



Dolores Canyon Solar
Site Specific Development Plan
and
Land Development Agreement Application
Dolores County, Colorado
March 18, 2021

Dolores Canyon Solar LLC
JSI Construction Group LLC

1.0	LAND DEVELOPMENT AGREEMENT APPLICATION	4
2.0	SITE PLAN	4
3.0	OWNERSHIP CONSENT	4
4.0	PROJECT CONCEPT	4
4.1	PROJECT ABSTRACT	
4.2	SITE DESCRIPTION	
4.3	ADJOINING PROPERTIES' DESCRIPTION	
5.0	PROJECT PROPOSAL	7
5.1	PROPOSED USE	
5.2	PROJECT PROPONENT OVERVIEW	
5.3	PROJECT DESCRIPTION	
5.4	DOLORES COUNTY JURISDICTIONAL OVERVIEW	
5.5	SITE STUDIES AND ANALYSES OVERVIEW	
5.6	PROJECT DECOMMISSIONING	
6.0	PERFORMANCE STANDARDS	15
6.1	PROTECTION OF AGRICULTURAL OPERATIONS	
6.2	IRRIGATION WATER AND DITCH EASEMENTS	
6.3	NOXIOUS WEED CONTROL	
6.4	PROVISION OF ADEQUATE WATER SUPPLY, SEWAGE DISPOSAL, FIRE PROTECTION, ACCESS ROADS, AND UTILITIES	
6.5	AIR QUALITY	
6.6	NUISANCES	
6.7	RUNOFF AND EROSION CONTROL	
6.8	FLOODPLAINS / STREAMS / RIVERS / CREEKS	
6.9	WETLANDS	
6.10	AVALANCHE HAZARD	
6.11	SLOPES	
6.12	GEOLOGY AND SOILS	
6.13	OPEN SPACE	
6.14	WILDLIFE HABITAT	
6.15	DENSITY	
6.16	FINANCIAL ASSURANCE	
6.17	FINANCIAL COST OF SERVICES EXPECTED OF COUNTY GOVERNMENT	

- 6.18 MUNICIPAL SOLID WASTE, HAZARDOUS WASTE, OTHER INDUSTRIAL OR COMMERCIAL WASTE OR LAND FILL, PUBLIC OR PRIVATE
- 6.19 MISCELLANEOUS

7.0 ADDITIONAL PERMITTING REQUIREMENTS 27

- 7.1 LOCAL
- 7.2 STATE
- 7.3 FEDERAL

APPENDICES

- 1 LAND DEVELOPMENT AGREEMENT APPLICATION FORM**
 - 1A PROJECT LANDOWNER CONTACTS**
 - 1B PROJECT PARCELS INFORMATION**
- 2 GENERAL SITE PLAN AND GENTIE DETAILS – PRELIMINARY DESIGN**
- 3 VICINITY EXISTING OWNERSHIP AND LAND USE MAP**
 - 3A LANDOWNERS WITHIN ONE-HALF MILE OF LDA PARCELS LIST**
 - 3B VICINITY LAND USE MAP**
- 4 OWNERSHIP CONSENT – VESTING DEEDS**
- 5 SITE ATTRIBUTES TOPOGRAPHIC MAP**
- 6 PARCELS AND LAND USE WITHIN ONE-HALF MILE MAP**
- 7 RESIDENCES WITHIN ONE-HALF MILE MAP**
- 8 TYPICAL SIGN APPEARANCE**
- 9 ESC SCHEMATIC PRELIMINARY RENDERING OF DOLORES CANYON SOLAR PROJECT SUBSTATION**
- 10 SAMPLE ONE-HALF MILE NEIGHBOR NOTIFICATION LETTER OF PLANNING COMMISSION HEARING**
- 11 SAMPLE PUBLIC NOTICE TEXT OF PLANNING COMMISSION HEARING**
- 12 SME PHASE I ENVIRONMENTAL SITE ASSESSMENT**
- 13 WEST INC. AQUATIC RESOURCE INVENTORY AND REPORT**
- 14 WEST INC. WILDLIFE SURVEY AND REPORT**
- 15 WEST INC. NOXIOUS WEED MANAGEMENT PLAN**
- 16 DECOMMISSIONING PLAN**
- 17 DOVE CREEK VOLUNTEER FIRE DEPARTMENT STATION MAP**
- 18 COLORADO STATE FOREST SERVICE LETTER**

Site Specific Development Plan

Dolores Canyon Solar Energy Facility
Dolores County, Colorado

- 19 FIRE PROTECTION PLAN**
- 20 DUST SUPPRESSION PLAN**
- 21 TRANSPORTATION ACCESS ROUTES MAP**
- 22 PROJECT TRAFFIC ROUTING LEVELS OF SERVICE MAP**
- 23 ESTIMATED TRAFFIC VOLUME TABLE**
- 24 FEMA FLOOD HAZARD MAP**
- 25 TERRACON GEOTECHNICAL REPORT**
- 26 TERRACON PULL TESTING REPORT**
- 27 ELK AND DEER MIGRATION CORRIDORS WITHIN PROJECT AREA**
- 28 U.S. FISH & WILDLIFE SERVICE – NO CONCERN LETTER**
- 29 PROJECT AREA PUBLIC LANDS MAP**
- 30 FEDERAL AVIATION ADMINISTRATION – NOTICE CRITERIA
TOOL RESULT**

1.0 LAND DEVELOPMENT AGREEMENT APPLICATION

Please refer to Appendix items 1, 1A, & 1B.

2.0 SITE PLAN

Article III, §3 of the Dolores County Land Use Regulations (“LUR”) specifies application Site Plan standards. *Please refer to Appendix item 2* for renderings of the Dolores Canyon Solar photovoltaic energy generation facility (“Project”) conceptual development design. Dolores Canyon Solar LLC (“Company”) will apprise the County when the Project has reached the Final design milestone and will share those documents.

§3(3) mandates the need for a vicinity map demonstrating existing property owners and land use within one-half mile of the proposed development. *Please refer to Appendix item 3* for Project Vicinity Land Use Map, and *Appendix item 3A* for an enumerated corresponding list of property ownership.

3.0 OWNERSHIP CONSENT

Eleven (11) landowners, representing ownership of seventeen (17) parcels, are a part of this Land Development Agreement (“LDA”) proposal, as seen in Appendix items 1A and 1B. The Company has obtained consent from all landowners as per the requirements of Section 2(A)(1) of the LUR. *Please refer to Appendix item 4.*

Applicant contact information:

Dolores Canyon Solar LLC
c/o David Kimmett, AICP
1710 29th Street, #1068
Boulder, CO 80301
(720)838-2318 (office)
(720)708-9149 (mobile)

4.0 PROJECT CONCEPT

Under the LUR, the Project fits into two categorizations of Article II, §4’s determining factors of what constitutes an “Activity Requiring a Land Development Agreement”:

- §4(A) New Developments:
 - (6) Public or Private Utilities, Major Facilities, and Utility Lines

- §4(B) Changes in Land Use:
 - (5) Any Change from One Listed Use to Another
 - (6) Any Change in Category of Land Use as Defined in Article II, Section 3, Paragraph A

4.1 Project Abstract

History:

The Project, a 110-megawatt alternating current (“MWac”) utility-scale solar photovoltaic energy generation facility, was first proposed in response to a Tri-State Generation & Transmission Association (“Tri-State”) Request For Proposals (“RFP”) in 2019. In January of 2020, the Project was selected by Tri-State from its RFP process and the project has signed a power purchase agreement (“PPA”) with Tri-State that governs power sales from the Project for an initial term of 15 years.

Initial communication with Dolores County Administrator Daves began in September of 2019 regarding the County’s development process. As the Project form and design has matured over the subsequent year and a half, Ms. Daves has assisted in providing sources of information to help understand the Dolores County process in preparation for this Project LDA application.

Premise:

Owing to a favorable site location – dry, and generally treeless tilled agricultural land adjacent to an electrical substation, as well as favorable solar exposure on a southerly aspect – the Project will generate electricity efficiently. Being built in separately fenced areas (or “arrays”) to minimize landscape impact, the Company has taken into design consideration multiple different factors: neighbor input, wildlife, vegetation, archaeological features, roadways, pipelines, subsurface soils, and more.

The Project can be broken into three distinct components:

- 1) The Project electricity generation equipment. This area consists of ground-mounted, sun-tracking racking, modules, and corollary electrical equipment. Additionally, there will be a storage shed, internal roadways, and the Project substation. Each array will be surrounded by a chain link fence and will have an individual access gate to an adjacent county road.
- 2) The Project electricity transfer equipment. This small portion in the northeastern portion of the Project will consist of several above-ground transmission structures

supporting 115-kiloVolt (“kV”) transmission wires delivering the power from the electricity generation equipment to the Tri-State-owned and operated Cahone Substation.

- 3) The Cahone Substation. This existing substation is the ultimate destination of Project power. Equipment to be installed will allow Tri-State to accept Project electrical flow into the Tri-State grid.

The overarching goal of the Project is to provide renewable electricity for Tri-State. Additionally, the Project will aid in meeting the State of Colorado’s 2040 Roadmap to 100% Renewable Energy¹ aspirations.

Project Timeframe:

The Company estimates that the LDA process – staff review, Planning Commission Review, Board of County Commissioners Review/Approval will be complete within the first half of 2021. Ancillary permits, e.g. ROW Permit, Driveway Permits, Building Permit, along with any State and Federal permits and or approvals, will be obtained during the second half of 2021. We anticipate receiving materials on site beginning in the first quarter of 2022, with groundbreaking activities commencing soon thereafter. Construction will be continuous until completion, with the Project being fully operational by the close of 2023.

Project Life:

The Project has an estimated useful life of 35 years from the date of commissioning.

Market For Electricity Produced:

The Project’s electricity will be purchased under terms of a PPA for 15 years by Tri-State. Prior to the end of the 15-year period, the Company will negotiate a new arrangement with Tri-State, or look for another electricity offtaker.

Possibility For Future Expansion:

At this juncture, the Project has no plans for expansion. However, future Tri-State or other utility developments could affect the potential for expansion. Additionally, as solar and battery technologies continue to evolve, other opportunities for expansion could materialize.

¹ See https://drive.google.com/file/d/1K_anGQpEf-edqhjz5b6D3LJIsfV3mI3/view

4.2 Site Description

The Project site is located in western Dolores County, Colorado, and is a collection of several sites near County Roads (“CR”) 15, 16, L.4, M.4, and M.9. The nearest town is Dove Creek, roughly nine miles to the northwest; unincorporated Cahone is approximately five miles to the southwest.

Existing land use across the Project acreage is dominated by actively-tilled agricultural lands, with a few minor areas of native scrub and forestland. The Company worked with landowners, consultants, and governmental agencies to preferentially site the Project footprint upon already disturbed agricultural lands. This rural, open, southern aspect tableland, coupled with proximity to the Tri-State Cahone Substation, presents a favorable setting for a utility-scale solar energy facility. *Please refer to Appendix item 5.*

Along with its present status, the Project area has historically been used for dryland agricultural activities, which continue to this day.

4.3 Adjoining Properties’ Description

Adjacent lands to the north, west, and south typically consist of active agricultural parcels. The terrain is undulating – tablelands cut by upland drainages – sloping generally to the west, southwest, and south for the most part. To the immediate east is the canyon of the Dolores River, which is under jurisdiction of the Bureau of Land Management’s Tres Rios Field Office.

Existing groundcover consists of native and introduced grasses and xeric trees, as is typical in this region next to working agricultural fields. *Please refer to Appendix item 3B for a Vicinity Map illustrating the present landcover dynamic.*

The area in and around the proposed Project is crossed by several county roads, and a smattering of large-acreage residences exist in the area within one-half mile of the Project boundary. *Please refer to Appendix item 6 for a map pinpointing non-participant residences within one-half mile of this boundary.*

5.0 PROJECT PROPOSAL

The Company’s LDA application and this Site Specific Development Plan (“SSDP”) are to allow for the development and construction of the 110MWac Project on leased, private property in Dolores County. The proposed Project will consist of low-profile modules (8’ high panels), mounted on single-axis sun-tracking racks. Electricity generated will be injected via a short transmission line to the adjacent Tri-State 115kV Cahone Substation. The Project site is located northeast of unincorporated

Cahone and southeast of the Town of Dove Creek on 800 acres of land, more or less. The Project is predominantly located on tilled agricultural lands that have been historically farmed for a variety of crops.

Generally, the Project will be located east of CR 14, west of the Dolores River Canyon, south of CR L.4, and north of CR N.3. Principal access will be via U.S. Highway 491 (“Hwy 491”) between Cahone and Dove Creek. The Project will require approximately 18 months to construct. Following commissioning, the Project will be mostly unmanned and remotely monitored. Typically, Company personnel will visit the site a few times per month routinely over the estimated 35-year life of the facility to provide preventative and reactive maintenance.

Dolores Canyon Solar consists of three primary features:

- The Project generation facility, comprised of solar photovoltaic (“PV”) modules, racks, inverters, transformers, a Project substation, and accessory maintenance structures
- A ¼-mile overhead electrical generation tie (“gen-tie”) line held by wooden or monopole structures connecting the Project substation to the Tri-State Cahone Substation; additionally, the Cahone Substation will receive upgrades to accommodate Project electricity generation
- In order to provide electricity for Project construction needs, an overhead power line supported by temporary poles will be erected between existing Empire Electric distribution lines and the Project site; following construction, this feature will be dismantled

The Company expects the total Project life to be approximately 35 years from the date of commissioning. A Power Purchase Agreement (“PPA”) with Tri-State has been executed for the sale of all electricity and environmental attributes generated by the facility for a term of 15 years. After this time, the useful life of the photovoltaic equipment and facility with regular maintenance is expected to provide an additional 20 years of profitable generation for the Project owner.

The Company anticipates construction commencement in early 2022, with construction completion and operational status in mid-2023.

5.1 Proposed Use

The Project is a standard utility-scale solar facility. PV modules, aligned in arrays and ground-mounted on sun-tracking racks, will generate and transmit DC voltage electricity, which in turn will be inverted to match the electric grid’s native AC voltage.

Dolores Canyon Solar is considered “utility-scale” in the industry parlance, meaning the Project is over twenty MW and the electricity generated by it will be fed to the transmission system in a wholesale transaction. Via an estimated 1300’ gen-tie line, Project-generated electricity will

flow to the Tri-State built-and-owned Cahone Substation. The electricity will be used to meet the needs of tri-State members, including Empire Electric Association, the local utility for much of Dolores County.

Operating at its maximum nameplate capacity of 110MWac, the Project will have the capacity to produce enough energy to power approximately 38,000 typical Colorado homes.

The Project area, defined as the acreage within its fencing, is roughly 800 acres. Being generally unmanned once operational, space within the Project will be more than sufficient to meet parking demand for the occasional maintenance visits that will occur throughout the year.

5.2 *Project Proponent Overview*

juwi Inc., parent company to both Dolores Canyon Solar LLC and JSI Construction Group LLC – juwi’s construction arm – is a Boulder, Colorado-based utility-scale solar energy development, engineering, procurement, construction, operations, and maintenance firm. juwi has been operation in the U.S. since 2008. In addition to other solar energy facilities constructed across the United States, juwi has built several projects within Colorado’s Adams, Chaffee, El Paso, Larimer, and Las Animas Counties.

juwi (pronounced “U-V”) is owned by the German company juwi AG, which in turn is a wholly-owned subsidiary of MVV, the municipally-owned electric utility of the City of Mannheim, Germany.

5.3 *Project Description*

In total, the project area spread across the various parcels amounts to approximately 800 acres of planned development within a dispersed area occupying seventeen parcels of land. The Project will consist of:

- Around 310,000 PV modules (solar panels)
- Racking components:
 - Steel C-channel embedded posts aligned in rows (no concrete necessary)
 - Rotating steel tubing mounted on a single axis powered to allow the solar modules to track the sun throughout the day
- Electrical infrastructure:
 - Cables
 - A short gen-tie (Project transmission) line
 - Inverters (converting DC electricity into AC electricity)

- Transformers (stepping the electrical voltage to match the 115kV Tri-State Cahone Substation and transmission line voltage)
- Project substation
- Maintenance shed(s)
- Internal roadways
- Fencing

Construction of the Project, which is anticipated to commence in the 1st quarter of 2022 and end upon energization of the solar farm in mid-2023, consists of several stages, with areas of overlap between each:

- Erecting a perimeter fence
- Grading
- Racking post embedment
- Array block electrical cable trenching
- Project transmission line installation between project substation and interconnection substation
- Project substation and interconnection substation installation
- Inverter installations
- Transformer installation
- Racking installations (the rotating member of each of the Project's solar array racks)
- Module installation
- SCADA installation
- System testing
- Facility energization

Typical construction hours will be 7am-7pm, Monday-Friday. Traffic at the apex period of Project construction will amount to 20 or so trucks per day and roughly 160 light duty vehicles (primarily workers' transportation vehicles).

Racking, Modules, and Electrical Equipment. Racking posts will be driven into the ground to a depth typically of 6' to ensure long-term stability. The single axis sun-tracking rack system will be fitted with modules that will be electrically linked with wires in groups of 12-14 inverter/transformer stations, each on a foundation with a footprint of approximately 250 square feet. Sensors and data acquisition equipment will continually report the Project equipment function, meteorologic conditions, and overall performance, allowing the Company to remotely monitor operational status, and if necessary, respond with a site visit to adjust or fix equipment as needed.

Shed. On the Project site, an unmanned operations and maintenance storage shed will be constructed to store spare parts; it will be approximately 800 square feet and 20' tall, built upon a concrete foundation. A single light will be affixed to the shed. *Please refer to Appendix item 7.*

Internal Roads. The Project will contain a network of interior gravel roads and several gravel staging areas.

Landscape. The Project will employ industry standard best practices to reduce erosion (to be incorporated into our future Storm Water Pollution Prevention Plan as a part of the State of Colorado Construction General Permit) and mitigate noxious weeds. The finished landscape will be achieved by drill-seeding native drought-tolerant low-growth grasses. Vegetation will be maintained as needed and weeds mitigated according to the standards of the Dove Creek Mandatory Weed Control District, Colorado Revised Statutes 35-5.5-101 et seq., and in collaboration with Noxious Weed Manager Oma Fleming, operating under Article IV §2(C) of the LUR.

Lighting. Lighting needs on an unmanned solar facility are quite low. The Project will incorporate exterior lights on the handful of Project structures scattered across the facility that are only turned on when needed. The standard operation is to have zero lights turned on. All lighting will be downward-directing and conform to LUR Article IV §2(F)(3).

Signage. Though not specified in the LUR, signage will adhere to juwi's typical formatting and will be shared with the County for general aesthetic considerations. Typical project sign design can be found attached as *Appendix item 8.*

Project Fence. Industry standards dictate a perimeter security fence surround utility-scale solar energy generation facilities, and the individual areas of the Project will be surrounded by a 6-8' chain link fence. Each fenced area will be accessible via a chain link gate from a county road. Colorado Parks & Wildlife ("CPW") has recently begun recommending wildlife-friendly options for fencing large areas, such as solar energy generation facilities, and the Company will consider CPW recommendations alongside other Project considerations to create a fencing design that is optimal for the Project.

Project Substation, Transmission Line, and Interconnection Substation. The Company will construct the Project substation in the northeastern portion of the Project arrays. This substation will be approximately one acre in size and feature graveled landscape with concrete foundations for equipment, conforming with standard substation design practice, codes, and regulations. The estimated maximum equipment height is 70'. The substation will be secured in its own 8-10' high, potentially barb-wire topped chain link fence with a gate. *Please refer to Appendix item 9.* The Project substation will transmit electricity via a 70-95' high, overhead generation tie-line ("gen-tie") mounted on H-frame wood poles to the ultimate Tri-State point of grid interconnection substation – the existing Cahone Substation – located a few hundred

feet east on Parcel 505920400039, owned by Tri-State. The Cahone Substation is secured within its own 8-10' tall gated chain link fence.

5.4 Dolores County Jurisdictional Overview of the Project

The Company first reached out to Dolores County Administrator Margret Daves in September of 2019 with our initial foray into the planning and permitting process for the Project. As project understanding and design have matured, we've continued to keep Ms. Daves and other Dolores County Staff apprised of changes as well as asking for assistance in understanding the jurisdictional and permitting path for the Project.

On September 14, 2020, Ms. Daves, Dolores County Attorney Dennis Golbricht, and the Dolores County Planning Commission hosted a Pre-Application Conference, as stipulated under LUR Article III, §1. The information garnered from the Pre-Application Conference's participants have subsequently assisted our design efforts and planning and permitting directions.

Further direction and design of Dolores Canyon Solar has been assisted by direct outreach to neighbors close to the Project. Over the course of the first week of November, juwi Senior Project Planner Dave Kimmett spoke directly with neighbors in proximity to the Project to inform them of the development, address their immediate questions, and to then convey their concerns to the Company's development team.

This present document represents the next stage of the Dolores County overview of the Project. The Land Development Agreement process grants several levels of oversight to the County: staff review; Planning Commission hearing and review; and culminating with Board of County Commissioner hearing, review, and potential approval. *Please refer to Appendix items 10 & 11* for a sample Planning Commission land use change notification letter (for neighbors within one-half mile of Project perimeter) as required by Article III, §2(A)(5), as well as a sample public notice text as required by Article III, §6(C) of the LUR.

A solar farm at the utility-scale is best described as being permissible with an LDA under the LUR in Article II as a Public or Private Utility as described in §4(A)(6), as well as a Change in Land Use as described in §B. The Project meets all standards incorporated thereunder.

5.5 Site Study and Analysis Overview

The Company has commissioned several professional, independent third-party consultants to examine the Project site for a host of factors, ranging from environmental constraints to subsurface constraints to surveying. Further, we have engaged governmental agencies for their regulatory review.

- **Phase I Environmental Site Assessment (SME Environmental Consultants, Durango CO).** Project avoids all identified Recognized Environmental Conditions (RECs) on site and thus no nexus with the federal Comprehensive Environmental Responsibility, Compensation, and Liability Act (CERCLA). *Please refer to Appendix item 12.*
- **Class I, II, and III Cultural & Archaeological Surveys (SEAS, Inc., Ignacio CO).** Human habitation of this portion of Colorado ranges from at least 12,000 years ago in a continuum to the present day. The Project area represents the far northern and highest altitude extent of pre-Contact Native American cultures. SEAS has undertaken extensive fieldwork and has provided detailed mapping. The Project avoids sites and resources listed on State of Colorado and National Historic Registers.

The Company has and will continue to rely on SEAS' expertise to ensure Project design minimizes impact and abides by applicable regulations. In the unlikely event that sensitive findings are encountered, SEAS and the Company will implement an inadvertent discovery protocol. As necessary, the Company coordinates with the Colorado Office of Archaeology and Historic Preservation to ensure approved development practices are followed during construction and operations.

- **Aquatic Resources Inventory and Report (WEST Inc., Cheyenne WY).** No jurisdictional wetlands or Waters of the United States under Section 404 of the Clean Water Act ("CWA") are found within the Project footprint. Nonetheless, the Company is communicating with the U.S. Army Corps of Engineers ("USACE") – Sacramento District Office for concurrence and an anticipated official Approved Jurisdictional Determination; a Nationwide or Individual Permit will not be necessary for the Project. *Please refer to Appendix item 13.*
- **Wildlife Survey and Report (WEST Inc., Cheyenne WY).**

The U.S. Fish & Wildlife Service ("FWS") has determined that Gunnison Sage Grouse ("GuSG") species recovery is not impacted by the Project location. No other federally Threatened Species / Endangered Species / Critical Habitat are found on site and no Take under Section 10 of the Endangered Species Act is anticipated. Seasonally, Virginia's Warblers and Pinyon Jays can be found in the area; these birds are protected by the Migratory Bird Treaty Act ("MBTA"). Species-specific pre-construction surveys and precautions will be employed during the nesting season from March 15 – October 31, if necessary. *Please refer to Appendix item 14.*

The Company is presently coordinating with CPW's Southwest Region Land Use Specialist Brian Magee, Area Wildlife Manager Adrian Archuleta, Biologist Brad Weinmeister, and Dove Creek District Wildlife Manager Becca DeVergie on sound development strategy in regard to overall fauna best practices. This includes CPW best practice strategies for Rocky Mountain Elk severe winter range and Mule Deer winter concentration area, as well as incorporating wildlife-friendly fence design.

- **Noxious Weed Management Plan (WEST Inc., Cheyenne WY).** Combining field observations, discussions, and coordinating with the Dove Creek Mandatory Weed Control District Manager, the Company will synchronize its post-construction revegetation and weed management approaches with local and state regulations. No State List A Species (the most noxious) are presently found on site, and the Company will pursue best practices to address and List B or C Species encountered. *Please refer to Appendix item 15.*
- **Boundary, Topographic, and Preliminary ALTA Survey (Goff Engineering & Surveying, Durango CO).** Once in Final version, the Company will provide Goff's survey for County review and archiving.
- **Geotechnical Investigations (Terracon Consultants Inc., Midvale UT).** Included bore and test pit soil sampling, soil resistivity, and site pull test observations and reporting.
- **Soil Test Loading (Sunflow Solar Structures, Golden CO).** Performed axial and lateral test loading for use in solar tracker foundation design.
- **Hydrology, Grading, Drainage, Site Planning, and Construction Erosion Control (Sunrise Engineering, Fillmore UT).** Peak discharge analyses, drainage analyses, scour mitigation recommendations, and preliminary civil design. The Company will provide a Final version of Sunrise Engineering's designs and analyses once complete in preparation for Building Permit.

5.6 Project Decommissioning

At the end of the useful lifespan of the Project, the Company has prepared a facility decommissioning and land reclamation plan. *Please refer to Appendix item 16.*

6.0 PERFORMANCE STANDARDS

Dolores County’s LUR provides developers with a rigorous format of development guardrails – the Article IV, §2 “Enumerated Performance Standards. Though not all of these standards apply to the Project, all have been contemplated and the Company will work diligently to meet them.

6.1 *Protection of Agricultural Operations*

Agricultural endeavors represent the strong backbone of western Dolores County’s land use, economy, and culture. The majority of juwi Inc.’s projects are found in rural, farming-based areas of America, and juwi traditionally builds projects – and good rapport – with local governments and stakeholders to make sure that our facilities don’t unduly conflict with agricultural practices and needs, both during construction and going forward operationally.

The Project will be located on land used presently and historically for plant commodity production. Solar farms make good neighbors to traditional farms, with an operational solar farm being quiet, seldom-visited, and not a consumer of water. Soils beneath solar arrays have the opportunity to regenerate for decades, and following Project decommissioning, the land can be returned to active agricultural production should that be the landowner desire at that time.

6.2 *Irrigation Water and Ditch Easements*

The Project is located entirely upon land upgradient from the primary irrigation source for the area, the Dove Creek Canal. Agriculture is of the dryland variety and as such, the Company is not aware of any potential ditch impacts, nor do any easements appear following comprehensive land surveying and title work. Nonetheless, should the Company be notified of an impact and determine it to be caused by the Project, the Company will, as soon as practicable, develop a plan to rectify the situation.

6.3 *Noxious Weed Control*

juwi Inc. has years of experience across diverse American landscapes revegetating sites following project construction. A key component of controlling weeds – as well as storm water runoff and soil erosion – is the restoration of a thriving palette of native vegetation. As mentioned in Section 5.5 above, the Company contracted with WEST Inc. to create a site-specific Noxious Weed Management Plan. The Company will continue its active dialogue during and after construction with the Dove Creek Mandatory Weed Control District to craft best practices to implement this plan.

6.4 Provision of Adequate Water Supply, Sewage Disposal, Fire Protection, Access Roads, and Utilities

6.4.1 Water

Solar farms do not use water in power production, and the Project will be unmanned following construction; as such no permanent water infrastructure will be established. Water is necessary during construction for dust abatement. The Company estimates a total Project need of roughly 75 acre feet and has received informal approval from the Dolores Water Conservancy District for a purchase of that quantity. Typically, construction water is acquired and delivered via truck. Though a specific point for truck retrieval of water has not been established, it is likely that water will be siphoned from the Dove Creek Canal to the southwest of the Project area.

6.4.2 Sewer

Being an unmanned facility without permanent water service provision in a rural part of the county, it will not be necessary to connect the Project to a municipal wastewater treatment facility nor an Individual Sewage Disposal System.

6.4.3 Fire Protection

The best method of fire protection for solar projects is active prevention via vegetation management. The Company will manage site vegetation to reduce fuel loads, informing Dove Creek Volunteer Fire Department (“DCVFD”) when necessary. As mentioned previously, native grasses will be established within the Project’s fenced bounds. Additionally, being located almost entirely on already-tilled agricultural fields averts significant Project interface with area piñon-juniper forests.

The Project is located within the DCVFD service area and is adjacent to an existing DCVFD Station on CR M.4, just east of CR 15; *please refer to Appendix item 17*. The Company has engaged with Chief Jake Kline of DCVFD, who confirmed as acceptable the Project’s internal road network width expectations – 16 feet. We will keep Chief Kline apprised of Project progress, as well as provide development plans once an LDA is finalized.

The Project is served by the Dolores County Sheriff’s Office. As Dolores County Sheriff, Don Wilson is also the County Fire Warden under CRS §29-22.5-103. The Company looks forward to working with Sheriff Wilson in both of his roles during future Project planning.

The Colorado State Forest Service (“CSFS”) has a publicly-available geographic dataset viewer application highlighting wildfire risk categorization. According to this app, the Project terrain is located in moderate-to-high wildfire hazard zones. The Company has worked with Mark

Loveall, the CSFS Supervisory Forester for the Durango Field Office/Southwest Colorado, in accordance with LUR requirements. *Please refer to Appendix item 18*, a letter explaining CSFS' approach to wildfire considerations.

As an adjacent neighbor, the Company has discussed the Project with Ian Barrett, Fire Management Specialist with the Bureau of Land Management's ("BLM") Southwest Colorado Fire Management Unit based in Dolores, Colorado. Mr. Barrett stated that, being on private property, there are not BLM standards required of adjacent private landowners.

Please refer to Appendix item 19, which details the Company's fire protection strategy.

6.4.4 Access

There are eight (8) proposed access points, as can be seen in the Site Plan:

- The west side of CR 15, roughly 1000' south of CR L.4; this will be the construction headquarters area, with temporary trailer installation as well as other temporary business features during the construction time frame
- The east side of CR 15, roughly 1000' south of CR L.4
- The east side of CR 15, roughly 750' south of CR M.4
- The west side of CR 16, roughly 875' south of CR M.9
- The west side of CR 16, roughly 2000' south of CR L.4
- The east side of CR 16, roughly 2000' south of CR L.4
- The south side of CR M.4, roughly 1700' northeast of CR 16
- The north side of CR M.4, roughly 4500' northeast of CR 16

Per the standards of the Dolores County Road & Bridge Department, each access will need to be approved and permitted with an individual Access Permit and constructed to County specifications. All access points will be accessible only via a locked gate meeting DCVFD requirements.

6.4.5 Roads

Internal Project roadways will not be publicly accessible; all areas of the Project are separately fenced with locked, gated accesses. Roadways will be of natural material (e.g. dirt, gravel, or other suitable material or combination thereof), permeable, yet resiliently constructed for all-weather travel by Company or emergency vehicles. Roadways are estimated to be 16' in width to accommodate DCVFD firefighting equipment and will terminate in 60'-radius cul-de-sacs, or other suitable vehicular turnaround designs.

6.4.6 Off-Street Parking and Loading Areas

Appendix E of the LUR delineates mandatory parking requirements and standards for a variety of New Developments or Changes In Land Use. The Project fits into the Article II, §4(6) definition:

“Public or private utilities, major facilities and utility lines.”

No Off-Street Parking and Loading Area considerations are necessary for the Project’s defined use. The Project contains significant open areas and will construct formal graveled laydown yards (see Site Plan) within the defined LDA that will be more than sufficient for both construction and operational parking needs.

6.4.7 Utility Easements

The LUR Performance Standard for Utility Easements references language in the Dolores County Subdivision Regulations, specifically Paragraph 5 “Easement Standards” of Section 7 “Design Standards.” The language of the referenced paragraph pertains specifically to easements encountered in the development of standard residential and commercial subdivisions. As such, the Project’s easements are not subject to §7(5) of the Subdivision Regulations.

6.4.8 Developer Improvements

There are no publicly-accessible roads within the Project, and as such, a Development Improvement Agreement is not necessary.

6.4.9 Land Dedication

Being a non-residential, major utility infrastructure proposal, no public purposes are associated with the Project lands. The Project will not necessitate a Certificate of Dedication.

6.5 *Air Quality*

Colorado Department of Public Health & Environment’s Air Pollution Control Division mandates that land disturbances of greater than twenty-five (25) acres must apply for an Air Pollution Emission Notification (“APEN”) permit. At the appropriate time prior to

commencement of construction, the Company will apply for the Project's necessary APEN permit and will ensure construction dust minimization according to State standards.

As a part of the Company's best management practices, a Dust Suppression Plan has been written for the Project. *Please refer to Appendix item 20.*

6.6 Nuisances

As has been corporate practice on all of our projects, juwi Inc. is proactive in monitoring of potential nuisance generation. Should concerns arise at any point during construction, please contact Vice President of Construction Darnell Everett at deverett@juwiamerica.com. The Company strives to ensure a safe construction format, always within the context of local, state, and federal regulations.

6.6.1 Mitigation

Unquestionably, the Project represents a Change In Land Use from what has been historically active agricultural lands across a pastoral landscape. Change can be challenging, and from discussions the Company has held with neighbors, some expressed discomfort with the changes proposed by the Project. Their comments held weight with the Company, and led to design changes in the Project layout.

NOISE. Any construction endeavor will elevate noise levels beyond median ambient noise. Under Colorado law (CRS 25-12-103), construction noise limits between 7 am and 7 pm are 80 decibels; the Company will abide by these standards. Following construction, a solar farm is a very quiet neighbor, with minimal noise perceptible beyond the Project fencing. The loudest part of a given solar project is a substation; the Project will be interconnecting to the existing Tri-State Cahone Substation, which already generates noise but is over 2000' from the nearest residence. The to-be-built Project substation will be over 2500' from the nearest residence.

ODOR. Generally speaking, the scent of the Project during construction is one typical of a construction project: heavy equipment, truck, and general vehicular exhaust pipe emissions; welding; concrete work, et cetera. For the estimated 35-year lifespan of the Project upon commissioning, odors are non-existent: solar farms produce no standard quantifiable emissions.

GLARE. Several neighbors contacted by the Company brought to the table a concern about glare from modules. This is a common and understandable concern. Those fears can be allayed by the science, however: although sunlight can reflect from the module surface, this

light is both diffuse (due to anti-reflective glass) and reduced by the science of modules themselves, in that they take in sunlight to produce energy, and lost light equates to lost energy production.

DUST. With a dozen plus years of construction experience on large-acreage solar facilities, the Company is cognizant of dust considerations. The State of Colorado requires an APEN Permit be filed for land disturbances of greater than 25 acres, and as such, the Company will obtain an APEN prior to groundbreaking.

VIEWS. The Company redesigned the Project to better accommodate the considerations of our neighbors – both during construction and in operation. Our original design hewed to standard Dolores County ROW setbacks of 40', which brought the Project close to many area residences; following neighbor consultation, we have ensured that no non-participant residence – meaning a residence who is not a landowner of a Project LDA parcel – is closer than 500' to the Project arrays. Keeping that 500' buffer distance has required the Company to acquire other land for Project siting.

The maximum height of Project modules (solar panels) is 9' above ground level, and presents a low-profile, generally uniform reveal across its horizon from a pedestrian viewshed perspective. The Project will have one unmanned maintenance items shed, approximately 16' tall. In the remote northeastern portion of the Project, over 2000' feet from any residence, will be the interconnection equipment: the new Project Substation and pole-mounted gen-tie line to the existing Tri-State Cahone Substation; the interconnection equipment is anticipated to be 75-90' tall. Owing to the distance to any residence, the interconnection equipment will have little visual impact to neighbors.

COUNTY-OWNED RIGHTS-OF-WAY / TRAFFIC. During the Pre-Application Conference held on September 14, 2020, county-owned ROW integrity both during and at the end of Project construction was mentioned. Further discussion between Dolores County and the Company will be necessary during the LDA process to determine acceptable methods and the scope of impact mitigation. The Company has received proposals from professional roadway analysis consultants to determine roadway quality and from such study, formulate a method for determining Project-related impacts.

The area of the Project is bisected by several Dolores County ROWs, and as stated in 6.4.4 above, will apply for eight Access Permits within the Project / ROW interface.

The majority of both hauling/delivery and passenger traffic on county ROWs is anticipated to exit northbound Hwy 491 and turn west onto CR R in Cahone itself, head north on CR 14, then west on CR P, then again north on CR 15 to the Project area. An alternate route from the north

will leave southbound Hwy 491 and turn west onto CR M, head south on CR 14, then west on CR M.4, then again north on CR 15 to the Project area. *Please refer to Appendix item 21.*

From the principal staging area on CR 15, the Company's plan is to direct delivery and passenger traffic with a focus on lessening the impact on area residences by taking a longer route to the various Project access points. *Please refer to Appendix item 22* for a representation of this plan's expected levels of service on county roads. One notable aspect of this plan will direct southbound CR 16 traffic that would otherwise take the formal intersection onto westbound CR M.4 (and vice-versa) through a private easement on Parcel 505929200122, thereby avoiding both a challenging intersection for large trucks and avoiding travel past a non-participating residence.

Should alternate routes along other county ROWs become necessary due to unforeseen circumstances, the Company will coordinate with the Road & Bridge Department for confirmation of that route.

Estimated Project-based traffic along these roads during the ~18-month construction period can be divided into three stages:

- 1) **Site Preparation.** Approximately 4-6 months of site preparation including installation of access driveways with culverts, erect fencing, as well as perform civil engineering work to survey, stake, and prepare the surface as necessary for the construction of the facility. This phase of construction will require 20-40 pickup trucks per day and 20 (on average) tractor-trailers per day delivering equipment or materials.
- 2) **Primary Construction.** Approximately 11 months of primary construction including delivery of solar modules and racking, installation of racking and modules, as well as electric work. This phase of construction will entail 150-200 pickup truck trips per day and 10-15 (on average) tractor-trailer loads per day with equipment or materials at the height of construction.
- 3) **Preparing for Operation.** Approximately 2 months of final work, connection, commissioning, and site cleanup. This phase of the Project will involve 20-40 pickup trucks per day but just one (one average) tractor-trailer load per week.

Following construction, expected operation and maintenance traffic would be in the range of ~5 vehicle trips per month via pickup trucks or other delivery vehicles, as needed.

The Company will coordinate, as necessary, all facets of county road use, diagnosis, and treatment aspects of the Project with Supervisor Davis / the Road & Bridge Department to minimize road damage as well as travel delays. Should acute damage occur due to Project impacts during construction, the Company will assess the damage, coordinate with Supervisor Davis / the Road & Bridge Department, and if necessary, conduct repairs as soon as feasible.

Please refer to Appendix item 23, a table containing estimated vehicular traffic counts.

6.6.2 Containment

Once operational – estimated to be late 2023 – the Project will be entirely contained within 6-8' tall chain link fencing. In accordance with the standards of Article IV §2(F)(2), as a solar photovoltaic facility, once operational there are no cinders, dust, fumes, gasses, odors, smoke, liquid or solid waste, and undue noise will not be generated. The Project site will be upkept, with managed vegetative growth to be trimmed as necessary to deter from unsightliness (see Noxious Weed Management Plan). During construction, waste materials will be disposed of on a regular basis, with presorting of items into recyclable and rubbish categories to direct waste stream flow. Once operational, waste will be negligible as an unmanned facility.

6.6.3 Exterior Lighting

As an unmanned facility, upon completion all Project lights will be off. Limited lighting, consisting of downward-facing shaded fixtures, will be installed in a select few ideal locations across the Project site; however, they will only be utilized during rare nighttime maintenance events.

6.7 *Runoff and Erosion Control*

The Project does not meet the LUR threshold of 20,000 square feet of continuous impervious surface to be constructed. Though the majority of the Project is on relatively low-gradient land, portions do exceed the LUR standard requiring a runoff, drainage, and erosion control plan for a cumulative land disturbance of one (1) acre or more on slopes of 8% or greater. A State of Colorado licensed engineer will prepare such a plan in accordance with typical engineering best practices and provide said plan to Dolores County as a part of the Building Permit application. The Company is working with Sunrise Engineering, who will assist in crafting runoff and erosion control design and best practices.

Additionally, the State of Colorado requires under the National Pollution Discharge Elimination System (“NPDES”) a Storm Water Pollution Prevention Plan (“SWPPP”) as a part of the Colorado Department of Public Health & Environment (“CDPHE”) Construction Stormwater Discharge Permit (COR400000) for land disturbance activities of greater than 5 acres. The Company will be applying for COR400000 prior to commencement of construction activities.

6.8 *Floodplains / Streams / Rivers / Creeks*

No portion of the Project is located within a Federal Emergency Management Agency-listed Flood Hazard Zone delineating a floodplain development risk – the entire Project lies within Zone X. Conflicts with Dolores County Floodplain Ordinance 1989-1 are not expected. *Please refer to Appendix 24.*

6.9 *Wetlands*

Professional study by WEST Inc. has concluded that all areas of the Project do not meet the characteristics of jurisdictional wetlands under the authority of the USACE. The Company has applied for a formal Approved Jurisdictional Determination from the USACE-Sacramento District Office in Grand Junction for confirmation; the Company expects full Project avoidance of wetland impacts to Waters of the United States, as regulated under Section 404 of the Clean Water Act.

6.10 *Avalanche Hazard*

The Project is not located within a High Avalanche Hazard Area of Dolores County.

6.11 *Slopes*

No portion of the Project is located on slopes of greater than 30% nor upon identified unstable substrate. The Company is working with grading consultant Sunrise Engineering to ensure proper Project development upon sloped areas.

6.12 *Geology and Soils*

Sunflow Solar Structures has determined that the local geology has sufficient loading capabilities to support typical rammed-post Project design. Additionally, the Company retained Terracon to conduct thorough investigations of site geologic and soil characteristics. Generally, the Project area contains supportive surface & subsurface structural horizons for the development of a solar farm project. *Please refer to Appendix item 25 & 26.*

6.13 Open Space

The Project is non-residential and as such does not fall under the compliance measures of Dolores County Subdivision Regulations.

6.14 Wildlife Habitat

The Company utilized the professional expertise of WEST Inc. to investigate potential Project impacts upon area wildlife. Two known elk and mule deer migration corridors were found to exist, as well as elk and mule deer wintering habitats (*please refer to Appendix item 27*). The Project has avoided the migration corridors area entirely, with narrowest area of fencing leaving well over a 1000' wide gap for wildlife passage.

Active dialogue with CPW's Southwestern Region office in Durango, as well as the Dove Creek District Wildlife Manager, has been a vital component to Project design. CPW toured the Project area on February 23, 2021. A roundtable discussion of CPW recommendations was held on March 9th, focusing on best design and development practices, in light of elk and mule deer wintering habitats. This dialogue continues, and the Company will consider CPW recommendations alongside other Project constraints.

Early on in our site analysis, the Company was made aware of potential GuSG implications with the Project location. However, upon professional study, the Project has been found to not impact GuSG Critical Habitat nor the species' Recovery Implementation Strategy crafted by the FWS². The FWS Grand Junction Ecological Services Field Office has issued a "no consultation necessary" letter regarding this important regional species. *Please refer to Appendix item 28*. Should species individuals present themselves on site during construction, the Company will work with the FWS, who will advise the Company on procedural best practices at that time.

6.15 Density

The Project is non-residential and unmanned. As such, dwelling density standards and the appurtenant obligation of a sewage disposal system are not relevant to this application.

² See <https://ecos.fws.gov/ecp0/profile/speciesProfile?spcode=B0B0#recovery> for detailed US Fish & Wildlife Service recovery strategy for the Gunnison Sage Grouse.

6.16 Financial Assurance

Utility-scale solar facilities have an estimated lifespan of 35 years. A typical mechanism for providing assurance to local jurisdictions on the eventual deconstruction and reclamation of a solar facility is a Decommissioning Plan. This plan serves to provide a guarantee that Dolores County will not be held liable for dismantling and removing the Project at the end of its useful life or in the event the Project owner has ceased to use the facility. *Please refer to Appendix item 16.*

6.17 Financial Cost of Services Expected of County Government

The Company was first made aware of Article IV, §2(Q) of the LUR during the September 14, 2020 Pre-Application Conference, and the Company recognizes the need for growth to pay its own way. Dolores Canyon Solar represents a remunerative opportunity for Dolores County. Below is an estimate of the financial cost and workforce employment for the Project. Of note: several contingent factors affect estimates at this stage of development; please consider these numbers good within roughly 10%:

Dolores County Property Taxation (2023-2043, in sum)	~ \$6,000,000
Total Workforce FTEs (Construction)	~ 300-350
Peak Workforce (Construction)	~ 150-225
Workforce (O&M)*	~ 1-3
Annual Spending (O&M)*	~ \$40,000-80,000

**Operations & Maintenance work is monthly, generally only a few days, not full time; as such, these are estimated equivalencies.*

Additionally, local purchasing impacts during construction, e.g. food, beverages, accommodations, and supplies will impact area business revenue and spur additional tax generation. Annual operation and maintenance spending will include the need for local and or regionally-based services, providing additional multiplier effects from the Project.

Significantly, the Project meets the current Dolores County Comprehensive Economic Development Strategy (CEDS) Community Development Action Plan Project 5 Goal of solar

energy as an opportunity for economic development under Colorado’s Region 9 Economic Development District ³.

Unquestionably, local road use during construction will be greater than usual. As above in Section 6.6’s discussion on Dolores County-owned rights-of-way, the Company will analyze road conditions prior, during, and following Project construction. We look forward to establishing a road maintenance protocol with the County.

6.18 *Municipal Solid Waste, Hazardous Waste, Other Industrial or Commercial Waste or Land Fill, Public or Private*

The Company takes pride in maintaining a clean construction environment; waste generated during Project construction will be separated into landfill and recyclable material streams. A dedicated concrete cleanout area will be designated and built according to CDPHE standards. No hazardous waste will be generated by the Project. A common misconception is that modules are categorized as hazardous waste; they are not and can be disposed of in a landfill or recycled accordingly.

6.19 *Miscellaneous*

SCHOOLS. The areas where Project traffic routes will pass, though rural and not fronting actual school buildings, lies within the Dolores County School District RE-2J boundary.

The Company will coordinate construction traffic safety protocols with Superintendent Gray to establish safe and timely operations of the District’s school bus system.

NATURAL RESOURCE CONSERVATION. The Project area is within the Dove Creek Conservation District. The Company will discuss development approaches with the District Board following LDA approval.

PUBLIC LANDS. In two areas, the Project abuts land under the U.S. Department of the Interior - Bureau of Land Management (“BLM”) administration. The Company recognizes the importance Dolores County places on public land access, as codified in Article IV, §6 of the LUR. The Project will not impact historic public access to these BLM parcels. *Please refer to Appendix item 29.*

³ See https://www.scan.org/uploads/4_-_Dolores_County_Update_2016.pdf

7.0 ADDITIONAL PERMITTING REQUIREMENTS

7.1 *Local*

Subsequent ancillary Dolores County permits anticipated include:

- Building Permit. The primary permit for Project construction.
- Driveway Permit. Required for the eight permanent access points to the Project from various county ROWs.
- Right of Way Permit. Necessary for any ROW work the Company must perform, such as in the event of a Company-caused damage to a public roadway, as well as for boring under or crossing over a county ROW with Project electrical apparatus.
- Special Transport Permit. Required for oversize loads upon county ROW.

7.2 *State*

Future State of Colorado permits anticipated include:

- Land Development Air Pollutant Emission Notice (“APEN”) from CDPHE. Necessary for land development greater than 25 acres.
- Construction Stormwater Discharge Permit from CDPHE. A necessary State-run permit under the authority of the U.S. Environmental Protection Agency for land development greater than 5 acres. A component of this permit is a Storm Water Pollution Prevention Plan, a necessary component of the National Pollution Discharge Elimination System.
- Electrical Permit. Dolores County utilizes the Colorado Division of Professions & Occupations for electrical permits and inspections.

7.3 *Federal*

Though no significant permits are expected to be necessary at the Federal level, the Company has already obtained a 7460-1 No Hazard To Air Navigation Review from the Federal Aviation Administration (“FAA”). *Please refer to Appendix item 30* for recent results from the FAA’s Notice Criteria Tool, demonstrating Project compliance with air navigation. Additionally, the Company will be required to self-certify a Spill Prevention Control and Countermeasure (“SPCC”) Plan for vegetable-based oil used permanently in project electrical equipment for cooling purposes, as well as for petroleum products used for machinery operation during construction.