

**MEMORANDUM**

**To:** Trevor Lloyd, Washoe County Planning and Development  
**From:** David Hochart, Dudek, on behalf of Dodge Flat Solar, LLC  
**Subject:** Special Use Permit (SUP) Application Package for the Dodge Flat Solar Energy Center  
**Date:** October 16, 2017  
**cc:** Eric Koster, Dodge Flat Solar LLC  
 Jesse Marshall, Dodge Flat Solar LLC

Enclosed is the Special Use Permit (SUP) Application Package for the Dodge Flat Solar Energy Center in Washoe County, Nevada.

Table 1, Development Application Submittal Requirements, has been provided to demonstrate applicability of SUP submittal requirements and current submittal status.

**Table 1  
 Development Application Submittal Requirements**

No.	Submittal Requirements	Applicable (Y/N)	Status /Rationale (If Applicable)
1	<b>Fees:</b> See Master Fee Schedule. Bring payment with your application to Community Service Department (CSD). Make check payable to Washoe County.	Y	A check in the amount of \$3,579.92 is made payable to Washoe County and enclosed per the Master Fee Schedule
2	<b>Development Application:</b> A completed Washoe County Development Application form.	Y	Enclosed
3	<b>Owner Affidavit:</b> The Owner Affidavit must be signed and notarized by all owners of the property subject to the application request.	Y	Enclosed
4	<b>Proof of Property Tax Payment:</b> The applicant must provide a written statement from the Washoe County Treasurer’s Office indicating all property taxes for the current quarter of the fiscal year on the land have been paid.	Y	Enclosed

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**Table 1**  
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No.	Submittal Requirements	Applicable (Y/N)	Status /Rationale (If Applicable)
5	<b>Application Materials:</b> The completed Special Use Permit Application materials.	Y	Enclosed
6	<b>Title Report:</b> A preliminary title report, with an effective date of no more than one hundred twenty (120) days of the submittal date, by a title company which provides the following information: <ul style="list-style-type: none"><li>• Name and address of property owners.</li><li>• Legal description of property.\Description of all easements and/or deed restrictions.</li><li>• Description of all liens against property</li><li>• Description of all liens against property</li><li>• Any covenants, conditions and restrictions (CC&amp;Rs) that apply.</li><li>• Submit Title Report with “Original Packet” only. You may be requested to provide additional copies, but do not include Title Report in other copies of the packet.</li></ul>	Y	Enclosed
7	<b>Proposed Site Plan Specifications (Special Use Permit and Stables):</b> <ul style="list-style-type: none"><li>a. Lot size with dimensions drawn using standard engineering scales (e.g. scale 1” = 100’, 1” = 200’, or 1” = 500’) showing all streets and ingress/egress to the property.</li><li>b. Show the location and configuration of all proposed buildings (with distances from the property lines and from each other), all existing buildings that will remain (with distances from the property lines and from each other), all existing buildings that will be removed, and site improvements on a base map with existing and proposed topography expressed in intervals of no more than five (5) feet.</li><li>c. Show the location and configuration of wells and well houses, septic systems and leach fields, overhead utilities, water and</li></ul>	Y	Enclosed

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	sewer lines, and all easements. d. Show locations of parking, landscaping, signage and lighting. e. The cross sections of all rights-of-way, streets, alleys or private access ways within the proposed development, proposed name and approximate grade of each, and approximate radius of all curves and diameter of each cul-de-sac.		
<b>8</b>	<b>Existing Site Specifications (Special Use Permit and Stables)</b>	N	N/A – No horse uses proposed.
<b>9</b>	a. Site Plan Specifications (Grading): b. Vicinity map showing the proposed project in relation to Interstate 80, Highway 395, I-580, or a major arterial. The vicinity map may be part of the site plan. c. Date, north arrow, scale, and number of each sheet in relation to the total number of sheets, and the name of person preparing the plans. d. Location and limits of all work to be done. e. Existing contours and proposed contours. f. Location of all proposed and existing structures. g. Location of any structures on adjacent parcels that are within fifteen (15) feet of the work site’s parcel boundary. h. Existing draining (natural and man-made) and proposed drainage patterns. i. Sufficient elevation data to show the drainage will work as proposed. j. Quantities of excavation, fill and disturbed surface area shall be calculated and shown on the site plan. Areas under buildings and	Y	Enclosed

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	<p>pavement need not be included in these calculations.</p> <p>k. Quantities of material proposed to be removed from the site must be shown. The proposed disposal area and the disposition of fill must be noted on the plan.</p> <p>l. Limiting dimensions of cut and fill.</p> <p>m. Proposed BMPs (Best Management Practices) for controlling water and wind erosion if a disturbed area is left undeveloped for more than thirty (30) days.</p> <p>n. Cut and fill slopes setback from the property boundary.</p> <p>o. Structure setbacks from a slope.</p> <p>p. Location of areas with existing slopes greater than fifteen percent (15%) and thirty percent (30%).</p> <p>q. Boundary of any wetland areas and/or floodplains</p> <p>r. Significant Hydrologic Resources. Indicate the critical and sensitive buffer zones according to Article 418 of the Washoe County Development Code.</p>		
<b>10</b>	<b>Grading:</b> In accordance with the grading provisions of Washoe County Code, Article 438, if the thresholds for a grading permit are met or exceeded, the grading plans shall indicate the existing and proposed grades, slope treatments (i.e. rip rap, erosion control, etc.) and drainage channels and the direction of flow. Cross sections must be provided at a minimum of two key locations.	Y	Enclosed
<b>11</b>	<b>Traffic Impact Report</b> (Special Use Permit and Stables): Traffic impact reports are required whenever the proposed development project will generate 80 or more weekday peak hour trips as	N	A Construction Traffic Haul Route Plan has been included with the SUP submittal. Per discussions with County Staff a Traffic Impact Report is not

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	<p>determined using the latest edition Institute of Transportation Engineers (ITE) trip generation rates or other such sources as may be accepted by Engineering and Capital Projects with less than 200 peak hour trips may not need to perform an impact analysis for future years. Traffic consultants are encouraged to contact Engineering and Capital Projects staff prior to preparing a traffic impact report.</p>		<p>required for a solar energy facility.</p>
<p><b>12</b></p>	<p><b>Landscaping:</b> Landscape plans may be required, for stables. Landscape plans may include: a soils evaluation; color and type of building material, such as fencing material; type of plant material; location of plant material and proposed maintenance schedule; size of plant material at planting and size of plant material at full maturation; type and amount of mulch material; and an irrigation plan.</p> <p>a. Planting Plan Specifications: The planting plan must include all necessary information to satisfy Washoe County Code Section 110.412.60, Planting Standards.</p> <ul style="list-style-type: none"> <li>○ Proposed Tree Locations. Individual trees shall be graphically depicted in the proposed locations; trees shall be identified as either evergreen or deciduous; trees shall be individually labeled or coded and cross referenced to the proposed plant species in the plant legend.</li> <li>○ Proposed Plant Material. The preliminary plan must identify where, and a square footage amount for, one or all of the following items: trees, mulch (rock, DG or bark), seeded areas, etc.</li> <li>○ Existing On-Site Vegetation. In the case of large strands of trees and shrubs, individual locations may be</li> </ul>	<p>N</p>	<p>Per discussions with County Staff a landscaping plan is not required for a solar energy facility.</p>

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	<p>identified with a revision cloud symbol. Smaller numbers or strands of trees (six (6) inch caliper and greater) shall be identified individually. Shrub areas and other forms of vegetation such as grasses shall be identified with a revision cloud symbol.</p> <ul style="list-style-type: none"> <li>○ Plant Legend. Legend shall include all proposed plant material, including the following: common name, botanical name, size at planting, spacing and quantity (of trees only).</li> </ul>		
13	<b>Signage Plan:</b> The signage plans shall include sign elevations and delineate location, height, style, dimensions, intensity of sign lighting and finish of any proposed signage.	N	A signage plan will be prepared at a future date when an engineering, procurement construction (EPC) contractor is selected to design/build the proposed project.
14	<b>Lighting Plan:</b> Show the location and configuration of all proposed exterior lighting including a detail of the parking lot light fixtures, pole heights, security lighting, and wall mounted illumination fixtures. Parking lot areas shall be depicted showing lumen isolines demonstrating compliance with the provisions of the Washoe County Development Code.	N	A lighting plan will be prepared at a future date when an engineering, procurement construction (EPC) contractor is selected to design/build the proposed project.
15	<b>Building Elevations:</b> All buildings and structures including fences, walls, poles and monument signs proposed for construction within the project shall be clearly depicted in vertical architectural drawings provided in accurate architectural scale. All architectural elevations from all building faces shall be presented.	N	Building elevations will be prepared at a future date when an engineering, procurement construction (EPC) contractor is selected to design/build the proposed project.
16	<b>Packets:</b> Four (4) packets and a flash drive or DVD. One (1) packet must be labeled “Original” and must include the fee schedule (including the appropriate	Y	See packets attached.

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	fees) and the original signed and notarized Owner Affidavit. Each packet shall include an 8.5” x 11” reduction of any applicable site plan, development plan, and/or application map. These materials must be readable. Labeling on these reproductions should be no smaller than 8 point on the 8½ x 11” display. Two (2) of the application packets shall include large format maps; the rest of the packets shall include either 8.5” x 11” or 11” x 17” maps. Large format sheets should be included in a slide pocket(s). Any specialized reports identified above shall be included as attachments or appendices and be annotated as such.		

Notes:

(i) Application and map submittals must comply with all specific criteria as established in the Washoe County Development Code and/or the Nevada Revised Statutes.

(ii) Appropriate map engineering and building architectural scales are subject to the approval of Planning and Development and/or Engineering and Capital Projects.

(iii) All oversized maps and plans must be folded to a 9” x 12” size.

(iv) Labels: The applicant is required to submit three (3) sets of mailing labels for every tenant residing in a mobile home park that is within five hundred (500) feet of the proposed project (or within seven hundred fifty (750) feet of the proposed project if the proposed project is a project of regional significance).

(v) Based on the specific nature of the development request, Washoe County reserves the right to specify additional submittal packets, additional information and/or specialized studies to clarify the potential impacts and potential conditions of development to minimize or mitigate impacts resulting from the project. No application shall be processed until the information necessary to review and evaluate the proposed project is deemed complete by the Director of Community Development.

(vi) Please be advised that the Washoe County Director of Planning and Development or his designee, Washoe County Board of Adjustment, and/or Washoe County Planning Commission have the ability to determine an application incomplete if they cannot ascertain what the applicant is requesting, or if there is insufficient information to determine a favorable outcome.

In addition to the SUP materials listed above, Dodge Flat Solar LLC has provided the County with the following materials to support the SUP filing:

- Project Description (Attachment A)
- Viewshed Map (Attachment B)
- Project Site Photos (Attachment C)
- Construction Traffic Haul Route Plan (Attachment D1)
- Stormwater Quality Management Plan (Attachment D2)
- Subsurface Investigation Report (Attachment D3)
- Cultural Resources Report (Attachment D4)
- Biological Resources Report (Attachment D5).

***SUP Application***

Community Services Department

Planning and Development

**SPECIAL USE PERMIT**

(see page 5)

**SPECIAL USE PERMIT FOR GRADING**

(see page 11)

**SPECIAL USE PERMIT FOR STABLES**

(see page 16)

**APPLICATION**



Community Services Department  
Planning and Development  
1001 E. Ninth St., Bldg. A  
Reno, NV 89520

Telephone: 775.328.3600

## Washoe County Development Application

Your entire application is a public record. If you have a concern about releasing personal information, please contact Planning and Development staff at 775.328.3600.

<b>Project Information</b>		Staff Assigned Case No.: _____	
Project Name: Dodge Flat Solar Energy Center			
Project Description: Approximately 200-megawatt (MW) photovoltaic (PV) solar generation facility, substation, 200 MW energy storage facility, and switching station.			
Project Address: 2505 State Route 447, Nevada			
Project Area (acres or square feet): Approximately 1,599 acres total (1,579 developed)			
Project Location (with point of reference to major cross streets <b>AND</b> area locator): Olinghouse Road, just west of SR-447; Latitude/Longitude 39°39'31N / 119°20'53"W			
Assessor's Parcel No.(s):	Parcel Acreage:	Assessor's Parcel No.(s):	Parcel Acreage:
079-150-29	600	079-180-16	499
079-150-11	480	079-180-14	N/A
Section(s)/Township/Range: T21N R23S, Sec. 23,24,25,36; T21N R24S, Sec. 19,30,31 MDBM			
<b>Indicate any previous Washoe County approvals associated with this application:</b>			
Case No.(s). SW0007-19, VA0007-21			
<b>Applicant Information</b> (attach additional sheets if necessary)			
<b>Property Owner:</b> NEVADA LAND & RESOURCE HOLDINGS INC		<b>Professional Consultant:</b> DUDEK	
Name: David Merrill		Name: David Hochart	
Address: 3480 GS Richards Blvd, Suite 101, Carson City, NV		Address: 605 Third Street, Encinitas, CA	
Zip: 89703		Zip: 92024	
Phone: 775.885.5000 ext 102	Fax: 775.885.5005	Phone: 760.479.4259	Fax:
Email: dmerrill@vidlerwater.com		Email: dhochart@dudek.com	
Cell:	Other:	Cell: 760.415.2864	Other:
Contact Person: David Merrill		Contact Person: David Hochart	
<b>Applicant/Developer:</b>		<b>Other Persons to be Contacted:</b>	
Name: Dodge Flat Solar LLC		Name: Eric Koster	
Address: 700 Universe Blvd, Juno Beach, FL		Address: 949 Twilight Avenue, Henderson, NV	
Zip: 33408		Zip: 89012	
Phone: 760.846.4421	Fax:	Phone: 702.335.2849	Fax:
Email: jesse.marshall@nee.com		Email: eric.koster@nee.com	
Cell: 760.846.4421	Other:	Cell: 702.335.2849	Other:
Contact Person: Jesse Marshall		Contact Person: Eric Koster	
<b>For Office Use Only</b>			
Date Received:	Initial:	Planning Area:	
County Commission District:		Master Plan Designation(s):	
CAB(s):		Regulatory Zoning(s):	

**Additional Property Owner**

<b>Property Owner:</b>	New Nevada Lands, LLC
<b>Name:</b>	Heath Rushing
<b>Address:</b>	125 Roger Storme Road Modisonville, LA 70447
<b>Phone</b>	601-876-7659
<b>Fax</b>	
<b>Email</b>	heath@newnr.com
<b>Cell:</b>	
<b>Other:</b>	
<b>Contact Person:</b>	Heath Rushing



# Special Use Permit Application Supplemental Information

(All required information may be separately attached)

Chapter 110 of the Washoe County Code is commonly known as the Development Code. Specific references to special use permits may be found in Article 810, Special Use Permits.

1. What is the type of project being requested?

The Dodge Flat Solar Energy Center is a proposed 200-megawatt (MW) (approximate) photovoltaic solar generation facility and 200 MW energy storage facility. Project components include a solar field, substation, switchyard, and energy storage facility (see Attachment A (Project Description)). The proposed project is located in the Truckee Canyon Planning Area and, per the Truckee Canyon Regulatory Zone Map, is located entirely within a General Rural (GR) zone. Renewable generation facilities are allowed in the GR zone with the approval of a Special Use Permit (SUP).

2. What currently developed portions of the property or existing structures are going to be used with this permit?

The subject property is undeveloped except for the rural roads, electrical distribution lines servicing groundwater wells, and underground water and gas pipelines that cross the property. The proposed project will generate solar energy that will be delivered to NV Energy high-voltage transmission lines that traverse the northern portion of the project site (See Attachment C (Project Site Photos)).

3. What improvements (e.g. new structures, roadway improvements, utilities, sanitation, water supply, drainage, parking, signs, etc.) will have to be constructed or installed and what is the projected time frame for the completion of each?

The proposed project is intended to be constructed in a single phase; however may be developed in multiple phases depending on pending power purchase agreements. The total construction duration associated with all project components for each phase is planned to take no more than 12 months from notice to proceed to final connection and commissioning. Improvements would include solar panel array structures, internal access roads, substation and energy storage facilities (see Attachment A (Project Description)).

4. What is the intended phasing schedule for the construction and completion of the project?

The proposed project is intended to be constructed in a single phase over a 12 month duration; however the project may be developed in multiple phases subject to pending power purchase agreements (see Attachment A (Project Description)).

5. What physical characteristics of your location and/or premises are especially suited to deal with the impacts and the intensity of your proposed use?

Solar generation is an ideal use for the subject properties given the topography is gently sloping, with an average slope of 2%-3% for the proposed developed area. The project site is also located adjacent to regional roadway facilities (SR-447) and high-voltage transmission lines, which minimizes the need for off-site improvements.

The property is located within an area that has a contiguous zoning of General Rural, and therefore does not conflict with any immediately adjacent current or allowed uses. There are no significant residential developments within the immediate vicinity, or within the general project view shed (see Attachment B (Viewshed Map)).

6. What are the anticipated beneficial aspects or effects your project will have on adjacent properties and the community?

The project will provide a reliable local and regional source of power, producing around 500,000 megawatt-hours of clean, emissions-free power each year. The project also includes an energy storage component that will facilitate grid reliability with providing energy delivery during peak demand periods.

Compared to Nevada's current average power emissions, this project will allow for the reduction of around 510,000 tons of carbon dioxide annually.

By locating the project near a State Highway, and directly adjacent to existing transmission lines, the project can be built with minimal additional infrastructure, minimizing additional property impacts and emissions during construction.

The proposed project will provide an opportunity for construction jobs as at the peak construction, close to 500 workers; average workforce of approximately 250 construction workers. The project would also provide approximately 10 full time jobs.

7. What will you do to minimize the anticipated negative impacts or effects your project will have on adjacent properties?

Surrounding lands include public lands managed by the Bureau of Land Management (BLM) and lands within with Pyramid Lake Indian Reservation managed by the Pyramid Lake Tribal Council. All lands surrounding the study area are designated "Rural" within the Washoe County Master Plan (WCMP) (Washoe County 2012). In the Truckee Canyon Area Plan (TCAP), surrounding lands are currently assessed as "Undeveloped" (Public Lands), "Industrial" (Reservation), and other private lands include a mix of "Low Density Rural," "Medium Density Suburban," "Vacant-Minor Improvements Common Area," and "Agricultural" (Washoe County 2012). The construction of solar generation facilities is considered to be consistent with the existing land use and zoning, and is not anticipated to have any adverse impacts or effects on these neighboring properties.

The project will maintain and implement a spill prevention control program to ensure hazardous materials are stored properly and in the event of an inadvertent spill are cleaned up in accordance with federal, state and local requirements. All equipment containing oil will be contained within secondary containment (see Attachment D2 (Stormwater Quality Management Plan)).

In accordance with Washoe County requirements the project will prepare and implement a construction traffic haul route plan to minimize potential impacts to local roads (see Attachment D1 (Construction Traffic Haul Route Plan)).

8. Please describe operational parameters and/or voluntary conditions of approval to be imposed on the project special use permit to address community impacts:

There are no anticipated impacts that would require special defined operational parameters or conditions to address community impacts.

9. How many improved parking spaces, both on-site and off-site, are available or will be provided? (Please indicate on site plan.)

Permanent on-site parking will not be required, as the facilities will be primarily operated remotely. Operations and maintenance staff will visit the site as needed to complete any repairs. There will not be any permanently manned structures on site.

10. What types of landscaping (e.g. shrubs, trees, fencing, painting scheme, etc.) are proposed? (Please indicate location on site plan.)

Due to the proposed use, zoning, and existing terrain, landscaping has not been proposed, and would not be appropriate for the solar generation facility.

11. What type of signs and lighting will be provided? On a separate sheet, show a depiction (height, width, construction materials, colors, illumination methods, lighting intensity, base landscaping, etc.) of each sign and the typical lighting standards. (Please indicate location of signs and lights on site plan.)

A permanent sign may be installed at the project boundary and entry, in compliance with Washoe County Development standards. Lighting will be provided for security and access purposes at the project entry, substation, energy storage facility and switchyard. All lighting will be directed downward and shielded in accordance with County requirements. The lighting would only switch on when personnel enter the area (either motion-sensor or manual activation [switch]). A signage plan will be prepared at a future date when an engineering, procurement construction (EPC) contractor is selected to design/build the proposed project.

12. Are there any restrictive covenants, recorded conditions, or deed restrictions (CC&Rs) that apply to the area subject to the special use permit request? (If so, please attach a copy.)

Yes  No

13. Utilities:

a. Sewer Service	No service available
b. Electrical Service	NV Energy
c. Telephone Service	No service available
d. LPG or Natural Gas Service	No service available
e. Solid Waste Disposal Service	Washoe County Solid Waste Management
f. Cable Television Service	No service available
g. Water Service	No service available

For most uses, the Washoe County Code, Chapter 110, Article 422, Water and Sewer Resource Requirements, requires the dedication of water rights to Washoe County. Please indicate the type and quantity of water rights you have available should dedication be required:

h. Permit #	85241, 85242, 85243	acre-feet per year	1428
i. Certificate #		acre-feet per year	
j. Surface Claim #		acre-feet per year	
k. Other #		acre-feet per year	

- l. Title of those rights (as filed with the State Engineer in the Division of Water Resources of the Department of Conservation and Natural Resources):

Nevada Land and Resource Holding, Inc.
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14. Community Services (provided and nearest facility):

a. Fire Station	Fernley Volunteer Fire Department, 165 E Main St, Fernley, NV 89408
b. Health Care Facility	Renown Medical Group, Fernley 1343 Newlands Dr. W. Fernley, NV 89408
c. Elementary School	Natchez Elementary School, 1 Hwy 447, Wadsworth, NV 89442
d. Middle School	Fernley Intermediate School, 320 Hwy 95a South, Fernley, NV 89408
e. High School	Fernley High School, 1300 US Highway 95A S, Fernley, NV 89408
f. Parks	In Town Skate Park, S Center St Fernley, NV 89408
g. Library	Fernley Branch Library, 575 Silver Lace Blvd, Fernley, NV 89408
h. Citifare Bus Stop	Nearby Wadsworth and Fernley do not operate a city bus system

# Special Use Permit Application for Grading Supplemental Information

(All required information may be separately attached)

Chapter 110 of the Washoe County Code is commonly known as the Development Code. Specific references to special use permits may be found in Article 810, Special Use Permits. Article 438, Grading, and Article 418, Significant Hydrologic Resources, are the ordinances specifically involved in this request.

1. What is the purpose of the grading?

Because the proposed project site is fairly level, grading is expected to be minor in most instances. However, grading would occur throughout the site, especially for the construction of roads and inverter pads. This would be accomplished with scrapers, motor graders, water trucks, dozers, and compaction equipment (see attached grading plans).

2. How many cubic yards of material are you proposing to excavate on site?

The project is anticipated to have approximately 307,004 cubic yards of cut and approximately 263,392 cubic yards of fill (see attached grading plans).

3. How many square feet of surface of the property are you disturbing?

It is anticipated that approximately 1,200 acres of the site will be disturbed to support the project facilities (see response #1).

4. How many cubic yards of material are you exporting or importing? If none, how are you managing to balance the work on-site?

No export or import of material is anticipated with the proposed project.

5. Is it possible to develop your property without surpassing the grading thresholds requiring a Special Use Permit? (Explain fully your answer.)

A Special Use Permit is required for the following: Grading projects excavating over 1,000 cubic yards; Importing more than 5,000 cubic yards of fill; Disturbing more than 25,000 square feet; Placing more than 1,000 cubic yards of fill in a flood hazard area; Constructing a permanent earthen structure over 4.5 feet high.

The project will consist of approximately 307,004 cubic yards of cut and approximately 263,392 cubic yards of fill, which exceeds the 25,000 square feet threshold.

6. Has any portion of the grading shown on the plan been done previously? (If yes, explain the circumstances, the year the work was done, and who completed the work.)

The north central portion of the project boundary has been historically disturbed by mining operations and is currently primarily unvegetated. The mining activity included extensive modifications of the landscape. The activities included the construction of roads, ditches, channels, pits and berms to reroute water around the mine site or isolate it in bermed areas. Some of the modifications still exist in original condition at the what appears to be a "reclaimed" portion of the mining area (presumably the quarry and ore processing area) and some have been left in place and/or failed over time, resulting in a large portion of the northcentral section of the project boundary draining into, and terminating at the bermed reclaimed mining area (bermed pits) (see Attachment D3 (Subsurface Investigation Report)).

7. Have you shown all areas on your site plan that are proposed to be disturbed by grading? (If no, explain fully your answer.)

Yes. Vegetation on the site would be modified only where necessary. Vegetation would be removed where gravel roads would be constructed, where fill would be placed from grading operations, where buildings are to be constructed, and where transmission pole and tracker foundations would be installed (if necessary). At locations where transmission pole and tracker foundations would be installed, minor cuts may be required where the foundations would be driven. Minor earth work would also occur to install aggregate base access roads and transmission line maintenance roads. The surface of the roads would be at-grade to allow any water to sheet flow across the site as it currently does. Throughout the remainder of the developed area on the solar and energy storage site, the vegetation root mass would generally be left in place to help maintain existing drainage patterns on a micro level, and to assist in erosion control. During construction of the solar and energy storage facility, it is expected that most of the vegetation would be cut, trimmed, or flattened as necessary, but otherwise undisturbed so that reestablishment is possible.

8. Can the disturbed area be seen from off-site? If yes, from which directions, and which properties or roadways?

Attachment B, Viewshed Map includes areas off-site that would have potential views of the project site. As seen in the viewshed map, the project site will be visible from sections of Highway 447 and Olinghouse Road located adjacent to the project site. The town of Wadsworth is the closest town to the project site and would not have views of the project site due to intervening topography.

9. Could neighboring properties also be served by the proposed access/grading requested (i.e. if you are creating a driveway, would it be used for access to additional neighboring properties)?

Access to the project site is readily available from Olinghouse Road that consists of an improved gravel road that is being maintained. No new access driveways are proposed that would result in new access to additional neighboring properties. Should the Wadsworth Bypass be approved by Nevada Department of Transportation and constructed prior to the Dodge Flat Energy Center, the Bypass would serve as the primary route of access, connecting to Olinghouse Road.

10. What is the slope (Horizontal:Vertical) of the cut and fill areas proposed to be? What methods will be used to prevent erosion until the revegetation is established?

Cut and fill areas are not anticipated to exceed 1:1 ratio. A stormwater pollution prevention plan (SWPPP) will be prepared to address stormwater quality during construction-related activities, and a design-level SQMP will be submitted to Washoe County at a later date as part of final grading permit approvals, in compliance with Article 421 of the Washoe County Development Code (Storm Water Discharge Program) (see Attachment D2 (Stormwater Quality Management Plan)).

11. Are you planning any berms?

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes, how tall is the berm at its highest?
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12. If your property slopes and you are leveling a pad for a building, are retaining walls going to be required? If so, how high will the walls be and what is their construction (i.e. rockery, concrete, timber, manufactured block)?

No retaining walls are proposed for the project. The topography of the project site is gently sloping, with an average slope of 2%-3% for the proposed developed area.

13. What are you proposing for visual mitigation of the work?

Due to the proposed use, zoning, and existing terrain, no visual mitigation has been proposed, and would not be appropriate for the solar generation facility.

14. Will the grading proposed require removal of any trees? If so, what species, how many and of what size?

Site improvements will not require the removal of any trees.

15. What type of revegetation seed mix are you planning to use and how many pounds per acre do you intend to broadcast? Will you use mulch and, if so, what type?

A revegetation plan and associated seed mix is being prepared for review with Washoe Storey Conservation District. All construction roads and unpaved operation and maintenance site roads will be stabilized with a nontoxic soil stabilizer or soil weighting agent for fugitive dust control.

16. How are you providing temporary irrigation to the disturbed area?

Due to the proposed use, zoning, and existing terrain, no landscaping has been proposed, and would not be appropriate for the solar generation facility.

17. Have you reviewed the revegetation plan with the Washoe Storey Conservation District? If yes, have you incorporated their suggestions?

A revegetation plan and associated seed mix is being prepared for review with Washoe Storey Conservation District.

18. Are there any restrictive covenants, recorded conditions, or deed restrictions (CC&Rs) that may prohibit the requested grading?

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes, please attach a copy.
------------------------------	--	-------------------------------

## Special Use Permit Application for Stables Supplemental Information

(All required information may be separately attached)

Chapter 110 of the Washoe County Code is commonly known as the Development Code. Specific references to administrative permits may be found in Article 810, Special Use Permits.

1. What is the maximum number of horses to be boarded, both within stables and pastured?

The project does not include uses associated with horse facilities.

2. What is the maximum number of horses owned maintained by the owner/operator of the project, both within stables and pastured?

The project does not include uses associated with horse facilities.

3. List any ancillary or additional uses proposed (e.g., tack and saddle sales, feed sales, veterinary services, etc.). Only those items that are requested may be permitted.

The project does not include uses associated with horse facilities.

4. If additional activities are proposed, including training, events, competition, trail rides, fox hunts, breaking, roping, etc, only those items that are requested may be permitted. Clearly describe the number of each of the above activities which may occur, how many times per year and the number of expected participants for each activity.

The project does not include uses associated with horse facilities.

5. What currently developed portions of the property or existing structures are going to be used with this permit?

The project does not include uses associated with horse facilities.

6. To what uses (e.g., restrooms, offices, managers living quarters, stable area, feed storage, etc.) will the barn be put and will the entire structure be allocated to those uses? (Provide floor plans with dimensions).

The project does not include uses associated with horse facilities.

7. Where are the living quarters for the operators of the stables and where will employees reside?

The project does not include uses associated with horse facilities.

8. How many improved parking spaces, both on-site and off-site, are available or will be provided? (Please indicate on site plan.) Have you provided for horse trailer turnarounds?

The project does not include uses associated with horse facilities.

9. What are the planned hours of operation?

The project does not include uses associated with horse facilities.

10. What improvements (e.g. new structures including the square footage, roadway/driveway improvements, utilities, sanitation, water supply, drainage, parking, signs, etc.) will have to be constructed or installed and what is the projected time frame for the completion of each?

The project does not include uses associated with horse facilities.

11. What is the intended phasing schedule for the construction and completion of the project?

The project does not include uses associated with horse facilities.

12. What physical characteristics of your location and/or premises are especially suited to deal with the impacts and the intensity of your proposed use?

The project does not include uses associated with horse facilities.

13. What are the anticipated beneficial aspects or affects your project will have on adjacent properties and the community?

The project does not include uses associated with horse facilities.

14. What are the adverse impacts upon the surrounding community (including traffic, noise, odors, dust, groundwater contamination, flies, rats, mice, etc.) and what will you do to minimize the anticipated negative impacts or effects your project will have on adjacent properties?

The project does not include uses associated with horse facilities.

15. Please describe operational parameters and/or voluntary conditions of approval to be imposed on the administrative permit to address community impacts.

The project does not include uses associated with horse facilities.

16. What types of landscaping (e.g. shrubs, trees, fencing, painting scheme, etc.) are proposed? (Please indicate location on site plan.)

The project does not include uses associated with horse facilities.

17. What type of signs and lighting will be provided? On a separate sheet, show a depiction (height, width, construction materials, colors, illumination methods, lighting intensity, base landscaping, etc.) of each sign and the typical lighting standards. (Please indicate location of signs and lights on site plan.)

The project does not include uses associated with horse facilities.

18. Are there any restrictive covenants, recorded conditions, or deed restrictions (CC&Rs) that apply to the area subject to the administrative permit request? (If so, please attach a copy.)

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
------------------------------	--

19. Community Sewer

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
------------------------------	--

20. Community Water

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
------------------------------	--

*Owner Affidavit*

# Property Owner Affidavit

**Applicant Name:** Dodge Flat Solar, LLC

The receipt of this application at the time of submittal does not guarantee the application complies with all requirements of the Washoe County Development Code, the Washoe County Master Plan or the applicable area plan, the applicable regulatory zoning, or that the application is deemed complete and will be processed.

STATE OF NEVADA       )  
                                  )  
COUNTY OF WASHOE    )

I, Dorothy A. Truitt Palmer  
(please print name)

being duly sworn, depose and say that I am the owner\* of the property or properties involved in this application as listed below and that the foregoing statements and answers herein contained and the information herewith submitted are in all respects complete, true and correct to the best of my knowledge and belief. I understand that no assurance or guarantee can be given by members of Planning and Development.

**(A separate Affidavit must be provided by each property owner named in the title report.)**

Assessor Parcel Number(s): 079-150-11, 079-180-14 and 079-180-16

Printed Name Dorothy A. Truitt Palmer

Signed Dorothy A. Truitt Palmer

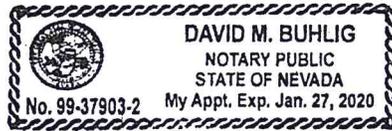
Address 3480 GS Richards Blvd, #101  
Carson City, NV 89703

Subscribed and sworn to before me this  
31<sup>st</sup> day of August, 2017.

David M. Buhlig  
Notary Public in and for said county and state

My commission expires: January 27, 2020

(Notary Stamp)



\*Owner refers to the following: (Please mark appropriate box.)

- Owner
- Corporate Officer/Partner (Provide copy of recorded document indicating authority to sign.)
- Power of Attorney (Provide copy of Power of Attorney.)
- Owner Agent (Provide notarized letter from property owner giving legal authority to agent.)
- Property Agent (Provide copy of record document indicating authority to sign.)
- Letter from Government Agency with Stewardship

**CORPORATE RESOLUTION OF  
NEVADA LAND AND RESOURCE HOLDINGS, INC.**

---

At a telephonic meeting between Maxim Webb, Dorothy A. Timian-Palmer and Stephen D. Hartman, Maxim Webb and Dorothy A. Timian-Palmer were advised that former Chief Executive Officer John R. Hart had been removed from the Board of Managers. As a result of Mr. Hart no longer being affiliated, employed or under contract with Nevada Land and Resource Holdings, Inc. or its parent corporation, PICO Holdings, Inc. PICO Holdings, Inc., through its Board of Directors, has issued an Omnibus Written Consent, executed in counterparts, confirming the removal of John R. Hart from all positions of the PICO group of companies.

Through the action of the PICO Holdings Board of Directors adoption of an Omnibus Written Consent, Nevada Land and Resource Holdings, Inc. designated the following members to be the Officers and Directors of Nevada Land and Resource Holdings, Inc.

The members of Nevada Land and Resource Holdings designated:

1. Dorothy A. Timian-Palmer
2. Maxim Webb
3. Stephen D. Hartman

Now therefore, it is resolved that Dorothy A. Timian-Palmer is hereby elected Chief Executive Officer in addition to her current officers and that Maxim Webb and Stephen D. Hartman are elected as Directors of the corporation.

There being no further business, the changes were directed to be made and appropriate filings and notifications to required regulatory bodies be completed as necessary.

This corporate resolution shall be effective as of October 17, 2016.

Dated this 31<sup>st</sup> day of March, 2017.

**Nevada Land and Resource Holdings, Inc.**  
a Nevada corporation

By:   
Dorothy A. Timian-Palmer, P.E.  
President/CEO

# SECRETARY OF STATE



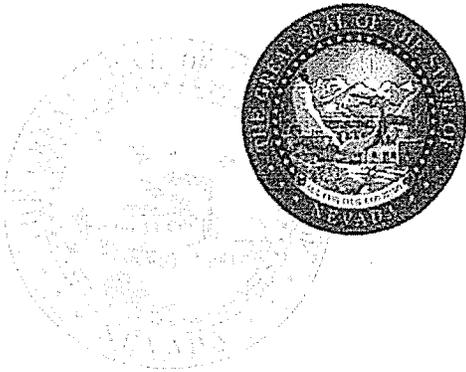
## NEVADA STATE BUSINESS LICENSE

**NEVADA LAND AND RESOURCE HOLDINGS, INC.**  
Nevada Business Identification # NV20021278639

**Expiration Date: April 30, 2018**

In accordance with Title 7 of Nevada Revised Statutes, pursuant to proper application duly filed and payment of appropriate prescribed fees, the above named is hereby granted a Nevada State Business License for business activities conducted within the State of Nevada.

Valid until the expiration date listed unless suspended, revoked or cancelled in accordance with the provisions in Nevada Revised Statutes. License is not transferable and is not in lieu of any local business license, permit or registration.



IN WITNESS WHEREOF, I have hereunto set my hand and affixed the Great Seal of State, at my office on April 4, 2017

*Barbara K. Cegavske*  
BARBARA K. CEGAVSKE  
Secretary of State

*You may verify this license at [www.nvsos.gov](http://www.nvsos.gov) under the Nevada Business Search.*

License must be cancelled on or before its expiration date if business activity ceases.  
Failure to do so will result in late fees or penalties which by law cannot be waived.

**(PROFIT) INITIAL/ANNUAL LIST OF OFFICERS, DIRECTORS AND STATE BUSINESS LICENSE APPLICATION OF:**

ENTITY NUMBER

NEVADA LAND AND RESOURCE HOLDINGS, INC.

C8551-2002

NAME OF CORPORATION



\*100103\*

FOR THE FILING PERIOD OF APR, 2017 TO APR, 2018

USE BLACK INK ONLY - DO NOT HIGHLIGHT

**\*\*YOU MAY FILE THIS FORM ONLINE AT [www.nvsilverflume.gov](http://www.nvsilverflume.gov)\*\***

Return one file stamped copy. (If filing not accompanied by order instructions, file stamped copy will be sent to registered agent.)

**IMPORTANT:** Read instructions before completing and returning this form.

1. Print or type names and addresses, either residence or business, for all officers and directors. A President, Secretary, Treasurer, or equivalent of and all Directors must be named. There must be at least one director. An Officer must sign the form. **FORM WILL BE RETURNED IF UNSIGNED.**

2. If there are additional officers, attach a list of them to this form.

3. Return the completed form with the filing fee. Annual list fee is based upon the current total authorized stock as explained in the Annual List Fee Schedule For Profit Corporations. A \$75.00 penalty must be added for failure to file this form by the deadline. An annual list received more than 90 days before its due date shall be deemed an amended list for the previous year.

4. State business license fee is \$500.00/\$200.00 for Professional Corporations filed pursuant to NRS Chapter 89. Effective 2/1/2010, \$100.00 must be added for failure to file form by deadline.

5. Make your check payable to the Secretary of State.

6. **Ordering Copies:** If requested above, one file stamped copy will be returned at no additional charge. To receive a certified copy, enclose an additional \$30.00 per certification. A copy fee of \$2.00 per page is required for each additional copy generated when ordering 2 or more file stamped or certified copies. Appropriate instructions must accompany your order.

7. Return the completed form to: Secretary of State, 202 North Carson Street, Carson City, Nevada 89701-4201. (775) 684-5708.

8. Form must be in the possession of the Secretary of State on or before the last day of the month in which it is due. (Postmark date is not accepted as receipt date.) Forms received after due date will be returned for additional fees and penalties. Failure to include annual list and business license fees will result in rejection of filing.

(This document was filed electronically.)  
ABOVE SPACE IS FOR OFFICE USE ONLY

Filed in the office of <i>Barbara K. Cegavske</i> Barbara K. Cegavske Secretary of State State of Nevada	Document Number <b>20170147723-14</b>
	Filing Date and Time <b>04/04/2017 10:36 AM</b>
	Entity Number <b>C8551-2002</b>

**CHECK ONLY IF APPLICABLE AND ENTER EXEMPTION CODE IN BOX BELOW**

Pursuant to NRS Chapter 76, this entity is exempt from the business license fee. Exemption code:

**NRS 76.020 Exemption Codes**

**NOTE: If claiming an exemption, a notarized Declaration of Eligibility form must be attached. Failure to attach the Declaration of Eligibility form will result in rejection, which could result in late fees.**

001 - Governmental Entity

005 - Motion Picture Company

006 - NRS 680B.020 Insurance Co.

This corporation is a publicly traded corporation. The Central Index Key number is:

This publicly traded corporation is not required to have a Central Index Key number.

NAME <b>DOROTHY A TIMIAN-PALMER</b>	TITLE(S) <b>PRESIDENT (OR EQUIVALENT OF)</b>
ADDRESS <b>3480 GS RICHARDS BLVD., SUITE 101</b>	CITY STATE ZIP CODE <b>CARSON CITY NV 89703</b>
NAME <b>STEPHEN D HARTMAN</b>	TITLE(S) <b>SECRETARY (OR EQUIVALENT OF)</b>
ADDRESS <b>3480 GS RICHARDS BLVD., SUITE 101</b>	CITY STATE ZIP CODE <b>CARSON CITY NV 89703</b>
NAME <b>MAXIM A WEBB</b>	TITLE(S) <b>TREASURER (OR EQUIVALENT OF)</b>
ADDRESS <b>7979 IVANHOE AVENUE, SUITE 300</b>	CITY STATE ZIP CODE <b>LA JOLLA CA 92037</b>
NAME <b>MAXIM A WEBB</b>	TITLE(S) <b>DIRECTOR</b>
ADDRESS <b>7979 IVANHOE AVENUE, SUITE 300</b>	CITY STATE ZIP CODE <b>LA JOLLA CA 92037</b>

None of the officers or directors identified in the list of officers has been identified with the fraudulent intent of concealing the identity of any person or persons exercising the power or authority of an officer or director in furtherance of any unlawful conduct.

I declare, to the best of my knowledge under penalty of perjury, that the information contained herein is correct and acknowledge that pursuant to NRS 239.330, it is a category C felony to knowingly offer any false or forged instrument for filing in the Office of the Secretary of State.

**X** LEANN BRANDT

Title WATER RIGHTS SPECIALIST Date 4/4/2017 10:36:42 AM

**Signature of Officer or Other Authorized Signature**

Nevada Secretary of State List Profit  
Revised: 7-1-15

**(PROFIT) INITIAL/ANNUAL LIST OF OFFICERS AND DIRECTORS OF:**  
 NEVADA LAND AND RESOURCE HOLDINGS, INC.

ENTITY NUMBER  
 C8551-2002

NAME STEPHEN D HARTMAN	TITLE(S) DIRECTOR		
ADDRESS 3480 GS RICHARDS BLVD., SUITE 101	CITY CARSON CITY	STATE NV	ZIP CODE 89703
NAME DOROTHY A TIMIAN-PALMER	TITLE(S) DIRECTOR		
ADDRESS 3480 GS RICHARDS BLVD., SUITE 101	CITY CARSON CITY	STATE NV	ZIP CODE 89703
NAME	TITLE(S)		
ADDRESS	CITY	STATE	ZIP CODE
NAME	TITLE(S)		
ADDRESS	CITY	STATE	ZIP CODE
NAME	TITLE(S)		
ADDRESS	CITY	STATE	ZIP CODE
NAME	TITLE(S)		
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NAME	TITLE(S)		
ADDRESS	CITY	STATE	ZIP CODE
NAME	TITLE(S)		
ADDRESS	CITY	STATE	ZIP CODE
NAME	TITLE(S)		
ADDRESS	CITY	STATE	ZIP CODE

# Property Owner Affidavit

**Applicant Name:** Dodge Flat Solar, LLC

The receipt of this application at the time of submittal does not guarantee the application complies with all requirements of the Washoe County Development Code, the Washoe County Master Plan or the applicable area plan, the applicable regulatory zoning, or that the application is deemed complete and will be processed.

STATE OF NEVADA     )  
                                  )  
COUNTY OF WASHOE    )

I, HEATH A. RUSHING, MANAGING MEMBER OF NEW NEVADA LAND, LLC  
(please print name)

being duly sworn, depose and say that I am the owner\* of the property or properties involved in this application as listed below and that the foregoing statements and answers herein contained and the information herewith submitted are in all respects complete, true and correct to the best of my knowledge and belief. I understand that no assurance or guarantee can be given by members of Planning and Development.

**(A separate Affidavit must be provided by each property owner named in the title report.)**

Assessor Parcel Number(s): 079-150-29

Printed Name \_\_\_\_\_

Signed [Signature]

Address 125 Roger Sterne Road

Madisonville, LA 70447

Subscribed and sworn to before me this  
5 day of sep, 2011.

(Notary Stamp)

Notary Public in and for said county and state

TRACY A. SALVAGGIO  
Notary Public #84772  
State of Louisiana

My Commission is issued for life

My commission expires: \_\_\_\_\_

\*Owner refers to the following: (Please mark appropriate box.)

- Owner
- Corporate Officer/Partner (Provide copy of recorded document indicating authority to sign.)
- Power of Attorney (Provide copy of Power of Attorney.)
- Owner Agent (Provide notarized letter from property owner giving legal authority to agent.)
- Property Agent (Provide copy of record document indicating authority to sign.)
- Letter from Government Agency with Stewardship

**RESOLUTION ACKNOWLEDGING AND AUTHORIZING  
SUCCESSOR MANAGER FOR NEW NEVADA LANDS, LLC**

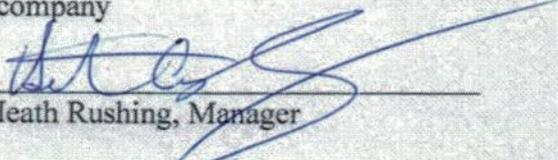
In accordance with Paragraph 7.1(b) of the Operating Agreement of **NEW NEVADA LANDS, LLC**, a Florida limited liability company, and, whereas it is deemed in the best interest of the limited liability company and its member(s) that the company take certain actions:

**RESOLVED**, That upon the death of M. C. Davis on July 11, 2015, **HEATH A. RUSHING**, automatically became the successor Manager of New Nevada Lands, LLC is hereby authorized, empowered, and directed on behalf of **NEW NEVADA LANDS, LLC** to perform all of the duties as described for such position in the Operating Agreement executed effective November 4, 2011, and

**THAT**, this Resolution may be executed in multiple originals or counterparts, all of which taken together shall be but one and the same document and that a facsimile or electronic copy of the signature below shall be binding upon all parties and shall be as enforceable and binding as the original.

**NEW NEVADA LANDS, LLC**, a Mississippi limited liability company

BY: \_\_\_\_\_

  
Heath Rushing, Manager

Dated: \_\_\_\_\_

02/11/16

***Proof of Property Tax Payment***

Washoe County Treasurer  
Tammi Davis

Washoe County Treasurer  
P.O. Box 30039, Reno, NV 89520-3039  
ph: (775) 328-2510 fax: (775) 328-2500  
Email: tax@washoecounty.us

Account Detail

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**Washoe County Parcel Information**

Parcel ID	Status	Last Update
07915011	Active	8/31/2017 2:10:40 AM
<b>Current Owner:</b> NEVADA LAND & RESOURCE HOLDINGS INC  3480 GS RICHARDS BLVD STE 101 CARSON CITY, NV 89703-8442		<b>SITUS:</b> 2505 STATE ROUTE 447 WCTY NV
<b>Taxing District</b>	<b>Geo CD:</b>	
Legal Description		
Section 25 Range 23 SubdivisionName _UNSPECIFIED Township 21		

**Tax Bill (Click on desired tax year for due dates and further details)**

Tax Year	Net Tax	Total Paid	Penalty/Fees	Interest	Balance Due
<a href="#">2017</a>	\$54.19	\$54.19	\$0.00	\$0.00	\$0.00
<a href="#">2016</a>	\$52.81	\$52.81	\$0.00	\$0.00	\$0.00
<a href="#">2015</a>	\$52.71	\$52.71	\$0.00	\$0.00	\$0.00
<a href="#">2014</a>	\$51.08	\$51.08	\$0.00	\$0.00	\$0.00
<a href="#">2013</a>	\$49.58	\$49.58	\$0.00	\$0.00	\$0.00
<b>Total</b>					<b>\$0.00</b>

**Important Payment Information**

- ALERTS:** If your real property taxes are delinquent, the search results displayed may not reflect the correct amount owing. Please contact our office for the current amount due.
- For your convenience, online payment is available on this site. E-check payments are accepted without a fee. However, a service fee does apply for online credit card payments. See [Payment Information](#) for details.

**Pay Online**

No payment due for this account.

**\$0.00**

**Pay By Check**

Please make checks payable to:  
**WASHOE COUNTY TREASURER**

**Mailing Address:**  
P.O. Box 30039  
Reno, NV 89520-3039

**Overnight Address:**  
1001 E. Ninth St., Ste D140  
Reno, NV 89512-2845



The Washoe County Treasurer's Office makes every effort to produce and publish the most current and accurate information possible. No warranties, expressed or implied, are provided for the data herein, its use, or its interpretation. If you have any questions, please contact us at (775) 328-2510 or [tax@washoecounty.us](mailto:tax@washoecounty.us)

This site is best viewed using Google Chrome, Internet Explorer 11, Mozilla Firefox or Safari.

Washoe County Treasurer  
Tammi Davis

Washoe County Treasurer  
P.O. Box 30039, Reno, NV 89520-3039  
ph: (775) 328-2510 fax: (775) 328-2500  
Email: tax@washoecounty.us

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**Washoe County Parcel Information**

Parcel ID	Status	Last Update
07918014	Active	8/31/2017 2:10:40 AM
<b>Current Owner:</b> NEVADA LAND & RESOURCE HOLDINGS INC  3480 GS RICHARDS BLVD STE 101 CARSON CITY, NV 89703-8442		<b>SITUS:</b> 0 UNSPECIFIED WCTY NV
<b>Taxing District</b>		<b>Geo CD:</b>
Legal Description		
Section 19 SubdivisionName _UNSPECIFIED Township 21 Range 24		

**Tax Bill (Click on desired tax year for due dates and further details)**

Tax Year	Net Tax	Total Paid	Penalty/Fees	Interest	Balance Due
<a href="#">2017</a>	\$8.43	\$8.43	\$0.00	\$0.00	\$0.00
<a href="#">2016</a>	\$8.21	\$8.21	\$0.00	\$0.00	\$0.00
<a href="#">2015</a>	\$8.20	\$8.20	\$0.00	\$0.00	\$0.00
<a href="#">2014</a>	\$7.94	\$7.94	\$0.00	\$0.00	\$0.00
<a href="#">2013</a>	\$7.70	\$7.70	\$0.00	\$0.00	\$0.00
Total					\$0.00

**Important Payment Information**

- ALERTS:** If your real property taxes are delinquent, the search results displayed may not reflect the correct amount owing. Please contact our office for the current amount due.
- For your convenience, online payment is available on this site. E-check payments are accepted without a fee. However, a service fee does apply for online credit card payments. See [Payment Information](#) for details.

**Pay Online**

No payment due for this account.

**\$0.00**

**Pay By Check**

Please make checks payable to:  
**WASHOE COUNTY TREASURER**

**Mailing Address:**  
P.O. Box 30039  
Reno, NV 89520-3039

**Overnight Address:**  
1001 E. Ninth St., Ste D140  
Reno, NV 89512-2845



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This site is best viewed using Google Chrome, Internet Explorer 11, Mozilla Firefox or Safari.

Washoe County Treasurer  
Tammi Davis

Washoe County Treasurer  
P.O. Box 30039, Reno, NV 89520-3039  
ph: (775) 328-2510 fax: (775) 328-2500  
Email: tax@washoecounty.us

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**Washoe County Parcel Information**

Parcel ID	Status	Last Update
07918016	Active	8/31/2017 2:10:40 AM
<b>Current Owner:</b> NEVADA LAND & RESOURCE HOLDINGS INC  3480 GS RICHARDS BLVD STE 101 CARSON CITY, NV 89703-8442		<b>SITUS:</b> 0 UNSPECIFIED WCTY NV
<b>Taxing District</b>		<b>Geo CD:</b>
Legal Description		
Section 31 Range 24 SubdivisionName _UNSPECIFIED Township 21		

**Tax Bill (Click on desired tax year for due dates and further details)**

Tax Year	Net Tax	Total Paid	Penalty/Fees	Interest	Balance Due
<a href="#">2017</a>	\$62.88	\$62.88	\$0.00	\$0.00	\$0.00
<a href="#">2016</a>	\$57.85	\$57.85	\$0.00	\$0.00	\$0.00
<a href="#">2015</a>	\$54.82	\$54.82	\$0.00	\$0.00	\$0.00
<a href="#">2014</a>	\$53.12	\$53.12	\$0.00	\$0.00	\$0.00
<a href="#">2013</a>	\$51.58	\$51.58	\$0.00	\$0.00	\$0.00
Total					\$0.00

**Important Payment Information**

- ALERTS:** If your real property taxes are delinquent, the search results displayed may not reflect the correct amount owing. Please contact our office for the current amount due.
- For your convenience, online payment is available on this site. E-check payments are accepted without a fee. However, a service fee does apply for online credit card payments. See [Payment Information](#) for details.

**Pay Online**

No payment due for this account.

**\$0.00**

**Pay By Check**

Please make checks payable to:  
**WASHOE COUNTY TREASURER**

**Mailing Address:**  
P.O. Box 30039  
Reno, NV 89520-3039

**Overnight Address:**  
1001 E. Ninth St., Ste D140  
Reno, NV 89512-2845



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This site is best viewed using Google Chrome, Internet Explorer 11, Mozilla Firefox or Safari.

Washoe County Treasurer  
Tammi Davis

Washoe County Treasurer  
P.O. Box 30039, Reno, NV 89520-3039  
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Email: tax@washoecounty.us

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**Washoe County Parcel Information**

Parcel ID	Status	Last Update
07915029	Active	8/31/2017 2:10:40 AM
<b>Current Owner:</b> NEW NEVADA LANDS LLC  PO BOX 805 DESTIN, FL 32540		<b>SITUS:</b> 0 STATE ROUTE 447 WCTY NV
<b>Taxing District</b>	<b>Geo CD:</b>	
Legal Description		
Section 23 Range 23 SubdivisionName _UNSPECIFIED Township 21		

**Tax Bill (Click on desired tax year for due dates and further details)**

Tax Year	Net Tax	Total Paid	Penalty/Fees	Interest	Balance Due
<a href="#">2017</a>	\$67.74	\$67.74	\$0.00	\$0.00	\$0.00
<a href="#">2016</a>	\$66.02	\$66.02	\$0.00	\$0.00	\$0.00
<a href="#">2015</a>	\$65.89	\$65.89	\$0.00	\$0.00	\$0.00
<a href="#">2014</a>	\$63.84	\$63.84	\$0.00	\$0.00	\$0.00
<a href="#">2013</a>	\$61.98	\$61.98	\$0.00	\$0.00	\$0.00
Total					\$0.00

**Important Payment Information**

- ALERTS:** If your real property taxes are delinquent, the search results displayed may not reflect the correct amount owing. Please contact our office for the current amount due.
- For your convenience, online payment is available on this site. E-check payments are accepted without a fee. However, a service fee does apply for online credit card payments. See [Payment Information](#) for details.

**Pay Online**

No payment due for this account.

**\$0.00**

**Pay By Check**

Please make checks payable to:  
**WASHOE COUNTY TREASURER**

**Mailing Address:**  
P.O. Box 30039  
Reno, NV 89520-3039

**Overnight Address:**  
1001 E. Ninth St., Ste D140  
Reno, NV 89512-2845



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This site is best viewed using Google Chrome, Internet Explorer 11, Mozilla Firefox or Safari.

*Site Plans and Grading Plans*



















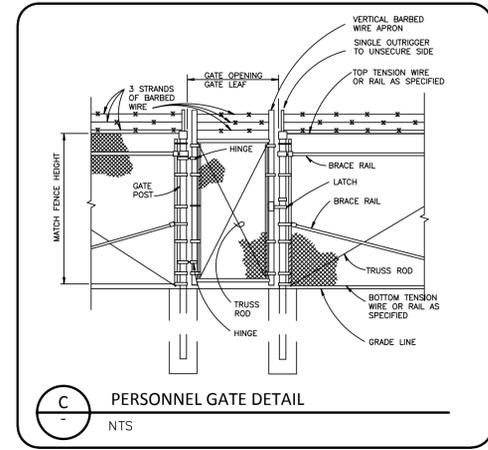






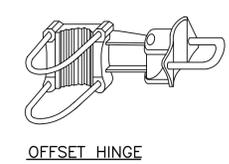
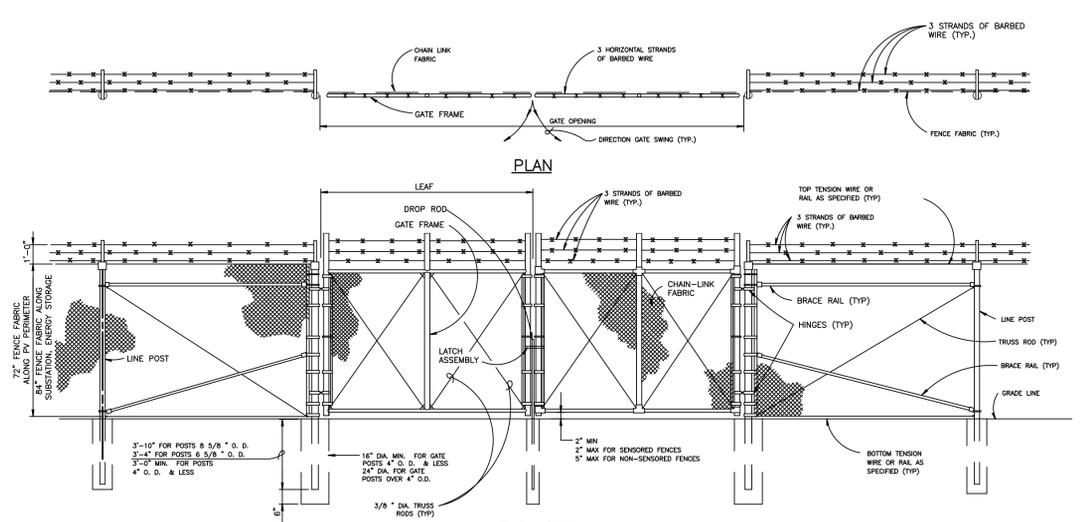






**C PERSONNEL GATE DETAIL**  
 NTS

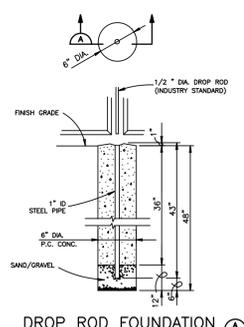
GATE POST SCHEDULE	
GATE LEAF WIDTH (NOMINAL)	OUTSIDE DIMENSION (NOMINAL)
6' OR LESS	2.875" OD 2.5" SQ
GREATER THAN 6' TO 12'	4.0" OD
GREATER THAN 12' TO 18'	6.625" OD
MORE THAN 18'	8.625" OD



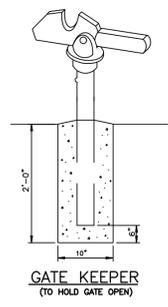
OFFSET HINGE



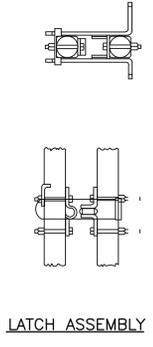
STANDARD HINGE



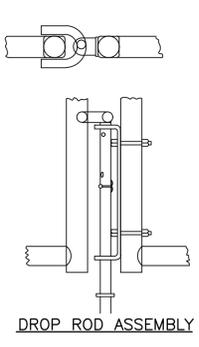
DROP ROD FOUNDATION



GATE KEEPER (TO HOLD GATE OPEN)



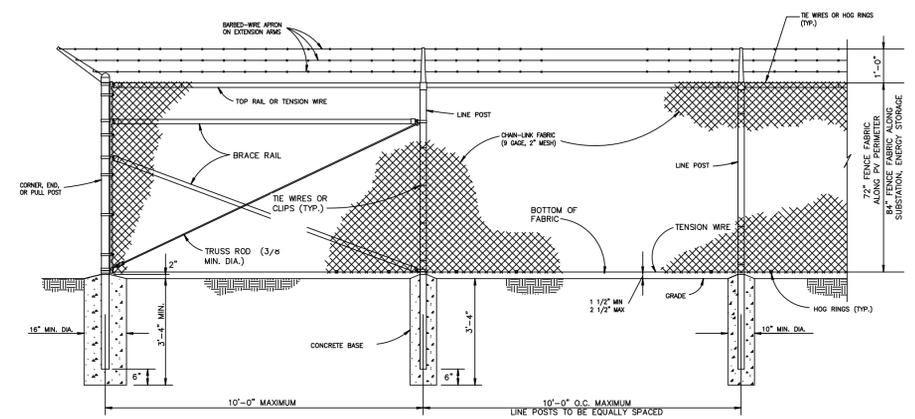
LATCH ASSEMBLY



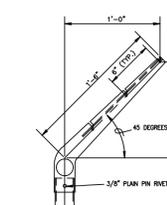
DROP ROD ASSEMBLY

**B CHAIN-LINK FENCE GATE DETAIL**  
 NTS

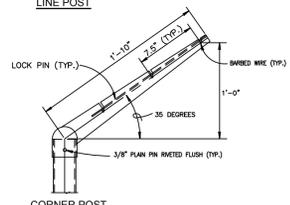
USE AND SECTION	STEEL POST SCHEDULE		
	FABRIC WIDTH 72" OR LESS	FABRIC WIDTH 84" TO 96"	FABRIC WIDTH 108" AND OVER
CORNER, END & PULL POSTS			
TUBULAR - ROUND	2.375" O.D.	2.875" O.D.	4.00" O.D.
TUBULAR - SQUARE	2.50" SQ	2.50" SQ	3.00" SQ
C-SECTION (ROLL-FORMED)	3.50" X 3.50"	3.50" X 3.50"	3.50" X 3.50"
LINE POSTS			
TUBULAR - ROUND	1.90" O.D.	2.375" O.D.	2.875" O.D.
H-SECTION	2.25" X 1.70"	2.25" X 1.70"	2.25" X 1.70"
C-SECTION (ROLL-FORMED)	1.875" X 1.625"	2.25" X 1.70"	2.25" X 1.70"
TOP, BOTTOM & BRACE RAILS			
TUBULAR - ROUND		1.66" O.D.	
TUBULAR - SQUARE		1.50" SQ	
H-SECTION		1.625" X 1.50"	
C-SECTION (ROLL-FORMED)		1.625" X 1.25"	



**CHAIN-LINK SECURITY FENCE DETAIL**  
 NO SCALE

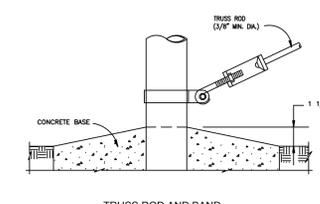


LINE POST

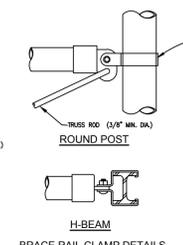


CORNER POST

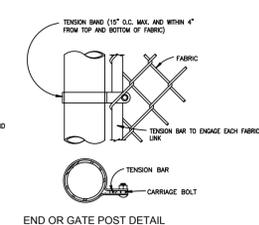
EXTENSION ARM DETAILS  
 NO SCALE



TRUSS ROD AND BAND



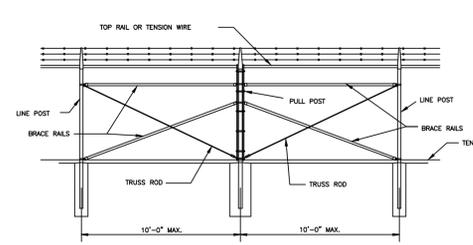
BRACE RAIL CLAMP DETAILS



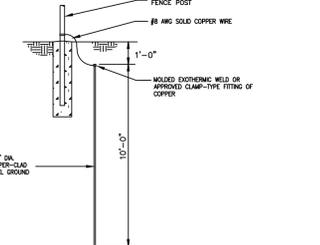
END OR GATE POST DETAIL

TENSION BAND DETAIL

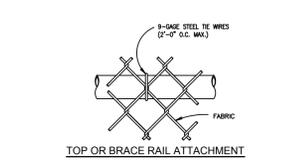
FASTENING DETAILS  
 NO SCALE



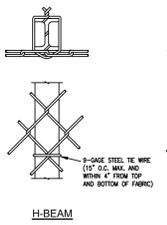
**BRACE PANEL DETAIL**  
 NO SCALE



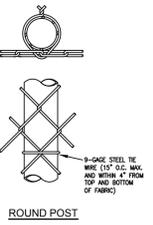
**GROUNDING DETAIL**  
 NO SCALE



TOP OR BRACE RAIL ATTACHMENT



H-BEAM



ROUND POST

LINE POST ATTACHMENTS  
 NO SCALE

**A CHAIN-LINK FENCE DETAIL**  
 NTS

PROJECT NO. 876-002  
 DESIGN: GCW  
 DRAWN: GCW  
 CHECK: GCW  
 PLOT DATE: 10-11-17  
 PLOT TIME: 02:10:48

1555 S. RAINBOW BLVD.  
 LAS VEGAS, NV 89146  
 T: 702.804.2000  
 F: 702.804.2299  
 gcwengineering.com

ENGINEERS' SURVEYORS  
 Todd Kelley

NEXTERA ENERGY RESOURCES  
 DODGE FLAT SOLAR PRELIMINARY  
 FENCE DETAILS



**ATTACHMENT A**  
*Project Description*

# **Project Description**

## **Dodge Flat Solar Energy Center**

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### **PROJECT DESCRIPTION**

#### **Summary**

The proposed Dodge Flat Solar Energy Center represents the “proposed project” purposes of this project description. The proposed project is proposed by Dodge Flat Solar, LLC (the Applicant). This solar generation and energy storage project will connect to an existing 345-kilovolt (kV) transmission line that crosses over the subject property via a proposed new substation and switching station located on site. Dodge Flat Solar, LLC will construct and operate all facilities proposed with the exception of the switching station that would be constructed and operated by NV Energy (NVE).

#### **Proposed Project Description**

The Applicant proposes to construct and operate the proposed project on properties consisting of approximately 1,599 acres in total. Approximately 1,200 acres of the subject property are proposed to be fenced and developed to produce approximately 500,000 megawatt-hours (MWhs) of renewable energy annually. The proposed solar and energy storage project would be a 200-megawatt (MW) alternating current (AC) photovoltaic (PV) solar energy and storage facility with associated on-site substation, inverters, fencing, roads, and supervisory control and data acquisition (SCADA) system. The proposed project would include a 200 MW AC maximum capacity battery system. The proposed project also would include a 345 kV overhead generation interconnection.

#### **Proposed Project Location**

The proposed project site is situated in Section 23, Township 21 North, Range 23 West; Section 25, Township 21 North, Range 23 West; Section 31, Township 21 North, Range 24 West; M.D.B. & M. It is found on the Wadsworth, Nevada U.S. Geological Survey (USGS) 7.5-topographic quadrangle at approximately latitude/longitude 39°39'31N/119°20'53"W. The proposed project site is located west of the intersection of State Route (SR-) 447 and Olinghouse Road, approximately 3.5 miles northeast of the town of Wadsworth, in unincorporated Washoe County, Nevada.

#### **Proposed Project Setting**

The location of the proposed project has been selected because of its proximity to the existing high-voltage transmission corridor; the fact that the land is currently encumbered by existing transmission facilities, pipeline facilities, and roadways; the site was previously disturbed by mining activities; the site has nearby access to existing roads reducing the need for new roads;

## **Project Description**

### **Dodge Flat Solar Energy Center**

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and the site is in an area with excellent solar irradiance. The proposed project site is generally flat with only an approximately 2%–3% gradient overall (a portion of rugged and mountainous terrain at the northeast corner of the subject property has been excluded from the proposed development area, and is not be considered for development at this time). The site generally slopes from west to the east, with elevations of the proposed development being approximately 4,176 to 4,479 feet above mean sea level. Locally, the proposed project would be accessed via SR-447 and Olinghouse Road, via access road easements issued by the Pyramid Lake Paiute Tribe to the site, and an internally constructed road system. Should the Wadsworth Bypass be approved by Nevada Department of Transportation (NDOT) and constructed prior to the proposed project, the Bypass would serve as the primary route of access, connecting to Olinghouse Road.

The north-central portion of the proposed project site has been historically disturbed by mining operations and is currently primarily unvegetated or contains a low cover of non-native plant species. The mining activity included extensive modifications of the alluvial landscape to control the hydrology of the site. The activities included the construction of roads, ditches, channels, pits, and berms to reroute water around the mine site or isolate it in bermed areas. Some of the modifications still exist in their original condition at what appears to be a “reclaimed” portion of the mining area (presumably the quarry and ore processing area) and some have been left in place and/or failed over time, resulting in a large portion of the north-central section of the study area draining into, and terminating at the bermed reclaimed mining area (bermed pits). The remaining proposed project site is vacant and mostly undisturbed with a land cover of native vegetation. Disturbances within the study area include the previously mentioned historical mining activities and uses ancillary to the mining operations, dirt roads, berms, channels, pits, and power lines, as well as small trash dumps, recreational off-road vehicle dirt tracks, and other signs of recent and ongoing human disturbance. One area in the northern section of the proposed project site appears to have been revegetated as evidenced by differing vegetation composition and relic irrigation piping.

The proposed project site has three identified groundwater wells on site in various conditions from prior activities. Each of these wells have production potential and are potentially ideal for use as a water source for proposed project construction and operation. Improvements to the wells, such as new pumps or drilling of replacement wells, may be necessary. Distribution power may need to be extended if not currently being adequately serviced.

Existing land uses and Land Use Zoning Districts on and adjacent to the proposed project site are listed in Table 1.

# Project Description

## Dodge Flat Solar Energy Center

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**Table 1**  
**Proposed Project Existing Land Use and Land Use Zoning District**

Location	Existing Land Use	Land Use Zoning District
Proposed Project Site	Vacant	GR (General Rural)
On-Site Substation	Vacant	GR (General Rural)
North	Vacant	GR (General Rural)
South	Vacant	GR (General Rural)
East	Vacant	GR (General Rural)/ Pyramid Lake Reservation
West	Vacant	GR (General Rural)

**Source:** Truckee Canyon Regulatory Zone Map, Washoe County Community Services Department 2013.

### Proposed Project Characteristics

The proposed project consists of the following components:

- Photovoltaic solar energy generation system
- On-site substation
- Energy storage system
- Ancillary facilities.

### *Solar Energy Generation System*

The proposed project includes a 200 MW solar power-generating installation built over a 12-month period. The existing site would house all structures, including solar panels, tracking/support structures, inverters, SCADA, energy storage facilities, and interconnection facilities (on-site substation and switching station), all of which would be enclosed by a perimeter security fence. Solar energy would be captured by an array of approximately 709,000 PV panels mounted to a single-axis tracking system (Note: the final number of panels will be determined based on the selected panel manufacturer and size of the panel selected).

The high-efficiency commercially available PV panels convert incoming sunlight to direct current (DC) electrical energy (see photo to the right). The panels are arranged in series to effectively increase output voltage to approximately 1,500 volts. These series chains of panels are called “strings” in industry terms, and provide the basic building block of power conversion in the solar array. The strings are combined in the solar field via an above- or



## **Project Description**

### **Dodge Flat Solar Energy Center**

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belowground DC collection system, and then further ganged together at the inverter stations, where the energy is converted to AC and then stepped to an intermediate voltage, typically 34.5 kV. The chosen PV panel would either be crystalline silicon or thin film and would be well suited for the desert environment due to their durability and reliability.

The tracking system would be supported, when practical, by driven piers (piles) directly embedded into the ground and would be parallel to the ground. The system would rotate slowly throughout the day at a range of +/- 60 degrees facing east to west to stay perpendicular to the incoming solar rays so that production can be optimized.

Each tracker would hold approximately 80 to 90 panels (depending on final configuration) and at its highest rotated edge would have a maximum height of approximately 12 feet above grade, depending on the dimensions of the chosen panel. The minimum clearance from the lower edge of the panel to ground level is approximately 18 to 24 inches, pending final design.

The inverter stations would be up to 13 feet in height and perform three critical functions for the solar plant: (1) collect DC power in a central location, (2) convert the DC power into AC power, and (3) convert low-voltage AC power to medium-voltage AC power. The inverter stations are typically open-air and well suited for desert environments. The stations consist of DC collection equipment, utility-scale inverters, and a low- to medium-voltage transformer. The output power from the inverter stations is then fed to the AC collection system via an above- or below-ground collection system. This AC collection system would deliver the electricity to the on-site substation, where the voltage would be stepped up to the interconnection voltage.

#### ***On-Site Substation and Switching Station***

On-Site Substation: The proposed project's on-site substation is the termination point of the collection system of 34.5 kV electricity. The output of the entire field is passed through a final interconnection step-up transformer to convert it to the interconnection voltage at 345 kV. The footprint of the on-site substation would be approximately 3.2 acres. Additionally, a telecommunications monopole with antenna dishes would also be constructed that is anticipated to be around 225 feet tall. The on-site substation would be constructed and operated by Dodge Flat Solar, LLC.

Switching Station: A separate switching station is proposed to host the interconnection safety equipment and switches required to interconnect to the high-voltage transmission system. The open-air on-site substation and switching stations would be constructed directly adjacent to and north of the existing 345 kV transmission line crossing the proposed project. Typical 345kV A-Frame structure that would be constructed within the Switching Station footprint will be

## **Project Description**

### **Dodge Flat Solar Energy Center**

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approximately 65 feet tall and include a 10-foot tall lightning mast attached at the top of the structure resulting in a total height of 75 ft. Additionally, a telecommunications monopole with antenna dishes would also be constructed that is anticipated to be around 90 feet tall. The switching station would also have a perimeter chain link fence, which is likely to be 6 feet tall topped with 1 foot of three-strand barbed wire (7 feet, total height). The footprint of the switching station would be approximately 5.7 acres.

The existing NVE 3421 Line that currently runs from East Tracy to Valmy will be folded into the proposed switching station. The line fold will consist of four (4) total structures; two (2) three-pole angle structures and two (2) three pole in-line dead-end structures. All structures range in height, up to approximately 120 feet tall (and could be taller, potentially up to 135 feet tall).

The switching station would be constructed and operated by NVE.

#### ***Energy Storage System***

Adjacent to the on-site substation, an energy storage system is proposed to provide a maximum capacity of 200 MW. The energy storage batteries would be housed in (an) enclosure(s), and would be located on approximately 5 acres of the proposed project site. The maximum height of the enclosure(s) would be up to 25 feet. The batteries would be housed in an open-air-style racking (similar to server racking), 7 to 9 feet high. The associated inverters, transformers, and switchgear would be located immediately adjacent to the enclosure(s) on concrete pads.

The energy storage equipment would be contained in (an) enclosure(s) that would also have a fire rating in conformance with local fire authority and County standards. The equipment would also have heating, ventilation, and air conditioning (HVAC) systems for thermal management of the batteries. Power to the HVAC, lighting, etc. would be provided via a connection to the on-site station service transformer with connection lines installed above and/or below ground. The energy storage system would be un-staffed and would have remote operational control and periodic inspections/maintenance performed as necessary.

#### ***Ancillary Facilities***

##### **Access Road**

The proposed primary project access road would be 20 feet wide, composed of asphalt concrete and would connect to Olinghouse Road. This road would connect to SR-447 and would require the improvement of approximately 1.8 miles of existing road. An easement will need to be

## **Project Description**

### **Dodge Flat Solar Energy Center**

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obtained from the Pyramid Lake Paiute Tribe for a portion of Olinghouse Road that is located on tribal reservation lands.

Perimeter roads connecting parcels connecting the project would consist of existing 20-foot-wide access roads within an existing 40-foot water pipeline and well easement, private easements, and traversing lands administered by the Bureau of Land Management, from whom Dodge Flat Solar is requesting a 100-foot easement.

The internal access roads to the onsite substation, switching station, and energy storage system would consist of 20-foot-wide roads with 6 inches of type II class B aggregate based compacted to 95% maximum dry density. Internal maintenance pathways between solar modules would be 16-foot-wide.

Access roads will be utilized by Dodge Flat Solar, LLC, Nevada Land and Resource Holding LLC and NVE.

#### **Signage**

A small sign at the site main entry to the proposed project would be installed. The sign would be no larger than 8 by 4 feet, and read “Dodge Flat Solar Energy Center.” In addition, required safety signs would be installed identifying high voltage within the facility on the fence near the entrance, as well as information for emergency services.

#### **Perimeter and Substation Fence**

The perimeter of the proposed project site would be enclosed by a 6-foot-tall chain-link fence topped with a foot of three-strand barbed wire. Access into the proposed project site would be provided through drive-through gates. The main purpose of the fence is to prevent unauthorized access to the site. The total height, above grade, of the fence would be approximately 7 feet. The perimeter around the proposed substation would be enclosed by a 7-foot-tall chain-link fence, topped with a foot of three-strand barbed wire.

#### **Lighting**

Low-elevation (<14 foot) controlled security lighting would be installed at primary access gates and the on-site substation, and entrance to energy storage structure. The lighting is only switched on when personnel enter the area (either motion-sensor or manual activation [switch]). All safety and emergency service signs would be lighted when the lights are on. The lighting would be shielded so that the light is directed downwards. Electrical power to supply the access gate and lighting would be obtained from NV Energy. Lighting would only be in areas where it is

## Project Description

### Dodge Flat Solar Energy Center

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required for safety, security, or operations. All lighting would be directed on site and would include shielding as necessary to minimize illumination of the night sky or potential impacts to surrounding viewers.

#### Construction

##### *Schedule*

The proposed project is intended to be constructed in a single phase; however may be developed in multiple phases depending on pending power purchase agreements. The total construction duration associated with all project components for each phase is planned to take no more than 12 months from notice to proceed to final connection and commissioning. It is anticipated that the work would be completed in 8- to 10-hour shifts, with a total of five shifts per week (Monday–Friday). Overtime and weekend work would be used only as necessary to meet scheduled milestones or accelerate schedule and would comply with all applicable Nevada labor laws. Primary construction activities and durations are presented in Table 2. The activities shown in Table 2 would be overlapping in certain phases, but all are expected to occur within the estimated 12-month construction duration for each phase.

##### *Traffic*

Peak daily construction employees would be approximately 500 daily. In addition to the 500 maximum daily workers traveling to the site, there would be up to 116 truck trips per day at peak construction activity (when trenching and system installation phases overlap). A total of up to 616 trips per day are anticipated during peak construction activities, assuming a worst-case scenario whereby no carpooling occurs, though it is likely that carpooling would occur.

**Table 2**  
**Proposed Project Construction – Estimated Truck Activity**

Truck Type	Average No. On Site	Gross Weight (pounds)	Trips/Day	Duration
8,000 Gallon Water Truck—will stay on site (loaded)	8	80,000	0	24 Months
20 Cubic Yard Dump/Bottom Dump Truck (loaded)	12	80,000	16+	3 Months
Pick-up Trucks	80	8,000	8	24 Months
Pile Driver	16	15,000	4	13 Months
Grader	8	54,000	4	10 Months
Boom Truck with Bucket	4	42,000	4	13 Months
Component Delivery Trucks	4	42,000	76	13 Months
Utility Line Service Truck	12	30,000	4	10 Months
<b>TOTAL</b>	—	—	<b>116</b>	—

## **Project Description**

### **Dodge Flat Solar Energy Center**

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Delivery of materials and supplies would reach the site via on-road truck delivery via SR-447 and the project access road. The majority of the truck deliveries would be for the PV system installation, as well as any aggregate material that may be required for road base. It is estimated that a total of up to 8,250 truck trips will be required to complete the proposed project, with the aggregate trucks accounting for approximately 30% of this number. It is estimated that there would be an average of 885 truck deliveries per month (about 43 per work day) with a peak number of truck deliveries of 1,265 deliveries per month (about 59 per work day), plus one other miscellaneous delivery equates to a peak truck trip of 60 per work day. These truck trips would be intentionally spread out throughout the construction day to optimize construction efficiency as is practical by scheduling deliveries at predetermined times.

The heaviest delivery loads to the site would also consist of the tracker structures, rock truck deliveries, and the delivery of the generator step up (GSU). These loads would typically be limited to a total weight of 80,000 pounds, with a cargo load of approximately 25 tons or 50,000 pounds of rock or tracker structures. The GSU could be up to 160,000 pounds. Typically, the rock is delivered in “bottom dump trucks” or “transfer trucks” with six axles and the tracker structures would be delivered on traditional flatbed trucks with a minimum of five axles. Low bed transport trucks would transport the construction equipment to the site as needed. The size of the low bed truck (axles for weight distribution) would depend on the equipment transported.

#### ***Construction Activities***

Because the proposed project site is fairly level, grading is expected to be minor in most instances. However, grading would occur throughout the site, especially for the construction of roads and inverter pads. This would be accomplished with scrapers, motor graders, water trucks, dozers, and compaction equipment. The PV modules would be off-loaded and installed using small cranes, boom trucks, forklifts, rubber-tired loaders, rubber-tired backhoes, and other small-to medium-sized construction equipment, as needed. Construction equipment would be delivered to the site on “low-bed” trucks unless the equipment can be driven to the site (for example the boom trucks). It is estimated that there would be approximately 116 pieces of construction equipment on site each month (see Table 2).

Vegetation on the site would be modified only where necessary. Vegetation would be removed where gravel roads would be constructed, where fill would be placed from grading operations, where buildings are to be constructed, and where transmission pole and tracker foundations would be installed (if necessary). At locations where transmission pole and tracker foundations would be installed, minor cuts may be required where the foundations would be driven. Minor earth work would also occur to install aggregate base access roads and transmission line maintenance roads. The surface of the roads would be at-grade to allow any water to sheet flow across the site as it

## **Project Description**

### **Dodge Flat Solar Energy Center**

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currently does. Throughout the remainder of the developed area on the solar and energy storage site, the vegetation root mass would generally be left in place to help maintain existing drainage patterns on a micro level, and to assist in erosion control. During construction of the solar and energy storage facility, it is expected that most of the vegetation would be cut, trimmed, or flattened as necessary, but otherwise undisturbed so that reestablishment is possible.

#### ***Water Use***

Water consumption during construction is estimated to be approximately 250 acre-feet (AF) for dust suppression and earthwork over an approximately 12-month period. Panel rinsing is expected to be conducted up to four times annually as performance testing and as weather and site conditions dictate. Construction, as well as operational water for panel rinsing, would be provided by on-site groundwater through up to three improved existing wells, or a new well permitted and drilled (if necessary). An on-site diesel generator may be used to power pumps for well water use during construction. During construction, water would be pumped directly into 2,000- to 4,000-gallon tank water trucks. Water may be stored in temporary approximately 12,000-gallon water storage tower/tanks (up to 16 feet tall), to assist in the availability of water for trucks and expedient filling thereof. The existing wells on site that would not be used would be capped in place in accordance with County requirements.

#### **On-Site Electrical Distribution**

Existing electrical power distribution lines on site that serve existing facilities, including well pumps, would be removed to allow for the proposed project development. New distribution lines would be needed to provide backup power to the solar and energy storage facilities for lighting and communications purposes, as well as to the groundwater well pump(s).

#### **Operation**

The proposed project would be unmanned and no operation and maintenance building would be constructed. Operations would be monitored remotely via the SCADA system and periodic inspections and maintenance activities would occur. During operations, solar panel washing is expected to occur one to four times per year and general labor (up to 20 individuals) may assist in the panel cleaning. Panel washing for a project of this size would require 25 days to complete per wash cycle. Water consumption is expected to be around 0.28 gallons per square yard of panel based on other similar operations. Given a 200 MW AC plant, with four cycles per year, the annual water usage is expected to consume up to approximately 20 AF of water. While the Applicant only expects to actually wash the PV panels once per year, the panels may need to be washed more frequently (up to four times per year) based on site conditions. Conditions that may

## **Project Description**

### **Dodge Flat Solar Energy Center**

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necessitate increased wash requirements include unusual weather occurrences, forest fires, local air pollutants, and other similar conditions. Therefore, the proposed project is requesting the use of up to 20 AF per year for the explicit use of washing panels. This amount is in addition to the amount of water necessary for the operations, fire suppression, and site landscape maintenance, which is a small amount of groundwater (i.e., approximately 2.0 AF) to be used for this purpose. In the event that electrical power distribution cannot be delivered to the groundwater pump, a generator would be located adjacent to the well pump to provide power. If groundwater proves unsuitable for washing, water trucks would be used to deliver water from a local purveyor.

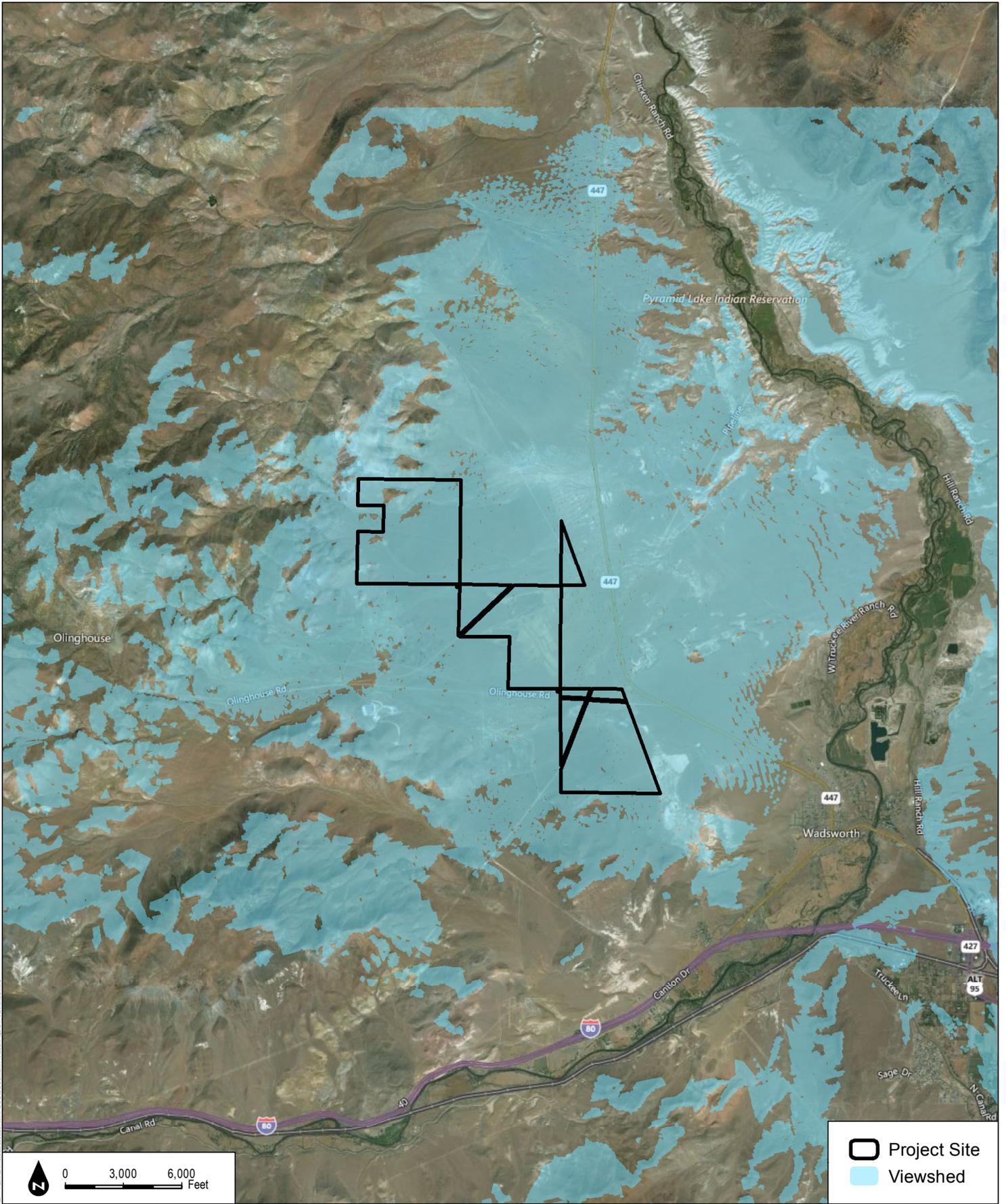
### **Decommissioning**

The PV system and energy storage system (including structure) would be recycled when the proposed project's life is over. Most parts of the proposed system are recyclable. Panels typically consist of silicon, glass, and a metal frame. Batteries include lithium-ion, which degrades but can be recycled and/or repurposed. Site structures would include steel or wood and concrete. All of these materials can be recycled. Concrete from deconstruction is to be recycled. Local recyclers are available. Metal and scrap equipment and parts that do not have free-flowing oil may be sent for salvage.

Fuel, hydraulic fluids, and oils would be transferred directly to a tanker truck from the respective tanks and vessels. Storage tanks/vessels would be rinsed and transferred to tanker trucks. Other items that are not feasible to remove at the point of generation, such as smaller containers, lubricants, paints, thinners, solvents, cleaners, batteries, and sealants would be kept in a locked utility building with integral secondary containment that meets Certified Unified Program Agencies (CUPA) and Resource Conservation and Recovery Act (RCRA) requirements for hazardous waste storage until removal for proper disposal and recycling. It is anticipated that all oils and batteries would be recycled at an appropriate facility. Site personnel involved in handling these materials would be trained to properly handle them. Containers used to store hazardous materials would be inspected regularly for any signs of failure or leakage. Additional procedures would be specified in the Hazardous Materials Business Plan (HMBP) closure plan. Transportation of the removed hazardous materials would comply with regulations for transporting hazardous materials, including those set by the United States Department of Transportation (USDOT), NDOT, U.S. Environmental Protection Agency (EPA), Nevada Highway Patrol (NHP), and Nevada State Fire Marshal.

Upon removal of the proposed project components, the site would be left as disturbed dirt generally consistent with the existing (pre-development) conditions.

**ATTACHMENT B**  
*Viewshed Map*



- Project Site
- Viewshed

**FIGURE 1**  
**Viewshed**

Washoe, NV



SOURCE: BING; Storey County GIS; EPA

Dodge Flat Solar Energy Project

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**ATTACHMENT C**  
*Project Site Photos*

# Project Site Photos

## Dodge Flat Solar Energy Center

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**Photo 1** – Overview of Olinghouse Road looking west from the Olinghouse Road/Highway 447 intersection.



**Photo 2** – Overview of Olinghouse Road looking east from the western limits of the project site.

## Project Site Photos Dodge Flat Solar Energy Center

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**Photo 3** – Overview of the project site looking north from Olinghouse Road.



**Photo 4** – Nevada Energy high-voltage facilities located near the proposed substation and switchyard.

# **ATTACHMENT D1**

## *Construction Traffic Haul Route Plan*

**Construction Traffic Haul Route Plan  
Dodge Flat Solar Energy Center**

*Prepared for:*

**Dodge Flat Solar, LLC**  
700 Universe Boulevard  
Juno Beach, Florida 33408

*Prepared by:*

**DUDEK**

**MAY 2017**

# Construction Traffic Haul Route Plan

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# Construction Traffic Haul Route Plan

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# Construction Traffic Haul Route Plan

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## 1 CONSTRUCTION TRAFFIC HAUL ROUTE PLAN

The purpose of this Construction Traffic Haul Route Plan is to identify existing Washoe County roads proposed for use during construction, document the existing surface conditions of these roads, and suggest approach to roadway maintenance, rehabilitation and restoration.

### 1.1 Project Description

This project is proposed by Dodge Flat Solar LLC (the Applicant). This solar generation and energy storage project will connect to an existing 345-kilovolt (kV) transmission line that crosses over the subject property via a proposed new substation and switching station located on site. The Applicant proposes to construct and operate the proposed project on properties consisting of approximately 1,632 acres in total (See Figures 1 and 2). The proposed solar and energy storage project would be a 200-megawatt (MW) alternating current (AC) photovoltaic (PV) solar energy and storage facility with associated on-site substation, inverters, fencing, roads, and supervisory control and data acquisition (SCADA) system.

### 1.2 Proposed Project Location

The proposed project site is situated in Section 23, Township 21 North, Range 23 West; Section 25, Township 21 North, Range 23 West; Section 31, Township 21 North, Range 24 West; M.D.B. & M. It is found on the Wadsworth, Nevada U.S. Geological Survey (USGS) 7.5-topographic quadrangle at approximately latitude/longitude 39°39'31N/119°20'53"W (see Figure 1, Regional Map, and Figure 2, Vicinity Map). The proposed solar project site is located west of the intersection of State Route (SR-) 447 and Olinghouse Road, approximately 3.5 miles northeast of the town of Wadsworth, in unincorporated Washoe County, Nevada.

### 1.3 Applicable Regulations

The project shall be subject to and comply with the Construction Traffic requirements as identified in Section 110.436.20(1) of the Washoe County Development Code.

### 1.4 Impacted Washoe County Roads

The proposed project site will be accessed exclusively from Olinghouse Road (see Figure 2). Per the Washoe County Road Map, Revised October 2010, Olinghouse road is classified as a County Maintained Presumed Public Road. Construction traffic will utilize Olinghouse Road from SR-447, westerly 0.67 miles to the easterly project boundary, and then continuing 0.37 miles through the project, allowing for access to the internal private project road system, for a total of approximately 1.04 miles of road usage and impacts during construction.

# Construction Traffic Haul Route Plan

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In the vicinity of the project, Olinghouse Road is currently an approximately 25' wide dirt road running east to west. It is generally in good condition, with no major erosion or deterioration issues (See Figure 3).

## 1.5 Rehabilitation, Maintenance and Restoration

At the beginning of construction, Olinghouse Road would be rehabilitated as needed to support the anticipated additional construction traffic loadings, which may include stabilization and improvement of the existing road base, adding compacting gravel as appropriate and as approved by the Washoe County Engineer. During construction, additional gravel may be applied and compacted as needed to maintain suitability for construction traffic, to support local residential traffic in the area, and to assure unimpeded emergency vehicle access. After construction, Olinghouse Road would be rehabilitated as needed, to restore the existing design life, as approved by the Washoe County Engineer.

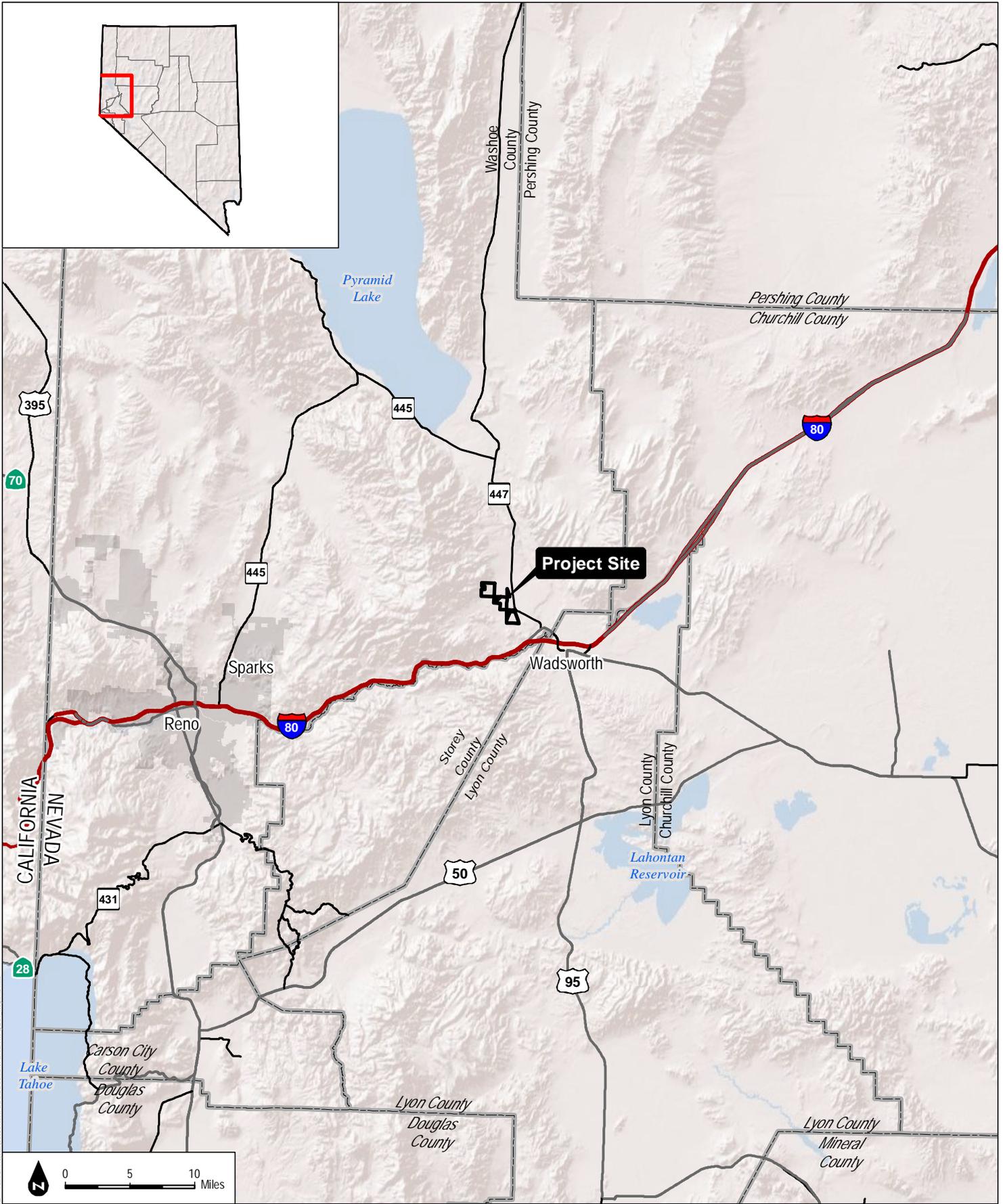
## 1.6 Haul Route Management

To minimize traffic impacts to the local road system, local residents, and the Washoe County School District, truck deliveries to the site during construction will be limited to off-peak hours.

The proposed project would be accessed via SR-447 via Olinghouse Road (see Figure 3 and Photo 1 below). In order to warn drivers of slow moving construction related traffic, and of truck traffic entering and exiting SR-447, the project will provide signage in compliance with the traffic control guidelines as per NDOT Standard Plans for Road and Bridge Construction, 2017 Edition. Specifically, the project would utilize and adhere to Standard Plan T35.1.1 and T35.1.10, as shown in Figures 4 and 5 below. Additional signage would be placed along Olinghouse Road as approved by the Washoe County Engineer.



**Photo 1** – Olinghouse Road looking west from SR-447/Olinghouse Road intersection.



SOURCE: ESRI Basemaps

**DUDEK**

Dodge Flat Solar Energy Center

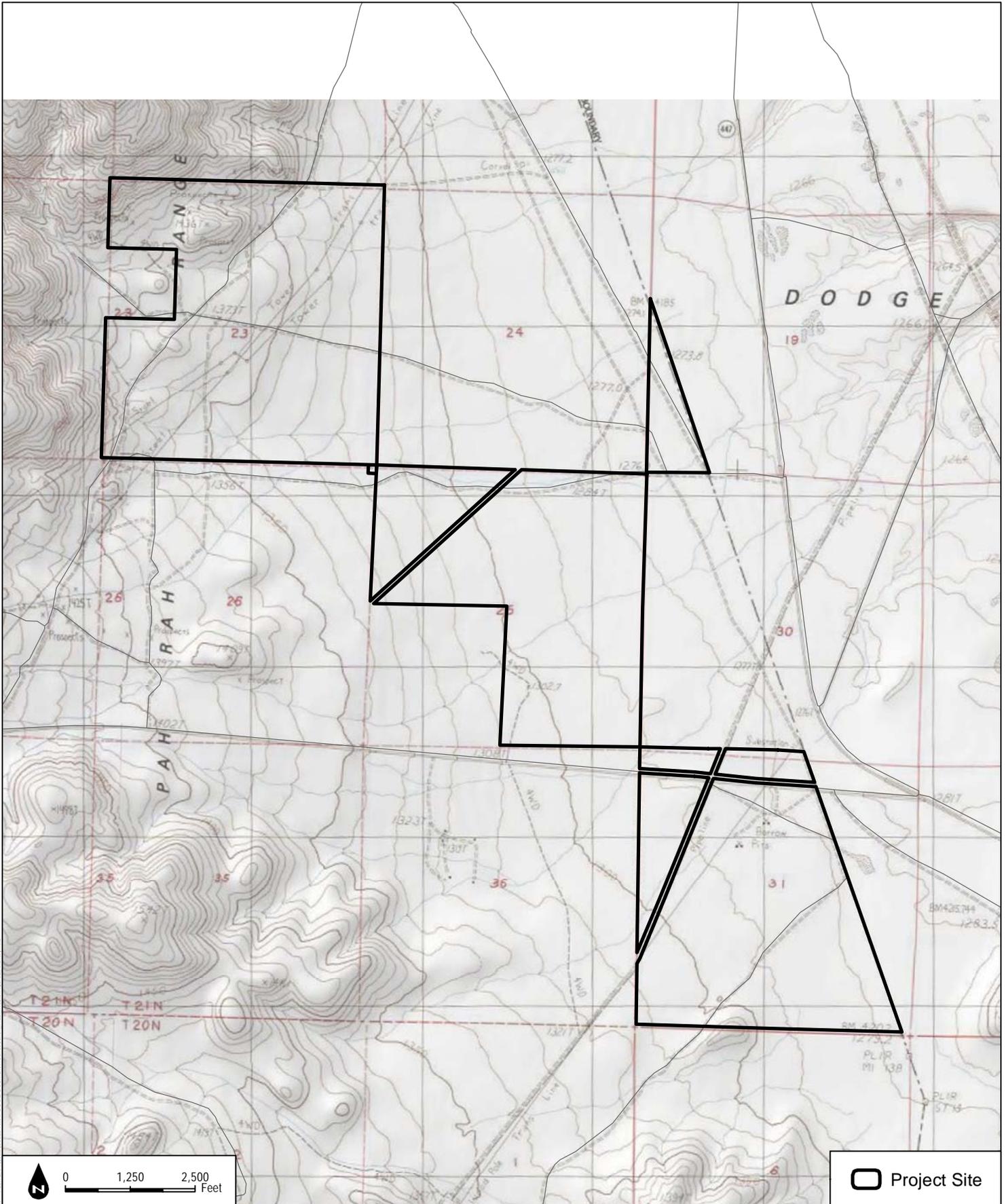
**FIGURE 1**  
Regional Map

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## Construction Traffic Haul Route Plan

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Project Site

**DUDEK**

SOURCE: ESRI Basemaps; Storey County GIS

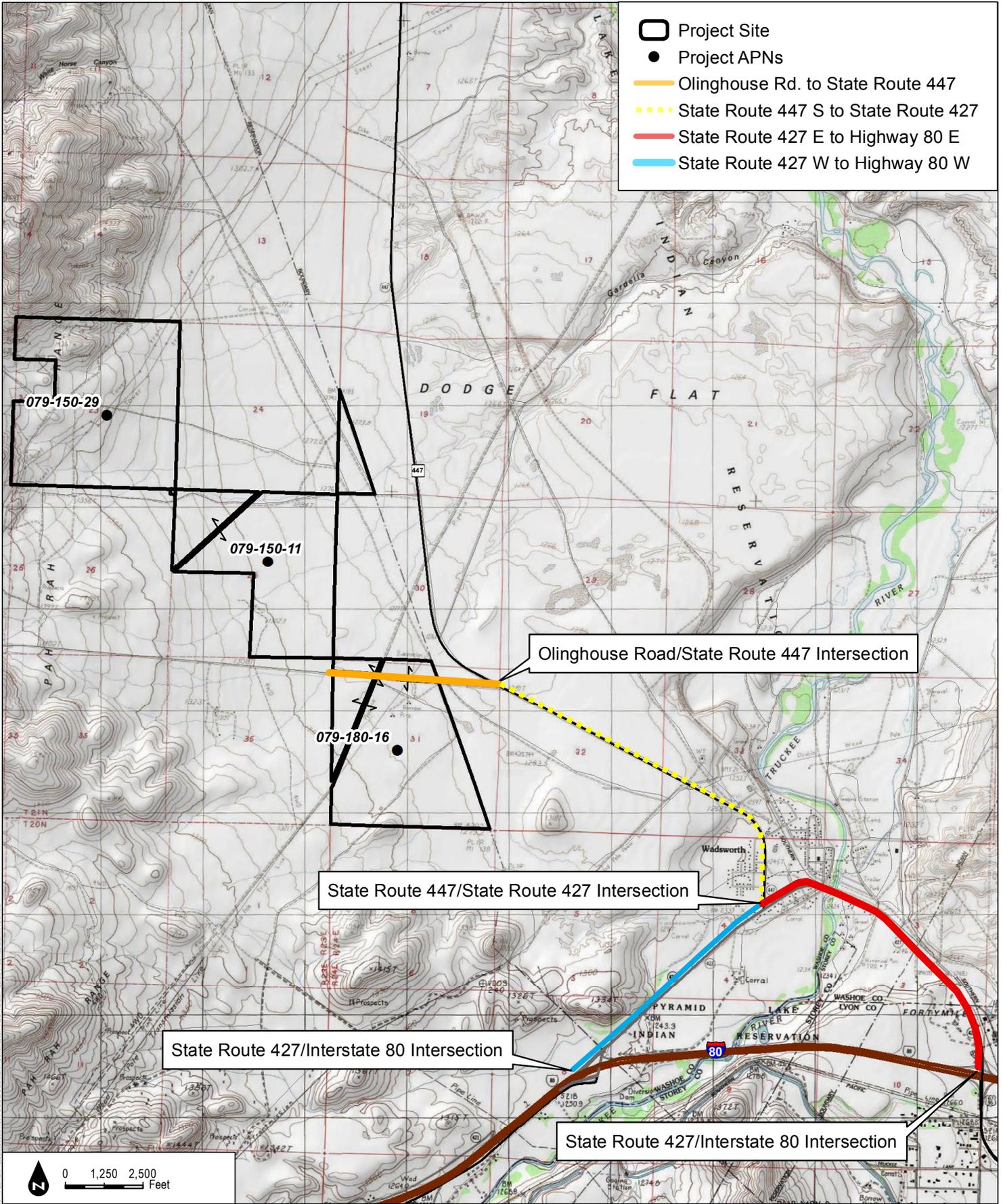
Dodge Flat Solar Energy Center

**FIGURE 2**  
Vicinity Map

## Construction Traffic Haul Route Plan

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- Project Site
- Project APNs
- Olinghouse Rd. to State Route 447
- State Route 447 S to State Route 427
- State Route 427 E to Highway 80 E
- State Route 427 W to Highway 80 W



SOURCE: ESRI Basemaps; Storey County GIS



Dodge Flat Solar Energy Center

**FIGURE 3**  
Haul Route to Highway 80

## Construction Traffic Haul Route Plan

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2

TAPER LENGTH AND CHANNELIZING DEVICE SPACING

1

ADVANCE WARNING SIGN SPACING

SPEED (mph)	DISTANCE BETWEEN SIGNS (ft)		
	A	B	C
	0-20	200	200
25-30	300	300	300
35-40	400	400	400
45-50	600	600	600
55-75	1000	1600	2640

SPEED (mph)	LENGTH FOR MERGING TAPER (L)			TAPER & CHANNELIZATION DEVICE SPACING (ft)
	10.0ft	11.0ft	12.0ft	
20	80	80	80	20
25	125	125	125	25
30	150	180	180	30
35	210	245	245	35
40	280	320	320	40
45	450	495	540	45
50	500	550	600	50
55	550	605	660	55 *
60	600	660	720	60 *
65	650	715	780	65 *
70	700	770	840	70 *
75	750	825	900	75 *

\* ON RURAL INTERSTATE HIGHWAYS WHERE THE SPEED LIMIT IS 55 MPH OR GREATER, THE CHANNELIZATION DEVICE SPACING (EXCEPT FOR TAPERS) MAY BE INCREASED TO 80 FEET. WHEN INCREASED DEVICE SPACING IS USED, 3 DRUMS WILL BE PLACED DIAGONALLY AT 0.5 MILE INCREMENTS TO INDICATE THE LANE IS CLOSED.

NOTES:

- Projects with an existing speed limit greater than 55 MPH may be temporarily reduced by 10 MPH or to 55 MPH, whichever is lower, with the concurrence from the Chief Traffic Operations Engineer. Any temporary reductions to a speed lower than 55 MPH may be reduced with concurrence from the Chief Traffic Operations Engineer and a recommendation forwarded by Traffic Operations to the Director for approval.
- The W1-3 signs shall be used when the recommended speed on a curve is 30 mph or less, the W1-4 signs shall be used when the recommended speed is 35 mph or greater.
- The W6-3 and R4-1 signs shall be installed alternately at 0.5 mile intervals when the lengths of crossovers exceed 0.5 mile.
- All regulatory signs (R series) shall be black on retroreflective white.
- All warning signs (W series) shall be black on retroreflective orange.
- Warning signs shall be a minimum of (3' x 3') for speeds of 45 mph or less, R2-1 shall be (3' x 4').
- Warning signs shall be a minimum of (4' x 4') for speeds of 50 mph or greater, R2-1 shall be (4' x 5').

3

BUFFER LENGTH

SPEED (mph)	LENGTH (ft)
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645
70	730
75	820

4

SHIFTING TAPER = 1/2 L  
SHOULDER TAPER = 1/3 L

$\leq 40 \text{ mph} \quad \frac{L=WS^2}{60}$ $\geq 45 \text{ mph} \quad L=WS$
S = Speed(mph)
L = Taper Length(ft)
W = Width of Lateral Shift(ft)

TYPICAL APPLICATIONS:

NDOT STANDARD SHEETS T-35.1.2 THRU T-35.1.17 INCLUDE A VARIETY OF TRAFFIC CONTROL METHODS, BUT DO NOT INCLUDE A LAYOUT FOR EVERY CONCEIVABLE WORK SITUATION, TYPICAL APPLICATIONS SHOULD BE ALTERED WHEN NECESSARY TO FIT THE CONDITIONS OF A PARTICULAR TEMPORARY TRAFFIC CONTROL ZONE. FOR ADDITIONAL INFORMATION REFER TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND REVISIONS.

ADVANCE WARNING ARROW PANEL

TYPE	MINIMUM SIZE (INCHES)	POSTED SPEED
A	48 X 24	30 MPH OR LESS
B	60 X 30	35 MPH TO 50 MPH
C	96 X 48	55 MPH OR MORE

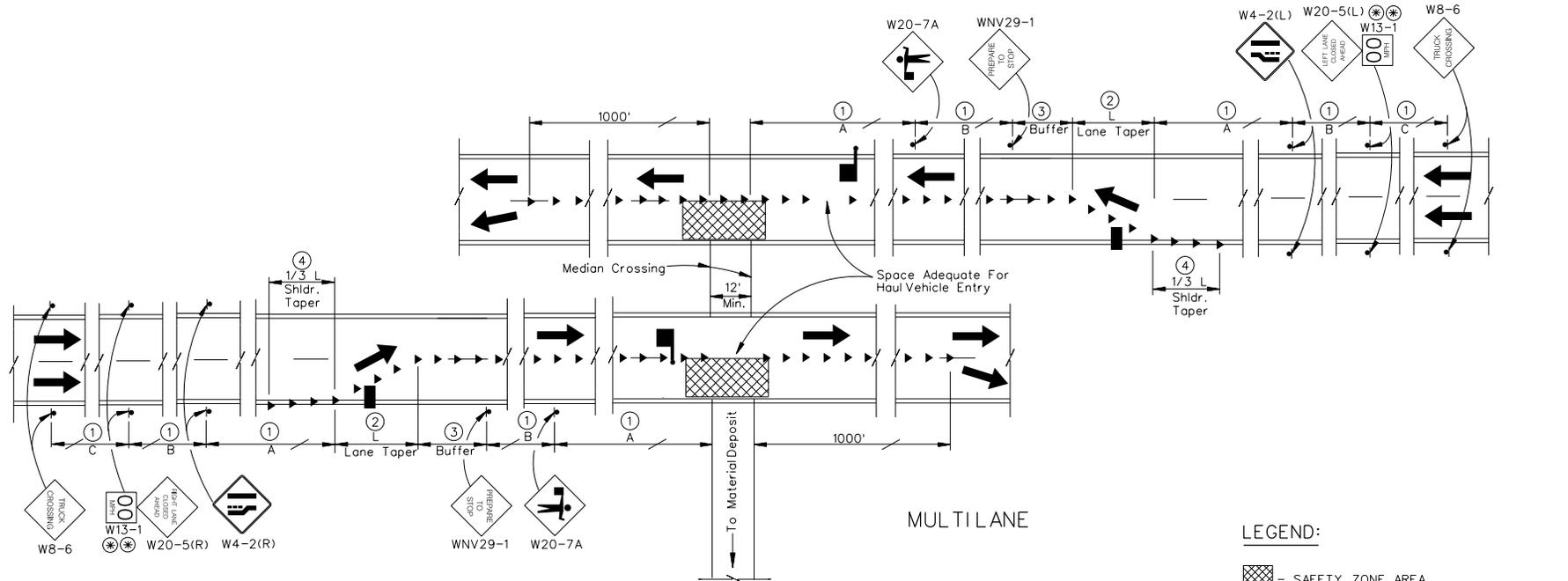
STATE OF NEVADA DEPARTMENT OF TRANSPORTATION		
TYPICAL TABLES/NOTES FOR TRAFFIC CONTROL SHEETS T-35.1.1 thru T-35.1.17		
T-35.1.1	(625)	Signed Original On File
ADOPTED 9/00	REVISED 10/15	CHIEF TRAFFIC OPS ENGR.

Figure 4

## Construction Traffic Haul Route Plan

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**LEGEND:**

- SAFETY ZONE AREA
- CHANNELIZING DEVICES
- ARROW BOARD
- OPTIONAL
- FLAGGER LOCATIONS TO BE DETERMINED BY THE FIELD ENGINEER

SEE SHEET T-35.1.1 FOR TABLES AND NOTES

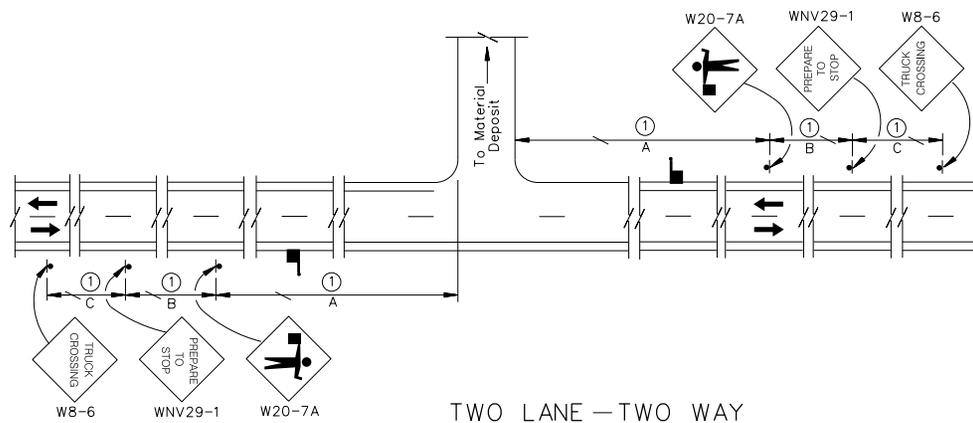


Figure 5

STATE OF NEVADA DEPARTMENT OF TRANSPORTATION		
<b>TYPICAL TRAFFIC CONTROL FOR HAUL ROAD</b>		
T-35.1.10	(625)	Signed Original On File
ADOPTED 7/96	REVISED 6/06	CHIEF TRAFFIC OPS ENGR.

## Construction Traffic Haul Route Plan

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# **ATTACHMENT D2**

## *Stormwater Quality Management Plan*

**Preliminary Stormwater Quality Management Plan  
Dodge Flat Solar Energy Center**

*Prepared for:*

**Dodge Flat Solar LLC**  
700 Universe Boulevard  
Juno Beach, Florida 33408

*Prepared by:*

**DUDEK**

**MAY 2017**

# Preliminary Stormwater Quality Management Plan

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## APPENDIX

- A Truckee Meadows Structural Control and LID Handbook

# Preliminary Stormwater Quality Management Plan

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# Preliminary Stormwater Quality Management Plan

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## 1 INTRODUCTION

### 1.1 Scope and Purpose

This preliminary Stormwater Quality Management Program (SQMP) has been prepared for the Dodge Flat Solar Energy Center (Project) to identify applicable water quality standards, evaluate the Project for potential pollutants of concern, and identify appropriate best management practices (BMPs) to reduce pollutants in stormwater runoff to the maximum extent practicable. This SQMP evaluates the Project's potential pollutants of concern in the context of narrative and numeric water quality standards, as described in the *Pyramid Lake Paiute Tribe Water Quality Control Plan* (Pyramid Lake Paiute Tribe 2008). Methods to avoid pollutant discharges described herein include low impact developments (LIDs) and source control BMPs selected based on site specific conditions (soils, land use, slope, etc.) and in consultation with stormwater quality BMP guidance documents for Truckee Meadows (see Appendix A).

This SQMP is being prepared at a planning level of detail to evaluate potential water quality issues associated with operation and maintenance of the Project, and to outline feasible and appropriate BMPs that would be necessary to avoid or substantially minimize non-point source pollutant levels in stormwater runoff from the site. A stormwater pollution prevention plan (SWPPP) will be prepared separately to address stormwater quality during construction-related activities, and a design-level SQMP will be submitted to Washoe County at a later date as part of final grading permit approvals, in compliance with Article 421 of the Washoe County Development Code (Storm Water Discharge Program).

### 1.2 Location

The Project area is located west of the intersection of State Route (SR-) 447 and Olinghouse Road, approximately 3.5 miles northeast of the town of Wadsworth, in unincorporated Washoe County, Nevada (Figure 1). More specifically, the Project area is situated in Section 23, Township 21 North, Range 23 West; Section 25, Township 21 North, Range 23 West; Section 31, Township 21 North, Range 24 West; M.D.B. & M. It is found on the Wadsworth, Nevada, U.S. Geological Survey 7.5-topographic quadrangle at approximately latitude/longitude 39°39'31 N/119°20'53" W (see Figure 2).

### 1.3 Project Description

Dodge Flat Solar LLC (Applicant) proposes to construct and operate the 200-megawatt Project photovoltaic (PV) solar energy and storage facility with associated on-site substation, inverters, fencing, roads, and supervisory control and data acquisition (SCADA) system.

# Preliminary Stormwater Quality Management Plan

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## 1.3.1 Construction

Construction of the Project would minimize ground disturbances and vegetation removal by limiting grading to the minimum area required. In addition, because the Project area is fairly level, cut/fill volumes are expected to be minor in any one area and would mostly consist of smoothing. Grading would occur for installation of inverter pads, access roads, on-site substation, on-site switching station, and energy storage system. The surface of the roads would be at grade to allow any water to sheet flow across the site to the maximum extent practicable.

Vegetation would be removed where gravel roads would be constructed, where fill would be placed from grading operations, where buildings are to be constructed, and where transmission pole and foundations would be installed (if necessary). PV tracking systems would be supported, by driven piers (piles) directly embedded into the ground. Throughout the remainder of the developed area on the solar and energy storage site, the vegetation root mass would generally be left in place to help maintain existing drainage patterns on a micro level, and to assist in erosion control. During construction of the solar and energy storage facility, it is expected that most of the vegetation would be cut, trimmed, or flattened as necessary, but otherwise undisturbed so that reestablishment is possible.

## 1.3.2 Operation

The Project would not have any industrial process wastewater, sanitary wastewater, or other wastewater streams associated with operation and maintenance of the facility. The Project would be unmanned, and no operation and maintenance building would be constructed. Operations would be monitored remotely via a SCADA system, and periodic inspections and maintenance activities would occur. During operations, solar panel washing is expected to occur periodically. The water resources required for the periodic washing of the solar panels is the primary long-term water use. Based on current solar panel facilities in the region, the annual water demand for the Project should be minimal (e.g. < 0.1 acre-feet/year; Klise et al, 2013).

# Preliminary Stormwater Quality Management Plan

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## 2 REGULATORY BACKGROUND

Water quality standards in the Project area are governed by the Pyramid Lake Paiute Tribe Water Quality Control Plan and the Washoe County Storm Water Discharge Program.

### 2.1 Pyramid Lake Paiute Tribe Water Quality Control Plan

The members of the Pyramid Lake Paiute Tribe are the end users of the water in the Truckee River, which flows into Pyramid Lake at its terminus. The Pyramid Lake Paiute Tribe maintains a fish hatchery for the threatened Lahontan cutthroat trout (*Oncorhynchus clarkii henshawi*) and the endangered cui-ui (*Chasmistes cujus*) fish.

On January 30, 2007, the Pyramid Lake Paiute Tribe received Treatment as State Status pursuant to Sections 303 & 401 of the federal Clean Water Act by the U.S. Environmental Protection Agency for Program Authority to conduct Water Quality Standards and 401 Certification within the exterior boundaries of the Pyramid Lake Paiute Indian Reservation (PLIR). On May 24, 2001, the Pyramid Lake Paiute Tribe adopted a Water Quality Control Plan (WQCP). The WQCP addresses issues such as beneficial uses, antidegradation, water quality criteria, scientific justification, and implementation plans in accordance with the tribe's Water Quality Ordinance. For the purposes of water pollution control, the Pyramid Lake Paiute Tribe maintains jurisdiction over all waters that flow into and exists within the PLIR.

The narrative standards contained in the Pyramid Lake Paiute Tribe WQCP apply to all surface water bodies within the exterior boundaries of the PLIR, including, but not limited, to ephemeral, intermittent, or perennial streams, springs, and wetlands. The numeric standards contained in the WQCP are applicable to several control points along the Truckee River and within Pyramid Lake. The closest (downstream) control point to the Project is at Nixon Bridge and is meant to be representative of the segment of the Truckee River between Dead Ox Wash and Pyramid Lake. Narrative and numeric water quality standards applicable to pollutants of concern for the Project are addressed in Section 4.

### 2.2 Washoe County Storm Water Discharge Program (Development Code Section 110.421)

On January 12, 2016, Washoe County (by way of Ordinance No. 1572) amended Chapter 110 of Washoe County Code (Development Code) to include Article 421, Storm Water Discharge Program, to repeal and replace the previously adopted stormwater discharge ordinance (Ordinance 1223). The amendment was intended to update, codify, and provide BMPs relating to the storm water discharge program and the National Pollutant Discharge Elimination System permit issued to Washoe County, and other matters necessarily

## **Preliminary Stormwater Quality Management Plan**

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connected therewith and pertaining thereto. The purpose of the Storm Water Discharge Program is to:

- a. Protect and enhance the water quality of our watercourses, water bodies, groundwater and wetlands in a manner pursuant to and consistent with the Clean Water Act.
- b. Control non-stormwater discharges to storm drain systems and reduce pollutants in stormwater discharges.
- c. Encourage the recharge of groundwater, where appropriate, and prevent the degradation of groundwater quality.
- d. Prevent threats to public health and safety by regulating stormwater runoff discharges from applicable land development projects and other construction activities in order to control and minimize increases in stormwater run-off rates, soil erosion, flooding, stream channel erosion, and non-point source pollution associated with stormwater runoff.
- e. Control and minimize the above impacts through implementation of approved post-construction SQMPs that place a strong emphasis on implementing LID principles and techniques that include, but are not limited to, disturbing only the smallest area necessary; minimizing soil compaction and imperviousness in drainage and recharge areas; preserving natural drainages, vegetation, and buffer zones; and utilizing on-site stormwater treatment techniques to the maximum extent practicable.

The Storm Water Discharge Program applies to all activities that may potentially affect the municipal separate storm sewer system, any private storm sewer system, or any body of water within the unincorporated area of Washoe County. Additionally, permanent and temporary stormwater management controls and facilities for industrial, commercial, institutional, single and multifamily residential development, and private subdivision projects that are located within the unincorporated area of Washoe County are also subject to this article.

Because the Project is not an industrial/commercial stormwater discharger connected to Washoe County's storm sewer system, it would not be subject to an environmental control permit (Section 110.421.60). However, the Project must have an approved post-construction SQMP and stormwater treatment device access and maintenance agreement to permit development, unless a written request to waive the plan requirements is granted by the Community Services Department Director (Section 110.421.70).

## 3 WATERSHED AND DRAINAGE CONDITIONS

The Project area is generally flat with only an approximately 2%–3% gradient overall (a portion of rugged and mountainous terrain at the northeast corner of the subject property has been excluded from the proposed development area and is not be considered for development at this time). The site generally slopes from west to the east, with elevations of the proposed development being approximately 4,176 to 4,479 feet above mean sea level. Locally, the Project would be accessed via SR-447, a private access road to the site, and an internally constructed road system.

The Middle Section of the Project area has been historically disturbed by mining operations and is currently primarily unvegetated or contains a low cover of non-native plant species. The mining activity included extensive modifications of the alluvial landscape to control the hydrology of the site. The activities included the construction of roads, ditches, channels, pits, and berms to reroute and/or capture water in detention basins. Some of the modifications still exist in their original condition at what appears to be a “reclaimed” portion of the site some have been left in place and/or failed over time, resulting in a large portion of the Middle Section of the study area draining into, and terminating at, the bermed reclaimed mining area.

The Upper and Lower Sections are vacant and mostly undisturbed with a land cover of native vegetation. Disturbances within the Project area include the previously mentioned historical mining activities and uses ancillary to the mining operations, dirt roads, berms, channels, pits, and power lines, as well as small trash dumps, recreational off-road vehicle dirt tracks, and other signs of recent and ongoing human disturbance.

### 3.1 Watershed and Project Receiving Waters

The Project area is located within the Truckee River Basin, a closed topographic basin that includes the Lake Tahoe watershed and headwater tributaries along the eastern slopes of the Sierra Nevada. All water that enters the region either infiltrates into the groundwater basin or sink areas that may include wetlands, lakes, and playas. The closest perennial feature to the study area is the Truckee River, located approximately 2 miles east of the Project. It runs from Lake Tahoe approximately 120 miles to its terminus in Pyramid Lake.

The majority of the Project area lies within the Pyramid-Winnemucca Lakes Watershed, a 1,370-square-mile watershed, specifically within the Dodge Flat Subunit. The southeast corner of the Project area lies within the Truckee Watershed, a 1,190-square-mile watershed, specifically within the Derby Dam-Truckee River Subunit.

# Preliminary Stormwater Quality Management Plan

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## 3.2 Drainage Patterns

The Project area is located on a series of alluvial fans at the eastern terminus of Olinghouse Canyon, Frank Fred Canyon, and Tiger Canyon in the Pah Rah Range. Numerous low-flow ephemeral drainages originate from the foothills and follow braided compound systems typical for this arid environment (ACOE 2008). These channels have been identified in a separate jurisdictional delineation study (Dudek 2017) and are uniformly shallow, narrow, with few signs of a high-energy erosive hydrologic system. Drainage from this area converges east of SR-447 and discharges into the Truckee River at Gardella Canyon.

Olinghouse Canyon is the largest contributing area to the site, and the main channel (Miller Creek) follows a braided compound channel system south of Olinghouse road until it crosses to the north side of Olinghouse Road and traverses the northwest corner of the Lower Section (Figure 3). Runoff generated from Frank Fred Canyon and Tiger Canyon follow similar compound channels toward the Project site. Discharge generated from Frank Fred Canyon follows a braided system that cuts into the southeastern corner of the Upper Section, and then traverses into the northern section of the Middle Section (Figure 3). Discharge generated from Tiger Canyon flow across the northern section of the Upper Section's property boundary, but approximately 500 feet north of any proposed development within that boundary.

# Preliminary Stormwater Quality Management Plan

## 4 POTENTIAL PROJECT POLLUTANTS OF CONCERN

To evaluate pollutants of concern and to select appropriate source controls and/or structural treatment controls, Dudek considered the following:

- Pollutants included on Clean Water Act Section 303(d) lists, and water quality standards that have been developed for the Truckee River and Pyramid Lake
- Pollutants associated with the land use type of the development project

### 4.1 Truckee River Clean Water Act Section 303(d) Water Quality Impairments and Approved Total Maximum Daily Loads

The main water quality concern within the Truckee River involves maintaining water quantity and quality sufficient to maintain the river’s ability to support populations of Lahontan cutthroat trout, a threatened species, and cui-ui. The Truckee River has been affected by heavy growths of aquatic weeds and benthic algae, caused by high nutrient loads and low flows. Plant respiration and decaying biomass have in turn decreased dissolved oxygen levels in the river, which can adversely affect fish populations.

The Truckee River has been evaluated by the Nevada Division of Environmental Protection (NDEP) for Clean Water Act Section 303(d) water quality impairments, shown in Table 1. The identified impairments, which consist of water temperature and turbidity, are applicable to sections of the Truckee River upstream of the PLIR boundary (NDEP 2016). Furthermore, the Truckee River has U.S. Environmental Protection Agency–approved total maximum daily loads (TMDLs) and water load allocations for total dissolved solids, total nitrogen, and total phosphorus (NDEP 1994). The TMDLs are applicable to stormwater runoff, agricultural drainage, and wastewater treatment plant discharges upstream of Lockwood, the TMDL compliance point, because controllable discharges (i.e., from Steamboat Creek, North Truckee Drain, and the Truckee Meadows Water Reclamation Facility) are all located upstream of this location (NDEP 1994). Conversations are ongoing between stakeholders on re-evaluating applicable water quality standards and whether they are sufficiently protecting the rivers aquatic resources.

**Table 1**  
**Truckee River Water Quality Impairments**

Reach Description	Parameter	Impaired Uses	TMDL Priority
From Nevada-California State Line to Idlewild	Temperature / Water	Aquatic Life	Low
From Idlewild to East McCarran Blvd	Temperature / Water	Aquatic Life	Low
From Lockwood to Derby Dam	Temperature / Water	Aquatic Life	Low
	Turbidity	Aquatic Life	Low

# Preliminary Stormwater Quality Management Plan

**Table 1**  
**Truckee River Water Quality Impairments**

Reach Description	Parameter	Impaired Uses	TMDL Priority
From Derby Dam to the Pyramid Lake Paiute Reservation	Temperature / Water	Aquatic Life	Low

Source: NDEP 2014

Although the Clean Water Act Section 303(d) impairments apply to areas upstream of the PLIR boundary, the overall water quality conditions and concerns are equally applicable to the section of Truckee River and Pyramid Lake within the PLIR boundary.

## 4.2 Project Water Quality Concerns

Because the Project would be unmanned, no sanitary wastewater system is proposed, which means that in the long term, the only discharge to the Truckee River and Pyramid Lake would consist of stormwater discharges. As indicated in Section 1.3, the battery storage area would be enclosed in a structure, and activity on the site would be limited to periodic maintenance activities. There are no processes or activities that would regularly expose hazardous materials to stormwater runoff. The primary water quality considerations for the Project are therefore (1) maintaining the site's natural hydrology to the greatest extent feasible, and (2) ensuring any materials or equipment staged or stored in exterior areas be protected from stormwater runoff.

The Project's effects on the pattern, rate, and volume of stormwater runoff would primarily consist of areas where grading and/or structures intersect flow paths, which have been identified by the Project's jurisdictional delineation (Dudek 2017). As described in Section 1.3, the Project would minimize grading and vegetation removal. Though construction of the Project would require access with heavy machinery, including some vegetation trimming and trampling, the root wads would be left intact, thereby preserving the integrity of site soils and leaving most areas in a condition where vegetation could re-establish over time. Site disturbances associated with inverter pads and tracker posts would not be consequential where located outside of the bed and banks of washes. Given they would be disconnected and very small-scale features, they would allow sheet flow conditions on the desert surface to continue unimpeded.

Therefore, the primary consideration in avoiding associated potential adverse effects on water quality, such as excessive erosion and scour, will be ensuring access roads and other Project features that cross jurisdictional streams are designed in a manner that minimizes erosion and does not redirect existing flow patterns. As discussed in Section 5, the Project will also implement good housekeeping practices and BMPs to ensure outdoor storage areas are managed in a way that avoids release of pollutants to stormwater runoff. If and where any conflict occurs

## Preliminary Stormwater Quality Management Plan

between the BMPs discussed in this SQMP and conditions of a Clean Water Act Section 404 permit from ACOE occurs, the ACOE conditions shall govern.

The water quality standards for the Truckee River section between Dead Ox Wash and Pyramid Lake, as well as Pyramid Lake, are provided in Table 2. Sources for these pollutants and the Project's potential for generating these pollutants are also identified in Table 2.

**Table 2**  
**Downstream Water Quality Standards and Project-Related Pollutants**

Water Quality Standard	Water Body	Major Sources	Applicable to Project
Alkalinity	Truckee River	Local geology, specific industrial uses, construction activities	Potential
Ammonia	Pyramid Lake	Human/Animal Waste – Decaying organic matter	No
Color	Truckee River	Unidentified	No
Chlorides	Truckee River	Local geology, outdoor storage of salts, wastewater	Potential
Chlorophyll a	Pyramid Lake	Increased nitrogen/phosphorus	No
Clarity	Pyramid Lake	Colloids (clays, organics)	No
Dissolved Inorganic Nitrogen	Pyramid Lake	Primarily agriculture/wastewater	No
Dissolved Oxygen	Truckee River, Pyramid Lake	Hydrocarbons, erosion	Potential
Dissolved Reactive Phosphorus	Truckee River, Pyramid Lake	Primarily agriculture/wastewater, detergents	No
Fecal Coliform	Truckee River, Pyramid Lake	Human/Animal Waste	No
Metals	Truckee River, Pyramid Lake	Industrial/Commercial Activities	Potential
Nitrogen Species	Truckee River	Primarily agriculture/wastewater	No
pH	Truckee River, Pyramid Lake	Sulfuric acid (acid rain), mining (exposed rocks), construction activities (work with concrete)	Potential
Suspended Solids	Truckee River, Pyramid Lake	Soil erosion, organics	Potential
Sodium	Truckee River	Local geology, outdoor storage of salts	Potential
Sulfate	Truckee River	Local geology, agriculture	Potential
Temperature	Truckee River, Pyramid Lake	Erosion	Potential
Total Dissolved Solids	Truckee River, Pyramid Lake	Local geology, erosion	Potential
Total Nitrogen	Pyramid Lake	Primarily agriculture/wastewater	No
Total Phosphorus	Pyramid Lake	Primarily agriculture/wastewater	No
Turbidity	Truckee River, Pyramid Lake	Erosion	Potential

Source: NDEP 2014

Pollutants in Table 2 that are potentially applicable to the Project are primarily associated with erosion and sediment transportation. Project activities linked to these potential pollutants are discussed below.

# Preliminary Stormwater Quality Management Plan

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## 4.2.1 Modified Hydrologic Regime and Sediment Transport

The Pyramid Lake Paiute Tribe WQCP states that the suspended sediment load and turbidity concentrations shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses. The transportation of sediments from the Project's proposed access roads is the primary potential source of pollution from the Project. Without proper design considerations, runoff could concentrate within the roads and develop rills, which would grow into larger channels with each significant rainfall event, creating a source of sediment to downstream water bodies. Modifications to the natural hydraulics at each channel crossing could also result in increased scouring and sediment transport. Additional pollutants that may be associated with increased sediment transport from the site are identified in the following sections.

### 4.2.1.1 *Metals, Chlorides, Sodium, Sulfate*

While Project activities will not generate metals or chemical compounds listed in the Pyramid Lake Paiute Tribe WQCP, historical uses (mining) and geologic formations upstream of the Project area are potential sources and need to be considered in the Project's final design. All three Project sections receive runoff from Olinghouse and Frank Fred Canyons, which were both part of Olinghouse gold mine operations. These operations included open pit mining and the stockpiling of tailing, which have the potential to release pollutants into downstream water bodies. Historically, runoff generated from the mining operations has travelled naturally through the site's ephemeral drainages. During previous mining operations, tailings and runoff from tailings were stored/captured within the Middle Section of the Project (Figure 3). Due to local geology and historical uses, sediment mobilized from the Project area could be a source of potentially toxic metals and chemical compounds to downstream water bodies.

Dudek recently conducted a soil investigation to determine the presence of potential soil contamination associated with the historical mining operations. While no specific impacts from mining activities were identified within the Project area during this investigation, a number of metals were detected in all soils (including the background soils) above the Environmental Protection Agency Region III's Freshwater Screening Benchmarks, including: antimony, barium, copper, lead, nickel, selenium, vanadium, and mercury. The presence of elevated metal concentrations in the background soils is indication that the native soils within the Project area contain metals at concentrations potentially detrimental to downstream aquatic ecosystems.

### 4.2.1.2 *Alkalinity and pH*

Similar to metals, the Project will not produce pollutants that could increase a water body's alkalinity and pH. Erosion and transportation of material from calcium-rich outcrops in the

## Preliminary Stormwater Quality Management Plan

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Olinghouse and Frank Fred drainages could be potential sources of base compounds, which would increase the alkalinity and pH of downstream water bodies.

### 4.2.1.3 *Additional Water Quality Parameters*

The transport of additional sediment to downstream water bodies could result in increased total dissolved solids concentrations, and could also increase sediment loading to pools (necessary aquatic habitat for certain species). Reduced depths in pools habitats could result in increasing temperature fluctuations, where higher temperatures would reduce dissolved oxygen concentrations.

## 5 **STORM WATER MANAGEMENT AND BEST MANAGEMENT PRACTICES**

To ensure the integrity of downstream water bodies, the preliminary site design (LIDs) and source control BMP are recommended to address all potential pollutant source associated with the Project. Per Construction General Permit NVR10000, a separate SWPPP will be developed for the Project to address all potential pollutants related to the Project's construction activities.

### 5.1 **General Storm Water Regulations and Requirements**

General requirements under the County's Storm Water Ordinance pertain to discharges to public and private plots of land in the unincorporated areas of the County. Adopting the recommended measures for minimizing the mobilization of pollutants in storm sewer systems would be beneficial to ensure water quality standards are met downstream. The following items under Section 110.421.45 of the County's ordinance may be pertinent to final Project designs:

- **Prohibited Discharges:** A sweeping rule prohibiting the disposal of wastes that could enter a waterway, including discharges of wastewater or rinse waters containing chemical compounds (e.g. surfactants, degreasers).
- **Good Housekeeping Practices:** Site designs and practices that promote proper containment of Project waste.
- **Surface Cleaning:** Equipment rinsing/cleaning on site should avoid use of cleaning products toxic to downstream aquatic habitat and should be conducted in a manner that precludes discharge to downstream water bodies.
- **Outdoor Storage Areas:** Storage of any hazardous substances on site should be done in a manner that prevents discharges to downstream water bodies.
- **Secondary Containment:** the Director of Community Services may identify specific components of the Project that pose a greater risk to habitat/human health and may require secondary containment.

## Preliminary Stormwater Quality Management Plan

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- **Non-Storm Water Discharges:** If solar panel rinsing is conducted with potable water and does not include additional chemical cleansers, discharges to the on-site jurisdictional water bodies may be considered insignificant. Solar panel rinsing practices should be verified with the County prior to finalizing site design.
- **Compliance with General Permit:** The Project will need to develop a SWPPP, per Construction General Permit NVR10000, which identifies BMPs specific to construction activities and phases.
- **Notification of Spills:** Any Project components that could result in spills of hazardous substances should be included in an emergency spill response program that includes a training program for all pertinent employees, a contact list for individuals to be notified in the event of a spill, and sufficient methods/materials for containment.
- **Soil Tracking and Drag Out:** While the main access road to the Project is unpaved (Olinghouse Road), measures should be taken to reduce the tracking of dirt from the Project onto SR-447.

### 5.2 Project-Specific LIDs and BMPs

Specific LIDs and BMPs pertinent to the Project are provided in this section and are identified on Figures 3a through 3c. The LIDs and BMPs provided in this SQMP are preliminary recommendations designed to help the Project meet downstream water quality standards. Some of the recommendations in this SQMP are included in the *Truckee Meadows Structural Controls Design and Low Impact Development Manual*, which provides schematics/details to assist in their design and implementation (see Appendix A). A final design-level SQMP identifying specific BMPs and maintenance programs should be provided with the Project's final design.

#### 5.2.1 LID Planning Principles

Incorporating LIDs into the Project design is the best way to ensure that the Project will maintain the existing hydrologic regime and avoid unintentionally discharging pollutants into downstream water bodies. For this area, allowing rainfall to infiltrate into the soil and minimizing the concentration of rainfall runoff would be the primary goal for all LIDs. The Project site is uniformly flat with a gentle slope (<2%) toward the Truckee River; therefore, most rainfall is expected to infiltrate into native soils and or discharge as sheet flow to the shallow drainage channels on site. The general non-invasive approach of the Project will serve as the main LID, where native soils and vegetation will remain undisturbed for the majority of the Project site, while minor grading will only be required for the installation of unpaved access roads, inverter pads, substation, switching station, and the energy storage system. These individual components could serve as long-term sources of pollutants, however, if designed in ways that would allow for rainfall to concentrate and increase downstream scouring and sediment carrying capacities. How the roads,

## Preliminary Stormwater Quality Management Plan

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solar panels, and accompanying infrastructure are designed and installed will be important in determining the long-term impact the Project will have on the area's existing hydrologic regime.

The installation of solar panels should utilize a minimally invasive technique (e.g., pile-driving posts). To the maximum extent practicable, the natural vegetation under/around the solar panels should remain undisturbed during the construction phase. Where fences cross jurisdictional channels, the base of the fence should be set higher than the OHWM in order to allow debris to pass unobstructed beneath it during the 5 to 10 year bank forming events.

Access roads should be graded to follow natural topography, to the maximum practicable extent, and to direct surface runoff as sheet flow away from the road. Where the potential development of concentrated flows could induce scouring exists, the Project should consider using energy-dissipating BMPs such as gravel-lined ditches and native landscaping. Where proposed roads cross drainage channels (including relic channels that could become active again), the Project should pursue unpaved low-water crossings perpendicular to flow in order to maintain the natural gradient of the channel, reduce potential for development of knick-points, and eliminate the potential for long-term maintenance issues associated with culverts.

The recommended and preliminary LIDs for the Project are provided in Table 3.

**Table 3**  
**Low Impact Development BMPs**

LID	Project Specific Details
Conservation of Natural Drainages, Well-Drained Soils, and Significant Vegetation	<p>Due to tracker installation method, the Project design does not require substantial alteration to natural soils. Minimal footprints will be required for installing concrete pads, and there are no proposed alterations to existing drainage patterns. Height of fencing above the jurisdictional water bodies should be, at a minimum, above the OHWM stage.</p> <p>Soil compaction would be limited to that necessary to engineer on-site roads and equipment pads.</p> <p>The majority of the Project area's natural vegetation root mass would generally be left in place to help maintain existing drainage patterns on a micro level, and to assist in erosion control. During construction of the solar and energy storage facility, it is expected that most of the vegetation would be cut, trimmed, or flattened as necessary, but otherwise undisturbed so that reestablishment is possible.</p>
Road Design	Internal access roads will be the minimum necessary to achieve Project objectives. Grading will mimic natural topography and/or implement features that will preclude the development of concentrated flows.
Low-Flow Channel Crossings	Where feasible, access roads will cross the small ephemeral drainages perpendicular to flow path and will not modify the cross-sectional area of the channel. At a minimum, the access roads will not decrease the cross-sectional area where they enter the drainages.
Parking Areas	The Project does not require a commercial parking lot, but aggregate should be used

# Preliminary Stormwater Quality Management Plan

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	for routine parking locations.
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## 5.2.2 Source Control BMPs

In continuation with the Project LIDs, source control BMPs are additional measures to prevent and/or remove pollutants from stormwater discharges. The BMPs recommended in Table 4 are designed to address potential sources of stormwater pollutants not mitigated with the LIDs in Section 5.2.1. These sources include concentrated stormwater discharge from impervious surfaces (e.g., roofs, concrete pads, solar panels), presence of potentially hazardous materials on site (cooling systems, battery storage), and tracking of sediment from the site. Proposed source control BMPs based on the preliminary Project plans are provided in Table 4.

**Table 4**  
**Source Control BMPs**

Source Control BMP	Project Specific Details
Drain Runoff from Impervious Surfaces to Pervious Areas	Impervious surfaces would be disconnected and would drain to adjacent soils, which are permeable.
Disconnect Impervious Surfaces	Impervious surfaces will be disconnected and limited to inverter pads, substation components, and battery storage units.
Proper Design of Trash Storage Areas	Facility will be unmanned and will not routinely generate trash or waste. Waste generated during periodic maintenance will be handled in accordance with local, state, and federal regulations.
Outdoor Material Storage and Secondary Containment	Where hazardous materials are stored/used on site (e.g., Freon for cooling systems, batteries, etc.), the Project should ensure proper enclosures, which could contain spills and preclude from access to downstream waters. The battery storage system will be enclosed in a structure.
Spill Prevention Plan	In the event that on-site hazardous materials are discharged, a spill prevention plan should be in place and all personal involved with the Project should be trained in the plan. This plan would include an updated response program identifying all personal to be notified in the event of a spill.
Stabilized Entrance/Exit	Aggregate will be used at all Project area entrances to minimize tracking of sediment from the site.

## Preliminary Stormwater Quality Management Plan

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### 6 BMP MONITORING AND MAINTENANCE

The final SQMP should include a monitoring and maintenance program to ensure that all site BMPs remain functional for the lifespan of the Project. This maintenance program could include, but not be limited to, the following:

- Annual survey of road conditions and solar panel field to identify sections that may require additional grading/BMPs
- Site visit after each significant rainfall event (runoff producing) to assess performance of low-flow channel crossings (look for scouring)
- Annual review of hazardous materials storage facilities and update of spill prevention and response program

## Preliminary Stormwater Quality Management Plan

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# Preliminary Stormwater Quality Management Plan

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## 7 SUMMARY

This preliminary SQMP provides general BMPs that could be employed by the Project to preserve the water quality standards established for the downstream water bodies. The final design-level SQMP is required by Washoe County as part of final grading permit approvals (Article 421 of the Washoe County Development Code).

## Preliminary Stormwater Quality Management Plan

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## Preliminary Stormwater Quality Management Plan

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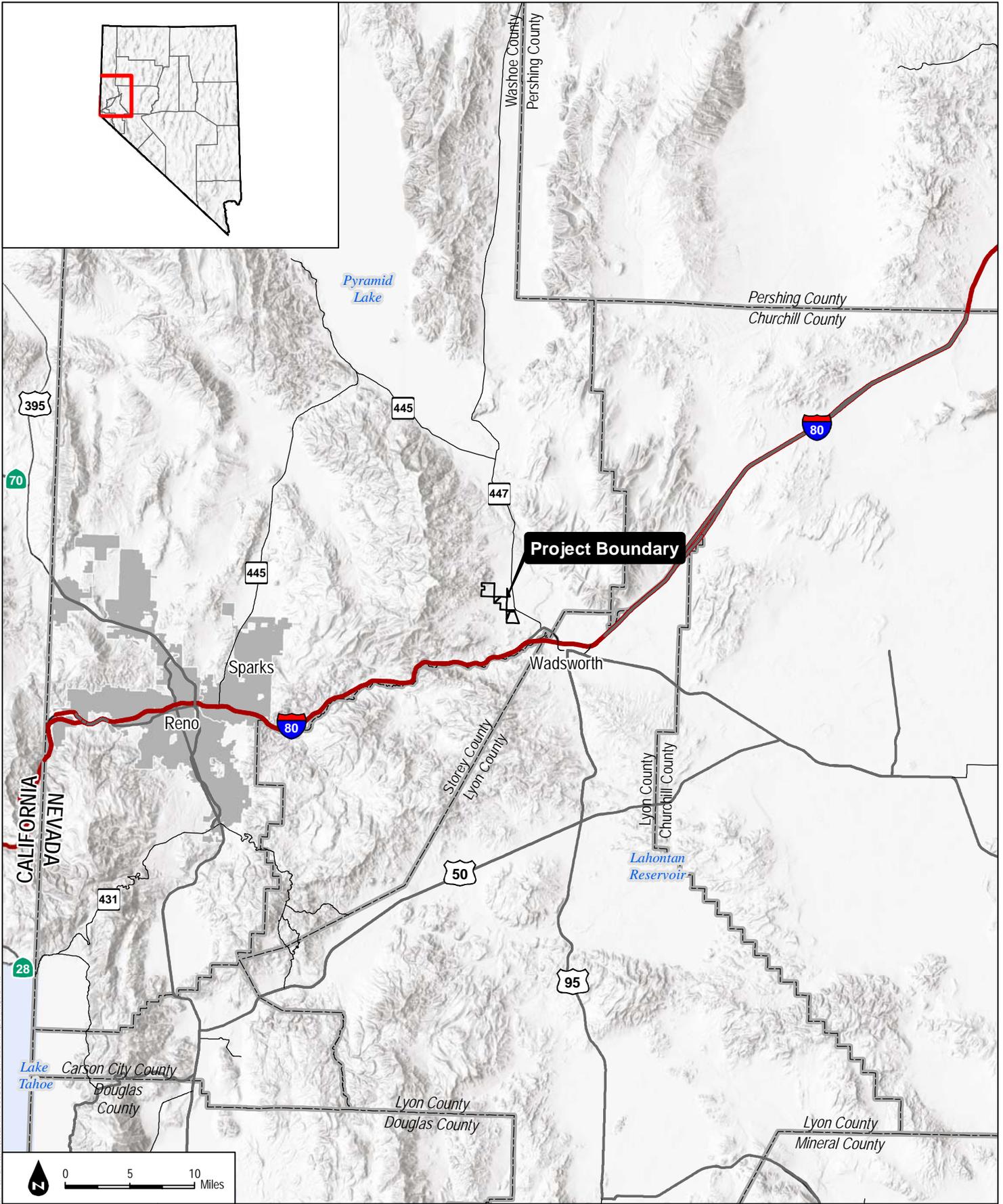
### 8 REFERENCES

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## Preliminary Stormwater Quality Management Plan

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SOURCE: ESRI Basemaps

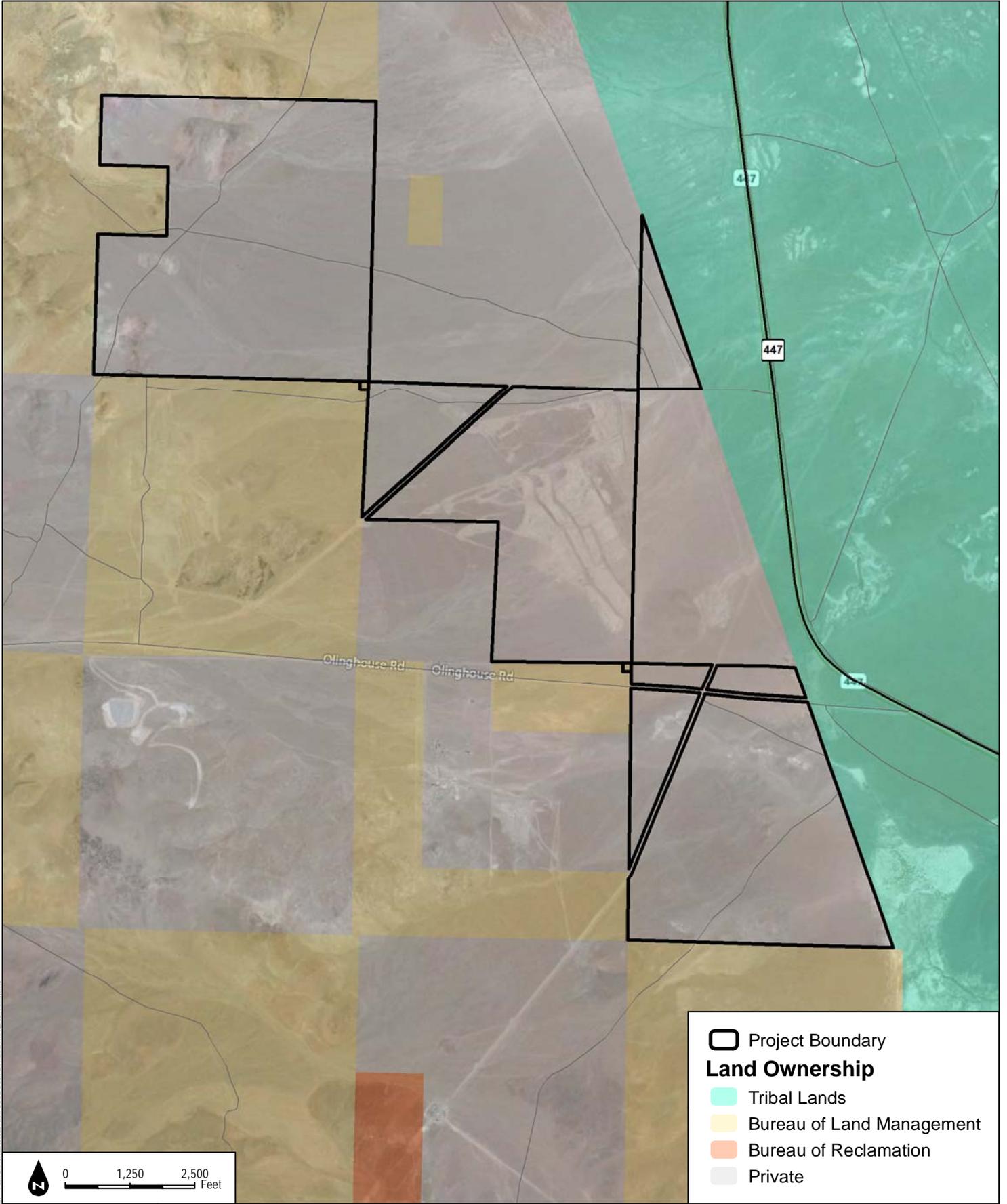
Dodge Flat Solar Energy Center

**FIGURE 1**  
Regional Map

## Preliminary Stormwater Quality Management Plan

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Project Boundary  
**Land Ownership**  
 Tribal Lands  
 Bureau of Land Management  
 Bureau of Reclamation  
 Private



SOURCE: Bing 2017

**DUDEK**

Dodge Flat Solar Energy Center

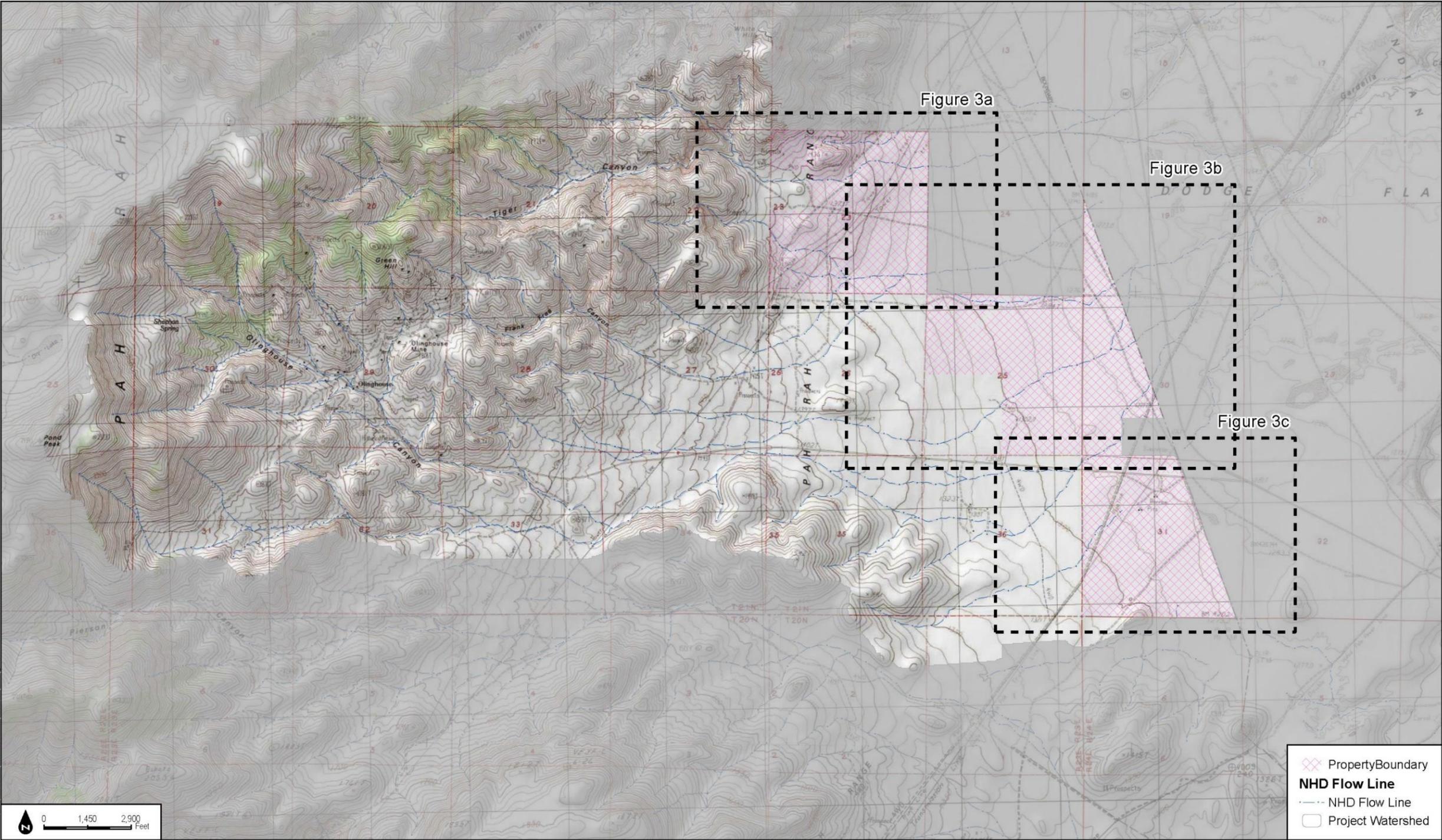
**FIGURE 2**  
Vicinity Map

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# Preliminary Stormwater Quality Management Plan

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SOURCE: ESRI Basemaps, USGS Topos and NHD Flowlines

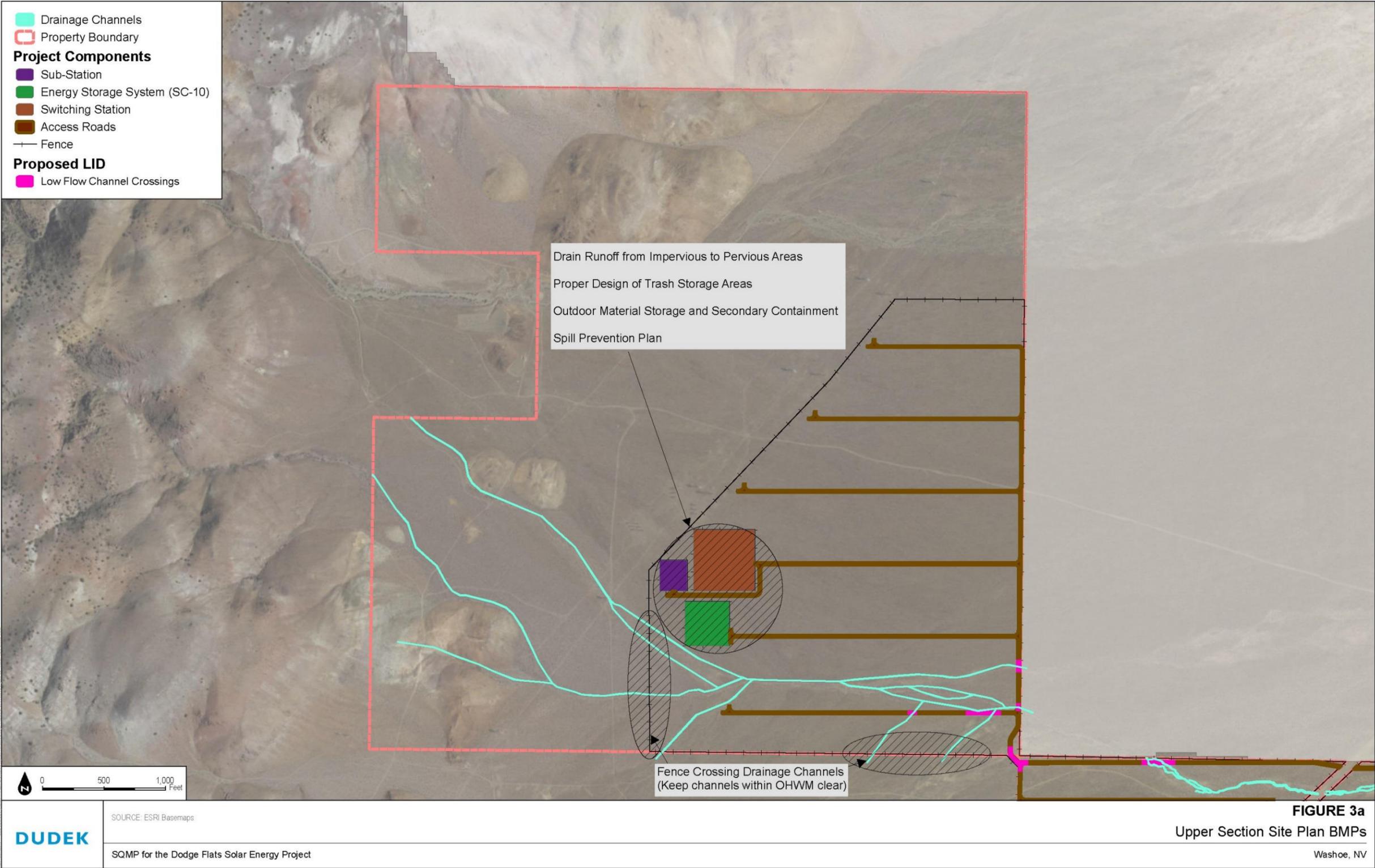
SQMP for the Dodge Flats Solar Energy Project

- Property Boundary
- NHD Flow Line
- NHD Flow Line
- Project Watershed

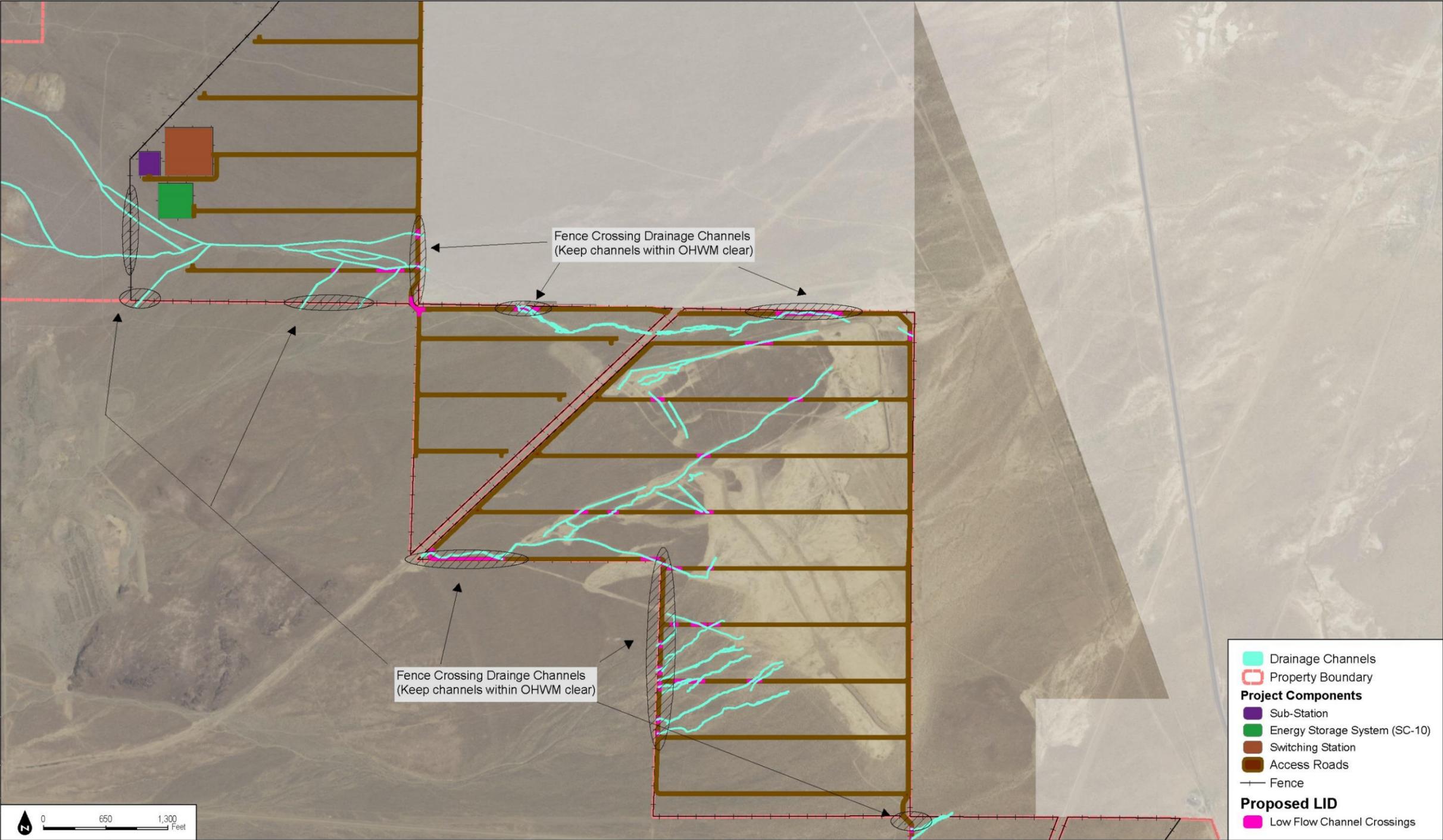
**FIGURE 3**  
SQMP - Hydrologic Setting

Washoe, NV

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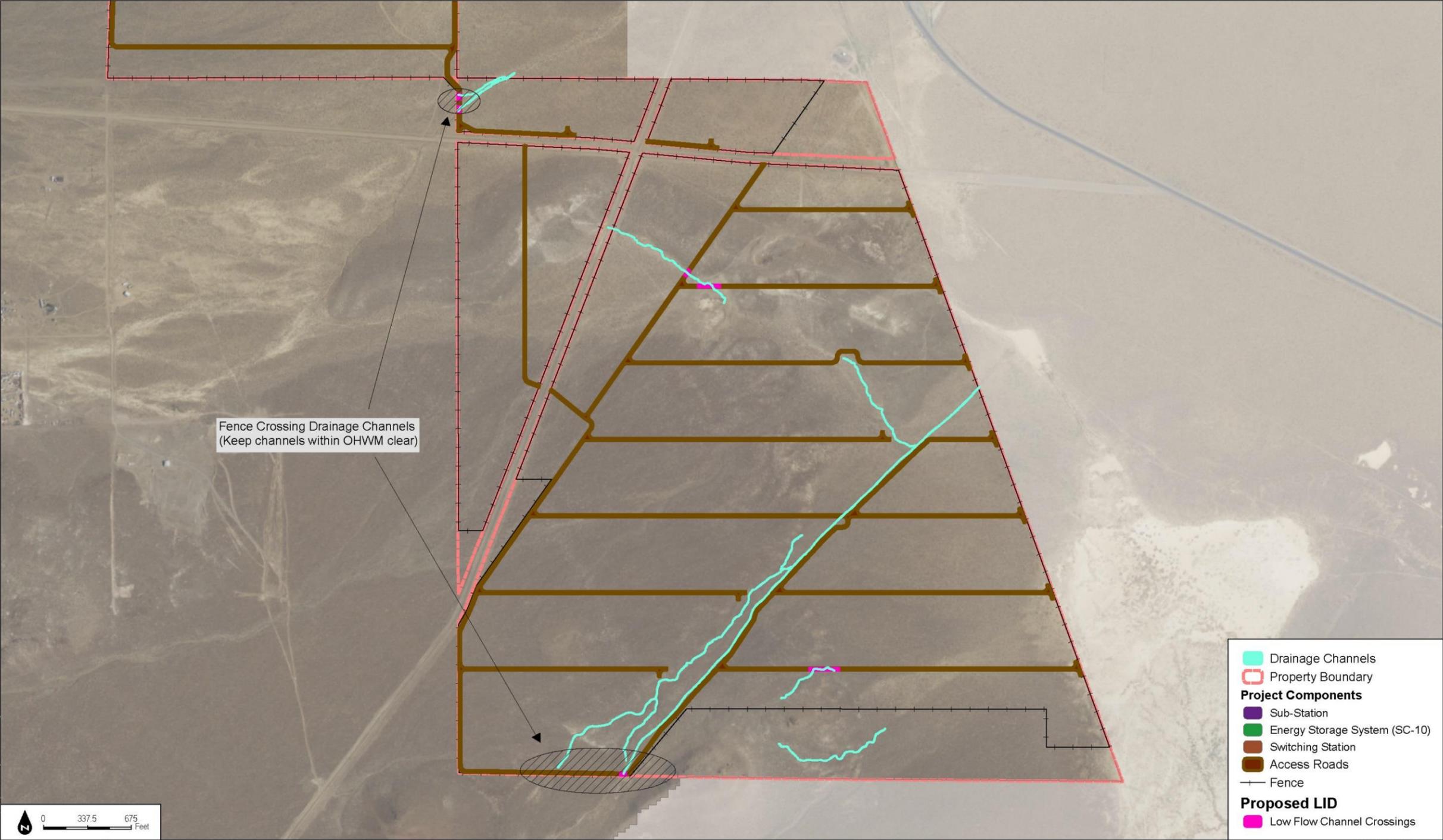


**FIGURE 3b**  
Middle Section Site Plan BMPs  
Washoe, NV

**DUDEK**

SOURCE: ESRI Basemaps  
SQMP for the Dodge Flats Solar Energy Project

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Fence Crossing Drainage Channels  
(Keep channels within OHWM clear)

- Drainage Channels
- Property Boundary
- Project Components**
- Sub-Station
- Energy Storage System (SC-10)
- Switching Station
- Access Roads
- Fence
- Proposed LID**
- Low Flow Channel Crossings



SOURCE: ESRI Basemaps  
SQMP for the Dodge Flats Solar Energy Project

**FIGURE 3c**  
Lower Section Site Plan BMPs  
Washoe, NV

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