4,807 acres of parkland containing a number of Giant Sequoias, and is located just east of Porterville. The Forest is a Demonstration Forest, which is considered timberland that is managed for forestry education, research, and recreation. Fishing ponds, hiking trails, and campsites are some of the amenities that can be found in the Forest." Colonel Allensworth State Historic Park (approximately 3,715 acres in area) is located in the unincorporated community of Allensworth in southwestern Tulare County.

#### Other Recreational Facilities

Other recreational resources available in Tulare County include portions of the Pacific Crest Trail, South Sierra Wilderness Area, Dome Land Wilderness Area, Golden Trout Wilderness Area, International Agri-Center, and the Tulare County Fairgrounds.<sup>215</sup>

<sup>210</sup> Op. Cit. 4-8.

<sup>&</sup>lt;sup>209</sup> Ibid. 4-7.

<sup>&</sup>lt;sup>211</sup> Op. Cit. 4-9.

<sup>&</sup>lt;sup>212</sup> Op. Cit.

<sup>&</sup>lt;sup>213</sup> Op. Cit.

<sup>&</sup>lt;sup>214</sup> Op. Cit. 4-7.

<sup>&</sup>lt;sup>215</sup> Op. Cit. 4-10 to 4-11.

In addition, there are several nature preserves open to the public which are owned and operated by non-profit organizations, including the Kaweah Oaks Preserve and Dry Creek- Homer Ranch preserves, both owned and operated by Sequoia Riverlands Trust.

#### Local

#### Parks

The nearest County owned/operated park is Woodville Park located approximately 1.5 miles northwest of the Project site.

# Schools

"A total of 48 school districts provide education throughout Tulare County... Of the 48 school districts, seven are unified districts providing educational services for kindergarten through 12<sup>th</sup> grade. The remaining 41 districts consist of 36 elementary school districts and four high school districts. Many districts only have one school." As noted earlier, the nearest elementary school (Woodville Elementary School) is located approximately 1.5 miles northwest of the Project site.

#### **Regulatory Setting**

Federal

None that apply to this Project.

State

None that apply to this Project.

Local

# **Project Impact Analysis:**

a) and b) No Impact: As discussed in Item 15 e), the proposed Project will not increase the demand for recreational facilities, nor will it put a strain on the existing recreational facilities. The nearest park is Woodville Park located approximately 1.5 miles northwest of the Project site. The Project does not include recreational facilities. Since there is no population growth associated with the Project, the Project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; further, there will be no need to construct or expand any recreational facilities as there would be no adverse physical effect on the environment. Therefore, there will be no impact to this resource.

Cumulative Impact Analysis: No Impact: The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, Tulare County General Plan Background Report, and Tulare County General Plan 2030 Update EIR. As noted earlier and summarized here, the Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years. As noted earlier, since there is no population growth associated with the Project, there would be no impacts to the recreation resource.

Mitigation Measure(s): None Required.

<sup>216</sup> Tulare County General Plan 2030 Update Background Report. Pages 7-75 and 7-76. Accessed July 2023 at: http://generalplan.co.tulare.ca.us/documents.html then scroll to Recirculated Draft EIR, the click on "Appendix B-Background Report"

#### XVII. TRANSPORTATION

Wou	ld the project:	SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	No Impact
a)	Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				$\boxtimes$
b)	Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?				$\boxtimes$
c)	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses, (e.g., farm equipment)?				$\boxtimes$
d)	Result in inadequate emergency access?			$\boxtimes$	

The discussions regarding Environmental Setting, Regulatory Setting, CEQA requirements, Transportation Resource, etc.; contained in the Tulare County General Plan 2030 Update, Tulare County General Plan Background Report, and Tulare County General Plan 2030 Update Environmental Impact Report are incorporated herein in their entirety. Where necessary and if available, additional site-specific facts, data, information, etc., are included in this discussion.

## **Environmental Setting**

As noted earlier and summarized here, the Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years.

"Tulare County has two major regional highways, State Highway [Route] 99 and 198. State Highway [Route] 99 connects Tulare County to Fresno and Sacramento to the north and Bakersfield to the south. State Highway 198 connects from U.S. Highway 101 on the west and continues eastward to Tulare County, passing through the City of Visalia and into Sequoia National Park. The highway system in the County also includes State highways, County-maintained roads, and local streets within each of the eight cities." <sup>217</sup>

"Tulare County's transportation system is composed of several State Routes, including three freeways, multiple highways, as well as numerous county and city routes. The county's public transit system also includes two common carriers (Greyhound and Orange Belt Stages), the AMTRAK Service Link, other local agency transit and paratransit services, general aviation, limited passenger air service and freight rail service.

Travel within Tulare County is a function of the size and spatial distribution of its population, economic activity, and the relationship to other major activity centers within the Central Valley (such as Fresno and Bakersfield) as well as more distant urban centers such as Los Angeles, Sacramento, and the Bay Area. In addition, there is considerable travel between the northwest portions of Tulare County and southern Fresno County and travel to/from Kings County to the west. Due to the interrelationship between urban and rural activities (employment, housing, services, etc.) and the low average density/ intensity of land uses, the private automobile is the dominant mode of travel for residents in Tulare County."

The nearest railroad to the Project site is Union Pacific Railroad (UPR), approximately seven miles to the west. The UPR provides freight service and functions to connect Tulare County with both northern and southern markets.

 $<sup>^{217} \ \</sup>text{Tulare County General Plan 2030 Update. Page 13-2. Accessed July 2023 at: } \underline{\text{http://generalplan.co.tulare.ca.us/index.asp.}} \\$ 

<sup>&</sup>lt;sup>218</sup> Tulare County General Plan 2030 Update Background Report. Page 5-4.

There are seven public use airports in Tulare County. These include six publicly owned and operated facilities (Porterville Municipal, Sequoia Field, Tulare Municipal [Mefford Field], Visalia Municipal, Woodlake, Exeter Airport, and Eckert Field." <sup>219</sup> As noted earlier, Mefford Field Airport (in the City of Tulare), is located greater than two miles west of the site and is the nearest airport.

# Design for Emergency Access

According to § 21060.3 and § 15309 of the CEQA Guidelines, an "Emergency" means a sudden, unexpected occurrence, involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services. "Emergency" includes such occurrences as fire, flood, earthquake, or other soil or geologic movements, as well as such occurrences as riot, accident, or sabotage.

#### Alternative Transportation

"Transit planning in Tulare County is done at the county and local level. The Tulare County Association of Governments (TCAG) is the County's designated Metropolitan Planning Organization (MPO) and also serves as the Tulare County Council of Governments, Transportation Authority, and Regional Transportation Planning Agency. TCAG's nine member agencies include eight incorporated cities (Dinuba, Exeter, Farmersville, Lindsay, Porterville, Tulare, Visalia, and Woodlake) and Tulare County." Fixed routes transit services operating in Tulare County are provided by Dinuba Area Regional Transit (DART - Flexroute), Porterville Transit (COLT), Tulare Intermodal Express (TIME), Tulare County Area Transit (TCaT), Visalia Transit, and Visalia-Fresno intercity service (V-Line). 221

#### **Regulatory Setting**

#### **Federal**

Several federal regulations govern transportation issues. They include: Title 49, CFR, Sections 171-177 (49 CFR 171-177) which governs the transportation of hazardous materials, the types of materials defined as hazardous, and the marking of the transportation vehicles; 49 CFR 350-399, and Appendices A-G, Federal Motor Carrier Safety Regulations which address safety considerations for the transport of goods, materials, and substances over public highways; and 49 CFR 397.9, the Hazardous Materials Transportation Act of 1974, which directs the U.S. Department of Transportation to establish criteria and regulations for the safe transportation of hazardous materials.

State

#### CEOA Guidelines Section 15064.3, Subdivision (b): Criteria for Analyzing Transportation Impacts

- (2) Land Use Projects. Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be considered to have a less than significant transportation impact.
- (3) Transportation Projects. Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, a lead agency may tier from that analysis as provided in Section 15152.
- (4) Qualitative Analysis. If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative

<sup>219</sup> Tulare County Comprehensive Airport Land Use Plan. Pages 1-1 and 1-3 Accessed July 2023 at: <a href="https://tularecounty.ca.gov/rma/rma-documents/planning-documents/tulare-county-comprehensive-airport-land-use-plan/">https://tularecounty.ca.gov/rma/rma-documents/planning-documents/tulare-county-comprehensive-airport-land-use-plan/</a>

<sup>220</sup> Tulare County Association of Governments (TCAG). Tulare County Long Range Transit Plan. Page 2-2. Accessed July 2023 at: https://tularecog.org/tcag/planning/transit-plans/transit-plans/transit-development-plans-short-and-long-range-transit-plans/tulare-county-regional-long-range-transit-plan/

<sup>&</sup>lt;sup>221</sup> Ibid. 30-32.

analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.

(5) Methodology. A lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revisions to model outputs should be documented and explained in the environmental document prepared for the project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section.

# **Caltrans: Transportation Concept Reports**

Each District of the State of California Transportation Department (Caltrans) prepares a Transportation Concept Report (TCR) for every state highway or portion thereof in its jurisdiction. The TCR usually represents the first step in Caltrans' long-range corridor planning process. The purpose of the TCR is to determine how a highway will be developed and managed so that it delivers the targeted LOS and quality of operations that are feasible to attain over a 20-year period, otherwise known as the "route concept" or beyond 20 years, for what is known as the "ultimate concept". At its nearest point, the Project site is located approximately 2.5 miles south of SR 137 (a Concept Report facility).

# Caltrans Guide for the Preparation of Traffic Impact Studies

"The California Department of Transportation (Caltrans) has developed this "Guide for the Preparation of Traffic Impact Studies" in response to a survey of cities and counties in California. The purpose of that survey was to improve the Caltrans local development review process (also known as the Intergovernmental Review/California Environmental Quality Act or IGR/CEQA process). The survey indicated that approximately 30 percent of the respondents were not aware of what Caltrans required in a traffic impact study (TIS)." However, the Project site will only have temporary traffic increases during construction-related activities. As indicated in the "Transportation Screening Analysis for the Tulare CSG 2 Solar Project" memorandum (see Attachment "D" of this MND), it is anticipated that Project construction would require on average approximately 12 haul truck round trips per day, 8 vendor truck round trips per day, and 62 construction worker round trips per day during the peak phases of construction (i.e., building construction and paving) over a 6-month period. This means a total of approximately 82 construction-related vehicle trips per day.

According to County of Tulare SB 743 Guidelines (June 8, 2020), Section 6, Local Transportation Analysis, an LTA is required for all projects which generate traffic greater than 100 peak-hour trips in the AM or PM peak hours. As indicated in the Guidelines, LTA should be applied for land development projects to provide improvements when traffic generated by a project will affect the local roadway system. These improvements are focused not only on the roadway system, but also on improvements needed to facilitate walking, bicycling and transit in the area of the project site. For this solar project, as noted earlier and summarized here, construction-related trips are estimated to be 82 per day for approximately six months. These trips are temporary, short-term and intermittent and do not require improvements to the local roadway system. Likewise, the low daily trips (16 trips/day) do not require improvements to the local roadway system. Therefore, additional traffic analysis is not required for the proposed Project.

#### Local Policy and Regulations

Local

#### Tulare County General Plan 2030 Update

The following Tulare County General Plan 2030 Update policies for this resource apply to this Project: *TC-1.16 County Level Of Service (LOS) Standards* wherein the County shall strive to develop and manage its roadway system (both segments and intersections) to meet a LOS of "D" or better in accordance with the LOS definitions established by the Highway Capacity Manual; and *HS-1.9 Emergency Access* wherein the County shall require, where feasible, road networks (public and private) to provide for safe and ready access for emergency equipment and provide alternate routes for evacuation.

#### County of Tulare SB 743 Guidelines

<sup>222</sup> Caltrans Guide for the Preparation of Traffic Studies. Page ii. Accessed July 2023 at: <a href="https://nacto.org/docs/usdg/guide\_preparation\_traffic\_impact\_studies\_caltrans.pdf">https://nacto.org/docs/usdg/guide\_preparation\_traffic\_impact\_studies\_caltrans.pdf</a>.

This report provides Tulare County's Vehicle Miles Traveled Guidelines (VMT Guidelines or Guidelines) for the implementation of Senate Bill 743 (SB 743) in the unincorporated area of Tulare County. SB 743 was passed by the legislature and signed into law in the fall of 2013. This legislation led to a change in the way that transportation impacts will be measured under the California Environmental Quality Act (CEQA). Starting on July 1, 2020, automobile delay and level of service (LOS) may no longer be used as the performance measure to determine the transportation impacts of land development projects under CEQA and the new performance measure will be vehicle miles traveled (VMT). Although statewide guidance for the implementation of SB 743 has been written by the Governor's Office of Planning and Research (OPR), CEQA allows lead agencies (including Tulare County) the latitude to determine their own methodologies and significance thresholds for CEQA technical studies. The SB 743 Guidelines provided in this report are based on the statewide guidance provided by OPR, but they include clarifications and details tailored for and specific to local conditions in Tulare County SB 743 applies to both land development and transportation projects.

SB 743 applies to both land development and transportation projects. The VMT analysis methodology for land development projects was developed in order to accomplish the following:

- Meet the requirements of CEQA, including the new SB 743 regulations that were adopted into CEQA in December 2018 and go into effect on July 1, 2020.
- Provide for transportation improvements to be built that benefit Tulare County residents and facilitate travel by walking, bicycling, and transit.
- Provide for analysis and mitigation of VMT impacts in a way that is feasible and within the scale of land development projects in Tulare County.

VMT analysis for land development projects is to be conducted by comparing a project's VMT/capita or VMT/employee to the average VMT/capita or VMT/employee for the traffic analysis zone (TAZ) in which the project is located. Projects that have a VMT/capita or VMT/employee equal to or above the average for the TAZ are required to provide mitigation in the form of relatively low-cost improvement projects that would support travel by bicycling or walking or provide justification that improvements at the regional level are sufficient to mitigate their VMT impacts. Certain projects such as small projects and local-serving retail projects would be presumed to have a less than significant impact and would not be required to do a VMT analysis. It is important to note that goods movement (e.g., the transport of raw or finished products from one location to another, for example, transfer of milk to an ice cream producing plant and then the transfer of ice cream to a distributor or directly to a retailer) is not subject to SB 743 and only passenger trips need to be considered in a VMT analysis.

Transportation projects that are focused on improvements to travel by bicycling, walking, and transit would be presumed to have a less than significant impact (as these modes of travel eliminate or reduce miles travelled by a vehicle) and would not be required to do a VMT analysis. Certain small roadway projects and all roadway projects that are consistent with the General Plan would be presumed to have a less than significant impact (as these projects have been anticipated to accommodate projected growth and/or are planned improvements to the roadway system for safety, to meet current roadway standards, or to improve roads that are functionally obsolete). Larger roadway projects that are inconsistent with the General Plan would need to conduct a VMT analysis and would need to consider providing mitigation if the project is forecasted to cause an increase in VMT.

# **Project Impact Analysis:**

a) No Impact: As noted earlier, and summarized here, the Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years. Construction of the Project would take approximately six months to complete. Initial site preparation would take four (4) weeks. The remainder of the construction period would consist of on-site assembly and installation of PV panels, which would not require heavy machinery. Construction would commence upon acquisition of all necessary permits, approvals, power sale, and financing. Level of Service (LOS) standards vary throughout the County and its eight incorporated cities. As noted earlier in Tulare County General Plan PolicyTC-1.16, the minimum LOS standard within the County shall be no lower than LOS D. Project operations and maintenance are anticipated to require up to 500 vehicle trips per year. As noted earlier, and summarized here, the "Transportation Screening Analysis for the Tulare CSG 2 Solar Project" memorandum (see Attachment "D" of this MND) estimates construction-related trips would be 82 per day for approximately six months. Except for annual (or biannual) panel washing activities, emergency repair events, weed abatement activities, and occasional security checks, the facility would not require any full-time employees located on or

traveling to the site. PV panel washing (using water trucks) would occur approximately one to two times a year depending on the amount of rainfall in a given year using imported water. As noted earlier, and as contained in the "Transportation Screening Analysis for the Tulare CSG 2 Solar Project" memorandum (see Attachment "D" of this MND), it is anticipated that Project construction would require on average approximately 12 haul truck round trips per day, 8 vendor truck round trips per day, and 62 construction worker round trips per day during the peak phases of construction (i.e., building construction and paving) over a 6-month period. This means a total of approximately 82 construction-related vehicle trips per day. As such, the Project would not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. Therefore, the Project would result in no impact.

- b) No Impact: Except for the access road on Avenue 160, the Project does not require construction of any roadways, and will generate approximately 82 peak trips per day on average for operation and maintenance. As indicated in the "Transportation Screening Analysis for the Tulare CSG 2 Solar Project" memorandum (see Attachment "D" of this MND), the Project would not exceed the County's threshold for Vehicle Miles Traveled (VMT) and goods movement trips are exempt from VMT counts as identified in the County of Tulare SB 743 Guidelines. As noted in Item a), an estimated average of 82 construction-related vehicle trips per day would be required for the import of construction workers, PV module materials, substation equipment, distribution line (which will connect to an existing transmission line) and associated support poles, power (battery) storage (BESS) facilities, and the surfacing material for access roads. The construction of the Project would take approximately six months to complete, as such, these vehicle trips are temporary, short-term, and intermittent. Also, as facility will be unmanned, and operated remotely. There may be occasional site visits for security, maintenance, and repairs, but these trips are not expected to occur regularly or produce significant amounts of trips. These occasional site visits shall occur during daylight hours and not be constrained by seasonal affects. The trip generation related to operation and periodic maintenance activities would occur throughout the year, however, it would be nominal. Therefore, the Project would result in no impact to this resource.
- c) No Impact: No roadway design features are associated with this Project and the change in the existing land use will not result in an incompatible use. As noted earlier, include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years. Therefore, the Project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses, (e.g., farm equipment). As such, the Project would result in a no impact to this resource.
- d) Less Than Significant Impact: No roads will be modified as a result of this Project, construction-related traffic that could impede emergency response will be short-term, temporary, and intermittent and would comply with laws requiring yielding right-of-way to emergency response vehicles. As noted earlier, as the facility will be unmanned, and operated remotely. There may be occasional site visits for security, maintenance, and repairs, but these trips are not expected to occur regularly or produce significant amounts of trips. These occasional site visits shall occur during daylight hours and not be constrained by seasonal affects. The trip generation related to operation and periodic maintenance activities would occur throughout the year, however, it would be nominal. As such, it can be reasonably concluded that the Project would not result in inadequate emergency access. Therefore, there will be less than significant impact to this resource.

**Cumulative Impact Analysis:** Less Than Significant Impact With Mitigation: The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, Tulare County General Plan Background Report, Tulare County 2030 General Plan EIR, and County of Tulare SB 743 Guidelines.

The Project will only contribute to cumulative impacts related to this Checklist Item if Project specific impacts were to occur. As noted earlier, as indicated in the "Transportation Screening Analysis for the Tulare CSG 2 Solar Project" memorandum (see Attachment "D" of this MND) it is anticipated that Project construction would require on average approximately 12 haul truck round trips per day, 8 vendor truck round trips per day, and 62 construction worker round trips per day during the peak phases of construction (i.e., building construction and paving) over a 6-month period. This means a total of approximately 82 construction-related vehicle trips per day. As such the Project's vehicle trips will not exceed the County's VMT thresholds. Further, all roadway segments will operate at acceptable LOS D or better during construction and operations/maintenance related activities of the

Project. The Project would not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. The Project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) as its VMT is below adopted Tulare County VMT Guideline thresholds and goods movement trips are exempt from VMT counts. Further, the Project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections), nor would it result in an incompatible use that would impede emergency response. As such, the Project would result in no cumulative impact.

Mitigation Measure(s): None Required.

#### XVIII. TRIBAL CULTURAL RESOURCES

the signal Public featured fine sacred	d the Project cause a substantial adverse change in gnificance of a tribal cultural resource, defined in a Resources Code section 21074 as either a site, e, place, cultural landscape that is geographically add in terms of the size and scope of the landscape, I place, or object with cultural value to a California	SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	No Impact
a)	e American tribe, and that is: Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?				
b)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?				

The discussions regarding Environmental Setting, Regulatory Setting, CEQA requirements, Transportation Resource, etc.; contained in the Tulare County General Plan 2030 Update, Tulare County General Plan Background Report, and Tulare County General Plan 2030 Update Environmental Impact Report are incorporated herein in their entirety. Where necessary and if available, additional site-specific facts, data, information, etc., are included in this discussion.

# **Environmental Setting**

"Tulare County lies within a culturally rich province of the San Joaquin Valley. Studies of the prehistory of the area show inhabitants of the San Joaquin Valley maintained fairly dense populations situated along the banks of major waterways, wetlands, and streams. Tulare County was inhabited by aboriginal California Native American groups consisting of the Southern Valley Yokuts, Foothill Yokuts, Monache, and Tubatulabal. Of the main groups inhabiting the Tulare County area, the Southern Valley Yokuts occupied the largest territory." <sup>223</sup>

Information provided by the Southern San Valley Historical Resources Information Center, at California State University, Bakersfield (Center) and the California Native American Heritage Commission Sacred Lands File search (included in Attachment "C" of this document) were used as the basis for determining that this Project would result in a less than significant impact with mitigation.

As noted previously, and summarized here, the Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years.

#### Cultural Background

"Tulare County lies within a culturally rich province of the San Joaquin Valley. Studies of the prehistory of the area show inhabitants of the San Joaquin Valley maintained fairly dense populations situated along the banks of major waterways, wetlands, and streams. Tulare County was inhabited by aboriginal California Native American groups consisting of the Southern Valley Yokuts, Foothill Yokuts, Monache, and Tubatulabal. Of the main groups inhabiting the Tulare County area, the Southern Valley Yokuts occupied the largest territory." <sup>224</sup>

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<sup>&</sup>lt;sup>223</sup> Tulare County General Plan 2030 Update. August 2012. Page 8-5.

<sup>&</sup>lt;sup>224</sup> Tulare County 2030 General Plan. Page 8-5.

"California's coast was initially explored by Spanish (and a few Russian) military expeditions during the late 1500s. However, European settlement did not occur until the arrival into southern California of land-based expeditions originating from Spanish Mexico starting in the 1760s. Early settlement in the Tulare County area focused on ranching. In 1872, the Southern Pacific Railroad entered Tulare County, connecting the San Joaquin Valley with markets in the north and east. About the same time, valley settlers constructed a series of water conveyance systems (canals, dams, and ditches) across the valley. With ample water supplies and the assurance of rail transport for commodities such as grain, row crops, and fruit, a number of farming colonies soon appeared throughout the region." <sup>225</sup>

"The colonies grew to become cities such as Tulare, Visalia, Porterville, and Hanford. Visalia, the County seat, became the service, processing, and distribution center for the growing number of farms, dairies, and cattle ranches. By 1900, Tulare County boasted a population of about 18,000. New transportation links such as SR 99 (completed during the 1950s), affordable housing, light industry, and agricultural commerce brought steady growth to the valley. The California Department of Finance estimated the 2007 Tulare County population to be 430,167."<sup>226</sup>

## Tulare County's Documented Cultural Resources

Tulare County's known and recorded cultural resources were identified through historical records, such as those found in the National Register of Historic Places, the Historic American Building Survey/Historic American Engineering Record (HABS/HAER), the California Register of Historic Resources, California Historical Landmarks, and the Tulare County Historical Society list of historic resources. These resources are available to the general public. They have been summarized in the Tulare County General Plan Update 2030 Background Report (2010). 227

# Records Search Results

As of the release date of the MND (July 19, 2023), RMA has not received a response from the California Historical Resources Information Center (CHRIS), Southern San Joaquin Valley Historical Resources Information Center (SSJVIC) located at California State University, Bakersfield (Center) regarding a search for the Project location as requested by Tulare County RMA. Typically, the Center searches the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, for the California State Historic Landmarks. The Center also typically The Center also recommended that the NAHC be contacted regarding cultural resources that may not be included in the CHRIS inventory (see Attachment "C"). Also, Tulare County RMA also requested a Sacred Lands File (SLF) search from the California Native American Heritage Commission (NAHC). As of July 19, 2023, the NAHC has not provided a "positive" or "negative" result which would indicate that there are, or are not, any documented Sacred Lands within the Project area. It is likely that response may be received for the CHRIS request, the NAHC request, and local Tribes prior to decision making body's (in this instance, the Tulare County Planning Commission) will be requested to approve this MND. Any comments received will be incorporated into the MND for consideration by the Planning Commission.

#### Native American Consultation

The Native American Heritage Commission (NAHC) maintains a contact list of Native American Tribes as having traditional lands located within the County's jurisdiction. A search of the Sacred Lands Inventory on file with the Native American Heritage Commission (NAHC) was also requested from the NAHC on March 20, 2023 (see Attachment "C"); to date, no results have been received. Pursuant to AB 52 Tulare County RMA staff contacted eight (8) Native American Tribes (see Attachment "C") by certified mail on July 14, 2023 regarding the Project (PSP 23-059) MND. To date, the County has not received any response from any of the Tribes.

#### **Regulatory Setting**

Federal

#### The National Historic Preservation Act

The National Historic Preservation Act (NHPA) of 1966, which has been amended several times, was passed to acknowledge the importance of protecting our nation's heritage from federal development. The NHPA sets federal historic preservation policy,

<sup>226</sup> Op. Cit. 8-6.

<sup>&</sup>lt;sup>225</sup> Ibid.

<sup>&</sup>lt;sup>227</sup> Tulare County General Plan Background Report. Pages 9-57 to 9-59.

establishes partnerships between the Federal government and states and the Federal government and tribes, creates the <u>National</u> <u>Register of Historic Places</u> and <u>National Historic Landmarks</u> programs, mandates the selection of qualified <u>State Historic Preservation Officers</u>, establishes the <u>Advisory Council on Historic Preservation</u>, charges Federal agencies with stewardship, and establishes the role of <u>Certified Local Governments</u> within the states.

Title I of the statute established the National Register of Historic Places to create a national listing of historic properties (districts, sites, buildings, structures, and objects) significant in American history, architecture, archeology, engineering, and culture. Title I also expanded the level of Federal concern to include the preservation of historic properties of local or State significance. It established State Historic Preservation Officers as partners in the national historic preservation program and also describes how local governments or Indian tribes may, in certain circumstances, carry out SHPO functions.

Implementation of Section 106 of Title I has been critical to archeology and archeological preservation in the United States. Section 106 requires federal agencies to take into account the effects of their actions on historic properties by identifying historic properties, assessing adverse effects, and resolving those adverse effects. The process is initiated by the federal agency, and includes comment and input from stakeholders at the local and State levels, as well as the Advisory Council on Historic Preservation. After the procedures for implementing Section 106 were established (6 CFR 800), the field of professional archeology expanded throughout governments and the private sector to meet the need for compliance.

Section 110 requires all federal agencies to establish -- in conjunction with the Secretary of the Interior -- their own historic preservation programs for the identification, evaluation, and protection of historic properties, including archeological properties. Determinations of Eligibility for the National Register are established during Phase II archeological surveys.

Title II

Title II of NHPA establishes the Advisory Council on Historic Preservation, an independent Federal agency. The Council and its staff advise Federal agencies on their roles in the national historic preservation program, especially Section 106. The ACHP also develops advice and training to support Federal agencies.

Title IV

Title IV of the statute established the National Center for Preservation Technology and Training, part of the National Park Service. NCPTT contributes research and training to archeological preservation practice.

Statute and regulation texts:

- National Historic Preservation Act (16 U.S. Code 470 et seq.), statute text.
- National Register of Historic Places (36 CFR 60), regulation text.
- Procedures for State, Tribal, and Local Government Historic Preservation Programs (36 CFR 61), regulation text.
- Determinations of Eligibility for Inclusion in the National Register of Historic Places (36 CFR 63), regulation text.
- Protection of Historic Properties (36 CFR 800), regulation text.

State

# California State Office of Historic Preservation (OHP)

"The California State Office of Historic Preservation (OHP) is responsible for administering federally and state mandated historic preservation programs to further the identification, evaluation, registration and protection of California's irreplaceable archaeological and historical resources under the direction of the State Historic Preservation Officer (SHPO), a gubernatorial appointee, and the State Historical Resources Commission" <sup>229</sup>

"OHP's responsibilities include:

- > Identifying, evaluating, and registering historic properties;
- Ensuring compliance with federal and state regulatory obligations;
- > Encouraging the adoption of economic incentives programs designed to benefit property owners;

<sup>&</sup>lt;sup>228</sup> U.S. Department of the Interior. National Park Service. Accessed March 2023 at: <u>National Historic Preservation Act of 1966 – Archeology (U.S. National Park Service) (nps.gov)</u>

<sup>&</sup>lt;sup>229</sup>Office of Historic Preservation. Mission and Responsibilities. Accessed July 2023 at: <a href="http://ohp.parks.ca.gov/?page\_id=1066">http://ohp.parks.ca.gov/?page\_id=1066</a>.

Encouraging economic revitalization by promoting a historic preservation ethic through preservation education and public awareness and, most significantly, by demonstrating leadership and stewardship for historic preservation in California."230

## "Architectural Review and Incentives

OHP administers the Federal Historic Preservation Tax Incentives Program and provides architectural review and technical assistance to other government agencies and the general public in the following areas:

- Interpretation and application of the Secretary of the Interior's Standards and Guidelines for the Treatment of Historic Properties;
- General assistance with and interpretation of the California Historical Building Code and provisions for qualified historic properties under the Americans with Disabilities Act;
- Developing and implementing design guidelines;
- Preservation incentives available for historic properties:
- Sustainability and adaptive reuse of historic properties."231

#### "Information Management

The California Historical Resources Information System (CHRIS) includes the statewide Historical Resources Inventory (HRI) database maintained by OHP and the records maintained and managed, under contract, by twelve independent regional Information Centers (ICs). The ICs provide archeological and historical resources information, on a fee-for-service basis, to local governments and individuals with responsibilities under the National Environmental Policy Act (NEPA), National Historic Preservation Act (NHPA), and California Environmental Quality Act (CEQA), as well as to the general public. ICs collect and maintain information on historical and archaeological resources which was not reviewed under a program administered by OHP."232

## Criteria for Designation

- Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States (Criterion 1).
- Associated with the lives of persons important to local, California or national history (Criterion 2).
- Embodies the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values (Criterion 3).
- Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation (Criterion 4).<sup>233</sup>

A historical resource may be eligible for inclusion in the California Register of Historical Resources (CRHR) if it:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated with the lives of persons important to our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in prehistory or history."234

## Native American Heritage Commission

"The Native American Heritage Commission (NAHC), created in statute in 1976, is a nine-member body, appointed by the Governor, to identify and catalog cultural resources -- ancient places of special religious or social significance to Native Americans and known ancient graves and cemeteries of Native Americans on private and public lands in California. The NAHC is also charged with ensuring California Native American tribes' accessibility to ancient Native American cultural resources on public lands, overseeing the treatment and disposition of inadvertently discovered Native American human remains and burial

<sup>&</sup>lt;sup>230</sup> Ibid.

<sup>&</sup>lt;sup>231</sup> Op. Cit.

<sup>&</sup>lt;sup>232</sup> Op. Cit. Criteria for Designation. Accessed July 2023 at: https://ohp.parks.ca.gov/?page\_id=21238

<sup>&</sup>lt;sup>234</sup> Office of Historic Preservation, Mission and Responsibilities. Accessed March 2023 at: http://ohp.parks.ca.gov/?page\_id=1066

items, and administering the California Native American Graves Protection and Repatriation Act (CalNAGPRA), among many other powers and duties." <sup>235</sup>

#### Tribal Consultation Requirements: AB 52 (Gatto, 2014)

"The Public Resources Code has established that "[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment." (Pub. Resources Code, § 21084.2.).

To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a Project. That consultation must take place prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project. (Pub. Resources Code, § 21080.3.1.)

If a lead agency determines that a project may cause a substantial adverse change to tribal cultural resources, the lead agency must consider measures to mitigate that impact. Pub. Res. Code § 20184.3 (b)(2) provides examples of mitigation measures that lead agencies may consider to avoid or minimize impacts to tribal cultural resources."<sup>236</sup>

#### CEQA Guidelines: Archaeological Resources

Section 15064.5(c) of CEQA Guidelines provides specific guidance on the treatment of archaeological resources as noted below. 237238

- (1) When a Project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource, as defined in subdivision (a).
- (2) If a lead agency determines that the archaeological site is an historical resource, it shall refer to the provisions of Section 21084.1 of the Public Resources Code, and this section, Section 15126.4 of the Guidelines, and the limits contained in Section 21083.2 of the Public Resources Code do not apply.
- (3) If an archaeological site does not meet the criteria defined in subdivision (a), but does meet the definition of a unique archeological resource in Section 21083.2 of the Public Resources Code, the site shall be treated in accordance with the provisions of section 21083.2. The time and cost limitations described in Public Resources Code Section 21083.2 (c–f) do not apply to surveys and site evaluation activities intended to determine whether the Project location contains unique archaeological resources.
- (4) If an archaeological resource is neither a unique archaeological nor an historical resource, the effects of the Project on those resources shall not be considered a significant effect on the environment. It shall be sufficient that both the resource and the effect on it are noted in the Initial Study or EIR, if one is prepared to address impacts on other resources, but they need not be considered further in the CEQA process.

#### **CEQA Guidelines: Human Remains**

Public Resources Code Sections 5097.94 and 5097.98 provide guidance on the disposition of Native American burials (human remains), and fall within the jurisdiction of the Native American Heritage Commission:<sup>239</sup>

- (d) When an initial study identifies the existence of, or the probable likelihood, of Native American human remains within the Project, a lead agency shall work with the appropriate Native Americans as identified by the Native American Heritage Commission as provided in Public Resources Code Section 5097.98. The applicant may develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any Items associated with Native American burials with the appropriate Native Americans as identified by the Native American Heritage Commission. Action implementing such an agreement is exempt from:
  - (1) The general prohibition on disinterring, disturbing, or removing human remains from any location other than a dedicated cemetery (Health and Safety Code Section 7050.5).

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<sup>&</sup>lt;sup>235</sup> Native American Heritage Commission. Welcome. Accessed July 2023 at: <a href="http://nahc.ca.gov/">http://nahc.ca.gov/</a>.

<sup>&</sup>lt;sup>236</sup> Office of Planning and Research. Technical Advisory: AB 52 and Tribal Cultural Resources in CEQA (June 2017). Page 3. Accessed July 2023 at: <a href="https://www.opr.ca.gov/docs/20200224-AB\_52\_Technical\_Advisory\_Feb\_2020.pdf">https://www.opr.ca.gov/docs/20200224-AB\_52\_Technical\_Advisory\_Feb\_2020.pdf</a>

Office of Historic Preservation. CEQA Basics. Accessed July 2023 at: <a href="https://ohp.parks.ca.gov/?page\_id=21721.">https://ohp.parks.ca.gov/?page\_id=21721.</a>

<sup>238</sup> CEQA Guidelines, Section 15064.5 – Determining the Significance of Impacts to Archaeological and Historical Resources. Accessed July 2023 at: https://casetext.com/regulation/california-code-of-regulations/title-14-natural-resources/division-6-resources-agency/chapter-3-guidelines-for-implementation-of-the-california-environmental-quality-act/article-5-preliminary-review-of-projects-and-conduct-of-initial-study/section-150645-determining-the-significance-of-impacts-to-archaeological-and-historical-resources

<sup>&</sup>lt;sup>239</sup> Op. Cit.

- (2) The requirements of CEQA and the Coastal Act.
- (e) In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps should be taken:
  - (1) There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:
    - (A) The coroner of the county in which the remains are discovered must be contacted to determine that no investigation of the cause of death is required, and
    - (B) If the coroner determines the remains to be Native American:
      - 4. The coroner shall contact the Native American Heritage Commission within 24 hours.
      - 5. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American.
      - 6. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98, or
  - (2) Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.
    - (C) The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission.
    - (D) The descendant identified fails to make a recommendation; or
    - (C) The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.
- (f) As part of the objectives, criteria, and procedures required by Section 21082 of the Public Resources Code, a lead agency should make provisions for historical or unique archaeological resources accidentally discovered during construction. These provisions should include an immediate evaluation of the find by a qualified archaeologist. If the find is determined to be an historical or unique archaeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures or appropriate mitigation should be available. Work could continue on other parts of the building site while historical or unique archaeological resource mitigation takes place.

Local

# Tulare County General Plan 2030 Update

The General Plan has a number of policies that apply to Projects within Tulare County. General Plan policies that relate to the Project are listed as follows: ERM-6.1 Evaluation of Cultural and Archaeological Resources wherein the County shall participate in and support efforts to identify its significant cultural and archaeological resources using appropriate State and Federal standards; ERM-6.2 Protection of Resources with Potential State or Federal Designations wherein the County shall protect cultural and archaeological sites with demonstrated potential for placement on the National Register of Historic Places and/or inclusion in the California State Office of Historic Preservation's California Points of Interest and California Inventory of Historic Resources; ERM-6.3 Alteration of Sites with Identified Cultural Resources which states that when planning any development or alteration of a site with identified cultural or archaeological resources, consideration should be given to ways of protecting the resources. Development can be permitted in these areas only after a site specific investigation has been conducted pursuant to CEQA to define the extent and value of resource, and Mitigation Measures proposed for any impacts the development may have on the resource; ERM-6.4 Mitigation which states that if preservation of cultural resources is not feasible, every effort shall be made to mitigate impacts, including relocation of structures, adaptive reuse, preservation of facades, and thorough documentation and archival of records; ERM-6.9 Confidentiality of Archaeological Sites wherein the County shall, within its power, maintain confidentiality regarding the locations of archaeological sites in order to preserve and protect these resources from vandalism and the unauthorized removal of artifacts; and ERM-6.10 Grading Cultural Resources Sites wherein the County shall ensure all grading activities conform to the County's Grading Ordinance and California Code of Regulations, Title 20, § 2501 et. seq.

The intensive agricultural use of the Project site have continually been disturbed to the point that there are no evident surface Tribal cultural resources. However, as discussed below, mitigation measures are included in the unlikely event that Tribal cultural resources are encountered.

#### **Project Impact Analysis:**

a) and b) Less Than Significant Impact With Mitigation: As noted previously, and summarized here, the proposed Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical

conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years.

As previously noted, information was requested from the Southern San Valley Historical Resources Information Center, at California State University, Bakersfield (Center, July 14, 2023, and included in Attachment "C" of this document) and the California Native American Heritage Commission Sacred Lands File search (July 14, 2023, and included in Attachment "C" of this document). Also as noted previously, as of the release date of the MND (July 19, 2023), RMA has not received a response from the California Historical Resources Information Center (CHRIS), Southern San Joaquin Valley Historical Resources Information Center (SSJVIC) located at California State University, Bakersfield (Center) regarding a search for the Project location as requested by Tulare County RMA. Typically, the Center searches the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, for the California State Historic Landmarks. The Center also typically The Center also recommended that the NAHC be contacted regarding cultural resources that may not be included in the CHRIS inventory (see Attachment "C"). Also, Tulare County RMA also requested a Sacred Lands File (SLF) search from the California Native American Heritage Commission (NAHC). As of July 19, 2023, the NAHC has not provided a "positive" or "negative" result which would indicate that there are, or are not, any documented Sacred Lands within the Project area. It is likely that response may be received for the CHRIS request, the NAHC request, and local Tribes prior to decision making body's (in this instance, the Tulare County Planning Commission) will be requested to approve this MND. Any comments received will be incorporated into the MND for consideration by the Planning Commission. Regardless of search results, There is a possibility that subsurface resources could be uncovered during Project construction-related activities. In such an unlikely event, potentially significant impacts to previously unknown subsurface resources may occur. The Center typically recommends that the NAHC be contacted regarding cultural resources that may not be included in the CHRIS inventory (see Attachment "C"). Although no responses have been received to date from the tribes that were notified in compliance with AB 52 requirements, it is not anticipated that Native American tribal cultural resources or remains will be found within the Project area. However, as an abundance of caution, Mitigation Measures 5-1 through 5-3 are included in the unlikely event that Native American remains or tribal cultural resources are unearthed during any ground disturbance activities. Mitigation Measures 5-1 through 5-3 would be implemented to reduce the potential level of impact to this resource as less than significant for resources listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or to a resource consider significant to a California Native American tribe. Therefore, the Project would result in a less than significant impact to this resource.

## **Cumulative Impact Analysis:** Less Than Significant Impact With Mitigation:

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, Tulare County General Plan Background Report, and Tulare County General Plan 2030 Update EIR. The Project would only contribute to cumulative impacts related to this Checklist Item if Project-specific impacts were to occur. With implementation of Mitigation Measure 5-1 through 5-3, potential Project-specific impacts would be reduced to less than significant levels. Therefore, the Project's cumulative impacts would be less than significant with mitigation. Also see the Mitigation Monitoring and Reporting Program (MMRP) in Attachment "F".

As previously discussed, based on the analysis noted earlier, impacts to Tribal Cultural Resources will be reduced to a level of *Less Than Significant Project-specific and Cumulative Impacts With Mitigation* with the implementation of Mitigation Measures 5-1 through 5-3.

Mitigation Measures: See Mitigation Measures 5-1 through 5-3 (which can be found in their entirety in Attachment "F" of this IS/MND)

# **Summary of Mitigation Measures:**

- 5-1. Discovery.
- 5-2. Cessation of Work/Preservation/Treatment Plan/PRC § 21074.
- 5-3. Implementation of Health and Safety Code § 7050.5, CEQA Guidelines § 15064.5, PRC § 5097.98.

Therefore, implementation of <b>Mitigation</b> cultural resources.	n Measure 5-1 through 5-3 wo	ould result in a less than signifi	cant impact to tribal
tial Study/Mitigated Negative Declaration			Lub. 2022

#### XIX. UTILITIES AND SERVICE SYSTEMS

Woul	ld the project:	SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	No Impact
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				$\boxtimes$
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				$\boxtimes$
c)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				$\boxtimes$
d)	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				$\boxtimes$
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				$\boxtimes$

## **Analysis:**

The discussions regarding Environmental Setting, Regulatory Setting, CEQA requirements, Utility/Service Systems Resources, etc.; contained in the Tulare County General Plan 2030 Update, Tulare County General Plan Background Report, and Tulare County General Plan 2030 Update Environmental Impact Report are incorporated herein in their entirety. Where necessary and if available, additional site-specific facts, data, information, etc., are included in this discussion.

# **Environmental Setting**

"Tulare County and special districts provide many important services to County residents and businesses in unincorporated communities and hamlets such as water, wastewater, storm drainage, solid waste removal, utilities, communications, fire protection, law enforcement, and a number of other community facilities and services (schools, community centers, etc.)." <sup>240</sup>

"Water districts supply water to communities and hamlets throughout the County. Most communities and some hamlets have wastewater treatment systems; however, several communities including Three Rivers, Plainview, Alpaugh, and Ducor rely on individual septic systems. Storm drainage facilities are generally constructed and maintained in conjunction with transportation improvements or new subdivisions in communities. Solid waste collection in the County is divided into service areas, as determined by the Board of Supervisors, with one license for each area. Southern California Edison provides electric service to the south and central areas of Tulare County while PG&E provides electric service in the north. The [Southern California] Gas Company is the primary provider of natural gas throughout the County."<sup>241</sup>

As noted earlier and summarized here, the Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing,

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<sup>&</sup>lt;sup>240</sup> Tulare County General Plan Update 2030. Page 14-3.

<sup>&</sup>lt;sup>241</sup> Ibid. 14-3.

access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years.

#### **Regulatory Setting**

Federal

# U.S. Environmental Protection Agency (U.S. EPA) - Federal Regulation Tile 40, Part 503

In 1993, the U.S. Environmental Protection Agency (U.S. EPA) promulgated Standards for the Use or Disposal of Sewage Sludge (Code of Federal Regulations Title 40, Part 503), which establish pollutant limitations, operational standards for pathogen and vector attraction reduction, management practices, and other provisions intended to protect public health and the environment from any reasonably anticipated adverse conditions from potential waste constituents and pathogenic organisms.

This part establishes standards, which consist of general requirements, pollutant limits, management practices, and operational standards, for the final use or disposal of sewage sludge generated during the treatment of domestic sewage in a treatment works. Standards are included in this part for sewage sludge applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator. Also included in this part are pathogen and alternative vector attraction reduction requirements for sewage sludge applied to the land or placed on a surface disposal site.

In addition, the standards in this part include the frequency of monitoring and recordkeeping requirements when sewage sludge is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator. Also included in this part are reporting requirements for Class I sludge management facilities, publicly owned treatment works (POTWs) with a design flow rate equal to or greater than one million gallons per day, and POTWs that serve 10,000 people or more.<sup>242</sup>

## Resource Conservation and Recovery Act (RCRA)<sup>243</sup>

Congress passed RCRA on October 21, 1976 to address the increasing problems the nation faced from our growing volume of municipal and industrial waste. RCRA, which amended the Solid Waste Disposal Act of 1965, set national goals for:

- a) Protecting human health and the environment from the potential hazards of waste disposal.
- b) Conserving energy and natural resources.
- c) Reducing the amount of waste generated.
- d) Ensuring that wastes are managed in an environmentally-sound manner
- e) To achieve these goals, RCRA established three distinct, yet interrelated, programs:
- f) The solid waste program, under RCRA Subtitle D, encourages states to develop comprehensive plans to manage nonhazardous industrial solid waste and municipal solid waste, sets criteria for municipal solid waste landfills and other solid waste disposal facilities, and prohibits the open dumping of solid waste.
- g) The hazardous waste program, under RCRA Subtitle C, establishes a system for controlling hazardous waste from the time it is generated until its ultimate disposal in effect, from "cradle to grave."
- h) The underground storage tank (UST) program, under RCRA Subtitle I, regulates underground storage tanks containing hazardous substances and petroleum products. RCRA banned all open dumping of waste, encouraged source reduction and recycling, and promoted the safe disposal of municipal waste. RCRA also mandated strict controls over the treatment, storage, and disposal of hazardous waste.

State

#### The Integrated Waste Management Act (Assembly Bill 939)

In 1989 the California legislature passed the Integrated Waste Management Act of 1989, known as AB 939. The bill mandates a reduction of waste being disposed: jurisdictions were required to meet diversion goals of 25% by 1995 and 50% by the year 2000. AB 939 also established an integrated framework for program implementation, solid waste planning, and solid waste facility and landfill compliance.

<sup>&</sup>lt;sup>242</sup> National Archives and Records Administration. Code of Federal Regulations. Title 40: Protection of Environment Part 503: Standards for the Use of Disposal of Sewage Sludge. Accessed July 2023 at: <a href="https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503?toc=1.">https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503?toc=1.</a>

<sup>243</sup> United States Environmental Protection Agency. Summary of the Resource Conservation and Recovery Act. Accessed July 2023 at: <a href="https://www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act">https://www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act</a>; then click on "EPA History: RCRA".

# State Water Quality Control Board

"The State Water Resources Control Board (State Water Board) was created by the Legislature in 1967. The joint authority of water allocation and water quality protection enables the State Water Board to provide comprehensive protection for California's waters. The State Water Board consists of five full-time salaried members, each filling a different specialty position. Board members are appointed to four-year terms by the Governor and confirmed by the Senate. There are nine Regional Water Quality Control Boards (Regional Boards). The mission of the Regional Boards is to develop and enforce water quality objectives and implementation plans that will best protect the State's waters, recognizing local differences in climate, topography, geology and hydrology. Each Regional Board has seven part-time members appointed by the Governor and confirmed by the Senate. Regional Boards develop "basin plans" for their hydrologic areas, issue waste discharge requirements, take enforcement action against violators, and monitor water quality. The task of protecting and enforcing the many uses of water, including the needs of industry, agriculture, municipal districts, and the environment is an ongoing challenge for the State and Regional Water Quality Control Boards." 244

#### Regional Water Quality Control Board (RWQCB)

"There are nine Regional Water Quality Control Boards (Regional Boards). The mission of the Regional Boards is to develop and enforce water quality objectives and implementation plans that will best protect the State's waters, recognizing local differences in climate, topography, geology and hydrology. Each Regional Board has seven part-time members appointed by the Governor and confirmed by the Senate. Regional Boards develop "basin plans" for their hydrologic areas, issue waste discharge requirements, take enforcement action against violators, and monitor water quality." <sup>245</sup>

# The Regional Water Quality Control Board – Biosolids

In California, the beneficial reuse of treated municipal sewage sludge (a.k.a., biosolids) generally must comply with the California Water Code in addition to meeting the requirements specified in Part 503 in Title 40 of the Code of Federal Regulations.

In July 2004, the State Water Resources Control Board adopted Water Quality Order No. 2004-12-DWQ (General Order), and certified a supporting statewide Programmatic Environmental Impact Report (PEIR)

The General Order incorporates the minimum standards established by the Part 503 Rule and expands upon them to fulfill obligations to the California Water Code. However, since California does not have delegated authority to implement the Part 503 Rule, the General Order does not replace the Part 503 Rule. The General Order also does not preempt or supersede the authority of local agencies to prohibit, restrict, or control the use of biosolids subject to their jurisdiction, as allowed by law.

Persons interested in seeking coverage under the General Order should contact the appropriate Regional Water Quality Control Board. Only applicants who submit a complete *Notice of Intent* (NOI), appropriate application fee, and are issued a Notice of Applicability by the executive officer of the appropriate Regional Water Quality Control Board are authorized to land apply biosolids at an agricultural, horticultural, silvicultural, or land reclamation site as a soil amendment under the General Order.

## State Water Resources Control Board, Divisions of Drinking Water and Clean Water

Recycled water regulations are administered by both Central RWQCB and the California State Water Resources Control Board (SWRCB). The regulations governing recycled water are found in a combination of sources, including the Health and Safety Code, Water Code, and Titles 22 and 17 of the California Code of Regulations (CCR). Issues related to the treatment and distribution of recycled water are generally under the permitting authority of RWQCB and the Clean Water Division of the SWRCB.

# State Water Resources Control Board Water Onsite Wastewater Treatment Systems (OWTS) Policy

"The purpose of this Policy is to allow the continued use of OWTS, while protecting water quality and public health. This Policy recognizes that responsible local agencies can provide the most effective means to manage OWTS on a routine basis. Therefore, as an important element, it is the intent of this policy to efficiently utilize and improve upon where necessary existing local programs through coordination between the State and local agencies. To accomplish this purpose, this Policy establishes a statewide, risk-based, tiered approach for the regulation and management of OWTS installations and replacements and sets the

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<sup>&</sup>lt;sup>244</sup> California State Water Boards Mission Statement. Accessed July 2023 at: <a href="http://www.waterboards.ca.gov/about\_us/water\_boards\_structure/mission.html">http://www.waterboards.ca.gov/about\_us/water\_boards\_structure/mission.html</a>.

<sup>&</sup>lt;sup>245</sup> Ibid.

level of performance and protection expected from OWTS. In particular, the Policy requires actions for water bodies specifically identified as part this Policy where OWTS contribute to water quality degradation that adversely affect beneficial uses."<sup>246</sup>

#### State NPDES General Construction Permit

The State NPDES General Construction Permit requires development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) that uses storm water "Best Management Practices" to control runoff, erosion and sedimentation from the site both during and after construction. The SWPPP has two major objectives: (1) to help identify the sources of sediments and other pollutants that affect the quality of storm water discharges; and (2) to describe and ensure the implementation of practices to reduce sediment and other pollutants in storm water discharges.

#### <u>CalRecycle</u>

CalRecycle (formerly the California Integrated Waste Management Board) governs solid waste regulations on the state level, delegating local permitting, enforcement, and inspection responsibilities to Local Enforcement Agencies (LEA). Regulations authored by CalRecycle (Title 14) were integrated with related regulations adopted by the State Water Resources Control Board (SWRCB) pertaining to landfills (Title 23, Chapter 15) to form CCR Title 27.

## California Public Utilities Commission

The California Public Utilities Commission (CPUC) regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies, in addition to authorizing video franchises. In 1911, the CPUC was established by Constitutional Amendment as the Railroad Commission. In 1912, the Legislature passed the Public Utilities Act, expanding the Commission's regulatory authority to include natural gas, electric, telephone, and water companies as well as railroads and marine transportation companies. In 1946, the Commission was renamed the California Public Utilities Commission. It is tasked with ensuring safe, reliable utility service is available to consumers, setting retail energy rates, and protecting against fraud.

#### Local

# Tulare County General Plan 2030 Update

As the Project will not utilize any new or expanded water, wastewater treatment or storm water drainage, natural gas, or telecommunications facilities, the applicable Tulare County General Plan 2030 Update policies for this resource are limited to the following for this resource item: PFS-2.3 Well Testing wherein the County shall require new development that includes the use of water wells to be accompanied by evidence that the site can produce the required volume of water without impacting the ability of existing wells to meet their needs; PFS-5.4 County Usage of Recycled Materials and Products wherein the County shall encourage all industries and government agencies in the County to use recycled materials and products where economically feasible; PFS-5.5 Private Use of Recycled Products wherein the County shall work with recycling contractors to encourage businesses to use recycled products and encourage consumers to purchase recycled products; PFS-5.6 Ensure Capacity wherein the County shall require evidence that there is adequate capacity within the solid waste system for the processing, recycling, transmission, and disposal of solid waste prior to approving new development; PFS-5.7 Provisions for Solid Waste Storage, Handling, and Collection wherein the County shall ensure all new development adequately provides for solid waste storage, screening, handling, and collection prior to issuing building permits; PFS-5.8 Hazardous Waste Disposal Capabilities wherein the County shall require the proper disposal and recycling of hazardous materials in accordance with the County's Hazardous Waste Management Plan; PFS-9.1 Expansion of Gas and Electricity Facilities wherein the County shall coordinate with gas and electricity service providers to plan the expansion of gas and electrical facilities to meet the future needs of County residents; PFS-9.2 Appropriate Siting of Natural Gas and Electric Systems wherein the County shall coordinate with natural gas and electricity service providers to locate and design gas and electric systems that minimize impacts to existing and future residents; PFS-9.4 Power Transmission Lines wherein the County shall work with the Public Utilities Commission and power utilities in the siting of transmission lines to avoid interfering with scenic views, historic resources, and areas designated for future urban development; and PFS-9.3 Transmission Corridors wherein the County shall work with the Public Utilities Commission and power utilities so that transmission corridors meet the following minimum requirements:

1. Transmission corridors shall be located to avoid health impacts on residential lands and sensitive receptors, and

<sup>&</sup>lt;sup>246</sup> California State Water Resources Control Board. OWTS Policy. Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems. June 19, 2012. Accessed July 2023 at: <a href="https://www.waterboards.ca.gov/water-issues/programs/owts/docs/owts-policy.pdf">https://www.waterboards.ca.gov/water-issues/programs/owts/docs/owts-policy.pdf</a>.

2. Transmission corridors shall not impact the economic use of adjacent properties.

## **Project Impact Analysis:**

- a) c) No Impact: As previously noted, and summarized here, the Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years. The Project does not require or would result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. Further, the Project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. The Project would use less water than the amount of water used to irrigate the current agricultural use; as such, the Project would have sufficient water supplies available to serve the project during normal, dry and multiple dry years as water would be imported for washing the solar panels approximately twice per year; and the usage of water to minimize dust during construction-related activities would be short-term, intermittent, and temporary. Other than the renewable energy project, there is no anticipated foreseeable future development other than the reclamation of the Project site as agricultural land following termination of the 30-year project life. As such, there will be no impact to these resources.
- d) Less Than Significant Impact: The Project is not anticipated to generate large volumes of solid waste during construction, operation, or decommissioning related activities. "The Project would not generate, use, or dispose of any hazardous waste during construction activities. Petroleum products would be used on-site. Petroleum products are excluded as hazardous substances. 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. If regulated materials (petroleum products) are spilled, measures would be taken to control the extent of the spill, and the appropriate agencies would be notified in accordance with the applicable federal and state regulations. Trucks and construction vehicles would be serviced from off-site facilities. The use, storage, transport, and disposal of hazardous materials used in construction of the facility would be carried out in accordance with federal, state, and County regulations. No extremely hazardous substances (i.e., those governed pursuant to Title 40, Part 330 of the Code of Federal Regulations) are anticipated to be produced, used, stored, transported, or disposed of as a result of Project construction. Material Safety Data Sheets for all applicable materials present on-site would be made readily available to onsite personnel.

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. It is anticipated that at least 20 percent of construction waste would be recyclable, and 50 percent of those materials would be recycled. Wooden construction waste (such as 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 the municipal County landfill. Hazardous waste and electrical waste would not be placed in a landfill, but rather would be transported to a hazardous waste handling facility (e.g., electronic-waste recycling facility). All contractors and workers would be educated about waste sorting, appropriate recycling storage areas, and how to reduce landfill waste. Signs for emergency contacts and hazard warning signs will be posted at the entrance to the facility, as necessary.

California's Green Building Standards Code (CALGreen; Title 24 Cal. Code Regs., Part 11) requires that nonresidential building projects recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste, or meet a local construction and demolition waste management ordinance, whichever is more stringent (§ 5.408.1). The Tulare County Construction and Demolition (C&D) Ordinance, will require the Applicant to divert 100 percent of inert waste and 50 percent of all other waste, prepare and implement a C&D Debris Recycling and Reuse Plan, and develop a C&D Debris Recycling and Reuse Compliance report to be submitted after Project completion. In order to obtain a building permit, the Applicant will be required to comply with the Tulare County C&D Ordinance. By diverting 100 percent of inert waste and 50 percent of all other waste, the Applicant will not generate waste in excess of state or local standards.

Any waste that cannot be recycled will likely be transported to the Tulare County Solid Waste Department operated Woodville Landfill located south of the Project site (or alternatively, to Visalia Disposal Site). The Project is not anticipated to generate a significant amount of solid waste and Woodville Landfill is anticipated to have sufficient space to accommodate

the Project needs through construction related activities. Woodville Landfill is currently permitted to accept approximately 900 tons per day (tpd), although the site is permitted for 1,078 tpd. The increase in acreage will also result in an increase to the permitted landfill capacity by approximately 14.0 million cubic yards for an overall capacity of the Woodville Landfill to approximately 27.5 million cubic yards. The additional Waste Management Units (WMUs) will be designated Class III landfill units and will extend the anticipated landfill closure date by 55 years (to approximately Year 2074).

Based on these considerations, the Project will not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure. See also Section 3.15 Public Services. As such, the Project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals and it will comply with federal, state, and local management and reduction statutes and regulations related to solid waste as applicable.

e) No Impact: Waste generated during Project construction, operation, or decommissioning related activities will be recycled or disposed of in a manner that is consistent with all applicable federal, state, and local recycling reduction and waste mandates, requirements, and policies. Therefore, the Project will not result in any impacts related to conflicts with statutes and regulations regarding solid waste.

**Cumulative Impact Analysis:** Not-to-Less Than Significant Impact: The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, Tulare County General Plan Background Report, and Tulare County General Plan 2030 Update EIR. As previously noted, and as summarized here, the Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years. The Project will only contribute to cumulative impacts related to this Checklist Item if Project specific impacts were to occur. As noted above, the Project is not anticipated to generate large volumes of solid waste during construction, operation, or decommissioning related activities. The Project does not require or would result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities; the Project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project; the Project would use less water than the amount of water used to irrigate the current agricultural use; as such, the Project would have sufficient water supplies available to serve the project during normal, dry and multiple dry years; and the usage of water to minimize dust during construction-related activities would be short-term, intermittent, and temporary. The Project Applicant will be required to comply with the Tulare County C&D Ordinance and state regulations (e.g., mandates), as applicable. Furthermore, a collection and recycling program will be implemented to promote the recycling of Project components and minimize disposal of Project components in landfills. The Project will not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure. The Project is required to comply with statutes and regulations regarding solid waste. Therefore, No Cumulative Impact will occur related to utilities and services systems.

Mitigation Measure(s): None Required.

#### XX. WILDFIRES

	ated in or near state responsibility areas or lands fied as very high fire hazard severity zones, would oject:	SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	No Impact
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?				$\boxtimes$
b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				$\boxtimes$
c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				$\boxtimes$
d)	Expose people or structures to significant risks, including downslope or downstream flooding, or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				$\boxtimes$

The discussions regarding Environmental Setting, Regulatory Setting, CEQA requirements, Utility/Service Systems Resources, etc.; contained in the Tulare County General Plan 2030 Update, Tulare County General Plan Background Report, and Tulare County General Plan 2030 Update Environmental Impact Report are incorporated herein in their entirety. Where necessary and if available, additional site-specific facts, data, information, etc., are included in this discussion.

## **Environmental Setting**

As noted earlier and summarized here, the proposed Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years.

"A wildfire is an uncontrolled fire spreading through vegetative fuels. Wildfires can be caused by human activities (such as arson or campfires) or by natural events (such as lightning). Wildfires often occur in forests or other areas with ample vegetation. Wildfires differ from other fires due to their large size, the speed at which the fires can spread, and the ability of the fire to change direction unexpectedly and to jump gaps, such as roads, rivers, and fire breaks. In areas where structures and other human development meet or intermingle with wildland or vegetative fuels (referred to as the wildland urban interface or WUI), wildfires can cause significant property damage and present extreme threats to public health and safety. The following three factors contribute significantly to wildfire behavior and can be used to identify wildfire hazard areas.

Topography: As slope increases, the rate of wildfire spread increases. South-facing slopes are also subject to more solar radiation, making them drier and thereby intensifying wildfire behavior. However, ridgetops may mark the end of wildfire spread because fire spreads more slowly or may even be unable to spread downhill.

Fuel: The type and condition of vegetation plays a significant role in the occurrence and spread of wildfires. Certain types of plants are more susceptible to burning or will burn with greater intensity, and non-native plants may be more susceptible to burning than native species. Dense or overgrown vegetation increases the amount of fuel load. The ratio of living to dead plant matter is also important. The risk of fire increases significantly during periods of prolonged drought, as the moisture content of both living and dead plant matter decreases; or when a disease or infestation has caused widespread damage. The fuel's continuity, both horizontally and vertically, is also an important factor.

Weather: The most variable factor affecting the behavior of wildfires is weather. Temperature, humidity, wind, and lightning can affect chances for ignition and spread of fire. Extreme weather, such as high temperatures and low humidity, can lead to extreme wildfire activity. By contrast, cooling and higher humidity often signal reduced wildfire occurrence and easier containment. Years of precipitation followed by warmer years tend to encourage more widespread fires and longer burn periods. Also, since the mid-1980s, earlier snowmelt and associated warming due to global climate change has been associated with longer and more severe wildfire seasons in the western U.S.

Wildfires can have serious effects on the local environment, beyond the removal of vegetation. Soil exposed to intense heat may lose its capability to absorb moisture and support life. Exposed soils erode quickly and enhance siltation of rivers and streams, thereby enhancing flood potential, harming aquatic life, and degrading water quality. Lands stripped of vegetation are also subject to increased debris flow hazards, as described above. Wildfires can also greatly affect the air quality of the surrounding area.

Local responsibility areas generally include incorporated cities, cultivated agriculture lands and portions of the desert. Local responsibility area fire protection is typically provided by city fire departments, fire protection districts, counties, and by CAL FIRE under contract to the local government. The fire hazard severity zones for the area of local responsibility in the County are shown on Figure B-4 (Appendix B, Hazard Figures [in the MJLHMP). Fire severity zones are depicted for the Cities of Porterville and Woodlake in Figures B-13 and B-20 (Appendix B, Hazard Figures MJLHMP).

State responsibility area is a legal term defining the area where the State has financial responsibility for wildfire protection. Incorporated cities and Federal ownership are not included. The prevention and suppression of fires in all areas that are not State responsibility areas are primarily the responsibility of local or Federal agencies.

The portion of the County that transitions from the valley floor into the foothills and mountains is characterized by high to very high threat of wildfire; this includes the cities of Porterville and Woodlake, the jurisdiction of Tulare County Office of Education (TCOE), the Tule River Tribe Reservation and areas of the County unincorporated. Steeper terrain in these areas increases the threat of wildfire. The western portion of the County has little or no threat of wildfire. The risk of wildfire increases where human access exists in high fire hazard severity zones, such as the Sierra Nevada Mountains and foothills, because of a greater chance for human carelessness and because of historic and current fire management practices.

# Impact of Climate Change

Climate and weather have long been acknowledged as playing key roles in wildfire activity, and global warming is expected to exacerbate fire impacts on natural and urban ecosystems. Predicting future fire regimes requires an understanding of how temperature and precipitation interact to control fire activity. Since 2012, record drought and record temperatures, have weakened trees throughout California, resulting in millions of acres of failing forestland that then become vulnerable to disease and infestation. Infestations, such as those caused by native bark beetles, have caused tree mortality of epidemic proportions. The scale of tree mortality in California contributes to significantly increased wildfire risks, and presents life safety risks due to falling trees that can injure or kill people. The immediate consequence of tree mortality on California forestlands increases the potential for wildfires, further spread of forest insect tree damage, threats to critical public safety infrastructure from falling trees, reduced forest carbon stocks, loss of commercial timber values to landowners, and diminished wildlife habitat. Due to these increased risks, the County proclaimed states of emergency for tree mortality.

In addition, and in response to the millions of dead trees, a State of Emergency Proclamation was issued by the Governor. A Tree Mortality Task Force, comprised of State and Federal agencies led by CAL FIRE, Cal OES and the Governor's office has identified six counties as high hazard zones due to dead and dying trees and the hazards, this tree mortality presents. The 10 counties include: Amadore, Calaveras, El Dorado, Fresno, Kern, Madera, Mariposa, Placer, Tulare, and Tuolumne. Both the State's and the County's Tree Mortality Task Forces are structured as a Multi-Agency Coordination Group and meet monthly to exchange information and updates among stakeholders. Participants are encouraged to discuss needs and concerns, and leverage each other's subject matter expertise and resources to further response efforts."<sup>247</sup>

The proposed Project's location does not lend itself to wildfire risk as it is not within a fire hazard severity zone (as identified by CalFire<sup>248</sup>), lacks slope/terrain conducive to wildfire spread, lacks vegetation which would fuel wildfire (i.e., dense vegetation consisting of shrubs and bushes, dead or dying trees caused by drought or pest infestation (i.e., bark beetle), is surrounded by

<sup>&</sup>lt;sup>247</sup> Tulare County 2018 Multi-Jurisdictional Local Hazard Mitigation Plan (MJLHMP). March 2018. Pages 70-72. Accessed July 2023 at: <a href="https://oes.tularecounty.ca.gov/oes/mitigation/tulare-county-mjlhmp/">https://oes.tularecounty.ca.gov/oes/mitigation/tulare-county-mjlhmp/</a>

<sup>&</sup>lt;sup>248</sup> California Department of Forestry and Fire Protection. 2007. Draft Fire Severity Zones in LRA Map. Accessed July 2023 at: <a href="https://osfm.fire.ca.gov/media/6832/fhszl06\_1\_map54.pdf">https://osfm.fire.ca.gov/media/6832/fhszl06\_1\_map54.pdf</a>

predominantly agriculturally productive lands, and, as noted earlier, is in the valley portion of the County which has no threat of wildfire.

#### **Regulatory Setting**

Federal

None that apply to the Project.

State

#### Senate Bill 1241 (Kehoe, 2012)

"Wildfire: Senate Bill 1241 (Kehoe, 2012) required the Office of Planning and Research, the Natural Resources Agency, and CalFire to develop "amendments to the initial study checklist of the [CEQA Guidelines] for the inclusion of questions related to fire hazard impacts for projects located on lands classified as state responsibility areas, as defined in section 4102, and on lands classified as very high fire hazard severity zones, as defined in subdivision (i) of section 51177 of the Government Code." (Pub. Resources Code, § 21083.01 (emphasis added).) The Agency added several questions addressing this issue. Notably, while SB 1241 required the questions to address specific locations, it did not necessarily limit the analysis to those locations, and so the Agency posed the questions for projects located within "or near" those zones. Lead agencies will be best placed to determine precisely where such analysis is needed outside of the specified zones." 249

"The safety elements of local general plans will also describe potential hazards, including: "any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides; subsidence; liquefaction; and other seismic hazards ..., and other geologic hazards known to the legislative body; flooding; and wildland and urban fires." (Gov. Code § 65302(g)(1).) Hazards associated with flooding, wildfire and climate change require special consideration. (Id. at subd. (g)(2)-(g)(4).) Lead agencies must "discuss any inconsistencies between the Project and applicable general plans" related to a project's potential environmental impacts in a project's environmental review. (State CEQA Guidelines § 15125(d).) Local governments may regulate land use to protect public health and welfare pursuant to their police power. (Cal. Const., art. XI, § 7; California Building Industry Assn. v. City of San Jose (2015) 61 Cal. 4th 430, 455 ("so long as a land use restriction or regulation bears a reasonable relationship to the public welfare, the restriction or regulation is constitutionally permissible.)" <sup>250</sup>

#### CAL FIRE - Tulare Unit Strategic Fire Plan

As summarized in the 2017 Tulare Multi-Jurisdictional Local Hazard Mitigation Plan (MJLHMP), "The Plan is a local road map to create and maintain defensible landscapes in order to protect vital assets. It seeks to reduce firefighting cost and property loss, increase public and firefighter safety, minimize wildfire risk to communities and contribute to ecosystem health. The Plan identifies pre-suppression projects including opportunities for reducing structural ignitability, and the identification of potential fuel reduction projects and techniques for minimizing those risks. The central goals that are critical to reducing and preventing the impacts of fire revolve around both suppression efforts and fire prevention efforts. The MJLHMP fire hazard analysis and fire related mitigation measures will be provided to Cal Fire to support the Tulare Unit Strategic Fire Plan." <sup>251</sup>

Cal Fire publishes Fire Hazard Severity Zone Maps for all regions in California, which can be viewed here. The fire hazard measurement used as the basis for these maps includes the speed at which a wildfire moves, the amount of heat the fire produces, and most importantly, the burning fire brands that the fire sends ahead of the flaming front. Lead agencies and project proponents can review the Cal Fire maps to determine whether a given project site will be subject to the new CEQA wildfire impacts analysis.

Local

#### Tulare County General Plan 2030 Update

The Project is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones. The following Tulare County General Plan 2030 Update policies could apply to this Project if it were located on sloped areas, fire

<sup>&</sup>lt;sup>249</sup> MJLHMP. Page 70.

<sup>&</sup>lt;sup>250</sup> Ibid. Pages 38 and 39.

<sup>&</sup>lt;sup>251</sup> Ibid Table 3-1: Legal & Regulatory Capabilities. 14.

hazards areas, lands susceptible to landslides, subsidence/settlement, contamination, and/or flooding; potential for wildland fires; etc.: ERM-7.3 Protection of Soils on Slopes wherein unless otherwise provided for in this General Plan, building and road construction on slopes of more than 30 percent shall be prohibited, and development proposals on slopes of 15 percent or more shall be accompanied by plans for control or prevention of erosion, alteration of surface water runoff, soil slippage, and wildfire occurrence; HS-1.5 Hazard Awareness and Public Education wherein the County shall continue to promote awareness and education among residents regarding possible natural hazards, including soil conditions, earthquakes, flooding, fire hazards, and emergency procedures; HS-1.11 Site Investigations wherein the County shall conduct site investigations in areas planned for new development to determine susceptibility to landslides, subsidence/settlement, contamination, and/or flooding; HS-6.1 New Building Fire Hazards - The County shall ensure that all building permits in urban areas, as well as areas with potential for wildland fires, are reviewed by the County Fire Chief; HS-6.2 Development in Fire Hazard Zones wherein the County shall ensure that development in extreme or high fire hazard areas is designed and constructed in a manner that minimizes the risk from fire hazards and meets all applicable State and County fire standards; HS-6.3 Consultation with Fire Service Districts wherein the County shall consult the appropriate fire service district in areas identified as subject to high and extreme fire hazard, for particular regulations or design requirements prior to issuance of a building permit or approval of subdivisions; HS-6.5 Fire Risk Recommendations - The County shall encourage the County Fire Chief to make recommendations to property owners regarding hazards associated with the use of materials, types of structures, location of structures and subdivisions, road widths, location of fire hydrants, water supply, and other important considerations regarding fire hazard that may be technically feasible but not included in present ordinances or policies; HS-6.6 Wildland Fire Management Plans wherein the County shall require the development of wildland fire management plans for projects adjoining significant areas of open space that may have high fuel loads; HS-6.13 Restoration of Disturbed Land wherein the County shall support the restoration of disturbed lands resulting from wildfires; HS-6.14 Coordination with Cities wherein the County shall coordinate with cities to develop cohesive fire safety plans with overlapping coverage; and HS-6.15 Coordination of Fuel Hazards on Public Lands wherein the County shall work with local and Federal agencies to support efforts to reduce fuel related hazards on public lands.

#### **Project Impact Analysis:**

a) - d) No Impact: As noted earlier and summarized here, the proposed Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years.

Cumulative Impact Analysis: No Impact – The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, Tulare County General Plan Background Report, and the Tulare County 2030 General Plan EIR. As noted earlier and summarized here, the Project would include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years.

The Project does not propose any other new developments or any changes to the existing surrounding land uses. According to the State Responsibility Area (SRA) Viewer, the Project site is not located in the SRA<sup>252</sup>. The Project does not impair the implementation of any adopted emergency response plan or evacuation plan. The Project will not exacerbate wildfire risks or expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire, due to slope, prevailing winds, and other factors. The Project will not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. The Project will include connection to an existing SCE transmission line from the Project site. The Project will not expose people or structures to significant risks, including downslope or downstream flooding, or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Therefore, the Project will result in no impact related to this resource. As it is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones, the Project will not exacerbate wildfire risks or expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire, due to slope, prevailing winds, and other factors. The Project will not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. The Project will not expose

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<sup>&</sup>lt;sup>252</sup> Ibid.

people or structures to significant risks, including downslope or downstream flooding, or landslides, as a result of runoff, post-fire slope instability, or drainage changes. The facility shall comply with all applicable 2022 California Building Code and CFC standards (such as lighting, fire extinguishers, access/egress, etc.). The applicant shall install a Knox Box (key box) as required by the Tulare County Fire Department. Conditions of approval are included. All new construction would require the submittal of plans for fire department review, and would be required to meet construction methods in accordance with Chapter 7A of the 2022 California Building Code. Therefore, there will be no impact to the wildfires resource.

Mitigation Measure(s): None Required.

#### XXI. MANDATORY FINDINGS OF SIGNIFICANCE

a)	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal species, or eliminate important examples of the major periods of California history or prehistory?			
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?		$\boxtimes$	
c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		$\boxtimes$	

#### **Project Impact Analysis:**

The analysis conducted in this Initial Study/Mitigated Negative Declaration results in a determination that the Project will have a less than significant effect on the local environment. As previously noted, and summarized here, the Project include clearing and grading of the site, solar modules, battery energy storage system, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear) on approximately 25 of the 77 acres of leased inactive (fallow) farmland. The Project site development area is located northwest Avenue 160 and Road 180. The Project would also include perimeter fencing, access roads, and connection to an existing SCE power line located directly adjacent to the Project. The life of the Project is anticipated to be 30 years.

- a) Less Than Significant Impact With Mitigation: The potential for impacts to cultural resources from the construction and operation of the Project will be less than significant with the incorporation of the Mitigation Measures 5-1 through 5-3 as contained in Item 5 Cultural Resources. The analysis contained in Item 4 Biological Resources concludes that biological resources will not be significantly impacted and mitigation measures are not warranted to reduce potential impacts. Accordingly, the Project will involve no potential for significant impacts due to degradation of the quality of the environment, substantial reductions in the habitat of a fish or wildlife species, causing a fish or wildlife population to drop below self-sustaining levels, threatening to eliminate a plant or animal community, reduction in the number or restriction of the range of a rare or endangered plant or animal or elimination of important examples of the major periods of California history or prehistory. As such, the impact will be less than significant for biological resources and less than significant with mitigation for cultural and tribal cultural resources.
- b) Less Than Significant Impact: Projects considered in a cumulative analysis include those that would be constructed concurrently with the Project and those that would be in operation at the same time as the Project. The cumulative projects considered in this analysis are limited to projects that would result in similar impacts to the Project due to their potential to collectively contribute to significant cumulative impacts, as well as other development projects that would be located in the vicinity of the Project. There are no similar projects under consideration or construction located in and around a 10-mile radius of the Project site. As such, its physical distance and location would not contribute to a cumulative impact.

Tulare County staff have determined that there are no projects that could have the potential to contribute to cumulative impacts. The Project was determined to have no impacts to Energy, Land Use and Planning, Mineral Resources, Population and Housing, Recreation and Wildfire. Therefore, the Project will not result in considerable impacts in combination with the other similar renewable energy projects (solar energy projects). The following environmental impacts were determined to be less than significant and did not require mitigation: Aesthetics, Agricultural Resources, Air Quality, Geology and Soils,

Greenhouse Gases, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Public Services, Transportation, and Utilities and Service Systems. As discussed earlier, the Project will result in less than significant impacts to cultural resources (including paleontological and Tribal Cultural Resources) and noise with incorporation/implementation of mitigation measures identified earlier.

The majority of the potential impacts resulting from the Project will be short term, temporary, and intermittent occurring during project construction-related activities; and with negligible impacts resulting from project operation as discussed in the earlier environmental analysis. Because construction-related impacts are of a short duration, temporary, intermittent, and localized, they would have to occur concurrently and in proximity of other projects in order to have a cumulative impact. Construction-related impacts (which are primarily associated with air quality, biological resources, noise, and traffic) are not likely to act cumulatively with any other projects in a manner that would result in significant impacts.

The Project (as described in Items 3 Air Quality and 8 Greenhouse Gases) will have short-term impacts with regard to air quality and greenhouse gases during construction-related activities. However, the emissions associated with this Project are less significant when compared to baseline emissions levels as quantified in Items 3 Air Quality and 8 Greenhouse Gases, and are not considered cumulatively considerable pursuant to guidelines from the Air District. (See Impact 3(c) for a complete discussion of the Project's cumulative air quality impacts.) The Project would implement the applicable SJVAPCD rules, regulations, permit requirements, etc., (e.g., Best Available Control Measures); therefore, reducing the Project specific and cumulative impacts to a less than significant level. In addition, the Project would lead to cumulatively beneficial reductions in GHG emissions.

As discussed in Item 4, the Project site consists of disturbed agricultural land. Operation of the Project would not result in the loss of sensitive biological habitats or sensitive cultural resources as seen in Attachments "B" and "C", respectively. As such, when combined cumulatively with other projects, the Project would not result in impacts to biological or cultural resources that are cumulatively considerable.

Impacts to aesthetics from the Project would be minimal. As noted earlier, the general vicinity of the Project's location consists of a regional viewshed that already includes agriculturally productive lands, agricultural-related structures (e.g., barns, equipment sheds, wells, etc.), scattered rural residences, an electrical substation, rural streets, and seasonally used irrigation ditches. Areas of the related projects are not identified as having sensitive or significant visual resources. However, most of the projects would not be visible in the same viewshed. Further, while the solar projects may change the visual character of the area, in general they do not obstruct scenic vistas. Although the Project may contribute to visual impacts on the area due to the addition of more solar facility uses in an agricultural area, the contribution of the Project would not be cumulatively considerable because the visual quality of the overall area is low and other currently operational solar facilities are scattered throughout out the County. Thus, the Project plus the related solar projects would result in less than significant cumulative impact to Aesthetics.

No archaeological or historic resources were located on the Project site. With implementation of the cultural resource mitigation measures specified in Impact 5 Cultural Resources, the Project would not cause cumulatively considerable cultural resource impacts because impacts to unknown cultural resources would be minimized.

The Project also will not cause cumulatively considerable geology and soils impacts (with the exception of paleontological resources, as noted earlier), as the Project-specific impacts will be less than significant and will not be anticipated to combine with impacts caused by the cumulative projects identified by the County.

The Project will not cause cumulatively considerable impacts related to hazards and hazardous materials. While small amounts of hazardous materials may be used or transported as a result of construction-related activities as the Project develops, these activities will occur in compliance with applicable laws and regulations, and any impacts resulting from use, transport, disposal, or accident or upset conditions will be localized in nature. As a result, any Project-level impacts will not have the potential to contribute to hazards associated with other projects because these impacts would only occur intermittently, if at all. Similarly, the Project will not contribute to cumulative wildland fire-related impacts because it is located in an area with low wildland fire risk.

The Project will not cause cumulatively considerable hydrology and water quality-related impacts. The Project applicant will be required to implement a SWPPP to reduce impacts and will not cause discharge to any surface or groundwater sources or alter the course of any stream or river. Nor will the Project change runoff patterns in the area.

The Project will not cause cumulatively considerable land use and planning impacts. The Project is consistent with all

applicable land use planning policies, and will be required to implement a reclamation plan at the end of the Project's life. The reclamation plan will ensure that the Project does not result in effects on neighboring land uses. As a result, the Project's impacts will not be cumulatively significant.

The Project also will not combine noise-related impacts with that of other projects to cause cumulatively considerable impacts. Construction-related activities will cause short-term, temporary, and intermittent increases in noise in the area, and could occur at the same time as other noise-causing events in the area. However, no other concurrent construction projects are anticipated to occur adjacent to or near the Project site, and operational noise will be minimal. As a result, the Project is not anticipated to considerably contribute to cumulative noise impacts during construction or operation. Therefore, a less than significant Project-specific impact related to this Checklist Item will occur.

Because the Project will not cause population growth in the area, it will not lead to construction of new or expanded police or fire protection facilities, or interfere with operation of existing facilities, or create the need for new recreation facilities. The Project will also be designed to minimize fire hazard, and existing emergency response in the area is adequate. Cumulative projects in the area are similarly situated, in that they will not lead to the new for new or expanded police or fire protection facilities or recreation facilities or cause substantial fire hazards. As a result, the Project will not cause cumulatively considerable public services or recreation impacts.

The Project will not cause cumulatively considerable traffic, transportation, or utilities-related impacts. The Project's trip generation projections during both construction and operation are low and will not cause substantial increases in traffic on surrounding roads. In addition, Project construction is not anticipated to overlap with other construction projects in a way that will cause combining of traffic impacts. Because the Project and cumulative projects would cause very little runoff and a minimal amount of waste, the Project will not cause cumulatively considerable utilities-related impacts.

Finally, as noted earlier, Items 20 a) through d) Wildfire, does not apply to the Project as it is not located in state responsibility areas or lands classified as very high fire hazard severity zones. As such, no Project-specific Impact or Cumulative Impacts will occur.

Each of the cumulative projects considered in this section would be required to comply with project-specific mitigation measures and/or conditions of approval, as well as applicable General Plans, zoning ordinances, laws and policies. The implementation of the identified Project-specific mitigation measures and compliance with applicable codes, compliance with the Tulare County General Plan, identified Best Management Practices, ordinances, laws, and other required regulations will reduce the magnitude of any contribution to cumulative impacts to a less than significant level.

c) Less Than Significant Impact With Mitigation: The Project will not result in substantial adverse effect on human beings, either directly or indirectly. Mitigation Measures (see Mitigation Measures 13-1 through 13-5) are provided to reduce the Project's potential effects from Noise to less than significant. No additional mitigation measures will be required. Therefore, implementation of the Project would result in a less than significant impact.

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# ATTACHMENT "A" AIR QUALITY AND GREENHOUSE GASES



### RESOURCE MANAGEMENT AGENCY

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#### AIR QUALITY AND GREENHOUSE GAS ASSESSMENT TECHNICAL MEMORANDUM

**DATE:** July 18, 2023

**TO:** Hector Guerra, Chief Environmental Planner

**FROM:** Jessica Willis, Planner IV

**SUBJECT:** Air Quality and Greenhouse Gas Assessment for the Tulare CSG 2 Solar Project (PSP 23-059)

#### PROJECT DESCRIPTION AND LOCATION

The Applicant, Tulare CSG 2 LLC, proposes to construct and operate the Tulare CSG 2 Solar Project (PSP 23-059) (Project). The proposed Project includes a clearing and grading of the site, ground mounted photovoltaic (PV) solar modules (i.e., solar panels mounted on steel posts), battery energy storage system (BESS) facility, underground electrical conductors, balance of system equipment (e.g., inverters, AC combiner boxes, transformers, and/or medium voltage switchgear), access roads, and fencing. The proposed Project will generate and store clean and renewable solar energy, with electricity offtake sold to residential customers within Tulare County and the larger Southern California Edison (SCE) Utility Territory.

The proposed Project is located on a ±77-acre site at the northeast corner of Avenue 160 and Road 180, approximately 1.25 miles southeast of the unincorporated community of Woodville and 0.75 mile directly west of Woodville Farm Camp, California (see **Figure 1**). The proposed Project will encompass ±31 acres of the ±77-acre site (see **Figure 2**). The proposed Project is located on County Assessor Parcel Numbers (APNs) 236-100-003 & 236-100-004, and is found within Section 21, Township 21 South, Range 26 East of the Woodville USGS 7.5-minute quadrangle.

#### PURPOSE AND NEED FOR ASSESSMENT

Qualified consulting firm, Dudek, prepared a report (*Air Quality and Greenhouse Gas Emissions Technical Memorandum for the Tulare CSG 2 Solar Project*), dated May 16, 2023, providing documentation regarding the potential impacts the proposed Project may have on air quality and global climate change (see **Attachment A**). The report was prepared in support of the application submitted for the proposed Project.

This document is intended to assist Tulare County Resource Management Agency (RMA) staff in the preparation of the Air Quality and Greenhouse Gas (GHG) components of the Mitigated Negative Declaration (MND) being prepared for the proposed Tulare CSG 2 Solar Project (PSP 23-059). The assessment is intended to provide sufficient detail regarding potential impacts of Project implementation and to identify mitigation measures, if necessary, to reduce potentially significant impacts.

The air quality assessment provided in this document was prepared to evaluate whether the air pollutant emissions generated from Project implementation would cause significant impacts to air quality and health risks to nearby receptors. The GHG assessment was prepared to evaluate whether the GHG emissions generated from Project implementation would cause significant impacts on global climate change.

**Figure 1. Project Vicinity** 

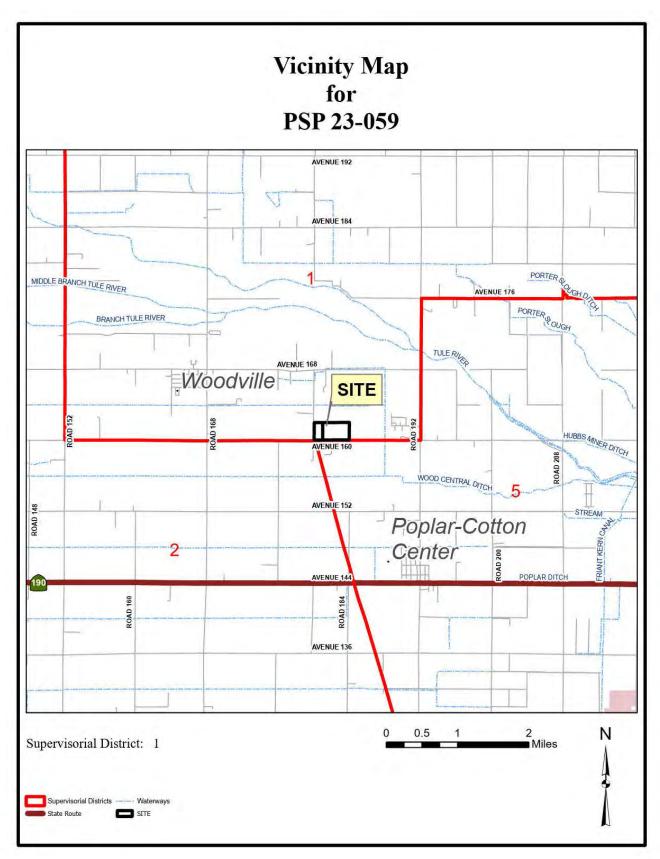


Figure 2. Site Plan LEGEND GRAVEL ROAD PROPERTY LINE BESS UNIT (SEE ELECTRICAL PLANS) KEY NOTES 50 0 OVERHEAD SETBACK TO BE VERIFIED FIGURE 1 - SOLAR PANEL SPACING SCALE 1" = 50' SITE ACCESS

Page 3 of 31

The assessments were conducted within the context of the California Environmental Quality Act (CEQA, California Public Resources Code Sections 21000, et seq.). The methodology for the Air Quality and GHG assessments follows Air District recommendations for quantification of emissions and evaluation of potential impacts as provided in their guidance documents:

- ➤ Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI), adopted March 19, 2015.¹
- ➤ Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Project under CEQA, adopted December 17, 2009.<sup>2</sup>

#### **EMISSIONS ANALYSIS**

The proposed Project will result in generation of air pollutant and GHG emissions during both construction and operations of the facility. On-site construction activities include site preparation, PV panel system installation, installation of inverters and transformers, and on-site storage system. Construction emissions include vehicle exhaust from on-site construction equipment as well as off-site material hauling and construction employee travel trips. On-site operational activities include vehicle exhaust from maintenance activities including panel washing and weed abatement. Off-site operational activities include transport of operation and maintenance supplies and employee travel trips.

As similar projects are likely to result in similar emissions, for comparison reasons only, Project-related emissions have been estimated from a similar solar project and is used in this assessment by analogy. **Table 1** provides a comparison between the previously assessed project, Tulare 40 Generation Facility (PSP 23-012), and this proposed Project.<sup>3</sup> As shown in **Table 1**, as compared to the previously assessed project, the proposed Project is approximately 19% of the land size, 13% of the energy production, and 25% of the storage capacity.

Table 1. Project Design Comparison						
Project Element	Tulare 40 Generation,	Tulare CSG 2 Solar,	% of Previous Projec			
	PSP 23-012	PSP 23-059				
Project Size (acres)	160	31	19			
Energy Production (MW)	40	5	13			
Power Battery Storage (MW)	20	5	25			
Construction (months)	8	6	75			
Construction Trips (ADT)	150 employees	50-70 employees	47			
Panel Cleaning (days)	20	10	50			
Note: MW = megawatts; ADT = Average I	Daily Trips					

Again, as similar projects are likely to result in similar emissions, this analysis assumes that the Project related construction- and operational-related emissions will be approximately 25% of those assessed for the Tulare 40 Generation Facility. Tables 2 and 3 provide the construction and operational emissions, relatively, of both projects.

Air District. Guidance for Assessing and Mitigating Air Quality Impacts. March 19, 2015. <a href="https://www.valleyair.org/transportation/GAMAQI\_12-26-19.pdf">https://www.valleyair.org/transportation/GAMAQI\_12-26-19.pdf</a>. Accessed July 2023.

<sup>&</sup>lt;sup>2</sup> Air District. Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Project under CEQA. December 17, 2009. https://www.valleyair.org/Programs/CCAP/12-17-09/3%20CCAP%20-%20FINAL%20LU%20Guidance%20-%20Dec%2017%202009.pdf. Accessed July 2023

The MND for the Tulare 40 Generation Facility (PSP 23-012) can be found online at <a href="https://tularecounty.ca.gov/rma/planning-building/environmental-planning/mitigated-negative-declarations/tulare-40-generation-facility-psp-23-012/">https://tularecounty.ca.gov/rma/planning-building/environmental-planning/mitigated-negative-declarations/tulare-40-generation-facility-psp-23-012/</a>.

<sup>4</sup> Ibid. The emissions analysis for the Tulare 40 Generation Facility (PSP 23-012) is provided in Appendix A of the MND prepared for that project.

Table 2. Project Construction Emissions Comparison by Analogy <sup>5,6</sup>							
Ducient			To	ns per Year			
Project	ROG	NOx	CO	SO <sub>2</sub>	PM <sub>10</sub> Total	PM <sub>2.5</sub> Total	
Tulare 40	0.3005	3.3639	2.3224	0.0057	0.3040	0.1924	
Tulare CSG 2	0.0752	0.8410	0.5806	0.0014	0.0760	0.0481	
Air District Threshold	10	10	100	27	15	15	
Threshold Exceeded?	NO	NO	NO	NO	NO	NO	

Table 3. Project Operational Emissions Comparison by Analogy <sup>7</sup>							
Duciost			To	ons per Year			
Project	ROG	NOx	CO	SO <sub>2</sub>	PM <sub>10</sub> Total	PM <sub>2.5</sub> Total	
Tulare 40	0.0014	0.0042	0.0224	6.1490E-05	0.0059	0.0016	
Tulare CSG 2	0.0004	0.0011	0.0056	1.538-05	0.0015	0.0004	
Air District Threshold	10	10	100	27	15	15	
Threshold Exceeded?	NO	NO	NO	NO	NO	NO	

Project-related daily emissions are provided in **Table 4**. Per Air District guidance, daily emissions are calculated based on the number of workdays for each activity type. The construction-related emissions provided in **Table 4** are based on a construction schedule of 154 days and operation-related emissions are based on 260 workdays, which assumes that facility staff will visit the site daily.

Table 4. Project Daily Criteria Pollutant Emissions								
Duoingt			Po	ounds per Day				
Project	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total		
Construction Emissions*	1.1394	12.7424	8.7970	0.0212	1.1515	0.7288		
Operational Emissions**	0.0031	0.0085	0.0431	1.1831E-04	0.0115	0.0031		
Total Emissions	0.9797	10.9305	7.5833	0.0183	0.9986	0.6278		
AAQA Screening Threshold	100	100	100	100	100	100		
Threshold Exceeded?	NO	NO	NO	NO	NO	NO		

<sup>1.</sup> Emissions based on 132 days of construction (22 workdays/month x 6 months).

The data provided in Tables 1 through 4 are for comparison purposes only and demonstrates that emissions analysis by analogy is appropriate in the event that an Air Quality study is unavailable. The assessment provided in the Impact Evaluation section of this memo is based on the emissions analysis provided in the Technical Memorandum prepared by Dudek.

#### SIGNIFICANCE THRESHOLDS

CEQA Guidelines define a significant effect on the environment as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project. <sup>8</sup> To determine if a project would have a significant impact on air quality and climate change, the type, level, and impact of criteria pollutant and GHG emissions generated by the project must be evaluated. Appendix G of the CEQA Guidelines provides the criteria (as Checklist Items) for evaluating potential impacts on the environment.

<sup>2.</sup> Emissions based on 260 workdays per year (5 workdays/week x 52 weeks/year).

<sup>&</sup>lt;sup>5</sup> The emissions analysis for the Tulare 40 Generation Facility (PSP 23-012) is provided in Appendix A of the MND prepared for that project. The MND can be found online at <a href="https://tularecounty.ca.gov/rma/planning-building/environmental-planning/mitigated-negative-declarations/tulare-40-generation-facility-psp-23-012/">https://tularecounty.ca.gov/rma/planning-building/environmental-planning/mitigated-negative-declarations/tulare-40-generation-facility-psp-23-012/</a>.

<sup>&</sup>lt;sup>6</sup> Tulare CSG 2 emissions are assumed to be 25% of those assessed for the Tulare 40 Generation Facility.

<sup>&</sup>lt;sup>7</sup> See footnotes 5 and 6.

<sup>8</sup> CEQA Guidelines Sections 15002(g) and 15382

The CEQA criteria and the Air District's significance thresholds and guidance for evaluation are provided below.

#### **Criteria Pollutant Significance Thresholds**

#### Air Quality Plans

The Air District has established thresholds of significance for criteria pollutant emissions. These thresholds are based on District New Source Review (NSR) offset requirements for stationary sources. "Stationary sources in the District are subject to some of the toughest regulatory requirements in the nation. Emission reductions achieved through implementation of District offset requirements are a major component of the District's air quality plans. Thus, projects with emissions below the thresholds of significance for criteria pollutants would be determined to "Not conflict or obstruct implementation of the District's air quality plan"."

The Air District has three sets of significance thresholds based on the source of the emissions. According to the GAMAQI, "The District identifies thresholds that separate a project's short- term emissions from its long-term emissions. The short-term emissions are mainly related to the construction phase of a project and are recognized to be short in duration. The long-term emissions are mainly related to the activities that will occur indefinitely as a result of project operations." <sup>10</sup>

Long-term (operational) emissions are further separated into permitted and non-permitted equipment and activities. Stationary (permitted) sources that comply or will comply with Air District rules and regulations are generally not considered to have a significant air quality impact. Specifically, the GAMAQI states, "District Regulation II ensures that stationary source emissions will be reduced or mitigated to below the District's significance thresholds... District implementation of New Source Review (NSR) ensures that there is no net increase in emissions above specified thresholds from New and Modified Stationary Sources for all nonattainment pollutants and their precursors. Furthermore, in general, permitted sources emitting more than the NSR Offset Thresholds for any criteria pollutant must offset all emission increases in excess of the thresholds...."

The Air District's significance thresholds are provided in **Table 5**.

Table 5. Air District Criteria Pollutant Significance Thresholds 12								
Construction Operational Emissions								
Pollutant/ Precursor	Emissions	Permitted Equipment and Activities	Non- Permitted Equipment and Activities					
	<b>Emissions (tpy)</b>	<b>Emissions</b> (tpy)	Emissions (tpy)					
CO	100	100	100					
NOx	10	10	10					
ROG	10	10	10					
SOx	27	27	27					
$PM_{10}$	15	15	15					
PM <sub>2.5</sub>	15	15	15					

<sup>9</sup> Air District, GAMAQI, Section 7.12, Page 65.

<sup>&</sup>lt;sup>10</sup> Air District, GAMAQI, Section 8.1, Page 75.

<sup>&</sup>lt;sup>11</sup> Air District, GAMAQI, Section 8.2.1, Page 76.

<sup>&</sup>lt;sup>12</sup> Air District, <a href="http://www.valleyair.org/transportation/0714-GAMAQI-Criteria-Pollutant-Thresholds-of-Significance.pdf">http://www.valleyair.org/transportation/0714-GAMAQI-Criteria-Pollutant-Thresholds-of-Significance.pdf</a>, accessed July 2023.

#### Air Quality Violations

"Determination of whether project emissions would violate any ambient air quality standard is largely a function of air quality dispersion modeling. If project emissions would not exceed State and Federal ambient air quality standards at the project's property boundaries, the project would be considered to not violate any air quality standard or contribute substantially to an existing or projected air quality violation. The need to perform an air quality dispersion modeling analysis for any project (urban development, commercial, or industrial projects) is determined on a case- by-case basis depending on the level of emissions associated with the proposed project. If such modeling is found necessary, the project consultant should check with the District to determine the appropriate model and input data to use in the analysis. Specific information for assessing significance, including screening tools and modeling guidance is available on-line at the District's website www.valleyair.org." <sup>13</sup>

"The thresholds of significance for Ambient Air Quality are based on the California Ambient Air Quality Standard (CAAQS) and National Ambient Air Quality Standard (NAAQS). A project would be considered to have a significant impact if its emissions are predicted to cause or contribute to a violation of an ambient air quality standard by exceeding any of the following:

- 1. Any of the CAAQS, or
- 2. Any of the NAAQS, and if available, the associated Significant Impact Level (SIL)."14

**Table 6** provides the California and National Ambient Air Quality Standards.

Table 6. Ambient Air Quality Standards <sup>15</sup>							
Pollutant	Averaging Time	California Standards	National Standards				
		Concentration	Primary	Secondary			
Ozone (O3)	1 Hour	0.09 ppm (180 μg/m3)		Same as Primary			
Ozone (O3)	8 Hour	0.070 ppm (137 μg/m3)	0.070 ppm* (137 μg/m3)	Same as Filmary			
Respirable Particulate Matter	24 Hour	50 μg/m3	$150 \mu g/m3$				
(PM10)	Annual Arithmetic Mean	20 μg/m3		Same as Primary			
	24 Hour		$35 \mu g/m3$	Same as Primary			
Fine Particulate Matter (PM2.5)	Annual Arithmetic Mean	12 μg/m3	12.0 μg/m3	15.0 μg/m3			
	1 Hour	20 ppm (23 mg/m3)	35 ppm (40 mg/m3)				
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m3)	9 ppm (10 mg/m3)				
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m3)					
Nitrogen Dioxide (NO2)	1 Hour	0.18 ppm (339 μg /m3)	100 ppb (188 μg/m3)	Same as Primary			

<sup>&</sup>lt;sup>13</sup> Air District, GAMAQI, Section 7.13, Page 65.

<sup>&</sup>lt;sup>14</sup> Air District, GAMAQI, Section 8.4, Page 90.

Air District, GAMAQI, Table 3, page 91; ARB, <a href="https://www.epa.gov/criteria-air-pollutants/naaqs-table">https://www.epa.gov/criteria-air-pollutants/naaqs-table</a>, accessed July2023.

	Annual Arithmetic Mean	0.030 ppm (57 μg/m3)	0.053 ppm	Same as Primary
	1 Hour	0.25 ppm (655 μg/m3)	75 ppb (196 μg/m3)	
Sulfur Diorido (SO2)	3 Hour			0.5 ppm (1300 μg/m3)
Sulfur Dioxide (SO2)	24 Hour	0.04 ppm (105 μg/m3)	0.14 ppm (for certain areas)	
	Annual Arithmetic Mean		0.030 ppm (for certain areas)	
	30 Day Average	1.5 μg/m3		
Lead	Calendar Quarter	1.5 μg/m3 (for certain areas)		Same as Primary
	Rolling 3-Month Average		0.15 μg/m3	
Visibility Reducing Particles	8 Hour	Extinction of 0.23/km; visibility of 10 miles or more		
Sulfates	24 Hour	25 μg/m3	No Notiona	l Ctondonda
Hydrogen Sulfide	1 Hour	0.03 ppm (42 μg/m3)	No National Standards	
Vinyl Chloride	24 Hour	0.01 ppm (26 μg/m3)		

#### **Cumulative Impacts**

"By its very nature, air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development. Future attainment of State and Federal ambient air quality standards is a function of successful implementation of the District's attainment plans. Consequently, the District's application of thresholds of significance for criteria pollutants is relevant to the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality.

Abbreviations:  $ppm = parts \ per \ million; \ mg/m_3 = milligram \ per \ cubic \ meter; \ \mu g/m_3 = micrograms \ per \ cubic \ meter.$ 

A Lead Agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program, including, but not limited to an air quality attainment or maintenance plan that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located [CCR §15064(h)(3)].

Thus, if project specific emissions exceed the thresholds of significance for criteria pollutants the project would be expected to result in a cumulatively considerable net increase of any criteria pollutant for which the District is in non-attainment under applicable Federal or State ambient air quality standards. This does not imply that if the project is below all such significance thresholds, it cannot be cumulatively significant. The thresholds of significance are presented in Chapter 8 [of the GAMAQI]"<sup>16</sup>.

<sup>&</sup>lt;sup>16</sup> Air District, GAMAQI, Section 7.14, Pages 65-66.

**Table 7** provides the San Joaquin Valley Air Basin attainment status for federal and state ambient air quality standards.

Table 7. San Joaquin Valley Attainment Status <sup>17</sup>					
D. II. 4	Designation / Classification				
Pollutant	Federal Standards	State Standards			
Ozone—1-hour	No Federal Standard	Nonattainment/Severe			
Ozone—8-hour	Nonattainment/Extreme	Nonattainment			
$PM_{10}$	Attainment	Nonattainment			
PM2.5	Nonattainment	Nonattainment			
Carbon monoxide	Attainment/Unclassified	Attainment/Unclassified			
Nitrogen dioxide	Attainment/Unclassified	Attainment			
Sulfur dioxide	Attainment/Unclassified	Attainment			
Lead (Particulate)	No Designation/Classification	Attainment			
Hydrogen sulfide	No Federal Standard	Unclassified			
Sulfates	No Federal Standard	Attainment			
Visibility-reducing particles	No Federal Standard	Unclassified			
Vinyl chloride	No Federal Standard	Attainment			

#### **Health Risk Significance Thresholds**

From a health risk perspective, there are two (2) categories of projects that have the potential to cause long-term health risks impacts:

- > Type A Projects: Land use projects that will place new toxic sources in the vicinity of existing receptors. This category includes sources of toxic emissions such as gasoline dispensing facilities, asphalt batch plants, warehouse distribution centers, freeways and high traffic roads, and other stationary sources that emit toxic substances.
- > Type B Projects: Land use projects that will place new receptors in the vicinity of existing toxic sources. This category includes residential, commercial, and institutional developments proposed in the vicinity of existing sources such as stationary sources, freeways and high traffic roads, rail yards, and warehouse distribution centers. 18

"Various tools already exist to perform a screening analysis from stationary sources impacting receptors (Type A projects) as developed for the AB2588 Hot Spots and air district permitting programs. Screening tools may include prioritization charts, AERSCREEN and various spreadsheets. For projects being impacted by existing sources (Type B projects), one screening tool is contained in the ARB Handbook: Air Quality and Land Use Handbook: A Community Health Perspective. The document includes a table entitled "Recommendations on Siting New Sensitive Land Uses Such As Residences, Schools, Daycare Centers, Playgrounds, or Medical Facilities" with recommended buffer distances associated with various types of common sources. If a proposed project is located within an established buffer distance to any of the listed

<sup>&</sup>lt;sup>17</sup> Air District, <a href="http://www.valleyair.org/aqinfo/attainment.htm">http://www.valleyair.org/aqinfo/attainment.htm</a>, accessed July 2023.

<sup>&</sup>lt;sup>18</sup> Air District, GAMAQI, Section 6.5, Page 44

sources, a health risk screening and/or assessment should be performed to assess risk to potential sensitive receptors. These guidelines are intended only for projects that are impacted by a single source. Another useful tool is the CAPCOA Guidance Document: Health Risk Assessments for Proposed Land Use Projects. CAPCOA prepared the guidance to assist Lead Agencies in complying with CEQA requirements. The guidance document describes when and how a health risk assessment should be prepared and what to do with the results."<sup>19</sup>

"Determination of whether project emissions would expose sensitive receptors to substantial pollutant concentrations is a function of assessing potential health risks. Sensitive receptors are facilities that house or attract children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Hospitals, schools, convalescent facilities, and residential areas are examples of sensitive receptors. When evaluating whether a development proposal has the potential to result in localized impacts, Lead Agency staff need to consider the nature of the air pollutant emissions, the proximity between the emitting facility and sensitive receptors, the direction of prevailing winds, and local topography. Lead Agencies are encouraged to use the screening tools for Toxic Air Contaminant presented in section 6.5 (Potential Land Use Conflicts and Exposure of Sensitive Receptors [pages 44 – 45 of the GAMAQI]) to identify potential conflicts between land use and sensitive receptors and include the result of their analysis in the referral document."

The San Joaquin Valley Air Pollution Control District's current thresholds of significance for toxic air contaminant (TAC) emissions from the operations of both permitted and non-permitted sources are combined and presented in **Table 8**.

Table 8. Air District Toxic Air Contaminant Thresholds of Significance <sup>21</sup>					
Carcinogens	Maximally Exposed Individual risk equals or exceeds 20 in one million				
Non-Carcinogens	Acute: Hazard Index equals or exceeds 1 for the Maximally Exposed Individual				
	Chronic: Hazard Index equals or exceeds 1 for the Maximally Exposed Individual				

#### **Nuisance Odor Screening Thresholds**

"Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, there are no quantitative or formulaic methodologies to determine the presence of a significant odor impact. Rather, the District recommends that odor analyses strive to fully disclose all pertinent information. The intensity of an odor source's operations and its proximity to sensitive receptors influences the potential significance of odor emissions. The District has identified some common types of facilities that have been known to produce odors in the San Joaquin Valley. These are presented in Chapter 8 [of the GAMAQI] along with a reasonable distance from the source within which, the degree of odors could possibly be significant."<sup>22</sup>

"The intensity of an odor source's operations and its proximity to sensitive receptors influences the potential significance of odor emissions. The District has identified some common types of facilities that have been known to produce odors in the San Joaquin Valley Air Basin. These are presented in Table 6

<sup>&</sup>lt;sup>19</sup> Air District, GAMAQI, Section 6.5, Page 45.

<sup>&</sup>lt;sup>20</sup> Air District, GAMAQI, Section 7.15, Page 66

<sup>&</sup>lt;sup>21</sup> Air District, <a href="http://www.valleyair.org/transportation/0714-GAMAQI-TACs-Thresholds-of-Significance.pdf">http://www.valleyair.org/transportation/0714-GAMAQI-TACs-Thresholds-of-Significance.pdf</a>, accessed July 2023.

<sup>&</sup>lt;sup>22</sup> Air District, GAMAQI, Section 7.16, Pages 66-67

(Screening Levels For Potential Odor Sources) [of the GAMAQI] along with a reasonable distance from the source within which, the degree of odors could possibly be significant. Table 6 (Screening Levels for Potential Odor Sources) [of the GAMAQI, **Table 5** of this document], can be used as a screening tool to qualitatively assess a project's potential to adversely affect area receptors. This list of facilities is not all-inclusive. The Lead Agency should evaluate facilities not included in the table or projects separated by greater distances if warranted by local conditions or special circumstances. If the proposed project would result in sensitive receptors being located closer than the screening level distances, a more detailed analysis should be provided."<sup>23</sup>

**Table 9** presents the Air District's screening levels for potential nuisance odor sources.

Table 9. Air District Screening Levels for Potential Odor Sources <sup>24</sup>				
Odor Generator / Type of Facility	Distance			
Wastewater Treatment Facilities	2 miles			
Sanitary Landfill	1 mile			
Transfer Station	1 mile			
Composting Facility	1 mile			
Petroleum Refinery	2 miles			
Asphalt Batch Plant	1 mile			
Chemical Manufacturing	1 mile			
Fiberglass Manufacturing	1 mile			
Painting/Coating Operations (e.g., auto body shop)	1 mile			
Food Processing Facility	1 mile			
Feed Lot/Dairy	1 mile			
Rendering Plant	1 mile			

#### **Greenhouse Gas (GHG) Significance Thresholds**

"It is widely recognized that no single project could generate enough GHG emissions to noticeably change the global climate temperature. However, the combination of GHG emissions from past, present and future projects could contribute substantially to global climate change. Thus, project specific GHG emissions should be evaluated in terms of whether or not they would result in a cumulatively significant impact on global climate change. GHG emissions, and their associated contribution to climate change, are inherently a cumulative impact issue. Therefore, project-level impacts of GHG emissions are treated as one-in-the-same as cumulative impacts." <sup>25</sup>

The Air District has determined that, "Projects complying with an approved GHG emission reduction plan or GHG mitigation program which avoids or substantially reduces GHG emissions within the geographic area in which the project is located would be determined to have a less than significant individual and cumulative impact for GHG emissions. Such plans or programs must be specified in law or approved by the Lead Agency with jurisdiction over the affected resource and supported by a CEQA compliant environmental review document adopted by the Lead Agency. Projects complying with an approved GHG

<sup>&</sup>lt;sup>23</sup> Air District, GAMAQI, Section 8.6, Pages 102-103

<sup>&</sup>lt;sup>24</sup> Air District, <a href="https://www.valleyair.org/transportation/GAMAQI-2015/GAMAQI-Criteria-Pollutant-Thresholds-of-Odors.pdf">https://www.valleyair.org/transportation/GAMAQI-2015/GAMAQI-Criteria-Pollutant-Thresholds-of-Odors.pdf</a>, accessed July 2023.

<sup>&</sup>lt;sup>25</sup> Air District, GAMAQI, Section 8.9.1, Pages 111

emission reduction plan or GHG mitigation program would not be required to implement Best Performance Standards (BPS)."<sup>26</sup>

#### **IMPACT EVALUATION**

#### **AIR QUALITY IMPACTS**

#### a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

#### Project Impact Analysis: Less Than Significant Impact

Air Quality Plans (AQPs) are plans for reaching attainment of air quality standards. The assumptions, inputs, and control measures are analyzed to determine if the Air Basin can reach attainment for the ambient air quality standards. The Project site is located within the jurisdictional boundaries of the San Joaquin Valley Unified Air Pollution Control District (Air District). To show attainment of the standards, the Air District analyzes the growth projections in the Valley, contributing factors in air pollutant emissions and formations, and existing and adopted emissions controls. The Air District then formulates a control strategy to reach attainment that includes both State and Air District regulations and other local programs and measures. For projects that include stationary sources of emissions, the Air District relies on project compliance with Rule 2201—New and Modified Stationary Source Review to ensure that growth in stationary source emissions would not interfere with the applicable AQP. Projects exceeding the offset thresholds included in the rule are required to purchase offsets in the form of Emission Reduction Credits (ERCs).

The CEQA Guidelines indicate that a significant impact would occur if the project would conflict with or obstruct implementation of the applicable air quality plan. The GAMAQI indicates that projects that do not exceed Air District regional criteria pollutant emissions quantitative thresholds would not conflict with or obstruct the applicable AQP. An additional criterion regarding the project's implementation of control measures was assessed to provide further evidence of the project's consistency with current AQPs. This document proposes the following criteria for determining project consistency with the current AQPs:

- 1. Will the project result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQPs? This measure is determined by comparison to the regional and localized thresholds identified by the District for Regional and Local Air Pollutants.
- 2. Will the project comply with applicable control measures in the AQPs?

The use of the criteria listed above is a standard approach for CEQA analysis of projects in the Air District's jurisdiction, as well as within other air districts, for the following reasons:

- Significant contribution to existing or new exceedances of the air quality standards would be inconsistent with the goal of attaining the air quality standards.
- AQP emissions inventories and attainment modeling are based on growth assumptions for the area within the air district's jurisdiction.

Page 12 of 31

<sup>&</sup>lt;sup>26</sup> Air District, GAMAQI, Section 8.9.1, Page 112

 AQPs rely on a set of air district-initiated control measures as well as implementation of federal and state measures to reduce emissions within their jurisdictions, with the goal of attaining the air quality standards.

#### Contribution to Air Quality Violations

The primary source of emissions from the proposed Project are the result of on-site construction equipment and on-road hauling of construction materials. The Air District evaluates significance of short-term (construction) emissions independent of long-term (operational) emissions. As discussed in Impact 3-b) below, Project-related emissions during construction and operations will not exceed the Air District's CEQA significance thresholds for any criteria pollutant. Therefore, the proposed Project would not be considered to obstruct implementation of the applicable air quality plan or be in conflict with the applicable air quality plan.

#### Air Quality Plan Control Measures

The AQP contains a number of control measures that are enforceable requirements through the adoption of rules and regulations. The proposed Project will be required to comply with all applicable Air District rules and regulations including, but not limited to, Regulation VIII (Fugitive PM10 Prohibition) and Rule 9510 (Indirect Source Review), which will further reduce Project-related emissions. Therefore, the Project would not conflict with or obstruct implementation of the applicable AQPs.

#### Conclusion

The proposed Project's emissions would be less than significant for all criteria pollutants and would not result in inconsistency with the AQP for this criterion. The proposed Project would comply with all applicable Air District rules and regulations. Considering the proposed Project's less-than-significant contribution to air quality violations and adherence to applicable rules and regulations, the proposed Project would not be considered inconsistent with the AQP. Therefore, the County concurs with the conclusion made in the Dudek technical memo that the Project will have a *Less Than Significant Project-specific Impact* related to this Checklist Item.

#### Cumulative Impact Analysis: Less Than Significant Impact

The geographic area of this cumulative analysis is the San Joaquin Valley Air Basin. The proposed Project would be considered to have a significant cumulative impact on air quality if Project-specific impacts are determined to be significant. As presented in **Tables 2 and 3**, relatively, the short-term construction-related and the long-term operational-related emissions will not exceed the Air District's thresholds of significance. As such, the proposed Project will not conflict with or obstruct implementation of the applicable air quality plans. Furthermore, future development within the proposed Project site will be required to implement all applicable General Plan policies and to comply with all applicable federal, state, and Air District rules and regulations. Therefore, the proposed Project will result in a *Less Than Significant Cumulative Impact* related to this Checklist Item.

Mitigation Measures: None Required

Conclusion: Less Than Significant Impact

As previously noted, the proposed Project will not exceed the Air District's thresholds of significance and therefore, will not conflict with or obstruct implementation of the applicable air quality plans. The County concurs with the conclusion made in the Dudek technical memo that *Less Than Significant Project-specific and Cumulative Impacts* related to this Checklist Item will occur.

b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?

#### Project Impact Analysis: Less Than Significant Impact

The San Joaquin Valley Air Basin is designated as non-attainment of Federal or State ambient air quality standards. for the 1-hour state ozone standard as well as for the federal and state 8-hour standards. Additionally, the Air Basin is designated as non-attainment for the state 24-hour and annual arithmetic mean  $PM_{10}$  standards, as well as the state annual arithmetic mean and the national 24-hour  $PM_{2.5}$  standards.

As previously noted, the Air District's guidance states that if project-specific criteria pollutant emissions exceed the thresholds of significance the proposed Project would be expected to result in a cumulatively considerable net increase of those emissions. As presented in **Table 10** proposed Project construction- and operational-related activities emissions would not exceed the annual Air District thresholds of significance for any criteria pollutant.

Table 10. Project Emissions <sup>27</sup>							
Emissions Type	Tons per Year						
<b>Emissions Type</b>	ROG	NOx	CO	$SO_2$	PM <sub>10</sub> Total	PM <sub>2.5</sub> Total	
Construction	0.08	0.92	1.20	< 0.005	0.11	0.05	
Operation	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	
Air District Threshold	10	10	100	27	15	15	
Threshold Exceeded?	NO	NO	NO	NO	NO	NO	

The Air District also provides guidance for the use of Ambient Air Quality Analysis (AAQA) screening to determine whether a project may exceed any applicable federal or state standards. Based on the information provided **Table 10**, daily construction- and operational-related emissions will not exceed the Air District's 100-pound-per-day (lb/day) screening threshold.

The proposed Project will not result in emissions that would exceed the District's annual criteria pollutant thresholds, nor will it cause an exceedance of the Air District's AAQA screening thresholds. Therefore, the Project will have a *Less Than Significant Project-specific Impact* related to this Checklist Item.

#### Cumulative Impact Analysis: Less Than Significant Impact

The geographic area of this cumulative analysis is the San Joaquin Air Basin. The proposed Project would be considered to have a significant cumulative impact on air quality if Project-specific impacts are determined to be significant. As project-specific impacts are less than significant, the proposed Project will not result in a cumulatively considerable net increase of any criteria pollutant for which the project region

<sup>&</sup>lt;sup>27</sup> Data was obtained from Tables 4 and 5 of the Dudek Technical Memo provided in Attachment A.

is nonattainment. Therefore, *Less Than Significant Cumulative Impacts* related to this Checklist Item will occur.

Mitigation Measures: None Required

Conclusion: Less Than Significant Impact

As previously noted, the Project will not exceed the Air District's annual thresholds of significance or daily screening thresholds. Therefore, the proposed Project will not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as nonattainment under applicable ambient air quality standard. The County concurs with the conclusion made in the Dudek technical memo that *Less Than Significant Project-specific and Cumulative Impacts* related to this Checklist Item will occur.

#### c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Project Impact Analysis: Less Than Significant Impact

Criteria Pollutants

Federal and state ambient air quality standards (AAQS) have been established for each criteria pollutant to protect the public health and welfare. The federal and state standards were developed independently with differing purposes and methods, although both processes are intended to avoid health-related effects. As such, it is reasonable to assume that if a project's emissions exceed the applicable air quality standard, which was established to protect human health, then the Project could pose a potential health risk to nearby receptors. As noted in Item b), the Air District has established a 100 lb/day screening threshold for each of the criteria pollutants to determine if a project's emissions may exceed any of the applicable AAQS. Based on the emissions presented in **Table 4**, construction and operational criteria pollutant emissions resulting from Project implementation would not exceed the 100 lb/day screening threshold. Therefore, the proposed Project would not exceed any of the health based AAQS and the Project would not expose nearby receptors to substantial criteria pollutant concentrations. *Less Than Significant Project-specific Impacts* related to this Checklist Item will occur.

#### Toxic Air Contaminants

Diesel particulate matter (DPM) represents the primary toxic air contaminates (TAC) of concern associated with the proposed Project. DPM emissions are primarily the result of the operation of internal combustion engines in equipment (e.g., loaders, backhoes, and cranes, as well as haul trucks) commonly associated with construction-related activities and with on-road diesel fueled truck trips during both construction- and operational-related activities.

The Air District recommends conducting a screening analysis for projects that have the potential to expose sensitive receptors to TAC emissions (e.g. DPM during project construction-related activities) that could pose a significance health risk. The Air District has devolved a prioritization tool to evaluate whether a Health Risk Assessment (HRA) should be prepared, which is based on the California Air Pollution Control Officers Association's (CAPCOA) latest methodology and OEHHA guidance. According to the Air District

guidance, projects that obtain a prioritization score  $\leq 1$  require no further evaluation, a score  $\geq 10$  requires a Health Risk Assessment (HRA), and a score between 1 and 10 requires a refined review. <sup>28</sup>

As similar projects are likely to result in similar emissions; as such, potential health risks associated with the development of the proposed Project are assumed to be less than or similar to the risks assessed for the previously assessed Tulare 40 Generation Facility project, which is used in this document by analogy. The nearest sensitive receptor is located approximately 1,200 feet (365.76 meters) south of the proposed Project development boundaries. Operational-related activities of the proposed Project would result in short-term, temporary, and intermittent use of mobile sources of DPM. Water trucks used during panel washing activities are required to comply with all applicable ARB emissions standard rules and regulations. Therefore, operation-related activities of the proposed Project would not expose nearby sensitive receptors to substantial DPM emissions.

The Air District's prioritization screening tool was used to evaluate the potential health risks of the Project's construction-related activities, specifically DPM emissions. As indicated in the Dudek technical memo, the Project resulted in a prioritization score of 4.6 which exceeds the Air District's threshold score of 1.<sup>29</sup> Although the proposed Project is not expected to result in significant health risk to the nearby receptors due to the temporary and intermittent nature of construction activities, the following Conditions of Approval will ensure that construction-related emissions will not pose a significant health risk.

- The applicant shall ensure that construction contracts stipulate that all off-road diesel-powered equipment used will be equipped with USEPA Tier 4 or cleaner engines, except for specialized equipment in which an USEPA Tier 4 engine is not available. In lieu of Tier 4 engines, project equipment can incorporate retrofits such that emissions reductions achieved equal to that of the Tier 4 engines at a minimum. The construction contractor shall submit a detailed list of the equipment fleet that demonstrates achievement of this mitigation measure to Tulare County Resource Management Agency Planning Branch for approval prior to receiving Notice to Proceed.
- Prior to issuance of any grading/building permits, the applicant shall provide the Tulare County Resource Management Agency Planning Branch with written confirmation from the Air District that the proposed Project will not result in significant impacts to nearby receptors.

Implementation of these Conditions of Approval would result in less than significant health risks. As such, *Less Than Significant Project-specific Impacts* related to this Checklist Item will occur.

#### <u>Cumulative Impact Analysis:</u> Less Than Significant Impact

The geographic area of this cumulative analysis is the San Joaquin Air Basin. The proposed Project would be considered to have a significant cumulative impact if Project-specific impacts are determined to be significant. A condition of approval requiring the applicant to provide documentation demonstrating that the Project will not result in significant health risks to nearby receptors will be incorporated into the Project. As Project-specific impacts will be reduced to a less than significant level, the Project will result in a *Less Than Significant Cumulative Impact* related to this Checklist Item.

Mitigation Measures: None Required

<sup>&</sup>lt;sup>28</sup> Air District, AB 2588 – TOXICS District Implementation, January 2013, <a href="https://www.valleyair.org/busind/pto/Toxic.pdf">https://www.valleyair.org/busind/pto/Toxic.pdf</a>, accessed July 2023.

<sup>&</sup>lt;sup>29</sup> Dudek Memo, page 12.

#### Conclusion: Less Than Significant Impact

Although the prioritization score may exceed the Air District's allowed score of 1, the proposed Project is not expected to result in significant health risk to the nearby receptors. Conditions of Approval will be incorporated into the Project to ensure that construction-related DPM emissions would not pose a significant risk to nearby receptors. Therefore, the County concurs with the conclusion made in the Dudek technical memo that *Less Than Significant Project-specific and Cumulative Impacts* related to this Checklist Item will occur.

d) Would the project result in other emissions (such as those leading to odors adversely affecting a substantial number of people?

Project Impact Analysis: Less Than Significant Impact

The facility itself is not a source of odorous emissions and maintenance and panel cleaning activities would not create odorous emissions. Construction-related activities would include fuels and other odor sources (such as diesel-fueled equipment) that could result in the creation of objectionable odors. Since construction-related activities would be short-term, temporary, and spatially dispersed (i.e., intermittent), and will occur in a predominantly rural area, these activities would not affect a substantial number of people. **Less Than Significant Project-specific Impacts** related to this Checklist Item will occur.

Cumulative Impact Analysis: Less Than Significant Impact

The geographic area of this cumulative analysis is the San Joaquin Valley Air Basin. The Project would be considered to have a significant cumulative impact on air quality if Project-specific impacts are determined to be significant. As Project-specific impacts will be less than significant, there will be *Less Than Significant Cumulative Impacts* related to this Checklist Item

Mitigation Measures: None Required

Conclusion: Less Than Significant Impact

The Project is not a source of nuisance odors. As such, the Project will not expose a substantial number of people to objectionable odors. Therefore, the County concurs with the conclusion made in the Dudek technical memo that *Less Than Significant Project-specific and Cumulative Impacts* related to this Checklist Item will occur.

#### **GREENHOUSE GAS IMPACTS**

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Project Impact Analysis: Less Than Significant Impact

The Air District has determined that projects consistent with an adopted Climate Action Plan (CAP) would be considered to have a less than significant impact on the environment. The Tulare County CAP serves as a guiding document for County actions to reduce GHG emissions and adapt to the potential effects of climate change. The CAP is an implementation measure of the Tulare County General Plan 2030 Update

(General Plan) which provides the supporting framework for development in the County. The CAP builds on the General Plan's framework with more specific actions that will be applied to achieve emission reduction targets required by State of California legislation. The General Plan fulfills many sustainability and GHG reduction objectives at the program level. The CAP identifies the County's fair share of reductions required to maintain consistency with the State's 2030 reductions target.

The CAP thresholds for determining consistency with the CAP are 500 dwelling units, 100,000 square feet of retail, or equivalent intensity for other uses. These thresholds are the amounts currently required from development related sources within the County to demonstrate consistency with SB 32 2030 targets As the CAP implements the County's strategy to achieve the State's 2030 reduction targets, projects below the consistency thresholds have been determined to be consistent with the State's targets and do not require GHG emissions quantification.. The proposed Project will generate approximately 82 daily vehicle trips during construction and decommissioning phases. The Transportation Screening Analysis indicates that the facility will be operated remotely and that site visits for security, maintenance, and repairs are not expected to occur regularly or produce significant amounts of trips. 30 As such, it would be conservative to assess one (1) vehicle trip per day (260 trips per year) for security, maintenance, and repairs. Assuming panel washing activities are comparative to similar projects, the proposed Project would include 10-20 days of panel washing activities, resulting in approximately 100 trips per year for panel cleaning operations. Based on these assumptions, the proposed Project will generate approximately 360 vehicle trips annually (1.38 average daily trips), which is less intense than the threshold requiring GHG emissions quantification. However, for disclosure purposes, Project construction- and operation-related GHG emissions are provided in Table 11.

Table 11 Project GHG Emissions <sup>31</sup>		
Project Phase	CO <sub>2e</sub> (metric tons per year)	
Construction / Deconstruction		
Construction	370.77	
Decommissioning	294.05	
Construction Activity Total	664.82	
Average Emissions over 30 Years	22.16	
Operations		
Area	6.73	
Energy	34.83	
Mobile	2.48	
Water	0.09	
Annual Operational Emissions	44.13	
Project Annual Total	66.29	
Project Total Over 30 Years	1,989	
Annual Displacement	-21,266	
Annual Net Emissions	-19,277	

The electricity generated during the operation of the proposed Project would be added to the power grid and displace electricity generated from fossil fuels. As this proposed Project is a renewable energy project, it will result in a benefit as it will reduce GHG emissions typically generated by other energy producers. As shown in **Table 11**, the annual net GHG emission reductions is 19,277 metric tons per year. Due to the

 $<sup>^{\</sup>rm 30}$  Dudek, Transportation Screening Analysis for the Tulare CSG 2 Solar Project, May 2023, page 4.

<sup>&</sup>lt;sup>31</sup> Data was obtained from Tables 6 and 7 and "Avoided GHG Emissions" discussion of the Dudek Technical Memo provided in Attachment A.

volume of emissions displaced, the GHG emissions generated during construction-related activities will be nullified when the Project is fully operational. As such, the Project would result in a *Less Than Significant Project-specific Impact* to this resource.

#### Cumulative Impact Analysis: Less Than Significant Impact

The geographic area of this cumulative analysis is the Tulare County, the San Joaquin Valley Air Basin, and the State of California. Project-related GHG emissions would be considered to have a significant cumulative impact if project-specific impacts are determined to be significant. Construction equipment and vehicle trips associated with the construction, operation and decommission of the proposed Project will generate approximately 1,989 metric tons of GHG emission per year; however, the Project will also displace approximately 21,266 metric tons of GHG emission per year, resulting in an overall reduction in GHG emissions. Therefore, the Project would not generate GHG emissions that would have a significant impact on the environment. *Less Than Significant Cumulative Impacts* related to this Checklist Item will occur

Mitigation Measures: None Required

Conclusion: Less Than Significant Impact

As previously noted, the Project is consistent with the Tulare County CAP and assists the State in achieving its reduction targets established in the State's Scoping Plan. As such, the Project would not generate GHG emissions that would have a significant impact on the environment. The County concurs with the conclusion made in the Dudek technical memo that *Less Than Significant Project-specific and Cumulative Impacts* related to this Checklist Item will occur.

# b) Would the project conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

#### Impact Analysis: Less Than Significant Impact

As the Project is located within unincorporated Tulare County, the most applicable GHG plan is the Tulare County CAP. The CAP is a strategic planning document that identifies sources of GHG emissions within the County, presents current and future emissions estimates, identifies a GHG reduction target for future years, and presents strategic policies and actions to reduce emissions from the development project subject to CEQA. The CAP builds on the General Plan's framework with more specific actions that will be applied to achieve emission reduction targets required by State of California legislation.

The Tulare County CAP does not require quantification of emissions for projects less intense than a 500-unit subdivision or 100,000 square feet of retail or equivalent intensity for other uses. For development projects less intense than a 500-unit subdivision or 100,000 square feet of retail or equivalent intensity, the CAP consistency checklist is used to determine the project's consistency with the CAP. The checklist contains design features and measures that are used to determine consistency. The overarching CAP consistency requirements for all projects are outlined in **Table 12**.

Table 12. CEQA Project Requirements for Consistency with CAP <sup>32</sup>		
Item	Project	
	Compliance?	
Project helps to meet the density goals from the Tulare Blueprint	N/A	
Consistency with General Plan policies	Yes	
Consistency with Rural Valley Land Plans or Foothill Growth Management Plan development criteria	Yes	
Consistency with Urban Growth Boundary expansion criteria	N/A	
Consistency for development within Rural Community Urban Development Boundaries		
(UDB) and Hamlet Development Boundaries HDB, and Legacy Development	N/A	
Boundaries (LDB)		

As previously noted, a conservative estimate indicates that the proposed Project will generate approximately 360 vehicle trips annually (1.38 average daily trips), which is less intense than the CAP consistency threshold. As such, the Project is consistent with the CAP. Furthermore, the Project would produce a new renewable source of energy in Tulare County and directly supports the State's target of increasing California's procurement of electricity from renewable sources from 50 percent to 60 percent by 2030. Therefore, *Less Than Significant Project-specific Impacts* related to this Checklist Item will occur.

Mitigation Measures: None Required

<u>Cumulative Impact:</u> Less Than Significant Impact

The geographic area of this cumulative analysis is Tulare County, the San Joaquin Valley Air Basin, and the State of California. As previously noted, the proposed Project is consistent with the Tulare County Climate Action Plan and the reduction goals identified in the State's Scoping Plans. Furthermore, the Project will result in a reduction of 19,277 metric tons of GHG emissions annually. Therefore, the proposed Project does not conflict with any applicable plan, policy or regulation adopted for the purpose of reducing GHG emission. *Less Than Significant Cumulative Impacts* related to this Checklist Item will occur.

#### Conclusion:

The Project does not conflict with any applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions. Rather, the proposed Project directly support the State's procurement goals from renewable resources. As such, the County concurs with the conclusion made in the Dudek technical memo that *Less Than Significant Project-specific and Cumulative Impacts* related to this Checklist Item will occur.

<sup>&</sup>lt;sup>32</sup> Tulare County CAP, Appendix C, available at:

## **ATTACHMENT A**

Air Quality and Greenhouse Gas Emissions Technical Memorandum Prepared by Dudek, May 2023



#### **MEMORANDUM**

To: Abby Reed, Dimension Renewable Energy

From: Adam Poll, Dudek

Subject: Air Quality and Greenhouse Gas Emissions Technical Memorandum for the Tulare CSG 2

Solar Project

**Date:** May 16, 2023

cc: Angela Zhang, Dudek
Attachment: A, Emission Calculations

Dudek is pleased to present Dimension Renewable Energy (applicant), with the following air quality and greenhouse gas (GHG) analysis for the proposed Tulare CSG 2 Solar Project (project) located in Tulare County (County). This memorandum estimates criteria air pollutant and GHG emissions and impacts from construction and operation of the project in accordance with the California Environmental Quality Act (CEQA) Guidelines. The contents and organization of this memorandum are as follows: Project Description, General Analysis and Methodology, Thresholds of Significance and Impact Analyses for the Air Quality Assessment and GHG Emissions Assessment, Conclusions, and References Cited.

# 1 Project Description

The applicant proposes to construct and operate the project; a single-axis tracker ground mounted photovoltaic (PV) community solar and battery storage facility, approximately 6.6 MWdc/5 MWac in capacity. The Project is proposed to be located on a privately-owned parcel in Tulare County, California. The applicant is requesting Special Use Permit approval from Tulare County in order to proceed with construction of the project.

# 2 General Analysis and Methodology

The project Site is located within the San Joaquin Valley Air Basin (SJVAB) and is within the jurisdictional boundaries of the San Joaquin Valley Air Pollution Control District (SJVAPCD), which has jurisdiction over Tulare County (County) where the project is located. Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. Criteria air pollutants that are evaluated include volatile organic compounds (VOCs; sometimes referred to as reactive organic gases (ROGs)), oxides of nitrogen (NO<sub>x</sub>), carbon monoxide (CO), sulfur oxides (SO<sub>x</sub>), particulate matter with an aerodynamic diameter less than or equal to 10 microns in size (coarse particulate matter, or  $PM_{10}$ ), and particulate matter with an aerodynamic diameter less than or equal to 2.5 microns in size (fine particulate matter, or  $PM_{2.5}$ ). VOCs and  $NO_x$  are important because they are precursors to ozone (O<sub>3</sub>).

GHGs are gases that absorb infrared radiation in the atmosphere. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature. Global climate change concerns are focused on whether human activities are leading to an enhancement of the greenhouse effect. Principal GHGs include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), O<sub>3</sub>, and water vapor. If the atmospheric concentrations of GHGs rise, the average temperature of the lower atmosphere will gradually increase. Globally, climate change has the potential to impact numerous environmental resources though uncertain impacts related to future air temperatures and precipitation patterns. Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. Climate change is already affecting California: average temperatures have increased, leading to more extreme hot days and fewer cold nights; shifts in the water cycle have been observed, with less winter precipitation falling as snow, and both snowmelt and rainwater running off earlier in the year; sea levels have risen; and wildland fires are becoming more frequent and intense due to dry seasons that start earlier and end later (CAT 2010).

The effect each GHG has on climate change is measured as a combination of the mass of its emissions and the potential of a gas or aerosol to trap heat in the atmosphere, known as its global warming potential (GWP), which varies among GHGs. Total GHG emissions are expressed as a function of how much warming would be caused by the same mass of  $CO_2$ . Thus, GHG emissions are typically measured in terms of pounds or tons of  $CO_2$  equivalent ( $CO_2$ e). The  $CO_2$ e for a gas is derived by multiplying the mass of the gas by the associated GWP, such that metric tons (MT) of  $CO_2$ e = (MT of a GHG) × (GWP of the GHG). CalEEMod assumes that the GWP for  $CH_4$  is 25, which means that emissions of 1 MT of  $CH_4$  are equivalent to emissions of 25 MT of  $CO_2$ , and the GWP for  $N_2O$  is 298, based on the Intergovernmental Panel on Climate Change's Fourth Assessment Report (IPCC 2007).

#### 2.1 Construction

Emissions from the construction phase of the project were estimated using the California Emissions Estimator Model (CalEEMod) Version 2022 (CAPCOA 2022). For the purposes of modeling, it was assumed that construction of the project would commence in June 2024¹ and would last approximately 7 months, ending in December 2024. The project was assumed to be operational for 30 years and then be decommissioned and removed at the end of its lifetime. Because the EMFAC and OFFROAD models within CalEEMod only have emission factors out to 2050, 2050 was used as the surrogate year for decommissioning, which is planned for 2055. The analysis contained herein is based on the following subset area schedule assumptions (duration of phases is approximate):

- Site preparation 1 month
- Building construction 6 months
- Paving 6 months
- Decommissioning 7 months

The majority of the phases listed above would occur concurrently and would not occur sequentially in isolation. The estimated construction duration was provided by the project applicant. Detailed construction equipment modeling assumptions are provided in Attachment A, CalEEMod Outputs.

The analysis assumes a construction start date of June 2024, which represents the earliest date construction would initiate. Assuming the earliest start date for construction represents the worst-case scenario for criteria air pollutant emissions because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years.



The construction equipment mix used for estimating the construction emissions of the project is based on information provided by the project applicant and is shown in Table 1.

**Table 1. Construction Scenario Assumptions** 

	One-Way Vehic	ele Trips		Equipment			
Construction Phase	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Average Daily Haul Truck Trips	Equipment Type	Quantity	Usage Hours	
Site preparation	8	4	4	Tractors/Loaders/ Backhoes	1	8	
				Skid Steer Loaders	1	8	
Building	50	6	8	Forklifts	2	8	
Construction				Skid Steer Loaders	4	8	
				Excavators	1	8	
Paving	12	2	4	Paving Equipment	1	8	
				Skid Steer Loaders	1	8	
				Tractors/Loaders/ Backhoes	1	8	
Decommissioning	50	6	8	Forklifts	3	8	
				Generator Sets	1	8	
				Cranes	1	8	
				Welders	1	8	
				Tractors/Loaders/ Backhoes	3	8	

Note: See Attachment A for details.

For the analysis, it was assumed that heavy construction equipment would be operating 5 days per week (22 days per month) during project construction. Construction worker and vendor trips were based on applicant provided data. Equipment emissions were estimated using the CalEEMod default emission factors for the construction duration.

All vehicles and haul trucks would travel to and from the onsite staging area. All water trucks were assumed to travel on unpaved road. Haul trucks during the building construction and decommissioning phases were assumed to travel 102 miles to the edge of the air basin for material deliveries.

Implementation of the project would generate air pollutant emissions from entrained dust, off-road equipment, vehicle emissions, and architectural coatings. Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in  $PM_{10}$  and  $PM_{2.5}$  emissions. The project would comply with SJVAPCD Rule 8021 to control dust emissions generated during the grading activities, which would be required as a condition of approval. Standard construction practices that would be employed to reduce fugitive dust emissions include watering of the active sites to maintain acceptable levels of dust generation.

A detailed depiction of the construction schedule—including information regarding phases and equipment used during each phase—is included in Attachment A to this letter report. The information contained in Attachment A was used as CalEEMod model inputs.



## 2.2 Operation

Emissions from the operational phase of the project were estimated using CalEEMod. Operational year 2025 was assumed, as it would be the first year following completion of construction.

#### **Area Sources**

During operations and maintenance, one of the main sources of GHG emissions would be fugitive emissions from equipment containing  $SF_6$  gas installed at the proposed switchgear.  $SF_6$  has a GWP of 23,900 using  $CO_2$  at a reference value of 1 (IPCC 2007). The collector substation would include six 138 kilovolt (kV) breakers that would contain  $SF_6$  gas. It is estimated that the project would maintain a total of 124 pounds of  $SF_6$  gas at the switchgear. Although leakage is unlikely, for the purposes of the project's emissions inventory, it was assumed that the breakers would have a maximum annual leak rate of 0.5% in accordance with the Institute of Electrical and Electronics Engineers (IEEE) PC37.122 - Standard for High Voltage Gas-Insulated Substations Rated Above 52 kV (IEEE 2018). Emissions from  $SF_6$  gas are included as part of area source emissions.

#### **Energy Sources**

As represented in CalEEMod, energy sources include emissions associated with building electricity and natural gas usage. Electricity use would contribute indirectly to criteria air pollutant emissions; however, the emissions from electricity use are only quantified for GHGs in CalEEMod, since criteria pollutant emissions occur at the site of the power plant, which is typically off site. The battery storage containers would have heating, ventilation, and air conditioning systems to keep the batteries in the optimal operating temperatures. It was estimated that the project would require up to 219,000 kWh of electricity per year. The project would not have natural gas.

Emissions were calculated by multiplying the energy use by the utility's carbon intensity (pounds of GHGs per megawatt-hour for electricity) for CO<sub>2</sub> and other GHGs. Annual electricity emissions were estimated in CalEEMod using the emissions factors for SCE, which would be the energy source provider for the project.

#### Mobile Sources

Following the completion of construction activities, the project would generate criteria pollutant emissions from mobile sources (vehicular traffic) as a result of the maintenance activity of the project. It is anticipated that a maximum of three permanent staff employees would use the operations and maintenance building for ongoing facility monitoring, equipment storage, and repairs. CalEEMod default data, including trip characteristics and emissions factors, were used for the model inputs. Project-related traffic was assumed to include a mixture of vehicles in accordance with the associated use, as modeled within CalEEMod. Emission factors representing the vehicle mix and emissions for 2025 were used to estimate emissions associated with vehicular sources.

#### Water and Wastewater

Supply, conveyance, treatment, and distribution of water for the project require the use of electricity, which would result in associated indirect GHG emissions. Similarly, wastewater generated by the project requires the use of electricity for conveyance and treatment, along with GHG emissions generated during wastewater treatment. The project would utilize water for panel washing. Water use was provided by the applicant.



#### 3 Air Quality Assessment

#### Thresholds of Significance 3.1

The significance criteria used to evaluate the project impacts to air quality are based on the recommendations provided in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.). For the purposes of this air quality analysis, a significant impact would occur if the project would:

- 1. Conflict with or obstruct implementation of the applicable air quality plan.
- 2. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.
- 3. Expose sensitive receptors to substantial pollutant concentrations.
- 4. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) indicates that, where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied on to determine whether a project would have a significant impact on air quality.

#### San Joaquin Valley Air Pollution Control District

The SJVAPCD Guidance for Assessing and Mitigating Air Quality Impacts has established emissions-based thresholds of significance for criteria pollutants (SJVAPCD 2015), which are depicted in Table 2. As shown in Table 2, the SJVAPCD has established significance thresholds for construction emissions and operational permitted and non-permitted equipment and activities, and it recommends evaluating impact significance for these categories separately. These thresholds of significance are based on a calendar-year basis, although construction emissions are assessed on a rolling 12-month period.

Table 2. San Joaquin Valley Air Pollution Control District California Environmental Quality Act Significance Thresholds for Criteria Pollutants

		Operational Emissi	Operational Emissions (tons per year)			
Pollutant	Construction Emissions (tons per year)	Permitted Equipment and Activities	Non-Permitted Equipment and Activities			
ROG	10	10	10			
NOx	10	10	10			
CO	100	100	100			
SO <sub>x</sub>	27	27	27			
PM <sub>10</sub>	15	15	15			
PM <sub>2.5</sub>	15	15	15			

Source: SJVAPCD 2015.

In addition to the annual emissions mass thresholds described in Table 2, the SJVAPCD has also established screening criteria to determine whether a project would result in a CO hotspot at affected roadway intersections



(SJVAPCD 2015). If neither of the following criteria are met at any of the intersections affected by the project, the project would result in no potential to create a violation of the CO standard:

- A traffic study for the project indicates that the level of service (LOS) on one or more streets or at one or more intersections in the project vicinity will be reduced to LOS E or F.
- A traffic study indicates that the project will substantially worsen an already existing LOS F on one or more streets or at more or more intersections in the project vicinity.

The SJVAPCD has also established screening criteria to determine whether a project needs to prepare an ambient air quality analysis. If a project exceeds 100 pounds per day on site for any mitigated criteria air pollutant, an ambient air quality assessment must be performed for all criteria air pollutants (SJVAPCD 2015).

#### **Toxic Air Contaminants**

The SJVAPCD has established thresholds of significance for combined TAC emissions from the operations of both permitted and non-permitted sources (SJVAPCD 2015). Projects that have the potential to expose the public to TACs in excess of the following thresholds would be considered to have a significant air quality impact:

- Probability of contracting cancer for the maximally exposed individual equals or exceeds 20 in 1 million people.<sup>2</sup>
- Hazard Index<sup>3</sup> for acute and chronic noncarcinogenic TACs equals or exceeds 1 for the maximally exposed individual.

#### **Odors**

As described in the *Guidance for Assessing and Mitigating Air Quality Impacts*, due to the subjective nature of odor impacts, there are no quantitative thresholds to determine if potential odors would have a significant impact (SJVAPCD 2015). Projects must be assessed for odor impacts on a case-by-case basis for the following two situations:

- Generators: Projects that would potentially generate odorous emissions proposed to locate near existing sensitive receptors or other land uses where people may congregate.
- Receivers: Residential or other sensitive receptor projects or other projects built for the intent of attracting people locating near existing odor sources.

The SJVAPCD has identified some common types of facilities that have been known to produce substantial odors, as well as screening distances between these odor sources and receptors. These are depicted in Table 3.

Non-cancer adverse health impact, both for acute (short-term) and chronic (long-term) health effects, is measured against a hazard index, which is defined as the ratio of the predicted incremental exposure concentration from the project to a published reference exposure level that could cause adverse health effects as established by the Office of Environmental Health Hazard Assessment. The ratio (referred to as the hazard quotient) of each noncarcinogenic substance that affects a certain organ system is added together to produce an overall hazard index for that organ system.



<sup>&</sup>lt;sup>2</sup> The cancer risk threshold was increased from 10 to 20 in 1 million with approval of APR 1906 (Framework for Performing Health Risk Assessments) on June 30, 2015.

**Table 3. Screening Levels for Potential Odor Sources** 

Type of Facility	Screening Distance (miles)
Wastewater treatment facility	2
Sanitary landfill	1
Transfer station	1
Composting facility	1
Petroleum facility	2
Asphalt batch plant	1
Chemical manufacturing	1
Fiberglass manufacturing	1
Painting/coating (i.e., auto body shop)	1
Food processing facility	1
Feed lot / dairy	1
Rendering plant	1

Source: SJVAPCD 2015.

- 1. If the project would result in an odor source and sensitive receptors being located within these screening distances, additional analysis would be required. For projects involving new receptors locating near an existing odor source where there is currently no nearby development and for new odor sources locating near existing receptors, the SJVAPCD recommends the analysis be based on a review of odor complaints for similar facilities, with consideration also given to local meteorological conditions, particularly the intensity and direction of prevailing winds. Regarding the complaint record of the odor source facility (or similar facility), the facility would be considered to result in significant odors if there has been:
  - More than one confirmed complaint per year averaged over a 3-year period, or
  - Three unconfirmed complaints<sup>4</sup> per year averaged over a 3-year period.

# 3.2 Impact Analysis

# 3.2.1 Would the project conflict with or obstruct implementation of the applicable air quality plan?

A project is non-conforming with an air quality plan if it conflicts with or delays implementation of any applicable attainment or maintenance plan. A project is conforming if it complies with all applicable SJVAPCD rules and regulations, complies with all proposed control measures that are not yet adopted from the applicable plan(s), and is consistent with the growth forecasts in the applicable plan(s) (or is directly included in the applicable plan). Zoning changes, specific plans, general plan amendments and similar land use plan changes which do not increase dwelling unit density, do not increase vehicle trips, and do not increase VMT are also deemed to comply with the applicable air quality plan (SJVAPCD 2015).

<sup>&</sup>lt;sup>4</sup> An unconfirmed complaint means that either the odor/air contaminant release could not be detected or the source/facility cannot be determined (SJVAPCD 2015a).

The project would comply with applicable SJVAPCD rules and regulations, such as Regulation VIII (Fugitive PM<sub>10</sub> Prohibitions) and IX (Mobile and Indirect Sources). The project would not conflict with existing land uses or result in population growth. In addition, the project would not result in a long-term increase in the number of trips or increase the overall VMT in the area. Haul truck, vendor truck, and worker vehicle trips would be generated during the proposed construction activities but would cease after construction is completed until decommissioning at the end of the project life span. Emissions during construction would not exceed the SJVAPCD significance threshold. During the longer-term operational phase, the project would have routine inspection and maintenance activities that would result in a net increase in emissions although, as discussed in Section 3.2.2, the increase in emissions would not exceed any significance threshold or violate any SJVAPCD rule or regulation. The project site is currently zoned as AE-40 and permits public utility structures as set forth in Section 16: Variances and Special Use Permits of the County's Municipal Code. Therefore, the project would be consistent with the zoned use for the site. The project would result in a less-than-significant impact during construction and operation.

# 3.2.2 Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and SJVAPCD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, project-level thresholds of significance for criteria pollutants are relevant in the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality.

#### **Construction Emissions**

Proposed construction activities would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment, soil disturbance, and VOC off-gassing) and off-site sources (i.e., on-road vendor trucks, haul trucks, and worker vehicle trips). Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and, for particulate matter, the prevailing weather conditions. Therefore, such emission levels can only be approximately estimated.

CalEEMod Version 2022 was used to estimate emissions from construction of the project. Internal combustion engines used by construction equipment, trucks, and worker vehicles would result in emissions of VOCs,  $NO_x$ ,  $CO_x$ ,  $PM_{10}$ , and  $PM_{2.5}$ .  $PM_{10}$  and  $PM_{2.5}$  emissions would also be generated by entrained dust, which results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil. The project would be required to comply with SJVAPCD Rule 8021 to control dust emissions generated during any dust-generating activities. Standard construction practices that would be employed to reduce fugitive dust emissions include watering of the active dust areas two times per day, with additional watering depending on weather conditions. The CalEEMod default assumptions were used for estimating fugitive dust emissions from grading on site. Table 6 presents the annual emissions reported as the highest rolling 12 months estimated during construction of the project. As the project construction duration is 7 months, the entirety of the project construction represents the highest 12 months. Details of the emission calculations are provided in Attachment A. The project would also comply with SJVAPCD Rule 9510, Indirect Source Review, which requires development projects to reduce exhaust emissions from construction equipment by 20% for  $NO_x$  and 45% for  $PM_{10}$  compared to the statewide average. This is reflected as



well in Table 4. The reductions taken in Table 6 are compared to the statewide average fleet, which is calculated using the Sacramento Metropolitan Air Quality Management District's Construction Mitigation Tool.

**Table 4. Estimated Maximum Construction Criteria Air Pollutant Emissions - Project** 

	ROG	NO <sub>x</sub>	СО	S0 <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Year	Tons per mo	onth				
2024	0.08	0.92	1.20	<0.00	0.11	0.05
2050	0.06	0.57	0.90	<0.00	0.08	0.03
Maximum Rolling 12-Month Total Emissions	0.08	0.92	1.20	<0.00	0.11	0.05
SJVAPCD Threshold	10	10	100	27	15	15
Threshold Exceeded?	No	No	No	No	No	No
Total Annual Emissions with ISR Compliance <sup>1</sup>	NA	0.74	NA	NA	0.09	NA
Threshold Exceeded?	No	No	No	No	No	No

**Notes:** ROG = reactive organic gases; NO<sub>x</sub> = oxides of nitrogen; CO = carbon monoxide; SO<sub>x</sub> = sulfur oxides; PM<sub>10</sub> = coarse particulate matter; PM<sub>2.5</sub> = fine particulate matter; SJVAPCD = San Joaquin Valley Air Pollution Control District; ISR = Indirect Source Review; <0.00 = less than 0.004.

As shown in Table 4, the project construction would not exceed SJVAPCD's rolling 12-month thresholds. Therefore, construction impacts associated with criteria air pollutant emissions would be **less than significant**.

#### **Operational Emissions**

Emissions from the operational phase of the project were estimated using CalEEMod. Operational year 2025 was assumed, as it would be the first year following completion of construction. Table 5 presents the estimated emissions during operation.

**Table 5. Estimated Maximum Annual Operational Criteria Air Pollutant Emissions** 

	ROG	NO <sub>x</sub>	СО	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Emissions Source	Tons per ye	ear				
Area	<0.00	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	<0.00	<0.00	0.01	<0.00	<0.00	<0.00
Total	<0.00	<0.00	0.01	<0.00	<0.00	<0.00
SJVAPCD Threshold	10	10	100	27	15	15
Threshold Exceeded?	No	No	No	No	No	No

**Notes:** ROG = reactive organic gases; NO<sub>x</sub> = oxides of nitrogen; CO = carbon monoxide; SO<sub>x</sub> = sulfur oxides; PM<sub>10</sub> = coarse particulate matter; PM<sub>2.5</sub> = fine particulate matter; SJVAPCD = San Joaquin Valley Air Pollution Control District. <0.00 = less than 0.004 See Attachment A for complete results. Totals may not sum precisely due to rounding.

As shown in Table 5, the project would not exceed SJVAPCD's significance thresholds during operations. Therefore, operational impacts associated with criteria air pollutant emissions would be less than significant.



 $<sup>^{\</sup>scriptsize 1}$  This row reflects minimum required emissions reductions in NO $_{\scriptsize x}$  and PM $_{\scriptsize 10}$  to comply with Rule 9510. See Attachment A for complete results.

For purposes of this air quality analysis and consistent with SJVAPCD guidance documents, actions that exceed criteria pollutant NAAQS (i.e., primary standards designed to safeguard the health of people considered to be sensitive receptors while outdoors and secondary standards designed to safeguard human welfare) or the Environmental Protection Agency's Prevention of Significant Deterioration Significant Impact Levels would result in significant impacts. Additionally, actions that violate CAAQS developed by CARB are considered significant.

Determination of whether project emissions would violate any ambient air quality standard is largely a function of air quality dispersion modeling. The SJVAPCD recommends that an ambient air quality analysis be performed when emissions of any criteria pollutant would equal or exceed any applicable threshold of significance for criteria pollutants or 100 pounds per day of any criteria pollutant. If the impacts resulting from a project's emissions would not exceed the CAAQS and NAAQS at the project's property boundaries, the project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation (SJVAPCD 2015). As shown in Attachment A, the project did not exceed 100 pounds per day on site during construction when assuming compliance with SJVAPCD Rule 9501, Indirect Source Rule; therefore, the project does not require an air quality dispersion modeling assessment.

Air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and the SJVAPCD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, project-level thresholds of significance for criteria pollutants are relevant in the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality. As previously described, the project would have a less-than-significant impact for construction and operation.

The SJVAB is a nonattainment area for  $O_3$ ,  $PM_{10}$ , and  $PM_{2.5}$  under the NAAQS and/or CAAQS. The poor air quality in the SJVAB is the result of cumulative emissions from motor vehicles, off-road equipment, commercial and industrial facilities, and other emission sources. Projects that emit these pollutants or their precursors (i.e., ROG and  $NO_x$  for  $O_3$ ) potentially contribute to poor air quality. Annual construction emissions associated with the project would not exceed the SJVAPCD significance thresholds for criteria pollutants. Accordingly, the project would result in a less-than-significant increase in emissions of nonattainment pollutants. The project would not generate a significant long-term increase in operational emissions, as shown in Table 5. Furthermore, the project would not conflict with the SJVAPCD Ozone Attainment Plans, or the  $PM_{10}$  or  $PM_{2.5}$  Attainment Plan, which address the cumulative emissions in the SJVAB and account for emissions associated with construction activity in the SJVAB.

As shown in Tables 4 and 5, the project would not exceed the SJVAPCD significance thresholds. Based on these considerations, the project would not result in a cumulatively considerable increase in emissions of nonattainment pollutants. Impacts would be **less than significant**.

# 3.3.3 Would the project expose sensitive receptors to substantial pollutant concentrations?

Air quality varies as a direct function of the amount of pollutants emitted into the atmosphere, the size and topography of the air basin, and the prevailing meteorological conditions. Air quality problems arise when the rate of pollutant emissions exceeds the rate of dispersion. Reduced visibility, eye irritation, and adverse health impacts upon those persons termed "sensitive receptors" are the most serious hazards of existing air quality conditions in the area. Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and



the activities involved. People most likely to be affected by air pollution, as identified by CARB, include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases; however, for the purposes of this analysis, residents are also considered sensitive receptors. As such, sensitive receptors include residences, schools, playgrounds, child-care centers, athletic facilities, long-term health-care facilities, rehabilitation centers, convalescent centers, and retirement homes. The closest off-site sensitive receptors to the project are existing residential land uses located approximately 1,200 feet south of the project site. As discussed, the project would comply with SJVAPCD Rule 8021, which requires applicants to develop, prepare, submit, obtain approval of, and implement a dust control plan.

#### Valley Fever Exposure

The project Site is located in Tulare County, which is a county where Valley Fever, caused by the fungus Coccidioides immitis, is considered endemic. Rates of Valley Fever are relatively high in Tulare County. Tulare County reported 317 cases of Valley Fever in 2021 (CDPH 2022). This fungus lives in the top 2–12 inches of soil; therefore, during soil disturbance, the fungal spores can be released into the air. The spores are too small to be seen by the naked eye, and there is no reliable way to test the soils for spores (CDPH 2019). The project Site is located in an area where there is a high risk of Valley Fever, a fungal-borne disease. The disease is caused by inhalation of dust containing the Coccidioides immitis, a fungal spore. Most people who are exposed have no or very mild systems; however, in a small percentage of the population, it can generate more serious systems of meningitis, pneumonia, or chronic fatigue. Construction workers have increased risk of exposure, since this job results in the disturbance of soils where fungal spores are found. Valley Fever infection rates are highest in California from June to November, and the illness is endemic in Tulare County. Therefore, a risk of Valley Fever infection exists for construction personnel working on the project in the peak summer and fall months. Valley Fever risk from construction-related dust from the project will be mitigated by implementation of an SJVAPCD-approved dust control plan and compliance with SJVAPCD Rule 8021. Therefore, impacts to construction workers and nearby sensitive receptors, would be less than significant.

#### Health Impacts of Toxic Air Contaminants

A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute (immediate) and/or chronic (cumulative) non-cancer health effects. A toxic substance released into the air is considered a toxic air contaminant (TAC). Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and non-carcinogenic effects. Examples include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources such as automobiles; and area sources such as landfills. Non-carcinogenic effects typically affect one or more target organ systems and may be experienced on either short-term (acute) or long-term (chronic) exposure to a given TAC.

TACs are identified by federal and state agencies based on a review of available scientific evidence. In the State of California, TACs are identified through a two-step process that was established in 1983 under the Toxic Air Contaminant Identification and Control Act. This two-step process of risk identification and risk management and reduction was designed to protect residents from the health effects of toxic substances in the air. In addition, the California Air Toxics "Hot Spots" Information and Assessment Act, Assembly Bill 2588, was enacted by the legislature in 1987 to address public concern over the release of TACs into the atmosphere.

Project construction would result in emissions of diesel particulate from heavy construction equipment and trucks accessing the Site. Diesel particulate is characterized as a TAC by the State of California. The Office of Environmental



Health Hazard Assessment has identified carcinogenic and chronic non-carcinogenic effects from long-term exposure but has not identified health effects due to short-term exposure to diesel exhaust. According to the Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year exposure period for the maximally exposed individual resident; however, such assessments should be limited to the period/duration of activities associated with the project. Thus, the duration of the proposed construction activities would only constitute a small percentage of the total 30-year exposure period. Due to this relatively short period of exposure (7 months), distance to the closest sensitive receptors, and minimal particulate emissions on site, TACs generated by the project would not result in concentrations causing significant health risks. Further, when using the SJVAPCD prioritization calculator, the project would result in a prioritization score of 4.6 at the nearest receptor. A prioritization score over 10 would require a refined health risk assessment to be prepared. As such, impacts would be less than significant.

Additionally, the health risk public-notification thresholds adopted by the SJVAPCD Board is 20 excess cancer cases in a million for cancer risk and a hazard index of more than one (1.0) for non-cancer risk. The hazard index of more than 1.0 means that predicted levels of a toxic pollutant are greater than the reference exposure level, which is considered the level below which adverse health effects are not expected. Examples of projects that emit toxic pollutants include oil and gas processing, gasoline dispensing, dry cleaning, electronic and parts manufacturing, medical equipment sterilization, freeways, and rail yards (SJVAPCD 2015). The project would not emit TACs during operation, and toxic contaminants are not anticipated to be present at the project site; as such, a formal health risk assessment will not be required for the project. Accordingly, the project is not anticipated to result in emissions that would exceed the SJVAPCD Board-adopted health risk notification thresholds.

#### **Health Impacts of Carbon Monoxide**

As described previously, exposure to high concentrations of CO can result in dizziness, fatigue, chest pain, headaches, and impairment of central nervous system functions. Mobile-source impacts, including those related to CO, occur essentially on two scales of motion. Regionally, project-related construction travel would add to regional trip generation and increase the vehicle miles traveled within the local airshed and the SJVAB. Locally, construction traffic would be added to the roadway system in the vicinity of the project Site. Although the SJVAB is currently an attainment area for CO, there is a potential for the formation of microscale CO "hotspots" to occur immediately around points of congested traffic. Hotspots can form if such traffic occurs during periods of poor atmospheric ventilation, is composed of a large number of vehicles cold-started and operating at pollution-inefficient speeds, and/or is operating on roadways crowded with non-project traffic. Because of continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SJVAB is steadily decreasing.

The SJVAPCD Guidance for Assessing and Mitigating Air Quality Impacts states that a quantitative CO hotspots analysis be performed if either of the following two conditions exist: (1) a traffic study for the project indicates that the level of service (LOS) on one or more streets or at one or more intersections in the project vicinity will be reduced to LOS E or F, or (2) a traffic study indicates that the project will substantially worsen an already existing LOS F on one or more streets or at more or more intersections in the project vicinity (SJVAPCD 2015). The project would cause a temporary increase in traffic during the 7-month construction period. However, the project would only result in 2 additional trips per week during operation. Therefore, the project would not materially contribute to the local traffic or impact local intersections level of service. As such, impacts to sensitive receptors with regard to potential CO hotspots resulting from the project's contribution to cumulative traffic-related air quality impacts would be less than significant.



#### Health Impacts of Other Criteria Air Pollutants

Construction of the project would not exceed the SJVAPCD threshold for ROGs. Specific ROGs may be TACs; however, ROGs are not expected to present risk of health impacts even if the specific ROGs associated with project construction aren't entirely known. Some ROGs would be associated with motor vehicles and construction equipment, whereas others are associated with architectural coatings, the emissions of which would not result in the exceedances of the SJVAPCD's threshold as shown in Table 2. Generally, the ROGs in architectural coatings are of relatively low toxicity. Additionally, SJVAPCD Rule 4601 restricts the ROG content of coatings for both construction and operational applications.

Operation of the project would not result in emissions that exceed the SJVAPCD's emission thresholds for any criteria air pollutants, including ROGs, NO<sub>x</sub>, CO, SO<sub>x</sub>, PM<sub>10</sub>, or PM<sub>2.5</sub>. Regarding ROGs, some ROGs would be associated with motor vehicles and construction equipment, while others are associated with architectural coatings, the emissions of which would not result in the exceedances of the SJVAPCD's thresholds as shown in Table 2. Generally, the ROGs in architectural coatings are of relatively low toxicity.

In addition, ROGs and  $NO_x$  are precursors to  $O_3$ , for which the SJVAB is designated as nonattainment with respect to the NAAQS and CAAQS (the Environmental Protection Agency has designated the SJVAB as a nonattainment area for the federal 8-hour  $O_3$  standard, and CARB has designated the SJVAB as a nonattainment area for the state 1-hour and 8-hour  $O_3$  standards). The health effects associated with  $O_3$  are generally associated with reduced lung function. The contribution of ROGs and  $NO_x$  to regional ambient  $O_3$  concentrations is the result of complex photochemistry. The increases in  $O_3$  concentrations in the SJVAB due to  $O_3$  precursor emissions tend to be found downwind from the source location to allow time for the photochemical reactions to occur. However, the potential for exacerbating excessive  $O_3$  concentrations would also depend on the time of year that the ROG emissions would occur because exceedances of the  $O_3$  ambient air quality standards tend to occur between April and October, when solar radiation is highest.

The holistic effect of a single project's emissions of  $O_3$  precursors is speculative due to the lack of quantitative methods to assess this impact. Nonetheless, the ROG and  $NO_x$  emissions associated with project construction could minimally contribute to regional  $O_3$  concentrations and the associated health impacts.  $O_3$  health impacts are associated with respiratory irritation, which may be experienced by nearby receptors during the periods of heaviest use of off-road construction equipment. The project would not exceed the SJVAPCD threshold for  $O_3$  precursor  $NO_x$  during construction thus there would be a less than significant impact during construction. In addition, the long-term operational emissions would not exceed any significance thresholds for  $O_3$  precursors.

Construction and operation of the project would not exceed thresholds for  $PM_{10}$  or  $PM_{2.5}$  and would not contribute to exceedances of the NAAQS and CAAQS for particulate matter. The project would also not result in substantial DPM emissions during construction and operation and therefore, would not result in significant health effects related to DPM exposure. Because the project would not exceed thresholds for  $PM_{10}$  or  $PM_{2.5}$  during construction and operation, health impacts would be less than significant.

Regarding NO<sub>2</sub>, according to the construction emissions analysis, construction of the project would not contribute to exceedances of the NAAQS and CAAQS for NO<sub>2</sub> during construction. Emissions from construction of the project would be short-term in duration, and the long-term operational emissions would not exceed any significance thresholds. NO<sub>2</sub> and NO<sub>x</sub> health impacts are associated with respiratory irritation, which may be experienced by nearby receptors during the periods of heaviest use of off-road construction equipment. Therefore, the construction- and operation-related health impacts for NO<sub>2</sub> would be considered less than significant.



# 3.3.4 Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The occurrence and severity of potential odor impacts depends on numerous factors. The nature, frequency, and intensity of the source; the wind speed and direction; and the sensitivity of receiving location all contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying and cause distress among the public and generate citizen complaints.

Odors would be potentially generated from vehicles and equipment exhaust emissions during construction of the project. Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment and asphalt pavement application. Such odors would disperse rapidly from the project site and generally occur at magnitudes that would not affect substantial numbers of people. Therefore, impacts associated with odors during construction would be less than significant.

Land uses and industrial operations associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting operations, refineries, landfills, dairies, and fiberglass molding facilities (SJVAPCD 2015). The project would not create any new sources of odor during operation as identified within Table 3. Therefore, project operations would result in an odor impact that would be less than significant.

### 4 Greenhouse Gas Emissions Assessment

# 4.1 Thresholds of Significance

The significance criteria used to evaluate the Project's GHG emissions impacts is based on the recommendations provided in Appendix G of the CEQA Guidelines. For the purposes of this GHG emissions analysis, the Project would have a significant environmental impact if it would (14 CCR 15000 et seq.):

- 1. Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
- 2. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. In addition, while GHG impacts are recognized exclusively as cumulative impacts (CAPCOA 2008), GHG emissions impacts must also be evaluated on a project-level under CEQA.

#### SJVAPCD

In August 2008, the SJVAPCD adopted a Climate Change Action Plan (CCAP). The CCAP directed the Air Pollution Control Officer to develop guidance documents to assist land—use and other permitting agencies in addressing GHG emissions as part of the CEQA process. The SJVAPCD has adopted the guidance in *Guidance for Valley Land-Use* 



Agencies in Addressing GHG Emission Impacts for New Projects Under CEQA and the policy, Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency. The guidance and policy rely on the use of performance-based standards, otherwise known as Best Performance Standards (BPS) to assess significance of project specific GHG emissions on global climate change during the environmental review process. However, SJVAPCD's adopted BPS are specifically directed at reducing GHG emissions from stationary sources; therefore, the adopted BPS would not generally be applicable to the project as the project would not be a stationary source of emissions. The SJVAPCD guidance does not limit a lead agency's authority in establishing its own process and guidance for determining significance of project related impacts on global climate change. SJVAPCD supports the use of the interim thresholds as established by the California Air Pollution Control Officers Association (CAPCOA) when adopted thresholds are not applicable.

#### **Tulare County Climate Action Plan**

The County of Tulare adopted the Tulare County Climate Action Plan (CAP) in August 2012. The CAP includes provisions for an update when the State of California Air Resources Board (CARB) adopts a Scoping Plan Update that provides post-2020 targets for the State and an updated strategy for achieving a 2030 target. Governor Brown signed Senate Bill (SB) 32 on September 8, 2016 which contains the new 2030 target. The CARB 2017 Scoping Plan Update for the Senate Bill (SB) 32 2030 targets was adopted by the CARB on December 14, 2017 which provided new emission inventories and a comprehensive strategy for achieving the 2030 target (CARB 2017). With the adoption of the 2017 Scoping Plan, the County proceeded with the 2018 CAP Update (Tulare County 2018). The 2018 CAP Update incorporates new baseline and future year inventories to reflect the latest information and updates the County's strategy to address the SB 32 2030 target. The 2030 target requires the State to reduce emissions by 40 percent below 1990 levels from the 2017 Scoping Plan and County data. The CAP identifies the County's fair share of reductions required to maintain consistency with the State target. The CAP is a qualified GHG reduction plan in accordance with CEQA Guidelines Section 15183.5. To tier from the CAP, a project must demonstrate that the project emissions are at least 31 percent below 2015 levels by 2030 or 9 percent below BAU emissions in 2030. These are the amounts currently required from development related sources to demonstrate consistency with SB 32 2030 targets. Projects could also use a checklist containing design features and measures that are needed to determine consistency.

## 4.2 Impact Analysis

- 4.2.1 Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- 4.2.2 Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

#### **Construction and Decommissioning Emissions**

Construction and decommissioning of the project would result in GHG emissions, which are primarily associated with use of off-road construction equipment, on-road vendor trucks, and worker vehicles. As stated above, the SJVAPCD recommends that construction emissions be amortized over a 30-year project lifetime; therefore, the total



construction and decommissioning GHG emissions were calculated, amortized over 30 years, and then added to the operational emissions.

CalEEMod was used to estimate GHG emissions during construction and decommissioning. Construction of the project is anticipated to last up to 7 months and decommissioning 7 months. On-site sources of GHG emissions include off-road equipment and off-site sources include on-road vehicles (vendor trucks and worker vehicles). Table 6 presents construction and decommissioning GHG emissions for the project from on-site and off-site emission sources.

Table 6. Estimated Annual Construction and Decommissioning GHG Emissions

	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
Year	Metric Tons			
2024	360.24	0.01	0.03	370.77
2050	287.80	0.01	0.02	294.05
	664.82			
	22.16			

**Notes:** GHG = greenhouse gas;  $CO_2$  = carbon dioxide;  $CH_4$  = methane;  $N_2O$  = nitrous oxide;  $CO_2e$  = carbon dioxide equivalent. See Attachment A for complete results.

As shown in Table 6, the estimated total GHG emissions during construction and decommissioning of the project would be approximately 665 MT CO<sub>2</sub>e. Estimated project-generated construction and decommissioning emissions amortized over 30 years would be approximately 22 MT CO<sub>2</sub>e per year. As with project-generated construction air quality pollutant emissions, GHG emissions generated during construction of the project would be short-term in nature, lasting only for the duration of the construction period, and would not represent a long-term source of GHG emissions. Because there is no separate GHG threshold for construction, the evaluation of significance is determined by adding the amortized construction emissions to the operational emissions and comparing them to the operational threshold.

#### **Operational Emissions**

CalEEMod was used to estimate potential project generated operational GHG emissions from area sources, energy sources (electricity), mobile sources, off-road equipment, solid waste, and water and wastewater. Emissions from each category are discussed in the following text with respect to the project. For additional details, see Section 2.2 for a discussion of operational emission calculation methodology and assumptions. Operational year 2025 was assumed as the first year of operation. Table 7 shows the estimated operational emissions from the project.

**Table 7. Estimated Annual Operation GHG Emissions** 

	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e		
Emissions Source	Metric Tons per Year					
Area	0.00	0.00	0.00	6.73		
Energy	34.63	0.00	0.00	34.83		
Mobile	2.40	0.00	0.00	2.48		
Water	0.09	0.00	0.00	0.09		



**Table 7. Estimated Annual Operation GHG Emissions** 

	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e		
Emissions Source	Metric Tons per Year					
An	nortized constructio	n and decommiss	ioning emissions	22.16		
	59.57					

**Notes:** GHG = greenhouse gas;  $CO_2$  = carbon dioxide;  $CH_4$  = methane;  $N_2O$  = nitrous oxide;  $CO_2e$  = carbon dioxide equivalent. See Attachment A for complete results.

As shown in Table 7, the estimated total GHG emissions during operation of the project would be approximately 60 MT CO<sub>2</sub>e per year, including amortized construction and decommissioning emissions.

#### **Avoided GHG Emissions**

The project would provide a source of renewable energy to support statewide RPS targets of 60% by 2030 and 100% by 2045 consistent with the renewable energy targets in the Scoping Plan and required by SB 100 and EO B-55-18. The generation of renewable energy, would offset GHG emissions generated by fossil-fuel power plants. As noted above, the project would generate 60 MT CO<sub>2</sub>e per year. The Proposed project is expected to produce an estimated 12,734 megawatt-hours of electricity per year (NREL 2023). The default CalEEMod CO<sub>2</sub>e emission factor for SCE was 350.65 pounds of CO<sub>2</sub>e per megawatt-hour (CO<sub>2</sub>e/MWh) from 2025 (CAPCOA 2022). Assuming that SCE would meet the EO B-55- 18 carbon neutrality target in 2045, a linear regression of the SCE GHG emission factor was calculated from 2025 to 2044. This would mean that the project would avoid less GHG emissions over time. Assuming this, the project would avoid a total of 21,266 MT CO<sub>2</sub>e from 2025 through 2044. Accounting for 30 years of operation, the project would emit 1,787 MT CO<sub>2</sub>e. Therefore, the project would avoid a net 19,479 MT CO<sub>2</sub>e over its lifetime. The project is expected to be operational through 2055 and thus it would not be avoiding GHG emissions from 2045 through 2055. Therefore, because the project would avoid more GHG emissions than it would produce it would support the GHG reduction goals of the CAP. Impacts would be less than significant.

#### Consistency with the County of Tulare Climate Action Plan

The Tulare County CAP is a strategic planning document that identifies sources of GHG emissions within the County, presents current and future emissions estimates, identifies a GHG reduction target for future years, and presents strategic policies and actions to reduce emissions from the development project subject to CEQA. The CAP builds on the General Plan's framework with more specific actions that will be applied to achieve emission reduction targets required by State of California legislation. The proposed Project will generate approximately 50 vehicle trips annually (4 average daily trips), which is less intense than the CAP consistency threshold. As discussed above, the project would avoid more GHG emissions over its lifetime than it would generate. As such, the project is consistent with the CAP. Furthermore, the project would produce a new renewable source of energy in Tulare County and directly supports the County's General Plan Policy ERM-4.6 for producing renewable energy and the State's target of increasing California's procurement of electricity from renewable sources from 50 percent to 60 percent by 2030. Therefore, less than significant project-specific Impacts related to this checklist Item will occur.



## 5 Conclusions

Criteria air pollutant emissions generated during construction and operation of the project would not exceed SJVAPCD's significance thresholds or result in a cumulatively considerable net increase in emissions. Similarly, the emissions would also not expose sensitive receptors to substantial pollutant concentrations during construction or operations, or create a CO hotspot. The project would not be a source of odors or other emissions.

Estimated total GHG emissions generated during operation, including amortized construction emissions, would be  $60 \text{ MT CO}_2\text{e}$  per year. The project would avoid a net  $19,479 \text{ MT CO}_2\text{e}$  over its lifetime and thus would support the renewable energy and GHG reduction goals within the Tulare County CAP. Accordingly, potential cumulative GHG impacts would be less than significant.

Sincerely,

Adam Poll, QEP, LEED AP BD+C Senior Air Quality Specialist

Cc: Angela Zhang, Dudek
Att: A – Emission Calculations

## 6 References

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# **Attachment A**Emission Calculations

# Table of Contents

RTS Orchards (Woodville) Solar Project Detailed Report	2
PRIORITIZATION-CALCULATOR	42
PVWatts Calculator	43
RPS GHG	45
SF6_Calculations	46

# RTS Orchards (Woodville) Solar Project Detailed Report

#### Table of Contents

- 1. Basic Project Information
  - 1.1. Basic Project Information
  - 1.2. Land Use Types
  - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
- 2. Emissions Summary
  - 2.1. Construction Emissions Compared Against Thresholds
  - 2.2. Construction Emissions by Year, Unmitigated
  - 2.4. Operations Emissions Compared Against Thresholds
  - 2.5. Operations Emissions by Sector, Unmitigated
- 3. Construction Emissions Details
  - 3.1. Site Preparation (2024) Unmitigated
  - 3.3. Building Construction (2024) Unmitigated
  - 3.5. Building Construction (2050) Unmitigated
  - 3.7. Paving (2024) Unmitigated

- 4. Operations Emissions Details
  - 4.1. Mobile Emissions by Land Use
    - 4.1.1. Unmitigated
  - 4.2. Energy
    - 4.2.1. Electricity Emissions By Land Use Unmitigated
    - 4.2.3. Natural Gas Emissions By Land Use Unmitigated
  - 4.3. Area Emissions by Source
    - 4.3.2. Unmitigated
  - 4.4. Water Emissions by Land Use
    - 4.4.2. Unmitigated
  - 4.5. Waste Emissions by Land Use
    - 4.5.2. Unmitigated
  - 4.6. Refrigerant Emissions by Land Use
    - 4.6.1. Unmitigated
  - 4.7. Offroad Emissions By Equipment Type
    - 4.7.1. Unmitigated
  - 4.8. Stationary Emissions By Equipment Type

- 4.8.1. Unmitigated
- 4.9. User Defined Emissions By Equipment Type
  - 4.9.1. Unmitigated
- 4.10. Soil Carbon Accumulation By Vegetation Type
  - 4.10.1. Soil Carbon Accumulation By Vegetation Type Unmitigated
  - 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type Unmitigated
  - 4.10.3. Avoided and Sequestered Emissions by Species Unmitigated
- 5. Activity Data
  - 5.1. Construction Schedule
  - 5.2. Off-Road Equipment
    - 5.2.1. Unmitigated
  - 5.3. Construction Vehicles
    - 5.3.1. Unmitigated
  - 5.4. Vehicles
    - 5.4.1. Construction Vehicle Control Strategies
  - 5.5. Architectural Coatings
  - 5.6. Dust Mitigation

- 5.6.1. Construction Earthmoving Activities
- 5.6.2. Construction Earthmoving Control Strategies
- 5.7. Construction Paving
- 5.8. Construction Electricity Consumption and Emissions Factors
- 5.9. Operational Mobile Sources
  - 5.9.1. Unmitigated
- 5.10. Operational Area Sources
  - 5.10.1. Hearths
    - 5.10.1.1. Unmitigated
  - 5.10.2. Architectural Coatings
  - 5.10.3. Landscape Equipment
- 5.11. Operational Energy Consumption
  - 5.11.1. Unmitigated
- 5.12. Operational Water and Wastewater Consumption
  - 5.12.1. Unmitigated
- 5.13. Operational Waste Generation
  - 5.13.1. Unmitigated

- 5.14. Operational Refrigeration and Air Conditioning Equipment
  - 5.14.1. Unmitigated
- 5.15. Operational Off-Road Equipment
  - 5.15.1. Unmitigated
- 5.16. Stationary Sources
  - 5.16.1. Emergency Generators and Fire Pumps
  - 5.16.2. Process Boilers
- 5.17. User Defined
- 5.18. Vegetation
  - 5.18.1. Land Use Change
    - 5.18.1.1. Unmitigated
  - 5.18.1. Biomass Cover Type
    - 5.18.1.1. Unmitigated
  - 5.18.2. Sequestration
    - 5.18.2.1. Unmitigated
- 6. Climate Risk Detailed Report
  - 6.1. Climate Risk Summary

- 6.2. Initial Climate Risk Scores
- 6.3. Adjusted Climate Risk Scores
- 6.4. Climate Risk Reduction Measures
- 7. Health and Equity Details
  - 7.1. CalEnviroScreen 4.0 Scores
  - 7.2. Healthy Places Index Scores
  - 7.3. Overall Health & Equity Scores
  - 7.4. Health & Equity Measures
  - 7.5. Evaluation Scorecard
  - 7.6. Health & Equity Custom Measures
- 8. User Changes to Default Data

# 1. Basic Project Information

# 1.1. Basic Project Information

Data Field	Value
Project Name	RTS Orchards (Woodville) Solar Project
Construction Start Date	6/1/2024
Operational Year	2025
Lead Agency	_
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.10
Precipitation (days)	23.0
Location	36.08203794132537, -119.1676598714111
County	Tulare
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2738
EDFZ	9
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.12

# 1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq	Special Landscape	Population	Description
					ft)	Area (sq ft)		

			04.0					
General Light	1.00	1000sqft	31.0	1,000	0.00	I —	_	l <del> —</del>
3		· •		,				
Industry								
inadoti y								

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

# 2. Emissions Summary

## 2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

				J. J		,	,		<b>J</b> ,									
Un/Mit.	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	1.51	1.26	13.5	18.5	0.04	0.43	1.21	1.65	0.40	0.32	0.72	_	5,979	5,979	0.18	0.56	9.72	6,159
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	1.46	1.20	13.8	17.8	0.04	0.43	1.21	1.65	0.40	0.32	0.72	_	5,935	5,935	0.19	0.56	0.25	6,106
Average Daily (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.54	0.45	5.04	6.60	0.02	0.16	0.44	0.59	0.15	0.11	0.26	_	2,176	2,176	0.07	0.20	1.52	2,239
Annual (Max)	_	_	_	_	_	_	_	_	_	-	_	_	_	-	_	-	_	-
Unmit.	0.10	0.08	0.92	1.20	< 0.005	0.03	0.08	0.11	0.03	0.02	0.05	_	360	360	0.01	0.03	0.25	371

## 2.2. Construction Emissions by Year, Unmitigated

Year	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)				_	_	_			_	_	_	_	_	_			_	_
2024	1.51	1.26	13.5	18.5	0.04	0.43	1.21	1.65	0.40	0.32	0.72	_	5,979	5,979	0.18	0.56	9.72	6,159
2050	1.09	0.91	8.72	14.0	0.04	0.15	1.06	1.22	0.14	0.28	0.42	_	4,899	4,899	0.13	0.34	0.34	5,005
Daily - Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2024	1.46	1.20	13.8	17.8	0.04	0.43	1.21	1.65	0.40	0.32	0.72	_	5,935	5,935	0.19	0.56	0.25	6,106
2050	1.08	0.90	8.88	13.8	0.04	0.15	1.06	1.22	0.14	0.28	0.42	_	4,873	4,873	0.13	0.34	0.01	4,979
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2024	0.54	0.45	5.04	6.60	0.02	0.16	0.44	0.59	0.15	0.11	0.26	_	2,176	2,176	0.07	0.20	1.52	2,239
2050	0.39	0.32	3.15	4.94	0.02	0.05	0.37	0.43	0.05	0.10	0.15	_	1,738	1,738	0.05	0.12	0.05	1,776
Annual	_	_	_	_	_	_	_	_	_	_	_	_		_	_	_	_	
2024	0.10	0.08	0.92	1.20	< 0.005	0.03	0.08	0.11	0.03	0.02	0.05	_	360	360	0.01	0.03	0.25	371
2050	0.07	0.06	0.57	0.90	< 0.005	0.01	0.07	0.08	0.01	0.02	0.03	_	288	288	0.01	0.02	0.01	294

# 2.4. Operations Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.02	0.04	0.10	0.30	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	0.00	325	325	0.02	0.01	0.34	331
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.02	0.04	0.11	0.21	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	0.00	320	320	0.02	0.02	0.01	325

Average Daily (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	< 0.005	0.02	0.01	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	224	224	0.02	< 0.005	0.02	226
Annual (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	37.1	37.1	< 0.005	< 0.005	< 0.005	37.4

# 2.5. Operations Emissions by Sector, Unmitigated

Sector	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	-	_	_	-	_	-	_	-	-	-	-	_	_	-	_	_	_	_
Mobile	0.02	0.02	0.10	0.30	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	_	116	116	< 0.005	0.01	0.34	120
Area	_	0.02	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Energy	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	_	209	209	0.02	< 0.005	_	210
Water	_	_	_	_	_	_	_	_	_	_	_	0.00	0.53	0.53	< 0.005	< 0.005	_	0.54
Waste	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	0.02	0.04	0.10	0.30	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	0.00	325	325	0.02	0.01	0.34	331
Daily, Winter (Max)	-	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	0.02	0.01	0.11	0.21	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	_	110	110	< 0.005	0.01	0.01	114
Area	_	0.02	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Energy	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	_	209	209	0.02	< 0.005	_	210
Water	_	_	_	_	_	_	_	_	_	_	_	0.00	0.53	0.53	< 0.005	< 0.005	_	0.54
Waste	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	0.02	0.04	0.11	0.21	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	0.00	320	320	0.02	0.02	0.01	325

Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	< 0.005	< 0.005	0.01	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	14.5	14.5	< 0.005	< 0.005	0.02	15.0
Area	_	0.02	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Energy	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	_	209	209	0.02	< 0.005	_	210
Water	_	_	_	_	_	_	_	_	_	_	_	0.00	0.53	0.53	< 0.005	< 0.005	_	0.54
Waste	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	< 0.005	0.02	0.01	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	224	224	0.02	< 0.005	0.02	226
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	2.40	2.40	< 0.005	< 0.005	< 0.005	2.48
Area	_	< 0.005	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Energy	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	_	34.6	34.6	< 0.005	< 0.005	_	34.8
Water	_	_	_	_	_	_	_	_	_	_	_	0.00	0.09	0.09	< 0.005	< 0.005	_	0.09
Waste	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	37.1	37.1	< 0.005	< 0.005	< 0.005	37.4

# 3. Construction Emissions Details

# 3.1. Site Preparation (2024) - Unmitigated

				<i>J</i> ,					<b>J</b> ,									
Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.18	2.09	3.42	< 0.005	0.08	_	0.08	0.07	_	0.07	_	535	535	0.02	< 0.005	_	537

Dust From Material Movemen	_	_			_	_	0.00	0.00	_	0.00	0.00	_	_		_	_		_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	-	_	_	-	_	_	-	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.01	0.13	0.21	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	32.3	32.3	< 0.005	< 0.005	_	32.4
Dust From Material Movemen	<u> </u>	-	_	_	_	_	0.00	0.00	_	0.00	0.00	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		< 0.005	0.02	0.04	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	5.34	5.34	< 0.005	< 0.005	_	5.36
Dust From Material Movemen	_	_	_	_	_	_	0.00	0.00	_	0.00	0.00	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Worker	0.05	0.05	0.03	0.42	0.00	0.00	0.04	0.04	0.00	0.01	0.01	_	49.3	49.3	< 0.005	< 0.005	0.20	50.2
Vendor	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	_	87.4	87.4	< 0.005	0.01	0.23	91.7
Hauling	0.01	0.01	0.36	0.09	< 0.005	0.01	0.07	0.08	0.01	0.02	0.03	_	288	288	0.01	0.05	0.69	302

Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	2.73	2.73	< 0.005	< 0.005	0.01	2.78
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	5.27	5.27	< 0.005	< 0.005	0.01	5.52
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	17.3	17.3	< 0.005	< 0.005	0.02	18.2
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.45	0.45	< 0.005	< 0.005	< 0.005	0.46
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	0.87	0.87	< 0.005	< 0.005	< 0.005	0.91
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	2.87	2.87	< 0.005	< 0.005	< 0.005	3.01

# 3.3. Building Construction (2024) - Unmitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	<u> </u>	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.53	5.99	9.14	0.01	0.23	_	0.23	0.21	_	0.21	_	1,425	1,425	0.06	0.01	_	1,430
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.53	5.99	9.14	0.01	0.23	_	0.23	0.21	_	0.21	_	1,425	1,425	0.06	0.01	_	1,430
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.19	2.13	3.25	< 0.005	0.08	_	0.08	0.08	_	0.08	-	508	508	0.02	< 0.005	_	509
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.03	0.39	0.59	< 0.005	0.01	_	0.01	0.01	-	0.01	-	84.1	84.1	< 0.005	< 0.005	-	84.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.31	0.29	0.16	2.60	0.00	0.00	0.27	0.27	0.00	0.06	0.06	_	308	308	0.02	0.01	1.26	314
Vendor	0.01	0.01	0.19	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	_	131	131	< 0.005	0.02	0.35	138
Hauling	0.10	0.04	3.22	0.56	0.02	0.05	0.76	0.81	0.05	0.21	0.26	_	2,875	2,875	0.06	0.45	7.00	3,018
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.27	0.25	0.21	2.04	0.00	0.00	0.27	0.27	0.00	0.06	0.06	_	273	273	0.02	0.01	0.03	277
Vendor	0.01	0.01	0.20	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	_	131	131	< 0.005	0.02	0.01	137
Hauling	0.10	0.04	3.46	0.56	0.02	0.05	0.76	0.81	0.05	0.21	0.26	_	2,875	2,875	0.06	0.45	0.18	3,011
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_
Worker	0.10	0.09	0.07	0.75	0.00	0.00	0.10	0.10	0.00	0.02	0.02	_	101	101	0.01	< 0.005	0.19	103
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	46.7	46.7	< 0.005	0.01	0.05	48.9
Hauling	0.04	0.01	1.20	0.20	0.01	0.02	0.27	0.29	0.02	0.07	0.09	_	1,024	1,024	0.02	0.16	1.07	1,073
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.02	0.02	0.01	0.14	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	_	16.7	16.7	< 0.005	< 0.005	0.03	17.0

Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	7.74	7.74	< 0.005	< 0.005	0.01	8.10
Hauling	0.01	< 0.005	0.22	0.04	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	_	170	170	< 0.005	0.03	0.18	178

# 3.5. Building Construction (2050) - Unmitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.81	6.62	12.9	0.03	0.12	_	0.12	0.11	_	0.11	_	2,629	2,629	0.11	0.02	_	2,638
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_
Off-Road Equipmen		0.81	6.62	12.9	0.03	0.12	_	0.12	0.11	_	0.11	_	2,629	2,629	0.11	0.02	_	2,638
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.29	2.36	4.60	0.01	0.04	_	0.04	0.04	_	0.04	_	937	937	0.04	0.01	_	940
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.05	0.43	0.84	< 0.005	0.01	_	0.01	0.01	_	0.01	_	155	155	0.01	< 0.005	_	156
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.07	0.07	0.03	0.75	0.00	0.00	0.27	0.27	0.00	0.06	0.06	_	233	233	< 0.005	< 0.005	0.03	235
Vendor	< 0.005	< 0.005	0.10	0.05	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	_	77.7	77.7	< 0.005	0.01	< 0.005	81.2
Hauling	0.04	0.02	1.96	0.31	0.02	0.04	0.76	0.79	0.04	0.21	0.24	_	1,959	1,959	0.02	0.31	0.31	2,051
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.07	0.06	0.04	0.57	0.00	0.00	0.27	0.27	0.00	0.06	0.06	_	207	207	< 0.005	< 0.005	< 0.005	208
Vendor	< 0.005	< 0.005	0.11	0.05	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	_	77.8	77.8	< 0.005	0.01	< 0.005	81.4
Hauling	0.04	0.02	2.11	0.31	0.02	0.04	0.76	0.79	0.04	0.21	0.24	_	1,959	1,959	0.02	0.31	0.01	2,051
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.02	0.02	0.01	0.21	0.00	0.00	0.10	0.10	0.00	0.02	0.02	_	76.5	76.5	< 0.005	< 0.005	< 0.005	76.9
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	27.7	27.7	< 0.005	< 0.005	< 0.005	28.9
Hauling	0.02	0.01	0.74	0.11	0.01	0.01	0.27	0.28	0.01	0.07	0.09	_	698	698	0.01	0.11	0.05	731
Annual	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	_	12.7	12.7	< 0.005	< 0.005	< 0.005	12.7
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	4.58	4.58	< 0.005	< 0.005	< 0.005	4.79
Hauling	< 0.005	< 0.005	0.13	0.02	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	_	116	116	< 0.005	0.02	0.01	121

# 3.7. Paving (2024) - Unmitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	<u> </u>	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Off-Road Equipmen		0.31	3.45	5.37	0.01	0.14	_	0.14	0.13	_	0.13	_	834	834	0.03	0.01	_	836
Paving	_	0.00	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.31	3.45	5.37	0.01	0.14	_	0.14	0.13	_	0.13	-	834	834	0.03	0.01	_	836
Paving	_	0.00	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.11	1.23	1.91	< 0.005	0.05	_	0.05	0.05	_	0.05	-	297	297	0.01	< 0.005	_	298
Paving	_	0.00	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	Ī-	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.02	0.22	0.35	< 0.005	0.01	_	0.01	0.01	_	0.01	-	49.2	49.2	< 0.005	< 0.005	_	49.3
Paving	_	0.00	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_		_	_	-
Worker	0.07	0.07	0.04	0.62	0.00	0.00	0.07	0.07	0.00	0.02	0.02	_	74.0	74.0	< 0.005	< 0.005	0.30	75.3
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	43.7	43.7	< 0.005	0.01	0.12	45.8

Hauling	0.01	0.01	0.36	0.09	< 0.005	0.01	0.07	0.08	0.01	0.02	0.03	_	288	288	0.01	0.05	0.69	302
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.06	0.06	0.05	0.49	0.00	0.00	0.07	0.07	0.00	0.02	0.02	_	65.4	65.4	0.01	< 0.005	0.01	66.5
Vendor	< 0.005	< 0.005	0.07	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	43.8	43.8	< 0.005	0.01	< 0.005	45.8
Hauling	0.01	0.01	0.39	0.09	< 0.005	0.01	0.07	0.08	0.01	0.02	0.03	_	288	288	0.01	0.05	0.02	301
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.02	0.02	0.02	0.18	0.00	0.00	0.02	0.02	0.00	0.01	0.01	_	24.2	24.2	< 0.005	< 0.005	0.05	24.6
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	15.6	15.6	< 0.005	< 0.005	0.02	16.3
Hauling	< 0.005	< 0.005	0.14	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	_	102	102	< 0.005	0.02	0.11	107
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	4.00	4.00	< 0.005	< 0.005	0.01	4.07
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	2.58	2.58	< 0.005	< 0.005	< 0.005	2.70
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	_	17.0	17.0	< 0.005	< 0.005	0.02	17.8

## 4. Operations Emissions Details

## 4.1. Mobile Emissions by Land Use

#### 4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

## 4.2. Energy

#### 4.2.1. Electricity Emissions By Land Use - Unmitigated

Land	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Use																		

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	_	_	_	_	_	_	_	_	_	_	_	_	209	209	0.02	< 0.005	_	210
Total	_	_	_	_	_	_	_	_	_	_	_	_	209	209	0.02	< 0.005	_	210
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	_	_	_	_	_	_	_	_	_	_	_	_	209	209	0.02	< 0.005	_	210
Total	_	_	_	_	_	_	<u> </u>	_		<u> </u>	_	_	209	209	0.02	< 0.005	_	210
Annual	_	_	_	_	_	_	<u> </u>	_		<u> </u>	_	_	_	_	_	_	_	_
General Light Industry	_	_	_	_	_	_	_	_	_	_	_	_	34.6	34.6	< 0.005	< 0.005	_	34.8
Total	_	_	_	_	_	_	_	_	_	<u> </u>	_	_	34.6	34.6	< 0.005	< 0.005	_	34.8

## 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Land Use	TOG	ROG				PM10E			PM2.5E			BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	_	0.00	0.00	0.00	0.00	_	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	_	0.00	0.00	0.00	0.00	_	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	_	0.00	0.00	0.00	0.00	_	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	_	0.00	0.00	0.00	0.00	_	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	_	0.00	0.00	0.00	0.00	_	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	_	0.00	0.00	0.00	0.00	_	0.00

## 4.3. Area Emissions by Source

## 4.3.2. Unmitigated

Source	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Consum er Products	_	0.02	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coatings	_	< 0.005	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	0.02	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Consum er Products	_	0.02	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Architect ural Coatings	_	< 0.005	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	0.02	_	_	_	_	_	_		_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Consum er Products	_	< 0.005	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coatings		< 0.005	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	< 0.005	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

## 4.4. Water Emissions by Land Use

## 4.4.2. Unmitigated

Land Use	TOG	ROG		СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	_	_	_	_	_	_	_	_	_	_	_	0.00	0.53	0.53	< 0.005	< 0.005	_	0.54
Total	_	_	_	_	_	_	_	_	_	_	_	0.00	0.53	0.53	< 0.005	< 0.005	_	0.54
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	_	_	_	_		_	_	_	_	_	_	0.00	0.53	0.53	< 0.005	< 0.005	_	0.54
Total	_	_	_	_	_	_	_	_	_	_	_	0.00	0.53	0.53	< 0.005	< 0.005	_	0.54

Annual	_	_	_	_	_	_	_	_	_	_	_		_	_	_	_	_	_
General Light Industry	_	_	_	_	_	_	_	_	_	_	_	0.00	0.09	0.09	< 0.005	< 0.005	_	0.09
Total	_	_	_	_	_	_	_	_	_	_	_	0.00	0.09	0.09	< 0.005	< 0.005	_	0.09

## 4.5. Waste Emissions by Land Use

## 4.5.2. Unmitigated

Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Daily, Winter (Max)	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	_	_	-	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	-	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00

## 4.6. Refrigerant Emissions by Land Use

#### 4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

## 4.7. Offroad Emissions By Equipment Type

#### 4.7.1. Unmitigated

Equipme nt Type	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_		_	_	_	_		_	_	_

Total	_	_	_	-	_	_	_	_	_	_	-	_	_	_	-	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	<u> </u>	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

## 4.8. Stationary Emissions By Equipment Type

#### 4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipme nt Type	TOG	ROG		со	SO2					PM2.5D		BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_		_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

## 4.9. User Defined Emissions By Equipment Type

#### 4.9.1. Unmitigated

Equipme	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
nt																		
Туре																		

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_		_	_	_	_	_	_		_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	<u> </u>		_	_		_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

## 4.10. Soil Carbon Accumulation By Vegetation Type

#### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetatio n	TOG	ROG		со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

#### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

## 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

				iy, tori/yr														
Species	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_		_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Avoided	_	_	_	<u> </u>	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	<u> </u>	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_		_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	<u> </u>	_	_	<u> </u>
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	<u> </u>	_	_	<u> </u>
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

## 5. Activity Data

## 5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	6/1/2024	7/2/2024	5.00	22.0	_
Building Construction	Building Construction	7/3/2024	12/31/2024	5.00	130	_
Decommissioning	Building Construction	1/1/2050	7/1/2050	5.00	130	_
Paving	Paving	7/3/2024	12/31/2024	5.00	130	_

## 5.2. Off-Road Equipment

## 5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Tractors/Loaders/Backh oes	Diesel	Average	1.00	8.00	84.0	0.37
Site Preparation	Skid Steer Loaders	Diesel	Average	1.00	8.00	71.0	0.37
Building Construction	Forklifts	Diesel	Average	2.00	8.00	82.0	0.20
Building Construction	Skid Steer Loaders	Diesel	Average	4.00	8.00	71.0	0.37
Building Construction	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Decommissioning	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Decommissioning	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Decommissioning	Cranes	Diesel	Average	1.00	8.00	367	0.29
Decommissioning	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Decommissioning	Tractors/Loaders/Backh oes	Diesel	Average	3.00	8.00	84.0	0.37
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Skid Steer Loaders	Diesel	Average	1.00	8.00	71.0	0.37
Paving	Tractors/Loaders/Backh oes	Diesel	Average	1.00	8.00	84.0	0.37

## 5.3. Construction Vehicles

## 5.3.1. Unmitigated

Phase Name	Тгір Туре	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	_	_	_	_
Site Preparation	Worker	8.00	7.70	LDA,LDT1,LDT2
Site Preparation	Vendor	4.00	6.80	HHDT,MHDT

Site Preparation	Hauling	4.00	20.0	HHDT
Site Preparation	Onsite truck	_	_	HHDT
Building Construction	_	_	_	_
Building Construction	Worker	50.0	7.70	LDA,LDT1,LDT2
Building Construction	Vendor	6.00	6.80	HHDT,MHDT
Building Construction	Hauling	8.00	102	HHDT
Building Construction	Onsite truck	_	_	HHDT
Paving	_	_	_	_
Paving	Worker	12.0	7.70	LDA,LDT1,LDT2
Paving	Vendor	2.00	6.80	HHDT,MHDT
Paving	Hauling	4.00	20.0	HHDT
Paving	Onsite truck	_	_	HHDT
Decommissioning	_	_	_	_
Decommissioning	Worker	50.0	7.70	LDA,LDT1,LDT2
Decommissioning	Vendor	6.00	6.80	HHDT,MHDT
Decommissioning	Hauling	8.00	102	HHDT
Decommissioning	Onsite truck	_	_	HHDT

## 5.4. Vehicles

## 5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

## 5.5. Architectural Coatings

Disease Manage	Desidential Interior Area Costad	Desidential Fotonian Anna Castad	New Desidential Interior Anna	New Desidential Fotography Anna	Deutsian Anna Operation (and fit)
Phase Name	Residential Interior Area Coated	Residential Exterior Area Coated	Non-Residential Interior Area	Non-Residential Exterior Area	Parking Area Coated (sq ft)
	(sq ft)	(sq ft)	Coated (sq ft)	Coated (sq ft)	

## 5.6. Dust Mitigation

#### 5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	_	_	0.00	0.00	_
Paving	0.00	0.00	0.00	0.00	0.00

#### 5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

#### 5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
General Light Industry	0.00	0%

## 5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	349	0.03	< 0.005
2050	0.00	261	0.03	< 0.005

## 5.9. Operational Mobile Sources

#### 5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	0.00	4.00	0.00	48.0	0.00	80.0	0.00	3,840

## 5.10. Operational Area Sources

#### 5.10.1. Hearths

## 5.10.1.1. Unmitigated

#### 5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	1,500	500	_

#### 5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

## 5.11. Operational Energy Consumption

#### 5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Light Industry	219,000	349	0.0330	0.0040	0.00

## 5.12. Operational Water and Wastewater Consumption

## 5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Light Industry	0.00	231,250

## 5.13. Operational Waste Generation

#### 5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Light Industry	0.00	_

## 5.14. Operational Refrigeration and Air Conditioning Equipment

#### 5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Pate	Times Serviced
Land Ose Type	Equipment Type	Remgerant	GWF	Quantity (kg)	Operations Leak Nate	Service Leak Rate	Times Serviced

## 5.15. Operational Off-Road Equipment

#### 5.15.1. Unmitigated

Equipment Type Fuel Type Engine Tier Number per Day	Hours Per Day	Horsepower	Load Factor
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## 5.16. Stationary Sources

#### 5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
	/					

#### 5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
1	· · · · · ·     - · · ·     - · · · ·		] =		

#### 5.17. User Defined

Equipment Type Fuel Type

\_

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Venetation Lend Hea Time	Variation Call Time	Initial Asses	Final Assas
Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
3	-3		

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
Biomaco Covor Typo	Titlat / toroo	i iliai rioloo

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
			transfer de de de de la company

## 6. Climate Risk Detailed Report

## 6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.4	annual days of extreme heat
Extreme Precipitation	0.75	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth

Wildfire 0.00 annual hectares burned	
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Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

#### 6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

## 6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

#### 6.4. Climate Risk Reduction Measures

## 7. Health and Equity Details

## 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	_
AQ-Ozone	84.6
AQ-PM	95.4
AQ-DPM	27.3
Drinking Water	96.6
Lead Risk Housing	77.2
Pesticides	83.4
Toxic Releases	24.2
Traffic	8.44

Effect Indicators	_
CleanUp Sites	53.4
Groundwater	99.8
Haz Waste Facilities/Generators	35.6
Impaired Water Bodies	43.8
Solid Waste	89.8
Sensitive Population	_
Asthma	36.7
Cardio-vascular	55.1
Low Birth Weights	46.0
Socioeconomic Factor Indicators	_
Education	99.3
Housing	63.6
Linguistic	99.7
Poverty	98.3
Unemployment	94.8

## 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract				
Economic	_				
Above Poverty	1.822148082				
Employed	16.72013345				
Median HI	8.340818683				
Education	_				
Bachelor's or higher	0.808417811				
High school enrollment	9.29038881				

Preschool enrollment	34.36417298
Transportation	_
Auto Access	58.83485179
Active commuting	60.23354292
Social	_
2-parent households	71.26908764
Voting	34.59514949
Neighborhood	_
Alcohol availability	60.47735147
Park access	11.85679456
Retail density	2.848710381
Supermarket access	28.25612729
Tree canopy	12.21609136
Housing	_
Homeownership	20.18478121
Housing habitability	47.35018606
Low-inc homeowner severe housing cost burden	24.72731939
Low-inc renter severe housing cost burden	94.18709098
Uncrowded housing	25.7153856
Health Outcomes	_
Insured adults	7.878865649
Arthritis	0.0
Asthma ER Admissions	46.9
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0

Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	27.3
Cognitively Disabled	70.6
Physically Disabled	71.5
Heart Attack ER Admissions	31.6
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	_
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	_
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	13.5
Elderly	93.7
English Speaking	4.7
Foreign-born	82.4
Outdoor Workers	0.1
Climate Change Adaptive Capacity	_
Impervious Surface Cover	90.9
Traffic Density	16.0

Traffic Access	0.0
Other Indices	
Hardship	95.4
Other Decision Support	_
2016 Voting	48.7

## 7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	92.0
Healthy Places Index Score for Project Location (b)	8.00
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

## 7.4. Health & Equity Measures

No Health & Equity Measures selected.

#### 7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

#### 7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

## 8. User Changes to Default Data

Screen	Justification				
Land Use	Site is 31 acres. Land use is a surrogate, assumptions provided by project applicant.				
Construction: Construction Phases	Based on applicant provided information.				

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Construction: Off-Road Equipment	Based on applicant provided information.			
Construction: Trips and VMT	Based on applicant provided information.			
Operations: Fleet Mix	Light duty vehicles and delivery trucks for maintenance.			
Operations: Energy Use	Auxiliary energy use from the BESS.			
Operations: Water and Waste Water	Water use for panel washing.			
Operations: Solid Waste	No solid waste.			
Operations: Refrigerants	Calculated outside of CalEEMod.			

Name		F	rioritizatio	n Calculate	or						
Applicability	Use to provide	a Prioritization		the emission pot	ency method. E	ntries required	-				
Author or updater	Adar	m Poll	Last Update		, 2023						
Facility:											
ID#:											
Project #:											
Unit and Process#		Project Construc	tion				_				
Operating Hours hr/yr	5,110.00							7			
Receptor Proximity and Proximity Factors	Cancer	Chronic	Acute						Lise the substa	nce dropdown list i	n the CASt
resoption resummey and resummey ractions	Score	Score	Score	Max Score			rs. Priortization			cate CAS# of subs	
0< R<100 1.000	1.16E+02	2.94E-01	0.00E+00	1.16E+02		med below by t	iplying the total		i indor to to	outo or ton or oubc	namooo.
100≤R<250 0.250	2.90E+01	7.36E-02	0.00E+00	2.90E+01		cord the Max so			Subs	tance	CAS# Fin
250≤R<500 0.040	4.63E+00	1.18E-02	0.00E+00	4.63E+00			ance list for the		Wood preservatives	(containing arsenic	1206
500≤R<1000 0.011	1.27E+00	3.24E-03	0.00E+00	1.27E+00			of rows here or			romate)	
1000≤R<1500 0.003	3.48E-01	8.83E-04	0.00E+00	3.48E-01		Itiple processes and sum the total					
1500≤R<2000 0.002	2.32E-01	5.89E-04	0.00E+00	2.32E-01	worksneets a	Scores.	als of the Max				
2000 <r 0.001<="" td=""><td>1.16E-01</td><td>2.94E-04</td><td>0.00E+00</td><td>1.16E-01</td><td></td><td>Goores.</td><td></td><td></td><td></td><td></td><td></td></r>	1.16E-01	2.94E-04	0.00E+00	1.16E-01		Goores.					
2000 (		it's CAS# of the			Prioritzatio	n score for each	n cubetance				
RTS Orchards (Woodville) Solar Project Construction	Litter the un		unts.	ited and trien		below. Totals of					
NTO OTCHARUS (WOODWINE) COIAI 1 TOJECT CONSTRUCTION			1	I	Corrected	Corrected	i idot row.				
		MW	Annual	Maximum	Annual	Maximum	Average				
				Hourly	Emissions	Hourly	Hourly				
Substance	CAS#	Correction						0	01	A	
			(lbs/yr)	(lbs/hr)	(lbs/yr)	(lbs/hr)	(lbs/hr)	Cancer	Chronic	Acute	
Diesel engine exhaust, particulate matter (Diesel PM)	9901	1.0000	5.02E+01		5.02E+01	0.00E+00	9.82E-03	1.16E+02	2.94E-01	0.00E+00	
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
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		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
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		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	



Caution: Photovoltaic system performance predictions calculated by PWWatts. include many inherent assumptions and uncertainties and do not reflect variations between PV technologies nor site-specific characteristics except as represented by PWWatts. inputs. For example, PV modules with better performance are not differentiated within PVWatts. from lesser performing modules. Both NREL and private companies provide more sophisticated PV modeling tools (such as the System Advisor Model at https://sam.nrel.gov) that allow for more precise and complex modeling of PV systems.

The expected range is based on 30 years of actual weather data at the given location and is intended to provide an indication of the variation you might see. For more information, please refer to this NREL report: The Error Report.

Disclaimer: The PVWatts<sup>®</sup> Model ("Model") is provided by the National Renewable Energy Laboratory ("NREL"), which is operated by the Alliance for Sustainable Energy, LLC ("Alliance") for the U.S. Department Of Energy ("DOE") and may be used for any purpose whatsoever.

The names DOE/NREL/ALLIANCE shall not be used in any representation, advertising, publicity or other manner whatsoever to endorse or promote any entity that adopts or uses the Model. DOE/NREL/ALLIANCE shall not provide any support, consulting, training or assistance of any kind with regard to the use of the Model or any updates, revisions or new versions of the Model.

AGREE INDEMNIFY DOE/NREL/ALLIANCE, AND ITS AFFILIATES, OFFICERS, AGENTS, AND EMPLOYEES AGAINST ANY CLAIM OR DEMAND, INCLUDING REASONABLE ATTORNEYS'
FEES, RELATED TO YOUR USE, RELIANCE, OR ADOPTION OF THE MODEL FOR ANY PURPOSE WHATSOEVER. THE MODEL IS PROVIDED BY DOE/NREL/ALLIANCE 'AS IS' AND ANY EXPRESS OR WARRANTIES, INCLUDING B IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY
DISCLAIMED. IN NO EVENT SHALL
DOE/NREL/ALLIANCE BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER. INCLUDING BUT NOT LIMITED TO CLAIMS ASSOCIATED WITH THE LOSS OF DATA OR PROFITS, WHICH MAY RESULT FROM ANY ACTION IN CONTRACT, NEGLIGENCE OR OTHER TORTIOUS CLAIM THAT ARISES OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE MODEL.

The energy output range is based on analysis of 30 years of historical weather data, and is intended to provide an indication of the possible interannual variability in generation for a Fixed (open rack) PV system at this location.

## RESULTS

# 12,734,241 kWh/Year\*

System output may range from 12,126,818 to 13,163,385 kWh per year near this location.

Month	Solar Radiation (kWh/m²/day)	AC Energy (kWh)
January	2.54	415,050
February	4.26	629,354
March	6.50	1,028,280
April	8.34	1,268,580
May	9.71	1,494,332
June	11.00	1,591,873
July	10.59	1,575,305
August	9.64	1,430,240
September	8.30	1,216,479
October	6.04	950,146
November	3.89	609,002
December	3.17	525,599
nnual	7.00	12,734,240

#### **Location and Station Identification**

 Requested Location
 36.081953, -119.167998

 Weather Data Source
 Lat, Lng: 36.09, -119.18
 0.8 mi

 Latitude
 36.09° N

Longitude 119.18° W

#### **PV System Specifications**

DC System Size 6600 kW

Module Type Standard

Array Type 1-Axis Tracking

System Losses 14.08%

Array Tilt 0°

Array Azimuth 180°

DC to AC Size Ratio 1.2

Inverter Efficiency 96%

Ground Coverage Ratio 0.4%

Albedo From weather file

Bifacial No (0)

Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec Monthly Irradiance Loss 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%

Ground Coverage Ratio 0.4

5/5/23, 8:05 AM PVWatts Calculator

Performance Metrics	
DC Capacity Factor	22.0%

Year	PG&E GHG Emission Factor Ib CO <sub>2</sub> e/MWh	Avoided GHG Emissions MTCO <sub>2</sub>
2025	350.65	-
		2,025.37
2026	333.12	1,924.10
2027	315.59	1,822.84
2028	298.05	1,721.57
2029	280.52	1,620.30
2030	262.99	1,519.03
2031	245.46	1,417.76
2032	227.92	1,316.49
2033	210.39	1,215.22
2034	192.86	1,113.95
2035	175.33	1,012.69
2036	157.79	911.42
2037	140.26	810.15
2038	122.73	708.88
2039	105.20	607.61
2040	87.66	506.34
2041	70.13	405.07
2042	52.60	303.81
2043	35.07	202.54
2044	17.53	101.27
2045	0.00	0.00

Total 21,266.41

Source	Breaker (kV)	Number of Breakers	Pounds of SF <sub>6</sub>	MT of SF <sub>6</sub>	Leak Rate	Global Warming Potential	MT CO₂e
Switchgear Breakers	138	6	124	0.056	1%	23,900	6.73

# ATTACHMENT "B" BIOLOGICAL RESOURCES



#### RESOURCE MANAGEMENT AGENCY

5961 SOUTH MOONEY BLVD VISALIA, CA 93277

PHONE (559) 624-7000 Fax (559) 615-3002 Aaron R. Bock Reed Schenke Economic Development and Planning

Reed Schenke Public Works
Sherman Dix Fiscal Services

REED SCHENKE, DIRECTOR

MICHAEL WASHAM, ASSOCIATE DIRECTOR

#### BIOLOGICAL RESOURCES EVALUATION TECHNICAL MEMORANDUM

DATE: July 14, 2023

TO: Hector Guerra, Chief Environmental Planner

FROM: Jessica Willis, Planner IV

SUBJECT: Biological Resources Evaluation for the Tulare CSG 2 Solar Project (PSP 23-059)

#### PROJECT DESCRIPTION AND LOCATION

The Applicant (Tulare CSG 2 LLC) proposes to construct and operate the Tulare CSG 2 Solar Project (PSP 23-059) (Project). The proposed Project includes: a single-axis tracker ground mounted photovoltaic (PV) community solar and battery energy storage system (BESS) facility, approximately 6.6 MWdc/5MWac<sup>1</sup> in capacity. The proposed Project will generate and store clean and renewable solar energy, with electricity offtake sold to residential customers within Tulare County and the larger Southern California Edison (SCE) Utility Territory.

The Project site is located on an approximately 24.5-acre site at the northeast corner of Avenue 160 and Road 180, approximately 1.25 miles southeast of the unincorporated community of Woodville and 0.75 mile directly west of Woodville Farm Camp, California. Of the  $\pm 31$ -acre lease area, only  $\pm 25$  acres are proposed for development. (See Attachment A)

Assessor Parcel Number(s): APNs 236-100-003 & 236-100-004

USGS 7.5-minute Quadrangle): Woodville

Surrounding Quadrangles: Woodville. Tulare, Cairns Corner, Lindsay, Tipton,

Porterville, Pixley, Sausalito School, Ducor

Public Land Survey System: Section 21, Township 21 South, Range 26 East, Mount Diablo

Base and Meridian

Latitude/Longitude: 36° 04' 48.8" N / 119° 10' 11.8" W (at southwest corner of Rd

180 and Ave 160)

#### NEED FOR EVALUATION

Qualified consulting firm (Dudek), prepared a report (Swainson's Hawk Surveys for the Tulare CSG 2 Solar Project (Woodville), Tulare County, California), dated May 9, 2023, providing documentation regarding the potential impacts the proposed Project may have on Swainson's hawk

<sup>1</sup> MWdc: megawatt direct current; MWac: megawatt alternating current

(SWHA; *Buteo swainsoni*). The report was prepared in support of the application submitted for the proposed Project.<sup>2</sup>

This Biological Resources Evaluation (BRE) technical memorandum has been prepared to supplement the Swainson's Hawk Surveys Report, specifically to evaluate potential impacts that the proposed Project may have on any special status plant or animal species on and in the vicinity of the Project site.

#### BIOLOGICAL RESOURCES DATABASE SEARCH

The most recent California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) RareFind 5 and Biogeographic Information and Observation System (BIOS 6) mapping applications were accessed on June 21, 2023.<sup>3,4</sup> The BIOS 6 Project 9-Quadrangle area and Project Quadrangle (Woodville) species and natural communities maps are provided in Attachments B and C, respectively. The RareFind 5 Project Quadrangle (Woodville) and Project 9-Quadrangle area special status species and natural communities lists are provided in Attachments E and F, respectively.

#### **JURISDICTIONAL WATERS**

The most recent United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) mapping application was accessed on June 21, 2023. The NWI map identified Freshwater Ponds approximately 50 feet north, 0.2 mile south, and 100 feet east of the proposed Project boundary, and Freshwater Emergent Wetlands approximately 0.25 mile west and 0.5 mile southwest of the proposed Project boundaries. No jurisdictional waters are within the prosed Project site. The NWI map is provided in Attachment D.<sup>5</sup>

#### POTENTIAL IMPACTS ON BIOLOGICAL RESOURCES

**Project Specific Impacts:** The proposed Project encompasses only a portion of the Woodville quadrangle. Of the 40 species and natural communities identified in the RareFind 5 species list for the 9-quadrangle Project area (see Attachment F), three (3) species are recorded within the Project quadrangle (see Attachment E), and none are reported within 0.5 mile of the proposed Project boundaries (see Attachment C). The CNDDB RareFind 5 species lists and BIOS 6 maps indicate that no special status species are recorded within or in close proximity (0.5 mile) of the proposed Project site.

As a result of surveys conducted by qualified consulting firm, Dudek, it was concluded that, "No active or inactive Swainson's hawk nests were observed during the surveys. One potential nest tree was observed in the 0.5-mile buffer area but more than 500 feet from the Project boundary. The

<sup>&</sup>lt;sup>2</sup> The Swainson's Hawk Surveys report is included as Attachment G; however, the attachments) are not included in this memo as the full report will be included in the MND as a separate attachment.

<sup>&</sup>lt;sup>3</sup> California Department of Fish and Wildlife. CNDDB Maps and Data: RareFind 5. <a href="https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data">https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data</a>. Accessed June 2023.

<sup>&</sup>lt;sup>4</sup> California Department of Fish and Wildlife. Biogeographic Information and Observation System. CDFW BIOS Viewer (accessed from RareFind5 query). https://apps.wildlife.ca.gov/bios6/?al=ds45. Accessed June 2023.

United States Fish and Wildlife Service. Wetlands Mapper. <a href="https://www.fws.gov/program/national-wetlands-inventory/wetlands-mapper">https://www.fws.gov/program/national-wetlands-inventory/wetlands-mapper</a>. Accessed June 2023.

potential nest tree was eventually abandoned due to harassment from a nearby nesting red-tailed hawk pair and therefore not anticipated to be adversely affected by Project construction activities."<sup>6</sup>

As noted in the Swainson's Hawk Survey, biological monitoring results provided by Dudek indicate numerous storm events constrained observations of Swainson's hawk; however; no active or inactive nests were observed during the surveys. The field data collection was performed by qualified consultants Dudek (in April and May of 2023) focusing on the Swainson's hawk.

As noted in the Swainson's Hawk Survey, four (4) additional raptor species, Cooper's hawk (*Accipiter cooperii*), turkey vulture (*Cathartes aura*), great horned owl (*Bubo virginianus*), and red-tailed hawk (*Buteo jamaicensis*) were observed during the survey. Of the six (6) active red-tailed hawk nests observed within the survey area, five (5) were located outside of the Project boundary but within the 0.5-mile buffer area, and one (1) active nest was located within the Project boundary.<sup>7</sup>

As noted in the Swainson's Hawk Survey, thirteen (13) other common bird species were observed during the survey; only one (1) active raven nest was located more than 0.7 mile north of the Project boundary.<sup>8</sup>

Checklist Items a) – d): Based on the information above, according to the project-specific screening examination of the CNDDB, no special status species, natural communities, or jurisdictional waters have been recorded within the proposed Project boundaries. Construction activity will not occur beyond the Project boundaries. As the one (1) potential Swainson's Hawk next tree is more than 500 feet from the Project boundary, the Swainson's Hawk Survey concludes, "Proposed construction activities and operations are therefore not anticipated to cause adverse effects to Swainson's hawk nests." The County concurs with this determination.

The proposed Project will comply with all applicable local and state permitting requirements, including but not limited to the County of Tulare, San Joaquin Valley Air Pollution Control District (SJVAPCD), CDFW, Regional Water Quality Control Board (RWQCB), USFWS, and United States Army Corps of Engineers (USACE). Furthermore, Project-related construction activities will be designed to avoid or minimize potential impacts to Swainson's hawk and red-tailed hawk. Conditions of Approval will be included in the Project that require the applicant to minimize impacts on Swainson's and red-tailed hawks. Specifically, if activities appear to upset Swainson's or red-tailed hawks, the applicant is required to consult with the CDFW immediately to determine any actions that should be taken to minimize impacts on the hawks. Also, the applicant will be required to submit a Reclamation Plan that details the actions to be taken to return the Project site to predevelopment use for agricultural purposes. As noted in the Swainson's Hawk Survey, seven (7) nests were observed in the Project vicinity. However, the Survey concludes, "A less than significant impact to the species is anticipated if avoidance measures are closely followed during project construction." The County concurs with this determination.

Oudek. Swainson's Hawk Surveys for the Tulare CSG 2 Solar Project (Woodville, Tulare County, CA. May 2023. Page 1. Included as Attachment "G" of this document.

<sup>&</sup>lt;sup>7</sup> Ibid. Page 2

<sup>&</sup>lt;sup>8</sup> Op. Cit. Page 3

<sup>&</sup>lt;sup>9</sup> Op. Cit.

<sup>&</sup>lt;sup>10</sup> Op. Cit.

For the reasons discussed above, the proposed Project location is anticipated to have a *Less Than Significant Project-specific Impact* on any special status species, natural community, or jurisdictional waters.

Checklist Item e): The Tulare County General Plan includes policies to reduce potential environmental impacts resulting from growth and development within the County. The proposed Project will comply with all applicable General Plan policies. The proposed Project is consistent with the County's current land use designation (Valley Agriculture) and zoning (AE-40, Exclusive Agriculture, 40-Acre Minimum). The applicant will be required to submit a Reclamation Plan that details the actions to be taken to return the Project site to pre-development use for agricultural purposes after the 35-year Project lifespan. Therefore, the proposed Project will not conflict with any local policies or ordinance protecting biological resources; there will be a *Less Than Significant Project-specific Impact* to this checklist item.

Checklist Item f): There are two (2) habitat conservation plans (HCPs)/natural community conservation plans (NCCP) that apply in Tulare County: the "Kern Water Bank Authority Habitat Conservation Plan/Natural Community Conservation Plan" and the "Recovery Plan for Upland Species in the San Joaquin Valley." The Kern Water Habitat Conservation Plan only applies to an area in Allensworth and the proposed Project area is not subject to this plan. The Recovery Plan for Upland Species in the San Joaquin Valley outlines a number of species that are important to the San Joaquin Valley, including the Swainson's hawk. However, none of these species were identified within the proposed Project site. Therefore, the proposed Project will not conflict with any HCP, NCCP, or any other locate, state, or federal conservation plans; there will be a Less Than Significant Project-specific Impact to this checklist item.

Cumulative Impacts: Future development projects within the Project planning area would result in physical changes to the environment that could potentially result in impacts to biological resources within the specific development area. Future development projects would be evaluated on a project-by-project basis and would be required to follow all local, state, and federal permit requirements (for example, of the County of Tulare, SJVAPCD, RWQCB, CDFW, USFWS, and USACE), as applicable. Future developments would also implement standard CDFW measures such as preconstruction surveys, avoidance measures, and temporal measures, as well as County standard measures such as Construction Best Management Practices and pre-construction biological education training, as deemed appropriate by Tulare County and CDFW, to reduce potential impacts on biological resources, as applicable. No other development projects are proposed in the vicinity of the proposed Project. As such, the proposed Project itself will have a *Less Than Significant Cumulative Impact* on biological resources.

#### **CONCLUSION**

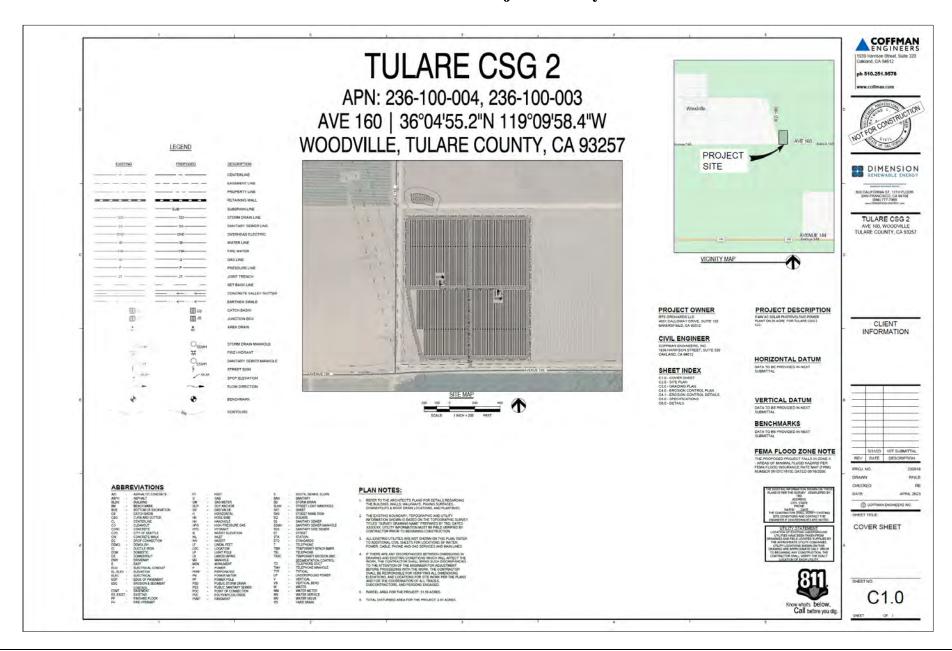
The proposed Project will not expand beyond the proposed site location. Based on the review of the CNDDB RareFind 5 and BIOS applications, no special status species, natural communities, or jurisdictional waters are located within the proposed Project site. The Resource Management Agency concurs with the Swainson's Hawk Survey findings provided by the biological consultants (Dudek)

Kern Water Bank Authority. KWBA Habitat Conservation Plan / Natural Community Conservation Plan (1997). Accessed July 2023 at: <a href="https://www.kwb.org/environmental-permits/">https://www.kwb.org/environmental-permits/</a>

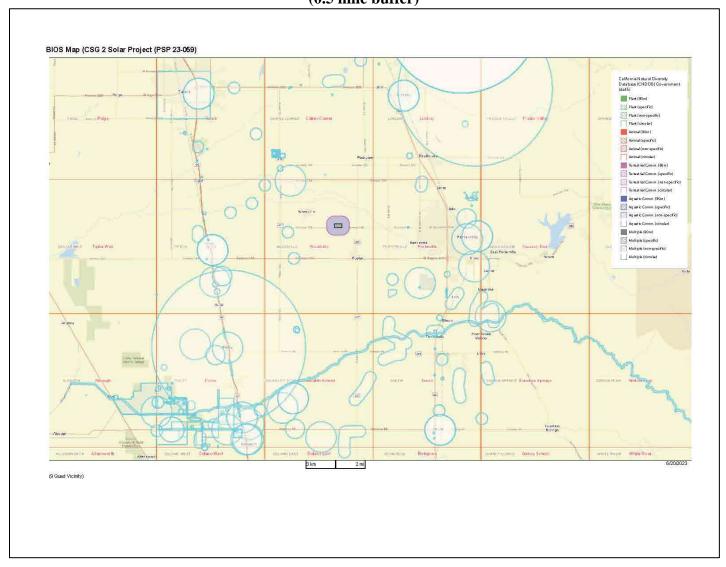
<sup>&</sup>lt;sup>12</sup> U.S. Fish & Wildlife Service. Recovery Plan for Upland Species of the San Joaquin Valley, California (1998) Accessed July 2023 at: <a href="https://esrp.csustan.edu/publications/recoveryplan.php">https://esrp.csustan.edu/publications/recoveryplan.php</a>

regarding presence or absence of the Swainson's hawk and red-tailed hawk near the proposed Project vicinity. The proposed Project have a *Less Than Significant Project-specific or Cumulative Impacts* on biological species and mitigation measures are not required to reduce potential impacts to a less than significant level.

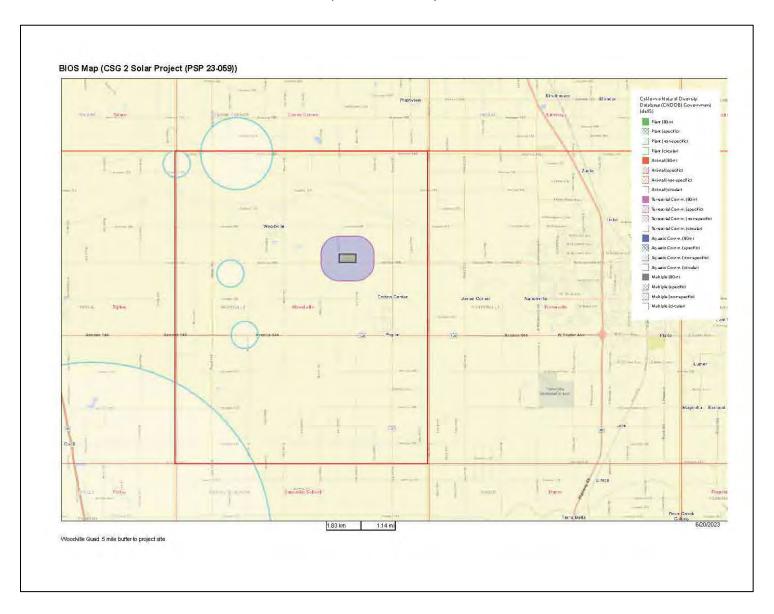
#### Attachment A. Project Vicinity



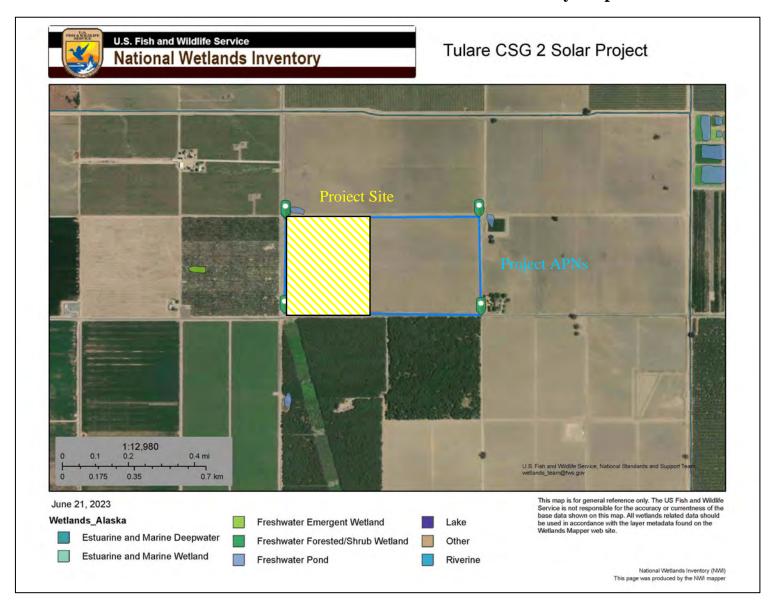
# Attachment B. BIOS 6 Project 9-Quad Area Species Map (0.5 mile buffer)



# Attachment C. BIOS 6 Project Quad Species Map (Woodville) (0.5 mile buffer)



## **Attachment D. USFW National Wetland Inventory Map**



# Attachment E. RareFind 5 Project Planning Area Species List

(Species recorded within the Woodville Quadrangle)



#### Selected Elements by Scientific Name

California Department of Fish and Wildlife California Natural Diversity Database



Query Criteria: Quad<span style='color:Red'> IS </span>(Woodville (3611912))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rank/CDFW SSC or FP
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S2	SSC
Dipodomys nitratoides nitratoides Tiplon kangaroo rat	AMAFD03152	Endangered	Endangered	G3T1T2	S2	
Vulpes macrotis mutica San Joaquin kit fox	AMAJA03041	Endangered	Threatened	G4T2	S3	

Record Count: 3

Government Version -- Dated June, 2 2023 -- Biogeographic Data Branch Report Printed on Tuesday, June 20, 2023

Page 1 of 1 Information Expires 12/2/2023

## Attachment F. Project Planning Area 9-Quad Species List



#### Selected Elements by Scientific Name California Department of Fish and Wildlife California Natural Diversity Database



Query Criteria:

Quad<span style='color:Red'> IS </span>(Woodville (3611912)<span style='color:Red'> OR </span>Ducor (3511981)<span style='color:Red'> OR </span>Tipton (3611913)<span style='color:Red'> OR </span>Tulare (3611923)<span style='color:Red'> OR </span>Cairns Corner (3611922)<span style='color:Red'> OR </span>Lindsay (3611921)<span style='color:Red'> OR </span>Porterville (3611911)<span style='color:Red'> OR </span style='col

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Agelaius tricolor	ABPBXB0020	None	Threatened	G1G2	S2	SSC
tricolored blackbird						
Andrena macswalni	IIHYM35130	None	None	G2	\$2	
An andrenid bee						
Anniella grinnelli	ARACC01050	None	None	G2G3	S2S3	SSC
Bakersfield legless lizard						
Anniella pulchra	ARACC01020	None	None	G3	S2S3	SSC
Northern California legless lizard						
Athene cunicularia	ABNSB10010	None	None	G4	S3	SSC
burrowing owl						
Atriplex cordulata var. erecticaulis	PDCHE042V0	None	None	G3T1	SI	18.2
Earlimart orache						
Atriplex coronata var. vallicola	PDCHE04371	None	None	G4T3	S3	1B.2
Lost Hills crownscale						
Atriplex depressa	PDCHE042L0	None	None	G2	S2	1B.2
brittlescale						
Atriplex minuscula	PDCHE042M0	None	None	G2	S2	18.1
lesser saltscale						
Atriplex persistens	PDCHE042P0	None	None	G2	S2	1B.2
vernal pool smallscale						
Atriplex subtilis	PDCHE042T0	None	None	G1	S1	1B.2
subtle orache						
Bombus crotchii	IIHYM24480	None	Candidate	G2	S2	
Crotch bumble bee			Endangered			
Branchinecta lynchi	ICBRA03030	Threatened	None	G3	S3	
vernal pool fairy shrimp						
Buteo swainsoni	ABNKC19070	None	Threatened	G5	S4	
Swainson's hawk						
Caulanthus californicus	PDBRA31010	Endangered	Endangered	G1	51	1B.1
California jewelflower						
Cicindela tranquebarica joaquinensis	HCOL0220E	None	None	G5T1	51	
San Joaquin tiger beetle						
Clarkia springvillensis	PDONA05120	Threatened	Endangered	G2	S2	18.2
Springville clarkia	1,00,000,000				-	
Delphinium recurvatum	PDRAN0B1J0	None	None	G2?	S2?	1B.2
recurved larkspur		C.1745	- Arak		200	2.3
Diplacus pictus	PDSCR1B240	None	None	G2	S2	1B.2
calico monkeyflower	2.24014434	Years	13010	100	/20	

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Page 1 of 2

Report Printed on Tuesday, June 20, 2023

Information Expires 12/2/2023



#### Selected Elements by Scientific Name



#### California Department of Fish and Wildlife California Natural Diversity Database

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFV SSC or FP
Dipodomys nitratoides nitratoides	AMAFD03152	Endangered	Endangered	G3T1T2	S2	
Tipton kangaroo rat						
Eremalche parryi ssp. kernensis	PDMAL0C031	Endangered	None	G3G4T3	\$3	1B.2
Kern mallow						
Fritillaria striata	PMLILOVOKO	None	Threatened	G1	SI	1B.1
striped adobe-lily						
Gambelia sila	ARACF07010	Endangered	Endangered	G1	S2	FP
blunt-nosed leopard lizard						
Lanius Iudovicianus	ABPBR01030	None	None	G4	S4	SSC
loggerhead shrike						
Lasiurus cinereus	AMACC05032	None	None	G3G4	S4	
hoary bat						
Lasthenia chrysantha alkali-sink goldfields	PDAST5L030	None	None	G2	\$2	1B.1
Lytta hoppingi	IICOL4C010	None	None	G1G2	S2	
Hopping's blister beetle						
Lytta molesta	IICOL4C030	None	None	G2	S2	
molestan blister beetle						
Lytta morrisoni	IICOL4C040	None	None	G1G2	S2	
Morrison's blister beetle						
Masticophis flagellum ruddocki	ARADB21021	None	None	G5T2T3	S3	SSC
San Joaquin coachwhip						
Monolopia congdonii	PDASTA8010	Endangered	None	G2	52	18.2
San Joaquin woollythreads						
Northern Claypan Vernal Pool	CTT44120CA	None	None	G1	S1.1	
Northern Claypan Vernal Pool						
Perognathus inomatus	AMAFD01060	None	None	G2G3	S2S3	
San Joaquin pocket mouse						
Phrynosoma blainvillii	ARACF12100	None	None	G4	S4	SSC
coast homed lizard						
Pseudobahia peirsonii	FDAST7P030	Threatened	Endangered	G1	S1	1B.1
San Joaquin adobe sunburst						
Puccinellia simplex	PMPOA53110	None	None	G2	S2	1B.2
California alkali grass						
Rhaphiomidas trochilus	IIDIP05010	None	None	GI	S1	
San Joaquin Valley giant flower-loving fly						
Spea hammondii	AAABF02020	None	None	G2G3	S3S4	SSC
western spadefoot						
Taxidea taxus	AMAJF04010	None	None	G5	S3	SSC
American badger						
Vulpes macrotis mutica	AMAJA03041	Endangered	Threatened	G4T2	S3	
San Joaquin kit fox						
					Record Cour	nt: 40

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Page 2 of 2

Report Printed on Tuesday, June 20, 2023

Information Expires 12/2/2023

#### Attachment G. Swainson's Hawk Survey



MAIN OFFICE 605 THIRD STREET ENCINITAS, CALIFORNIA 92024 T 800.450.1818 F 760.632.0164

Abby Reed Dimension Renewable Energy 1400 Broadway, 28th Floor New York, NY 10018 May 9, 2023

#### Subject: Swainson's Hawk Surveys for the Tulare CSG 2 Solar Project (Woodville), Tulare County, California

This Swainson's hawk (SWHA; *Buteo swainsoni*) report was prepared in support of an application submitted by Dimension Renewable Energy for the proposed development of the Tulare CSG 2 Solar Project (Project) located on unincorporated lands in Tulare County, California. The Project site is located on approximately 24.5 acres of unincorporated privately owned lands along Avenue 160 and Road 180 to the west of Porterville in Tulare County, California.

Based on their experience with other comparable projects, Tulare County has determined that, pursuant to the California Environmental Quality Act (California Public Resources Code Sections 21000 et seq.), review of the Project should take the form of a Categorical Exemption (CatEx).

This letter report summarizes the methods and documents the results of the SWHA surveys being undertaken to assess the presence or absence of SWHA and other birds/raptors at the Project site.

Heather Neldner, a wildlife biologist with the environmental consultancy Dudek, served as the principal investigator for this survey with the assistance of biologists Grace Sanclemente and Josh McLaughlin. A total of six surveys were conducted in April and May 2023. The number of suitable survey days within the Phase 2 and Phase 3 survey windows were constrained due to the numerous storm events that occurred. Surveys were conducted within the approximately 24.5-acre Project area and within 0.5-mile of the Project area, herein referred to as the survey area.

No active or inactive Swainson's hawk nests were observed during the surveys. One potential nest tree was observed in the 0.5-mile buffer area but more than 500 feet from the Project boundary. The potential nest tree was eventually abandoned due to harassment from a nearby nesting red tailed hawk pair and are therefore not anticipated to be adversely affected by Project construction activities.

#### Introduction

The purpose of the surveys discussed in this report was to determine the presence or absence of Swainson's hawks, particularly nesting habitat, to inform project planning being undertaken by Dimension Renewable Energy. The goal of identifying these species and their nesting habitat is to avoid and minimize impacts where feasible. Additionally, the survey results will inform the CatEx and related environmental planning for the Project. Swainson's hawk surveys were conducted in accordance with the methodology used in the Central Valley recommended by the Swainson's hawk Technical Advisory Committee (SHTAC 2000).

#### Background

Swainson's Hawk

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The Swainson's hawk was listed as a California state threatened species by the California Fish and Game Commission in 1983 due to loss of nesting habitat and decreased numbers throughout the state. The majority of the remaining breeding pairs of SWHA in California occur in the Central Valley and on the northeastern plateau. This species breeds in the western United States and Canada and winters in Central and South America, sometimes as far south as Argentina. The biggest threats to SWHA include the loss of foraging and breeding habitats due to development, climate change, disease, pesticide poisoning, and electrocution (USFWS).

#### Methods

#### Swainson's Hawk

Focused surveys for SWHA following the methodology used in the Central Valley recommended by the Swainson's Hawk Technical Advisory Committee (SHTAC 2000) were conducted on April 2, April 11, April 12, April 14, April 20, and May 5, 2023. The survey area is shown in Figure 1. Pursuant to this protocol, Dudek biologist Heather Neldner, surveyed all suitable nesting habitat within the approximately 24.5-acre Project area, and outside the Project area within 0.5 miles, to the extent that those areas are accessible and visible with the aid of binoculars and spotting scopes from the Project area or public roads within 0.5 miles of Project area. During each survey, Ms. Neldner inspected individual trees, tree clusters, and riparian areas for suitable nest structures. Ms. Neldner also conducted searches for individual Swainson's hawks and recorded information regarding Swainson's hawk observed activities, including behaviors indicative of pairing and nesting.

#### Results

#### Swainson's Hawk

Suitable nesting habitat was identified within the survey area including nearby large trees. During the surveys, no potential SWHA nests was observed, although a pair of SWHA were repeatedly observed performing territorial/paired behavior near a conifer (a potential nesting tree) located approximately 1000 feet west of the North-Northwest site corner. The pair was not observed engaging in any nest building activity during surveys.

Approximately two SWHA individuals (identified as a pair) were observed repeatedly within the Project area during the surveys. No SWHA or nests were observed during the April 2 or April 11, 2023 surveys. On the April 12, 13, and 20, 2023 surveys, the same pair of intermediate morph adult SWHA were observed performing territorial/paired behavior within the buffer area, but were not observed engaging in nest building activities. No SWHA or nests were observed during the May 5, 2023 survey. A newly found RTHA nest with fledglings was observed nearby the pine tree where the previously observed SWHA pair were present. The pair of SWHA observed onsite were described as receiving aggression from a pair of RTHA nearby. It is likely the aggressor RTHAs were the same pair observed with the newly found nest on May 5th, as chicks would have been present in the last 2-3 weeks during the last round of surveys. It is likely the RTHA pair drove the SWHA pair off, as nesting RTHA are known to be aggressively territorial.

#### Other Birds Observed

Four additional raptor species, Cooper's hawk (*Accipiter cooperii*), turkey vulture (*Cathartes aura*), great horned owl (*Bubo virginianus*), and red-tailed hawk (*Buteo jamaicensis*), were observed during surveys. Six active red-tailed hawk nests within the survey area were identified (see Figure 2). Five of the active red-tailed hawk nests are located outside of the Project boundary, but within the 0.5-mile buffer area. One active red-tailed hawk nest is located within site boundaries within a valley oak tree at approximately 36.083585°N 119.158008°W.

2

Other bird species observed during surveys included mourning dove (Zenaida macroura), common raven (Corvus corax), northern flicker (Colaptes auratus), House Finch (Haemorhous mexicanus), Yellow-rumped Warbler (Setophaga coronata), Northern Mockingbird (Mimus polyglottos), American Robin (Turdus migratorius), Black Phoebe (Sayornis nigricans), Brewer's Blackbird (Euphagus cyanocephalus), western kingbird (Tyrannus verticalis), California scrub-jay (Aphelocoma californica), killdeer (Charadrius vociferus), and European starling (Sturnus vulgaris). An active common raven nest was identified within the survey area, but outside of the Project boundary. The common raven nest is located approximately 3,800 feet to the north of the Project boundary in a utility/cellular tower.

#### Swainson's Hawk Surveys Summary

Date	Staff	Site Conditions	SWHA Observations
4/02/23	Grace Sanclemente	8:30 AM-11:00 AM; 41- 52°F; 2-5 mph wind; 0% cloud cover	No SWHA; no nests
4/11/23	Heather Neldner	10:50 AM-4:59 PM; 70- 85°F; 0-2 mph wind; 0% cloud cover	No SWHA; no nests
4/12/23	Heather Neldner	10:00 AM-12:00 AM; 58- 61°F; 0-3 mph wind; 100% cloud cover	2 adults performing territorial/paired behavior; no nests
4/14/23	Heather Neldner	9:05 AM-11:30 AM; 64- 70°F; 0-4 mph wind; 0% cloud cover	2 adults performing territorial/paired behavior; no nests
4/20/23	Heather Neldner	5:59 PM-7:13 PM; 62-64°F; 3-4 mph wind; 50% cloud cover	2 adults performing territorial/paired behavior; no nests
5/05/23	Josh McLaughlin	11:15 AM-2:20 PM; 62- 66°F; 1-6 mph wind; 50- 70% cloud cover	No SWHA; no nests. SWHA pair previously observed likely driven away by nearby nesting RTHA pair.

#### Conclusion

No active or inactive Swainson's hawk nests were observed within the 0.5-mile survey area surrounding the Project. One potential SWHA nest tree was observed but is located more than 500 feet from proposed construction activities and operations. In addition, as of the last survey completed at the site, it is believed the SWHA pair observed at the potential next tree were driven away by a nesting RTHA pair nearby observed with fledglings. Proposed construction activities and operations are therefore not anticipated to cause adverse effects to Swainson's hawk nests.

Six red-tailed hawk nests and one common raven nest were observed in the vicinity but will be avoided during project construction. A less than significant impact to the species is anticipated if avoidance measures are closely followed during project construction.

If you have any questions regarding the contents of this letter report, please contact me at 510.601.2504 or azhang@dudek.com.

3

Sincerely,

Angela Zhang

Environmental Compliance Manager

A – Figures B – Field Data Reports C – Biologist Resumes

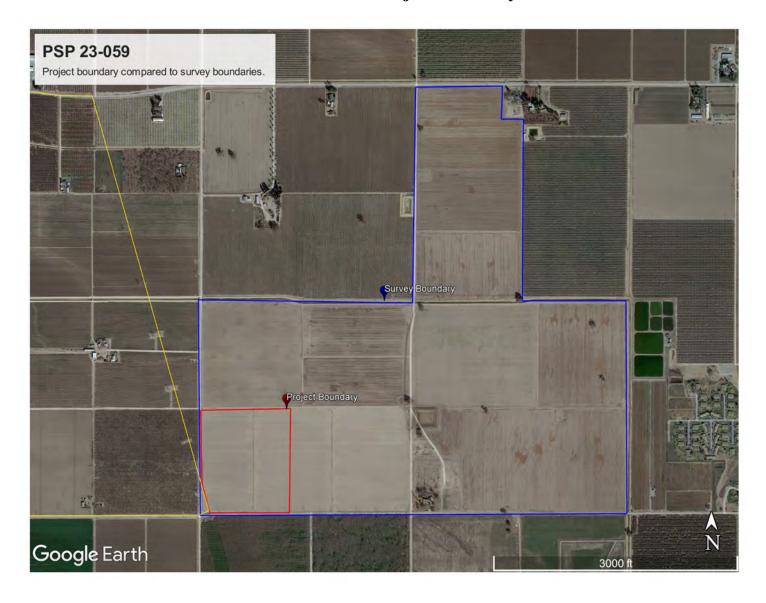
#### Literature Cited

California Department of Fish and Wildlife (CDFW). Swainson's Hawks in California. https://wildlife.ca.gov/Conservation/Birds/Swainson-Hawks. Accessed April 2023.

SHTAC (Swainson's Hawk Technical Advisory Committee). 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83990. Accessed April 2023.

4

# **Attachment H. Project Boundary**





MAIN OFFICE 605 THIRD STREET ENCINITAS, CALIFORNIA 92024 T 800.450.1818 F 760.632.0164

Abby Reed
Dimension Renewable Energy
1400 Broadway, 28th Floor
New York, NY 10018

May 9, 2023

#### Subject: Swainson's Hawk Surveys for the Tulare CSG 2 Solar Project (Woodville), Tulare County, California

This Swainson's hawk (SWHA; *Buteo swainsoni*) report was prepared in support of an application submitted by Dimension Renewable Energy for the proposed development of the Tulare CSG 2 Solar Project (Project) located on unincorporated lands in Tulare County, California. The Project site is located on approximately 24.5 acres of unincorporated privately owned lands along Avenue 160 and Road 180 to the west of Porterville in Tulare County, California.

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No active or inactive Swainson's hawk nests were observed during the surveys. One potential nest tree was observed in the 0.5-mile buffer area but more than 500 feet from the Project boundary. The potential nest tree was eventually abandoned due to harassment from a nearby nesting red tailed hawk pair and are therefore not anticipated to be adversely affected by Project construction activities.

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4/14/23	Heather Neldner	9:05 AM-11:30 AM; 64- 70°F; 0-4 mph wind; 0% cloud cover	2 adults performing territorial/paired behavior; no nests
4/20/23	Heather Neldner	5:59 PM-7:13 PM; 62-64°F; 3-4 mph wind; 50% cloud cover	2 adults performing territorial/paired behavior; no nests
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#### Conclusion

No active or inactive Swainson's hawk nests were observed within the 0.5-mile survey area surrounding the Project. One potential SWHA nest tree was observed but is located more than 500 feet from proposed construction activities and operations. In addition, as of the last survey completed at the site, it is believed the SWHA pair observed at the potential next tree were driven away by a nesting RTHA pair nearby observed with fledglings. Proposed construction activities and operations are therefore not anticipated to cause adverse effects to Swainson's hawk nests.

Six red-tailed hawk nests and one common raven nest were observed in the vicinity but will be avoided during project construction. A less than significant impact to the species is anticipated if avoidance measures are closely followed during project construction.

If you have any questions regarding the contents of this letter report, please contact me at 510.601.2504 or azhang@dudek.com.

Sincerely,

Angela/Zhang

**Environmental Compliance Manager** 

Att.: A – Figures

B – Field Data Reports C – Biologist Resumes

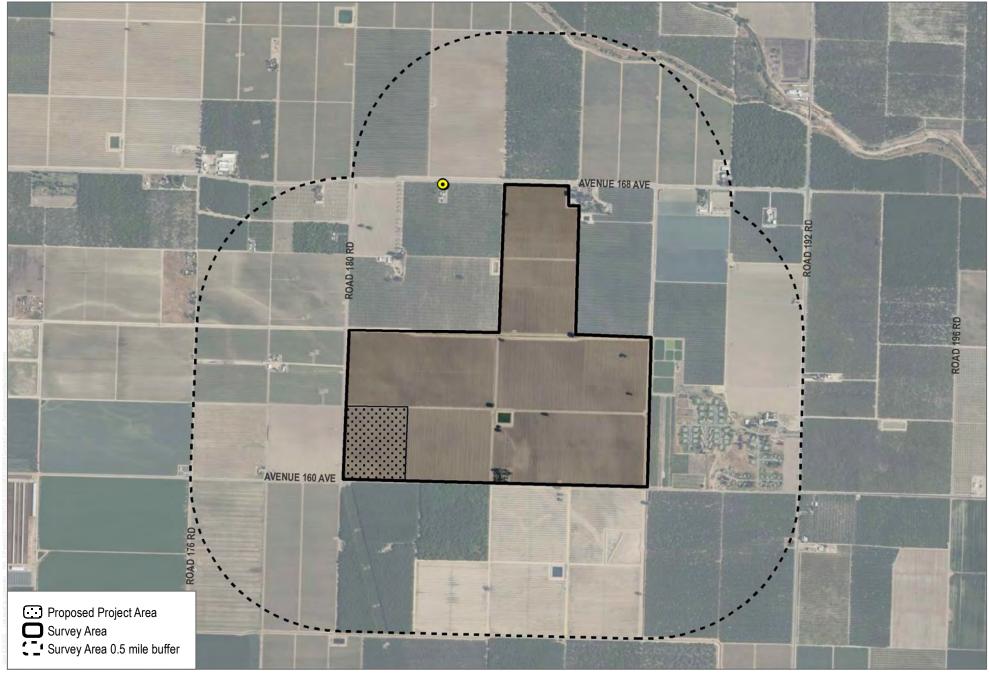
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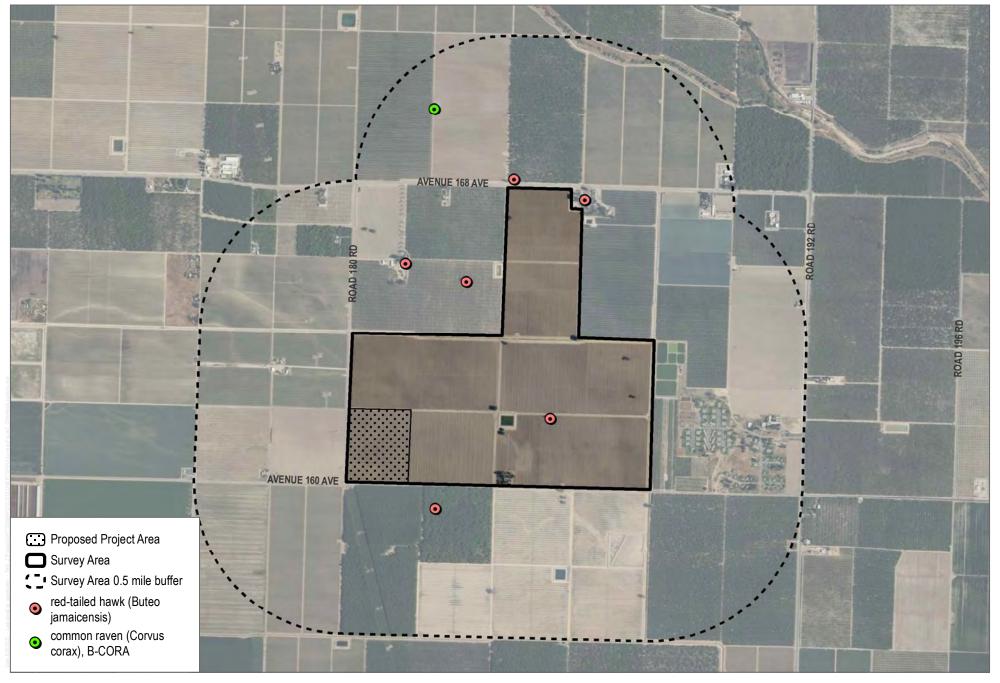
https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83990. Accessed April 2023.

# Attachment A Figures



SOURCE: Bing Maps 2023; County of Tulare 2023

FIGURE 1
Swainson's Hawk Nest Location
RTS Orchards (Woodville) Project



SOURCE: Bing Maps 2023; County of Tulare 2023

FIGURE 2
Other Nest Location
RTS Orchards (Woodville) Project

# Attachment B Field Data Reports

	Bio Field Data
ID	29003
Date	2023-04-02
Biologist	Grace Sanclemente
Project	Dimension Renewable Energy
Survey Area	Entire Site
Survey Type	Swainson's Hawk
Time	8:30 AM-11:00 AM
Conditions	41–52°F; 0% cloud cover; 2–5 mph wind
Visit Type	
Notes	Biologist Grace Sanclemente surveyed for Swainson hawk activity within the project boundary and the surrounding 0.5mi buffer. Most of the survey was conducted from a vehicle due to the inaccessibility of surrounding areas (most of the buffer is privately owned property).  Area within project boundary is flat, and trees were planted very recently so there is no chance of SWHA nests to be observed within that boundary. In the 0.5mi buffer, there are several large oak trees suitable for SWHA nests. Only one large stick nest was observed in an oak tree approximately 2,200 feet north from the project boundary. A pair of RTHA were observed perched near the nest. Territorial behavior and courtship displays were observed, and the pair attempted to copulate. It is very likely that this pair will be using the nest this season.  No observations of SWHA within project area or buffer.
Number of Nests Observed	0

	Wildlife List	
ID	S29003	
Species Name	turkey vulture (Cathartes aura), B-TUVU	
Federal and State Status	None/None	
ID	S29003	
Species Name	Brewer's blackbird (Euphagus cyanocephalus), B-BRBL	
Federal and State Status	None/None	
ID	S29003	
Species Name	black phoebe (Sayornis nigricans), B-BLPH	
Federal and State Status	None/None	
ID	S29003	
Species Name	northern flicker (Colaptes auratus), B-RSFL	
Federal and State Status	None/None	

ID	S29003
Species Name	American robin (Turdus migratorius), B-AMRO
Federal and State Status	None/None
ID	S29003
Species Name	northern mockingbird (Mimus polyglottos), B-NOMO
Federal and State Status	None/None
ID	S29003
Species Name	yellow-rumped warbler (Setophaga coronata), B-YRWA
Federal and State Status	None/None
ID	S29003
Species Name	S29003 house finch (Haemorhous mexicanus), B-HOFI
Species Name	house finch (Haemorhous mexicanus), B-HOFI
Species Name Federal and State Status	house finch (Haemorhous mexicanus), B-HOFI None/None

	Photos
ID	S29003
Туре	Photo



Description	Large stick nest observed in oak tree within 0.5mi of survey boundary.
ID	S29003
Туре	Photo



Description

View of survey area from NW corner. Photo bearing SE.

Type S29003
Photo



Photo

Description

View of survey area from SW corner.

	Bio Field Data
ID	29369
Date	2023-04-11
Biologist	Heather Neldner
Project	RTS Orchards (Woodville)
Survey Area	Entire Site
Survey Type	Burrowing Owl, San Joaquin Kit Fox Pedestrian Surveys, Swainson's Hawk
Time	4:59 PM-10:50 AM
Conditions	70-85°F; 0% cloud cover; 0-2 mph wind
Visit Type	
Wildlife Species Count Summary	
	Dudek biologist Heather Neldner performed survey for Swainson's Hawk within site boundaries and half-mile buffer around site (when accessible) in accordance with SWHA survey protocols. Biologist drove site and buffers in vehicle and used binoculars/spotting scope to observe and catalog large stick nests/habitat that could be utilized by SWHA. No SWHA observed during survey. RTHA aerial courtship was observed near previous observations from prior SWHA survey.
Notes	Biologist performed pedestrian survey in accordance with survey protocols for Burrowing Owl and San Joaquin Kit Fox within site boundaries and appropriate buffers around site (using binoculars when access was prohibited). Biologist walked survey area in 20 m transects, noting any burrows meeting/exceeding size threshold that allows possible BUOW/SJKF utilization. No BUOW/SJKF sign or other signs of occupancy were observed. Recent flooding/rain may have washed away signs of occupation as very little mammalian sign was observed across the site in general.
	Non-SWHA Nests Identified: - Red-tailed Hawk nest in defoliated almond tree ~400 ft SWW of site boundary. Adult RTHA present in nest with another adult RTHA circling and calling nearby
Number of Nests Observed	0

	Wildlife List
ID	S29369
Species Name	great horned owl (Bubo virginianus), B-GHOW
Federal and State Status	None/None
ID	S29369
Species Name	mourning dove (Zenaida macroura), B-MODO
Federal and State Status	None/None
ID	S29369
Species Name	western kingbird (Tyrannus verticalis), B-WEKI
Federal and State Status	None/None
ID	S29369

Species Name	red-tailed hawk (Buteo jamaicensis), B-RTHA
Federal and State Status	None/None
ID	S29369
Species Name	Cooper's hawk (Accipiter cooperii), B-COHA
Record Lat/Long	Latitude:36.079997, Longitude:-119.170050, Altitude:108.142114, Speed:0.000000, Horizontal Accuracy:4.657303, Vertical Accuracy:6.495637, Time:04/10/2023 16:16:10 PDT
Federal and State Status	None/WL

	Photos
ID	S29369
Туре	Photo



Description GHOW perched after being flushed from Valley Oak roost

ID	S29369
Туре	Photo



Description Adult RTHA sitting in nest while another adult circles overhead

ID	S29369
Туре	Photo



Photo

Description New RTHA nest location in almond orchard south of site

ID	S29369
Туре	Photo



Description

Example of washed out burrow with no signs of recent activity

ID	S29369
Туре	Photo



Photo

Description

Portion of site representative of habitat type (immature or chard) surveyed for BUOW, SJKF, and SWHA  $\,$ 

	Bio Field Data
ID	29429
Date	2023-04-12
Biologist	Heather Neldner
Project	RTS Orchards (Woodville)
Survey Area	Entire Site
Survey Type	Swainson's Hawk
Time	10:00 AM-12:00 PM
Conditions	58-61°F; 100% cloud cover; 0-3 mph wind
Visit Type	
Notes	Dudek biologist Heather Neldner performed survey for Swainson's Hawk within site boundaries and half-mile buffer around site (when accessible) in accordance with SWHA survey protocols. Biologist drove site and buffers in vehicle and used binoculars/spotting scope to observe and catalog large stick nests/habitat that could be utilized by SWHA. Biologist expanded survey to encompass entire site (previously received directive to survey smaller site footprint).  Starting ~11:30, large-scaled territorial dispute occurred over northern half of site between what appeared to be 2 pairs of adult RTHA and 1 pair of adult SWHA (ID'ed using calls due to poor lighting). During 30 min dispute, raptors vocalized, performed territorial aerial dives, chased each other for tree-to-tree, and harried one another. While dispute occurred biological identified several a large stick nests with fresh raptor feathers, implying nests are normally active and occupied when intense territorial disputes are not underway.  After dispute settled down, adult pair of SWHA - one intermediate morph and one dark or intermediate morph - perched and preened together on upper branch of tall conifer in halfmile buffer near 36.094569°N 119.164536°W. While no obvious nest was identified in said tree, pair may be in early stages of nest building and further observation is warranted.
	Nests/Sites Warranting Further Observation:  - Active raptor nest in eucalyptus ~170 ft N of site boundary, likely RTHA due to nearby adu RTHA pair occupying immediate area around nest.  - Raptor nest in valley oak ~140 ft N of site boundary, likely RTHA due to nearby adult RTH pair occupying immediate area around nest  - Pair of adult SWHA displaying territorial behavior and courting behavior while perched in conifer ~1000 ft W of NNW site corner that may become future nesting site  Non-SWHA Nests Identified:  - Common Raven nest in utility/cellular tower N of site boundary. Adult CORA present in ne with additional adult CORA circling nearby.
	····

Swainson's Hawk Observations	
ID	S29429
ID (date-observer-consecutive number)	2023412-HN-1
Number of SWHA Observed	2
Age(s)	adult
Nest?	No

0

Number of Nests Observed

Other	NI+	Ct-t.	

#### Courtship/territorial behavior

Wildlife List	
ID	S29429
Species Name	common raven (Corvus corax), B-CORA
Federal and State Status	None/None
ID	S29429
Species Name	mourning dove (Zenaida macroura), B-MODO
Federal and State Status	None/None
ID	S29429
Species Name	red-tailed hawk (Buteo jamaicensis), B-RTHA
Federal and State Status	None/None

Photos		
ID	S29429	
Туре	Photo	
Photo		
Description	Pair of adult SWHA displaying territorial behavior and courting behavior while perched in conifer ~1000 ft W of NNW site corner that may become future nesting site	
ID	S29429	
Type	Photo	



Photo

Description

Location of raptor nest in valley oak ~140 ft N of site boundary, likely RTHA due to nearby adult RTHA pair occupying immediate area around nest

ID	S29429
Туре	Photo



Description	Active raptor nest in eucalyptus ~170 ft N of site boundary, likely RTHA due to nearby adult RTHA pair occupying immediate area around nest
ID	S29429
Туре	Photo
Photo	
Description	Location of active raptor nest in eucalyptus ~170 ft N of site boundary
ID	S29429
Туре	Photo
Photo	
Description	Portion of site during SWHA survey

Bio Field Data	
er	
wk	
AM	
oud cover; 0–4 mph wind	
Heather Neldner performed survey for Swainson's Hawk within site half-mile buffer around site (when accessible) in accordance with SWHA s. Biologist drove site and buffers in vehicle and used binoculars/spotting we and catalog large stick nests/habitat that could be utilized by SWHA.  Ber Neldner observed 2 newly-hatched nestlings in RTHA nest previously idek biologist Grace Sanclamente, around 36.089899°N 119.163156°W.  Bapproximately one hour observing previously-identified pair of intermediate nat had exhibited paired activity in residential conifer around 36.094455°N to ascertain if nest building was occuring. Over entirety of observation period, r nest building occurred, but one SWHA repeatedly performed territorial diperch tree. Preening and pair attendance continues to suggest SWHA pair building activity in the conifer within a week.  A Nests Identified:  Wk nest in Valley Oak within site boundaries around 36.083585°N  One adult RTHA perched near nest, looking into nest (possibly at hatchlings sible) while another adult RTHA circled nearby.	
sistery willio another addit for the conditional floating.	
si	

Swainson's Hawk Observations	
ID	S29621
ID (date-observer-consecutive number)	2023414-HN-1
Number of SWHA Observed	2
Age(s)	adult
Nest?	No
Other Nest Status	Paired behavior in preparation for nest building

Wildlife List	
ID	S29621
Species Name	common raven (Corvus corax), B-CORA
Federal and State Status	None/None

ID	S29621
Species Name	mourning dove (Zenaida macroura), B-MODO
Federal and State Status	None/None
ID	S29621
Species Name	California scrub-jay (Aphelocoma californica), B-CASJ
Federal and State Status	None/None
ID	S29621
ID Species Name	S29621 killdeer (Charadrius vociferus), B-KILL
Species Name	killdeer (Charadrius vociferus), B-KILL
Species Name Federal and State Status	killdeer (Charadrius vociferus), B-KILL None/None

	Photos
ID	S29621
Туре	Photo



Description

Previously-identified pair of intermediate morph SWHA that had exhibiting preening and pair attendance that continues to suggest SWHA pair will begin nest building activity in the conifer within a week

ID	S29621
Туре	Photo



Description

Location of previously-identified pair of intermediate morph SWHA (circled) that had exhibited paired activity in residential conifer around 36.094455°N 119.164673°W

ID	S29621
Туре	Photo



Photo

RTHA nest previously identified by Dudek biologist Grace Sanclamente, around 36.089899°N

Description 119.163156°W. Biologist Heather Neldner observed 2 nestlings from afar (indicated with arrows)

ID	S29621
Туре	Photo



Description

Location of RTHA nest previously identified by Dudek biologist Grace Sanclamente, around  $36.089899^\circ N$   $119.163156^\circ W$ .

Type S29621 Photo



Photo

Description

Red-tailed Hawk nest (circled) in Valley Oak within site boundaries around 36.083585°N 119.158008°W. One adult RTHA perched near nest, looking into nest (possibly at hatchlings that were not visible) while another adult RTHA circled nearby.

ID	S29621
Туре	Photo



Description

Location Red-tailed Hawk nest in Valley Oak within site boundaries around  $36.083585^\circ N$   $119.158008^\circ W$ .

Bio Field Data	
ID	29807
Date	2023-04-20
Biologist	Heather Neldner
Project	Woodville
Survey Area	Entire Site
Survey Type	Swainson's Hawk
Time	5:59 PM-7:13 PM
Conditions	62-64°F; 50% cloud cover
Visit Type	
Notes	Dudek biologist Heather Neldner performed survey for Swainson's Hawk within site boundaries and half-mile buffer around site (when accessible) in accordance with SWHA survey protocols. Biologist drove site and buffers in vehicle and used binoculars/spotting scope to observe and catalog large stick nests/habitat that could be utilized by SWHA.  Biologist observed previously-identified pair of intermediate morph SWHA for prolonged period to assess mating or nest building activity. Pair appeared to make a single attempt at copulation during 30 min observation period, but did not seem to succeed. No nest building
	activity occurred post-copulation-attempt, suggesting SWHA may not have begun nest building phase yet but continues to occupy likely nesting tree.  No new large stick nests or SWHA nests observed. New pairs of SWHA may begin nesting in near future due to later-than-average nesting behavior but no additional SWHA pairs have been observed in the area.
Number of Nests Observed	0

Swainson's Hawk Observations	
ID	S29807
ID (date-observer-consecutive number)	2023420-HN-1
Number of SWHA Observed	2
Age(s)	adult
Nest?	No

Wildlife List		
ID	S29807	
Species Name	Brewer's blackbird (Euphagus cyanocephalus), B-BRBL	
Federal and State Status	None/None	
ID	S29807	
Species Name	northern mockingbird (Mimus polyglottos), B-NOMO	
Federal and State Status	None/None	
ID	S29807	

Species Name	common raven (Corvus corax), B-CORA
Federal and State Status	None/None
ID	S29807
Species Name	western kingbird (Tyrannus verticalis), B-WEKI
Federal and State Status	None/None
ID	S29807
Species Name	red-tailed hawk (Buteo jamaicensis), B-RTHA
Federal and State Status	None/None
ID	S29807
Species Name	mourning dove (Zenaida macroura), B-MODO
Federal and State Status	None/None

Photos Photos		
ID	S29807	
Туре	Photo	



Description

Likely-male SWHA immediately post apparently-failed copulation attempt perching alone in likely nesting tree exhibiting no nest building behavior yet

ID	S29807
Туре	Photo



Description

Pair of SWHA immediately after apparent failed copulation attempt in key future nesting site

### Bio Field Data

Biologist	
	Joshua McLaughlin
Project	Dimension Renewable Energy
Survey Area	Entire Site
Survey Type	Swainson's Hawk
Time	11:15 AM-2:20 PM
Conditions	62-66°F; 50-70% cloud cover; 1-6 mph wind
Visit Type	
Notes	RTS Orchards Woodville  Biologist Josh McLaughlin surveyed for SWHA activity within the project boundary and the surrounding
	0.5mi buffer. Survey conducted from within a vehicle on public roads as all the surrounding buffer area encompasses private property.
	Area within project boundary is flat with pistachio orchards, no potential nesting sites for SWHA. Within the 0.5mi buffer there are multiple large trees suitable for SWHA nests; however, the majority of trees are located on private property and were surveyed to the best of the biologist's ability. The land use within and around the buffer is a mix of orchards and private residences.
	One RTHA observed on a utility pole near the nest on the S side of the project. At least one chick observed in the nest.  Multiple CORA flying over project and buffer area.
	A new RTHA nest with 3 nestlings located along Ave 160 on the SE edge of the project observed. One adult observed soaring close by over a young pistachio orchard.
	A hawk briefly observed sitting in the nest in the middle of the project, at least one nestling observed flapping.  One RTHA observed soaring far S of the buffer.
	One RTHA observed perched on a known nest tree in an orchard near the NW corner of the project.  Two RTHA observed in a oak in the NW corner of the buffer, later a nest with three fledglings was observed in a pine nearby. This is close to where the SWHA were observed previously. and chicks would have been present when the SWHA were last seen during surveys.  6 total active RTHA nests observed on-site.
	No SWHA or SWHA nests observed. The pair of SWHA observed on-site were described as receiving aggression from a pair of RTHA nearby; likely it was the same pair observed with the newly found nest as chicks would have been present in the last 2-3 weeks, during the last round of surveys, and so probably drove the SWHA off.

Survey Conditions		
Status	Start	
Time	11:15:00	
TEMPERATURE	°F	
Air Temp	62	
Air Temp	62	
Soil Temp	0	
Water Temp	0	
Visibility		
Humidity		
Cloud Cover	70	
WIND	mph	
Minimum Wind Speed (mph)	1	

Survey Conditions	
Status	End
Time	14:20:00
TEMPERATURE	°F
Air Temp	66
Air Temp	66
Soil Temp	0
Water Temp	0
Visibility	
Humidity	
Cloud Cover	50
WIND	mph
Minimum Wind Speed (mph)	1

Wildlife List	
Species Name	American robin (Turdus migratorius), B-AMRO
Record Lat/Long	
Federal and State Status	None/None

Wildlife List	
Species Name	California scrub-jay (Aphelocoma californica), B-CASJ
Record Lat/Long	
Federal and State Status	None/None

Wildlife List	
Species Name	northern mockingbird (Mimus polyglottos), B-NOMO
Record Lat/Long	
Federal and State Status	None/None

Wildlife List	
Species Name	red-tailed hawk (Buteo jamaicensis), B-RTHA
Record Lat/Long	
Federal and State Status	None/None

Wildlife List	
Species Name	European starling (Sturnus vulgaris), B-EUST
Record Lat/Long	
Federal and State Status	None/None



# Wildlife List Species Name Nuttall's woodpecker (Dryobates nuttallii), B-NUWO Record Lat/Long Federal and State Status BCC/None

Wildlife List	
Species Name	house sparrow (Passer domesticus), B-HOSP
Record Lat/Long	
Federal and State Status	None/None

Wildlife List	
Species Name	brown-headed cowbird (Molothrus ater), B-BHCO
Record Lat/Long	
Federal and State Status	None/None

Wildlife List	
Species Name	northern flicker (Colaptes auratus), B-RSFL
Record Lat/Long	
Federal and State Status	None/None

Wildlife List	
Species Name	Bullock's oriole (Icterus bullockii), B-BUOR
Record Lat/Long	
Federal and State Status	BCC/None

Wildlife List	
Species Name	common raven (Corvus corax), B-CORA
Record Lat/Long	
Federal and State Status	None/None

Wildlife List	
Species Name	mourning dove (Zenaida macroura), B-MODO
Record Lat/Long	
Federal and State Status	None/None



# Wildlife List Species Name Eurasian collared-dove (Streptopelia decaocto), B-EUCD Record Lat/Long Federal and State Status None/None

Wildlife List	
Species Name	house finch (Haemorhous mexicanus), B-HOFI
Record Lat/Long	
Federal and State Status	None/None

Wildlife List	
Species Name	rock pigeon (rock dove) (Columba livia), B-ROPI
Record Lat/Long	
Federal and State Status	None/None

Wildlife List	
Species Name	western kingbird (Tyrannus verticalis), B-WEKI
Record Lat/Long	
Federal and State Status	None/None

Wildlife List	
Species Name	turkey vulture (Cathartes aura), B-TUVU
Record Lat/Long	
Federal and State Status	None/None

Wildlife List	
Species Name	Anna's hummingbird (Calypte anna), B-ANHU
Record Lat/Long	
Federal and State Status	None/None

Wildlife List	
Species Name	California quail (Callipepla californica), B-CAQU
Record Lat/Long	
Federal and State Status	None/None

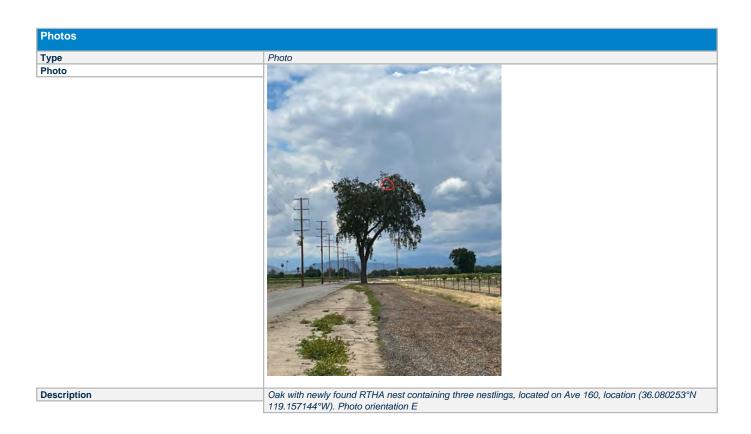


Wildlife List	
Species Name	northern flicker (Colaptes auratus), B-RSFL
Record Lat/Long	
Federal and State Status	None/None

Wildlife List	
Species Name	black phoebe (Sayornis nigricans), B-BLPH
Record Lat/Long	
Federal and State Status	None/None

Wildlife List	
Species Name	killdeer (Charadrius vociferus), B-KILL
Record Lat/Long	
Federal and State Status	None/None

Wildlife List	
Species Name	common raven (Corvus corax), B-CORA
Record Lat/Long	
Federal and State Status	None/None



# Photos Photo Type Photo Description

Detail of new RTHA nest with chicks located (36.080253°N 119.157144°W)





# Photos Type Photo

Photo

Description

Detail of new RTHA nest with fledglings located at (36.090874°N 119.166768°W).

# Attachment C Biologist Resumes

# Joshua McLaughlin

### **BIOLOGIST**

Joshua McLaughlin is a Biologist with 6 years' professional experience conducting wildlife surveys for numerous species, including special-status species such as desert tortoise (*Gopherus agasizii*), San Joaquin kit fox (*Vulpes macrotis mutica*), burrowing owl (*Athene cunicularia*), and Swainson's hawk (*Buteo swainsoni*). Mr. McLaughlin has experience providing restoration services in the San Joaquin River Valley as well as biological monitoring services on large solar arrays. Mr. McLaughlin also has technical experience in data analysis and map creation.

### **Project Experience**

Pelicans Jaw Hybrid Solar Project, Kern County, California. Conducted protocol-level blunt nosed leopard lizard surveys and burrow surveys, and wildlife camera installation for sensitive species within suitable habitat in Kern County. Resources were collected and updated digitally using ArcGIS Collector.

### Education

Gordon College, Wenham, MA BS, Biology, 2016

### Certifications

CPR and First Aid Pesticide Applicator Categories C & F

#### Professional Affiliations

The Audubon Society (Fresno Chapter)

The Wildlife Society (Western Chapter and San Joaquin Chapter)

Solar Power Project, Confidential Client, Kern County, California. Conducted pre-construction surveys for nesting birds, small mammals, San Joaquin kit fox (*Vulpes macrotis mutica*), American badger (*Taxidea taxus*), and Swainson's hawk (*Buteo swainsoni*). Performed biological monitoring during construction activities and consulted with construction personnel on project mitigation measures and governing documents. Implemented protective measures for resources on site, including no-disturbance buffers and monitoring. Relocated wildlife from the construction area and completed daily monitoring reports.

Solar Project, Confidential Client, Kern County, California. Biological monitor on an approximately 760 MW photovoltaic solar project in Kern County. Conducted line transect and clearance surveys for sensitive species including desert tortoise, desert kit fox, and burrowing owl prior to construction activities. Monitored and recorded breeding/nesting behavior of avian species during construction activity according to the Migratory Bird Treaty Act and associated permit requirements. Monitored known desert tortoise habitat during construction activities to minimize and avoid adverse impacts to sensitive species and associated habitat. Facilitated construction personnel compliance with federal, state, and local environmental regulations and associated permits.

San Joaquin River Parkway & Conservation Trust, Fresno, California. Managed, planned, and implemented habitat restoration projects along the San Joaquin River through the establishment of native plants, installing and maintaining irrigation systems, invasive weed suppression and removal, and monitoring of sites. Conducted onsite monitoring of nesting birds and other fauna, with an emphasis on species of concern such as burrowing owl and Swainson's hawk. Conducted daily field data collection and GIS mapping of project sites.

# Heather Neldner

### **BIOLOGIST**

Heather Neldner is a biologist with 5 years' experience working in a field environment surveying and monitoring. Species experience includes bluntnosed leopard lizards (*Gambelia sila*), various other herpetofauna, small mammals, invertebrates, freshwater fish, birds and vascular plants. Ms. Neldner also has an extensive list of field techniques experience including camera trapping, seining, use of Sherman traps, VHF radio telemetry, spotlighting, mist netting, lizard noosing, cover boards, point counts (audio & visual), use of ID keys, ear-tagging, shell marking, field necropsies, toe clipping, blood drawing, pitfall traps, and various transect techniques.

### **Project Experience**

Strauss Wind Farm, Santa Barbara County, California. Approved as a biological monitor to oversee all aspects of construction. Conduct preconstruction surveys for American badger, burrowing owl, and San Diego desert woodrat. Conduct nesting bird and roosting bat surveys and ensure on-site compliance with all project permits.

Rancho Seco Solar II, Sacramento, California. Field Lead. Coordinated with contractor and subcontractors to determine number and location of ground-disturbing activities; assigned biological monitors to tasks. Communicated compliance concerns with project manager and worked with on-site team to develop solutions. Provided biological monitoring & pre-construction surveys for California tiger salamander (CTS) and other sensitive species (e.g. WPT, western spadefoot, burrowing owl, Swainson's hawk). Authorized to handle and relocate CTS and WSF found within the project site

#### Education

California Polytechnic State University, San Luis Obispo, CA

BS, Biological Sciences, Field Biology emphasis, 2017

California Polytechnic State University, San Luis Obispo, CA

MS, Biological Sciences (Physiology), in progress

### Professional Affiliations

NSF Fellow, American Society of Ichthyologists and Herpetologists, Society for the Study of Amphibians and Reptiles, Western Section of the Wildlife Society, Luis Stokes Alliance for Minority and Underrepresented Student Participation in STEM, American Academy for the Advancement of Science, Cal Poly Wildlife Club

Wildfire Emergency Hazard Tree Risk Assessment and Mitigation Monitoring Project, Highways 9 and 236, 2020 CZU Lightning Complex, Santa Cruz County, California. Helped assess the risk posed by wildfire damaged trees by identifying those trees that are an immediate hazard, recommend mitigation, and monitor mitigation efforts along Highways 236 and 9.

### **Publications**

- Wojan, E. M., Carreiro, N.C., Clendenen D.A., Neldner, H.M., Castillo C., Bertram S.M., and Kolluru, G.R.. "The effects of commonly used anesthetics on color measurements across body regions in the poecilid fish, *Girardinus metallicus*" Journal of Fish Biology. 95 (5), pp. 1320-1330. September 2019.
- Wojan, E. M., Bertram S.M., Clendenen D.A., Castillo C., Neldner, H.M, and Kolluru, G.R..(2018) "Sexual selection on the multicomponent display of black morph male *Girardinus metallicus* (Pisces: Poeciliidae)",Behavioral Processes. 153,pp. 1–8. May 2018.



### Posters and Presentations

- H. Neldner, M. Westphal, I. Moore, K. Ivey, N. Gaudenti, and E. Taylor. "Hormonal Herps: Stress and Physiology of an Endangered Lizard (*Gambelia sila*)."
- G. Kolluru, E.Wojan, S.Bertram, C.Castillo, H. Neldner, J.Fitzgerald and N.Carreiro. "Sexual selection via male-male competition in a polymorphic poecilid fish.
- H. Neldner, M. Westphal, I. Moore, K.Ivey, and E. Taylor. "Blunt-nosed Bling: Are radio collars a stressor to Blunt-nosed Leopard Lizards (*Gambelia sila*)?"
- H. Neldner, M. Westphal, I. Moore, K.Ivey, and E. Taylor. "Hormonal Herps: Stress and Physiology of an Endangered Lizard (*Gambelia sila*)"
- M. Kepler, H. Neldner, A. Skeate, S. Clement, and E. Taylor. "Designing Primers f or Assessing NR3C1 Methylation in *Thamnophis sirtalis infernalis*"
- G. Garcia, J.T. Nolan, H Crowell, H. Neldner, and E. Taylor. "Snake-Eat-Snake World: Quantifying Pacific Rattlesnake (*Crotalus oreganus*) Responses to King snake (*Lampropeltis californiae*) Stimuli"
- H. Neldner, J. Budke, and G. Kolluru. "Do Females Pick a Winner? Social Eavesdropping in the Poeciliid Fish *Girardinus metallicus*"
- H. Neldner, J.Budke and G. Kolluru. "Social Eavesdropping and its Effects on Mate Choice in a Tropical Freshwater Fish"
- C. Castillo, H. Neldner, and G. Kolluru. "Sexual selection in a Cuban Poeciliid fish: the role of color and aggression in mating success"

### Grants and Fellowships

- World Congress of Herpetology 9 Student Scholarship
- National Science Foundation Graduate Research Fellowship (\$136,000)
- Frost Undergraduate Research Program (\$2000)

# Grace Sanclemente

### **BIOLOGIST**

Grace Natalie Sanclemente is a biologist with experience with sensitive species including. burrowing owls (*Athene cunicularia*), and San Joaquin kit fox (*Vulpes macrotis*), and Swainson's hawk (*Buteo swainsoni*). Grace has experience conducting construction monitoring on large solar facilities. Grace has great organizational skills and can complete tasks in a timely manner. Grace also is adaptable and is comfortable in evolving environments, as well as possessing good communication skills.

#### Education

University of California, Santa Barbara B.A. Environmental Studies, 2020

### Project Experience

**Pelicans Jaw Hybrid Solar Project, Kern County, California.** Conducted protocol-level blunt nosed leopard lizard surveys and burrow surveys, and wildlife camera installation for sensitive species within suitable habitat in Kern County. Resources were collected and updated digitally using ArcGIS Collector.

**Delta Field Division HCP Project, Stanislaus County, California.** Installed and reviewed wildlife camera along the California Aqueduct as part of a long-term wildlife corridor study for the Department of Water Resources.

**Quinto Ranch Solar Project, Stanislaus County, California.** Conducted burrow surveys for San Joaquin kit foxes, American badgers, and burrowing owls within suitable habitat for the species. Resources were collected and updated digitally using ArcGIS Collector.

**Proxima Solar Project, Stanislaus County, California.** Conducted pre-construction surveys for San Joaquin kit fox, burrowing owls, and nesting birds for a 200-megawatt solar project. Additional activities included weekly spot checks, construction monitoring, and daily Swainson's hawk nest checks to ensure the implementation of mitigation measures during construction activities.

Solar Project, Confidential Client, Kern County, California. Worked as a biological monitor on an approximately 760 MW Photovoltaic solar project site. Conducted line transect and clearance surveys for sensitive species including desert tortoise, desert kit foxes, and burrowing owl prior to construction activities. Monitored and recorded breeding/nesting behavior of avian species during construction activity according to the Migratory Bird Treaty Act and associated permit requirements. Monitored known desert tortoise habitat during construction activities to minimize and avoid adverse impacts to sensitive species and associated habitat. Facilitated construction personnel compliance with federal, state, and local environmental regulations and associated permits.

**Scarlet Solar Project, Fresno County, California.** Conducted pre-construction surveys for nesting birds, burrowing owl, San Joaquin kit fox on a solar project within Fresno County.

**South loop Transmission Line, Santa Clara, California**. Conducted SWPPP inspections during construction activities in Santa Clara County.

# ATTACHMENT "C" CULTURAL & TRIBAL CULTURAL RESOURCES

TRIBAL CONSULTATION NOTICE AND TRACKING TABLE													
TULARE CSG 2 SOLAR PROJECT (PSP 23-059)													
TRIBE CONTACTED	į –			ITEMS & DOCUMENTS SUBMITTED						Y METHOD		TION PERIOD	CONSULTATION / ACTIONS
	AB 52	SB 18	Sec 106	Project Notification Form/Letter	Maps	SLF Search Results	CHRIS Results	Other	E-mail	Certified US Mail	Return Receipt	Period Ends	Summary
SACRED LAND FILE (SLF) REQUEST					-			-			_		
Native American Heritage Commission  NAHC@nahc.ca.gov	Х			Х	Х			Search Request Form	7/14/23				
CONSULTATION REQUEST LETTERS	CONSULTATION REQUEST LETTERS												
Big Sandy Rancheria of Western Mono Indians Elizabeth D. Kipp, Chairperson PO. Box 337 Auberry, CA 93602 Ikipp@bsrnnation.com	х			х	Х				7/14/23	7/14/23 7020 2450 0001 9281 1215			
Dunlap Band of Mono Indians Benjamin Charley Jr., Tribal Chair P.O. Box 14 Dunlap, CA 93621 ben.charley@yahoo.com	х			х	Х				7/14/23	7/14/23 7020 2450 0001 9281 1222			
Dunlap Band of Mono Indians Dirk Charley, Tribal Secretary 5509 E. McKenzie Avenue Fresno, CA 93727 dcharley2016@gmail.com	х			х	Х				7/14/23	7/14/23 7020 2450 0001 9281 1239			
Kern Valley Indian Community Robert Robinson, Co-Chairperson P.O. Box 1010 Lake Isabella, CA 93240 bbutterbredt@gmail.com	х			х	Х				7/14/23	7/14/23 7020 2450 0001 9281 0997			
Kern Valley Indian Community Julie Turner, Secretary P. Box 1010 Lake Isabella, CA 93240 meindiangirl@sbcglobal.net	х			Х	Х				7/14/23	7/14/23 7020 2450 0001 9281 1161			
Kern Valley Indian Community Brandi Kendricks 30741 Foxridge Court Tehachapi, CA 93561 krazykendricks@hotmail.com	Х			х	х				7/14/23				

# TRIBAL CONSULTATION NOTICE AND TRACKING TABLE TULARE CSG 2 SOLAR PROJECT (PSP 23-059)

TULARE CSG 2 SOLAR PROJECT (PSP 23-059)													
TRIBE CONTACTED	REC	QUEST T	YPE	ITEMS & DOCUMENTS SUBMITTED					DELIVERY METHOD CONSULTATION PERIOD				CONSULTATION / ACTIONS
	AB 52	SB 18	Sec 106	Project Notification Form/Letter	Maps	SLF Search Results	CHRIS Results	Other	E-mail	Certified US Mail	Return Receipt	Period Ends	Summary
North Fork Mono Tribe Ron Goode, Chairperson 13396 Tollhouse Road Clovis, CA 93619 rwgoode911@hotmail.com	Х	х	х	х	х				7/14/23	7/14/23 7020 2450 0001 9281 1154			7/14/23, D. Folk received email from Mr. Goode stating tribe has no comment.
Santa Rosa Rancheria Tachi Yokut Tribe Leo Sisco, Chairperson 16835 Alkali Drive Lemoore, CA 93245 LSisco@tachi-yokut-nsn.gov	Х	х	х	х	х				7/14/23	7/14/23 7020 2450 0001 9281 1178			
Santa Rosa Rancheria Tachi Yokut Tribe Cultural Department Shana Powers, Director 16835 Alkali Drive Lemoore, CA 93245 SPowers@tachi-yokut-nsn.gov	Х	Х	Х	Х	Х				7/14/23	7/14/23 7020 2450 0001 9281 1185			
Santa Rosa Rancheria Tachi Yokut Tribe Cultural Department Staff Samantha McCarty SMcCarty@tachi-yokut-nsn.gov Paige Berggren PBerggren@tachi-yokut-nsn.gov	Х	х	X	х	х				7/14/23				
Tubatulabals of Kern Valley Robert L. Gomez, Jr., Chairperson P.O. Box 833 Weldon, CA 93283-0833 rgomez@tubatulabal.org	Х	Х	х	X	х				7/14/23	7/14/23 7020 2450 0001 9281 1192			
Tule River Indian Tribe Neil Peyron, Chairperson P. O. Box 589 Porterville, CA 93258 neil.peyron@tulerivertribe-nsn.gov	Х	Х	х	х	х				7/14/23	7/14/23 7020 2450 0001 9281 1208			
Tule River Indian Tribe Dept. of Environmental Protection Kerri Vera, Director P. O. Box 589 Porterville, CA 93258 tuleriverenv@yahoo.com keri.vera@tulerivertribe-nsn.gov	х	Х	х	Х	х				7/14/23	7/14/23 7020 2450 0001 9281 1147			

TRIBAL CONSULTATION NOTICE AND TRACKING TABLE													
TULARE CSG 2 SOLAR PROJECT (PSP 23-059)													
TRIBE CONTACTED	TRIBE CONTACTED REQUEST TYPE			ITEMS & DOCUMENTS SUBMITTED						DELIVERY METHOD		TION PERIOD	CONSULTATION / ACTIONS
	AB 52	SB 18	Sec 106	Project Notification Form/Letter	Maps	SLF Search Results	CHRIS Results	Other	E-mail	Certified US Mail	Return Receipt	Period Ends	Summary
Tule River Indian Tribe Felix Christman, Council Member P. O. Box 589 Porterville, CA 93258 tuleriverarchmon1@gmail.com felix.christman@tulerivertribe-nsn.gov	Х	Х	Х	X	х				7/14/23				
Wuksache Indian Tribe/Eshom Valley Band Kenneth Woodrow, Chairperson 1179 Rock Haven Ct. Salinas, CA 93906	Х	Х	Х	х	х				7/14/23	7/14/23 7020 2450 0001 9281			

kwood8934@aol.com

1130



### RESOURCE MANAGEMENT AGENCY

5961 SOUTH MOONEY BLVD VISALIA, CA 93277

PHONE (559) 624-7000 FAX (559) 615-3002 Reed Schenke Public Works
Sherman Dix Fiscal Services

REED SCHENKE, DIRECTOR

MICHAEL WASHAM, ASSOCIATE DIRECTOR

# PROJECT NOTIFICATION AND TRIBAL CONSULTATION REQUEST PURSUANT TO AB 52

**Project Title:** - Tulare CSG 2 Solar Project (PSP 23-059)

**Project Location:** Northeast of Avenue 160 and Road 180 southern San Joaquin Valley approximately 1.25 miles southeast of the unincorporated community of Woodville. The Project is located within Sections 9 and 16 Township 21 S, Range 27 E, MDBM at coordinates 36°04'55.2"N (latitude) and 119°09'58.4W (longitude).

USGS 7.5 Minute Quadrangle(s): Woodville

APN(s): 236-100-003, -004

PLSS: S ½ Section 21, Township 21 South, Range 26 East, MDB&M.

**Land Use Designation / Zoning:** Agricultural / AE-40 (Exclusive Agriculture Zone- 40 acre minimum).

**Project Description:** The Applicant (Tulare CSG 2 LLC) proposes to construct and operate the Tulare CSG 2 Solar Project (Project); a single-axis tracker ground mounted photovoltaic (PV) community solar and battery storage facility, approximately 6.6MWdc/5MWac in capacity. The Project is proposed to be located on a privately-owned parcel in Tulare County, California. Tulare CSG 2 LLC is requesting Special Use Permit approval from Tulare County in order to proceed with construction of the project. The purpose of the proposed Project is to construct and operate a PV solar array with attached battery storage, which will generate and store clean and renewable solar energy, with electricity offtake sold to residential customers within Tulare County and the larger Southern California Edison ("SCE") Utility Territory. The Project is proposed under the California Assembly Bill 2316 (AB2316), adopted by the California legislature in 2022. AB 2316 (Ward) Community Renewable Energy Program (CREP) instructs the California Public Utilities Commission to establish a new community solar program by March 2024 which will bolster the reliability of the electrical grid while benefitting those who cannot put solar on their roofs. The Project would benefit Tulare County by providing clean and renewable solar energy generation.

**Request for Consultation:** Pursuant to the provisions of AB 52, as the lead agency under the California Environmental Quality Act (CEQA), the County of Tulare hereby extends an invitation to consult on the CEQA review of the Tulare CSG 2 Solar Project (PSP 23-059) in order to assist with identifying and/or preserving and/or mitigating project impacts to Native American cultural places and tribal cultural resources.

If your Tribe desires to consult with the County on the review of this project, please respond in writing within thirty (30) days of receipt of this notification. Written correspondence can be mailed to the following addresses:

US Post: Tulare County Resource Management Agency

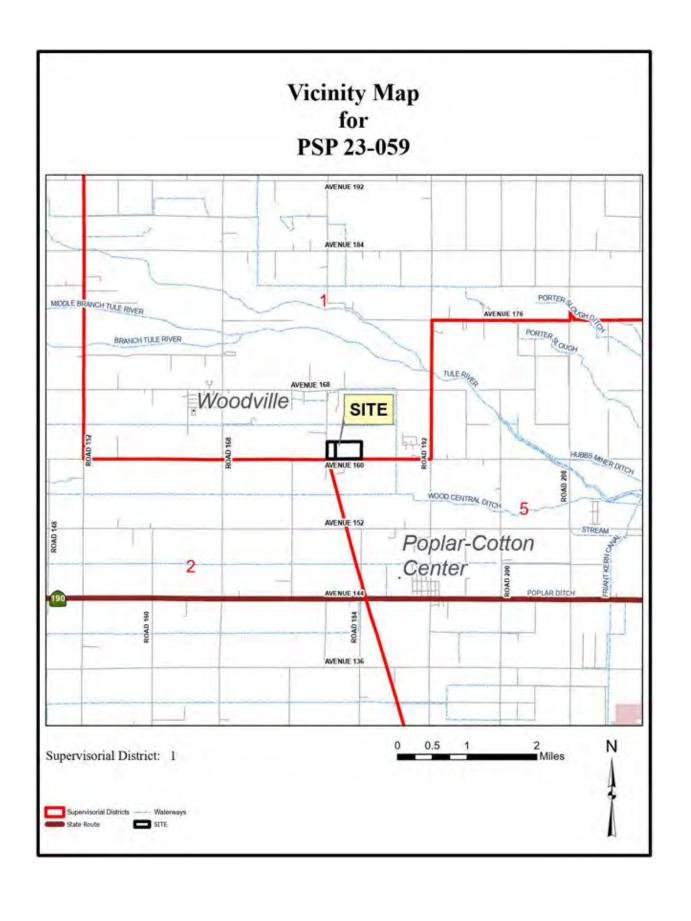
Environmental Planning Division Attn: Jessica Willis / Hector Guerra

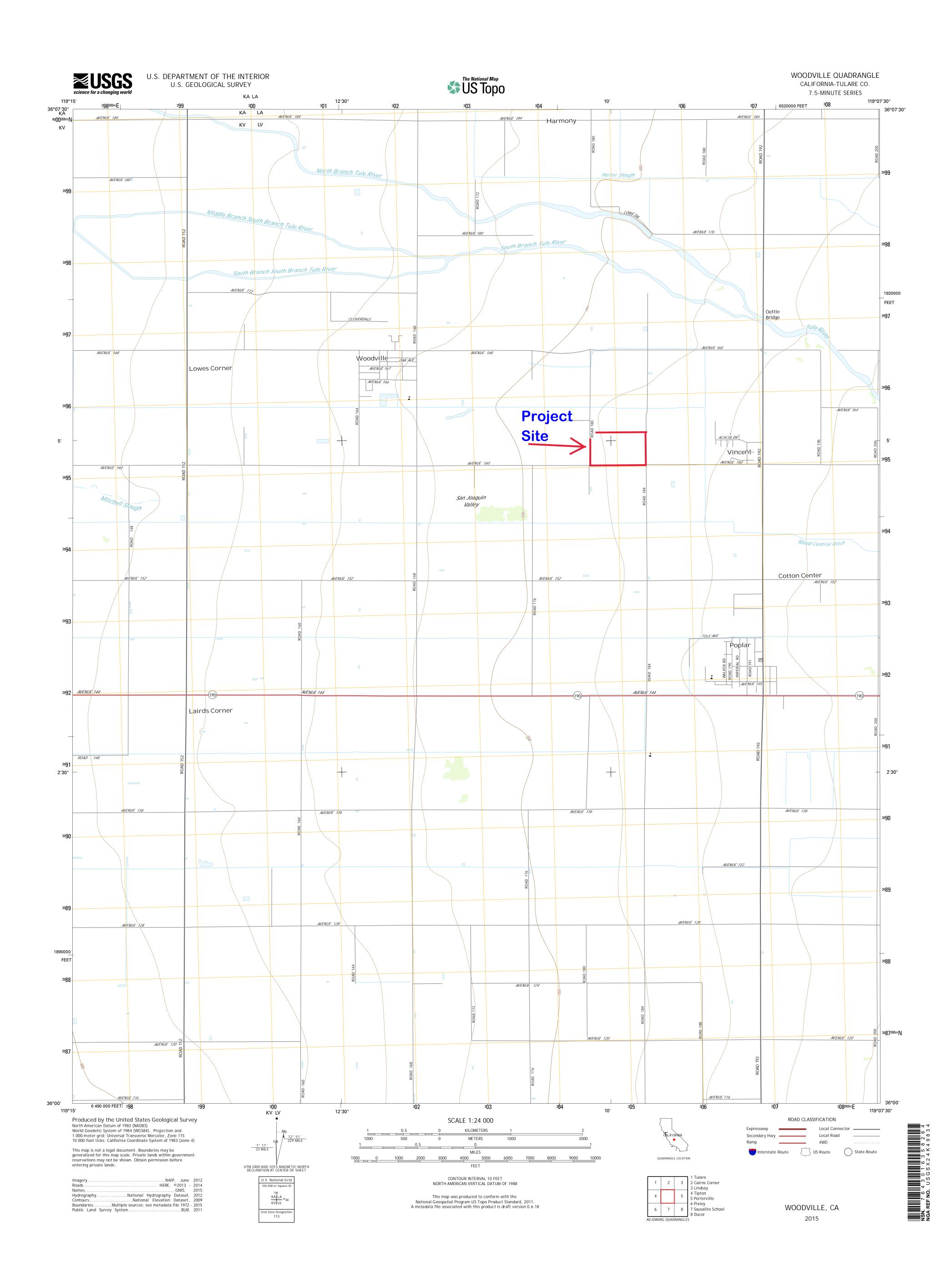
5961 S. Mooney Blvd. Visalia, CA 93277-9394

E-mail: JWillis@tularecounty.ca.gov and HGuerra@tularecounty.ca.gov

If you need further assistance or have any questions, please feel free to contact Jessica Willis, Planner IV, by phone at (559) 624-7122, or Hector Guerra, Chief Environmental Planner, at (559) 624-7121.

If the County does not receive a response to this notification, it will be presumed that your Tribe has declined the opportunity to consult on this project pursuant to AB 52.

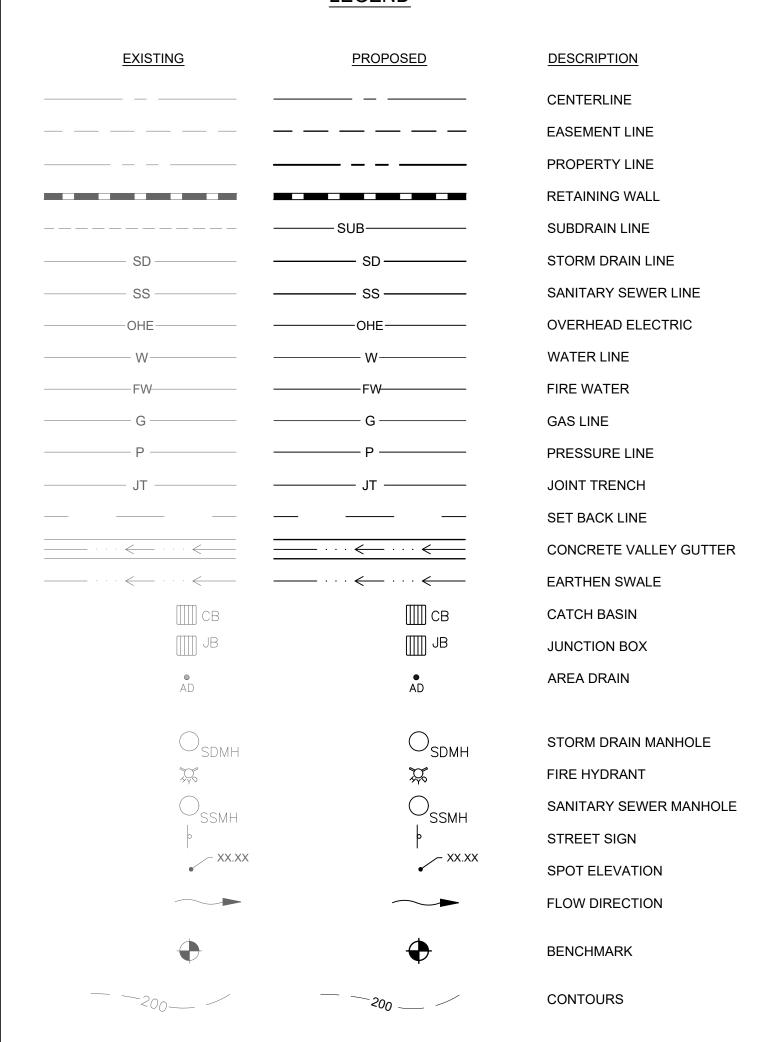




# TULARE CSG 2

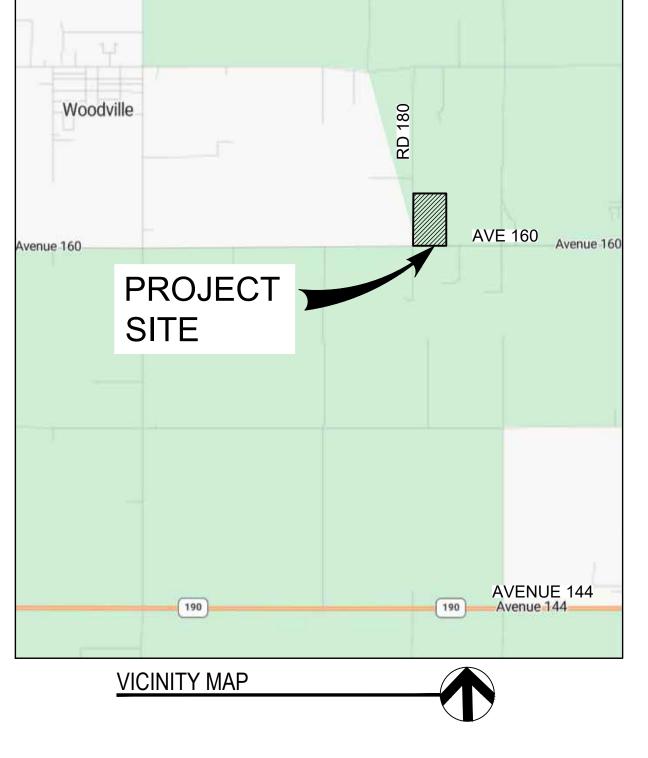
APN: 236-100-004, 236-100-003 AVE 160 | 36°04'55.2"N 119°09'58.4"W WOODVILLE, TULARE COUNTY, CA 93257

# **LEGEND**





1 INCH = 200



# **PROJECT OWNER**

RTS ORCHARDS LLC 4831 CALLOWAY DRIVE, SUITE 102 BAKERSFIELD, CA 93312

## **CIVIL ENGINEER**

COFFMAN ENGINEERS, INC. 1939 HARRISON STREET, SUITE 320 OAKLAND, CA 94612

# **SHEET INDEX**

C1.0 - COVER SHEET

C2.0 - SITE PLAN C3.0 - GRADING PLAN

C4.0 - EROSION CONTROL PLAN

C4.1 - EROSION CONTROL DETAILS C5.0 - SPECIFICATIONS

C6.0 - DETAILS

# PROJECT DESCRIPTION

5 MW AC SOLAR PHOTOVOLTAIC POWER PLANT ON 25 ACRE FOR TULARE CSG 2

# HORIZONTAL DATUM

DATA TO BE PROVIDED IN NEXT SUBMITTAL

# **VERTICAL DATUM**

DATA TO BE PROVIDED IN NEXT SUBMITTAL

## **BENCHMARKS**

DATA TO BE PROVIDED IN NEXT SUBMITTAL

# FEMA FLOOD ZONE NOTE

THE PROPOSED PROJECT FALLS IN ZONE X - AREAS OF MINIMAL FLOOD HAZARD PER FEMA FLOOD INSURANCE RATE MAP (FIRM) NUMBER 06107C1610E DATED 06/16/2009.

> PLANS IS PER THE SURVEY COMPLETED BY **ADDRESS** CITY, STATE DATED: <u>DATE</u>.
>
> THE CONTRACTOR SHALL VERIFY EXISTING

SITE CONDITIONS AND CONTACT THE ENGINEER IF DISCREPANCIES ARE NOTED.

# LOCATION OF EXISTING UNDERGROUND

UTILITIES HAVE BEEN TAKEN FROM DRAWINGS AND FIELD LOCATES SUPPLIED BY THE APPROPRIATE UTILITY COMPANIES. UTILITY LOCATIONS SHOWN ON THIS DRAWING ARE APPROXIMATE ONLY. PRIOR TO BEGINNING ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF EACH UTILITY.



ph 510.251.9578 www.coffman.com

1939 Harrison Street, Suite 320

Oakland, CA 94612





600 CALIFORNIA ST, 11TH FLOOR SAN FRANCISCO, CA 94108

**TULARE CSG 2** AVE 160, WOODVILLE TULARE COUNTY, CA 9325

# **CLIENT** INFORMATION

| 5/31/23 | 1ST SUBMITTAL REV DATE DESCRIPTION PROJ. NO. 230916

RH/LB CHECKED APRIL 2023

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SHEET TITLE:

**COVER SHEET** 

SHEET NO:

# **ABBREVIATIONS**

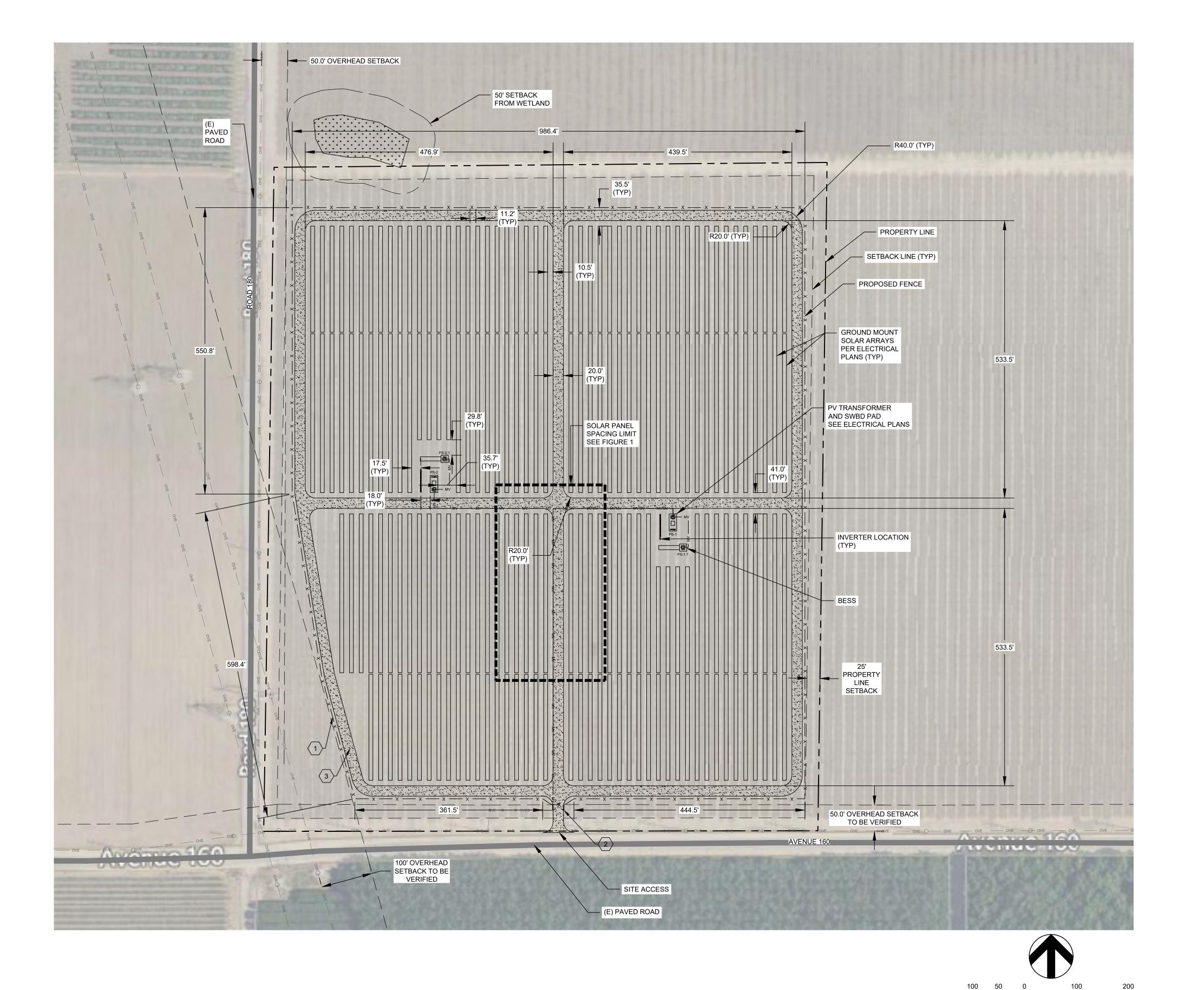
3	-	ASPHALTIC CONCRETE	FT	-	FEET	S	-	SOUTH, SEWER, SLOPE
PH	-	ASPHALT	G	-	GAS	SAN	-	SANITARY
DG	-	BUILDING	GM	-	GAS METER	SD	-	STORM DRAIN
l	-	BENCH MARK	GUY	-	GUY ANCHOR	SLHH	-	STREET LIGHT HANDHOLE
E	-	BOTTOM OF EXCAVATION	GV	-	GAS VALVE	SHT	-	SHEET
	-	CATCH BASIN	Н	-	HORIZONTAL	SNS	-	STREET NAME SIGN
.G	-	CURB AND GUTTER	HB	-	HOSE BIBB	SQ	-	SQUARE
	-	CENTERLINE	HH	-	HANDHOLE	SS	-	SANITARY SEWER
)	-	CLEANOUT	HPG	-	HIGH PRESSURE GAS	SSMH	-	SANITARY SEWER MANHOLE
NC	-	CONCRETE	HYD	-	HYDRANT	SSS	-	SANITARY SIDE SEWER
)S	-	CITY OF SEATTLE	ΙE	-	INVERT ELEVATION	ST	-	STREET
V	-	CONCRETE WALK	INL	-	INLET	STA	-	STATION
;	-	DROP CONNECTION	INV	-	INVERT	STD	-	STANDARDS
MO	-	DEMOLISH	LF	-	LINEAL FEET	Τ	-	TELEPHONE
	-	DUCTILE IRON	LOC	-	LOCATION	TBM	-	TEMPORARY BENCH MARK
M	-	DOMESTIC	LP	-	LIGHT POLE	TEL	-	TELEPHONE
;	-	DOWNSPOUT	LS	-	LANDSCAPING	TESC	-	TEMPORARY EROSION AND
٧Y	-	DRIVEWAY	MH	-	MANHOLE			SEDIMENTATION CONTROL
	-	EAST	MON	-	MONUMENT	TD	-	TELEPHONE DUCT
D	-	ELECTRICAL CONDUIT	Р	-	POWER	TMH	-	TELEPHONE MANHOLE
, ELEV	-	ELEVATION	PERF	-	PERFORATED	TYP	-	TYPICAL
EC	-	ELECTRICAL	PM	-	POWER METER	UP	-	UNDERGROUND POWER
P	-	EDGE OF PAVEMENT	PP	-	POWER POLE	V	-	VERTICAL
С	-	EROSION & SEDIMENT	PSD	-	PUBLIC STORM DRAIN	VB	-	VERTICAL BEND
		CONTROL	PSS	-	PUBLIC SANITARY SEWER	W	-	WATER
MT	-	EASEMENT	POC	-	POINT OF CONNECTION	WM	-	WATER METER
, EXIST	-	EXISTING	PVC	-	POLYVINYLCHLORIDE	WS	-	WATER SERVICE
	-	FINISHED FLOOR	PVMT	-	PAVEMENT	WV	-	WATER VALVE

# **PLAN NOTES:**

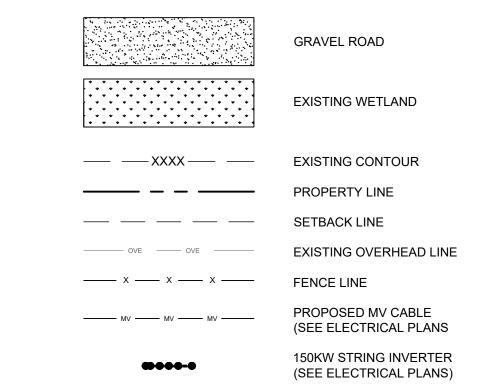
- 1. REFER TO THE ARCHITECT'S PLANS FOR DETAILS REGARDING THE BUILDING, WALLS, WALKWAYS, PAVING SURFACES, DOWNSPOUTS & ROOF DRAIN LOCATIONS, AND PLANTINGS.
- 2. THE EXISTING BOUNDARY, TOPOGRAPHIC AND UTILITY INFORMATION SHOWN IS BASED ON THE TOPOGRAPHIC SURVEY TITLED "SURVEY DRAWING NAME" PREPARED BY TBD, DATED XX/XX/XX. UTILITY INFORMATION MUST BE FIELD VERIFIED BY CONTRACTOR PRIOR TO BEGINNING CONSTRUCTION.
- 3. ALL EXISTING UTILITIES ARE NOT SHOWN ON THIS PLAN, REFER TO ADDITIONAL CIVIL SHEETS FOR LOCATIONS OF WATER, POWER, CABLE, PHONE AND GAS SERVICES AND MAIN LINES.
- 4. IF THERE ARE ANY DISCREPANCIES BETWEEN DIMENSIONS IN DRAWING AND EXISTING CONDITIONS WHICH WILL AFFECT THE WORK, THE CONTRACTOR SHALL BRING SUCH DISCREPANCIES TO THE ATTENTION OF THE ENGINEER FOR ADJUSTMENT BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS. ELEVATIONS, AND LOCATIONS FOR SITE WORK PER THE PLANS AND FOR THE COORDINATION OF ALL TRADES, SUBCONTRACTORS, AND PERSONS ENGAGED.
- 5. PARCEL AREA FOR THE PROJECT: 31.33 ACRES.

YARD DRAIN

6. TOTAL DISTURBED AREA FOR THE PROJECT: 2.81 ACRES.







# **KEY NOTES**

CONSTRUCT 7'-HIGH CHAIN LINK SECURITY FENCING (6' FENCE W/ 1' BARBED WIRE) SEE DETAIL 2 ON SHEET C6.0

PV TRANSFORMER AND SWBD PAD

(SEE ELECTRICAL PLANS)

(SEE ELECTRICAL PLANS)

**BESS UNIT** 

- ACCESS GATE WITH CLEAR OPENING WIDTH OF 20' SEE DETAILS ON SHEET C6.0
- 20' WIDE ACCESS ROAD WITH ALL WEATHER SURFACE CRUSHED ROCK. SEE DETAIL 1 ON SHEET

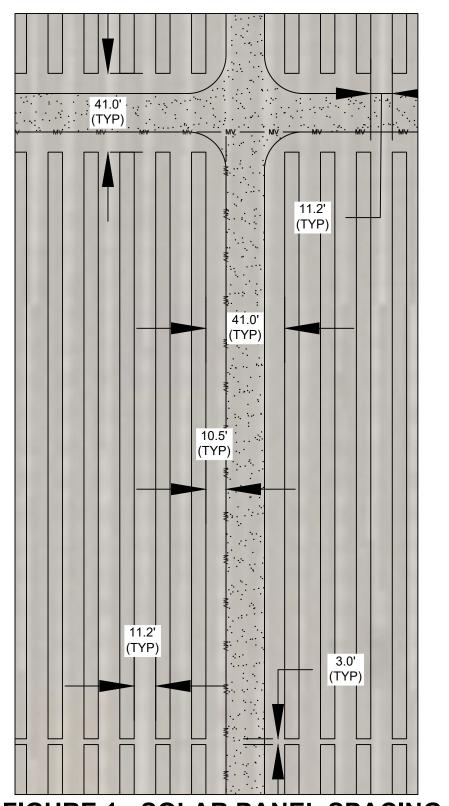


FIGURE 1 - SOLAR PANEL SPACING **SCALE 1" = 50'** 

PLANS IS PER THE SURVEY COMPLETED BY ADDRESS

1 INCH = 100 FEET

UTILITIES HAVE BEEN TAKEN FROM DRAWINGS AND FIELD LOCATES SUPPLIED BY THE APPROPRIATE UTILITY COMPANIES. UTILITY LOCATIONS SHOWN ON THIS DRAWING ARE APPROXIMATE ONLY. PRIOR
TO BEGINNING ANY CONSTRUCTION, THE
CONTRACTOR SHALL VERIFY THE EXACT
LOCATION OF EACH UTILITY.

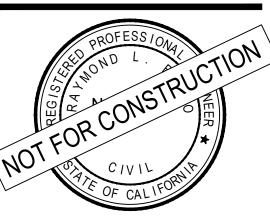


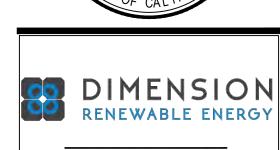
| 1939 Harrison Street, Suite 320

ph 510.251.9578

Oakland, CA 94612

www.coffman.com

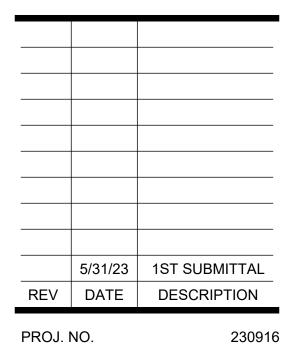




DIMENSION RENEWABLE ENERGY 600 CALIFORNIA ST, 11TH FLOOR SAN FRANCISCO, CA 94108 (866) 777-7969 www.DIMENSION-ENERGY.com

TULARE CSG 2 AVE 160, WOODVILLE TULARE COUNTY, CA 93257

# CLIENT INFORMATION



DRAWN RH/LB CHECKED APRIL 2023

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SHEET TITLE:

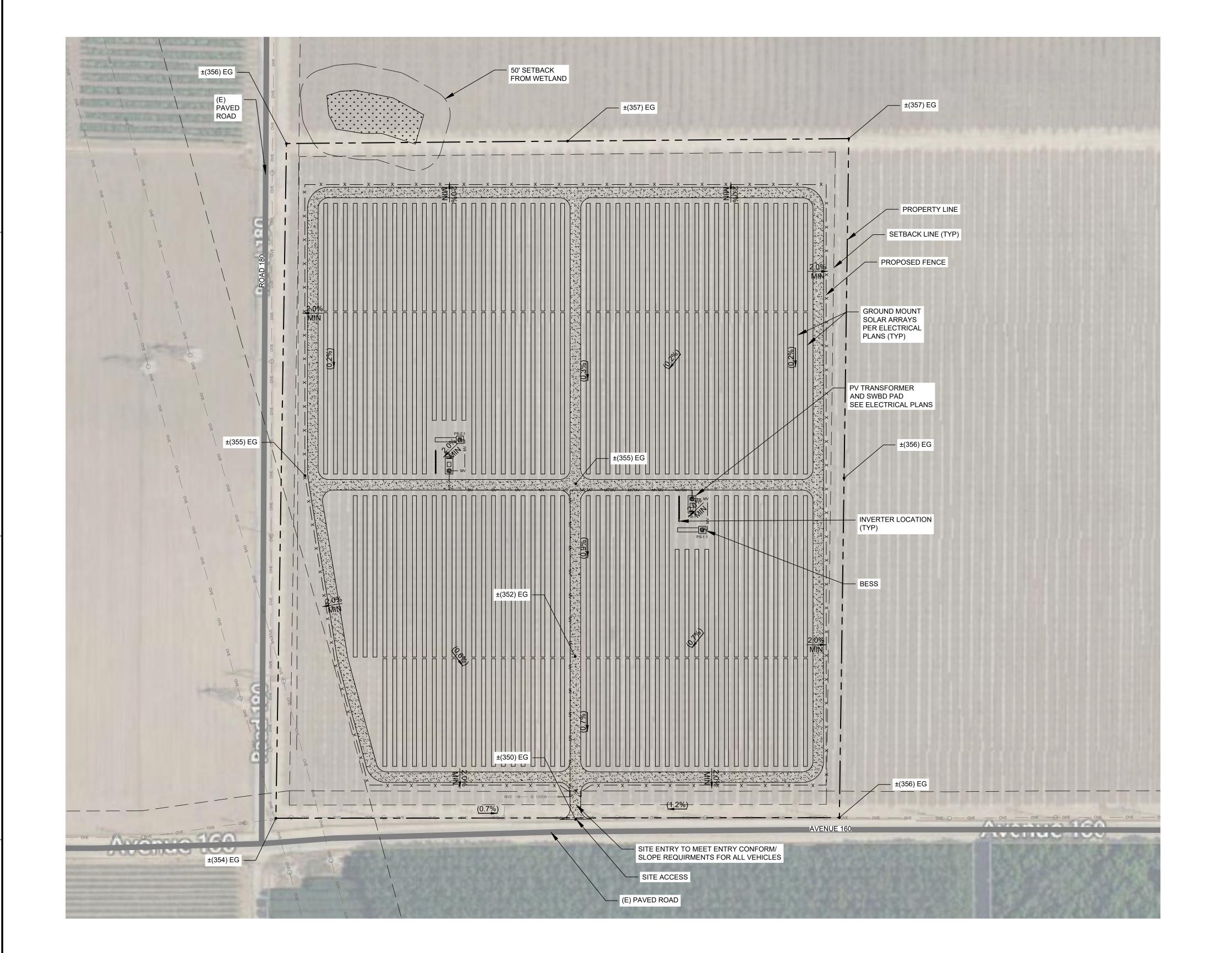
SITE PLAN

SHEET NO:

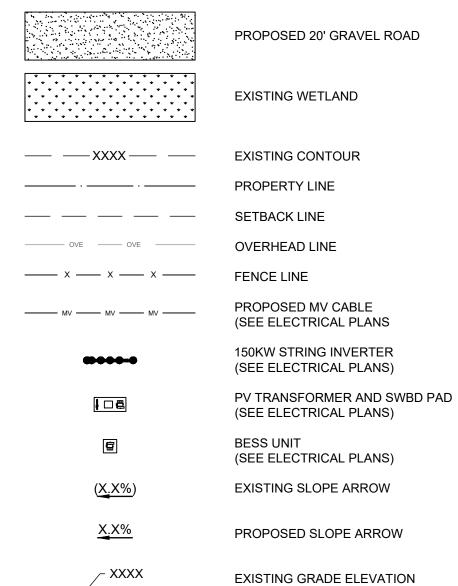
CITY, STATE
PHONE

DATED: \_\_\_\_\_DATE\_\_\_.

THE CONTRACTOR SHALL VERIFY EXISTING
SITE CONDITIONS AND CONTACT THE ENGINEER IF DISCREPANCIES ARE NOTED

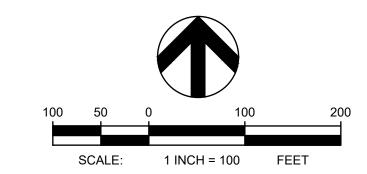


### LEGEND



# GRADING GENERAL NOTES

- ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST CITY OF WOODVILLE AND TULARE COUNTY STANDARDS.
- ANY EXISTING INFRASTRUCTURE, SITE FEATURES, OR PROPERTY DAMAGED AS A RESULT OF CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE APPROPRIATE AGENCY.
- 3. ALL CONSTRUCTION SHALL CONFORM TO APPLICABLE STATE AND/OR LOCAL CODES. THE CONTRACTOR SHALL HAVE A COPY OF CURRENT CODES MAINTAINED ON SITE AT ALL TIMES.
- 4. ALL SIGNAGE AND PAINT MARKINGS SHALL COMPLY WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), OR AS OTHERWISE SPECIFIED. INSTALLATION OF SIGNS SHALL BE GOVERNED BY LOCAL CODES.
- 5. THE CONTRACTOR IS RESPONSIBLE TO LOCATE AND PROTECT ALL EXISTING UTILITIES DURING CONSTRUCTION. THE CONTRACTOR IS TO NOTIFY THE UTILITY PROTECTION CENTER AT LEAST 72 HOURS PRIOR TO ANY SITE WORK FOR PROPER IDENTIFICATION OF EXISTING UTILITIES.
- 6. THE CONTRACTOR SHALL VERIFY ALL EXISTING ITEMS AND DIMENSIONS TO REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO BEGINNING CONSTRUCTION.
- 7. UNLESS OTHERWISE NOTED, PAVEMENT ELEVATION IS 6" BELOW THE TOP OF CURB ELEVATION.
- 8. ALL GRADE BREAKS SHALL BE CONSTRUCTED AS A VERTICAL CURVE TO AVOID ANY DEFINED CRESTS OR SUMPS.
- 9. GRADE ELECTRICAL PAD AREA AT 2% MIN.
- 10. GRADE ROADWAY ACCESS PER TYPICAL DETAIL. FINAL GRADING ELEVATIONS TO BE PROVIDED AT CONSTRUCTION DOCUMENT STAGE.



THE EXISTING INFORMATION SHOWN ON THESE PLANS IS PER THE SURVEY COMPLETED BY:

TBD

ADDRESS
CITY, STATE
PHONE

DATED: \_\_\_DATE\_\_.

THE CONTRACTOR SHALL VERIFY EXISTING
SITE CONDITIONS AND CONTACT THE

ENGINEER IF DISCREPANCIES ARE NOTED

UTILITY STATEMENT
LOCATION OF EXISTING UNDERGROUND
UTILITIES HAVE BEEN TAKEN FROM
DRAWINGS AND FIELD LOCATES SUPPLIED BY
THE APPROPRIATE UTILITY COMPANIES.
UTILITY LOCATIONS SHOWN ON THIS
DRAWING ARE APPROXIMATE ONLY. PRIOR
TO BEGINNING ANY CONSTRUCTION, THE
CONTRACTOR SHALL VERIFY THE EXACT
LOCATION OF EACH UTILITY.

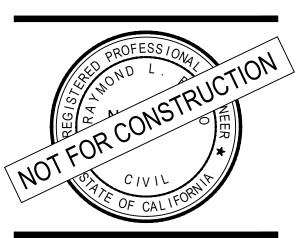


ENGINEER

1939 Harrison Street, Suite 320 Oakland, CA 94612

ph 510.251.9578

www.coffman.com





DIMENSION RENEWABLE ENERGY

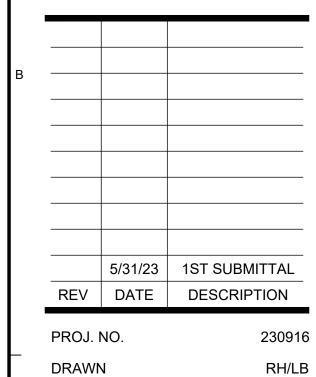
600 CALIFORNIA ST, 11TH FLOOR SAN FRANCISCO, CA 94108 (866) 777-7969 www.DIMENSION-ENERGY.com

TULARE CSG 2

AVE 160, WOODVILLE

TULARE COUNTY, CA 93257

# CLIENT INFORMATION



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CHECKED

DATE APRIL 2023

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SHEET TITLE:

**GRADING PLAN** 

SHEET NO:

C3.0

SHEET OF 7



### **EROSION CONTROL KEY NOTES:**

(\$E-\$) INSTALL FIBER ROLLS PER SE-5. CONTRACTOR TO VERIFY FINAL LOCATION IN ACCORDANCE WITH SIDEWALK REMOVAL.

ALL (E) INLETS SHALL BE PROTECTED PER SE-10. CONTRACTOR TO VERIFY INLET LOCATIONS VERIFY INLET LOCATIONS.

(TC-1) CONSTRUCTION ENTRANCE/EXIT PER TC-1.

INSTALL CONCRETE WASHOUT ROLL OFF BIN WITH LID REFER TO WM-8 FOR ADDITIONAL INFORMATION.

### EROSION AND SEDIMENT CONTROL BMP NOTES

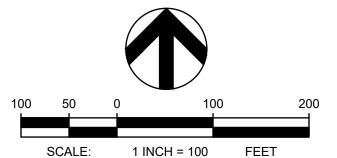
- THIS PLAN MAY NOT COVER ALL THE SITUATIONS OR PHASES THAT ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. IN GENERAL, THE CONTRACTOR IS RESPONSIBLE FOR KEEPING SEDIMENT STORM RUNOFF FROM LEAVING THE SITE. SEDIMENT ROLLS AND SILT FENCES SHALL BE USED BY THE CONTRACTOR ON AN AS NEEDED BASIS TO INHIBIT SILT FROM LEAVING THE SITE AND ENTERING THE STORM DRAIN SYSTEM. TEMPORARY EROSION CONTROL DEVICES SHOWN ON GRADING PLAN WHICH INTERFERE WITH THE WORK SHALL BE RELOCATED OR MODIFIED WHEN THE INSPECTOR SO DIRECTS AS THE WORK PROGRESSES.
- 2. EROSION CONTROL FACILITIES SHALL BE MAINTAINED DAILY. THESE FACILITIES SHALL CONTROL AND CONTAIN EROSION-CAUSED SILT DEPOSITS AND PROVIDE FOR THE SAFE DISCHARGE OF SILT FREE STORM WATER INTO EXISTING AND PROPOSED STORM DRAIN FACILITIES. DESIGN OF THESE FACILITIES MUST BE APPROVED AND UPDATED EACH YEAR BY THE ENGINEER (OCTOBER 1 TO APRIL 15).
- 3. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH CITY STANDARD.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL SUB-CONTRACTOR AND SUPPLIERS ARE AWARE OF ALL STORM WATER QUALITY MEASURES AND IMPLEMENT SUCH MEASURES. FAILURE TO COMPLY WITH THE APPROVED CONSTRUCTION WILL RESULT IN THE ISSUANCE OF CORRECTION NOTICES, CITATIONS, AND / OR A PROJECT STOP ORDER.
- 5. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT LADEN RUNOFF TO ANY STORM DRAIN
- 6. DURING THE RAINY SEASON, ALL PAVED AREAS WITH SPOILS STORAGE SHALL BE PROTECTED AND COVERED. THE SITE IS TO BE MAINTAINED SO AS TO MINIMIZE SEDIMENT RUNOFF TO ANY STORM DRAIN
- 7. DURING PERIODS WHEN STORMS ARE FORECAST:
  - A. EXCAVATED SOILS SHOULD NOT BE PLACED IN STREETS OR ON PAVED AREAS.
  - B. ANY EXCAVATED SOILS SHOULD BE REMOVED FROM THE SITE BY THE END OF DAY.
  - C. WHERE STOCKPILING IS NECESSARY, USE A TARPAULIN OR SURROUND THE STOCKPILE WITH FIBER ROLLS, GRAVEL SEDIMENT BARRIER, SILT FENCE, OR OTHER RUNOFF CONTROLS.
  - D. USE INLET CONTROLS AS NEEDED (E.G. BLOCK AND GRAVEL SEDIMENT BARRIER) FOR STORM DRAIN ADJACENT TO THE PROJECT SITE OR STOCKPILED SOIL.
- 8. THOROUGHLY SWEEP ALL PAVED AREAS EXPOSED TO SOIL EXCAVATION AND PLACEMENT
- 9. STAND-BY CREWS SHALL BE ALERTED BY THE OWNER OR CONTRACTOR FOR EMERGENCY WORK DURING
- 10. AFTER OCTOBER 1ST TO APRIL15TH, ALL EROSION CONTROL MEASURES WILL BE INSPECTED DAILY AND AFTER EACH STORM.
- 11. BORROW AREAS AND TEMPORARY STOCKPILES SHALL BE PROTECTED WITH APPROPRIATE EROSION CONTROL MEASURES TO THE SATISFACTION OF THE ENGINEER.
- 12. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING SAFETY OF VEHICLES OPERATING IN ROADWAY ADJACENT TO EROSION CONTROL FACILITY.
- 13. DUST CONTROL SHOULD BE PRACTICED ON ALL CONSTRUCTION SITES WITH EXPOSED SOILS AS NEEDED. IT IS IMPORTANT IN WINDY OR WIND-PRONE AREAS. DUST CONTROL IS CONSIDERED A TEMPORARY MEASURE AND AS INTERMEDIATE TREATMENT BETWEEN SITE DISTURBANCE AND CONSTRUCTION, PAVING, OR REVEGETATION. REFER TO CASQA BMP HANDBOOK.

# EROSION AND SEDIMENT CONTROL BMP MAINTENANCE NOTES

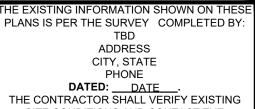
- 1. USE FIBER ROLL ALONG CONTOURS OF SHORT SLOPES OR SLOPES 3:1 OR FLATTER, KEYED INTO GROUND AT LEAST 3" DEEP (TYPICALLY 25' APART).
- 2. INSTALL SILT FENCE ALONG CONTOURS AS SECONDARY MEASURE TO KEEP SEDIMENT ONSITE AND TO MINIMIZE VEHICLE AND FOOT TRAFFIC BEYOND LIMITS OF SITE DISTURBANCE. SILT FENCING MUST BE KEYED
- 3. CONSTRUCT A CONCRETE WASHOUT SITE ADJACENT TO STABILIZED ENTRANCE. CLEAN AS NEEDED AND REMOVE AT END OF PROJECT.
- 4. COVER ALL STOCKPILES AND LANDSCAPE MATERIAL AND BERM PROPERLY WITH STRAW WATTLES OR SAND BAGS. KEEP BEHIND SILT FENCE, AWAY FROM WATER BODIES. HAZARDOUS MATERIALS AND REFUSE MUST BE KEPT IN CLOSED CONTAINERS THAT ARE COVERED AND UTILIZE SECONDARY CONTAINMENT, NOT
- 5. USE PEA-GRAVEL BAGS, (OR SIMILAR PRODUCT) AROUND DRAIN INLETS LOCATED BOTH ONSITE AND IN GUTTER AS A LAST LINE OF DEFENSE.
- 6. PLACE PORT-A-POTTY WITH SECONDARY CONTAINMENT, BEHIND THE CURB AND AWAY FROM GUTTERS, STORM DRAIN INLETS, AND WATER BODIES.
- 7. COVER ALL EXPOSED SOIL WITH STRAW MULCH AND TACKIFIER (OR EQUIVALENT).
- 8. EXISTING VEGETATION SHOULD BE PRESERVED AS MUCH AS POSSIBLE. AREAS OF DISTURBED SOIL/VEGETATION SHOULD BE REVEGETATED AS SOON AS PRACTICAL.
- 9. PREVENT EQUIPMENT FLUID LEAKS ONTO GROUND BY PLACING DRIP PANS OR PLASTIC TARPS UNDER EQUIPMENT. REPAIR EQUIPMENT AS NECESSARY.

# ADDITIONAL BMPS DURING CONSTRUCTION

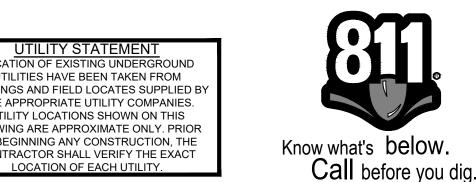
- 1. LIMIT THE EXTENT OF LAND DISTURBANCE TO THE MINIMUM AMOUNT NECESSARY TO CONSTRUCT THE
- 2. HYDROSEED DISTURBED AREAS WITH NATIVE PLANTS IMMEDIATELY UPON CONCLUSION OF CONSTRUCTION
- 3. STAGING AREAS OF CONSTRUCTION EQUIPMENT AND MATERIALS, INCLUDING RECEPTACLES AND TEMPORARY STOCKPILES OF GRADED MATERIALS MUST BE COVERED ON A DAILY BASIS.
- 4. GOOD CONSTRUCTION MEASURES SUCH AS THE USE OF DRY CLEANUP MEASURES WHENEVER POSSIBLE, COLLECTING AND FILTERING CLEANUP WATER WHEN DRY CLEANUP METHODS ARE NOT FEASIBLE, CLEANING AND REFUELING CONSTRUCTION EQUIPMENT AT DESIGNATED OFF SITE MAINTENANCE AREAS, AND IMMEDIATE CLEANUP OF ANY LEAKS OR SPILLS.



CONSTRUCTION ENTRANCE/EXIT



UTILITIES HAVE BEEN TAKEN FROM RAWINGS AND FIELD LOCATES SUPPLIED BY THE APPROPRIATE UTILITY COMPANIES. UTILITY LOCATIONS SHOWN ON THIS DRAWING ARE APPROXIMATE ONLY. PRIOF TO BEGINNING ANY CONSTRUCTION, THE SITE CONDITIONS AND CONTACT THE CONTRACTOR SHALL VERIFY THE EXACT ENGINEER IF DISCREPANCIES ARE NOTE



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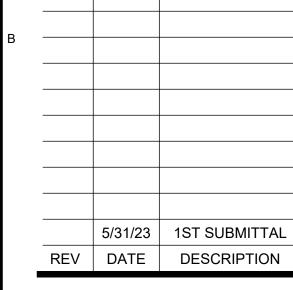


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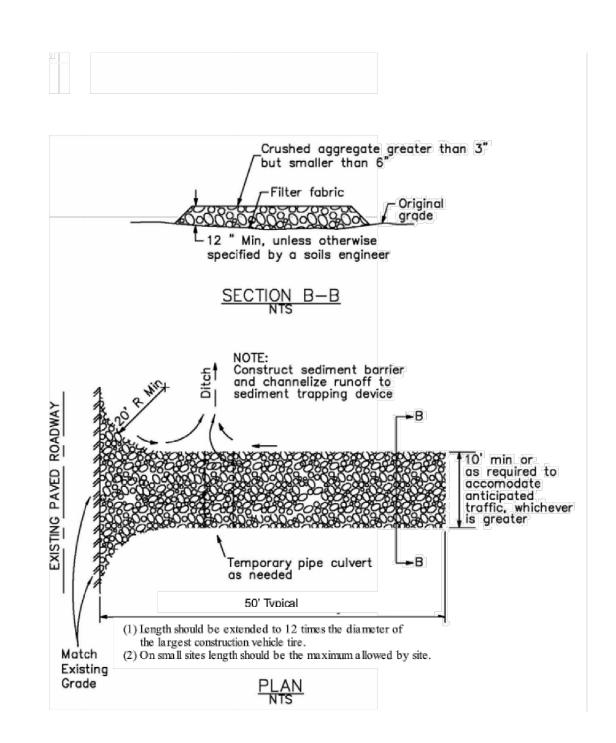
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SHEET TITLE:

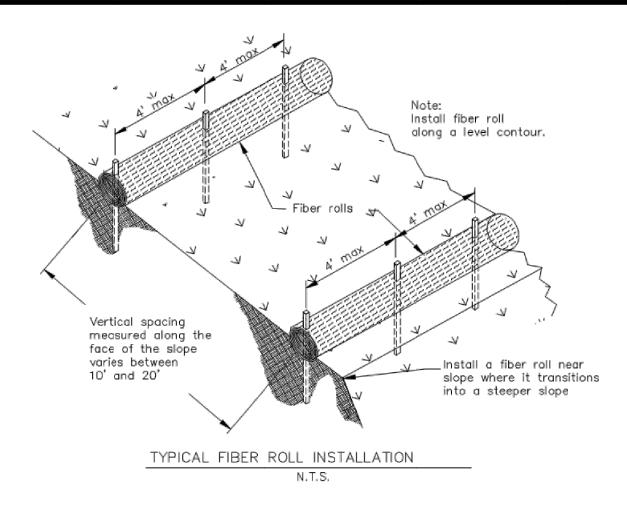
**EROSION CONTROL PLAN** 

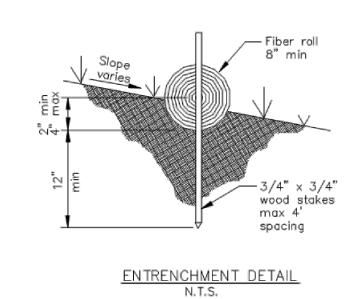
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# Stabilized Construction Entrance/Exit TC-1



### Fiber Rolls SE-5





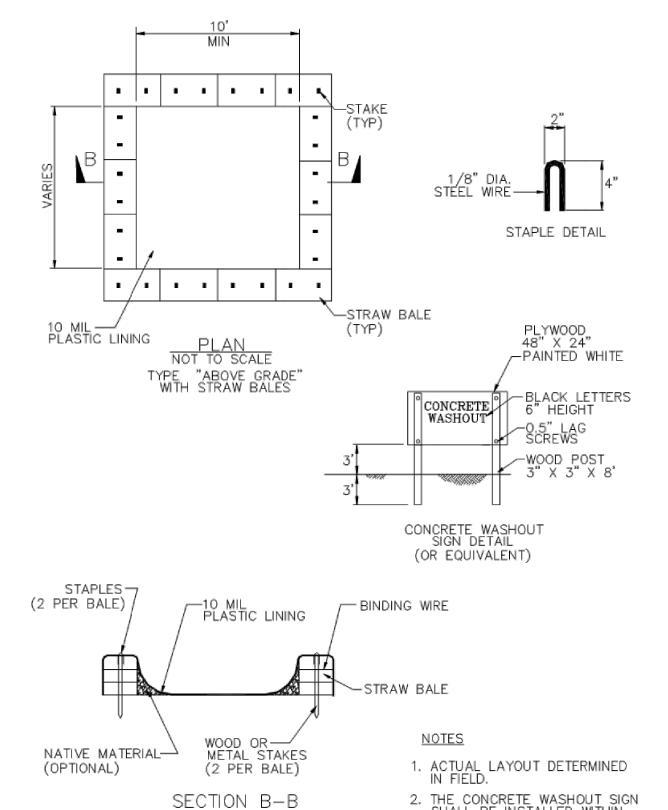
**STABILIZED CONSTRUCTION ENTRANCE/EXIT** 

SE-5 FIBER ROLLS

SCALE: NTS

**Concrete Waste Management** 

WM-8



WM-8 CONCRETE WASTE MANAGEMENT

SCALE: NTS

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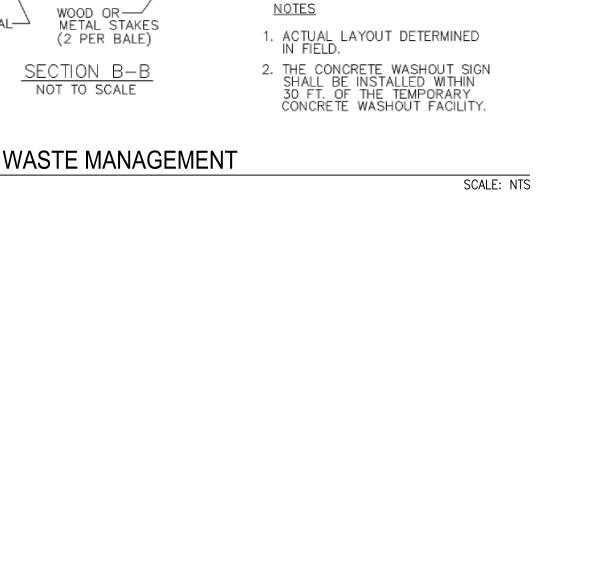
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SHEET TITLE:

**EROSION** CONTROL DETAILS

UTILITIES HAVE BEEN TAKEN FROM DRAWINGS AND FIELD LOCATES SUPPLIED BY THE APPROPRIATE UTILITY COMPANIES. UTILITY LOCATIONS SHOWN ON THIS DRAWING ARE APPROXIMATE ONLY. PRIOR TO BEGINNING ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF EACH UTILITY.



### **GENERAL NOTES**

- PROVIDED BY THE AUTHORITIES HAVING JURISDICTION, WORK AND MATERIALS SHALL COMPLY WITH THE MOST CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK).
- 2. THE CONTRACTOR SHALL CALL THE UNDERGROUND SERVICE ALERT ONE-CALL NUMBER 811 TWO BUSINESS DAYS PRIOR TO EXCAVATION.
- INFORMATION ON EXISTING CONDITIONS AND BOUNDARIES / RIGHT OF WAY SHOWN ON THESE PLANS WAS OBTAINED FROM A SURVEY NOT PERFORMED BY COFFMAN ENGINEERS. NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. THE CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND REQUIRED ELEVATIONS AT THE SUBJECT SITE. VERIFY THE LOCATION AND SIZE OF EXISTING UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION ACTIVITIES, INCLUDING UNDERGROUND AND OVERHEAD UTILITIES, UTILITY STRUCTURES, POINTS OF CONNECTION, AND UTILITY CROSSINGS. NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR EXCEPTIONS ENCOUNTERED PRIOR TO PROCEEDING. ANY COSTS INCURRED AS A RESULT OF THE CONTRACTOR'S FAILURE TO VERIFY EXISTING CONDITIONS PRIOR TO BEGINNING CONSTRUCTION SHALL BE BORNE BY THE CONTRACTOR.
- 4. THE CONTRACTOR SHALL HAVE A COMPLETE SET OF APPROVED CONSTRUCTION DOCUMENTS (INCLUDING ADDENDA) ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
- THE CONTRACTOR SHALL PERFORM ALL WORK NECESSARY TO COMPLETE THIS PROJECT IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS, INCLUDING SUCH INCIDENTALS AS MAY BE NECESSARY TO MEET THE REQUIREMENTS AND STANDARDS OF THE AUTHORITIES HAVING JURISDICTION.
- 6. THE DRAWINGS INDICATE LOCATIONS, DIMENSIONS, REFERENCES, AND TYPICAL DETAILS OF CONSTRUCTION. THE DRAWINGS DO NOT INDICATE EVERY CONDITION. WORK NOT FULLY DETAILED 7. SHALL BE OF CONSTRUCTION SIMILAR TO PARTS THAT ARE FULLY DETAILED.
- 7. THE CONTRACTOR SHALL OBTAIN THE APPROPRIATE APPROVALS AND PERMITS FROM THE AUTHORITIES HAVING JURISDICTION PRIOR TO PROCEEDING WITH CONSTRUCTION ACTIVITIES. THE 8. COMPLY WITH NFPA 24 FOR FIRE SUPPRESSION SYSTEM PIPING MATERIALS AND INSTALLATION. CONTRACTOR SHALL COORDINATE WITH THE AUTHORITIES HAVING JURISDICTION TO CONFIRM INSPECTION, TESTING, AND CERTIFICATION REQUIREMENTS.
- 8. CONSTRUCTION SHALL COMPLY WITH THE CURRENT VERSION OF THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG).
- 9. EXISTING PROPERTY CORNERS AND SURVEY MONUMENTS SHALL BE PROTECTED DURING CONSTRUCTION. ANY DAMAGED OR OBLITERATED CORNERS OR MONUMENTS SHALL BE RE-ESTABLISHED BY A PROFESSIONAL SURVEYOR AT THE CONTRACTOR'S EXPENSE.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) STANDARDS AND LOCAL REQUIREMENTS. CONTRACTOR SHALL COORDINATE REQUIREMENTS WITH THE AUTHORITIES HAVING JURISDICTION.
- 11. SAFETY STANDARDS AND REQUIREMENTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND COMPLIED WITH AS SET FORTH BY OSHA.
- 12. THE CONTRACTOR SHALL HAVE THE APPROPRIATE LICENSES TO PERFORM THE SPECIFIED WORK IN CONFORMANCE WITH THE AUTHORITIES HAVING JURISDICTION.
- 13. MAINTAIN EXISTING UTILITIES AND PROTECT THEM AGAINST DAMAGE DURING CONSTRUCTION. DO NOT INTERRUPT EXISTING UTILITIES SERVING ADJACENT OCCUPIED OR OPERATING FACILITIES 12. UTILITY PIPE AND CONDUITS SHALL BE INSTALLED WITH THE REQUIREMENTS OF THE AUTHORITIES HAVING UNLESS AUTHORIZED IN WRITING BY OWNER AND AUTHORITIES HAVING JURISDICTION. PROVIDE TEMPORARY SERVICES DURING INTERRUPTIONS TO EXISTING UTILITIES, AS ACCEPTABLE TO OWNER AND AUTHORITIES HAVING JURISDICTION.
- 14. IF MATERIALS SUSPECTED OF CONTAINING HAZARDOUS MATERIALS ARE ENCOUNTERED, DO NOT DISTURB; IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER AND OWNER.
- 15. AREAS DISTURBED OR DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE CONSTRUCTED OR RESTORED TO ORIGINAL CONDITIONS OR BETTER, TO THE SATISFACTION OF THE OWNER, AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING CONDITIONS PRIOR TO CONSTRUCTION ACTIVITIES AND ANY DAMAGE THAT MAY OCCUR.
- 16. REMOVE WASTE MATERIALS AND DEBRIS FROM PROJECT SITE AND LEGALLY DISPOSE OF THEM IN AN EPA-APPROVED LANDFILL ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.
- 17. REFER TO ARCHITECTURAL AND STRUCTURAL DOCUMENTS FOR ADDITIONAL INFORMATION REGARDING CONSTRUCTION OF STRUCTURES, ENCLOSURES, STAIRS, SIDEWALKS/PATHS, LANDINGS/PATIOS, FENCING, RAILING, AND GATES.
- 18. RECORD DRAWINGS IDENTIFYING AND ACCURATELY LOCATING SUBSURFACE UTILITIES AND IMPROVEMENTS AND NOTING AS-CONSTRUCTED CONDITIONS SHALL BE PROVIDED BY THE CONTRACTOR AT THE END OF CONSTRUCTION.

### **DEMOLITION NOTES**

- MAINTAIN EXISTING UTILITIES INDICATED TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING DEMOLITION OPERATIONS. DO NOT INTERRUPT EXISTING UTILITIES SERVING ADJACENT OCCUPIED OR OPERATING FACILITIES UNLESS AUTHORIZED IN WRITING BY OWNER AND AUTHORITIES HAVING JURISDICTION. PROVIDE TEMPORARY SERVICES DURING INTERRUPTIONS TO EXISTING UTILITIES, AS ACCEPTABLE TO OWNER AND AUTHORITIES HAVING JURISDICTION.
- 2. COORDINATE DEMOLITION OPERATIONS AND ANY REQUIRED UTILITY RELOCATIONS WITH THE OWNER AND APPROPRIATE UTILITY PURVEYOR, INCLUDING REQUIREMENTS AND SCHEDULING.
- COORDINATE EXTENT OF DEMOLITION WITH PROPOSED IMPROVEMENTS. CONTRACTOR SHALL REVIEW THE PROJECT LIMITS TO DETERMINE THE QUANTITY AND TYPE OF DEMOLITION WASTE MATERIAL AND DEBRIS TO BE INCLUDED IN THEIR BID. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING, AND RELOCATING IF NECESSARY, ANY ITEMS NOT OTHERWISE NOTED THAT CONFLICT WITH THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY CONFLICTING ITEMS NOT SHOWN ON THE PLANS THAT MUST BE REMOVED OR RELOCATED. FAILURE TO NOTIFY THE ENGINEER DOES NOT RELIEVE THE CONTRACTOR OF COST RESPONSIBILITY FOR REMOVING REQUIRED ITEMS
- 4. COMPLY WITH GOVERNING EPA NOTIFICATION REGULATIONS BEFORE BEGINNING DEMOLITION. COMPLY WITH HAULING AND DISPOSAL REGULATIONS OF AUTHORITIES HAVING JURISDICTION.
- 5. IF MATERIALS SUSPECTED OF CONTAINING HAZARDOUS MATERIALS ARE ENCOUNTERED, DO NOT DISTURB; IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER AND OWNER.
- 6. CONDUCT DEMOLITION ACTIVITIES AND DEBRIS REMOVAL OPERATIONS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, WALKWAYS, AND OTHER ADJACENT FACILITIES.
- REMOVE OBSTRUCTIONS, TREES, SHRUBS, GRASS, AND OTHER VEGETATION TO PERMIT INSTALLATION OF NEW CONSTRUCTION. REMOVAL OF TREES AND SHRUBS WITHIN AREA OF NEW CONSTRUCTION SHALL INCLUDE DIGGING OUT STUMPS AND OBSTRUCTIONS AND GRUBBING ROOTS. REMOVAL OF TREES IN AREAS ADJACENT TO TREES THAT ARE TO REMAIN AND BE PROTECTED SHALL INCLUDE TREE REMOVAL AND GRINDING OF STUMP TO 3" BELOW FINISHED GRADE. STUMP AND ROOT REMOVAL IS NOT ALLOWED IN THESE AREAS TO PRESERVE HEALTH OF ADJACENT TREES.
- 8. ALL CONCRETE AND ASPHALT SURFACES INDICATED TO BE REMOVED. SHALL BE SAWCUT
- 9. CONTRACTOR SHALL PROTECT ALL EXISTING PROPERTY CORNERS AND BENCH MARKS. ANY DAMAGE CAUSED BY CONSTRUCTION ACTIVITIES SHALL BE REMEDIED TO THE OWNER'S SATISFACTION AT THE CONTRACTOR'S EXPENSE.
- 10. AREAS DISTURBED OR DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE CONSTRUCTED OR RESTORED TO ORIGINAL CONDITIONS OR BETTER, TO THE SATISFACTION OF THE OWNER, AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING CONDITIONS PRIOR TO CONSTRUCTION ACTIVITIES AND ANY DAMAGE THAT MAY OCCUR.
- 11. REMOVE DEMOLITION WASTE MATERIALS AND DEBRIS FROM PROJECT SITE AND LEGALLY DISPOSE OF THEM IN AN EPA-APPROVED LANDFILL ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.

## **EARTHWORK & GRADING NOTES**

- SITE PREPARATION, GRADING, EXCAVATION AND FILL REQUIREMENTS BELOW THE PROPOSED IMPROVEMENTS, EMBANKMENTS, AND UTILITY TRENCHING SHALL BE COMPLETED IN CONFORMANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK) AND THE GEOTECHNICAL ENGINEERING EVALUATION FOR THE SUBJECT SITE.
- EXAMINE EXPOSED SUBGRADES AND BASE SURFACES FOR COMPLIANCE WITH REQUIREMENTS FOR DIMENSIONAL, GRADING, AND ELEVATION TOLERANCES. PREVENT SURFACE WATER AND GROUNDWATER FROM ENTERING EXCAVATIONS, FROM PONDING ON PREPARED SUBGRADES AND BASE SURFACES, AND FROM FLOODING PROJECT SITE AND SURROUNDING AREA. PROTECT SUBGRADES AND BASE SURFACES FROM SOFTENING, UNDERMINING, WASHOUT, DAMAGE BY RAIN OR WATER ACCUMULATION, AND AGAINST FREEZING TEMPERATURES AND FROST.
- REFER TO ARCHITECTURAL DOCUMENTS FOR ADDITIONAL INFORMATION REGARDING ANY STEPS IN FINISH FLOOR ELEVATION, BASEMENT ELEVATION, AND EXTERIOR DOOR LOCATIONS. COORDINATE ARCHITECTURAL ELEVATIONS WITH SITE GRADING.
- 4. REFER TO LANDSCAPE DOCUMENTS FOR ADDITIONAL INFORMATION REGARDING BERM ELEVATIONS, LANDSCAPE GRADING, LANDSCAPE DRAINS, PLACEMENT OF TOPSOIL, AND COORDINATION BETWEEN LANDSCAPING AND STORM WATER MANAGEMENT IMPROVEMENTS.
- 5. SPOT ELEVATIONS ARE FOR FINISHED GRADE/SURFACE UNLESS OTHERWISE NOTED.
- UNLESS ELEVATIONS AND/OR CONTOURS ARE OTHERWISE SHOWN, NEW FINISH GRADE SURFACES SHALL BE PLACED TO ALLOW FOR POSITIVE DRAINAGE TO RUNOFF COLLECTION DEVICES OR FACILITIES. MAINTAIN POSITIVE DRAINAGE AWAY FROM BUILDINGS. IF FIELD GRADE ADJUSTMENTS ARE REQUIRED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
- 7. GROUNDWATER OR UNANTICIPATED SUBSURFACE CONDITIONS SHALL BE REPORTED TO THE GEOTECHNICAL ENGINEER FOR ASSESSMENT AND RECOMMENDATIONS.
- 8. COMPACTION EFFORTS AND MASS GRADING SHALL BE MONITORED AND TESTED BY AN EXPERIENCED SOILS TECHNICIAN, UNDER THE SUPERVISION OF A LICENSED GEOTECHNICAL ENGINEER REPRESENTING THE OWNER.
- UNLINED STORM WATER MANAGEMENT BASIN AND BIO-INFILTRATION SWALE BOTTOMS ARE EXPECTED TO INFILTRATE VIA THE FINISH GRADE SURFACE AND, THEREFORE, SHALL NOT BE HEAVILY COMPACTED; EQUIPMENT TRAFFIC SHALL BE MINIMIZED ON THE POND OR SWALE BOTTOMS. THE FACILITY SUB-GRADE SHALL BE A MEDIUM- TO WELL- DRAINING MATERIAL, WITH A MINIMUM THICKNESS OF 48 INCHES AND A MINIMUM INFILTRATION RATE OF 0.15 INCHES PER HOUR. THE FACILITY SHALL DRAIN WITHIN 72 HOURS OF A STORM EVENT. IF THE POND OR SWALE ALSO SERVES AS A WATER QUALITY TREATMENT FACILITY, THE TREATMENT ZONE SHALL BE A MEDIUM- TO WELL-DRAINING MATERIAL WITH A MINIMUM INFILTRATION RATE OF 0.25 TO 0.50 INCHES PER HOUR. SCARIFY THE FINISHED GRADE OF THE POND OR SWALE BOTTOM PRIOR TO HYDROSEEDING OR SODDING. TESTING THAT VERIFIES SUBGRADE MINIMUM INFILTRATION RATE MAY BE REQUIRED BY THE LOCAL JURISDICTION PRIOR TO CONSTRUCTION CERTIFICATION TO ENSURE ADEQUATE DRAINAGE. INFILTRATION TESTING OF THE TREATMENT ZONE MAY BE REQUIRED BY THE LOCAL JURISDICTION. IF DURING FINAL INSPECTION IT IS FOUND THAT THE CONSTRUCTED POND OR SWALE DOES NOT CONFORM TO THE ACCEPTED DESIGN, THE SYSTEM SHALL BE RECONSTRUCTED SO THAT IT DOES COMPLY.

## **PAVING NOTES**

- DO NOT APPLY PAVEMENT MATERIALS IF SUBGRADE IS WET OR EXCESSIVELY DAMP, OR IF RAIN IS IMMINENT OR EXPECTED BEFORE TIME REQUIRED FOR ADEQUATE CURE. SURFACE AND AIR TEMPERATURES SHALL CONFORM TO REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK).
- 2. COMPLY WITH GREENBOOK SPECIFICATIONS FOR HOT MIX ASPHALT PAVEMENT
- 3. WHERE NEW ASPHALT PAVEMENT JOINS EXISTING ASPHALT, THE EXISTING ASPHALT SHALL BE SAWCUT TO A NEAT, VERTICAL EDGE AND TACKED WITH ASPHALT EMULSION IN ACCORDANCE WITH GREENBOOK SPECIFICATIONS.
- 4. COMPLY WITH GREENBOOK SPECIFICATIONS AND ACI 301 REQUIREMENTS FOR MEASURING, MIXING, TRANSPORTING, AND PLACING CEMENT CONCRETE PAVEMENT.
- APPLY PAVEMENT MARKING MATERIALS TO CLEAN, DRY PAVEMENT SURFACES ACCORDING TO WSDOT STANDARD SPECIFICATION 8-22. PAVEMENT MARKINGS SHALL COMPLY WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION.
- 6. CONSTRUCTION STAKING FOR CURB AND GUTTER, PAVEMENT GRADES, SIDEWALK GRADES, AND ANY OTHER VERTICAL AND/OR HORIZONTAL ALIGNMENT SHALL BE PROVIDED BY A SURVEYING OR ENGINEERING FIRM CAPABLE OF PERFORMING SUCH WORK.

### **UTILITY & DRAINAGE NOTES**

- WORK AND MATERIALS SHALL COMPLY WITH THE CONSTRUCTION DOCUMENTS AND THE REQUIREMENT OF PIPING LOCATION AND ARRANGEMENT OF PIPING LAYOUT TAKE DESIGN CONSIDERATIONS INTO ACCOUNT. INSTALL PIPING AS INDICATED, TO EXTENT PRACTICAL. WHERE SPECIFIC INSTALLATION IS NOT INDICATED, FOLLOW PIPING MANUFACTURER'S WRITTEN INSTRUCTIONS AND REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION.
  - 2. UTILITIES SHALL BE STUBBED FIVE (5) FEET OUTSIDE OF THE BUILDING. THE SITE CONTRACTOR SHALL COORDINATE CONTINUATION OF UTILITY SERVICES AND UTILITY CONNECTIONS TO THE BUILDING WITH THE BUILDING CONTRACTOR AND BUILDING PLANS. A PLUG SHALL BE INSTALLED AT THE END OF SERVICE LINES UNTIL SUCH TIME THAT SERVICE IS EXTENDED TO THE BUILDING FOR CONNECTION.
  - 3. REFER TO ARCHITECTURAL AND MECHANICAL DOCUMENTS FOR ADDITIONAL INFORMATION REGARDING ROOF DRAINS AND CANOPY DRAINS.
  - 4. REFER TO ELECTRICAL PLANS FOR INFORMATION REGARDING SITE LIGHTING, POWER, AND COMMUNICATIONS. COORDINATE REQUIREMENTS AND SCHEDULING FOR POWER AND UTILITY INSTALLATIONS WITH UTILITY PURVEYOR, INCLUDING TRENCH EXCAVATION, BEDDING, AND BACKFILL REQUIREMENTS.
  - 5. REFER TO FIRE PROTECTION PLANS FOR ADDITIONAL INFORMATION REGARDING FIRE SUPPRESSION IMPROVEMENTS.
  - 6. FOR EACH TYPE OF PIPE, USE JOINING MATERIALS RECOMMENDED BY PIPING SYSTEM MANUFACTURER, UNLESS OTHERWISE INDICATED.
  - CONNECT UTILITY PIPING TO EXISTING SYSTEM ACCORDING TO REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION. ARRANGE WITH THE GOVERNING REGULATORY AGENCY OR UTILITY COMPANY FOR TAP OF SIZE AND IN LOCATION INDICATED. COORDINATE REQUIREMENTS AND SCHEDULING WITH AUTHORITIES HAVING JURISDICTION.

  - 9. BURY PIPING WITH DEPTH OF COVER IN COMPLIANCE WITH REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION AND MANUFACTURER'S REQUIREMENTS. THE CONTRACTOR SHALL COORDINATE WITH THE AUTHORITIES HAVING JURISDICTION FOR ALL REQUIREMENTS AND TO CONFIRM THAT AN ADEQUATE DEPTH OF COVER IS MAINTAINED OVER THE UTILITIES, INCLUDING CLEARANCES BETWEEN THE VARIOUS UTILITIES.
  - 10. INSTALL PRESSURIZED UNDERGROUND PIPING WITH RESTRAINED JOINTS AT HORIZONTAL AND VERTICAL CHANGES IN DIRECTION. RESTRAINMENT SHALL COMPLY WITH THE REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION.
  - 11. CONTRACTOR SHALL MAINTAIN A MINIMUM TEN (10) FEET OF HORIZONTAL SEPARATION BETWEEN WATER PIPE AND PIPE CARRYING NON-POTABLE WATER. AT CROSSINGS, PROVIDE A MINIMUM VERTICAL CLEARANCE OF 18 INCHES BETWEEN WATER PIPE (ABOVE) AND PIPE CARRYING NON-POTABLE WATER (BELOW). INSTALLATIONS FOR PIPE CARRYING NON-POTABLE WATER MAY BE INSTALLED AT A CLEARANCE LESS THAN THOSE STATED ABOVE IF THE NON-POTABLE LINE IS SLEEVED. THE SLEEVE PIPE SHALL BE ONE (1) SIZE LARGER THAN THE CONSTRUCTION PIPE. THE SLEEVE SHALL BE AT LEAST TWENTY (20) FEET IN LENGTH AND CENTERED ON THE CROSSING TO PROVIDE FOR A MINIMUM HORIZONTAL SEPARATION OF TEN (10) FEET EACH SIDE OF THE CROSSING, MEASURED PERPENDICULAR TO THE CROSSED LINE. EACH END OF THE SLEEVE SHALL BE SEALED WITH A FERNCO RUBBER COUPLER.
  - JURISDICTION AND AT OUTSIDE EDGE OF UNDERGROUND STRUCTURES. USE DETECTABLE WARNING TAPE OVER NONFERROUS PIPING.
  - 13. CONTRACTOR SHALL COORDINATE WITH THE UTILITY PURVEYOR REGARDING NATURAL GAS IMPROVEMENTS, INCLUDING TRENCH EXCAVATION, BEDDING, AND BACKFILL REQUIREMENTS. INSTALLATION OF THE NATURAL GAS LINE FROM THE POINT OF CONNECTION UP TO AND INCLUDING THE METER SHALL BE BY THE UTILITY PURVEYOR. COORDINATE REQUIREMENTS AND SCHEDULING WITH THE UTILITY PURVEYOR.
  - 14. FIELD QUALITY CONTROL SHALL COMPLY WITH THE AUTHORITIES HAVING JURISDICTION. INSPECT, TEST, DISINFECT, AND CLEAN UTILITY LINES IN ACCORDANCE WITH REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION.



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230916

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SHEET TITLE:

SPECIFICA'

SHEET NO:

www.DIMENSION-ENERGY.com √ 3 STRANDS BARBED WIRE - DOUBLE GATE PANEL - 20'-0" -FABRIC TIE, TYP. ─ FULLY WELD TOP RAIL /--WIRE MESH \_45 DEGREE BARBED WIRE / TO GATE POSTS ARM (FACING OUTSIDE) POST CAP BARBED WIRE, —HORIZONTAL RAIL 3 STRINGS - CHAIN LINK FENCE PER CORNER OR CLFMI GUIDELINES **END POST** (SEE DETAIL) - MIDDLE RAIL AT CORNERS TENSION BAND AND GATES ONLY TRUSS ROD AT TERMINAL —TENSION BAND GATE LATCH - BOULEVARD CLIPS CONNECTIONS HORIZONTAL BRACE WITH PROVISION FOR PADLOCK - STRETCHER BAR ✓ FINISH GRADE ─DRIVEN POST PER— CONCRETE —/ FOUNDATION AT **CLFMI GUIDELINES** BENDS PER CLFMI **GUIDELINES WHEN** APPLICABLE 1. THE FENCE SHALL MEET OR EXCEED THE CHAIN LINK FENCE MANUFACTURER INSTITUTE (CLFMI) GUIDELINES AND RELATED FEDERAL SPECIFICATIONS FOR CONCRETE FOOTING AT
TERMINAL POST PER
CHAINLINK MANUFACTURER
INSTITUTE (CLFMI)
GUIDELINES SECURITY CHAIN LINK FENCE MATERIALS AND INSTALLATION. ALL FENCE MATERIAL AND COMPONENTS SHALL BE GALVANIZED.
 THIS DETAIL NOT APPLICABLE FOR PRIVACY FENCE OR FENCE WITH SLATS. CHAIN LINK FENCE AND VEHICLE GATE SCALE: NTS PROPOSED FENCE CALTRANS CLASS 2 AB (TBD) COMPACTED TO 95% PER ASTM D1557 (GRAVEL SECTION TO MEET DESIGN VEHICLE LOAD) EXISTING —— GROUND (TYP) — EXISTING GROUND (TYP) DRAWN COMPACTED SUBGRADE (TBD) COMPACTED TO 90% PER ASTM D1557 (SCARIFY AND COMPACT SUBGRADE SECTION (N) SWALE SIZE —/ LOCATION TBD PER SOIL CRITERIA NEEDS) REINFORCING FABRIC, MIRAFI 500X OR EQUAL TO BE DETERMINED BASED ON SOILS CRITERIA GRAVEL ACCESS ROAD SCALE: NTS SHEET NO:

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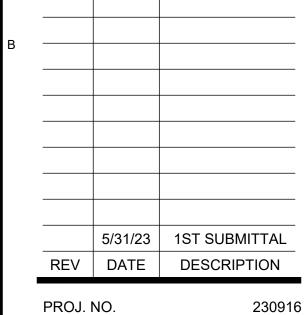




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**DETAILS** 

Know what's below.

Call before you dig.



### RESOURCE MANAGEMENT AGENCY

**5961 SOUTH MOONEY BLVD VISALIA, CA 93277**PHONE (559) 624-7000

Fax (559) 615-3002

Reed Schenke Public Works
Sherman Dix Fiscal Services

REED SCHENKE, DIRECTOR

MICHAEL WASHAM, ASSOCIATE DIRECTOR

July 14, 2023

Big Sandy Rancheria of Western Mono Indians Elizabeth D. Kipp, Chairperson PO. Box 337 Auberry, CA 93602

RE: Project Notification and Consultation Request Pursuant to Assembly Bill (AB) 52 for the Tulare CSG 2 Solar Project (PSP 23-059)

Dear Chairperson Kipp,

Pursuant to the provisions of AB 52, as the lead agency under the California Environmental Quality Act (CEQA), the County of Tulare hereby extends an invitation to consult on the California Environmental Quality Act (CEQA) review of the Tulare CSG 2 Solar Project (PSP 23-059) in order to assist with identifying and/or preserving and/or mitigating project impacts to Native American cultural places including:

- Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine; and
- Native American historic, cultural, or sacred site that is listed or may be eligible for listing in the California Register of Historical Resources including historic or prehistoric ruins and any burial ground, archaeological, or historic site.

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### **Consultation Request**

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Sincerely,

Jessica Willis Planner IV

(559) 624-7121

jwillis@tularecounty.ca.gov

Zessica R. Willis

Attachment(s): AB 52 Project Notification and Tribal Consultation Request



### RESOURCE MANAGEMENT AGENCY

**5961 SOUTH MOONEY BLVD VISALIA, CA 93277**PHONE (559) 624-7000
FAX (559) 615-3002

Aaron R. Bock Economic Development and Planning

Reed Schenke Public Works
Sherman Dix Fiscal Services

REED SCHENKE, DIRECTOR

MICHAEL WASHAM, ASSOCIATE DIRECTOR

July 14, 2023

Dunlap Band of Mono Indians Benjamin Charley Jr., Tribal Chair P.O. Box 14 Dunlap, CA 93621

RE: Project Notification and Consultation Request Pursuant to Assembly Bill (AB) 52 for the Tulare CSG 2 Solar Project (PSP 23-059)

Dear Chairperson Charley,

Pursuant to the provisions of AB 52, as the lead agency under the California Environmental Quality Act (CEQA), the County of Tulare hereby extends an invitation to consult on the California Environmental Quality Act (CEQA) review of the Tulare CSG 2 Solar Project (PSP 23-059) in order to assist with identifying and/or preserving and/or mitigating project impacts to Native American cultural places including:

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Sincerely,

Jessica Willis Planner IV

(559) 624-7121

jwillis@tularecounty.ca.gov

Zessica R. Willis

Attachment(s): AB 52 Project Notification and Tribal Consultation Request



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Reed Schenke Public Works
Sherman Dix Fiscal Services

REED SCHENKE, DIRECTOR

MICHAEL WASHAM, ASSOCIATE DIRECTOR

July 14, 2023

Dunlap Band of Mono Indians Dirk Charley, Tribal Secretary 5509 E. McKenzie Avenue Fresno, CA 93727

RE: Project Notification and Consultation Request Pursuant to Assembly Bill (AB) 52 for the Tulare CSG 2 Solar Project (PSP 23-059)

Dear Mr. Charley,

Pursuant to the provisions of AB 52, as the lead agency under the California Environmental Quality Act (CEQA), the County of Tulare hereby extends an invitation to consult on the California Environmental Quality Act (CEQA) review of the Tulare CSG 2 Solar Project (PSP 23-059) in order to assist with identifying and/or preserving and/or mitigating project impacts to Native American cultural places including:

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Attachment(s): AB 52 Project Notification and Tribal Consultation Request



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Reed Schenke Public Works
Sherman Dix Fiscal Services

REED SCHENKE, DIRECTOR

MICHAEL WASHAM, ASSOCIATE DIRECTOR

July 14, 2023

Kern Valley Indian Community Robert Robinson, Co-Chairperson P.O. Box 1010 Lake Isabella, CA 93240

RE: Project Notification and Consultation Request Pursuant to Assembly Bill (AB) 52 for the Tulare CSG 2 Solar Project (PSP 23-059)

Dear Chairperson Robinson,

Pursuant to the provisions of AB 52, as the lead agency under the California Environmental Quality Act (CEQA), the County of Tulare hereby extends an invitation to consult on the California Environmental Quality Act (CEQA) review of the Tulare CSG 2 Solar Project (PSP 23-059) in order to assist with identifying and/or preserving and/or mitigating project impacts to Native American cultural places including:

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Reed Schenke Public Works
Sherman Dix Fiscal Services

REED SCHENKE, DIRECTOR

MICHAEL WASHAM, ASSOCIATE DIRECTOR

July 14, 2023

Kern Valley Indian Community Julie Turner, Secretary P. Box 1010 Lake Isabella, CA 93240

RE: Project Notification and Consultation Request Pursuant to Assembly Bill (AB) 52 for the Tulare CSG 2 Solar Project (PSP 23-059)

Dear Ms. Turner,

Pursuant to the provisions of AB 52, as the lead agency under the California Environmental Quality Act (CEQA), the County of Tulare hereby extends an invitation to consult on the California Environmental Quality Act (CEQA) review of the Tulare CSG 2 Solar Project (PSP 23-059) in order to assist with identifying and/or preserving and/or mitigating project impacts to Native American cultural places including:

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Aaron R. Bock Economic Development and Planning

Reed Schenke Public Works
Sherman Dix Fiscal Services

REED SCHENKE, DIRECTOR

MICHAEL WASHAM, ASSOCIATE DIRECTOR

July 14, 2023

North Fork Mono Tribe Ron Goode, Chairperson 13396 Tollhouse Road Clovis, CA 93619

RE: Project Notification and Consultation Request Pursuant to Assembly Bill (AB) 52 for the Tulare CSG 2 Solar Project (PSP 23-059)

Dear Chairperson Goode,

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PHONE (559) 624-7000 FAX (559) 615-3002 Reed Schenke Public Works
Sherman Dix Fiscal Services

REED SCHENKE, DIRECTOR

MICHAEL WASHAM, ASSOCIATE DIRECTOR

July 14, 2023

Santa Rosa Rancheria Tachi Yokut Tribe Leo Sisco, Chairperson 16835 Alkali Drive Lemoore, CA 93245

RE: Project Notification and Consultation Request Pursuant to Assembly Bill (AB) 52 for the Tulare CSG 2 Solar Project (PSP 23-059)

Dear Chairperson Sisco,

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Reed Schenke Public Works
Sherman Dix Fiscal Services

REED SCHENKE, DIRECTOR

MICHAEL WASHAM, ASSOCIATE DIRECTOR

July 14, 2023

Santa Rosa Rancheria Tachi Yokut Tribe Cultural Department Shana Powers, Director 16835 Alkali Drive Lemoore, CA 93245

RE: Project Notification and Consultation Request Pursuant to Assembly Bill (AB) 52 for the Tulare CSG 2 Solar Project (PSP 23-059)

Dear Ms. Powers.

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FAX (559) 615-3002 Sherman Dix Fiscal Services

REED SCHENKE, DIRECTOR

MICHAEL WASHAM, ASSOCIATE DIRECTOR

July 14, 2023

Tubatulabals of Kern Valley Robert L. Gomez, Jr., Chairperson P.O. Box 833 Weldon, CA 93283-0833

RE: Project Notification and Consultation Request Pursuant to Assembly Bill (AB) 52 for the Tulare CSG 2 Solar Project (PSP 23-059)

Dear Chairperson Gomez,

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REED SCHENKE, DIRECTOR

MICHAEL WASHAM, ASSOCIATE DIRECTOR

July 14, 2023

Tule River Indian Tribe Neil Peyron, Chairperson P. O. Box 589 Porterville, CA 93258

RE: Project Notification and Consultation Request Pursuant to Assembly Bill (AB) 52 for the Tulare CSG 2 Solar Project (PSP 23-059)

Dear Chairperson Peyron,

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In accordance with the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.), the County of Tulare Resource Management Agency (RMA) will be preparing a Mitigated Negative Declaration (MND) to evaluate the environmental effects associated with the Project.

#### **Sacred Lands File Search**

The County requested a Sacred Lands File (SLF) search through the Native American Heritage Commission (NAHC) on July 14, 2023, for the Tulare CSG 2 Solar Project (PSP 23-059). The SLF search results will be made available upon the release of the MND for public review. However, the results may be made available to your Tribal Representatives if a written request for consultation is submitted to the County within thirty (30) days of receipt of this letter.

A California Historical Resources Information System (CHRIS) search for the project area will be requested through the Southern San Joaquin Valley Information Center (SSJVIC). The results of the CHRIS search may be made available to your Tribal Representatives if a written request for consultation is received. As such, the County is requesting consultation with your Tribe to determine whether a Cultural Resources Study will be required. Should the County not receive a response to this request within thirty (30) days of receipt of this letter, it will be presumed that there are no cultural resources of concern and a Cultural Resources Study will not be required.

#### **Consultation Request**

If your Tribe desires to consult with the County on the review of this project, please respond in writing within thirty (30) days regarding AB 52. Written correspondence can be mailed to the address provided above or e-mailed to the addresses provided below.

If the County does not receive a response to this notification, it will be presumed that your Tribe has declined the opportunity to consult on this project pursuant to AB 52.

Thank you for your consideration on this matter and please do not hesitate to contact me by phone or e-mail should you have any questions or need additional information. If you need immediate assistance and I am unavailable, please contact, Hector Guerra, Chief of Environmental Planning, by phone at (559) 624-7121, or by email at <a href="mailto:hguerra@tularecounty.ca.gov">hguerra@tularecounty.ca.gov</a>.

Sincerely,

Jessica Willis Planner IV

(559) 624-7121

jwillis@tularecounty.ca.gov

Zessica R. Willis



# RESOURCE MANAGEMENT AGENCY

**5961 SOUTH MOONEY BLVD VISALIA, CA 93277**PHONE (559) 624-7000

Fax (559) 615-3002

Reed Schenke Public Works
Sherman Dix Fiscal Services

REED SCHENKE, DIRECTOR

MICHAEL WASHAM, ASSOCIATE DIRECTOR

July 14, 2023

Tule River Indian Tribe
Dept. of Environmental Protection
Kerri Vera, Director
P. O. Box 589
Porterville, CA 93258

RE: Project Notification and Consultation Request Pursuant to Assembly Bill (AB) 52 for the Tulare CSG 2 Solar Project (PSP 23-059)

Dear Ms. Vera,

Pursuant to the provisions of AB 52, as the lead agency under the California Environmental Quality Act (CEQA), the County of Tulare hereby extends an invitation to consult on the California Environmental Quality Act (CEQA) review of the Tulare CSG 2 Solar Project (PSP 23-059) in order to assist with identifying and/or preserving and/or mitigating project impacts to Native American cultural places including:

- Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine; and
- Native American historic, cultural, or sacred site that is listed or may be eligible for listing in the California Register of Historical Resources including historic or prehistoric ruins and any burial ground, archaeological, or historic site.

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Sincerely,

Jessica Willis Planner IV

(559) 624-7121

jwillis@tularecounty.ca.gov

Zessica R. Willis



# RESOURCE MANAGEMENT AGENCY

**5961 SOUTH MOONEY BLVD VISALIA, CA 93277**PHONE (559) 624-7000
FAX (559) 615-3002

Reed Schenke Public Works
Sherman Dix Fiscal Services

REED SCHENKE, DIRECTOR

MICHAEL WASHAM, ASSOCIATE DIRECTOR

July 14, 2023

Wuksache Indian Tribe/Eshom Valley Band Kenneth Woodrow, Chairperson 1179 Rock Haven Ct. Salinas, CA 93906

RE: Project Notification and Consultation Request Pursuant to Assembly Bill (AB) 52 for the Tulare CSG 2 Solar Project (PSP 23-059)

Dear Chairperson Woodrow,

Pursuant to the provisions of AB 52, as the lead agency under the California Environmental Quality Act (CEQA), the County of Tulare hereby extends an invitation to consult on the California Environmental Quality Act (CEQA) review of the Tulare CSG 2 Solar Project (PSP 23-059) in order to assist with identifying and/or preserving and/or mitigating project impacts to Native American cultural places including:

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Sincerely,

Jessica Willis Planner IV

(559) 624-7121

jwillis@tularecounty.ca.gov

Zessica R. Willis

 From:
 Danielle Folk

 To:
 lkipp@bsrnation.com

 Cc:
 Jessica R Willis

Subject: AB 52 Project Notification - Tulare CSG 2 Solar Project (PSP 23-059)

**Date:** Friday, July 14, 2023 12:14:38 PM

Attachments: Tribal AB52 Consultation Letter CSG 2 Kipp BSRWM.pdf

Project Notification and Consult Request AB52 CSG 2.pdf

CSG 2 Vicinity Map.pdf Woodville topo CSG20001.pdf PSP23-059 SitePlan.pdf

#### Good afternoon.

Pursuant to AB 52, please find attached the cover letter, Project Notification and Tribal Consultation Request form, project vicinity map, and project site plan maps for the Tulare CSG 2 Solar Project (PSP 23-059). The hard copies of these documents were sent to you via Certified Mail Today, July 14, 2023.

Please feel free to contact me by phone or email if you would like to begin the consultation process. Also, if your tribe would like to decline the opportunity to consult or defer to another tribe, an email stating so would be greatly appreciated.

Thank you.



Planner III
Tulare County Resource Management Agency (559) 624-7029

<u>Dfolk@tularecounty.ca.gov</u>

To: Ben Charley; Dirk Charley

Cc: <u>Jessica R Willis</u>

Subject: AB 52 Project Notification - Tulare CSG 2 Solar Project (PSP 23-059)

**Date:** Friday, July 14, 2023 12:16:10 PM

Attachments: Tribal AB52 Consultation Letter CSG 2 DCharley DBMI.pdf

Project Notification and Consult Request AB52 CSG 2.pdf

CSG 2 Vicinity Map.pdf Woodville topo CSG20001.pdf PSP23-059 SitePlan.pdf

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Thank you.

# Danielle Folk

Planner III
Tulare County Resource Management Agency (559) 624-7029

<u>Dfolk@tularecounty.ca.gov</u>

To: Robert Robinson (bbutterbredt@gmail.com); Julie Turner (meindiangirl@sbcglobal.net); Brandy Kendricks

(krazykendricks@hotmail.com)

Cc: <u>Jessica R Willis</u>

Subject: AB 52 Project Notification - Tulare CSG 2 Solar Project (PSP 23-059)

**Date:** Friday, July 14, 2023 12:18:21 PM

Attachments: <u>Tribal AB52 Consultation Letter CSG 2 Robinson KVIC.pdf</u>

Project Notification and Consult Request AB52 CSG 2.pdf

CSG 2 Vicinity Map.pdf PSP23-059 SitePlan.pdf Woodville topo CSG20001.pdf

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Thank you.

# Danielle Folk

 From:
 Danielle Folk

 To:
 Ron W. Goode

 Cc:
 Jessica R Willis

Subject: AB 52 Project Notification - Tulare CSG 2 Solar Project (PSP 23-059)

**Date:** Friday, July 14, 2023 12:19:41 PM

Attachments: <u>Tribal AB52 Consultation Letter CSG 2 Goode NFMT.pdf</u>

Project Notification and Consult Request AB52 CSG 2.pdf

CSG 2 Vicinity Map.pdf PSP23-059 SitePlan.pdf Woodville topo CSG20001.pdf

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Thank you.



To: Leo Sisco (LSisco@tachi-yokut-nsn.gov); Shana Powers (SPowers@tachi-yokut-nsn.gov); Samantha McCarty;

Paige Berggren

Cc: <u>Jessica R Willis;</u> <u>HECTOR GUERRA</u>; <u>Hector Guerra</u>

Subject: AB 52 Project Notification - Tulare CSG 2 Solar Project (PSP 23-059)

**Date:** Friday, July 14, 2023 12:23:55 PM

Attachments: <u>Tribal AB52 Consultation Letter CSG 2 Powers SRRTYT.pdf</u>

Project Notification and Consult Request AB52 CSG 2.pdf

CSG 2 Vicinity Map.pdf Woodville topo CSG20001.pdf PSP23-059 SitePlan.pdf

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Thank you.

# Danielle Folk

To: Robert L. Gomez (rgomez@tubatulabal.org)

Cc: <u>Jessica R Willis</u>

Subject: AB 52 Project Notification - Tulare CSG 2 Solar Project (PSP 23-059)

**Date:** Friday, July 14, 2023 12:26:01 PM

Attachments: <u>Tribal AB52 Consultation Letter CSG 2 Gomez TKV.pdf</u>

Project Notification and Consult Request AB52 CSG 2.pdf

CSG 2 Vicinity Map.pdf Woodville topo CSG20001.pdf PSP23-059 SitePlan.pdf

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Thank you.



To: Neil Peyron (neil.peyron@tulerivertribe-nsn.gov); Kerri Vera (tuleriverenv@yahoo.com); Felix Christman

(tuleriverarchmon1@gmail.com)

Cc: <u>Jessica R Willis</u>

Subject: AB 52 Project Notification - Tulare CSG 2 Solar Project (PSP 23-059)

**Date:** Friday, July 14, 2023 12:28:42 PM

Attachments: <u>Tribal AB52 Consultation Letter CSG 2 Peyron TRIT.pdf</u>

Project Notification and Consult Request AB52 CSG 2.pdf

CSG 2 Vicinity Map.pdf PSP23-059 SitePlan.pdf Woodville topo CSG20001.pdf

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Thank you.

# Danielle Folk

Planner III
Tulare County Resource Management Agency (559) 624-7029

<u>Dfolk@tularecounty.ca.gov</u>

To: Ken Woodrow (Kwood8934@aol.com)

Cc: <u>Jessica R Willis</u>

Subject: AB 52 Project Notification - Tulare CSG 2 Solar Project (PSP 23-059)

**Date:** Friday, July 14, 2023 12:30:50 PM

Attachments: Tribal AB52 Consultation Letter CSG 2 Woodrow WIT.pdf

Project Notification and Consult Request AB52 CSG 2.pdf

Woodville topo CSG20001.pdf PSP23-059 SitePlan.pdf CSG 2 Vicinity Map.pdf

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Thank you.

# Danielle Folk

# ATTACHMENT "D" TRANSPORTATION

#### **MEMORANDUM**

To: Abby Reed, Dimension Renewable Energy

From: Sabita Tewani, AICP, PTP, Dudek

Jeanney Keo, Dudek

Subject: Transportation Screening Analysis for the Tulare CSG 2 Solar Project

**Date:** May 5, 2023

cc: Angela Zhang, Dudek

Candice Magnus, Dudek

Attachment(s): Figures 1-2

A: CalEEMod Output for Construction Schedule and Vehicles

The following memorandum provides the transportation screening analysis which includes trip generation and vehicle miles traveled (VMT) analysis for the construction and operation of the Tulare CSG 2 Solar Project (project) by Dimension Renewable Energy (applicant) in Tulare County (County). This analysis was conducted to determine the trip generation and VMT analysis pf the project per Senate Bill (SB) 743 requirements under California Environmental Quality Act (CEQA).

This trip generation analysis has been prepared consistent with the trip generation methodologies generally used for construction related traffic. The project's VMT analysis is consistent with the guidance provided in the Governor's Office of Planning and Research's (OPR) Technical Advisory on Evaluating Transportation Impacts in CEQA (December 2018) and the County of Tulare SB 743 Guidelines (June 8, 2020). The memo also includes screening for level of service (LOS) for operational analysis requirements consistent with the County of Tulare General Plan Transportation and Circulation Element (Amended 2020).

# 1 Project Description and Existing Setting

The applicant proposes to construct and operate the Tulare CSG 2 Solar Project (project); a single-axis tracker ground mounted photovoltaic (PV) community solar and battery storage facility on a privately-owned parcel in the County. The project site is located on the north side Avenue 160 and on the east side of Road 180, east of Woodville and west of Porterville within the County.

Figure 1 illustrates the project location and Figure 2 illustrates the proposed layout for the project. The following describes the existing transportation setting in the project's vicinity.

#### Vehicle Miles Traveled

Based on the Tulare County Traffic Analysis Zone (TAZ) Map (Figure 3-2 of the County of Tulare SB 743 Guidelines), the project is located in South Region in TAZ 2738, which is estimated to have a baseline VMT of 20.12 daily VMT per capita, and 30.16 daily VMT per employee.

#### **Roadway Facilities**

Per Tulare County Road System, shown on Figure 13-1, in the General Plan Transportation and Circulation Element, the roadway functional classification in the County includes State highways, arterial, and collector roadway system. All other roadways are classified as local streets. The County's functional classification system recognizes differences in roadway functions and standards between urban/suburban areas and rural areas.

Following roadways would provide regional and local access to the project:

**State Route (SR)** -99. SR-99 is a north-south oriented, generally four-lane, divided freeway located west of the project that connects Tulare County to Fresno and Sacramento to the north and Bakersfield to the south. It would provide regional access to the project site via its interchange with State Route 190 (SR-190) or Olive Avenue. The posted speed limit is 65 miles per hour.

**SR-190** is generally an east-west oriented, two-lane, undivided, roadway located south of the project site. It is classified as a Minor Arterial, east of SR-99 in the County's Transportation and Circulation Element. The posted speed limits are 55 and 65 miles per hour (mph).

SR-65 is generally a north-south, generally four-lane, divided highway located east of the project site. It provides regional access to the project via its interchange with SR-190. The posted speed limit is 65 miles per hour.

**Avenue 160** is an east-west, two-lane, divided, rural local road located directly south of the project site. There is no curb or gutter along the roadway or posted speed limit along this road.

**Road 180** is a north-south, undivided and paved rural local road located directly west of the project site. There is no curb or gutter along the roadway or posted speed limit along this road.

#### Transit, Bike and Pedestrian Facilities

Tulare County Area Transit provides regional transit service throughout the County. The recently updated 2022 Regional Active Transportation Plan for the Tulare County Region identifies goals, objective and project related to pedestrian and bicycle facilities that would promote active transportation in the County. The project is in the unincorporated portion of the County with no existing or proposed bicycle, pedestrian, or transit facilities within the project's vicinity.

# 2 Trip Generation Analysis

### 2.1 Construction

The Institute of Transportation Engineers' (ITE) Trip Generation Manual does not contain trip rates for construction-related activities associated with the proposed project. Trip generation for construction projects is based on average or peak number of workers and trucks that would be required for the proposed construction activities. Construction traffic includes the number of workers, and the quantity of material and equipment delivery-related trucks (vendor) and haul trucks that would be generated to and from the site daily and during the AM and PM peak hours. The construction activities will occur during the daylight hours for approximately 8 hours over the weekdays, Monday through Friday.



Construction activities, schedule, and an estimate of related workers and trucks for the construction phase of the proposed project are shown in Table 1.

Overlap of Phases 2 and 3 during construction activities of the project is estimated to generate peak worker and truck traffic (i.e., 62 worker trips, 8 vendor truck trips, and 12 haul truck trips).

**Table 1 Phasing and Schedule - Construction** 

No.	Phase truction	Start	End	Daily Worker Trips	Daily Vendor Truck Trips	Daily Haul Truck Trips
1	Site Preparation	6/1/2023	7/2/2024	8	4	4
2	Building Construction <sup>1</sup>	7/3/2024	12/31/2024	50	6	8
3	Paving <sup>1</sup>	7/3/2024	12/31/2024	12	2	4
4	Decommissioning <sup>2</sup>	01/01/2050	07/01/2050	50	6	4
Peak	Phases for Construction (assuming	62	8	12		

Source: Attachment A

Notes: Dates shown are illustrative only.

The proposed schedule for construction is approximately 7 months and would include simultaneous phases: building construction and paving. The length of each phase over the 7-month construction period was evaluated to identify which phases could occur concurrently to determine peak worker and truck traffic, since traffic during these overlapping phases would be additive. Overlap of Phases 2 and 3 during construction activities of the project is estimated to generate peak worker and truck traffic (i.e., 31 workers, 4 vendor trucks and 6 haul trucks). Similarly, peak phase of decommissioning activities is estimated to require 25 workers, 3 vendor trucks and 2 haul trucks each day for the duration of the phase. Because the decommissioning would occur in the year 2050, it is not included in determining the peak phase of construction of the project.

Construction of the proposed project would require a peak of approximately 31 workers, 4 vendor trucks and 6 haul trucks per day. The work shift would begin during the AM peak period (generally occurs between 6:00 a.m.–8:00 a.m.) and end during the PM peak period (generally occurs between 4:00 p.m.–6:00 p.m.). Therefore, 100% of the workers would arrive at the project site during the AM peak hour, and 100% of the workers would depart the site during the PM peak hour. It is expected that carpooling would occur among the workers, however, to provide a conservative estimate of peak hour trips, no carpool reduction factor was applied to AM and PM peak trips associated with the workers. Truck traffic to and from the site was evenly distributed assuming an 8-hour workday.

The calculation of project trip generation estimates during the peak construction phase is shown in Table 2. To address the effect caused by large over-sized trucks onto the roadway network, a factor called the passenger car equivalent (PCE) was developed and represents the number of passenger cars displaced by each truck in the traffic stream under mixed flow conditions. PCE factor ranges from 2.0 to 3.0 based on the number of axles in the truck. A PCE factor of 3.0 has been utilized to convert truck trips into equivalent car trips for the project construction trip generation analysis.



Indicates the peak scenario during which construction is occurring simultaneously.

Decommissioning would occur in the year 2050 and not result in trips that exceed the peak phase identified above.

**Table 2: Peak Phase of Construction Trip Generation Summary** 

	Daily		AM Peak Hour			PM Peak Hour			
Vehicle Type	Quantity	Daily Trips	In	Out	Total	In	Out	Total	
Trip Generation <sup>1</sup>									
Workers	31 workers	62	31	0	31	0	31	31	
Vendor Trucks	4 trucks	8	1	0	1	0	1	1	
Haul Trucks	6 trucks	12	1	1	2	1	1	2	
	Total	82	33	1	34	1	33	34	
Trip Generation w/PCE1	Trip Generation w/PCE <sup>1</sup>								
Workers	31 workers	62	31	0	31	0	31	31	
Vendor Trucks <sup>2</sup>	4 trucks	16	2	0	2	0	2	2	
Haul Trucks <sup>3</sup>	6 trucks	36	3	3	6	3	3	6	
	Total (PCE)	114	36	3	39	3	36	39	

Notes: PCE = Passenger Car Equivalent.

- Trips have been rounded to the nearest whole number; rounding errors may be present.
- PCE factor of 2.0 was utilized for vendor trucks.
- 3 PCE factor of 3.0 was utilized for haul trucks.

As shown in Table 2, the proposed project would generate 82 total daily trips, 34 AM peak hour trips (33 inbound and 1 outbound), and 34 PM peak hour trips (1 inbound and 33 outbound). With the application of PCE factors to truck trips, the project would generate 114 total PCE daily trips, and 39 PCE trips during the AM peak hour (36 inbound and 3 outbound) and 39 PCE trips during the PM peak hour (3 inbound and 36 outbound).

# 2.2 Permanent Operations and Maintenance

The facility will be unmanned, and operated remotely. There may be occasional site visits for security, maintenance, and repairs, but these trips are not expected to occur regularly or produce significant amounts of trips. These occasional site visits shall occur during daylight hours and not be constrained by seasonal affects. The trip generation related to operation and periodic maintenance activities would occur throughout the year, however, it would be nominal.

# 3 Vehicle Miles Traveled (VMT) Analysis

The OPR approved the addition of new Section 15064.3, "Determining the Significance of Transportation Impacts" to the State's CEQA Guidelines, compliance with which was required beginning July 1, 2020. OPR recommended VMT as the most appropriate measure of project transportation impacts for land use projects and land use plans. The updates to the CEQA Guidelines required under SB 743 were approved on December 28, 2018. The OPR Technical Advisory (OPR 2018) provides guidance and tools to properly carry out the principles within SB 743 and how to evaluate transportation impacts in CEQA.

Under the new transportation guidelines, LOS, or vehicle delay, is no longer be considered an environmental impact under CEQA. The Updated CEQA Guidelines state that "generally, vehicle miles traveled (VMT) is the most appropriate measure of transportation impacts" and define VMT as "the amount and distance of automobile travel

attributable to a project." It should be noted that "automobile" refers to on-road passenger vehicles, specifically cars and light trucks. OPR has clarified in the Technical Advisory and recent informational presentations that heavyduty truck VMT is not required to be included in the estimation of a project's VMT. Other relevant considerations may include the effects of the project on transit and non-motorized traveled.

CEQA Guidelines Section 15064.3(b) is further divided into four subdivisions: (1) land use projects, (2) transportation projects, (3) qualitative analysis, and (4) methodology. The CEQA Guidelines are accompanied by an OPR Technical Advisory, which includes specifications for how to estimate and forecast VMT for these subdivisions. The County has also adopted its own SB 743 guidelines which provide applicable screening criteria, threshold and VMT analysis methodology for land use and transportation projects. If the project does not meet the applicable screening criteria, then further analysis is required.

The updated CEQA Guidelines do not establish a significance threshold, however Tulare County Guidelines recommend a threshold of significance for land use development (residential, office, and other land uses) and transportation projects. The recommended threshold for Tulare County for residential, office or industrial projects, respectively, is if the VMT per capita or employee exceeds the average VMT per capita or employee for the TAZ where the project is located. It should be noted that there is no significance threshold for construction or maintenance projects.

The guidance from the County does not require a VMT analysis for construction projects. Therefore, the VMT analysis for the project's construction phase has been evaluated qualitatively, per OPR guidance in the Technical Advisory. The analysis for the project's operational phase has been conducted using the Tulare County SB 743 guidelines. Therefore, as described below, the VMT generated by the construction of the project would be short-term and temporary and would not require a detailed analysis. The VMT generated by the operation of the proposed project would be less than 500 average daily trips (ADT) and hence would be screened out per County's SB 743 Guidelines.

# 3.1 Construction (and Decommissioning)

Construction of the project is not a land use or transportation project, and therefore neither Section 15064.3(b)(1) nor Section 15064.3(b)(2) of the CEQA Guidelines apply. Instead, the proposed project would be categorized under Section 15064.3(b)(3) qualitative analysis. The following paragraph from the Section 15064.3(b)(3) provides guidance regarding qualitative analysis:

If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.

Vehicle-trip generation (for workers and trucks) as a result of project construction has been summarized in Table 2. The VMT for the overall project using approximate trip lengths for worker commute, vendor, and haul trips has been estimated using default values for the San Joaquin Valley region from the California Emissions Estimator Model (CalEEMod) land use emissions computer model in the project's air quality analysis. However, construction (and decommissioning) related trips are temporary and would not generate permanent trips. Therefore, the VMT from construction (and decommissioning) is not required to be quantified per SB 743 requirements. Further, the



project construction would be generally consistent with construction activities in terms of the temporary nature of activities, trip generation characteristics, and the types of vehicles and equipment required. Even though it is anticipated that some of the workers would carpool to the site, managing worker and vendor trip lengths for the construction projects is not feasible because of the remote location and duration of individual activities. Accessibility to alternative modes of transportation is also not available for workers in the rural County.

Per OPR, heavy vehicle traffic is not required to be included in the estimation of a project's VMT. As noted above, worker and vendor trips would generate VMT, but once construction (and decommissioning) is completed, the construction-related traffic would cease and VMT would return to pre-construction conditions. Measures to reduce the VMT generated by workers and trucks are limited, and there are no thresholds or significance criteria for temporary, construction-related VMT. Additionally, construction (and decommissioning) related VMT would be temporary and short term which would cease after construction is complete. Further, it should be noted that OPR and Tulare County does not require quantitative assessment of temporary construction traffic. Therefore, the proposed project would not conflict or be inconsistent with CEQA Guidelines Sections 15064.3(b)(1) and 15064.3(b)(3), and impacts would be less than significant.

### 3.2 Operation and Maintenance

Consistent with OPR's Technical Advisory, Tulare County specifies description of projects that would have a less than significant transportation impact due to project size or project type. The following screening criteria, would apply to the operation of the project:

Screening Criteria for Small Projects (500 daily trips or less): Some projects are small enough that they can be presumed to have a less than significant transportation impact without doing a detailed VMT analysis. For Tulare County, projects that generate less than 500 trips per day can be presumed to have a less than significant impact.

As mentioned above, the project would be unmanned, and operated remotely. There may be occasional site visits for security, maintenance, and repairs, but these trips are not expected to occur regularly or produce significant amounts of trips. Therefore, the operation of the project can be screened from further VMT analysis using the Small Projects screening criteria. The operation of the project would not have a significant transportation impact. No mitigation would be required.

Thus, the Project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b), and transportation impacts under CEQA would be **less than significant**.

# 4 Levels of Service (LOS) Screening Analysis

Although SB 743 changes the CEQA transportation performance measure from LOS to VMT, it does not affect a local agency's ability to analyze roadway operations and require land development projects to provide improvements when the traffic generated by a project will affect the local roadway system. The Tulare County Transportation and Circulation Element states that a traffic study or local transportation analysis (LTA) should generally be provided for land development projects that generate more than 100 peak hour trips. Additionally, the County shall strive to develop and manage its roadway system (both segments and intersections) to meet a LOS of "D" or better in accordance with the LOS definitions established by the Highway Capacity Manual.



The construction and permanent operations and maintenance of the proposed project would add short-term and temporary trips (see Table 2) to the roadway network and intersections and is not anticipated to generate more than 100 peak hour trips. The peak construction phase would generate less than 50 peak hour trips and the operation and maintenance activities would generate nominal trips. Therefore, the project would not have a measurable effect on the roadway network near the project and would not be required to prepare an LTA or traffic study. No improvement measures would be required.

# 5 Conclusions

The trip generation analysis for the project provides an estimate of the daily and peak hour trip generation for the construction and operation of the proposed project. As shown in the analysis, the project would generate 1 would generate 82 total daily trips, 34 AM peak hour trips (33 inbound and 1 outbound), and 34 PM peak hour trips (1 inbound and 33 outbound) during the peak construction of its 7-month construction period. With the application of PCE factors to truck trips, the project would generate 114 total PCE daily trips, and 39 PCE trips during the AM peak hour (36 inbound and 3 outbound) and 39 PCE trips during the PM peak hour (3 inbound and 36 outbound). The project is not anticipated to generate a significant number of daily and peak hour trips once the construction is complete.

As shown above, the VMT generated by the construction (and decommissioning) of the proposed project would be short-term and temporary and would not require a detailed analysis. The VMT generated by the operation of the proposed project would be less than 500 ADT and hence would be screened out from conducting a detailed VMT analysis. The project would not have a VMT impact and no mitigation measures would be required.

The peak construction phase would generate less than 50 peak hour trips and the operation and maintenance activities would generate nominal trips. Therefore, the project would not have a measurable effect on the roadway network near the project and would not be required to prepare an LTA or traffic study. The project is not anticipated to have any traffic or operational effects and no improvement measures would be required.

# References

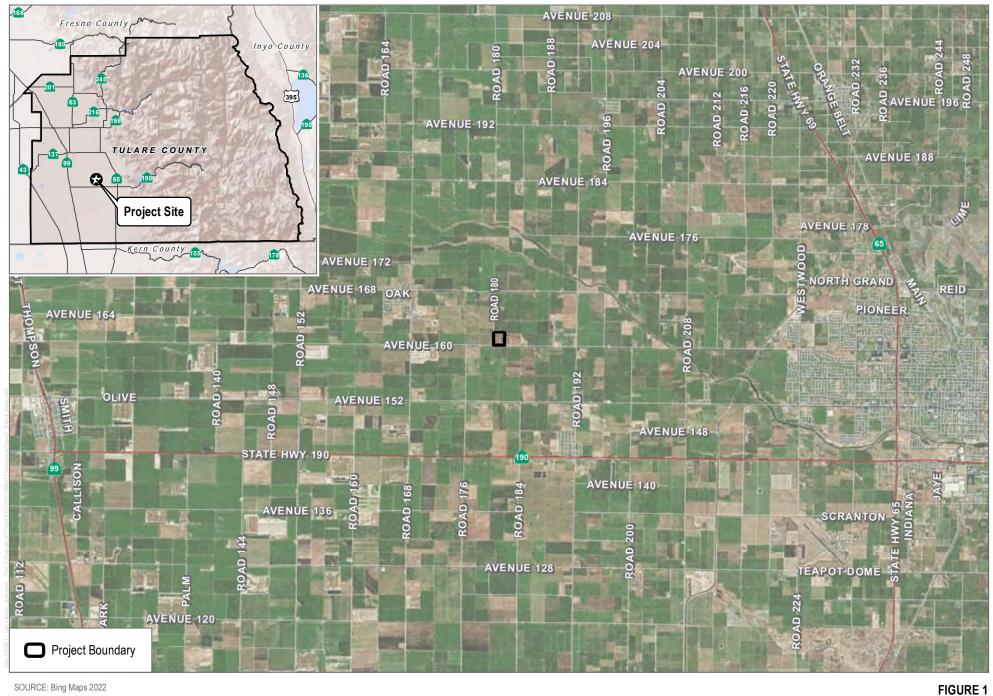
County of Tulare. 2020. County of Tulare SB 743 Guidelines. June 8.

County of Tulare. 2020. County of Tulare General Plan Transportation and Circulation Element. August.2012. (Amended 2020).

OPR (California Governor's Office of Planning and Research). 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. December 2018. http://opr.ca.gov/docs/20190122-743\_Technical\_Advisory.pdf.

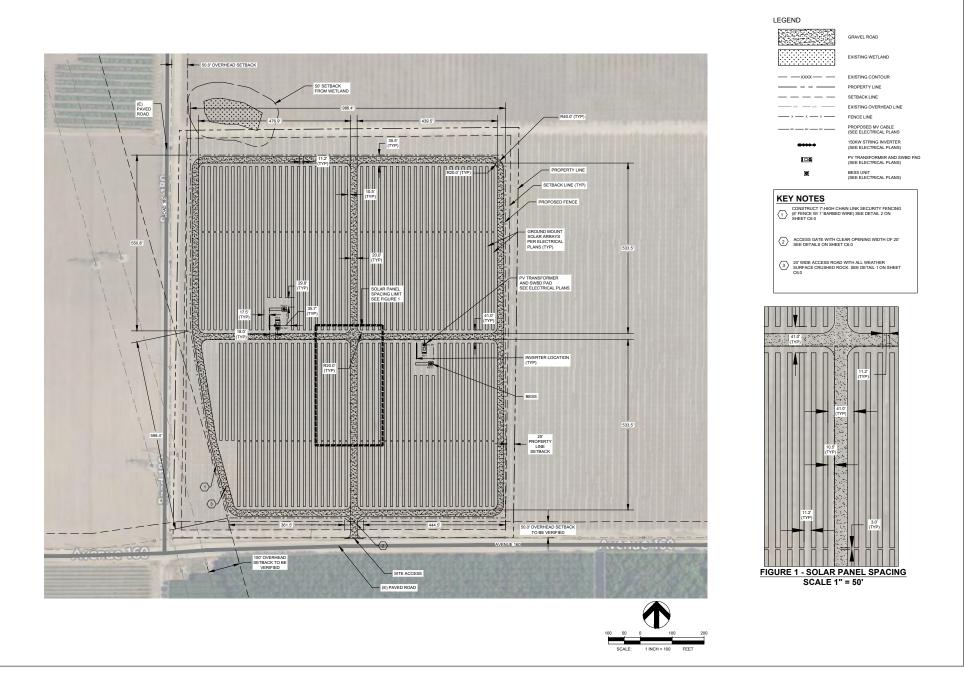
Tulare County Association of Governments (TCAG). 2022. Regional Active Transportation Plan for the Tulare County Region.





SOURCE: Bing Maps 2022

**Project Location** 



SOURCE: COFFMAN ENGINEERS 2023



# **Attachment A**

CalEEMod Output for Construction Schedule and Vehicles

Avoided	_	_	_	_		_	_	_	_	_	_		_	_	_		_	_
	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

# 5. Activity Data

# 5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	6/1/2024	7/2/2024	5.00	22.0	_
Building Construction	Building Construction	7/3/2024	12/31/2024	5.00	130	_
Decommissioning	Building Construction	1/1/2050	7/1/2050	5.00	130	_
Paving	Paving	7/3/2024	12/31/2024	5.00	130	_

# 5.2. Off-Road Equipment

# 5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Tractors/Loaders/Backh oes	Diesel	Average	1.00	8.00	84.0	0.37
Site Preparation	Skid Steer Loaders	Diesel	Average	1.00	8.00	71.0	0.37
Building Construction	Forklifts	Diesel	Average	2.00	8.00	82.0	0.20
Building Construction	Skid Steer Loaders	Diesel	Average	4.00	8.00	71.0	0.37
Building Construction	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Decommissioning	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Decommissioning	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Decommissioning	Cranes	Diesel	Average	1.00	8.00	367	0.29
Decommissioning	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Decommissioning	Tractors/Loaders/Backh oes	Diesel	Average	3.00	8.00	84.0	0.37
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Skid Steer Loaders	Diesel	Average	1.00	8.00	71.0	0.37
Paving	Tractors/Loaders/Backh oes	Diesel	Average	1.00	8.00	84.0	0.37

# 5.3. Construction Vehicles

# 5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	_	_	_	_
Site Preparation	Worker	8.00	7.70	LDA,LDT1,LDT2
Site Preparation	Vendor	4.00	6.80	HHDT,MHDT

Site Preparation	Hauling	4.00	20.0	HHDT
Site Preparation	Onsite truck	_	_	HHDT
Building Construction	_	_	_	_
Building Construction	Worker	50.0	7.70	LDA,LDT1,LDT2
Building Construction	Vendor	6.00	6.80	HHDT,MHDT
Building Construction	Hauling	8.00	102	HHDT
Building Construction	Onsite truck	_	_	HHDT
Paving	_	_	_	_
Paving	Worker	12.0	7.70	LDA,LDT1,LDT2
Paving	Vendor	2.00	6.80	HHDT,MHDT
Paving	Hauling	4.00	20.0	HHDT
Paving	Onsite truck	_	_	HHDT
Decommissioning	_	_	_	_
Decommissioning	Worker	50.0	7.70	LDA,LDT1,LDT2
Decommissioning	Vendor	6.00	6.80	HHDT,MHDT
Decommissioning	Hauling	8.00	102	HHDT
Decommissioning	Onsite truck	_	_	HHDT

#### 5.4. Vehicles

## 5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

# 5.5. Architectural Coatings

Dhara Nama	Desidential Interior Area Contest	Desidential Estadon Anna Ocatad	Man Davidantial Intenian Anna	Man Davidantal Fotonian Anna	Danking Anna Oantark (an ft)
Phase Name	Residential Interior Area Coated	Residential Exterior Area Coated	Non-Residential Interior Area	Non-Residential Exterior Area	Parking Area Coated (sq ft)
	(ac ft)	(og ft)	Cooted (og ft)	Cooted (og ft)	
	(SQ II)	(sq ft)	Coated (sq ft)	Coated (sq ft)	

# 5.6. Dust Mitigation

# ATTACHMENT "E" PROJECT APPLICATION & PROJECT NARRATIVE



# TULARE COUNTY RESOURCE MANAGEMENT AGENCY PLANNING APPLICATION



**GENERAL INFORMATION / COVER SHEET** 

LAND US	E ENTITLE	MENT (DISC	RETIONARY)	esour Tular
TYPE OF APPLICATION:				Ce Manac Cour
☐ Development Agreement	☐ Review/Inte	rpretation Request	RETIONARY)	MAY To semen
☐ Final Site Plan		a Parcel/Sub Map	☐ Variance-Buildin	g/Road Šetback
☐ General Plan Initiation	Special Use	Permit (PC)	☐ Variance- Zoning	9
☐ General Plan Amendment	☐ Specific Plan	n .	☐ Zone Change Ini	itiation
☐ Planned Development	☐ Tentative Pa	arcel Map	☐ Zone Change	
☐ Planned Unit Development	☐ Tentative Su	ubdivision Map	Other	
Applicant: Tulare CSG 2 LLC (R				
Mailing Address 11100 Santa Monica	Blvd, Suite 780	-	831 Calloway Dri	
City/Town Los Angeles State C		-	sfield State	CA <sub>Zip</sub> 93312
Phone See agent Cell S	ee agent	Phone See age		See agent
E-Mail See agent		E-Mail See ager	nt	
Signature		(Signature)	d Stop	miter
Other Persons to be Notified: (Spe	•	er(s), Agent, Lender,	, Architect, Engineer,	Surveyor)
Name/Title Dudek c/o Angela Z		Name/Title		
Mailing Address 2280 Historic Decat	ur Rd, Suite 200	Mailing Address		
City/Town San Diego State C	A Zip 92106	City/Town	State_	Zip
Phone 760-936-7956 Fax_		Phone	Fax_	
E-Mail azhang@dudek.com		E-Mail		
Project Information:				
Site Address(es): Ave 160			City/Town W	/oodville
Assessor's Parcel No(s): 236-100	-004, 236-100	0-003		
Project Number: PSP 23- 059.  Current Zoning: AE-40. Ger	Supervisor Di	se: Rural Valley	omic Development: UAB/UDB/HDB/MSC	
Project Description 5 Mplac		inguight t	Over Plant on -	<u>+ 25-acm</u>
Agricultural Preserve (If applicable) -	<b>建设工作的原始与特别的分包的都位</b>	101	_ Contract No	H2 <del>4</del>
Filing Fee(s):	_ Total Amount P	with the second of the second	Payment Typ	e:
Date Received:	1010	Existing Entitlemen	nts/References:	
Application Received/Reviewed by:	NAD.			
PERMIT CENTER HOU	S: MONDAY - THURS	DAY 9:00 A.M. TO 4:30 P.N	I. FRIDAY 9 A.M11 A.M.	

TULARE COUNTY RESOURCE MANAGEMENT AGENCY \*\*5961 S. Mooney Blvd. Visalia, CA 93277 \*\* PHONE: 559-624-7000 \*\*

#### DISCRETIONARY LAND USE ENTITLEMENT APPLICATION

#### REQUIREMENTS, FEES AND INSTRUCTIONS (Please use dark blue or black ink)

The application form must be filled out completely and in every respect with <u>all</u> questions answered and <u>all</u> required attachments before the County can officially accept the application for processing. In the course of accepting and processing the application, Permit Center staff or the project planner may ask the applicant to clarify, correct or otherwise supplement the required information. The application may be filed with the Resource Management Agency Permit Center, at 5961 S. Mooney Blvd. Visalia, CA 93277. Phone No. (559) 624-7000. IMPORTANT NOTICE: Fees are required at time of application submittal and are subject to change. Please verify the most up to date fees with Permit Center staff. The applicant is responsible for the payment of all fees associated with this application, including the initial fee/deposit and additional fees charged for processing. In addition, the applicant may be required to submit to the County additional deposits.

Please see application fee information on Page 3 for specific and detailed fee information.

#### In addition to this application, please provide the following:

- 1. 15 copies of the Development / Site Plans (showing entire parcel and location of the project)
- 2. Operational Statement: Please attach a detailed operational statement.
- 3. A signed Indemnification Agreement
- 4. "Will Serve" Letter from the appropriate off-site Community Water or Sewage Disposal provider.
- 5. Supplemental Information: Parcel Map Applications may require applications for exceptions and/or a waiver of the final map (if appliable). Certain applications pertaining to projects involving the raising of animals (dairies or other animals), Surface Mining or other more intense uses may require additional information and forms which can be obtained by contacting the Permit Center staff.

#### SUMMARY OF REQUIREMENTS FOR A LAND USE ENTITLEMENT APPLICATION

		Applicant	Siai
1.	Completed Application		
2.	Owner's Affidavit (signed by property owner)		
3.	Filing Fee		
4.	Development/Site Plans (15 copies) (additional copies may be required)		
5.	Indemnification and Cost Recovery Agreement (separate attachment)		
6.	Supplemental Information (Review of "Identified Hazardous Waste Sites")		
7.	Applicant's Request for Notification of Proposed Land Use Action		
8.	Operational Statement (if required by County)		
9.	"Will Serve" letter from the appropriate off-site Community water and/or		
	sewage disposal provider.		
10.	Water availability information for all existing and/or proposed on-site domestic values. If a domestic well on one parcel is going to supply water to another parcel ten foot wide well and pipeline repair and maintenance easement in favor of parcel shall be shown on the parcel (tentative/final) map and incorporated into legal description prepared for the division of land.)	cel, a f that	
11.	Request for Unused Fees Form (Signed by the Applicant)		

Analicant

#### LAND USE ENTITLEMENT APPLICATION FEES

Project Type Development Fee Due at Application Submittal

Agreement \$1,303 deposit (then \$100/hourly charged)

Final Site Plan \$3,415 deposit (then \$100/hourly charged)

General Plan Initiation \$5,321 deposit (then \$100/hourly charged)

General Plan Amendment \$10,321 deposit (then \$100/hourly charged)

Planned Development \$8,304 deposit (then \$100/hourly charged)

Planned Unit Development \$8,203 deposit (then \$100/hourly charged)

Review/Interpretation Request \$300 deposit (then \$100/hourly charged)

Revisons to a Parcel/Sub Map \$1,312 (for a Minor Revision)

1/2 of fee for Tent Map not less than \$1,354 (Major Revision)

Special Use Permit (PC) \$3,005 deposit (then \$100/hourly charged) for CEQA Exempt

projects, temporary uses, mobile home/additional housing \$5,750 deposit (then \$100/hourly charged) for New Special Use

Permits and Amendments

\$5,528 deposit (then \$100/hourly charged) for Expansions of

Non-Conforming Uses

\*Note that Large Day Cares, Kennels, and Hazardous Waste Facilties

have special fee amounts. Please contact Permit Center staff for any fee questions. Additional \$150 fee in SRA Areas

Specific Plan \$5,321 deposit (then \$100/hourly charged)

Tentative Parcel Map \$2,407 flat fee (for 1-4 lots) - Additional: \$168 for Waiver request, \$249

for exceptions to maps/lot lines, \$113 in SRA Areas;

\$3,568 plus \$65 per lot (for more than 4 lots) (then \$100/hourly

charged)

Tentative Subdivision Map Deposit Varies based on number of lots (then \$100/hourly charged)

Variance - Flood \$3,313 deposit (then \$100/hourly charged)

Variance - Building/Road Setback \$1,531 flat fee

Variance - Zoning \$3,490 deposit (then \$100/hourly charged)

Zone Change Initiation \$3,333 deposit (then \$100/hourly charged)

Note: Zone Initiation fee is deducted from Zone Change Fee

Zone Change \$6,451 deposit (then \$100/hourly charged)

Additional Fees Due Prior to Hearing or Project Completion

CEQA (Environmental) Fees for 2018

CEGA (Environmental) rees for 2010

Recording Fee Deposit Compliance Monitoring Fee Varies: Exempt: \$58, ND or MND: \$2,338.75, EIR: \$3,226.00 \$150 (Including SB2 - Building Homes and Jobs Act Fee)

\$130

Tax Clearance Fees for Parcel Maps/Lot Line Adjustments

Assessor Fee Per Map for Tax Estimates

Assessor Fee Per Map for Waived Maps

Tax Collector Fee

\$63 \$336

\$131 per Original APN

#### 1. Type of Project: Residential ☐ Commercial Industrial ☐ Agricultural 2. Present use of the project site (existing conditions, improvements, and/or development)? Vacant/fallow agricultural land 3. What is the project/proposed use of site? And when will the use begin? (Please state exactly and in detail what the intended reason to be done on, or with, the property). 5 MWac solar photovoltaic power plant on +/-25 acres. Proposed operational date: April 2024 Is the project proposing to create new lots? No 4. If yes, how many? \_\_\_\_ Is this project to resolve a violation? No 5. ☐ Proposed 6. Septic Tank-Leach Lines: Size of tank \_\_\_\_\_gallons & length of lines \_\_\_\_\_ft. Unmanned site - no liquid Seepage Pit - Size waste Community System – Name: disposal required Aerobic tank - Size of tank \_\_\_\_\_ ☐ Existing ☐ Proposed 7. Water supply (please check appropriate box): Domestic Well – Size of pump \_\_\_\_\_ Gallons per minute \_\_\_\_\_ Unmanned site - no water Irrigation Well: supply Irrigation District – Name: required Private Water Company – Name: Community System – Name: Note: A "Will Serve" letter must be provided from any off-site community water and/or sewage disposal provider and must be submitted as part of this application. In addition, water availability information for all existing and/or proposed on-site domestic wells must also be submitted with this application. Source of energy (please check appropriate box): 8. Propane: Size of tank \_\_\_\_\_ Provider (Date property was acquired) Jumber 5, 2019 (Date use began on site) when site 12/5 horg 9. 10.

PLEASE FILL OUT THE FOLLOWING INFORMATION COMPLETELY.

11.	Parcel or Lot Size(s) (in acres or sq. ft. as appropriate): +/-77 acres total
12.	How much area of the total parcel or lot is being developed or utilized for the proposed use (acreage, square footage and percentage)? +/-25 acres
13.	Will the development of the project be in phases? If yes, Yes ☐ No ■ please describe each phase and estimated time frames.
14.	List and describe any other related permits and/or other public approvals required for this project, including those required by city, regional, state and federal agencies.  CEQA Notice of Exemption will be completed
15.	Parking: Specify the number of on-site parking spaces, including the location, size, and type of surfacing.  As the facility will be unmanned, no parking is required or proposed.
	Specify number of loading space(s) and loading dock(s) N/A
16.	Number of trips generated per day by each type listed below (2 trips = 1 arrival and 1 departure):
	Residents Customers
	Employees (including self) Shipping
	Deliveries Other
Resid	lential Projects Only:
17.	Please indicate the type of residential development (conventional, mobile home, duplex, tri-plex).
18.	How many structures/buildings are being proposed?
19.	How many units will there be?
20.	Please provide the relationship of persons to the applicant in each dwelling unit.
**For	Residential Projects and Tentative Parcel Map/Subdivision Map Projects please skip the next
	on and proceed to Page 9 to complete the Environmental Setting Questions and additional red forms.
Com	mercial, Industrial and Agricultural Projects Only:
21.	Employees: Indicate the total number of employees and include the number of shifts and number of employees per shift.  Facility will be unmanned - no regular employees on site. Occasional site visits for security, maintenance, and repairs.

22. Days and Hours of Operation (if seasonal, include months of operation):

The facility will operate automatically during daylight hours throughout the entire year.

23. Please fill out the table below regarding your proposed project. Note: For proposed expansions please provide a copy of the existing use permit or approved site plan. Please describe additional information about the expansion on a separate sheet.

	Existing	NEW OR PROPOSED EXPANSION
Type of Use	Agriculture	Solar
Number of Employees	N/A	N/A
Type of Development	None	Solar array & BESS
Size of Development (sq. ft.)		
Area of Development (sq. ft./acres)		
Operating Hours & Days		daylight hours/ year round
Annual Production (tons, gallons, etc.)		
Daily Trips (arrivals & departures) of : Employees	N/A	N/A
Customers		
Deliveries		
Shipments		
Equipment		
/ehicles, by type	N/A	N/A
Water usage (# of gallons per year)		
Wastewater (# of gallons per year)	N/A	N/A
Beverage Control.  5. Waste materials: Indicate type disposal.	who will hold the license from	site? Yes No om the State Department of Alcohol and the existing or proposed method ring construction, which will be disposed properly off-
26. Waste/Storm water: Indicate pla Erosion and sediment control best man		e/stormwater (if applicable):  ne installed on site to prevent stormwater run
	Regional Water Quality Con	atrol Board? Y/N IIf yes, attach repo
Required permit or waiver from F	togional tratol danty con	14, 0, 20 a, a
N/A	rigating, specify # of acres,	location (APNs) and property owner(s
If processing water is used for in N/A	rigating, specify # of acres,	location (APNs) and property owner(s
If processing water is used for in N/A  7. Access to major roads, railroads 2 miles north of State Room	rigating, specify # of acres, or waterways. Site is adjuste 190 and 7 miles w	location (APNs) and property owner(s

29.	9. Signage – Describe existing and proposed signage for the proposed use. No existing signa					
	Proposed signage per building department requirements at entrance and along perimeter.					
30.	Landscaping – Describe existing and proposed landscaping on the site. No existing landscaping.					
31.	If the proposed use is for commercial development, indicate the type (neighborhood, general, service, urban, rural, agricultural), proposed use, and square footage of retail and/or wholesale sales area and/or storage area.  N/A					
32.	If the proposed use is for institutional, indicate the type (hospital, daycare, clinics, or similar use), the major function, estimated occupancy and the community benefits to be derived from the project.  N/A					
33.	If the proposed use includes manufacturing or processing, indicate the type of product, method of storage, process for distribution or selling, and whether the operation is for retail or wholesale.  N/A					
	Equipment used Where operated					
	Distance from nearest off-site residence					
	Current production (# gallons or tons/yr) Proposed production(# gallons or tons/yr)					
34.	If the proposed use includes storage or warehousing, indicate the type of materials to be stored on site and the size and description of the storage area, including existing and proposed fencing and screening.  Project includes a BESS, which will be comprised of two separate battery banks located centrally within the Project					
	Are any portable toilets stored on site? Yes /No If so, how many?					
	Where are portable toilets emptied and cleaned out?By whom?					
	Are any of the stored materials hazardous (Yes) No					
	Any explosive materials? Yes No Volatile materials? Yes No Poisons? Yes No					
	If so, please describe storage arrangements (containment, inside structure, signage, etc.) The BESS would include battery banks. (see Project Description for full description					
	Does applicant have a Hazardous Materials Business Plan on file with the County Environmental Health Services Division? N/A					
	Does applicant have current State and local permits for transporting hazardous materials? Yes / No Describe N/A					
35.	Type of equipment and/or machines to be utilized, including horsepower. Specify - powered by propane, gasoline, diesel or electricity (if applicable): Please refer to Project Description					
	for description of onsite project components.  Fork Lifts					
36.	Type and number of vehicles to be utilized (if applicable):					
- <del>- •</del>	Pickups Tractors					
	2-ton trucks ARB compliant? Yes / No					
	18-wheelers ARB compliant? Yes / No					
	Trailers Other					

# Specific Types of Projects (Applicable only to Cell Tower, Solar Projects, Confined Animal Operations and Assemblage of People applications):

37.	If the proposed use is for a telecommuni area and the number of receivers propose N/A		, indicate the type, height, size of lease
	Distance from nearest residence	Dist	ance from public road
	NOTE: Please provide map of cell tower l	ocations within 10	mile radius.
38.	If the proposed use is for a solar facility, d	lescribe whether p	oower will be generated -
	For use on the site  or back to the grid	—	
	Panel type Tracking		
	Ground mounted 🔳 Roof-mounted 🗌	Amount of power	to be generated 6.6MWdc/5MWac
39.	If the proposed use is for an animal open number. N/A	eration, specify th	ne types of animals and their maximum
	Note: Dairies and Other Concentrated A	nimal Raising Ope	erations require special application forms.
40.		ide/outside (tent, ¯	e of people (in a church, auditorium, or canopy or building), indicate the seating the number of tables with seating.
	Proposed days (weekends or weekdays?	)	Proposed # of events/year
	Proposed Number of Commercial Events:	:	
	Expected # of attendees		
	Distance to lot lines	Distance	e to nearest off-site residence
	Proposed entertainment		`
	Hours of events - Setup		
	# of parking spaces On-site park Off-site parking arrangements, if any:		
	Fencing - Type	Location	
	Proposed # of security guards (Need 1 fo.	r each 100 attend	ees if no alcohol served or 2 for each
	100 if alcohol is served):		
	Will alcohol be served? Yes	No 🗌	
	If yes, who holds the ABC license?		
	Restroom arrangements: Portable To Number Provided Number of hand wash sinks for every 15 food handlers).		people) Restrooms (1:100 people)
	Food Provider or Caterer:		

#### **ENVIRONMENTAL SETTING**

The state to assume with se	and the land with the expection of one transmission tower swood by Southern California Edison
	be affected by the proposed project.
WITHOUT WITH THOU	be anected by the proposed project.
	nd indicate the slopes and general terrain of the subject site (fairly level, on bluff, oppings, etc.): Site and vicinity are generally flat, 0-5% slope.
	entify the type and size of any large trees on site.  trees on the site.
(rivers, canals, di	rses: Identify the type and location of any on-site or nearby water bodies/courses ches, streams, creeks, ponds etc.).
No water bodies/cour	ses on-site. One small freshwater pond just north of the proposed Project boundary that will be avoided.
	ace, water courses, railroads, roads, rural residential, subdivisions, commercial,
DIRECTION	s, vacant, city or county boundary): <u>CHARACTER/LAND USE</u>
DIRECTION	CHARACTER/LAND USE
DIRECTION North	CHARACTER/LAND USE Orchard, fallow
DIRECTION North South	CHARACTER/LAND USE Orchard, fallow Orchard
North South East West	Orchard, fallow Orchard Orchard Orchard, residence, agricultural buildings Orchard
North South East West	Orchard, fallow Orchard Orchard Orchard, residence, agricultural buildings Orchard
North South East West  Fire Suppression Number of Hydra	Orchard, fallow Orchard Orchard Orchard Orchard, residence, agricultural buildings Orchard
North South East West  Fire Suppression Number of Hydra Storage tank on a Will the project reetc.)? If so, desc	Orchard, fallow Orchard Orchard, residence, agricultural buildings Orchard  Orchard  Orchard  Orchard  Orchard  Orchard  ents on site N/A Hydrant(s) off site N/A Distance  site for fire suppression (requires Fire Department connection) Size equire the development of public service facilities (roads, sewer lines, water lines, ribe the required development:
North South East West  Fire Suppression Number of Hydra Storage tank on a Will the project re etc.)? If so, desc	Orchard, fallow Orchard Orchard, residence, agricultural buildings Orchard  Orchard  Orchard  Orchard  Orchard  Orchard  Orchard  Ints on site N/A Hydrant(s) off site N/A Distance Site for fire suppression (requires Fire Department connection) Size Equire the development of public service facilities (roads, sewer lines, water lines, ribe the required development:  Were line connection to an existing distribution line along the southern edge of the parcel. No public service facilities are needed.
North South East West  Fire Suppression Number of Hydra Storage tank on a Will the project reetc.)? If so, desc The project includes a po Provide any add this form or attack	Orchard, fallow Orchard Orchard, residence, agricultural buildings Orchard  Orchard  Orchard  Orchard  Orchard  Orchard  Orchard  ents on site N/A Hydrant(s) off site N/A Distance  site for fire suppression (requires Fire Department connection) Size  equire the development of public service facilities (roads, sewer lines, water lines, ribe the required development:

# SUPPLEMENTAL INFORMATION FOR APPLICATION OF ANY DEVELOPMENT PROJECT

#### **HAZARDOUS WASTE AND SUBSTANCES STATEMENT:**

Per California Government Code Section 65962.5(f), before the County accepts as complete an application for any development project, the applicant or owner shall consult the State's lists of hazardous waste facilities, shall submit a signed statement to the County indicating whether the project is located on a site that is included on any of the lists. The "Identified Hazardous Waste Sites" list may be viewed on the web at <a href="http://www.envirostor.dtsc.ca.gov/public">http://www.envirostor.dtsc.ca.gov/public</a> or reviewed at the Resource Management Agency Permit Center, 5961 South Mooney Blvd., Visalia, California.

Before any application can be accepted as complete by the Tulare County Resource Management Agency, the owner of the subject property, or the owner's authorized agent, must complete this form.

#### STATEMENT:

"The site(s) of the project subject to this application \_\_\_ is / X is not on the "Identified Hazardous Waste Sites" list."

(If the site is on any of hazardous waste facilities lists, the applicant shall inform the County of which list, the date of the list, the regulatory identification number of the site on the list and corrective measures that will be taken to remove the site from the State list.)

#### **CERTIFICATION:**

I hereby certify that the information furnished herein presents to the best of my knowledge and belief, true and correct facts, statements, and information, and that I am the owner, or the authorized agent of the owner, of the subject property.

(Signed:)

(Dated:

# OWNER'S AFFIDAVIT

# (Must be signed by property owner)

STATE OF CALIFORN COUNTY OF TULARE		)	SS.			
I, (We,) the undersigne	ed, say	<b>:</b>				
I (We) own property in other documents and and information above knowledge and belief correct.	maps e referi . I (W	required hereby red to are, in al e) declare und	y to the best of I respects, true er penalty of p	f my (our) a e and correct erjury that t	bility and to	he statements est of my (our)
Executed on April	<u> </u>	, 20 <u>23</u> ,	at EULUST	$ea_{i}$	<u>Л</u>	<del></del>
Property Owner:) Name: Colho (17.5) Address: 483 (2)	Aiefy	ater ay prive,	Signature: <u>/</u> St/ /02_	Cod Stat	Starte: OA	zip: <u>93317</u>
Optional – additiona	l prop	erty owner:				
Name:			Signature:			
Address:				Stat	te:	Zip:
If there is an agent, tit taken on this applicati	on, ple	pany, or prospe ase enter name ail Reed	ective buyer who here.	o desires no	tification o	f the action
		ct Applicant	······································			
Relationship: Address:		0 Santa Monic	a Boulevard, S	Suite 780		
Address.	State:	CA	Zip: 90	0025		
Telephone:		522-6961			<u>.                                    </u>	
FAX No.:						
Signed:	1			_Date:5	/1/202	-3

# APPLICANT(S) REQUEST FOR NOTIFICATION OF PROPOSED LAND USE ACTION

NO	TI		⊏.
INO		U	┖.

Under Section 65945(a) of the California Government Code, at the time of filing an application for a development permit, the applicant may make a written request to receive notice from the County of a proposal to adopt or amend any of the following plans or ordinances which may affect the proposed development permit:

- 1. A General Plan
- 2. A Specific Plan
- 3. A Zoning Ordinance
- 4. An Ordinance affecting building permits or grading permits

The applicant shall specify, in written request, the types of proposed actions for which notice is requested. Prior to taking any of those actions, the County is required to give notice to any applicant who has requested notice of the type of action proposed and whose develop0ment project is pending before the County if the County determines that the proposal is reasonably related to the applicant's request for the development permit. Notice shall be given only for those types of actions which the applicant specifies in the request for notification.

REQUEST:									
x	I hereby red above). Cir				5945(a)	for the fo	llowing typ	oes of action	ons (see
	1	2	3	4					
	I hereby wa	ive noti	ce unde	r Sectio	on 65945	(a).			
	that any righ en on my deve				ection 65	945(a) wi	ll lapse at	the time t	hat final
Signed:	(applicant or	authoriz	red agei	nt)		Dated:	5/1/20	023	_
Permit No.: _									





### **Project Description**

Tulare CSG 2 LLC proposes to construct and operate the Tulare CSG 2 Solar Project (Project); a single-axis tracker ground mounted photovoltaic (PV) community solar and battery storage facility, approximately 6.6MWdc/5MWac in capacity. The Project is proposed to be located on a privately-owned parcel in Tulare County, California. Tulare CSG 2 LLC is requesting Special Use Permit approval from Tulare County in order to proceed with construction of the project.

#### **Purpose and Need**

The purpose of the proposed Project is to construct and operate a PV solar array with attached battery storage, which will generate and store clean and renewable solar energy, with electricity offtake sold to residential customers within Tulare County and the larger Southern California Edison ("SCE") Utility Territory. The Project is proposed under the California Assembly Bill 2316 (AB2316), adopted by the California legislature in 2022. AB2316 instructs the California Public Utilities Commission to establish a new community solar program by March 2024 which will bolster the reliability of the electrical grid while benefitting those who cannot put solar on their roofs. The law requires that under the new program at least 51% of community solar subscribers must be low-income, and that projects will be built by workers paid prevailing union wages.

Based on its commitment to providing renewable energy, Tulare CSG 2 LLC proposes to develop the site described below to maximize its solar energy potential. In order to best determine optimal location within the site, the following factors have been analyzed:

- Significant solar radiation (insolation)
- Site accessibility
- Avoidance of environmentally sensitive areas
- Limited tree and vegetative clearing
- Limited visibility from offsite locations

In order to put the Project in the best position to be ready for construction in the Spring of 2024, Tulare CSG 2 LLC has already taken the following steps:

- Executed a lease with the landowner;
- Submitted the project to the interconnection gueue for study by the utility





• Completed desktop due diligence to identify any sensitive resources, including wetlands/waterways, species habitat, and cultural resources.

Developed preliminary engineering drawings for the facility

• Planned for screening to limit visibility from offsite locations, if necessary.

It is Tulare CSG 2 LLC's intent to perform all necessary permitting and planning tasks in order to declare construction Notice to Proceed upon receipt of our interconnection agreement and program award. To this end, we have a schedule, budget, and actively engaged consultants in place to navigate processes and obtain all necessary permits and approvals.

#### **Site Setting**

The proposed Project site is located on parcel 236-100-004 and 236-100-003 on the northeast corner of the intersection of avenue 160 and Road 180 in Tulare County, California. The parcels are zoned AE-40 "Exclusive Agicultural Zone, 40 Acre Minimum" and are approximately 77 acres in size together. The proposed Project will occupy approximately 31 acres on the southwestern portion of the parcels, with access and the point of interconnection located on Avenue 160. The parcel is currently used for agricultural production. The Project parcel is vacant apart from crops, overhead transmission lines and associated towers. The site is bordered by agricultural fields on all sides. The proposed Project will be located approximately 1,500 feet from the nearest residence. The Project will be designed in a way that complies with required local setbacks and new screening measures can be installed if needed to further screen the Project from view.

The Project is proposed to be interconnected to a three-phase line owned by SCE along the southern side of the parcel. A System Impact Study is currently underway by SCE to identify any required upgrades for interconnection.

#### **Key Components**

The proposed Project will consist of the following key components:

- Solar Modules
- Battery Energy Storage System ("BESS")
- Underground Electrical Conductors





- Balance of System Equipment
- Access Roads
- Fencing

Key components are described in the following subsections.

#### Solar Modules

The proposed Project will utilize approximately 12,000 solar modules. The modules are manufactured offsite and will be delivered to the site by truck in wooden crates or cardboard boxes. Each module will measure approximately 3.4 feet by 7.2 feet and will be rated at approximately 540 watts. Solar modules are fully enclosed in metal and glass frames, typically 1 module high (7.2 feet) and will rotate throughout the day to maximize sun exposure.

The frames of solar modules will be mounted on steel posts, which would be driven or screwed into the ground to a depth between 10 and 15 feet. The posts will be made from galvanized or corrosion-resistant metal to minimize the potential for corrosion over the lifespan of the Project. Approximately 27 feet of space will be maintained between each row of solar modules for operations and maintenance access.

# Battery Energy Storage System

The proposed Project will include a Battery Energy Storage System, intended to store electrical energy produced by the Project during the day and flexibly dispatch it to the grid when it is most needed, typically in the evening.

The BESS will be comprised of 2 separate battery banks located centrally within the project footprint. Each battery bank is approximately the size of a standard shipping container. Tulare CSG 2 LLC will utilize state-of-the-art battery technology with an emphasis on safety. Redundant safety measures will include hydrogen detection and active ventilation, fire detection and remote shutdown, fireproof insulation, and internal fire suppression technology. Access roads will be placed throughout the facility so that no panel is more than 150-feet from a fire road and will connect directly to the BESS.

<sup>&</sup>lt;sup>1</sup> Technical Note – Fire Prevention & Mitigation, Powin Energy, May 26, 2020





### **Underground Electrical Conductors**

Underground electrical conductors will be installed in trenches at a depth in compliance with the National Electric Code. Conductors either will be buried in a polyvinylchloride (PVC) conduit or equivalent.

### Balance of System Equipment

Balance of System Equipment including but not limited to inverters, AC combiner boxes, transformers, and/or medium voltage switchgear may be installed near the solar array within the Project's fence line. Balance of System Equipment will be installed on H-Frames and concrete pads and in compliance with equipment manufacturer instructions. Full details of Balance of System Equipment will be included as part of the Project's electrical design plan set submitted for ministerial permits.

#### **Access Roads**

The site will be accessed via a new driveway constructed from Avenue 160. Where necessary, the access road will be upgraded using gravel and geotextile fabric and extended into the Project's fence line. The access road will terminate at the Project's equipment pad with a hammerhead turnaround to accommodate maintenance vehicles. The road will be wide enough to accommodate emergency vehicles and designed in compliance with County building and fire department standards.

# Fencing

The solar array and all balance of system equipment will be enclosed in a seven-foot-tall chain link fence in compliance with the National Electric Code. The fence will have at least one vehicle access gate at the boundary of the array, which will always remain locked, except during operations and maintenance activities. A Knox box will be installed at the entrance gate to provide 24-hour access for emergency responders.

#### Summary of Construction Activities and Components

Site preparation will consist of clearing the existing vegetation in those areas where construction will be undertaken, grading, and establishing temporary staging areas (including stockpile and





laydown areas), as necessary. Once the site is prepared, the installation of racking equipment, modules, and balance of system equipment can begin.

#### Clearing and Grading

Selected vegetation located on the proposed Project site may be removed in order to accommodate the construction of the array and its appurtenances, as well as to prevent shading on the array during operation. Because the solar modules will be placed approximately 2 feet above grade, any vegetation taller than 2 feet or expected to exceed 2 feet in height will be removed. Grass and groundcover may remain between rows and under the solar modules. After construction the ground underneath the array will be reseeded with low growth, native pollinator species to promote soil stability. All cleared vegetation will either be chipped and spread on site or disposed of responsibly.

Construction equipment such as tractors, backhoes, loaders, dozers, and graders may be needed to clear vegetation from the site, and to grade roads and areas where structures will stand. While the racking equipment can tolerate some slope, grading in the Project area will also be required to even out the terrain, currently characterized by mounds of loose aggregate material. Erosion and sediment control best management practices (BMPs) will be installed on site to prevent stormwater runoff. Grading will be done in phases, as needed, to reduce dust and erosion. These BMPs will remain in place until construction is complete, and the site is reseeded and stabilized in accordance with applicable code.

# Staging Areas

A temporary staging area will be used as a laydown area for equipment and materials such as solar crates, electric cable, structural supports, and Balance of System Equipment, as well as the location for sanitary facilities and a construction trailer. The portion of the staging area containing equipment and materials will likely be enclosed within a temporary construction fence with a lockable gate.

# Racking and Modules

The foundations securing the solar modules will be designed to withstand high winds and snow loads. Galvanized or corrosion-resistant steel piles will be driven into the ground between 10 and





15 feet, depending on soil conditions and depth to bedrock. Modules will be aggregated into frames and mounted on each supporting pile.

#### Balance of System Equipment and Conductors

Balance of System electrical equipment will be located on concrete pads within the Project's fence line. Balance of System equipment may include inverters, cabinet style equipment such as AC combiner boxes, transformers, and medium voltage switchgear, which will be anchored directly to the concrete pad, as well as smaller metering and controls equipment, which would be mounted on H-frames or other supporting structures. Structural analysis will be performed to determine the size and thickness of the concrete pads.

Low voltage conductors connecting solar modules to the Balance of System Equipment will be run underground in conduit. Trenching will be required to install all underground wiring. All conduits will be buried at a depth in compliance with local standards.

#### Transportation and Traffic

Materials for the proposed Project (e.g., solar modules, supporting racks, foundation materials, electrical gear) will be brought to the site by truck over the course of construction. It is not expected that the additional vehicles associated with construction will have an impact of overall traffic in Tulare County. Once construction is complete, vehicles will be on site sparingly for operations and maintenance activities approximately four times a year.

# **Employment**

A typical construction workforce for a solar facility of this size consists of approximately 70 workers during the construction period, which should last approximately 6 months. Construction personnel will be divided between civil and electrical services and based on the phasing of construction it is not anticipated that all workers will be present on site at the same time. Workers will be transported to the site via construction trucks and will park in the established staging area. All construction workers will be paid prevailing wage, as required in AB2316.





#### Water Use

No new water infrastructure is proposed in association with the Project and minimal water will be used as needed for construction and maintenance activities such as dust mitigation and panel washing.

#### Sewer and Solid Waste

Sewer services are proposed in association with the Project. Temporary sanitary facilities will be placed onsite during construction. Solid waste is anticipated to be produced only during construction, primarily comprised of equipment packaging, and will be disposed of in accordance with County standards offsite.

#### **Project Benefits**

The proposed Project will bring many benefits to the Tulare County community, including:

- Electricity bill savings for subscribers of 10-20%, with at least 50% low-income subscribers;
- Approximately 70 jobs during construction paid at prevailing union wages and workforce training opportunities for workers;
- Improved grid resiliency and reliability by discharging electricity directly to the local distribution rather than transmission grid, and a battery system ensuring that electricity is dispatched when it is needed most not only when the sun is shining;
- \$10 million direct investment in the Community and increased State and Federal income;
   taxes, and
- Generation of clean and renewable electricity requiring no additional municipal services, with minimal impact to the community or environment.

The approval of this Special Use Permit will allow for community members of Tulare County to subscribe to and benefit from clean and renewable solar energy generation. If any other information is required, please let us know.

Respectfully,

Sam Youneszadeh

# ATTACHMENT "F"

#### MITIGATION MONITORING AND REPORTING PROGRAM

### MITIGATION MONITORING AND REPORTING PROGRAM

This Draft Mitigation Monitoring and Reporting Program (MMRP) has been prepared in compliance with State law and based upon the findings of the Draft Mitigated Negative Declaration for Tulare CSG 2 Solar Project (PSP 23-059).

The CEQA Public Resources Code Section 21081.6 requires the Lead Agency decision making body is going to approve a project and certify the EIR that it also adopts a reporting or monitoring program for those measures recommended to mitigate or avoid significant/adverse effects of the environment identified in the EIR. The law states that the reporting or monitoring program shall be designed to ensure compliance during project implementation. The MMRP is to contain the following elements:

- Action and Procedure. The mitigation measures are recorded with the action and procedure necessary to ensure compliance. In some instances, one action may be used to verify implementation of several mitigation measures.
- Compliance and Verification. A procedure for compliance and verification has been outlined for each action necessary. This procedure designates who will take action, what action will be taken and when and by whom compliance will be monitored and reported and to whom it will be report. As necessary the reporting should indicate any follow-up actions that might be necessary if the reporting notes the impact has not been mitigated.
- **Flexibility.** The program has been designed to be flexible. As monitoring progresses, changes to compliance procedures may be necessary based upon the recommendations by those responsible for the MMRP. As changes are made, new monitoring compliance procedures and records will be developed and incorporated into the program.

The following presents the Mitigation Measures identified for the proposed Project in this MND. Each Mitigation Measure is identified by the impact number. For example, 4-1 would be the first Mitigation Measure identified in the Biological analysis of the MND.

The first column of the MMRP Table identifies the Mitigation Measure. The second column, "Timing/Frequency," identifies the time the Mitigation Measure should be initiated and identifies the frequency of the monitoring that should take place to assure the mitigation is being or has been implemented to achieve the desired outcome or performance standard. The third column, "Action Indicating Compliance," identifies the requirements of compliance with the Mitigation Measure. The fourth column, "Monitoring Agency," names the party ultimately responsible for ensuring that the Mitigation Measure is implemented. The fifth column, "Person/Agency Conducting Monitoring/Reporting" names the party/agency/entity responsible for verification that the Mitigation Measure has been implemented. The last three columns will be used by the County of Tulare to ensure that individual Mitigation Measures have been complied with and monitored.

Mitigation Monitoring and Reporting Program								
Mitigation Measure	Timing / Frequency	Action Indicating	Monitoring	Person Responsible for Monitoring / Reporting	Verification of Compliance			
			Agency		Initials	Date	Remarks	
CULTURAL, PALEONTOLOGICAL, AND TRIBAL C								
5-1. Discovery: If historical, archaeological or paleontological resources are discovered during site excavation, the County shall require that grading and construction work on the Preferred/Proposed Project site be immediately suspended until the significance of the features can be determined by a qualified archaeologist or paleontologist. In this event, the specialists shall provide recommendations for measures necessary to protect any site determined to contain or constitute an historical resource, a unique archaeological resource, or a unique paleontological resource or to undertake data recover, excavation analysis, and curation of archaeological or paleontological materials. County staff shall consider such recommendations and implement them where they are feasible in light of Project design as previously approved by the County.	Daily or as needed throughout the construction period if historical, archaeological or paleontological resources are discovered.	Field Evaluation Report submitted to Tulare County RMA if resources are discovered. The report shall include results of field evaluation and recommend further actions to be taken to mitigate for unique resources or human remains found, consistent with all applicable laws including CEQA.	County of Tulare.	County of Tulare, Qualified Archaeologist or Paleontologist				
5-2 Avoidance, Preservation, and Treatment: The property owner shall avoid and minimize impacts to paleontological resources. If a potentially significant paleontological resource is encountered during ground disturbing activities, all construction within a 100-foot radius of the find shall immediately cease until a qualified paleontologist determines whether the resources require further study. The project proponent shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. The paleontologist shall notify the Tulare County	Daily or as needed throughout the construction period if paleontological resources are discovered.	Field Evaluation Report submitted to Tulare County RMA if resources are discovered.	County of Tulare.	County of Tulare, Qualified Paleontologist				

Mitigation Monitoring and Reporting Program							
Mitigation Measure	Timing / Frequency	Action Indicating	Monitoring	Responsible for Monitoring / Reporting	Veri	fication of	Compliance
		Compliance	Agency		Initials	Date	Remarks
Resource Management Agency and the project proponent of the procedures that must be followed before construction is allowed to resume at the location of the find. If the find is determined to be significant and the Tulare County Resource Management Agency determines avoidance is not feasible, the paleontologist shall design and implement a data recovery plan consistent with applicable standards. The plan shall be submitted to the Tulare County Resource Management Agency for review and approval. Upon approval, the plan shall be incorporated into the project.  5-3. Compliance with Health and Safety	Daily or as needed	Field Evaluation	County of	County of			
Code: Consistent with Section 7050.5 of the California Health and Safety Code and (CEQA Guidelines) Section 15064.5, if human remains of Native American origin are discovered during project construction, it is necessary to comply with State laws relating to the disposition of Native American burials, which fall within the jurisdiction of the Native American Heritage Commission (Public Resources Code Sec. 5097). In the event of the accidental [that is, unanticipated] discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps should be taken:  1. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:  a. The Tulare County Coroner/Sheriff must be contacted to determine that no	throughout the construction period if human remains are discovered.	Report and Data Recovery Plan submitted to Tulare County RMA if human remains are discovered.	Tulare.	Tulare, Qualified Archaeologist.			

Mitigation Monitoring and Reporting Program							
Mitigation Measure	Timing / Frequency	Action Indicating Compliance	Monitoring Agency	Person Responsible for Monitoring / Reporting	Verification of Compliance		
					Initials	Date	Remarks
investigation of the cause of death is required; and b. If the coroner determines the remains to be Native American: i. The coroner shall contact the Native American Heritage Commission within 24 hours. ii. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American. iii. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in Public Resources Code							
section 5097.98, or  2. Where the following conditions occur, the landowner or his/her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.  a. The Native American Heritage  Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after							

Mitigation Monitoring and Reporting Program									
Mitigation Measure	Timing / Frequency	Action Indicating	Monitoring				Verification of Compliance		
		Compliance	Agency	Monitoring / Reporting	Initials	Date	Remarks		
being notified by the commission.  b. The descendant fails to make a recommendation; or  c. The landowner or his authorized representative rejects the recommendation of the descendent.				Reporting	includ	Date	Temar no		