



# United States Department of the Interior



BUREAU OF LAND MANAGEMENT  
Palm Springs South Coast Field Office  
1201 Bird Center Drive  
Palm Springs, CA 92262

[www.blm.gov/office/palm-springs-south-coast-field-office](http://www.blm.gov/office/palm-springs-south-coast-field-office)

*In Reply Refer To:*

2800 (P)  
CACA-49397  
CAD066.63

**SENT VIA EMAIL  
ELECTRONIC RETURN RECEIPT REQUESTED**

## NOTICE

Desert Quartzite, LLC	:	Right-of-way
Attn: Levi Cox	:	CACA-49397
Levi.Cox@edf-re.com	:	FLPMA

### Notice to Proceed

On October 16, 2020 and November 10, 2020, the Bureau of Land Management (BLM) received a request from Desert Quartzite, LLC to proceed with geotechnical testing within the Desert Quartzite Solar Project, assigned serial number CACA 49397. The requested activities are consistent with the authorized right-of-way grant dated August 5, 2020.

Enclosed, you will find a Notice-to-Proceed (BLM Form 2800-15), which authorizes Desert Quartzite, LLC to proceed with limited geotechnical activities summarized in the work plan attached to BLM Form 2800-15 (enclosure 2). Desert Quartzite, LLC and its contractors shall comply with the BLM ROW grant, CACA-49397, all applicable Federal, State, and local regulations, and authorizations, including but not limited to, Riverside County and the California Department of Fish and Wildlife.

You shall adhere to the work outline in enclosure 2. Please ensure a copy of the necessary plans and the ROW grant are available on site. All full-time BLM approved biological, archaeological, and paleontological monitors shall be present during the above approved activities. Desert Quartzite, LLC shall halt activities in the immediate vicinity should a monitor identify cultural, paleontological, or biological resources within the project area. This NTP does not authorize the Translocation or handling of Mojave desert tortoises. Desert Quartzite shall also monitor and avoid Couch's Spadefoot Toads and their habitat.

All employees present on site will receive a BLM approved Worker Environmental Awareness Program (WEAP) training prior to performing their work duties.

Should any changes in the scope of work be necessary, the ROW holder shall notify the BLM in writing of the change. The BLM may require the development of additional monitoring and management plans or the modification of existing plans.

If you have any questions please contact Brandon G. Anderson, Assistant District Manager, at (760) 422-9120 or at [bganderson@blm.gov](mailto:bganderson@blm.gov).

Jeremiah Karuzas  
Field Manager (Acting)

Enclosure(s):

NTP Form 2800-15

Enclosure 2: Geotechnical Work Plan

Enclosure 1: Notice to Proceed (BLM Form 2800-15)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
**RIGHT-OF-WAY NOTICE TO PROCEED**

Right-of-Way or Temporary Use Permit (TUP) Serial Number  
CACA 49397

Date: 11/13/2020  
Issuing Office: Palm Springs South Coast

Right-of-Way or TUP name  
Desert Quartzite Solar Project

**Certified/Registered Mail-Return Receipt Requested**

INSTRUCTIONS — Use Certified or Registered Mail or hand deliver. Send or give original to Holder. Distribute other copies as indicated after receipt date.

Holder: Desert Quartzite, LLC

In accordance with the terms and conditions of the above referenced right-of-way grant or TUP you are hereby authorized to proceed with the activities noted below in the locations specified. Map(s) are attached.  Yes  No

Activity	Location
<p>Activities are limited to those activities needed for Geotechnical subsurface investigations. The investigations consists of a combination of soil borings with standard penetration testing (SPT) and soil sampling, test pile installation and load testing, and field electrical resistivity testing.</p> <p>All activities shall adhere to required project plans and ROW grant terms, conditions, and stipulations.</p> <p>The holder is not authorized to translocate or handle Mojave Desert Tortoises.</p> <p>The holder shall monitor and avoid Couch's Spadefoot Toads and their habitat.</p>	<p>See attached legal description and Map</p>

Authorized officer is:

Jeremiah Karauzas  
\_\_\_\_\_  
(Name)

Field Manager (Acting)  
\_\_\_\_\_  
(Title)

Onsite inspection and compliance of the Right-of-Way or TUP stipulations will be conducted by the authorized officer's representative.

Brandon G. Anderson  
\_\_\_\_\_  
(Name of Authorized Officer's Representative)

California Desert District, 22835 Calle San Juan De Los Lagos  
Moreno Valley, CA 92553  
\_\_\_\_\_  
(Office, Street Address, City, State, Zip)

951-697-5215  
\_\_\_\_\_  
(Office Phone Number)

760-422-9120  
\_\_\_\_\_  
(Cell Phone Number)

\_\_\_\_\_  
(Authorized Officer's or Representative's Signature)

\_\_\_\_\_  
(Date)

Holders Acknowledgement when notice is delivered in person.

\_\_\_\_\_  
(Signature of Recipient)

\_\_\_\_\_  
(Firm Name)

\_\_\_\_\_  
(Name of Recipient)

\_\_\_\_\_  
(Date)

**Exhibit A**  
**Land Description**

San Bernardino Meridian, California

T. 7 S., R. 21 E.,

sec. 2, S $\frac{1}{2}$ NE $\frac{1}{4}$ , E $\frac{1}{2}$ SW $\frac{1}{4}$ , and NW $\frac{1}{4}$ SE $\frac{1}{4}$ ;

sec. 4, S $\frac{1}{2}$ SW $\frac{1}{4}$  and SW $\frac{1}{4}$ SE $\frac{1}{4}$ ;

sec. 5, S $\frac{1}{2}$ SW $\frac{1}{4}$  and S $\frac{1}{2}$ SE $\frac{1}{4}$ ;

sec. 6, SE $\frac{1}{4}$ SE $\frac{1}{4}$ ;

sec. 7, E $\frac{1}{2}$ NE $\frac{1}{4}$ ;

sec. 9, N $\frac{1}{2}$ NE $\frac{1}{4}$ ;

sec. 10, S $\frac{1}{2}$ NE $\frac{1}{4}$ , N $\frac{1}{2}$ NW $\frac{1}{4}$ , SE $\frac{1}{4}$ NW $\frac{1}{4}$ , NE $\frac{1}{4}$ SW $\frac{1}{4}$ , S $\frac{1}{2}$ SW $\frac{1}{4}$ , and SE $\frac{1}{4}$ ;

sec. 11, W $\frac{1}{2}$ NE $\frac{1}{4}$ , SE $\frac{1}{4}$ NE $\frac{1}{4}$ , NE $\frac{1}{4}$ NW $\frac{1}{4}$ , S $\frac{1}{2}$ NW $\frac{1}{4}$ , and SW $\frac{1}{4}$ ;

sec. 12, NW $\frac{1}{4}$  and N $\frac{1}{2}$ SW $\frac{1}{4}$ ;

sec. 13, N $\frac{1}{2}$ , SW $\frac{1}{4}$ , N $\frac{1}{2}$ SE $\frac{1}{4}$ , and SW $\frac{1}{4}$ SE $\frac{1}{4}$ ;

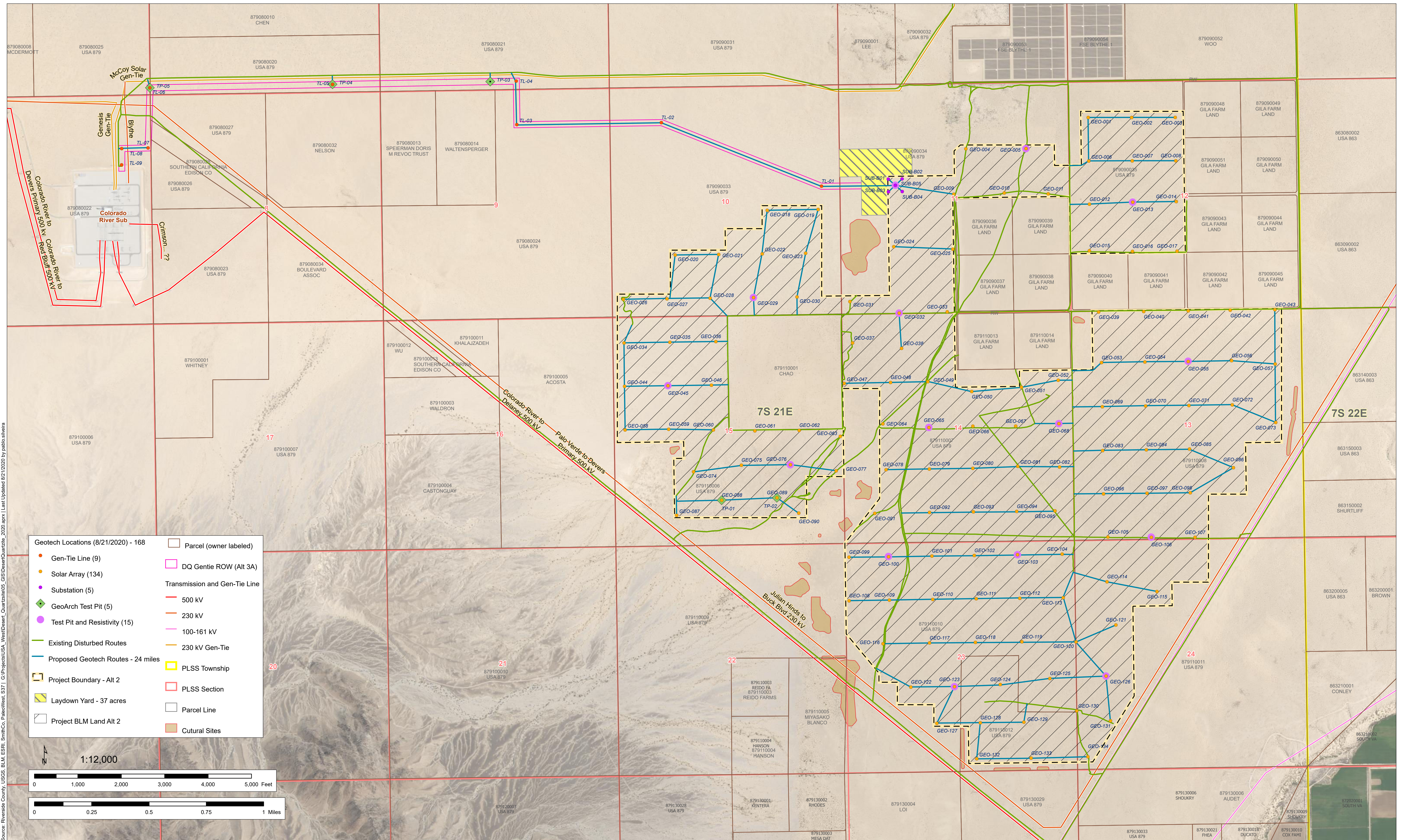
sec. 14, S $\frac{1}{2}$ NE $\frac{1}{4}$ , W $\frac{1}{2}$ , and SE $\frac{1}{4}$ ;

sec. 15, NW $\frac{1}{4}$ , N $\frac{1}{2}$ SW $\frac{1}{4}$ , SE $\frac{1}{4}$ SW $\frac{1}{4}$ , and SE $\frac{1}{4}$ ;

sec. 23, N $\frac{1}{2}$ , N $\frac{1}{2}$ SW $\frac{1}{4}$ , SE $\frac{1}{4}$ SW $\frac{1}{4}$ , and SE $\frac{1}{4}$ ;

sec. 24, NW $\frac{1}{4}$ NE $\frac{1}{4}$ , NW $\frac{1}{4}$ , W $\frac{1}{2}$ SW $\frac{1}{4}$ , SE $\frac{1}{4}$ SW $\frac{1}{4}$ , and S $\frac{1}{2}$ SE $\frac{1}{4}$ .

End Land Description



Source: Riverside County, USGS, BLM, ESRI, SmaCo, PalcoWest, S37 | G:\Projects\USA\_West\Desert\_Quartzite\05\_GIS\DesertQuartzite\_2020.aprx | Last Updated 8/21/2020 by pablo.alvarina

Enclosure 2: Geotechnical Work Plan



EDF Renewables North America  
15445 Innovation Drive  
San Diego, CA 92128  
www.edf-re.com

October 16, 2020

Brandon G. Anderson  
Assistant District Manager, Project Support  
Bureau of Land Management  
California Desert District  
22835 Calle San Juan De Los Lagos  
Moreno Valley, CA 92553  
Desk: 951-697-5215  
Mobile: 760-422-9120

Mr. Anderson,

On behalf of EDF Renewables Development, Inc., we would like to formally request a Limited Notice to Proceed (LNTP) for geotechnical testing over the right-of-way issued to Desert Quartzite, LLC as CACA-49397. Please see the attached workplan detailing the activities associated with the Geotechnical Testing along with the applicable GIS files, in line with our LNTP request.

EDFR would like to commence with Geotechnical testing activities starting the week of November 16, 2020. Estimated time of completion for the geotechnical testing activities would be between 8 to 12 weeks.

Please contact me if you have any questions or further requests.

Attachments:

1. Exhibit 1: Geotechnical Investigation Work Plan & Test Locations Map
2. Exhibit 2: Geotechnical Investigation Test Location Coordinates
3. Exhibit 3: Biological Monitoring Plan
4. Exhibit 4: Cultural Monitoring Plan
5. Exhibit 5: LNTP Request & Plan Summary
6. GIS Files

Sincerely,

A handwritten signature in blue ink, appearing to read "Levi Cox", written over a horizontal line.

Levi Cox, Project Developer  
Consultant to EDF Renewables, Inc.  
T: 760-578-8153  
E: [levi.cox@edf-re.com](mailto:levi.cox@edf-re.com)



# **Exhibit 1**

## **Geotechnical Investigation Work Plan & Test Locations Map**



The following outlines the geotechnical investigation plan of work for the Desert Quartzite Solar Project. The geotechnical investigation and pile testing program is necessary to support the engineering of the project. Pedestrian and vehicular access to the property, as well as equipment access for testing is being requested. Access in and out of the site is expected periodically over approximately 8 weeks.

## **Description of Activities**

The purpose of the geotechnical investigation is to gather information of the site for pertinent geological and geotechnical concerns and risks, as well as to gather adequate soil properties data to evaluate and provide recommendations for foundation, road, and electrical infrastructure design and constructability.

Subsurface investigations will consist of a combination of soil borings with standard penetration testing (SPT) and soil sampling, test pile installation and load testing, and field electrical resistivity testing. The on-site geotechnical investigation will consist of a team of approximate three to four staff, plus any biological, cultural, and paleontological monitors. The team proposes to conduct fieldwork at approximately 149 locations on BLM administered lands. The work is estimated to be completed over up to eight weeks, including approximately 3 to 4 weeks for soil borings and cone penetrometer test (CPT) soundings, test pits, and resistivity testing, followed by approximately 3 to 4 weeks for test pile installation, loading, and removal. A maximum work period of 12 weeks is being requested for this work to buffer for holidays and potential work delays.

Further details of the work are described below.

## **Geotechnical Work Areas and Activities**

A temporary work space measuring up to approximately 30 by 40 feet will be required to complete site investigation activities at each test location. Actual equipment dimensions are less than the work space listed as some additional area is required for setup space and navigation. In addition to the work space required for investigation, the work equipment and crews will travel across the site to each test location. Where possible, the investigation will utilize existing trails and paths to minimize ground disturbance in undisturbed area as shown in Exhibit 1. The travel path will be approximately 8 to 10 feet wide, and based on the current plan is calculated to be approximately 22.4 miles long, not including existing roads or trails. Actual travel paths will be adjusted in the field based on site conditions and disturbance factors. Therefore, providing for some variation in travel path due to avoidance of larger brush or sensitive areas, the estimated total length is up to 24 miles.

In undisturbed areas, including work areas and travel paths, the site investigation team (including monitors) will make field adjustments to mitigate disturbance and avoid sensitive areas or species. Vegetation not avoided will be driven over and “crushed” so as to minimize vegetation removal. The total footprint of ground disturbance is estimated to be approximately 30 acres, which includes approximately 4 acres for investigation locations and 26 acres for travel paths in previously undisturbed areas. Exhibit 1 includes a map of the proposed test locations and access routes.

The permitted location of the Project substation is in the northerly corner of the Project. At the time of writing this workplan, preliminary engineering is working through the design of the Project layout. There is a potential for the Project substation to be moved to a more central location within the Project. If preliminary design selects a location of the Project substation other than the northern location shown on Exhibit 1, then testing would occur at the revised location and the testing associated with locations SUB-B01 through SUB-B05 as shown on Exhibit 1 would be relocated. An updated workplan with these locations would be provided to BLM for review and approval prior to commencement of work at the revised location.

Further details of the work are described below.

## **Cone Penetrometer Test Soundings**

One track mounted Cone Penetrometer Testing (CPT) rig will be mobilized to the project site to complete this work. The CPT rig will be track mounted and specifically intended for low ground pressure and working on rugged terrain while minimizing ground disturbance. The CPT rig has four jacks to raise the rig and create a level platform. The rig will have a total weight of approximately 15 to 20-tons.

An example photo of the CPT rig is shown in Figure 1:



*Figure 1: Cone Penetrometer Test (CPT) Rig Example Photo*

Support equipment for the CPT rig and crew will consist of a truck and trailer to mobilize the rig to the site at the start of the investigation, and demobilize the rig after completion of the investigation. A standard heavy-duty pickup truck will be utilized by the crew on a daily basis for travel and support. Side-by-side utility vehicles (UTVs) may also be utilized by on site staff.

Hydraulic jacking and reaction systems on the rig will be utilized for pushing an instrumented cone and rods vertically into the ground at a controlled rate of approximately 2.0 cm/sec. During penetration, measurements are made of the cone tip resistance, the side friction on the cylindrical shaft just above the tip, and pore-water pressure generated by cone penetration. The borehole diameter from the sounding will be on the order of 2 inches. A total of 139 CPT soundings will be performed to a target depth of 20 feet below existing grade, or refusal if shallower. All sounding holes will be backfilled in accordance with state and local regulations immediately upon completion of the sounding.

## **Geotechnical Soil Borings**

One geotechnical drilling rig will be mobilized to the project site to complete this work. The drilling rig will be either track mounted or rubber-tired all-terrain and designed specifically for low ground pressure and working on rugged terrain while minimizing ground disturbance. The drill rig will be outfitted with four jacks to raise the rig and create a level platform. The rig will have a total weight of approximately 15 to 20-tons. Example photos of the types of drill rigs considered for this work are shown in Figure 2.

Support equipment for the drill rig and crew will consist of a truck and trailer to mobilize the rig to the site at the start of the investigation, and demobilize the rig after completion of the investigation. A standard heavy-duty pickup truck will be utilized by the crew on a daily basis for travel and support. Side-by-side utility vehicles (UTVs) may also be utilized by on site staff.

Forty-five (45) soil borings are planned to target depths of 20 to 50 feet below existing grade. The soil borings will be completed using continuous flight augers (hollow-stem or solid stem auger type) or air rotary drilling methods. The maximum outside borehole diameter will be 8 inches. At selected depths, the borehole advancement will be stopped and a sample of the soils below the bottom of the augers or drill bit will be taken. A geotechnical engineer or geologist will log the borings in the field and classify the materials encountered during boring activity to determine the subsurface geotechnical conditions. All

boreholes will be backfilled in accordance with state and local regulations immediately upon completion of the sounding.



*Figure 2: Drill rig examples*

### **Soil Test Pit Excavations**

One rubber-tired backhoe will be mobilized to the site to complete test pit excavations for both geotechnical and geoarchaeological purposes. An example photo of a backhoe conducting a test pit excavation is shown in Figure 3.



*Figure 3: Test Pit Backhoe Example*

The test pits will be performed to investigate, classify, and sample the surficial soils in the upper approximately 5 to 10 feet at the site. Test pits are planned at a total of 20 of the investigation locations. Sample sizes from test pit excavations will generally be no larger than one 5-gallon bucket. Test pit excavations will be backfilled with the native excavated soils immediately after completion of visual inspections, classification, and any sampling.

### ***Electrical Resistivity Testing***

Electrical resistivity testing will be performed at fifteen (15) locations at the project site. This testing involves setup of an array of metal electrodes across the ground surface and measuring the electrical resistance. Test arrays will consist of two perpendicular lines at the selected locations. The probes are inserted by hand several inches to one-foot into the ground during testing. The total length of each test line will be 300 feet or less.

### ***Pile Installation and Testing***

One (1) Hydraulic Hammer Rig will be mobilized to the site to complete test pile installation. The proposed test program includes one-hundred and forty-five (145) test piles at fifty-eight (58) locations (two test piles at each location, plus a third test pile at 50% of the pile test locations). Test locations will coincide with geotechnical boring locations to minimize potential site disturbance and for site specific performance correlations (test piles at approximately half of the boring locations). The pile sizes for testing will be W6x9 bare steel sections. At each test location, the piles will be installed to variable depths between 5 and 10 feet. An example photo of the pile installation rig is shown in Figure 4:



*Figure 4: Example Hydraulic Hammer Rig*

After completion of pile installation, each pile will be load tested. Testing will generally follow procedures in ASTM D 3689, Standard Test Method for Deep Foundations under Static Axial Tensile Load, Load, ASTM D3966 Standard Test Methods for Deep Foundations Under Lateral Load, and ASTM D1143 Standard Test Methods for Deep Foundations Under Static Axial Compressive Load. Example photos of typical testing setups for solar tracker piles are shown in Figure 5 and 6 below:



Figure 5: Axial Load Testing



Figure 6: Lateral Load Testing

Upon completion of pile load testing, each pile will be extracted using a backhoe or excavator. Any holes or excavation from extraction will be immediately backfilled and leveled using the native soils. All test piles will be removed from the site after extraction.

## Site Visits

EDF Renewables (EDFR) and potential contractors will visit the site to better understand the engineering and construction considerations necessary to build the Desert Quartzite project. EDFR and potential contractors will utilize four-wheel on and or off-road vehicles traveling to locations mirroring those areas identified as geotechnical proposed access roads on Exhibit 1. Site visits are anticipated to run concurrently or following geotechnical work thus no additional disturbance will be created by way of this effort.

## Schedule

The geotechnical testing activities are anticipated to begin in November 2020, pending review and permission from the Bureau of Land Management. As mentioned above, the work is estimated to be completed over up to eight weeks, including approximately 3 to 4 weeks for soil borings, test pits, and resistivity testing, followed by approximately 3 to 4 weeks for test pile installation, loading, and removal.

### Attachments:

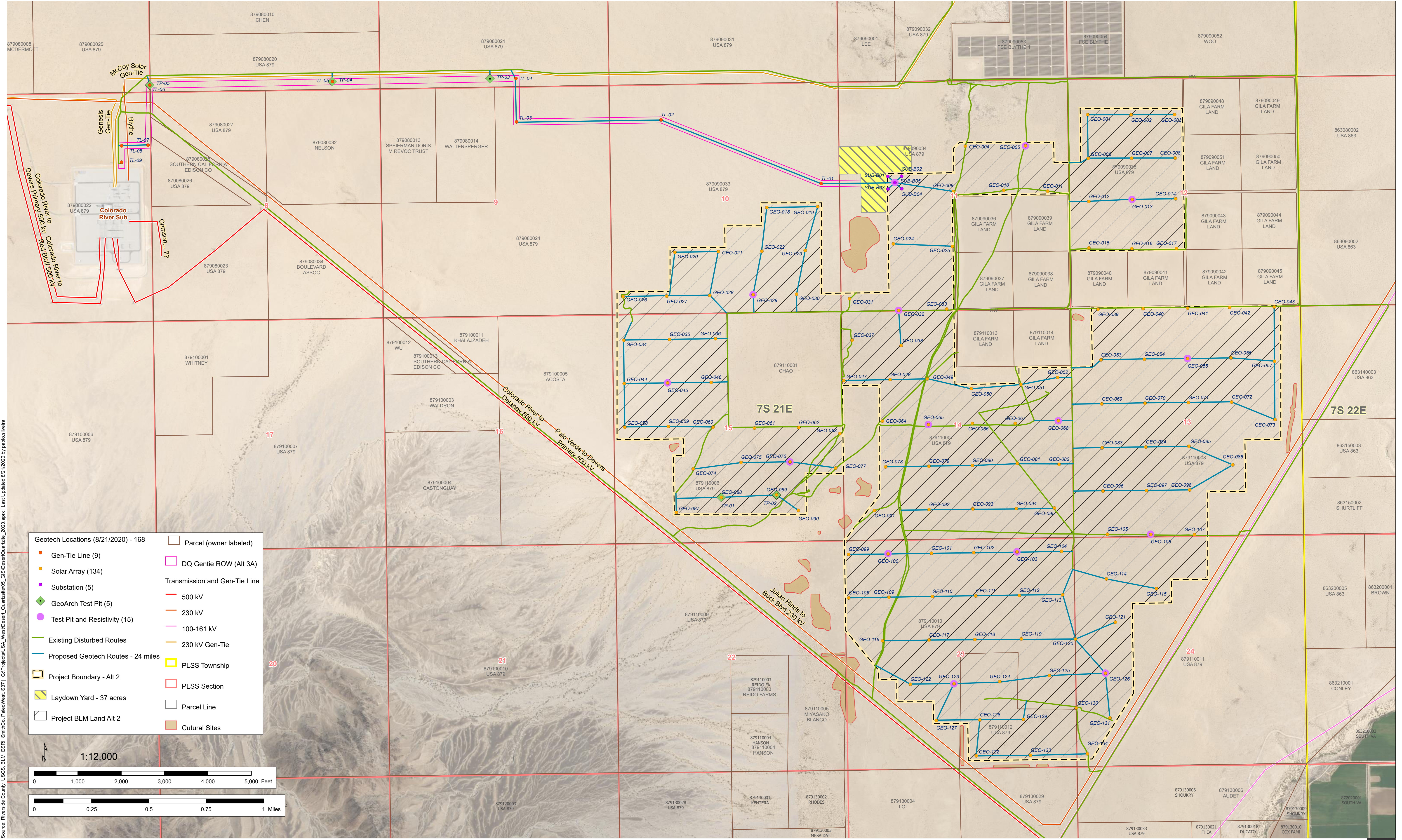
*Exhibit 1: Geotechnical Investigation Test Locations Map*

*Exhibit 2: Geotechnical Investigation Test Location Coordinates*

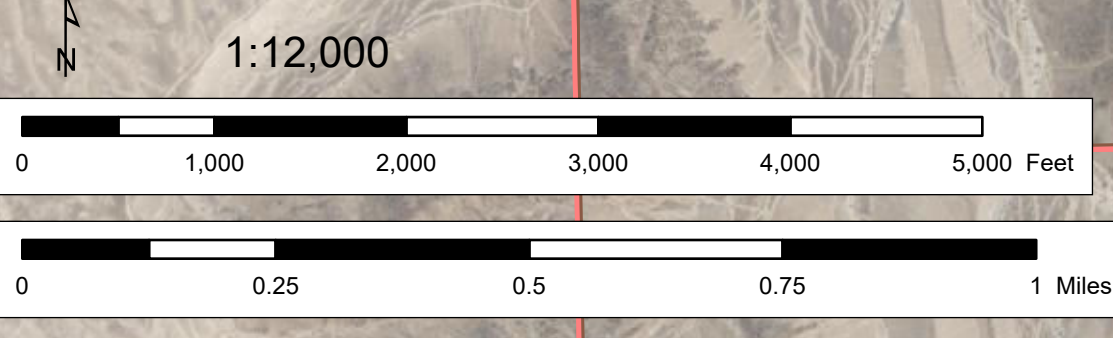
*Exhibit 3: Biological Monitoring Plan*

*Exhibit 4: Cultural Monitoring Plan*

Source: Riverside County, USGS, BLM, ESRI, SmaCo, PalcoWest, S371 G:\Projects\USA\_West\Desert\_Quartzite\05\_GIS\DesertQuartzite\_2020.aprx | Last Updated 8/21/2020 by pablo.silveria



● Geotech Locations (8/21/2020) - 168	□ Parcel (owner labeled)
● Gen-Tie Line (9)	□ DQ Gentie ROW (Alt 3A)
● Solar Array (134)	
● Substation (5)	
◆ GeoArch Test Pit (5)	
● Test Pit and Resistivity (15)	
— Existing Disturbed Routes	
— Proposed Geotech Routes - 24 miles	
□ Project Boundary - Alt 2	
■ Laydown Yard - 37 acres	
□ Project BLM Land Alt 2	
	— Transmission and Gen-Tie Line
	— 500 kV
	— 230 kV
	— 100-161 kV
	— 230 kV Gen-Tie
	□ PLSS Township
	□ PLSS Section
	□ Parcel Line
	■ Cultural Sites



## **Exhibit 2**

### **Geotechnical Investigation Test Location Coordinates**





Desert Quartzite Solar Project  
Geotechnical Investigation Work Plan

EXHIBIT 2

Site Investigation ID	Coordinates		Investigation Type					
	Longitude	Latitude	CPT Sounding	Soil Boring*	Geotech Test Pit	GeoArch Test Pit	Resistivity Testing	Pile Load Testing**
GEO-001	-114.742937	33.586203	X					
GEO-002	-114.739650	33.586163	X					X
GEO-003	-114.736359	33.586127	X					
GEO-004	-114.752225	33.584331	X					
GEO-005	-114.747672	33.584290	X		X		X	X
GEO-006	-114.742944	33.583448	X					
GEO-007	-114.739652	33.583416	X	X				
GEO-008	-114.736358	33.583380	X					X
GEO-009	-114.753189	33.581464	X	X				X
GEO-010	-114.749368	33.581498	X					
GEO-011	-114.746045	33.581402	X					
GEO-012	-114.742939	33.580708	X					X
GEO-013	-114.739661	33.580798	X		X		X	
GEO-014	-114.736369	33.580797	X					
GEO-015	-114.742996	33.577768	X					
GEO-016	-114.739739	33.577685	X					X
GEO-017	-114.736361	33.577661	X	X				
GEO-018	-114.767313	33.580614	X					
GEO-019	-114.763466	33.580623	X					
GEO-020	-114.774317	33.577863	X					
GEO-021	-114.771029	33.577863	X					X
GEO-022	-114.767744	33.577864	X	X				
GEO-023	-114.764459	33.577867	X					X
GEO-024	-114.757783	33.578197	X					X
GEO-025	-114.753320	33.577995	X					
GEO-026	-114.778281	33.575105	X					
GEO-027	-114.774988	33.575095	X					X
GEO-028	-114.771729	33.575103	X					
GEO-029	-114.768442	33.575104	X		X		X	X
GEO-030	-114.765156	33.575105	X					
GEO-031	-114.761159	33.574764	X					X
GEO-032	-114.757442	33.573983	X		X		X	
GEO-033	-114.753812	33.574023	X	X				X
GEO-034	-114.778285	33.572348	X					X
GEO-035	-114.774818	33.572352	X	X				
GEO-036	-114.771339	33.572354	X					X
GEO-037	-114.761004	33.572140	X	X				
GEO-038	-114.757307	33.571751	X					X
GEO-039	-114.742361	33.573879	X					
GEO-040	-114.738954	33.573865	X					X
GEO-041	-114.735583	33.573864	X					
GEO-042	-114.732407	33.573867	X					X
GEO-043	-114.729030	33.573864	X					
GEO-044	-114.778293	33.569596	X					X
GEO-045	-114.775005	33.569594	X		X		X	
GEO-046	-114.771718	33.569594	X					
GEO-047	-114.761680	33.569588	X					X
GEO-048	-114.758174	33.569606	X					
GEO-049	-114.755361	33.569618	X					
GEO-050	-114.752049	33.568960	X					
GEO-051	-114.748282	33.569178	X					X
GEO-052	-114.745490	33.569591	X					
GEO-053	-114.742199	33.570664	X	X				X
GEO-054	-114.738920	33.570665	X					
GEO-055	-114.735638	33.570664	X		X		X	X

Site Investigation ID	Coordinates		Investigation Type					
	Longitude	Latitude	CPT Sounding	Soil Boring*	Geotech Test Pit	GeoArch Test Pit	Resistivity Testing	Pile Load Testing**
GEO-056	-114.732361	33.570672	X					
GEO-057	-114.729069	33.570418	X	X				X
GEO-058	-114.778295	33.566838	X					X
GEO-059	-114.775000	33.566840	X					
GEO-060	-114.771624	33.566759	X					X
GEO-061	-114.768482	33.566656	X					
GEO-062	-114.765131	33.566649	X					
GEO-063	-114.762031	33.566235	X					
GEO-064	-114.758802	33.566992	X	X				X
GEO-065	-114.755322	33.566713	X		X		X	
GEO-066	-114.752001	33.566758	X					X
GEO-067	-114.748759	33.566721	X	X				
GEO-068	-114.745489	33.566842	X		X		X	X
GEO-069	-114.742186	33.567871	X					
GEO-070	-114.738917	33.567882	X					X
GEO-071	-114.735639	33.567870	X					
GEO-072	-114.732358	33.567869	X					X
GEO-073	-114.729093	33.566718	X					
GEO-074	-114.773166	33.564123	X	X				
GEO-075	-114.769542	33.564494	X					
GEO-076	-114.765830	33.564484	X		X		X	X
GEO-077	-114.762385	33.564059	X					
GEO-078	-114.758605	33.564086	X					
GEO-079	-114.755330	33.564087	X					X
GEO-080	-114.752046	33.564090	X					
GEO-081	-114.748648	33.564180	X					X
GEO-082	-114.745485	33.564087	X					
GEO-083	-114.742213	33.565092	X					X
GEO-084	-114.738909	33.565101	X	X				
GEO-085	-114.735640	33.565113	X					X
GEO-086	-114.732343	33.563893	X					
GEO-087	-114.774488	33.561375	X					
GEO-088 / TP-01	-114.771064	33.562297	X			X		X
GEO-089 / TP-02	-114.766886	33.562401	X			X		
GEO-090	-114.765257	33.561409	X	X				
GEO-091	-114.759504	33.561330	X					X
GEO-092	-114.755369	33.561334	X					
GEO-093	-114.752053	33.561333	X					X
GEO-094	-114.748774	33.561323	X					
GEO-095	-114.745877	33.561319	X					X
GEO-096	-114.742193	33.562352	X					
GEO-097	-114.738902	33.562352	X					X
GEO-098	-114.735631	33.562339	X					
GEO-099	-114.761504	33.558577	X					
GEO-100	-114.758510	33.558574	X		X		X	
GEO-101	-114.755235	33.558578	X	X				X
GEO-102	-114.752028	33.558571	X					
GEO-103	-114.748757	33.558579	X		X		X	X
GEO-104	-114.745386	33.558577	X	X				
GEO-105	-114.741907	33.559614	X					X
GEO-106	-114.738622	33.559564	X		X		X	
GEO-107	-114.735321	33.559515	X	X				X
GEO-108	-114.761546	33.555819	X					
GEO-109	-114.758494	33.555824	X					X
GEO-110	-114.755220	33.555824	X					
GEO-111	-114.751927	33.555824	X					X



**Desert Quartzite Solar Project  
Geotechnical Investigation Work Plan**

Site Investigation ID	Coordinates		Investigation Type					
	Longitude	Latitude	CPT Sounding	Soil Boring*	Geotech Test Pit	GeoArch Test Pit	Resistivity Testing	Pile Load Testing**
GEO-112	-114.748634	33.555819	X					
GEO-113	-114.745351	33.555813	X					X
GEO-114	-114.742022	33.556786	X					
GEO-115	-114.738258	33.556121	X					X
GEO-116	-114.759023	33.553067	X					
GEO-117	-114.755511	33.553072	X					X
GEO-118	-114.752041	33.553064	X					
GEO-119	-114.748523	33.553060	X					X
GEO-120	-114.744429	33.553004	X					
GEO-121	-114.741398	33.554040	X					X
GEO-122	-114.756969	33.550296	X	X				X
GEO-123	-114.753667	33.550279	X		X		X	
GEO-124	-114.750205	33.550375	X					X
GEO-125	-114.746450	33.550713	X					
GEO-126	-114.742197	33.550811	X		X		X	X
GEO-127	-114.755048	33.547972	X					
GEO-128	-114.751755	33.547968	X					X
GEO-129	-114.748462	33.547973	X					
GEO-130	-114.744451	33.548636	X	X				X
GEO-131	-114.741917	33.547980	X					
GEO-132	-114.752064	33.545694	X					
GEO-133	-114.747956	33.545682	X					X
GEO-134	-114.743663	33.545723	X					
SUB-B01	-114.758123	33.582484	X					
SUB-B02	-114.757080	33.582488	X					
SUB-B03	-114.758126	33.581687	X					
SUB-B04	-114.757083	33.581680	X					
SUB-B05	-114.757598	33.582085	X	X	X		X	
TL-01	-114.763184	33.582093		X				
TL-02	-114.775228	33.586271		X				
TL-03	-114.786162	33.586264		X				
TL-04	-114.786164	33.589026		X				
TL-05 / TP-04	-114.800056	33.588973		X		X		
TL-06 / TP-05	-114.813877	33.588924		X		X		
TL-07	-114.814077	33.585122		X				
TL-08	-114.816074	33.585102		X				
TL-09	-114.816095	33.584070		X				
TP-03	-114.788129	33.589020				X		

Total Number of Investigation Locations:

149

	CPT Sounding	Soil Boring	Geotech Test Pit	GeoArch Test Pit	Resistivity Testing	Pile Load Testing
Quantity Subtotals:	139	45	15	5	15	58

\* Sixteen (16) additional soil borings are included in the quantities at locations not currently designated. These locations will coincide with the selected geotechnical investigation locations, with the additional borings conducted to supplement CPT soundings where shallow refusal is encountered.

\*\* Final selection of pile load testing at the geotechnical investigation location may be adjusted based on the subsurface conditions observed from the CPT soundings, soil borings, and test pits. In all cases the pile test locations will coincide with a designated site investigation location.

**Exhibit 3**  
**Biological Monitoring Plan**



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August 13, 2020

Devon Muto  
Director, Solar Development  
EDF Renewable Energy  
15445 Innovation Drive  
San Diego, CA 92128

**SUBJECT: Desert Quartzite Solar Project – Biological Monitoring Approach for the Geotechnical Investigation Work Plan**

Mr. Muto:

This memorandum has been prepared to outline the approach to biological resource monitoring during the proposed geotechnical investigation at the Desert Quartzite Solar Project. The objective of the measures noted in this plan is to avoid and minimize impacts to biological resources, including special status plant and wildlife species. The proposed geotechnical investigation would involve work locations throughout the proposed project site footprint and proposed right-of-way (ROW). Portions of this work likely will require overland vehicular and equipment access. The following measures have been derived from the mitigation measures found in the Record of Decision (ROD) for the Desert Quartzite Solar Project<sup>1</sup>:

1. EDF RE shall obtain approval from the BLM Authorized Officer (AO) for at least one Designated Biologist (DB), as described in VEG-1 and VEG-2.
2. The DB shall be onsite during all geotechnical work activities and be responsible for implementing the conditions below. The DB shall have the authority to halt work to comply with the conditions below. If additional biological monitoring support is needed, a Biological Monitor (BM) would support the DB in the field and work under the supervision of the DB.
3. Soil disturbance shall be minimized by restricting work areas and access routes to existing disturbed roads and areas to the extent feasible.
4. Sources of potential weeds such as sediment on vehicles, equipment, or materials will be washed or cleaned prior to travel to or use on the site.

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<sup>1</sup> Bureau of Land Management (BLM). 2020. Record of Decision. Decision to Amend California Desert Conservation Area Plan and Authorize Right-of-Way for the Desert Quartzite Solar Project. BLM Case File No. CACA-49397 DOI-BLM-CA-D060-2017-0002-EIS. January 2020

5. Access routes leading to the geotechnical work locations that require overland travel off existing roads shall be determined under coordination with the DB to minimize impacts to native vegetation, soils, and special status species.
6. All disturbance shall be confined to the authorized right-of-way (ROW) as detailed and delineated in the attached maps.
7. The speed limit shall not exceed 15 miles per hour on all unpaved roads. The DB or BM shall escort equipment on both unpaved off-site access and Project roads and during overland travel to geotechnical work locations as deemed appropriate by the DB.
8. Equipment maintenance and refueling shall not be conducted within 150 feet of any sensitive resource (e.g., desert dry wash woodland, dune habitats, and rare plant populations).
9. A pre-activity survey shall be performed by the DB or BM prior to disturbance. The survey shall identify any existing sensitive biological resources (e.g., active bird nests, burrowing owl burrows, tortoise burrows, desert kit fox and badger dens, and sensitive plants).
10. Sensitive biological resource areas near all work activities shall be clearly communicated and/or marked (e.g., flagged or fenced) in the field. Avoidance buffers shall be established in accordance with relevant mitigation measures found in the ROD, and adjusted if necessary, by the DB.
11. All observations of special status species shall be recorded by the DB and reported to the CNDDDB per VEG-7.
12. No vehicles or construction equipment shall be moved prior to an inspection of the ground beneath the vehicle for the presence of desert tortoise.
13. Per VEG-8, all trenches, bores, and other excavations shall be inspected regularly throughout the day, at the end of each workday, and at the beginning of each day by the DB or BM. At the end of each work day, all potential wildlife pitfalls shall be backfilled, or sloped at a 3:1 ratio at the ends to provide wildlife escape ramps, or covered completely to prevent wildlife access, or fully enclosed with desert tortoise exclusion fencing.
14. Per VEG-8, any pipe, culvert, or similar structure stored for one or more nights, shall be inspected for tortoises, birds, and other wildlife before the material is moved, buried or capped. As an alternative, all such structures may be capped before being stored.
15. Water used for dust abatement or other work activities shall use the minimal amount needed to meet safety and air quality standards in an effort to prevent the formation of puddles, per VEG-8.
16. All vehicles and equipment shall be maintained in proper working condition to minimize the potential for fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials. Any hazardous material spills shall be immediately cleaned up and the contaminated soil properly disposed of at a licensed facility by the responsible party.



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17. All temporary disturbance areas shall be recontoured as close to its pre-disturbed state as feasible and to the satisfaction of the DB at the completion of geotechnical activities.
18. No desert tortoises shall be handled, moved, or harassed unless necessary. If a tortoise is found along the access road or work areas, they shall be avoided by halting or redirecting work activities.
19. No burrow or den potentially occupied by a special status wildlife species (e.g., desert tortoise, burrowing owl, desert kit fox, or American badger) shall be excavated or disturbed.
20. All injured or dead wildlife found during the geotechnical work shall be reported to the BLM within 24 hours.
21. All trash and materials shall be contained during work activities and properly disposed of at the end of each day.
22. Written records of the tasks specified above shall be maintained each day by the DB.

Respectfully,

**IRONWOOD CONSULTING, INC.**

Chris Blandford  
Principal  
949.351.0192

# **Exhibit 4**

## **Cultural Monitoring Plan**





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info@paleowest.com

SAN DIEGO, CALIFORNIA  
3990 Old Town Avenue, Suite  
C101 San Diego, CA 92110

October 16, 2020

## Plan for Cultural and Paleontological Monitoring During Geotechnical and Geoarchaeological Investigations at the Desert Quartzite Solar Project

The purpose of monitoring is to protect cultural and paleontological resources from geotechnical-related impacts and respond in accordance with appropriate measures in the event of a discovery or unanticipated effect to any historic properties during geotechnical and geoarchaeological studies for the Desert Quartzite Solar Project (DQSP). Archaeological, paleontological, and Native American monitors from the Colorado River Indian Tribes (CRIT) will be on site for all activities where ground-disturbing activities are conducted.

Any routes that have not been previously surveyed for the presence of cultural or paleontological resources will be preceded by an archaeological and paleontological monitor. Once routes have been established, they will be periodically checked for any new resources. Monitors will inspect an activity area before any activity occurs. The archaeological/paleontological monitor will be allowed to deny access if a resource is discovered and direct crews to areas that will be less impactful.

The monitors shall:

- Provide overview of the sensitivity of the area for each person entering areas sensitive for cultural or paleontological resources;
- Present a cultural and paleontological overview of the project area and explain and pertinent issues and concerns about the area;
- Provide a forum for the Native American monitor to explain the sensitivity of the project area;
- Explain the protocols for any discovery that is made;
- Note the civil and criminal penalties that may apply for damages to resources.

If the monitor identifies impacts or potential impacts to cultural or paleontological resources, the monitor is authorized to cease the activity in the immediate area. The monitor shall immediately contact the Bureau of Land Management – Palm Spring South Coast Field Office (BLM PSSCFO) archaeologist/geologist. Any discoveries will be treated in accordance with the protocols of mitigation measures Cultural-4 (Unanticipated Discoveries) and PAL-5 (Paleontological Monitoring Activities).

Upon completing all monitoring of geotechnical and geoarchaeological activities, a brief letter report will be drafted for cultural resources and paleontology and submitted to the BLM PSSCFO archaeologist and geologist. This report will be independent of and in addition to the report detailing the findings of geoarchaeological investigation.



# **Exhibit 5**

## **LNTP Request and Plan Summary**

**Exhibit 5**

**Activities Associated with Geotechnical Testing for the Desert Quartzite Solar Project**

In line with the LNTP Geotechnical Testing Plan provided to the BLM and dated Aug 21, 2020, the following activities will be associated with geotechnical testing at the Desert Quartzite Solar Site:

- 1) Approximately 30 acres of potential ground disturbance for this action. 4 acres of disturbance is related to investigation locations, inclusive of potential disturbance within the temporary work space measuring 30 x 40 feet. It has been estimated that approximately 26 acres of potential disturbance would be related to traveled paths to the test sites. The potential for disturbance to the 26 acres would be specifically related to drive and crush of equipment and would be temporary in nature. No grading or excavation activities would take place in the 26 acres of travel routes. Wherever possible, avoidance of vegetation would be implemented. Sensitive areas and/or sensitive species would be avoided.
- 2) Access would occur from 16<sup>th</sup> Avenue and over the approved access road for the Project;

The following applicable plans are required per the Record of Decision prior to ground disturbance and have been provided to BLM:

- 1) (AQ-1) Dust Control Plan provided to BLM;
- 2) (VEG-1, VEG-2) Designated Biologist would be Chris Blandford with Ironwood Consultants; Biological Monitors would likewise be provided by Ironwood Consultants;
- 3) Requirement for BRIMIMP (VEG-7); See Exhibit 3
- 4) (VEG-8, VEG-9) Habitat Restoration Plan and Vegetation Resources Management Plan provided to BLM;
- 5) (APM-BIO-5, WIL-2, WIL-5, WIL-6) Integrated Weed Management Plan, Desert Tortoise Translocation Plan, Predator (Raven) Management Plan & Bird & Bat Conservation Strategy (BBCS) provided to BLM;
- 6) (WIL-7) Pre-Construction Nest Surveys; Outside of nesting season – no grading or mowing activities are associated with the proposed action;
- 7) (WIL-8, WIL-9) Desert Kit Fox Management Plan & Burrowing Owl Mitigation Plan provided to BLM;
- 8) (WIL-12) Couch's Spadefoot Toad Protection & Mitigation Plan; the proposed action would avoid any identified habitat supporting CST within the the area of the proposed action;
- 9) (CULTURAL-6) Contracts with Tribal Monitors have been prepared; Tribal monitors would be on-site for proposed action;
- 10) (FIRE-1) Fire Safety Plan has been provided to BLM;
- 11) (HAZ-1) Hazardous Materials Management & Emergency Response Plan is required prior to full Notice to Proceed; request BLM concurrence that this plan is not required for the proposed action;
- 12) (UXO-1) UXO Plan has been provided to BLM;
- 13) (PAL-3) A PRMMP has been submitted and approved by BLM;

- 14) (VIS-1, VIS-4) A Lighting Plan and Decommission plan has been provided to BLM;
- 15) (WATER-1, WATER-2, WATER-4 & WATER-5 – Request BLM concurrence that these plans are not required by the proposed action being that the proposed action will not utilize ground water or perform grading activities that would necessitate these plans.
- 16) All work will occur during the daytime hours;
- 17) Resource Plans applicable to this LNTP request have been filed with the BLM;
- 18) The grading activities, construction of solar panels, trackers or associated equipment will not occur associated with this LNTP.