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# Willow Rock Energy Storage Center (21-AFC-02)

## *Data Request Response Set 1*

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## Foreword

On March 1, 2024, GEM A-CAES, LLC (Applicant) docketed the Supplemental Application for Certification (SAFC) Volume 1 for the Willow Rock Energy Storage Center (WRESC; 21-AFC-02). On July 16, 2024, the Executive Director recommended that the Committee accept the Supplemental AFC as complete, and that the 12-month timeline to reach a decision on the AFC, as required by Public Resources Code section 25540.6, shall begin.

Pursuant to Title 20, California Code of Regulations, section 1716, California Energy Commission (CEC) Staff on July 26, 2024, docketed Data Requests Set 1. Data Requests Set 1 presents a list of questions associated with the Project's alternatives and resource topic areas Cultural and Historic Resources and Socioeconomics. To address CEC Staff's request, each Data Request within Set 1 has been responded to with supplemental information or guidance on where the information may be found.

The Applicant docketed their Cultural Resources Phase II Testing Plan on June 17, 2024 (TN #257813). The Applicant is gathering review comments from CEC Staff and the tribal entities during formal government-government consultation, to be incorporated and docketed in a Final Revised Cultural Resources Phase II Testing Plan. The Tejon Indian Tribe should be actively engaged and providing comments. At this time, the Applicant has made all changes to the Final Revised Cultural Resources Phase II Testing Plan that are within their control. The Final Revised Cultural Resources Phase II Testing Plan will be docketed following receipt of input from Tribal stakeholders. The Applicant intends to initiate Phase II Testing Plan field work in September 2024.

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**ATTACHMENT DR2-2**

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OT Site Map

**ATTACHMENT DR2-5**

Odel Phase I ESA

**ATTACHMENT DR2-6**

Villa Haines Phase I ESA

## 1.0 INTRODUCTION

GEM A-CAES LLC's (the "Applicant") is responding to the California Energy Commission (CEC) Staff Data Requests Set 1, numbers:

- **Alternatives:** DR1, and DR 2
- **Cultural/Tribal Cultural Resources:** DR3 through DR 22
- **Socioeconomics:** DR23 and DR24

This response document addresses CEC Data Request Set 1. The responses are grouped by individual discipline or topic area. Within each discipline area, the responses are presented in the same order as presented by CEC Staff and are keyed to the Data Request (DR) numbers (DR#). New or revised graphics, tables, or attachments are provided as attachments and are numbered in reference to the Data Request number. For a hypothetical example, the first attachment used in response to Data Request DR10 would be numbered Attachment DR10-1. Each page in this response document is sequentially page-numbered consistently with the remainder of the document, although some attachments may also have their own internal page numbering system.

## 2.0 ALTERNATIVES

### 2.1 Preferred Gen-Tie Route Options

#### 2.1.1 Data Request DR1

Section 2.0 Project Description lists project features, including the transmission line to connect the project to the grid at the Whirlwind Substation: "One, approximately 19-mile-long 230 kV single-circuit, double-bundle, conductor generation-tie (gen-tie) line interconnecting to the SCE Whirlwind Substation with a preferred gen-tie route and route options."

In Section 6.0 Alternatives, subsection 6.5.1.2 Preferred Gen-Tie Route Options, several options are listed. It states that these route options "deviate slightly from the primary alignment that are also included in the proposed project. These are all considered available but less preferable than the primary route." (The options are numbered: 1, 2a, 2b, 3a, 3b, 4, 5, and 6.).

**DR1:** Please clarify whether all the transmission line route options are considered part of the proposed project. If not, please clarify whether the applicant is seeking CEC certification only for the "primary route."

**Response:** *A Preferred Route for the location of the Gen-Tie line has been identified for the Project. The Project transmission line options are numbered 1, 2a, 2b, 3a, 3b, 4, 5, and 6. While the Preferred Route continues to be the anticipated route for the Gen-Tie line, WRESC seeks certification for the Preferred Route and all of the numbered options to ensure needed flexibility in the final route alignment in the designated option areas.*

### 2.2 Alternative Sites

#### 2.2.1 Data Request DR2

Section 6.0 Alternatives of the supplemental application evaluates several alternative sites, including the original Sweetser Road Site, for a total of eight alternative sites. The three alternative sites from the original application are included in the supplemental application (BLM Site, Little Buttes Site, and Rosamond Hills Site). The applicant provided details to staff on these three sites in its August 2022 Data Request Response Set 1, Attachment DR6-1,

“Nonconfidential Summary of the Geotechnical Examination” (TN 245698). These details included large-scale (i.e., zoomed in) maps and other information to allow staff to examine these alternative sites.

The applicant added four sites to the Alternatives analysis in the supplemental application for the relocated project: VH Site, PS Site, G Site, and OT Site. These sites are shown as dots on a map (Figure 6-1) with general descriptions of their locations relative to the proposed site. Additional information is required to allow staff to describe and evaluate these new alternative sites.

**DR2:** Please provide assessor’s parcel numbers and large-scale, zoomed in maps showing the locations of the VH Site, PS Site, G Site, and OT Site. Please provide any additional details on these sites that might have been acquired by the applicant prior to submittal of the supplemental application (e.g., information from a preliminary site assessment or other similar study).

**Response:** *The assessor’s parcel numbers and large-scale, zoomed in maps showing the locations of VH Site, PS Site, G Site, and OT Site are provided as follows (Attachments DR2-1 through DR2-4):*

- *Attachment DR 2-1 VH Site Map*
- *Attachment DR 2-2 PS Site Map*
- *Attachment DR 2-3 G Site Map*
- *Attachment DR 2-4 OT Site Map*

*As previously explained on page 6-13 of the Supplemental Application for Certification (SAFC) (TN# 254805), the PS site was dropped from further consideration because the site owner has active plans to develop the site for the Mojave Micro Mill on that parcel. Kern County prepared a CEQA Environmental Impact Report for the PS Site as part of its permitting record (<https://kernplanning.com/environmental-doc/mojave-micro-mill-project/>). Draft Phase I Environmental Site Assessment (ESA) Reports were prepared for the VH Site and the OT Site. These documents are incomplete drafts that were never finalized as the landowners failed to respond to the associated questionnaire. Right of entry access was not obtained for PS Site and G Site. No similar studies were performed for these two parcels. The Draft Phase I ESAs for the VH Site and OT Site will be submitted simultaneous to this document through Kiteworks under the reference Attachments DR-2-5 and DR-2-6, respectively.*

## **3.0 CULTURAL/TRIBAL CULTURAL RESOURCES**

### **3.1 Section 5.0 Research Design for the Cultural Resources Testing Program in WSP 2024**

#### **3.1.1 Data Requests DR3 to DR5**

The discussion of regional research issues in the testing plan is underdeveloped. For instance, the historic archaeological research questions are only mentioned in Chronology (WSP 2024, pages 23–24). The CEC staff informed the applicant and its consultant team during a May 17, 2024, meeting that the testing plan should make use of a few readily available, thematic archaeological research designs: COHP (1990) for general guidance on research design and methods, Caltrans (2008) for mining cultural resources, and Caltrans (2023) for agricultural cultural resources. WSP (2024) does not reference these documents.

**DR3:** Please provide a summary of regional research issues.

**Response:** On June 18, 2024, the Applicant docketed the Cultural Resources Phase II Testing Plan (TN# 257813). Section 3.0 of the Final Revised Cultural Resources Phase II Testing Plan will contain the requested information, including a more in-depth discussion of research issues related to site chronologies, subsistence patterns, material sourcing, historic period homesteading, and ranching.

The Final Revised Cultural Resources Phase II Testing Plan will be docketed following receipt of input from Tribal stakeholders. The Applicant cannot finalize the testing plan's revision until it receives substantive comments from the Tribes. The Applicant assumes that Staff is spearheading tribal consultation, though the Applicant has no visibility into the Government-to-Government consultation process. The Tejon Indian Tribe should be actively engaged and providing comments.

**DR4:** Please provide historic archaeological research questions relevant to the area or region and activities that were present in this region (i.e., mining, agriculture, ethnicity, gender, etc.).

**Response:** This information will be provided in Section 5.0 of the Final Revised Cultural Resources Phase II Testing Plan, which was docketed on June 18, 2024 (TN#: 257813). Section 5 of the revised testing plan will contain questions regarding historic homesteading, ranching, and mining as they pertain to WRESC-ZEV-HIST-SITE-1, WRESC-ZEV-HIST-SITE-2, CA-KER-3816H, CA-KER-8234H, CA-KER-8235H, and CA-KER-8236H. The Revised Final Cultural Resources Phase II Testing Plan will be docketed following receipt of input from Tribal stakeholders. The Applicant cannot finalize the testing plan's revision until it receives substantive comments from the Tribes. The Applicant assumes that Staff is spearheading tribal consultation, though the Applicant has no visibility into the Government-to-Government consultation process.

**DR5:** Please provide historic research questions relevant to the artifacts expected to be recovered at the specific site types.

**Response:** This information will be provided in the Final Revised Cultural Resources Phase II Testing Plan. The Final Revised Cultural Resources Phase II Testing Plan will be docketed following receipt of input from Tribal stakeholders. The Applicant cannot finalize the testing plan's revision until it receives substantive comments from the Tribes. The Applicant assumes that Staff is spearheading tribal consultation, though the Applicant has no visibility into the Government-to-Government consultation process.

## **3.2 Figure 2 Site Testing Locations (map) in WSP 2024**

### **3.2.1 Data Request DR6**

The map is missing two archaeological resource locations (WRESC-ZEV-HIST-2 and WRESC-P1-PRE-SITE-2).

**DR6:** Please add WRESC-ZEV-HIST-2 and WRESC-P1-PRE-SITE-2 to Figure 2.

**Response:** The requested figure will be included in Section 4.0 of the Final Revised Cultural Resources Phase II Testing Plan. The Final Revised Cultural Resources Phase II Testing Plan will be docketed following receipt of input from Tribal stakeholders. The Applicant cannot finalize the testing plan's revision until it receives substantive comments from the Tribes. The Applicant assumes that Staff is spearheading tribal consultation, though the Applicant has no visibility into the Government-to-Government consultation process.

### 3.3 Section 3.2.2 Ethnographic Context in WSP 2024

#### 3.3.1 Data Request DR7

The testing plan does not contain ethnographic information for the Serrano, except for scattered references in the Kitanemuk and Tataviam discussions (WSP 2024, pages 8-11).

**DR7:** Please add a Serrano context to the Ethnographic Context of the survey addendum when that report is completed.

**Response:** *The Applicant acknowledges DR7 and the Serrano Ethnographic Context will be added to the Revised Survey Report. Once input from Tribal stakeholders is provided on the Final Revised Cultural Resources Phase II Testing Plan and Phase II surveys are completed, the Applicant will prepare the Revised Survey Report.*

### 3.4 Section 4.1 General Testing Methodology in WSP 2024

#### 3.4.1 Data Requests DR8 to DR11

The testing plan does not contain data thresholds to determine what constitutes a “substantial cultural deposit” (COHP 1990, page 10).

When excavating historic features where discernable layers are present, excavation should be done stratigraphically using the Harris Matrix or similar approaches. To confirm the character and composition of surface deposits in aeolian depositional environments, incorporate the use of 2-meter-by-2-meter Surface Test Units (STUs), excavated to a depth of 5 centimeters below surface and screened through 1/8-inch wire mesh. STU locations can be determined to incorporate cultural materials visible on the surface. STUs can be expanded to shovel test pits (STPs) or test units (TUs) if cultural materials are encountered beyond an established threshold of what was initially visible on the surface. The Testing Plan must determine the conditions upon which a STU would be expanded to a STP or TU. Be specific in determining this threshold.

The prescribed testing plans for Native American archaeological site WRESC-ZEV-PRESITE 1 indicates that “STPs will be excavated in a manner that avoids potential direct impacts to the identified site until it is determined that surface collection and additional excavation within the recorded site boundary is appropriate” (WSP 2024, page 18). If testing the exterior margins of a site does not show evidence of subsurface cultural deposits, subsurface testing should be explored within the recorded site boundary to determine the presence or absence of subsurface cultural deposits for the purposes of evaluating the significance of the resource. Phase II investigations are the appropriate time to excavate within the recorded site boundary. This approach to identifying subsurface cultural deposits should be discussed within the methods section and applied to all Native American archaeological sites (WRESC-ZEV-PRE-SITE 1, WRESCZEV-PRE-SITE 2, WRESC-P1-PRE-SITE 1, and WRESC-P1-PRE-SITE 2).

**DR8:** Please add data thresholds for what constitutes a substantial deposit (i.e., a concentration of \_\_\_ artifacts or intact features, etc.). These can be site-specific based on the site type and context.

**Response:** *Section 4.0 of the Final Revised Cultural Resources Phase II Testing Plan will be updated to include both generalized and site-specific threshold definitions. The Final Revised Cultural Resources Phase II Testing Plan will be docketed following receipt of input from Tribal stakeholders.*

**DR9:** Please verify that when historic features are encountered that warrant it, industry standards for the excavation of historical archaeology will be employed such as stratigraphic excavation methods (i.e., Harris Matrix).

**Response:** *For historic archaeological features, such as those associated with WRESC-ZEV-HIST-SITE-1, Harris Matrix will be employed during the combined testing/data recovery phase and will be discussed in Section 4.0 of the Final Revised Cultural Resources Phase II Testing Plan. The Final Revised Cultural Resources Phase II Testing Plan will be docketed following receipt of input from Tribal stakeholders.*

**DR10:** Please incorporate the use of 2-meter-by-2-meter STUs at Native American archaeological sites with surface deposits in aeolian depositional environments.

**Response:** *The Final Revised Cultural Resources Phase II Testing Plan has been updated to include in detail how 2x2 meter STUs will be deployed at WRESC-ZEV-PRE-SITE-1 and WRESC-ZEV-PRE-SITE-2 in aeolian deposits. The Final Revised Cultural Resources Phase II Testing Plan will be docketed following receipt of input from Tribal stakeholders.*

**DR11:** Please incorporate methods for subsurface testing within site boundaries of all Native American archaeological sites to determine the presence or absence of subsurface cultural deposits for the purposes of evaluating the significance of the resource if the testing of the exterior margins of a site does not show evidence of a subsurface cultural deposit.

**Response:** *Meaningful discussion with Native American stakeholders is necessary to formulate an appropriate treatment for surface collection and storage of resources, prior to the formulation of a methodology. The Applicant is waiting on comments from formal government-government consultation to incorporate into the Final Revised Cultural Resource Phase II Testing Plan. The Applicant cannot finalize the testing plan's revision until it receives substantive comments from the Tribes. The Applicant assumes that Staff is spearheading tribal consultation, though the Applicant has no visibility into the Government-to-Government consultation process.*

## **3.5 Section 4.2 Site-Specific Plans in WSP 2024**

### **3.5.1 Data Requests DR12 to DR15**

Site-specific plans need to be more developed to include how and what decisions will be made if intact deposits or features are encountered.

WESC-ZEV-HIST-SITE-1 methods should also focus on identifying features that could contribute to the eligibility of the site or answer relevant research questions, as well as diagnostic artifacts to help identify the period of occupation of the homestead.

Historic sites CA-KER-8324H, CA-KER-8325H, CA-KER-3816H, and CA-KER-8328H along the Gen-Tie Route generally fall outside of the areas of direct impacts and the present plan is geared toward establishing the presence or absence of archaeological deposits. The plan should include decision thresholds, if an intact deposit or feature is encountered, that include whether the unit will be expanded to determine if the deposit would contribute to the overall site eligibility or to exhaust the data potential of the deposit.

The prescribed testing plan for sites WRESC-P1-PRE-SITE 1 and WRESC-P1-PRE-SITE 2 proposes over 100 STPs across 1,000 square meters, to potentially redefine the boundaries of the two resources among obsidian isolates recently identified in January of 2024. The testing plan also proposes to assess the potential for subsurface archaeological deposits using these STPs. It is not clear how using 100 STPs spaced every 10 meters

across a grid projected between the two sites is going to determine if the boundaries of these two resources are accurately defined if the resources are not yet known to contain subsurface deposits. A thorough surface survey or deployment of STUs seems a more likely way to identify sparse lithic scatters in surface deposits. The proposed prescribed testing for WRESC-P1-PRE-SITE 1 and WRESC-P1-PRE-SITE 2 only addresses the matter of defining the boundaries of the resources; it does not address how the resources are going to be investigated to evaluate their significance.

**DR12:** Please include figures that show the area(s) that will be tested, limits of property access, and survey area for each site.

**Response:** Section 4.0 of the Final Revised Cultural Resources Phase II Testing Plan will include the additional figures illustrating the areas that will be tested, limits of property access, and survey area for each site. The Applicant is waiting on comments from formal government-government consultation to incorporate into the Final Testing Plan. The Applicant cannot finalize the testing plan's revision until it receives substantive comments from the Tribes. The Applicant assumes that Staff is spearheading tribal consultation, though the Applicant has no visibility into the Government-to-Government consultation process.

**DR13:** Please update WESC-ZEV-HIST-SITE-1 to include methods for identifying features that could contribute to the eligibility of the site or answer relevant research questions.

**Response:** Additional questions regarding the period of significance, association with local themes, including the Southern Pacific Railroad, ranching, and homesteading will be incorporated into Section 5.0 of the Final Revised Cultural Resources Phase II Testing Plan. The Final Revised Cultural Resources Phase II Testing Plan will be docketed following receipt of input from Tribal stakeholders. The Applicant cannot finalize the testing plan's revision until it receives substantive comments from the Tribes. The Applicant assumes that Staff is spearheading tribal consultation, though the Applicant has no visibility into the Government-to-Government consultation process.

**DR14:** Please update the site-specific plans for CA-KER-8324H, CA-KER-8325H, CA-KER-3816H, and CA-KER-8328H to include decision thresholds, if an intact deposit or feature is encountered, that include whether the unit will be expanded to determine if the deposit would contribute to the overall site eligibility or to exhaust the data potential of the deposit.

**Response:** Site-specific plans will be included in Section 4.0 of the Final Revised Cultural Resources Phase II Testing Plan. The Final Revised Cultural Resources Phase II Testing Plan will be docketed following receipt of input from Tribal stakeholders.

**DR15:** Please update WRESC-P1-PRE-SITE 1 and WRESC-P1-PRE-SITE 2 with methods that include thorough surface survey or deployment of STUs to aid in defining the existing site boundaries and how the resources are going to be investigated to evaluate their significance.

**Response:** Details regarding Phase II resurvey of the sites and a more detailed description of excavation and evaluation methods will be incorporated into the Final Revised Cultural Resources Phase II Testing Plan. The Final Revised Cultural Resources Phase II Testing Plan will be docketed following receipt of input from Tribal stakeholders.



## 3.6 Information Requirements for AFC Application

### 3.6.1 Data Request DR16 to DR 20

CEC staff has received via confidential filing the Cultural Resources Assessment of WRESC Advanced Compressed Air Energy System (A-CAES) Project prepared by WSP USA, Inc. (WSP) (Amorelli et al. 2024). Section (g)(2)(C) of Appendix B, Information Requirements for an AFC (Cal. Code Regs., tit. 20, Div. 2, Ch. 5) requires that the cultural resources technical report conforms to the Archaeological Resource Management Report (ARMR) format (COHP 1990), so that staff has sufficient information upon which to complete its analysis.

Section 3.1 of the confidential Cultural Resources Assessment (Amorelli et al. 2024) describes the natural setting of the proposed project's area and provides an overview of the geology, climate, biology, and hydrology. However, a description of the natural environment as it is believed to have existed during the temporal periods of occupation being investigated is absent.

Additionally, the ethnographic context contained in the report (Amorelli et al. 2024) provides a review of ethnographic information regarding the Kitanemuk, Tataviam, and Kawaiisu. However, a discussion of the Serrano is absent, even though their ancestral lands are closer to the project site than the Tataviam.

Section (g)(2)(C) of Appendix B requires that new pedestrian surveys be conducted inclusive of the project site and project linear facility routes, extending no less than 200 feet around the project site, substations and staging areas, and to no less than 50 feet to either side of the right-of-way of project linear facility routes. Section 6.3 of the confidential Cultural Resources Assessment (Amorelli et al. 2024) discusses the methods and results of the cultural resources survey, and report that 18 percent of the P1 Staging Area, a two-mile segment of Alternative C of the gen-tie route, and several portions of the preferred gen-tie route have not been surveyed.

The ARMOR (COHP 1990, page 10) indicates that for survey reports, maps should be used to depict areas surveyed, not surveyed, or surveyed using various strategies. No such maps were provided in the application.

Lastly, several bibliographic resources cited in the confidential Cultural Resources Assessment (Amorelli et al. 2024) are not included in the References section of the report.

To resolve these issues identified with the confidential Cultural Resources Assessment (Amorelli et al. 2024), the applicant may address the data requests identified below in its addendum survey report(s).

**DR16:** Please provide a description of the paleoenvironmental setting, per ARMOR, p. 8.

**Response:** *Additional details of the Pleistocene era Lake Thompson will be incorporated into the Revised Survey Report. The Revised Survey Report will be docketed following completion of the Cultural Resource Phase II Survey.*

**DR17:** Provide a review of the ethnographic information relating to the Serrano that includes the Vanyume.

**Response:** *The Revised Survey Report will incorporate Ethnographic Context for the Serrano. The Revised Survey Report will be docketed following completion of the Cultural Resource Phase II Survey.*

**DR18:** A significant amount of the project area remains unexamined by cultural resources specialists. Obtain access to all properties within the archaeological study area, survey them for the presence/absence of cultural resources and provide a supplemental report of methods and findings.



**Response:** The vast majority of the proposed development footprint has been surveyed. This includes 100% of the WRESC project area and approximately 78% of the gen-tie line preferred and option routes. This equates to 98% of the permanently disturbed lands (i.e., based on WRESC facility and pole locations) associated with the Project. As described, the majority of the areas where site control has not been granted is within the transmission line corridor where siting of structures is flexible and can be used to avoid resources. The Applicant continues to seek site access for parcels within the study area not currently available.

**DR19:** Provide archaeological survey coverage maps per ARM, p. 10.

**Response:** Survey coverage maps will be incorporated into the Revised Survey Report. The Revised Survey Report will be docketed following completion of the Cultural Resource Phase II Survey.

**DR20:** Provide bibliographic entries for these text citations: Kern County Gazette 1876; Kern-Antelope Historical Society 1936, 2018; Mayer and Laudenslayer 1988; Norwood and Kilanowski 1991; San Bernardino Museum n.d.; USGS 1963.

**Response:** Kern County Gazette 1876 excerpt is cited as referenced by Serpico 2000. The "USGS 1963" citation was incorrectly cited in the text. It should be "Historic Aerials Viewer 1963", which was already included in the references. This and all other references will be updated in the Revised Survey Report.

## 3.7 Historic Built Environment Resource Documentation

### 3.7.1 Data Requests DR21 and DR22

The Cultural Resources Assessment of the WRESC A-CAES project states that one built environment resource, the Zabriski Place (P 15-003098), was inaccessible from the right of way and therefore the applicant's consultants only inventoried the property at a reconnaissance level instead of the intensive level survey and documentation that all other built environment resources received (Amorelli et al. 2024, page 75). While the condition of the resource may be difficult to fully document with visual obstructions from the right of way, the historic context and potential significance of P-15-003098 should still be documented at an intensive survey level, especially considering that this resource was previously recommended eligible for listing in the National Register of Historic Places, likely qualifying the Zabriski Place as a historical resource under the California Environmental Quality Act.

Additionally, several built environment resources documented in Appendix D of the Cultural Resources Assessment are not listed with the other surveyed resources in the Built Environment Investigation Results (Section 6.4) or shown on the Built Environment Survey Result Maps in Appendix C (Survey Results Figures). These include Map ID #35-54 (Amorelli et al. 2024, pages 7-90, Appendix C).

**DR21:** Please document P-15-003098 on a DPR 523 form to the fullest extent possible given the visual obstructions from the right of way with emphasis on historic context and potential significance of the resource.

**Response:** Resource P-15-003098 was visible from the rights-of-way (ROW) and was already documented at an intensive level. It was recommended eligible under CRHR Criterion 2. A different resource (Map ID 73) was documented at the reconnaissance level because it was not visible from the ROW. The DPR form for Map ID 73 has been updated to include as much context and evaluation as possible given the limited visibility. The updated DPR form for Map ID 73 will be submitted with the Revised Survey Report, which will be finalized with results from the Cultural Resource Phase II Testing Plan. The resource remains "assumed eligible" under CRHR Criterion 3 but will not be impacted by the undertaking.

**DR22:** Please revise Section 6.4 and the Built Environment Survey Results Map in Appendix C of the Cultural Resources Assessment to include these resources.

**Response:** *The specified resources (Map ID #35-54) were located along Route Alignment D when surveyed. Route D was removed from reporting prior to submittal of the Cultural Resources Assessment Technical Report. Therefore, these resources do not need to be listed or shown in mapping. Applicant will remove the errant DPR 523 forms for these resources from Appendix D.*

## **4.0 SOCIOECONOMICS**

### **4.1 Local Versus Non-Local Construction Workers**

#### **4.1.1 Data Requests DR23 and DR24**

Staff needs clarification on the percent of local and non-local workers for the construction on the project. Regarding cavern construction, Section 5.10.3.2.1 on page 5.10-12 of the application states, “Construction of the cavern and shafts requires a specialized workforce” and “The Applicant anticipates that the workforce for the cavern and shafts will largely consist of out-of-town workers”. Regarding surface construction, Section 5.10.3.2.1 page 5.10-16 of the application states “The Applicant anticipates that 28 percent of the skilled labor needed for surface construction activities will be drawn from local communities.” Additionally, Section 5.10.3.2.1 on page 5.1-12 states that “Based on the skilled labor requirements and the existing workforces in Kern County, local labor pools will be adequate to fulfill the WRESC’s non-specialized construction labor requirements.”

**DR23:** What is the percentage of local and non-local construction workforce for each of the three phases of construction?

**Response:** *During each of the three phases of construction (shaft, cavern, and topside), it is estimated that 20% of the workforce would be local and 80% non-local. The Applicant anticipates that these numbers will be refined during the detailed engineering and design processes.*

**DR24:** Identify the construction workers and/or construction phase(s) that is referred to as the project’s non-specialized construction labor and that could be fulfilled by Kern County local labor pools.

**Response:** *All on-site construction, alteration, painting or repair of buildings, structures and other works and related activities for the Project that is within the craft jurisdiction of one of the Unions and which is directly or indirectly part of the Project, including, without limitation, pipelines (including those in linear corridors built to serve the Project), pumps, pump stations, tanks, battery installation, construction abatement, start-up and commissioning, site preparation, survey work, soils and material inspection and testing, hazardous material remediation, surveying, geotechnical and exploratory drilling, temporary HVAC, landscaping and temporary fencing, all on-site fabrication work provided such work is within the fabrication provision of a local master or national agreement of one of the Unions and all construction, demolition or improvements authorized by the public agency approvals granted for the Project. This includes all physical work typically performed by craft labor in California that is part of Project startup and commissioning, including, but not limited to, system flushes and testing, rework and modifications, loop checks, functional and operational testing up to and including the final running test.*

*The construction workers include journeymen and apprentices of the building trades unions who are members of the Kern, Inyo, and Mono Counties Building and Construction Trades Council (“Local Council”) and the local*

*unions who are members of same and/or employees with the same skills employed by contractors who perform the above work.*

*Some work is excluded from this scope including work required as part of a warranty or service agreement by an Original Equipment Manufacturer, engineering, procurement, project management, specialized work, maintenance work, work by the regular operations and maintenance workforce, and other kinds of work.*

[https://wsponlinenam.sharepoint.com/sites/us-hydrostorwillowrock/project files ansel/05 technical work/10\\_data requests and data responses/wresc data request set 1 response\\_082324.docx](https://wsponlinenam.sharepoint.com/sites/us-hydrostorwillowrock/project%20files%20ansel/05%20technical%20work/10_data%20requests%20and%20data%20responses/wresc%20data%20request%20set%201%20response_082324.docx)

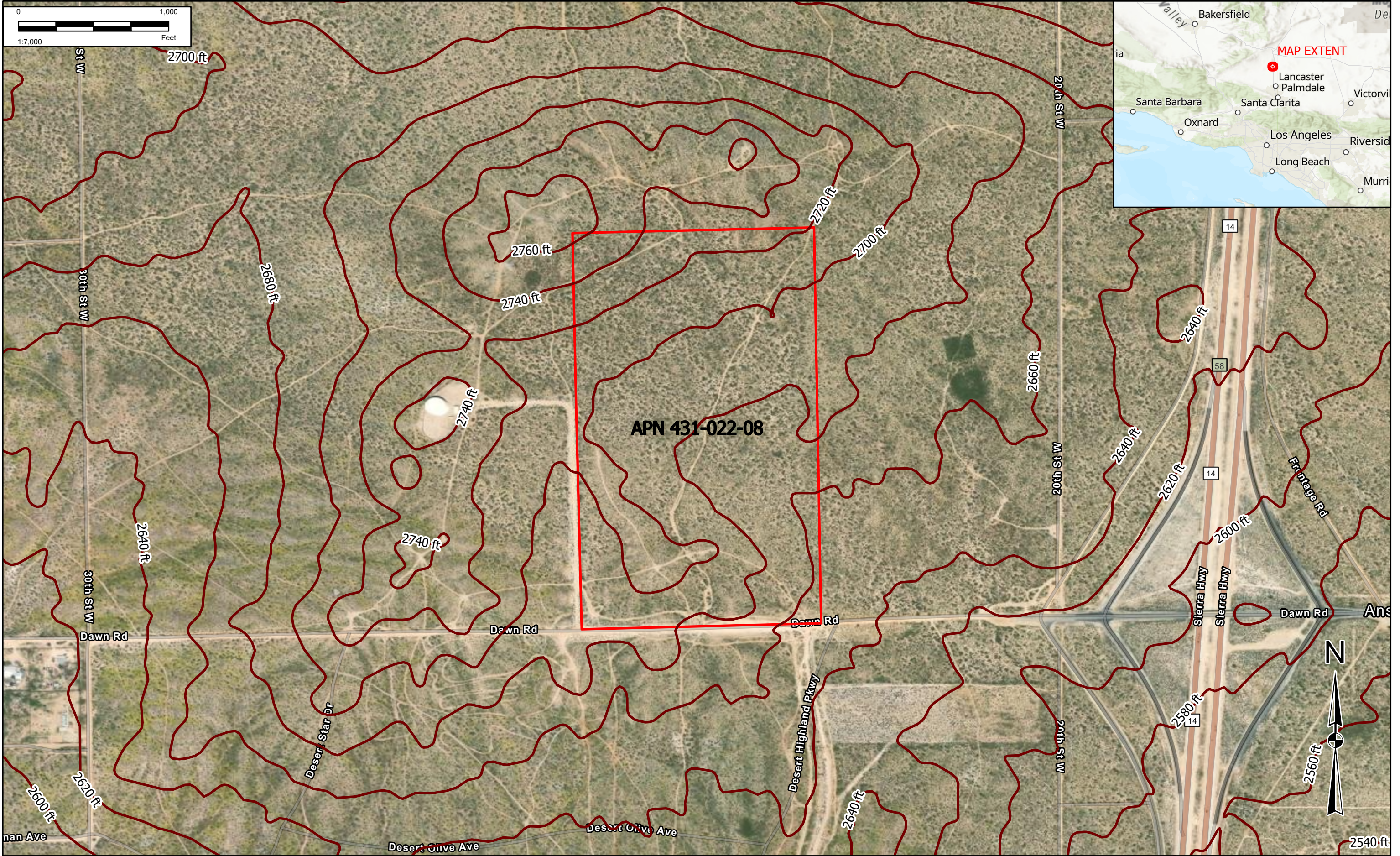
## 5.0 REFERENCES

- Amorelli et al. (Michael Amorelli, Allegría Garcia, Kate Umlauf, and Austin White). 2024. GEM A-CAES, LLC: Cultural Resources Assessment of the Willow Rock Energy Storage Center (WRESC) Advanced Compressed Air Energy System (A-CAES) Project, Unincorporated Communities of Ansel, Willow Springs and Rosamond, Kern County, California. Confidential report prepared by WSP, Riverside, CA, March 1, 2024.
- Caltrans (California Department of Transportation). 2008. A Historical Context and Archaeological Research Design for Mining Properties in California. Accessed online at: <https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/ser/mining-study-a11y.pdf>. Sacramento, 2008.
- Caltrans (California Department of Transportation). 2023. A Historical Context and Methodology for Evaluating Agricultural Properties in California. Accessed online at: <https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/ser/historical-context-agricultural-properties-ca-a11y.pdf>. Prepared for Cultural Studies Office, Division of Environmental Analysis, California Department of Transportation, Sacramento, 2023.
- COHP (California Office of Historic Preservation). 1990. Archaeological Resource Management Reports (ARMR): Recommended Contents and Format. Accessed online at: <https://ohp.parks.ca.gov/pages/1069/files/armr-remediated.pdf>. Sacramento, February 1990.
- WSP (WSP USA Inc.). 2024. Report: Cultural Resources Phase II Testing Plan Willow Rock Energy Storage Center (21-AFC-02). Confidential report submitted to Hydrostor. Prepared by WSP USA Inc., Riverside, CA, June 17, 2024.
- WSP (WSP USA Inc.). 2024b. Willow Rock Traffic Study Report (TN Number: 258518).

**ATTACHMENT DR2-1**

## VH Site Map



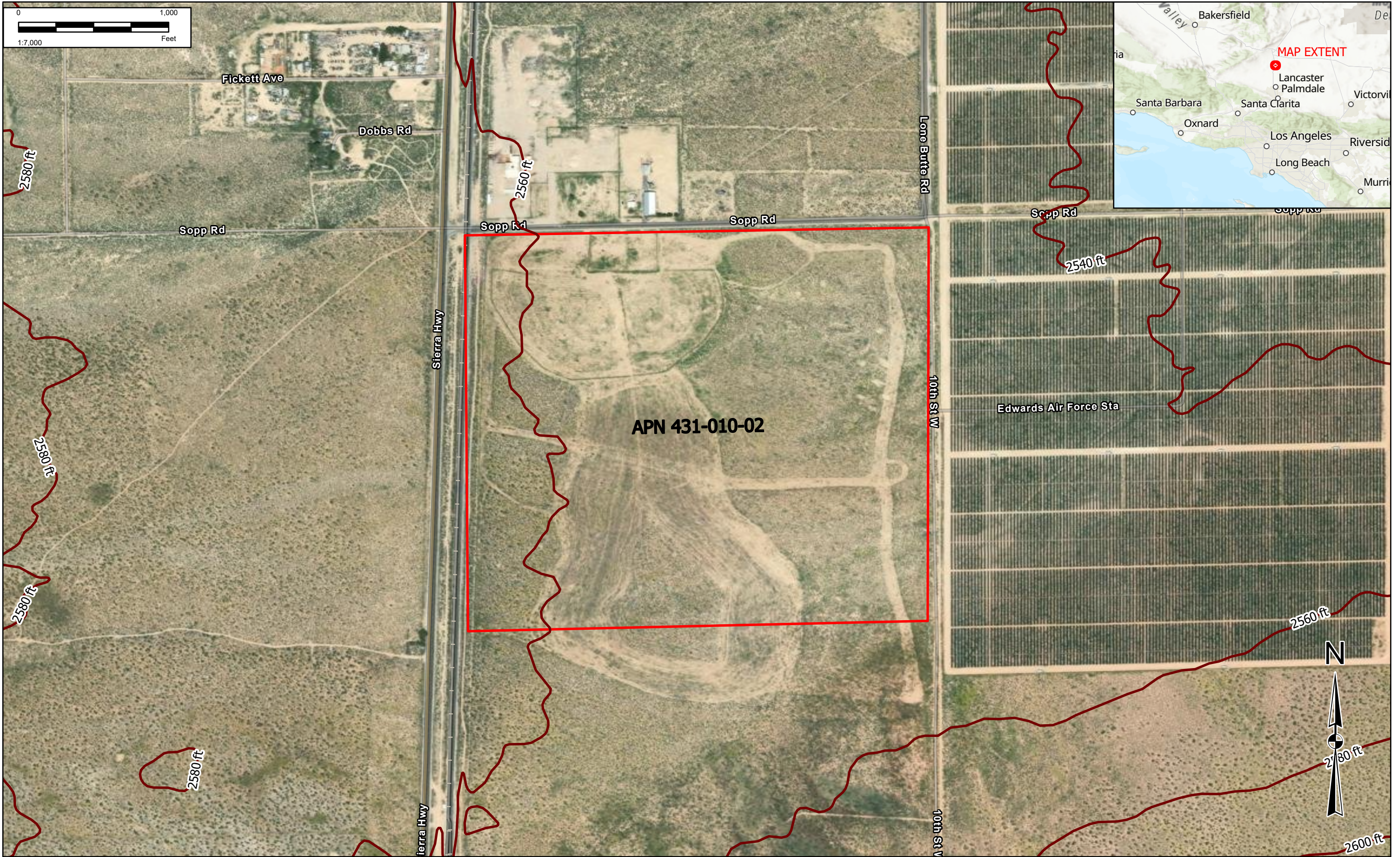




**ATTACHMENT DR2-2**

# PS Site Map



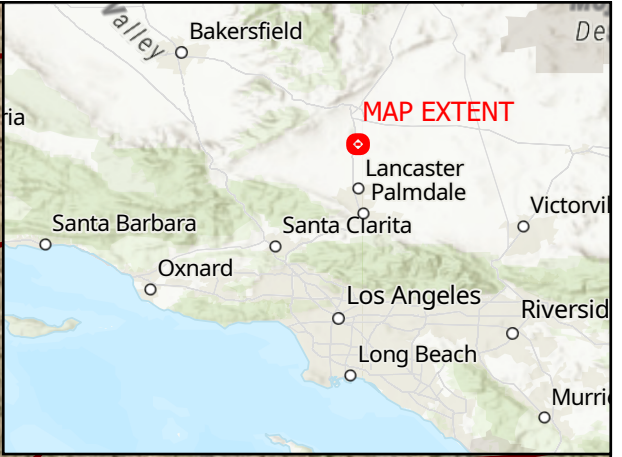
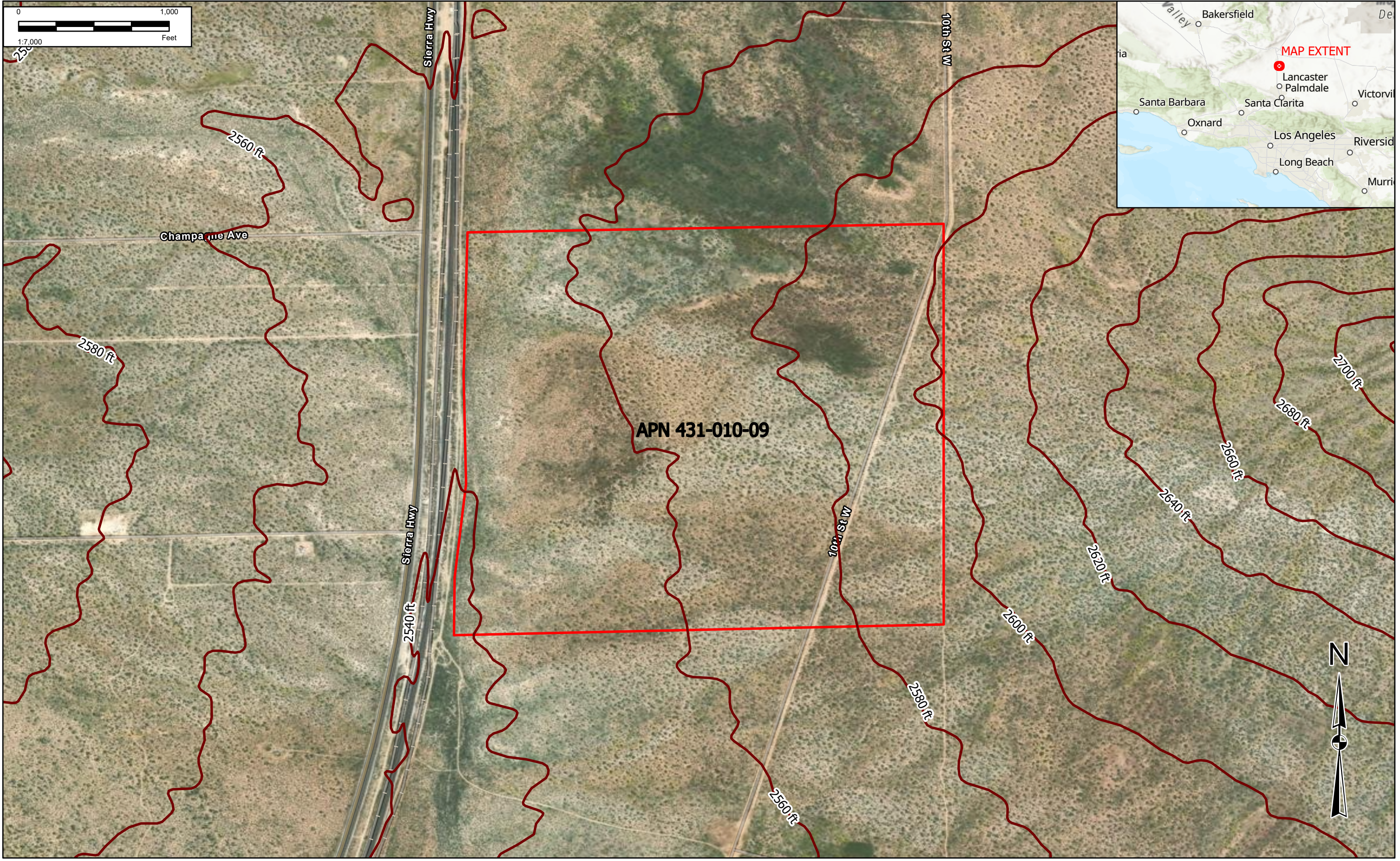
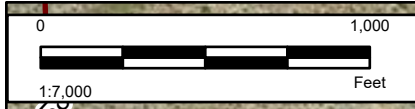




**ATTACHMENT DR2-3**

## **G Site Map**



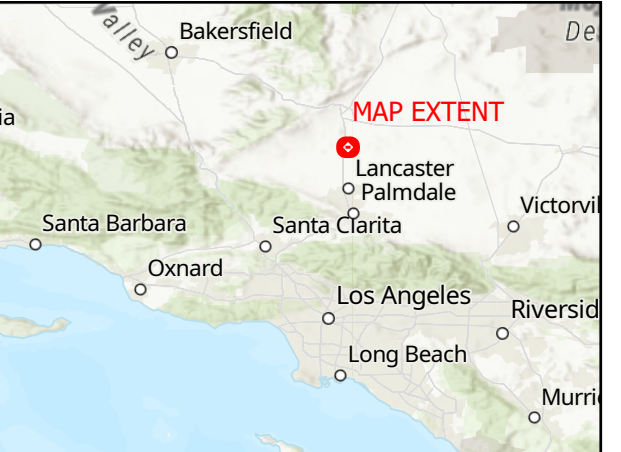
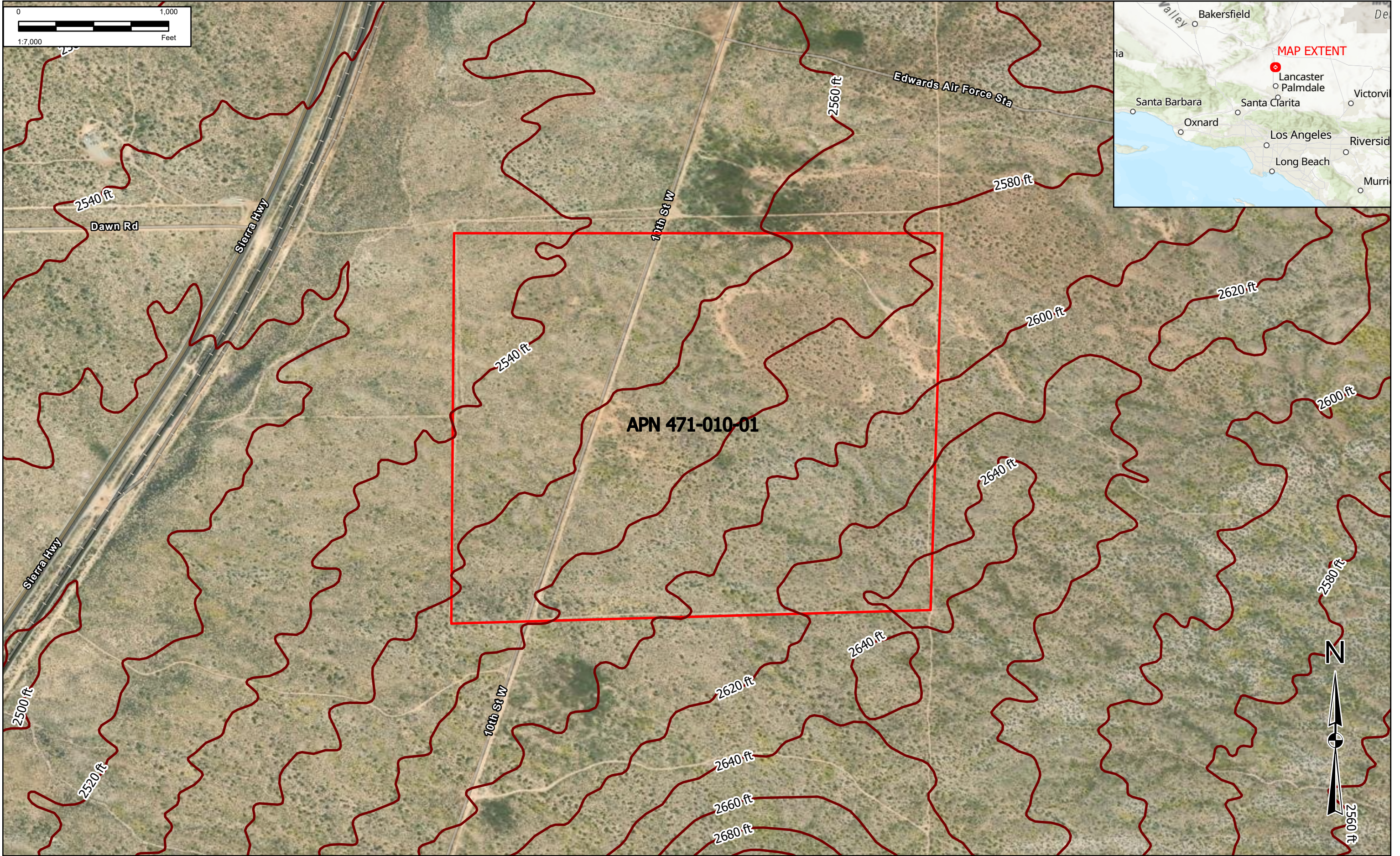
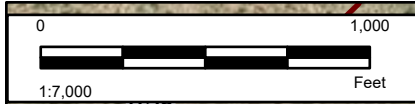




**ATTACHMENT DR2-4**

# OT Site Map







**ATTACHMENT DR2-5**

# Odel Phase I ESA

(submitted via Kiteworks)

**ATTACHMENT DR2-6**

# Villa Haines Phase I ESA

(submitted via Kiteworks)

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