



SOLACE ENERGY CENTER

Rezoning Application from SH to CI-2
8890 S Wilmot Road, Tucson, AZ 85756
Job No. 25008251

Prepared for:

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I. SITE INVENTORY

I.A LAND USE

I.A.1 LOCATION/REGIONAL CONTEXT

The subject rezoning property is a portion of the SE ¼ of Section 25, T15S, R14E, and is more particularly located on the west side of S. Wilmot Road, approximately 1.5 miles south of Interstate 10. The rezoning site consists of one (1) parcel (Assessors Tax Code No. 140-45-0340) and comprises 18.02 AC acres in gross area.

The site is bounded on all sides by public holdings. Its entire south boundary, together with a portion of its eastern boundary, is bordered by Federal lands (Bureau of Prisons) containing a law enforcement training facility and the Wilmot Prison complex. Both facilities are fenced and secured and are located within the Tucson city limits. On the west and north boundaries, with a portion of its east boundary, the subject site is bordered by vacant State Trust Lands, all of which are located within unincorporated Pima County. Wilmot Road is designated “Major Street” on the Pima County Major Streets & Routes Plan (MSRP).

I.A.2 EXISTING LAND USE ON SITE

Based on desktop reviews completed as part of the Biological Impact Report (BIR), the Subject Property is open space with no development or agricultural uses. The Subject Property will be altered to develop the proposed Project. Measures will be taken to avoid and/or mitigate any regulated resources in accordance with the BIR findings.

I.A.3 EXISTING EASEMENTS

There are no known easements located onsite.

I.A.4 COMPREHENSIVE PLAN ON SITE & SURROUNDING

The Current Comprehensive Plan Category is Suburban Intensity Category [Residential (R)]. The Proposed Comprehensive Plan Category is General Intensity Category [Industrial (I)]. The proposed rezone or specific plan zoning is from the current zoning of Suburban Homestead (SH) to the proposed zoning of General Industrial Zone (CI-2). The Comp Plan amendment has been approved.

The surrounding properties are designated as follows:

- North – HIU
- South – City of Tucson
- East – HIU & City of Tucson
- West – HIU

I.A.5 SURROUNDING LAND USES

The surrounding properties are developed as follows:

- North – Arizona State Trust Lands, undivided and vacant
- South – United States Bureau Prisons Land, law enforcement training facility
- East – Arizona State Trust Lands, undivided and vacant; United States Bureau Prisons Land, Wilmont Road Prison Complex
- West – Arizona State Trust Lands, undivided and vacant

I.A.6 PENDING REZONING, PLATS, DEVELOPMENT PLANS

There are no other pending rezoning, plats, or development plans in the project vicinity.

I.B TOPOGRAPHY AND GRADING

I.B.1 TOPOGRAPHIC CHARACTERISTICS

The site is relatively flat. Over the parcels length of approximately 1,300 feet the grade falls by approximately 18'. This results in a slope of slightly above 1 percent. Refer to Appendix A - Exhibit 1.

I.B.1.A RESTRICTED PEAKS AND RIDGES

The site does not contain any restricted peaks or ridges.

I.B.1.B ROCK OUTCROPS, TALUS SLOPES

The site does not contain any rock outcrops or talus slopes.

I.B.1.C SLOPES OF 15% TO 25% AND SLOPES GREATER THAN 25%

The site does not contain any slopes of 15 to 25 percent or greater than 25%.

I.B.1.D ANY OTHER SIGNIFICANT TOPOGRAPHIC FEATURES

There is a primary natural drainage channel that traverses the site and which features associated Regulated Xeroriparian "C" Habitat. This channel is fed primarily by a major culvert that runs beneath the Wilmot Prison Complex and which outlet onto the subject site.

I.B.2 AVERAGE CROSS SLOPE

$$\frac{(1' \text{ Contour Interval}) \times (8,810 \text{ Total Length of Contours}) \times (0.0023 \text{ Conversion})}{(18.02 \text{ Ac Total Site Area})}$$

The resultant Average Cross Slope = 1.12%

I.C HYDROLOGY

Atwell, LLC has completed a preliminary drainage assessment for the subject property (Assessor Parcel No. 140-45-0340) in accordance with the County's adopted Site Analysis guidelines. The findings are presented below.

I.C.1 OFF-SITE HYDROLOGY

Appendix A - Exhibit 2 illustrates the off-site watersheds draining into the subject property, along with their respective points of concentration, and provides a Summary Table indicating their individual drainage areas and 2-, 10, and 100-year peak discharges. Five (5) offsite drainage areas drain to the subject property as discussed below.

Offsite 1 flow is accepted into the Site from the southeast corner via an at-grade Wilmot Rd drainage crossing, indicated as **CPX-1**. The offsite area drainage to the location is generally southeast of the Site and is approximately 27.7 acres in size, with a concentrated discharge from the existing Federal Correctional Institute via a dual CMP storm drain outlet. Hydrologic discharge peak discharge rates per PC-Hydro for the Offsite area for the 2-, 10-, and 100-year storm events are **34.3**, **78.5**, and **165.0** CFS, respectively. Refer to the PC-Hydro computation results for Offsite.

Offsite 2 flow is accepted into the Site at the south property line via a concentration point, indicated as **CPX-2**. The Offsite 2 area is generally located south of the Site and is approximately 2.83 acres in size, with sheet flow discharge from natural desert area. Hydrologic discharge peak discharges rates per PC-Hydro for the Offsite 2 area for the 2-, 10, and 100-year storm events area **2.9**, **7.8**, and **16.0** CFS, respectively. Refer to the PC-Hydro computation results for Offsite.

Offsite 3 flow is accepted into the Site via sheet flow at the west property line at the southern end of the Site. The Offsite 3 area is generally located west of the Site and is approximately 0.73 acres in size, with sheet flow discharge from natural desert area. Hydrologic discharge peak discharges rates per PC-Hydro for the Offsite 3 area for the 2-, 10, and 100-year storm events area **0.9**, **2.0**, and **4.1** CFS, respectively. Refer to the PC-Hydro computation results for Offsite.

Offsite 4 flow is accepted into the Site via sheet flow at the west property line just north of the south end of the Site. The Offsite 4 area is generally located west of the Site and is approximately 1.74 acres in size, with sheet flow discharge from natural desert area. Hydrologic discharge peak discharges rates per PC-Hydro for the Offsite 4 area for the 2-, 10, and 100-year storm events area **1.7**, **4.8**, and **9.8** CFS, respectively. Refer to the PC-Hydro computation results for Offsite.

Offsite 5 flow is accepted into the Site via sheet flow at the west property line at the north end of the Site. The Offsite 5 area is generally located west of the Site and is approximately 0.61 acres in size, with sheet flow discharge from natural desert area. Hydrologic discharge peak discharges rates per PC-Hydro for the Offsite 5 area for the 2-, 10, and 100-year storm events area **0.6**, **1.7**, and **3.4** CFS, respectively. Refer to the PC-Hydro computation results for Offsite.

I.C.2 ON-SITE HYDROLOGY

I.C.2.A FLOW CONTROL RESOURCE AREAS

Flood control resources include topography from PAG, the Pima County Regional Flood Control District website, Pima County Maps (GIS), City of Tucson Drainage Manual, and the FEMA Maps website.

Hydrologic Computation Procedures. The Pima County hydrologic computation procedure, as presented within the “PC-HYDRO User Guide” (Arroyo Engineering, March 2019), was used to compute the peak discharges. PC-Hydro, Version 7.1, was used to estimate the flows affecting this site. PC-Hydro is a web-based computer program developed per the Pima County Hydrology Procedures, which uses a Rational Method based algorithm and utilizes rainfall depth information from the intensity-duration-frequency data from NOAA Precipitation Atlas 14 of the Western United States (Volume I, Version 4, NOAA National Weather Service, Silver Spring, Maryland; G. M. Bonnin, et al., 2006). Specific watershed parameters were estimated per the Pima County Hydrology Procedures and based on local topography, recent aerial photography, and field verification. Hydrologic soil groups (HSG) for the existing and proposed condition drainage areas were determined from the Pima County Maps, which is a GIS system that includes various digital mapping layers for Pima County, Arizona. Soils information for this report is based off of the NRCS (Natural Resources Conservation Services) line work within Pima County Maps, effective October 1, 2016.

PC-Hydro computations, similar to the Rational Method, assume that rainfall is uniformly distributed over the entire watershed, uniform rainfall intensity occurs with a duration of at least the time of concentration, the peak rate of runoff is proportional to rainfall intensity and rainfall depth averaged over the time period is equal to the time of concentration, the return period of the runoff event is the same as the return period of the precipitation event, and that channel storage is negligible. It is noted that the Pima County Hydrology Procedure as presented in PC-Hydro can be used for watersheds up to 10

square miles, with further notation that it tends to be valid for watersheds with homogenous areas up to 1 square mile (Arroyo Engineering, March 2019).

I.C.2.B CONCENTRATION POINTS AND 100-YEAR PEAK DISCHARGES FOR ALL ON-SITE WATERSHEDS

The existing on-site watershed is composed of one (1) watershed, annotated as EON-1 on Appendix A - Exhibit 2, with respective area and discharge rates shown in Table 1 below. Drainage areas Off-1, Off-2, Off-3, Off-4, & EON-1 are conveyed to the north property and is indicated as CPX-3.

Drainage Area ID	Watershed Area (acres)	Conc. Point	Cw	Tc (min)	i (in/hr)	q (in/hr)	Q (CFS)
EON-1	18.02	-	0.50	8.63	8.56	4.29	78
OFF-1, OFF-2, OFF-3, OFF-4, & EON-1	51.02	CPX-3	0.58	9.02	8.43	4.86	250.1

I.C.2.C FLOODPLAINS AND FLOODWAYS

The project area is covered in Federal Emergency Management Agency (FEMA), Flood Insurance Rate Map (FIRM) Panel 2905, Map Number 04019C2905L, dated 6/16/2011. As shown on the map, the project is within Zone “X”, which classifies an area of 0.2% annual chance of flood, areas of 1% annual chance flood with average depths of less than 1 foot, or with drainage areas less than 1 square mile; together with areas protected by levees from 1% annual chance flood.

I.C.2.D FLOODPLAIN DELINEATION OF ANY PREVIOUSLY UNMAPPED REGULATORY FLOODPLAIN

One (1) regulatory floodplain affects this site with a discharge originating at the southeast corner of the site via Wilmot Rd R/W (Q₁₀₀=165.0 CFS) and extends to the northwest through the rezoning site to the north property line where it ultimately discharges off the site (Q₁₀₀=250.1 CFS). Floodplain delineation was performed on the site via four (4) hydraulic cross-sections. See the existing conditions drainage map Exhibit 2 and Table 2 below for the hydraulic cross-section results.

Table 2: Existing Hydraulic Cross-Sections Results						
Cross-Section ID	Flow (CFS)	Avg. Vel. (ft/s)	Hyd. Top Width (ft)	Froude #	Depth (ft)	WSEL
1140	165.0	3.13	211.57	0.97	1.21	2784.33
990	165.0	4.92	91.06	0.50	1.22	2782.50
840	165.0	2.40	165.57	0.90	0.98	2781.23
690	165.0	3.72	181.12	0.62	0.93	2779.84
540	165.0	2.71	146.04	0.66	0.78	2777.51
400	165.0	2.64	144.22	0.79	1.21	2776.16
150	165.0	2.83	161.84	0.56	0.88	2773.68
34	165.0	2.35	184.74	0.97	1.21	2772.56

I.C.2.E REGULATORY SHEET FLOOD AREAS

No regulatory sheet flood areas affect this site.

I.C.2.F ANY LAKES, PONDS, WETLANDS, SPRINGS, OR OTHER SOURCE(S) OF PERENNIAL SURFACE WATER

There are no lakes, ponds, wetlands, springs, or other sources of perennial surface water on this site.

I.C.2.G EROSION HAZARD SETBACKS FOR ALL ON-SITE WATERCOURSES. IF AN EROSION HAZARD SETBACK FROM A WATERCOURSE JUST OFF-SITE IMPACTS THE PROJECT SITE, ALSO SHOW THOSE LIMITS

The wash impacting this site is considered a Minor Wash as described per Pima County, AZ Code Ordinance Section 16.28.030 with a base flood peak discharge between 500 and 100 CFS, which holds a requirement of a 25 foot EHS from the flood limit line.

I.C.2.H PIMA COUNTY REGULATED RIPARIAN HABITAT LIMITS AND CLASSIFICATIONS

This site contains an area of Xeroriparian Habitat Class C per Pima County Ordinance 2005-FC2, effective 10/20/2005. The area is approximately 3.73 Acres in size and extends approximately from the southwest corner to the north property boundary following approximately the natural wash boundary. Refer to Appendix A - Exhibit 2 for the approximate extents of habitat area within the rezoning site.

I.C.2.I FLOW ARROWS FOR NON-REGULATORY FLOWS

Directional surface-flow arrows are provided on Exhibit 2 within Appendix A.

I.C.2.J EXISTING DRAINAGE EASEMENT(S)

There are no established or recorded drainage easements on this site.

I.C.2.K EXISTING DRAINAGE INFRASTRUCTURE ON OR ADJACENT TO THE SITE

There is no existing drainage infrastructure on this site.

I.C.3 HYDROLOGY

The subject property contains vacant natural undeveloped land. The existing site drainage conveys to and via a regulatory wash that extends through the site from approximately the southeast corner to the north property line. The regulatory wash holds a requirement of a 25 foot EHS per Pima County, AZ Ordinance.

I.C.3.A FEATURES OF THE WATERSHEDS THAT MAY AFFECT OR BE EFFECTED BY THE CONDITIONS OF THE SITE

The subject property is currently entirely undeveloped natural desert land. Vegetation across the site is composed of desert brush, local cacti, and a Xeroriparian Habitat Class C per Pima County Ordinance 2005-FC2, effective 10/20/2005 having an average cover density of approximately 25%. Soils across the site are comprised of Stagecoach-Sahuarita association with 1 to 8 percent slopes, which is classified as hydrologic soil group (HSG) A (67%) and C (33%), and a small portion of Hantz Loam HSG rated as 100% C.

Rainfall runoff enters the subject property from the southeast corner, the south property line, and at the west property line, and exits the site at the north property line via the onsite natural drainage wash.

The existing on-site drainage consists of one (1) drainage area conveying drainage to the onsite natural drainage wash, which extends from the southeast corner of the property to the north property line.

Per the Pima County Regional Flood Control District (PCRFCDD) *Critical Basins within Unincorporated Pima County Map* with an effective date of 3/15/2007, the subject property lies within a balanced basin. As requirement of the PCRFCDD Design Standards for Stormwater Detention and Retention, new development within balanced basins must demonstrate appropriate measures to reduce post-development runoff rates to the pre-developed peak discharge rates at the project boundary for the 2-, 10-, and 100-year storm runoff events.

Per the Preliminary Development Plan (PDP) retention/detention basins are proposed for this development as a method to reduce post-development peak discharge rates per the Pima County design standards. Each retention/detention basin will be equipped with storage volume and outlet

structures consisting of appropriate weir/pipe outlet configurations to achieve the appropriate site outfall discharge rates.

I.C.3.B ACREAGE AND 100 YEAR PEAK DISCHARGE FOR UPSTREAM OFF-SITE WATERSHEDS

The boundary of the offsite watersheds contributing rainfall to the subject site are shown on Exhibit 2. Offsite watersheds affecting this site parcel extend to the southeast, south, and west. Their areas are composed of 27.7 acres of existing Federal Correction Institute site and Wilmot Rd right-of-way, and 5.91 acres natural desert.

Upstream Drainage Area OFF-1. This watershed drains to the southeast corner of the project via a Wilmot Rd at-grade drainage crossing. Soil composition for the area is Stagecoach-Sahuarita association with 1 to 8 percent slopes, having classification of 67% HSG A and 33% HSG C.

Upstream Drainage Areas OFF-2, OFF-3, OFF-4, & OFF-5. These watersheds drain to the site via the south and west property edges and consist of a concentration point at the south property line and sheet flow from the western property edge. Soils compositions for the areas are Stagecoach-Sahuarita association with 1 to 8 percent slopes, having classification of 67% HSG A and 33% HSG C.

Refer to the table below for the upstream/offsite drainage hydrology:

Table 3: Offsite 100-year Hydrology Results							
Drainage Area ID	Watershed Area (acres)	Conc. Point	Cw	Tc (min)	i (in/hr)	q (in/hr)	Q (CFS)
OFF-1	27.7	CPX-1	0.62	6.4	9.59	5.91	165.0
OFF-2	2.83	CPX-2	0.53	5.0	10.68	5.61	16.0
OFF-3	0.73	Sheet	0.53	5.0	10.68	5.61	4.1
OFF-4	1.74	Sheet	0.53	5.0	10.68	5.61	9.8
OFF-5	0.61	Sheet	0.53	5.0	10.68	5.61	3.4

I.C.3.C THE METHODOLOGY USED TO DETERMINE THE EROSION HAZARD SETBACKS;

The wash impacting this site is considered a Minor Wash as described per Pima County, AZ Code Ordinance Section 16.28.030 with a base flood peak discharge between 500 and 100 CFS, which holds a requirement of a 25 foot EHS from the flood limit line.

I.C.3.D THE METHODOLOGY USED TO DETERMINE THE 100- YEAR FLOODPLAINS FOR PEAK DISCHARGES GREATER THAN OR EQUAL TO 100 CFS

Floodplain delineation was performed on the site using the U.S. Army Corp of Engineers HEC-RAS program (V6.6) via nine (9) hydraulic cross-sections using Manning's Normal Depth computations. Manning's n values used in the calculations were derived from the City of Tucson Standards Manual for Drainage Design and Floodplain Management, dated December 1989 (Revised July, 1998) Table 8.1. The cross-section normal depths/WSELs were used to determine the extents of floodplain and transposed to plan view using existing contours with hydraulic gradients.

I.D BIOLOGICAL RESOURCES

I.D.1 CONSERVATION LANDS SYSTEM (CLS)

The entire site falls outside of the Maeveen Marie Behan Conservation Lands System (MMBCLS).

I.D.2 PRIORITY CONSERVATION AREA (PCA)

There are no Critical Landscape Linkages on or near this property.

I.D.2.A PIMA PINEAPPLE CACTUS

The site is designated as Priority Conservation Area (PCA) for the Pima Pineapple cactus. While it was not formally surveyed for during our inventory of saguaros and ironwood trees, none were seen on site.

I.D.2.B NEEDLE-SPINED PINEAPPLE CACTUS

No portion of the site is designated as Priority Conservation Area for the Needle-Spine Pineapple Cactus.

I.D.2.C CACTUS FERRUGINOUS PYGMY OWL AND BURROWING OWL

No portion of the site is designated as Priority Conservation Area for the Cactus Ferruginous Pygmy Owl or Burrowing Owl.

I.D.3 SAGUAROS AND IRONWOOD TREES

The site was field surveyed for saguaros and ironwood trees. None exist on the property. The only regulated native plant species on this property are palo verdes (*Cercidium floridum*) and mesquites (*Prosopis velutina*). The majority of these occur within the site's Xeroriparian "C" Regulated Habitat and will be preserved in place. Any impacted by development will be assessed for salvage and reused on the property within future perimeter buffers and landscape areas as appropriate and will be dealt with on the Native Plant Preservation.

I.D.4 HABITAT PROTECTION/COMMUNITY OPEN SPACE

This property is not identified by Pima County for acquisition under its habitat protection and community open space program.

I.E TRANSPORTATION

The subject property is located on South Wilmot Road. This segment of South Wilmont Road is designated as “major collector” on the Tucson Functionally Classified Roads Exhibit prepared by ADOT. Public Streets within one mile of the subject property include:

- South Wilmont Road
- South Kolb Road

I.E.1 EXISTING/PLANNED OFF-SITE STREETS

I.E.1.A EXISTING RIGHT-OF-WAY WIDTH

- South Wilmont Road
 - 150-foot right-of-way width
- South Kolb Road
 - 150-foot right-of-way width

I.E.1.B NUMBER OF TRAVEL LANES, CAPACITY, AND POSTED SPEED LIMIT

- South Wilmont Road
 - Two lane roadway
 - 50 MPH Speed Limit
- South Kolb Road
 - Two lane roadway
 - 45 MPH Speed Limit
- Both Kolb and Wilmont Road are Class 1 two-lane, undivided urban roadways with a calculated capacity of 16,800 daily trips (AADT) for Level of Service (LOS) “C” and 17,700 daily trips for LOS “D”.

I.E.1.C PRESENT AVERAGE DAILY TRIPS (ADT)

Per Pima Association of Governments Traffic Count (TCDS) S Wilmont Rd has an ADT volume of 8,003 directly across the street from the subject parcel. S Kolb Rd has an ADT volume of 7,256 just south of Interstate 10.

I.E.1.D EXISTING BICYCLE AND PEDESTRIAN WAYS

There are no existing pedestrian ways north or south of the project on S Wilmont Rd. Per the PimaMap there is an existing bicycle route with Striped Shoulder along S Wilmot Rd. There is an existing sidewalk along S Kolb Rd on the east side of the roadway starting south of the Intersection of E Voyage Road and S Kolb Street until the end of S Kolb St. North of this intersection to Interstate 10 there are no existing pedestrian ways on S Kolb Rd. Per the PimaMap there is an existing bicycle route with Striped Shoulder along S Kolb Rd.

I.E.1.E PUBLIC ROADWAY IMPROVEMENTS UNDERWAY OR SCHEDULED WITHIN 5 YEARS

There are no known roadway improvements either planned or underway in the vicinity of the project.

I.E.2 DISTANCES TO EXISTING DRIVES/INTERSECTIONS

Refer to Appendix A - Exhibit 3 for paved driveways for sites in the vicinity of the project.

I.E.3 PUBLIC TRANSIT

There are no existing public transit routes within the vicinity of the project. Refer to Appendix A – Exhibit 4.

I.F SEWERS

I.F.1 EXISTING PUBLIC SEWER

There is an existing 8-inch public gravity sewer main with S Wilmont Road. The site will not be served by a sewer line as no buildings or plumbing fixtures are proposed. Refer to Appendix A - Exhibit 1 for the location of the existing sewer main within S Wilmot Rd.

I.F.2 SITE CONSTRAINTS FOR SEWER

A sewer connection is not proposed for this project.

I.G RECREATION

I.G.1 EXISTING RECREATIONAL FACILITIES ON SITE AND WITHIN 1 MILE

See Appendix A - Exhibit 5 for the various trails and parks located within one mile of the site and in the general vicinity of the project.

I.G.2 TRAIL RIGHTS-OF-WAY

See Appendix A - Exhibit 5 for the various trails and parks located in the general vicinity of the project. There is no trail rights-of-way located on the project site.

I.H CULTURAL RESOURCES: ARCHAEOLOGICAL AND HISTORIC SITES

I.H.1 RECORDS CHECK

An Archaeological Class I Inventory was prepared by Stantec dated November 12, 2024. The records check reviewed existing records in the following databases:

- ASM Online Cultural Resource Database (AZSITE)
- NRHP
- Bureau of Land Management (BLM) General Land Office (GLO) Plat Maps
- Original land patent data
- Historic maps and aerial imagery
- United States Geological Survey Quadrangle maps

Refer to the Archaeological Class I Inventory included in Appendix C.

I.H.2 SURVEY TITLE

Deferred to submittal of development plan.

I.I COMPOSITE

I.I.1 COMPOSITE OF TOPOGRAPHIC, HYDROLOGIC AND BIOLOGICAL CONSTRAINTS

Refer to Appendix A – Exhibit 2.

II. LAND USE PROPOSAL

II.A PROJECT OVERVIEW

II.A.1 PROPOSED ZONING BOUNDARIES

Refer to Appendix B – Exhibit 6.

II.A.2 PROJECT DESCRIPTION

II.A.2.A PROPOSED DEVELOPMENT USE AND TYPE

The proposed use of the Subject Property is to construct and operate the Solace Energy Center, LLC (“Project”), a 250 MW/ 1000 MWh Battery Energy Storage System (BESS) to be situated on approximately 18 acres of private property, located south of Highway 10 on South Wilmot Road. The Project will consist of battery enclosures, transformers, inverters, transmission lines, and associated infrastructure.

The Project will include a high voltage substation to condition the power to and from the BESS to safely interconnect to the Tucson Electric Power (TEP) transmission system. This includes transforming the medium voltage power from the BESS to the grid interconnecting high voltage and is an integral part to the functioning of the BESS. The Project will interconnect to the existing Robert Bills-Wilmot Substation to the north of the Subject Property through the Project’s high voltage transmission line that connects the Project’s substation to the Robert Bills-Wilmot utility substation. The Project will deliver electricity to the TEP transmission system via existing transmission infrastructure and associated utility easements.

As part of the decommissioning of the project, the BESS and supporting high voltage Project substation and Project transmission line will be decommissioned. Decommissioning of the project includes the removal of the BESS facilities and associated electrical equipment and project substation. The land would be restored to as close as reasonably practicable to the condition it was in prior to construction of the project.

II.A.2.B PROPOSED DEVELOPMENT AND HOW THE PROJECT RESPONDS TO THE OPPORTUNITIES AND CONSTRAINTS OF THE SITE

The Subject Property’s proposed use, a BESS Project, is needed to assist State of Arizona and Pima County meet their renewable energy goals. It is also needed to assist TEP meet its resource planning goals. The BESS

Project is a renewable energy project and assists with meeting the following:

- State of Arizona Renewable Generation Goals
 - 15% renewable energy production by 2025
 - Substantial increase in the share of renewable energy in the State's power mix by 2040
- Pima County Pima Prospers, Section 4.3 Energy Element Goals
 - Goal 1: Support the increased use of cost-effective clean alternative energy systems;
 - Goal 1 Measure C: Identifying zoning and other code barriers that inhibit the use of the latest energy technologies;
 - Policy 2: Promote the generation, transmission, storage and use of a range of renewable energy sources such as solar, biofuels and wind power to meet current and future energy demands and decrease reliance on fossil fuels.
- TEP Resource Planning Goals
 - Plan to interconnect over 3,970 MW of new energy resources over the next 15 years including:
 - 2,640 MW of new generating capacity
 - 1,330 MW of new energy storage
 - 600 MW of new capacity resources
 - 450 MW of new renewable energy resources by 2029

The Project effectively integrates energy infrastructure into a community with energy needs so as to ensure the long-range viability of the region. It provides economic benefits in the form of tax revenue and jobs. It has minimal environmental impact with no emissions, no operational water use, no leaching, and minimal noise production.

The Project stores a very large amount of clean energy, approximately 250 MW/1000 MWh, while occupying a relatively small footprint of approximately 18 acres. The Project supports healthy people, a healthy environment, and a healthy economy by providing emissions free clean energy and supplying critical grid infrastructure with minimal environmental impact.

The Project helps the County support a balance of appropriate land uses as discussed above. It will be located outside of the SDCP Maeveen Marie Behan Conservation Lands System. The Project will have minimal impact on biological and water resources. Measures will be taken to adopt best

management practices during construction and operation to assure minimal impacts to the environment and any nearby communities. Additional analysis of biological and floodplain factors is documented in the Biological Impact Report (BIR).

As the project is located within Pima County District 2, the project applicant reached out to the District 2 Supervisor Matt Heinz regarding the development to provide background and request a call to answer any questions. This correspondence has been included in Appendix D.

II.A.2.C CONFORMANCE TO THE COMPREHENSIVE PLAN

Following submission and approval of the Comp Plan amendment, we intend to submit a Rezoning or Specific Plan request to rezone the Subject Property from Suburban Homestead (SH) to Light Industrial-General (CI-2). The rezoning would allow for future development of the proposed Project.

- Current Comprehensive Plan Category: Suburban Intensity Category [Residential (R)]
- Proposed Comprehensive Plan Category: General Intensity Category [Industrial (I)]
- Current Zoning: Suburban Homestead (SH)
- Proposed Zoning: General Industrial Zone (CI-2)

II.A.2.D CONVERSATIONS WITH SURROUNDING PROPERTY OWNERS

There are no neighborhood associations located near the project. The closest homes are over 2,000 feet away. The surrounding properties are exclusively held by public entities, namely the United States of American (Federal Bureau of Prisons) and the State of Arizona (State Land Department). Proper notice will be given to both of these entities as to this proposed rezoning and site development, including the offering of a duly-notice public meeting to present and discuss the project. We will work surrounding land owners to assure that we develop an emergency response plan with their consultation and input. We will discuss with the county whether they recommend any additional neighborhood outreach and will comply with their suggestions.

II.A.2.E THE IMPACT THE PROPOSED DEVELOPMENT WILL HAVE ON LAND USES WITHIN ONE-QUARTER MILE OF THE SITE

Development of the proposed plan amendment site, as intended, is an appropriate expansion of the emerging urban character of the area, incorporating critical grid infrastructure in a community that needs it. The Project can provide 250 MW/1000 MWh to the Robert Bills-Wilmot

Substation, powering approximately 80,000 homes. The Subject Property's proposed siting is over 2000 feet from the nearest residence. The Subject Property is adjacent to FCI-Tucson. We will work with them to provide information and address any concerns. BESS is an ideal energy technology for minimizing natural environment disturbance. BESS enclosures are stationary, steel enclosures that have no water use, no air emissions, no leaching, and have noise levels similar to a substation within the project boundary.

II.A.2.F SMART GROWTH PRINCIPLES AND THE USE OF SOLAR ENERGY AND SOLAR ACCESS

The construction and operation of a 250 MW/1000 MWh BESS Project squarely meets these goals. The Project will develop energy storage to meet current and future energy demands and decrease overall reliance on fossil fuels. The Project is a local source of electricity that will connect directly to Tucson Electric Power's grid at the Robert Bills-Wilmot Substation. It will directly contribute to the County Net Zero Energy Program Standard. The Project is a source of new, clean, renewable, cost-efficient energy

II.A.3 COMPLIANCE WITH ZONING CODE

County approval of the Comp Plan amendment request and the Rezone or Specific Plan request will serve to eliminate zoning and code barriers for new energy technology development, directly satisfying this implementation measure.

II.B PLAN (PDP)

II.B.1 PRELIMINARY DEVELOPMENT PLAN (PDP)

Refer to Appendix B – Exhibit 7.

II.B.2 PDP SUPPORT DATA

II.B.2.A ESTIMATED FLOOR AREA OF STRUCTURES

The Project may include an operations and maintenance (“O&M”) building, and a collection substation all located within the Project Area. An O&M building would likely be a pre-engineered structure containing a field office, a potable water and wastewater holding tank (no water or sewer hookup needed), and storage space for spare parts and data and security monitoring equipment. Sizes and flood plan layouts for these structures would be determined during detailed engineering efforts. Any buildings shall be built in compliance with applicable Pima County codes.

There Project will also include BESS enclosures as well as enclosures for the supporting electrical equipment such as inverters and medium voltage transformers. There will be approximately 275 enclosures. Each enclosure is approximately 160 square feet.

II.B.2.B BUILDING HEIGHTS

Battery systems are housed in containerized steel structures fabricated off-site and delivered as one component. The dimensions of these structures vary, but are generally 8-10 feet tall, but no taller than 15 feet.

II.B.2.C TOTAL NUMBER OF DWELLING UNITS

No dwelling units are proposed.

II.B.2.D RESIDENTIAL DENSITY

Not applicable, this is an industrial development.

II.B.2.E TYPE OF LANDSCAPING

Landscaping will be a mix of native desert, shrubs, and groundcover. Landscaped bufferyards will either be wholly natural or be supplemented with transplanted trees or other vegetation salvaged from the property.

II.B.2.F ACREAGE AND DESCRIPTION OF NATURAL AND FUNCTIONAL OPEN SPACE AND RECREATION AREA

No onsite recreational areas or functional open space will be provided as this site will be zoned as General Industrial.

II.C TOPOGRAPHY AND GRADING

II.C.1 DEVELOPMENT/ MITIGATION ON STEEP SLOPES

There are no steep slopes located on the property.

II.C.2 NATURAL AREAS UNDER HDZ

There are no areas being set aside for natural open space on the property for the purpose of HDZ allowances.

II.C.3 DISTURBED, REVEGETATED, NATURAL AREAS

Refer to Appendix B – Exhibit 7.

II.C.3.A PERCENTAGE OF SITE TO BE: RETAINED AS NATURAL OPEN SPACE;

Approximately 3.38 ac of natural open space is provided. This area is associated with the Xeroriparian “C” regulated habitat within the site.

II.C.3.B PERCENTAGE OF SITE TO BE: REVEGETATED; OR
Revegetation/landscaping will occur in areas designated for detention basins and other drainage areas.

II.C.3.C PERCENTAGE OF SITE TO BE: GRADED OR DISTURBED OR SHALL REMAIN GRADED OR DISTURBED.

Approximately 8.81 acres (49%) of the overall site will be disturbed.

II.C.4 CHANGES TO NATURAL GRADE

The site is relatively flat. There are no areas where grading cuts or fill will exceed five feet from existing grade.

II.D HYDROLOGY ONE MAP

II.D.1 POST-DEVELOPMENT ON-SITE HYDROLOGY

A combination of surface drainage and man-made drainage improvements (retention/detention basins) will be used to accommodate surface drainage in this development. Refer to Appendix B – Exhibit 7.

II.D.1.A PRESERVED NATURAL WASHES

It is the intent of this development to preserve the Natural Wash that conveys through the project site from the southeast corner to the north property boundary to the furthest extent possible.

II.D.1.B REGULATORY FLOODPLAINS

The regulatory floodplain affecting this site has discharge originating at the southeast corner of the site via Wilmot Rd R/W (Q100=165.0 CFS) and extends to the northwest through the rezoning site to the north property line where it ultimately discharges off the site (Q100=250.1 CFS). Proposed floodplain delineation was performed utilizing the existing four (4) hydraulic cross-sections. See the post-development conditions drainage map Appendix B - Exhibit 7 and Table 4 below for the hydraulic cross-section results.

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Reach 1	1275	PF 1	165.00	2784.95	2785.74		2785.79	0.001930	1.81	91.22	221.02	0.50
Reach 1	1201	PF 1	165.00	2784.29	2785.29	2785.29	2785.43	0.024059	3.06	55.79	245.58	0.96
Reach 1	1140	PF 1	165.00	2783.12	2784.33		2784.45	0.007047	3.13	67.76	211.57	0.61
Reach 1	990	PF 1	165.00	2781.28	2782.50	2782.50	2782.84	0.017960	4.92	37.04	91.06	0.97
Reach 1	840	PF 1	165.00	2780.25	2781.23		2781.29	0.005086	2.40	81.21	165.57	0.50
Reach 1	690	PF 1	165.00	2778.91	2779.84	2779.84	2779.99	0.017755	3.72	57.64	181.12	0.90
Reach 1	540	PF 1	165.00	2776.73	2777.51	2777.38	2777.61	0.008257	2.71	68.07	146.04	0.62
Reach 1	400	PF 1	165.00	2774.95	2776.16	2776.02	2776.26	0.009777	2.64	64.96	144.22	0.66
Reach 1	150	PF 1	165.00	2772.80	2773.68	2773.63	2773.80	0.015396	2.83	59.07	161.84	0.79
Reach 1	34	PF 1	165.00	2771.35	2772.56	2772.40	2772.64	0.007000	2.35	77.56	184.74	0.56

II.D.1.C EROSION HAZARD SETBACKS (EHS)

The wash impacting this site is considered a Minor Wash as described per Pima County, AZ Code Ordinance Section 16.28.030 with a base flood peak discharge between 500 and 100 CFS, which holds a requirement of a 25 foot EHS from the flood limit line.

II.D.1.D PIMA COUNTY REGULATED HABITAT

This site contains an area of Xeroriparian Habitat Class C per Pima County Ordinance 2005-FC2, effective 10/20/2005. The area is approximately 3.98 Acres in size and extends approximately from the southwest corner to the north property boundary following approximately the natural wash boundary. The Proposed development for the project will not encroach or impact the habitat. Refer to Appendix B - Exhibit 7.

II.D.1.E PROPOSED DRAINAGE STRUCTURES

The property is proposed to place retention/detention structures onsite to mitigate developed discharge rates and retain first-flush threshold volumes onsite in conformance with PCRFC Design Standards for Stormwater Detention and Retention. The existing Natural Wash will be left unimpacted by the development to the furthest extent possible, therefore the proposed watersheds represent those parcel areas proposed to be developed and delineations of the areas to remain natural.

Appendix B - Exhibit 7 presents a concept plan for the post-development onsite drainage. The concept illustrates each of the proposed developments that will individually surface flow to retention/detention basins. There are four (4) post-development on-site watersheds (DON-1 – DON-4). Please note that DON-4 identify area is to remain natural. All the on-site watersheds, their respective areas, and their discharge rates are shown in Table 5 below and on Appendix B - Exhibit 7.

Drainage Area ID	Watershed Area (acres)	C_w	T_c (min)	i (in/hr)	q (in/hr)	Q, 100 (CFS)
DON-1	4.89	0.72	5	10.68	7.99	39.4
DON-2	3.76	0.83	5	10.68	8.91	33.8
DON-3	2.45	0.82	5	10.68	8.72	21.5
DON-4 (Nat.)	6.92	0.50	8.62	8.56	4.29	30

All of the drainage areas will individually discharge to the Natural Wash extending along the middle of the development with an ultimate discharge to the north property line.

All basins shall be designed with storage volume and outlet structures to reduce the 2-, 10-, and 100-year, post-development discharges to the pre-development discharge rates at each of the internal points of discharges as well as the overall north point property line concentration point (CPX-3). In addition, each basin shall be designed to provide first-flush runoff volume

retention per PCRFC Design Standards for Stormwater Detention and Retention (DSSDR). The first-flush stormwater runoff is considered a “volume of stormwater from 0.5 inch of rainfall that is expected to discharge from impervious and disturbed areas.” Volumes for the first-flush will be incorporated into each of the proposed retention/detention basins as calculated per Table 2.1 of the DSSDR.

Volumes for each of the retention/detention basins were preliminarily determined per Equation 3.8 of the DSSDR and a safety factor of 1.2 was applied. Refer to Table 6 below for a summary of the basin volume results.

Basin ID	Area (A) (Ac)	Ex. 100-Yr Q (CFS): Qo	Prop. 100-Yr Q (CFS): Qi	Cw	Pt (In)	Vs (Acre-Ft)
1	4.89	22.4	39.4	0.72	2.81	0.319
2	3.76	12.6	33.8	0.83	2.81	0.366
3	2.45	10.9	21.5	0.82	2.81	0.232

In addition to peak discharge rate reductions, the basins shall be designed to retain at minimum the “first-flush” retention volume. The site is considered to be in a lower permeability area and requires total volumes calculated based on 1,440 cf/Ac for impervious areas and 140 cf/Ac for disturbed areas. Refer to Table 7 below for estimated retention volumes required.

Basin ID	Imp. Area (Ac)	Dist. Area (Ac)	Retention Volume (cf)
1	2.66	2.23	4,143
2	2.74	1.02	4,088
3	0.68	1.77	1,227

Site and street drainage will be designed per Pima County Development Standards, which may incorporate scuppers, pipes, valley gutters, erosion control structures, etc. as necessary for development of the parcel.

II.D.1.F DRAINAGE CROSSINGS & ATTENDANT STRUCTURES

There are no drainage crossings or attendant structures proposed.

II.D.1.G FLOODPLAIN ENCROACHMENTS & ASSOCIATED EROSION PROTECTION

This development does not propose to encroach into the floodplain.

II.D.1.H PROPOSED STORM DRAIN ALIGNMENTS & INLETS

Retention/detention basins are proposed to mitigate post-development discharges and shall be constructed per current Pima County Development

Standards. Generally, the access road through the project site from Wilmot Rd will be constructed of gravel and graded to drain into proposed retention/detention basins. Each detention/retention basin will be equipped with an outlet structure consisting of a bleeder pipe and/or outlet weir to meter flows. Any ponding within the roadway will be 6-inch minimum depth for the 100-year storm event.

II.D.1.I DRAINAGE EASEMENTS.

Proposed drainage features for this project will be privately owned and maintained. Therefore, no drainage easements will be necessary.

II.D.1.J STREETS, LOTS, BUILDING PADS.

The Project may include an operations and maintenance (“O&M”) building and a collection substation all located within the Project Area. An O&M building would likely be a pre-engineered structure containing a field office, a potable water and wastewater holding tank (no water or sewer hookup needed), and storage space for spare parts and data and security monitoring equipment. Sizes and flood plan layouts for these structures would be determined during detailed engineering efforts. Any buildings shall be built in compliance with applicable Pima County codes.

II.D.2 PRELIMINARY INTEGRATED WATER MANAGEMENT PLAN (PIWMP)

Per letter from Tucson Water dated January 28, 2022, regarding Water Availability for the Project on APN 140-45-0340 with a provided Case # WA3899, the site is located within the City’s water service “expansion area”, which results in this site being unable to be granted water service without doing a pre-annexation development agreement (PADA). This site does not require nor propose water service onsite.

II.D.3 PROPOSED HYDROLOGY

Post-Development discharges flowing onto the adjacent property will not change as a result of this development. Post-Development discharges exiting the property will be detained and will meet adopted Pima County RFCD criteria for a balanced basin.

II.D.3.A PDP RESPONSE TO THE CONSTRAINTS

The development layout shown on the PDP best accommodates the site's dimensional constraints; while still providing perimeter buffering and accommodating balanced-basin drainage requirements to reduce post-development outflows to at least pre-existing conditions flows at the project discharge points. The site's retention/detention will also feature first-flush water harvesting.

II.D.3.B ENCROACHMENT JUSTIFICATION

This development proposes no encroachments into the Natural Wash regulatory floodway and associated Xeroriparian Habitat Class C.

II.D.3.C PROVIDE A TABLE OF CONCENTRATION POINTS COMPARING DISCHARGE FLOWING ONTO AND LEAVING THE SITE BEFORE AND AFTER DEVELOPMENT.

Exhibit 7 provides the offsite watersheds points of concentration/sheet flow entering the subject site, as well as the Q100's for the post development on-site watersheds. One (1) post-development point of concentration outlet is proposed at the north property line as is in existing conditions. Flows from offsite drainage areas will be allowed to drain through the site unaltered, while retention/detention basins will be utilized to mitigate post-development discharge rates from the parcel to pre-development discharge rates, therefore the peak flow of 230.4 CFS at the project outlet point will remain equal to or less post-development.

II.D.3.D LOCATION OF POTENTIAL ENGINEERING AND DESIGN FEATURES THAT WILL BE USED TO MITIGATE DRAINAGE AND EROSION PROBLEMS

Drainage design features that will be included with this development include detention/retention basins. The retention/detention basins are proposed to mitigate post-development peak discharge rates as well as provide first-flush rain water harvesting per PCRFC criteria.

II.D.3.E SUMMARIZED EFFECT OF THE DEVELOPMENT ON THE DRAINAGE PATTERN OF THE SITE

The site is proposed to be graded to not alter existing natural topographic drainage characteristics. As mentioned above the site is within a balanced basin per Pima County. Therefore, overall post-development site peak

discharge flows will be reduced to at least the pre-existing peak discharge flow at the overall property discharge point. The site will be designed to conform to all applicable PCRFCO and ADEQ policies and criteria. Improvements to the project will be implemented with an intent to minimize impacts to upstream and downstream lands. Stormwater pollution prevention will be implemented at the time of the project construction to minimize impacts to adjacent downstream lands during construction.

II.E BIOLOGICAL RESOURCES

II.E.1 IMPACTS TO BIOLOGICAL RESOURCES

II.E.1.A EACH CONSERVATION LANDS SYSTEM DESIGNATION AFFECTED

The entire site falls outside of the Maeveen Marie Behan Conservation Lands System (MMBCLS).

II.E.1.B SAGUAROS

The site was field-surveyed for saguaros and none exist on the property.

II.E.1.C IRONWOOD TREES

The site was field-surveyed for ironwood trees and none exist on the property.

II.E.1.D PIMA PINEAPPLE CACTUS

The site is designated as Priority Conservation Area (PCA) for the Pima Pineapple cactus. While it was not formally surveyed for during our inventory of saguaros and ironwood trees, none were seen on site.

II.E.1.E NEEDLE-SPINED PINEAPPLE CACTUS

No portion of the site is designated as Priority Conservation Area for the Needle-Spine Pineapple Cactus.

II.F LANDSCAPE, BUFFERYARDS, AND VISUAL MITIGATION

II.F.1 BUFFERYARDS

The site is proposed to be rezoned as CI-2, General Industrial. Per the Pima County Development Services Department 2023 Screening and Bufferyard Design Manual the following bufferyards are required. Refer to Appendix B – Exhibit 6 for the zoning of neighboring sites. The surrounding land uses and required bufferyards are as follows:

- North –
 - SH Zone
 - Type C Bufferyard required
- South –
 - I-2 Zone
 - No Bufferyard Required
- East –
 - Public Street
 - Type E Bufferyard required
- West –
 - SH Zone
 - Type C Bufferyard required

A 40-foot natural undisturbed desert bufferyard is required for the north and west sides of the site for a Type C bufferyard. A 50-foot natural undisturbed desert bufferyard will be provided on all sides of the site. Refer to Appendix B – Exhibit 7.

II.F.2 BUFFERYARD CONFLICTS

There are no potential bufferyard conflicts.

II.F.3 VEGETATION TRANSPLANTING IMPACTS

Landscaped bufferyards will either be wholly natural or be supplemented with transplanted trees or other vegetation salvaged from the property.

II.F.4 MITIGATION OF VISUAL IMPACTS

There are no visual impacts resulting from this property. There are no occupied residences within vicinity of the project.

II.F.5 SIGNIFICANT VEGETATION

The majority of the vegetation onsite is located within the Xeroriparian “C” regulated habitat. This area will be preserved as natural open space.

II.G TRANSPORTATION

II.G.1 PROPOSED INGRESS/EGRESS

One new ingress/egress point is proposed to serve this site. This driveway will be private and will access S Wilmot Rd. Following the recommendation of Pima County during a Pre-rezoning meeting held on April 16, 2025, the project applicant reached out to Tucson Department of Transportation to request feedback on the proposed design as part of this application. No response has been received from TDOT but the County did not flag any issues with proposed access for the site. This correspondence has been included in Appendix D.

II.G.2 DISTANCES TO ACCESS POINTS

Refer to Appendix B – Exhibit 7.

II.G.3 OFF-SITE ROAD IMPROVEMENTS

There are no off-site roadway improvements to Wilmot Road necessary or planned at this time.

II.G.4 ADT AND LEVEL OF SERVICE

It is anticipated there would be no full-time staff on site, but periodic maintenance would be completed by a staff of 1-2 people. Therefore, no significant change to the ADT or Level of Service will occur to Wilmot Rd.

II.G.5 CONCURRENCY

It is anticipated there would be no full-time staff on site, but periodic maintenance would be completed by a staff of 1-2 people. Therefore, no significant change to the ADT or Level of Service will occur to Wilmot Rd.

II.G.6 BICYCLE AND/OR PEDESTRIAN

No bicycle or pedestrian pathways are proposed onsite. It is anticipated there would be no full-time staff on site, but periodic maintenance would be completed by a staff of 1-2 people.

II.G.7 ON-SITE STREET SYSTEM

The project will be served by one private driveway. No new public streets are proposed. The internal access paths will be gravel or other DOT approved surfacing.

II.G.8 TRAFFIC IMPACT STUDY

This project will not generate an increase of 10,000 ADT. It is anticipated there would be no full-time staff on site, but periodic maintenance would be completed by a staff of 1-2 people. There will be no parking spaces provided onsite.

II.H ON-SITE WASTEWATER TREATMENT AND DISPOSAL

Not applicable; no onsite wastewater treatment is proposed for this project.

II.I SEWERS

Not applicable; connection to the sewer is not proposed for this project.

II.J WATER

Not applicable; water service is not proposed for this project.

II.K SCHOOLS

The site is within Tucson Unified School District No. 1. No schools abut the project site. The site is not residential and will not generate any students, therefore this section is not applicable.

II.L RECREATION

Not applicable; this site proposes industrial uses therefore will not provide onsite recreation. Additionally, this site will not provide any additional users of surrounding trails discussed in Section I-G.

II.M CULTURAL RESOURCES

An Archaeological Class I Inventory was completed by Stantec dated November 12, 2024. Refer to the report included in Appendix C.

II.N ENVIRONMENTAL QUALITY

During construction a Stormwater Pollution Prevent Plan (SWPPP) along with a Notice of Intent (NOI), will be prepared in accordance with Arizona Department of Environmental Quality regulatory permit requirements. The SWPPP and NOI will discuss the proposed dust control and erosion control measures that shall be used during construction.

II.O **AGREEMENTS**

No agreements are in place with any neighboring property owners at this time. The surrounding properties are exclusively held by public entities, namely the United States of American (Federal Bureau of Prisons) and the State of Arizona (State Land Department). Proper notice will be given to both of these entities as to this proposed rezoning and site development, including the offering of a duly-notice public meeting to present and discuss the project.

APPENDIX A

Section I Exhibits

Exhibit 1 – Existing Conditions

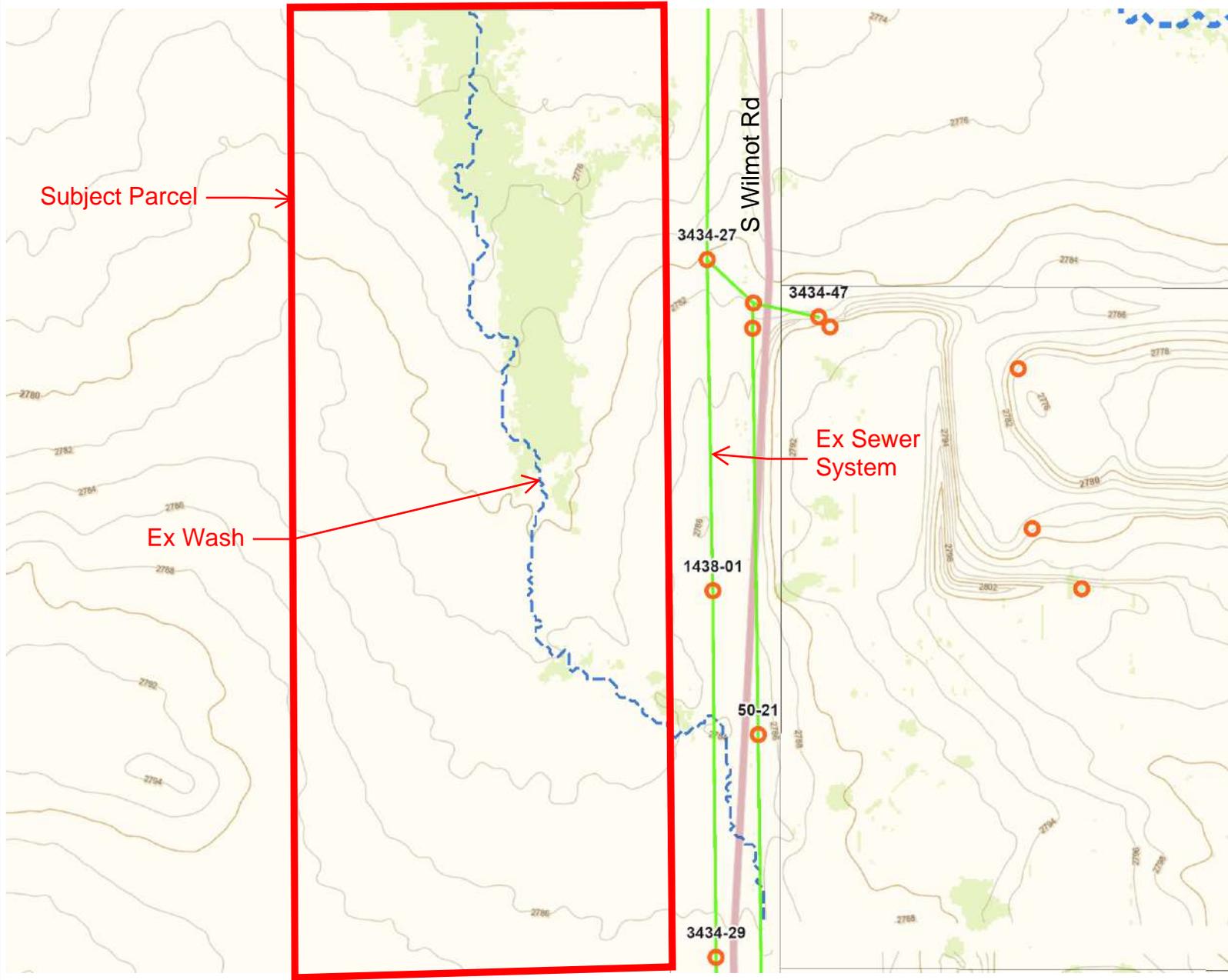
Exhibit 2 – Existing Hydrology

Exhibit 3 – Existing Access

Exhibit 4 – Transit Map

Exhibit 5 – Pima County Trail Map

Existing Site Conditions



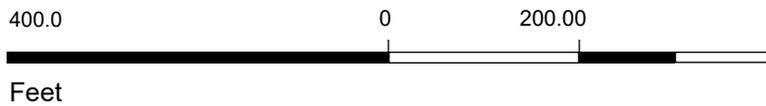
Legend

- Parcels
- Sanitary Sewer Structures**
 - Circular Manhole
 - Cleanout
 - Rectangular Manhole
 - ▣ Siphon
 - ⌈ Plug
 - ▬ Stub
 - ⊥ Tee
 - ⊕ Weir
 - ✖ Unclassified Structure
- Sanitary Sewer Pipe Status**
- Washes - All**
 - Unknown Discharge
 - - - 100-500 CFS
 - - - 500-1000 CFS
 - - - 1000-2000 CFS
 - - - 2000-5000 CFS
 - - - 5000-10000 CFS
 - - - Over 10000 CFS



Notes:

EXH - 1



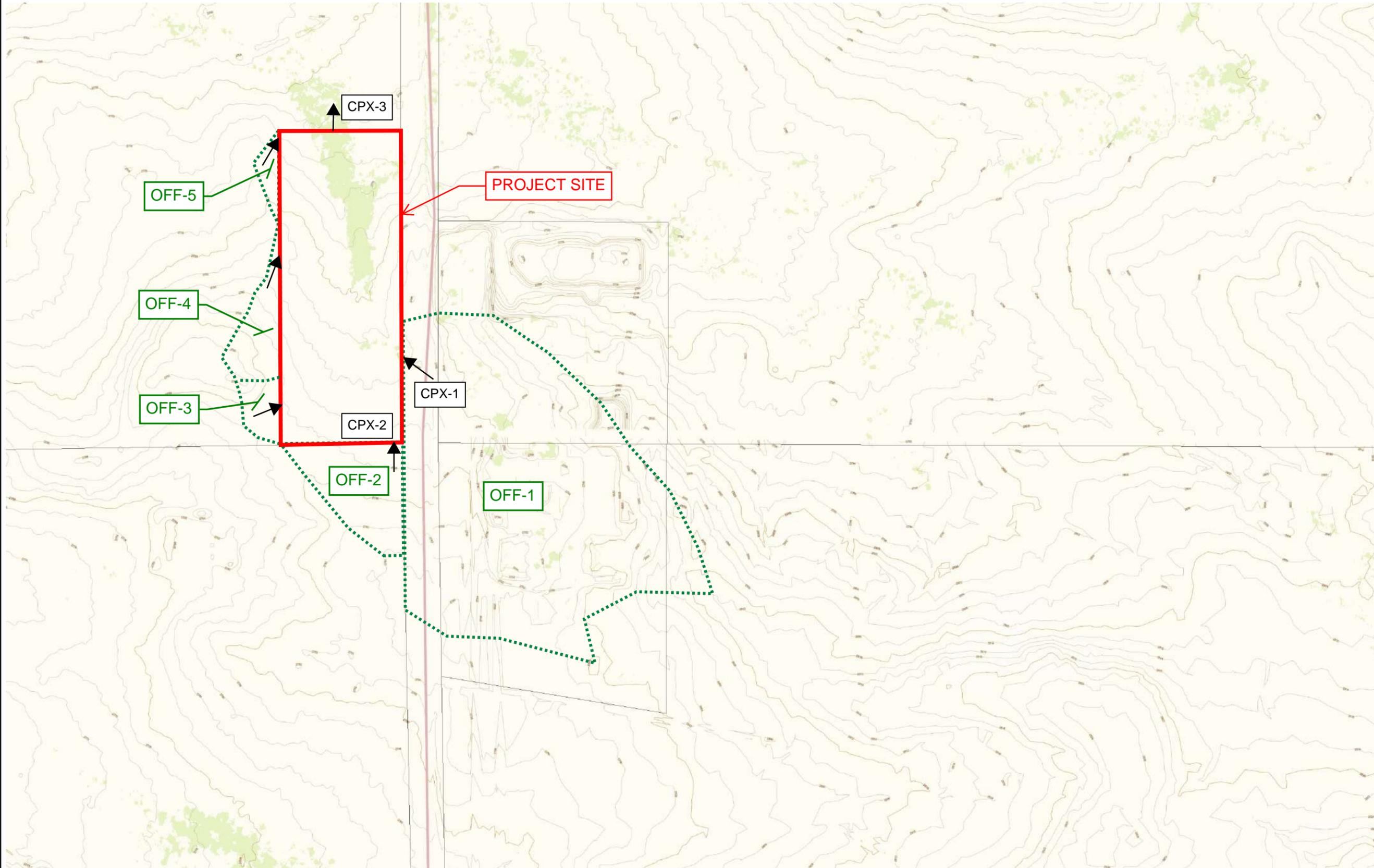
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10/16/2025

Existing Hydrology

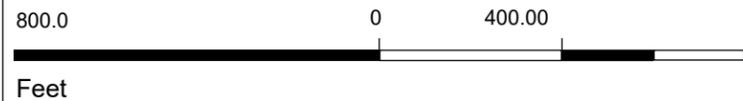
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□ Parcels



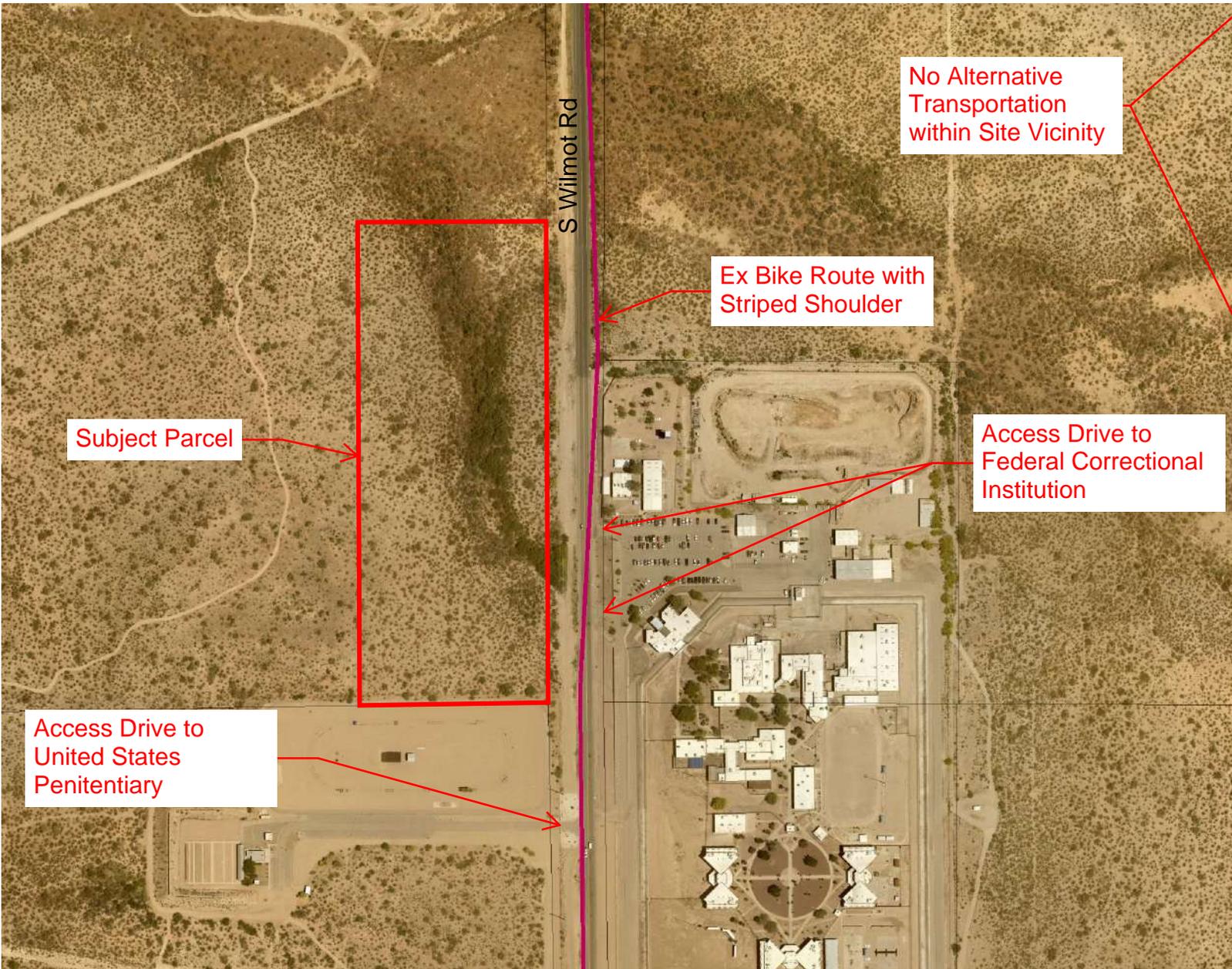
Notes:

EXH - 2



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Existing Access



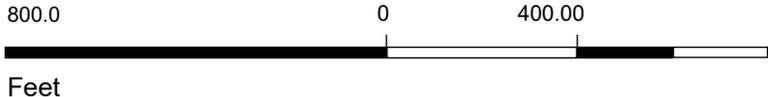
Legend

- Bus Stops - Sun Tran
- Bicycle Routes**
- Bike Blvd/Shared Lane Markings
- Bike Route
- Bike Route with Striped Shoulder
- Bus/Bike Lane
- Hiking/Mountain Bike/Equestrian/W
- Key Connecting Streets
- Planned Bike Route
- Planned Bike Route with Striped St
- Planned Shared-use Path
- Residential Streets
- Separated Bike Lane
- Shared Lane Markings
- Shared-use Path
- Other
- Bus Routes - Sun Tran**
- 10th/12th Ave
- 22nd St
- 6th St/Wilmot
- Ajo Way
- Alvernon Way
- Benson Highway

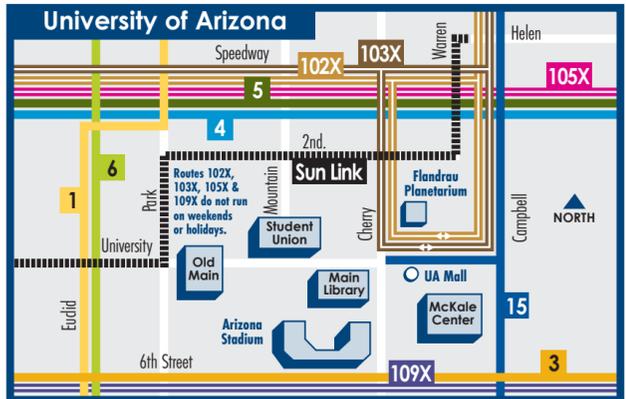
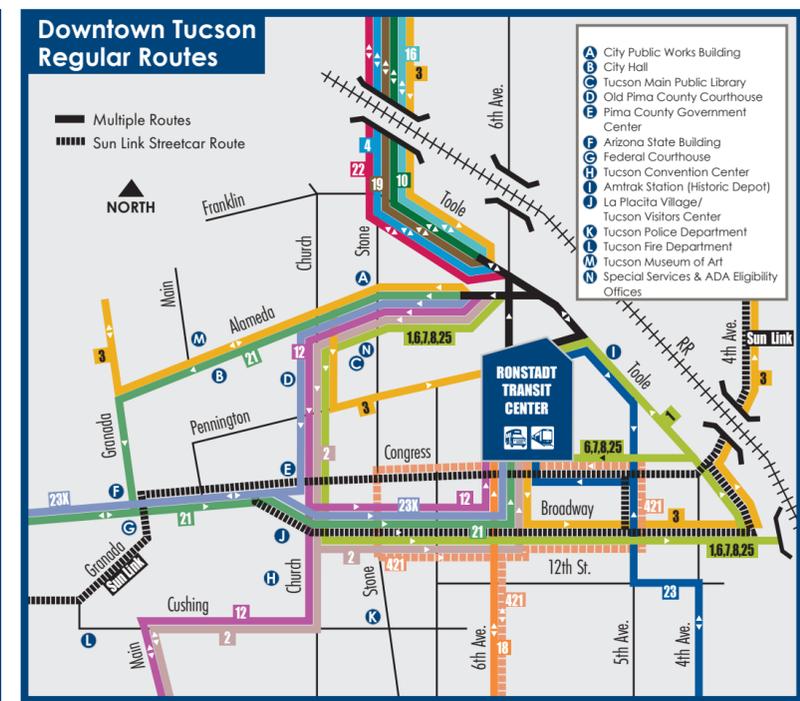
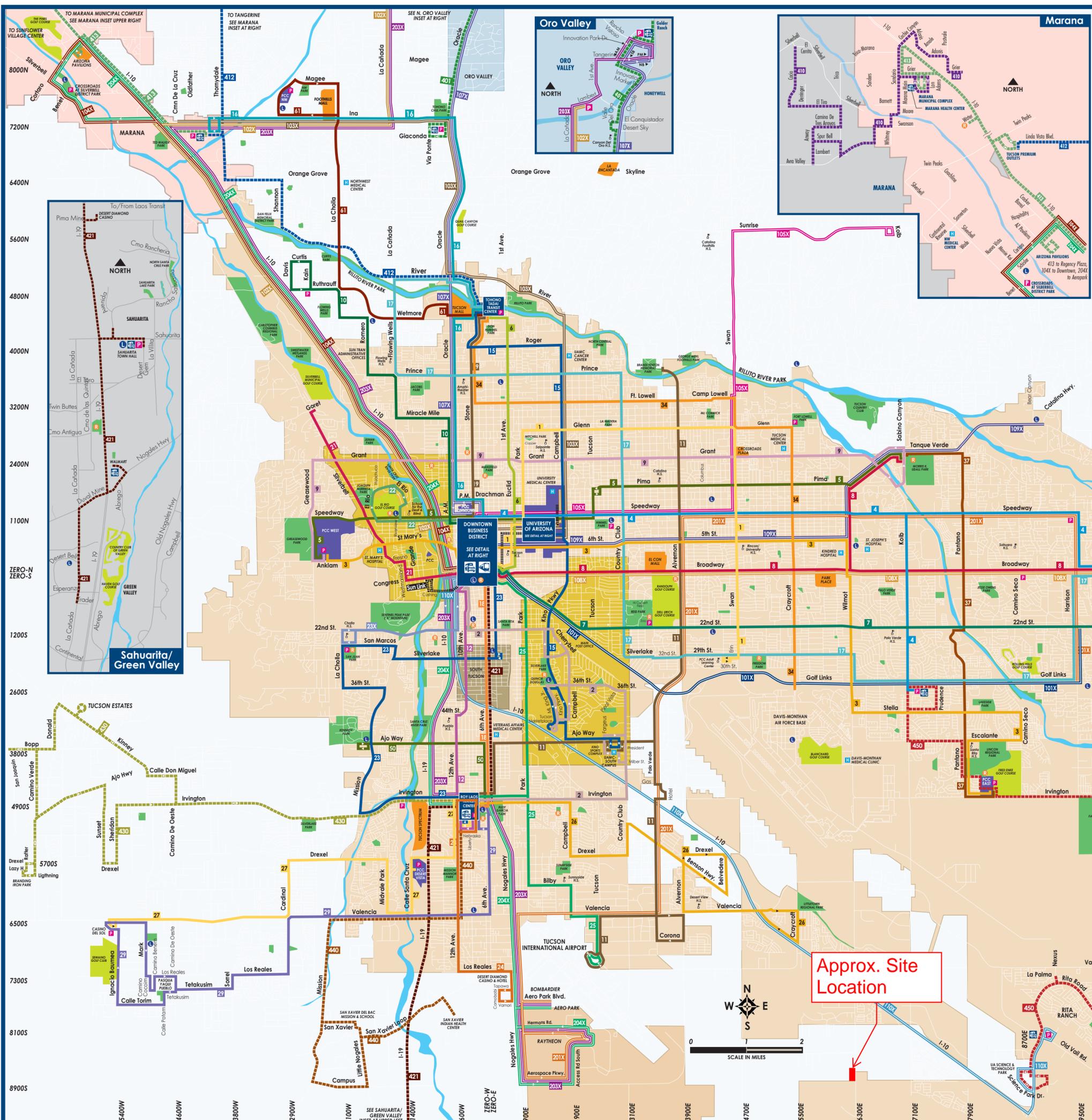


Notes:

EXH - 3



This map is static output from an internet mapping site and no warranty is expressed or implied as to the accuracy, reliability, currency or completeness of the data, and is for reference only



MAP KEY

1 Glenn/Swan	25 S. Park Ave.
2 Pueblo Gardens	26 Benson Highway
3 6th St./Wilmot	27 Midvale Park Rd.
4 Speedway	29 Valencia
5 Pima/W. Speedway	34 Craycroft/Ft. Lowell
6 Euclid/N. 1st Ave.	37 Pantano
7 22nd St.	50 Ajo Way
8 Broadway	61 La Cholla
9 Grant	101X Golf Links-Downtown Express
10 Ruthrauff	102X Northwest-UA Express
11 Alvernon	103X Northwest-Downtown Express
12 10th/12th Ave.	104X Marana-Downtown Express
15 Campbell	105X Foothills-Downtown Express
16 Oracle/Ina	107X Oro Valley-Downtown Express
17 Country Club/29th St.	108X Broadway-Downtown Express
18 S. 6th Ave.	109X Catalina Hwy-Downtown Express
19 Stone	110X Rita Ranch-Downtown Express
21 W. Congress/Silverbell	201X Eastside-Aero Park Express
22 El Rio/W. Speedway	203X Oro Valley-Aero Park Express
23 Mission	204X Northwest-Aero Park Express
24 12th Ave.	
23X Cholla Charger Express	Routes and schedules are subject to change.

SYSTEM-WIDE TRANSIT MAP

EFFECTIVE AUGUST 8, 2021

For schedule information or trip planning:
(520) 792-9222 • suntran.com

APPENDIX B

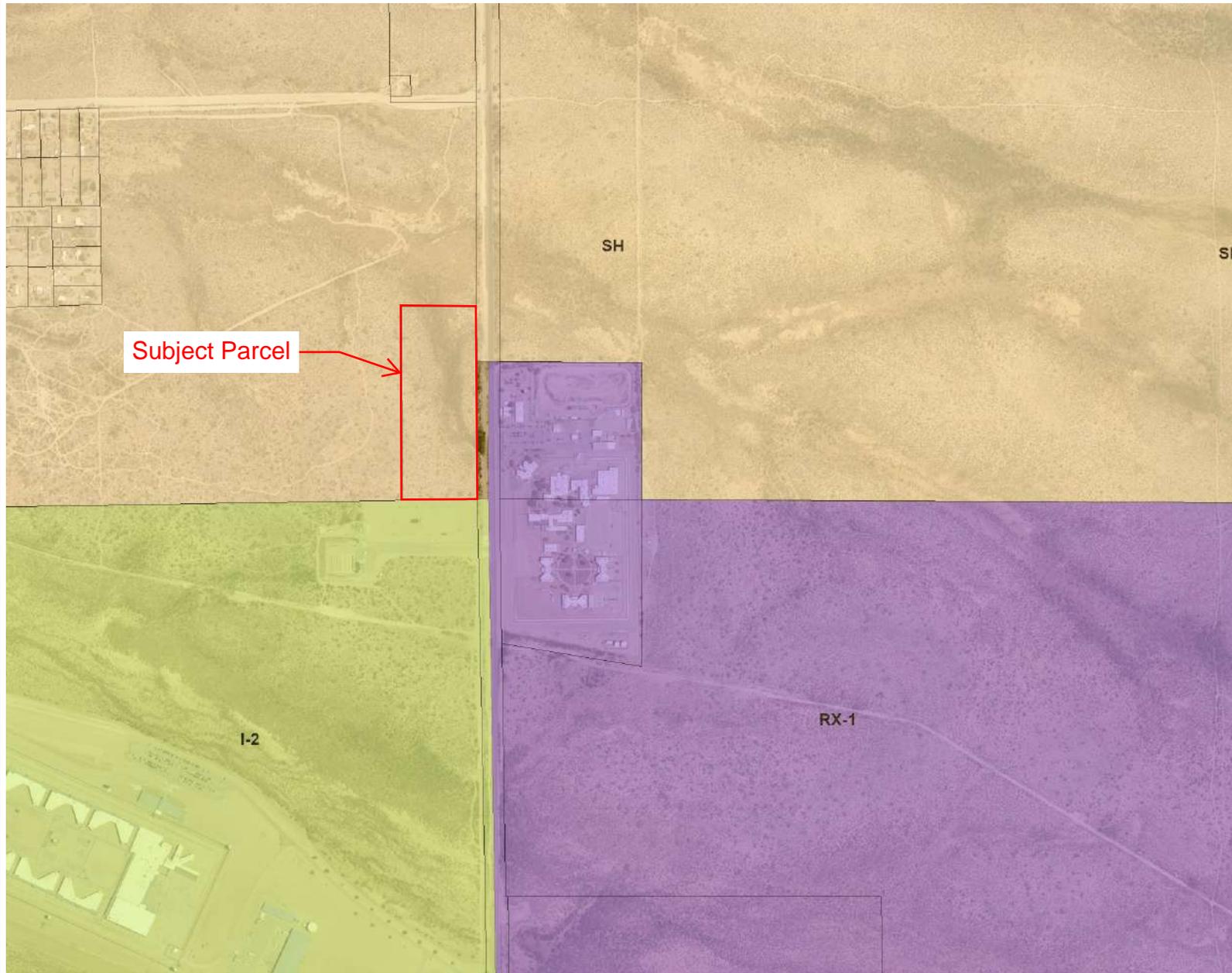
Section II Exhibits

Exhibit 6 – Existing Zoning

Exhibit 7 – Site Plan and Proposed Hydraulics

Exhibit 8 – Site Plan

Existing Zoning



Legend

- Parcels
- Zoning - County**
- CB-1
- CB-1(H)
- CB-2
- CB-2(H)
- CI-1
- CI-2
- CI-3
- CMH-1
- CMH-2
- CPI
- CR-1
- CR-2
- CR-2(H)
- CR-3
- CR-4
- CR-4(H)
- CR-5
- CR-5(GC)
- CR-5(H)
- GR-1
- GR-1(H)



Notes:

EXH - 6



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10/16/2025

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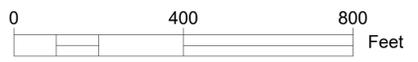
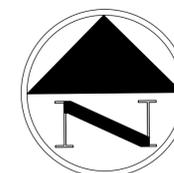
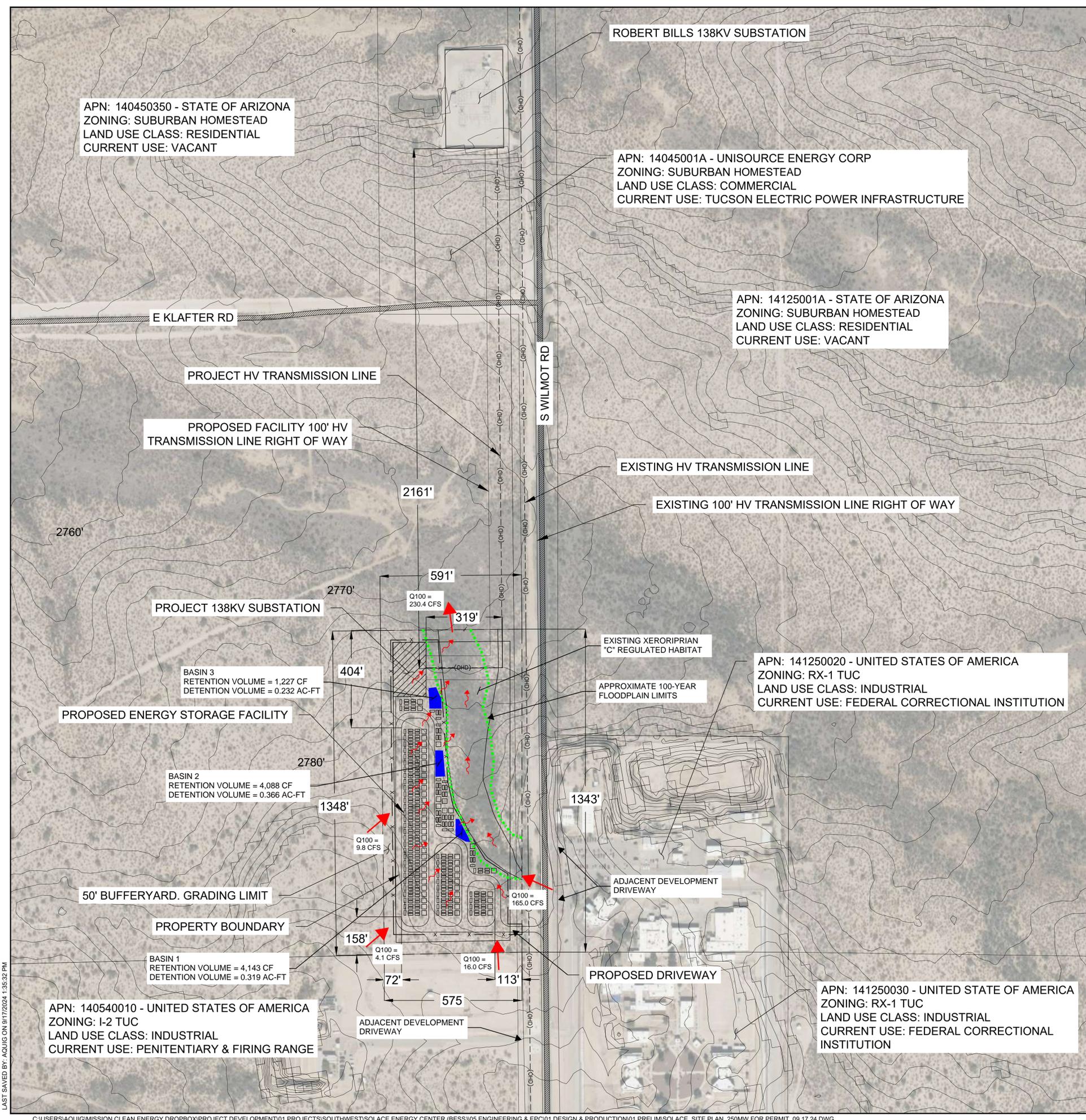
SOLACE ENERGY CENTER
PIMA COUNTY, AZ

PROJECT LOCATION



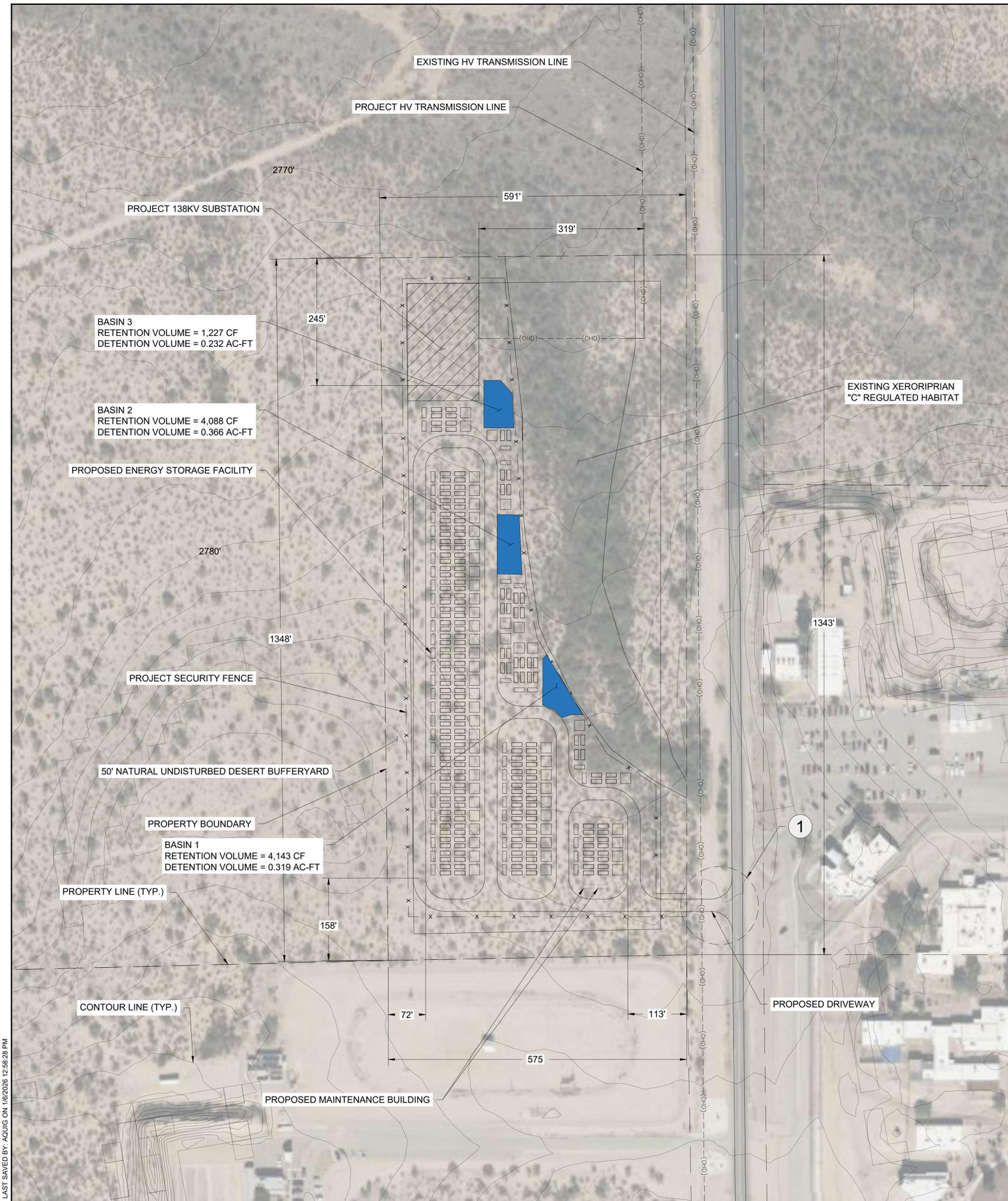
VICINITY MAP

PROJECT SUMMARY	
TOTAL PROJECT AREA (ACRES)	18
TECHNOLOGY	BESS
BESS AC CAPACITY AT POI (MW)	250
BESS CAPACITY AT POI (MWh)	1000
POINT OF INTERCONNECTION	ROBERT BILLS 138KV SUBSTATION
INTERCONNECTION VOLTAGE (KV)	138
GEN-TIE DISTANCE (FEET)	2200



APPROVED BY: AQ	CHECKED BY:	DESIGNED BY: BK	PROJECT NUMBER:	DRAWING NAME:
SITE PLAN				
SCALE: 1" = 200'				
DRAWING No.				REVISION
SP100				1

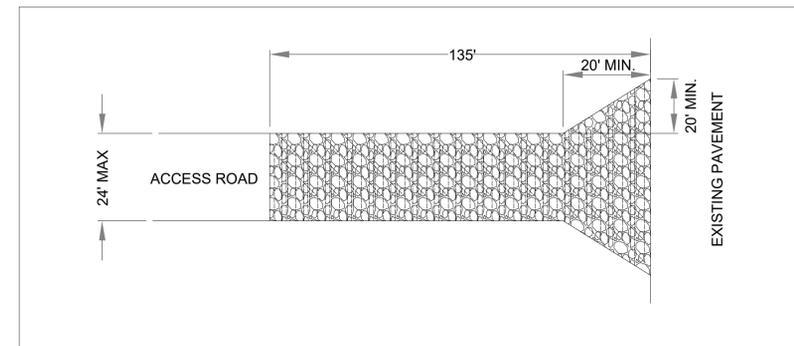
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PROJECT LOCATION



VICINITY MAP

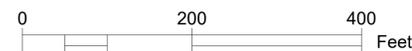
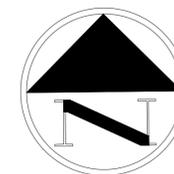


1 TYPICAL SITE ACCESS DRIVEWAY PLAN VIEW
SCALE: NTS

PROJECT SUMMARY

TOTAL PROJECT AREA (ACRES)	18
TECHNOLOGY	BESS
BESS AC CAPACITY AT POI (MW)	250
BESS CAPACITY AT POI (MWh)	1000
POINT OF INTERCONNECTION	ROBERT BILLS 138KV SUBSTATION
INTERCONNECTION VOLTAGE (KV)	138
GEN-TIE DISTANCE (FEET)	2200

- NOTES:**
- PROJECT PARCEL APN: 140450340
 - PROPOSED FACILITY ZONING: CI-2 (GENERAL INDUSTRIAL)
 - PROPOSED FACILITY CURRENT USE: VACANT
 - ACCESS DRIVEWAY TO BE PAVED. PROPOSED ENERGY STORAGE FACILITY AND ACCESS ROADS TO CONSIST OF COMPACTED GRAVEL
 - PROPOSED ENERGY STORAGE ENCLOSURE AREA: 3 ACRES
 - PROPOSED ENERGY STORAGE ENCLOSURE HEIGHT: 12 FT.
 - PROPOSED NUMBER OF BESS AND PCS ENCLOSURES: 275
 - APPROXIMATE SQUARE FOOTAGE PER BESS/PCS ENCLOSURE: 160 SQ. FT.
 - PROPOSED MAINTENANCE BUILDING DIMENSIONS AREA: 320 SQ. FT.
 - PROPOSED MAINTENANCE BUILDING HEIGHT: 12 FT.
 - 2 FOOT CONTOUR LINES SHOWN



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PIMA COUNTY, AZ**

APPROVED BY: AQ
CHECKED BY:
DESIGNED BY:
DRAWN BY: BK
PROJECT NUMBER:
DRAWING NAME:

SITE PLAN

SCALE:
1" = 100'

DRAWING No. **SP101** REVISION **2**

LAST SAVED BY: AQJUC ON 1/6/2028 12:56:28 PM

APPENDIX C

Solace Battery Energy Storage Project Class I Inventory



**Solace Battery Energy Storage Project
Class I Inventory, Pima County, Arizona**

Results for Archaeological Class I Inventory

November 12, 2024

Prepared for:

Mission Clean Energy, LLC
3210 21st Street
San Francisco, CA 94110

Prepared by:

Stantec Consulting Services Inc.
3133 W Frye Road Ste 300
Chandler, AZ 85226
www.stantec.com

Stantec Project Number:

203724238

The conclusions in the Report titled **Solace Battery Energy Storage Project Class I Inventory, Pima County, Arizona** are Stantec's professional opinion, as of the time of the Report, and concerning the scope described in the Report. The opinions in the document are based on conditions and information existing at the time the scope of work was conducted and do not take into account any subsequent changes. The Report relates solely to the specific project for which Stantec was retained and the stated purpose for which the Report was prepared. The Report is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient's own risk.

Stantec has assumed all information received from **Mission Clean Energy, LLC** (the "Client") and third parties in the preparation of the Report to be correct. While Stantec has exercised a customary level of judgment or due diligence in the use of such information, Stantec assumes no responsibility for the consequences of any error or omission contained therein.

This Report is intended solely for use by the Client in accordance with Stantec's contract with the Client. While the Report may be provided to applicable authorities having jurisdiction and others for whom the Client is responsible, Stantec does not warrant the services to any third party. The report may not be relied upon by any other party without the express written consent of Stantec, which may be withheld at Stantec's discretion.

Prepared by: _____

Signature
Seth C. Taylor

Printed Name

Reviewed by: _____

Signature
Gilbert Browning

Printed Name

Approved by: _____

Signature
Sean Kyle

Printed Name



**Solace Battery Energy Storage Project Class I Inventory, Pima County, Arizona
Results for Archaeological Class I Inventory**

Revision	Description	Author	Date	Quality Check	Date	Independent Review	Date
1.0	Draft	Seth C. Taylor	10/30/2024				
2.0	Draft	Sean Kyle	11/12/2024			X	
3.0	Draft	Gilbert Brown	11/12/2024	X			
4.0	Final	Seth C. Taylor	11/13/2024				



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2.1 Geology and soils	1
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Acronyms and Abbreviations

°F	degrees Fahrenheit
ASM	Arizona State Museum
AZSITE	Arizona State Museum Online Cultural Resource Database
BLM	Bureau of Land Management
GLO	General Land Office
NRHP	National Register of Historic Places
Project	Solace Battery Energy Storage Project
Stantec	Stantec Consulting Services Inc.
Study Area	Project area plus a 1-mile search area buffer



Executive Summary

Mission Clean Energy, LLC, intends to construct the Solace Battery Energy Storage Project (the Project), a 16-acre Battery Energy Storage System approximately 3.8 miles east of the Tucson International Airport, Pima County, Arizona. To support this effort, Mission Clean Energy, LLC, has requested that Stantec Consulting Services Inc. conduct an Archaeological Class I inventory for the Project.

The Project area consists of approximately 26 acres in Section 25 in Township 15S, Range 14E, Pima County, Arizona.

The Class I cultural resources desktop review revealed that one previously recorded cultural resource and seven previously recorded inventories have been identified within the Project area.

While the records search results provide preliminary information regarding cultural resources within the Project and the Study Area, the information obtained from the Arizona State Museum and the Arizona State Historic Preservation Office should not be considered complete and final and, therefore, should not be used alone in determining the Project's impacts on cultural resources. If the Project is subject to permitting through a federal or state agency, federal and Arizona state guidelines on cultural resources may require that an archaeological inventory/survey be conducted to identify cultural resources that could be affected by the Project.



1 Introduction

Mission Clean Energy, LLC, intends to construct the Solace Battery Energy Storage Project (the Project). To support this effort, Mission Clean Energy, LLC, has requested Stantec Consulting Services Inc. (Stantec) conduct a Class I inventory for the Project.

The Class I inventory includes the Project area plus a 1-mile search area buffer (Study Area).

As the Project develops, applicable federal, state, and county laws may include Section 106 of the National Historic Preservation Act (36 CFR 800) and the Arizona State Historic Preservation Act of 1982 (A.R.S. 41-861 et seq.). These acts require the federal, state, and county agencies to consider the effect an undertaking may have on historic properties (cultural resources listed in or eligible for listing in the National Register of Historic Places [NRHP]). In addition to federal guidelines, the Arizona State Historic Preservation Offices and Arizona State Museum (ASM) have developed state-level guidelines for conducting cultural resource surveys for a variety of project types. In Arizona, cultural resources investigations are designed to be compliant with the standards codified in Arizona Revised Statute (A.R.S. § 41-865). The state of Arizona has no legal requirements for cultural resource field investigations for private projects (i.e., non-federal publicly funded projects, without state permits, on privately owned lands).

Private landowners, including any partnership or corporation thereof, must comply with state law regarding the discovery and disturbance of human remains. Any landowner with intention to disturb human remains or having unintentionally disturbed human remains shall immediately cease any disturbance and shall notify the ASM of such disturbance or intent to disturb (ASM 2024). Additionally, cultural resource investigations should take into consideration local zoning ordinances, which vary by county and/or locality.

1.1 PROJECT LOCATION

The Project is located 3.8 miles east of the Tucson International Airport, Pima County, Arizona. The Project comprises 16 acres on private land in the southern portion of the Project area, 6.3 acres of State of Arizona land in the center section of the Project area, and 3.7 acres of private land in the northern section of the Project area for total of 26 acres. All portions of the Project area are located in Section 25, Township 15 South, Range 14 East (Gila-Salt River Meridian), Pima County, Arizona. The Project is depicted on the United States Geological Survey 7.5-min (1:24,000) Tucson SE, AZ quadrangle map (USGS 2021) (**Appendix A, Figure A-1**).

2 Environmental Background

The Project is in Pima County in southeastern Arizona and is in the Tucson Basin. The Santa Catalina Mountains are to the northeast, the Rincon Mountains are to the east, and the Santa Rita Mountains are to the south. The Project varies in elevation between 2,795 feet above mean sea level (USGS 2021). Temperatures in this area of the high desert range from 120 degrees Fahrenheit (°F) in the summer months to 18 °F in the winter. Annual rainfall in the area is between 0.5 and 6 inches (EPA 2024).

2.1 GEOLOGY AND SOILS

The Project geology comprises Early Pleistocene to Late Pliocene surficial deposits. Soil formations include Hantz loam (loam and clay loam), Sahuarita soils, Mohave soils, urban land (gravelly sandy loam



**Solace Battery Energy Storage Project Class I Inventory, Pima County, Arizona
Results for Archaeological Class I Inventory**

and fine sandy loam), and Stagecoach-Sahuarita association (very gravelly fine sandy loam). There are no buried A horizons present in the Project area (NRCS 2024).

2.2 FLORA

The APE is in the Environmental Protection Agency (EPA) Level III Sonoran Desert ecoregion supporting mix of desert scrub and semi-desert grasslands. Representative vegetation within this ecoregion includes saguaro cactus (*Carnegiea gigantea*), yucca (*Yucca* spp.), cholla (*Opuntia* spp.), catclaw (*Acacia greggii*), creosotebush (*Larrea tridentata*), white bursage (*Ambrosia dumosa*) and palo verde (*Parkinsonia aculeta*) (EPA 2024).



3 Archival Research

The overall objective of this Class I cultural resources desktop review is to assist in the development of the Project by complying with federal and state regulations to determine if previously recorded cultural resources (archaeological sites, historic structures, cemeteries, etc.) occur within or adjacent to the Study Area, and to determine what portions (if any) of the Project area have been subject to previous inventories.

The Class I inventory includes data from the following databases:

- ASM Online Cultural Resource Database (AZSITE)
- NRHP (managed by the National Park Service)
- Bureau of Land Management (BLM) General Land Office (GLO) Plat Maps
- Original land patent data
- Historic maps and aerial imagery
- United States Geological Survey quadrangle maps

3.1 PREVIOUS CULTURAL RESOURCES SITES AND INVENTORIES

Stantec Senior Archaeologist Seth Taylor, PhD, conducted a search of the AZSITE database (2024) on October 30, 2024. This review included the Project area and Study Area.

Sixteen previously recorded cultural resources were identified in the Study Area (**Table 1; Appendix A, Figure A-2**). These consist of 3 historic resources and 13 precontact resources. Five of the previously recorded resources are recommended eligible for listing in the NRHP, 5 are recommended ineligible for listing, and 4 are unevaluated for listing. One previously recorded site is located within the Project (AZ BB:13:661(ASM); this historic road is currently unevaluated for listing in the NRHP.

Table 1. Previously Recorded Cultural Resources in the Study Area

Site ID	Resource Category	Resource Type	Eligibility	In Project Area
AZ BB:13:661(ASM)	Historic	Historic road	Not evaluated	Yes
AZ FF:9:17(ASM)	Historic	Historic road	Eligible individually	No
AZ BB:13:62(ASM)	Precontact	Lithic scatter	Not evaluated	No
AZ BB:13:399(ASM)	Precontact	Lithic scatter	Not evaluated	No
AZ BB:13:400(ASM)	Precontact	Lithic scatter	Eligible individually	No
AZ BB:13:616(ASM)	Precontact	Roasting pit	Not evaluated	No
AZ BB:13:617(ASM)	Precontact	Multiple features	Eligible	No
AZ BB:13:618(ASM)	Precontact	Roasting pit	Ineligible individually	No
AZ BB:13:619(ASM)	Precontact	Multiple features	Eligible	No
AZ BB:13:622(ASM)	Precontact	Roasting pit	Not evaluated	No
AZ BB:13:660(ASM)	Historic	Historic road	Not evaluated	No



**Solace Battery Energy Storage Project Class I Inventory, Pima County, Arizona
Results for Archaeological Class I Inventory**

Site ID	Resource Category	Resource Type	Eligibility	In Project Area
AZ BB:13:669(ASM)	Precontact	Lithic scatter	Eligible individually	No
AZ BB:13:670(ASM)	Precontact	Lithic scatter	Ineligible individually	No
AZ BB:13:671(ASM)	Precontact	Roasting pit	Ineligible individually	No
AZ BB:13:672(ASM)	Precontact	Roasting pit	Ineligible individually	No
AZ BB:13:745(ASM)	Precontact	Multiple features	Ineligible individually	No

Source: AZSITE 2024

Thirty-four previous cultural resource inventories were identified within the Study Area. These consist of transmission-line, sewer, road, construction, and fiber optic related projects. There are seven previous cultural inventories overlapping the Project (10.1352.SHPO, 1986-1.ASM, 1995-218.ASM, 1999-297.ASM, 2003-1375.ASM, 2003-497.ASM, and 2008-74.ASM) (**Table 2; Appendix A, Figure A-3**).

Table 2. Previous Cultural Inventories in the Study Area

Project Number	Name	Author	Date	Overlap Project Area
10.1352.SHPO	No data	No data	No data	Yes
1986-1.ASM	Littleton Substation Survey	Sires, Earl	1986	Yes
1995-218.ASM	Report for Section 30/33 (ASLD No. 18-101042). Professional Archaeological Services and Technologies (PAST) Letter Report 95648. Tucson, AZ.	Stephen, David	1995	Yes
1999-297.ASM	Wilmot Road Utilities Survey	Dosh, Deborah	1999	Yes
2003-1375.ASM	Cultural Resources Survey along Wilmot Road South of Hermans Road, and along the Old Vail Road Alignment East of Wilmot Road, Tucson, Pima County, Arizona. Desert Archaeology, Inc. Project Report No. 03-199. Tucson, Arizona.	Hall, Susan	2003	Yes
2003-497.ASM	A Class III Archaeological Survey of the Proposed Rober Bills-Wilmont Road 138 kV Substation and 1.5 Miles of Right of Way Along Portions of Wilmont Road, Pima County, Arizona. Harris Environmental Group, Inc. HEG Project 03-21A. Tucson, Arizona	Twilling, Shannon D., and Grant A. Fahrni	2003	Yes
2008-74.ASM	Class III Cultural Resources Survey of the FBOP Gravity Sewer Line, on 47 Acres Along Wilmont Road, Near Interstate 10, Pima County, Arizona. Cultural Resources Report 2005-50. WestLand Resources, Inc., Tucson, Arizona.	Cook, Michael and Eleonore Malarchik	2006	Yes
12-100-11.BLM	No data	No data	No data	No
7.2811.SHPO	Hieroglyphic Mountains Survey	No data	No data	No



**Solace Battery Energy Storage Project Class I Inventory, Pima County, Arizona
Results for Archaeological Class I Inventory**

Project Number	Name	Author	Date	Overlap Project Area
10.159.SHPO	No data	No data	No data	No
1979-29.ASM	Wilmot Road Federal Prison Site Archaeological Survey	Brew, Susan	1979	No
1982-87.ASM	Pima County Department of Transportation Survey	Madsen, John	1982	No
1983-128.ASM	State Land Survey	Lange, Richard C.	1983	No
1983-73.ASM	State Land Survey	Lange, Richard	1983	No
1984-92.ASM	An Archaeological Clearance Survey of Two Guywire and Powerline Anchor Locations, Pima County, Arizona. Tucson, Arizona: Arizona State Museum Cultural Resource Management Division.	Sullivan, Alan	1984	No
1986-214.ASM	Preliminary Cultural Resources Survey Report for the US Telecom Fiber Optic Cable Project from San Timoteo Canyon, California to Socorro, Texas. Phoenix, Arizona: Dames & Moore.	Bruder, J. Simon, Patrick M. O'Brien, and A.E. Rogge	1986	No
1987-222.ASM	Cultural Resources Technical Report for the US Telecom Fiber Optic Cable Project from San Timoteo, California to Socorro, Texas: The Arizona Segment. Phoenix, Arizona: Dames & Moore.	O'Brien, Patrick M., J. Simon Bruder, David A. Gregory, A.E. Rogge, and Deborah A. Hull	1987	No
1990-2.ASM	Cultural Resource Survey of State Land near Kolb and I-10	Harry, Karen	1990	No
1999-23.ASM	Archaeology Survey of the Public Safety Academy Land Acquisition Project	Ruble, Ellen	1999	No
1999-1.ASM	UA Soils Department Santa Rita Soils Contest	Lange, Richard	1999	No
2000-795.ASM	Letter Report for Herman's Road Archaeological Survey. PAST Report No. 001254. Professional Archaeological Services and Technologies, Tucson, Arizona.	Stephen, David	2000	No
2000-42.ASM	Southeast "D" Zone Reservoir Survey	Heuett, Mary Lou	2000	No
2000-37.ASM	Los Reales Expansion Survey	D. Swartz	2000	No
2003-917.ASM	Cultural Resource Investigation of Proposed Federal Bureau of Prisons Site Tucson, Pima County, Arizona. Phoenix, Arizona: The Louis Berger Group, Inc.	Hohmann, John	2001	No
2000-822.ASM	A Cultural Resources Maintenance Survey of Approximately 0.83 Miles of Interstate 10 Right of Way between Milepost 237.33 and 238.16 in the Vicinity of Marana, Pima County, Arizona. Archaeological Research Services Report No. 1999:036a. Tempe, Arizona.	Barnes, Benjamin N. and Thomas E. Wright	2001	No



**Solace Battery Energy Storage Project Class I Inventory, Pima County, Arizona
Results for Archaeological Class I Inventory**

Project Number	Name	Author	Date	Overlap Project Area
2003-818.ASM	Proposed United States Penitentiary Tucson, Pima County, Arizona. Cultural Resource Investigations of a Proposed Sewer Line for a Federal Bureau of Prisons Site. Phoenix, Arizona: The Louis Berger Group, Inc.	Hohmann, John	2002	No
2003-1480.ASM	A Class III Cultural Resources Assessment Survey of Approximately Two Linear Miles Located Along the Frontage Road of East Interstate 10 and South Kolb Road in Tucson, Pima County, Arizona. Tierra Right of Way Services, Ltd. Archaeological Report No. 2003-78. Tucson, Arizona.	Moses, James	2004	No
2004-773.ASM	The Robert Bills Distribution Line Project: A Cultural Resources Survey Along the South Side of Interstate 10 from Craycroft Road to Kolb Road, Pima County. SWCA, Inc., Environmental Consultants. Cultural Resources Report No. 2004-321. Tucson, Arizona.	Barr, David	2004	No
2004-567.ASM	A Class III Cultural Resource Survey of Two Road Corridors for the Proposed Sycamore Peak Development near I-10 and Kolb, Road Southeast of Tucson, Pima County, Arizona. Tierra Right of Way Services, Ltd. Archaeological Report No. 2004-57. Tucson, Arizona.	Doak, David	2004	No
2006-497.ASM	Cultural resources inventory of a 1.03-mile-long corridor for an existing APS 11kV distribution line west of Woodruff, Navajo County, Arizona. Report (EnviroSystems Management (Flagstaff, Ariz.)); no. 1233-06. EnviroSystems Management: Flagstaff, Arizona.	Newsome, Daniel	2006	No
2006-355.ASM	A Class III Cultural Resources Survey of 1.8 Acres on State Land near Robert Bills Substation, Pima County, Arizona. Harris Environmental Group: Tucson, Arizona.	Twilling, Shannon D. and Chester Shaw	2006	No
2021-470.ASM	Cultural Resource Inventory for the Wilmot Park and Hook M Ranch Development Lift Station and Force Main in Pima County, Arizona. Report No. 2022-187. Westland Engineering and Environmental Services, Tucson, Arizona.	Ryder, Jason	2022	No
2022-375.ASM	Class III Cultural Resources Survey for the AZ02-158 Lookout Communications Facility in Tucson, Pima County, Arizona. Terracon Consultants, Inc., Tucson, Arizona.	Oswald, Chris	2022	No

Source: AZSITE 2024



3.2 HISTORIC MAPS AND LAND PATENTS

A search of the BLM GLO land patent records was also conducted to identify the original date of historic period occupation or developments (BLM 2024a). The original United States BLM GLO map of 1873 shows no developments in the area (BLM 2024b).

Table 3. GLO Patents in the Study Area

Area	Date of Registration	Name on Claim	Authority
T15S/14E Sec 25	6/2/1915	State Of Arizona	June 20, 1910: Quant & Spec Grant Selection (36 Stat. 557)

Notes:
GLO = General Land Office
Source: BLM 2024aF

3.3 CEMETERIES

The closest cemetery to project area is the Fireman’s Cemetery in Tucson, Arizona, approximately 3.3 miles north of the Project area (Find a Grave 2024). There are no known graves or cemeteries within the Project area.



4 Results and Recommendations

The Class I cultural resources desktop review did not identify any NRHP properties or structures in the Study Area. However, one previous recorded cultural resource (AZ BB:13:661(ASM)) and seven previous cultural resource inventories (10.1352.SHPO, 1986-1.ASM, 1995-218.ASM, 1999-297.ASM, 2003-1375.ASM, 2003-497.ASM, and 2008-74.ASM) were identified that overlap with the Project.

While the records search results provide preliminary information regarding cultural resources within the Project Area and the Study Area, the information obtained from AZSITE should not be considered complete and final. Therefore, these results should not be used alone in determining the Project's impacts on cultural resources.

The state of Arizona has no legal requirements for cultural resource field investigations for private projects (i.e., non-federal publicly funded projects, without state permits, on privately owned lands). Federal and/or Arizona state or county guidelines on cultural resources may require that an archaeological inventory/survey be conducted to identify cultural resources that could be affected by the Project, and if federal, state, and/or county permitting is required, and/or the grid connection is owned by the federal government, Section 106 of the National Historic Preservation Act (36 CFR 800) may be triggered. Only a small portion of the Project Area has been subjected to large-scale cultural resources survey. Due to the lack of complete coverage and the presence of previously recorded resources, Stantec recommends a Class III cultural resources inventory to evaluate the Project area in its entirety.



5 References

ASM (Arizona State Museum)

2024 A.R.S. §41-844 AND §41-865 GUIDELINES. Available at: [st law guidelines.pdf \(arizona.edu\)](#). Accessed October 30, 2024.

AZSITE (Arizona State Museum Online Cultural Resource Database)

2024 [Map Application \(asu.edu\)](#). Accessed October 30, 2024.

BLM (Bureau of Land Management)

2024a *General Land Office Plat maps and Land Patents*. Online database [Patent Details - BLM GLO Records](#), Patents. Accessed October 30, 2024.

2024b *General Land Office Plat maps and Land Patents*. Online [Survey Details - BLM GLO Records](#), 1873 Original survey map. Accessed October 30, 2024.

EPA (Environmental Protection Agency)

2024 [Ecoregions of North America | US EPA](#) (usda.gov). Accessed October 30, 2024.

Find a Grave

2024 [Fireman's Cemetery in Tucson, Arizona - Find a Grave Cemetery](#) Accessed October 30, 2024.

NRCS (Natural Resources Conservation Service, United States Department of Agriculture)

2024 Pima County, Arizona, Eastern Part [Web Soil Survey](#). Accessed October 30, 2024.

USGS (US Geological Survey)

2021 Tucson SE, AZ, 1:24,000 scale quadrangle.

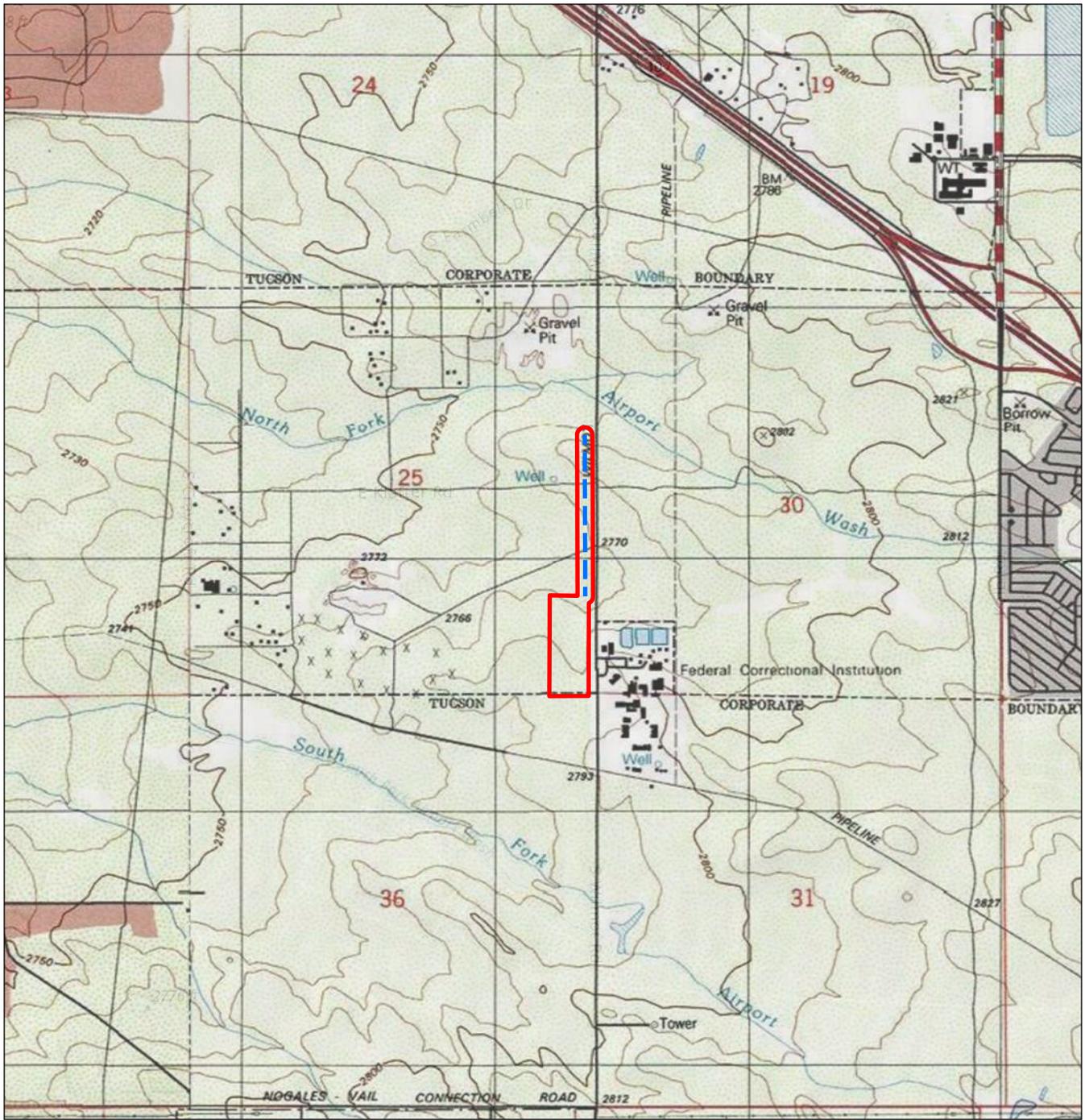


APPENDIX A

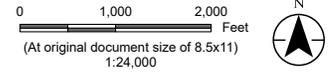
Maps



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--- Gen-Tie Easement #1
□ Project Boundary



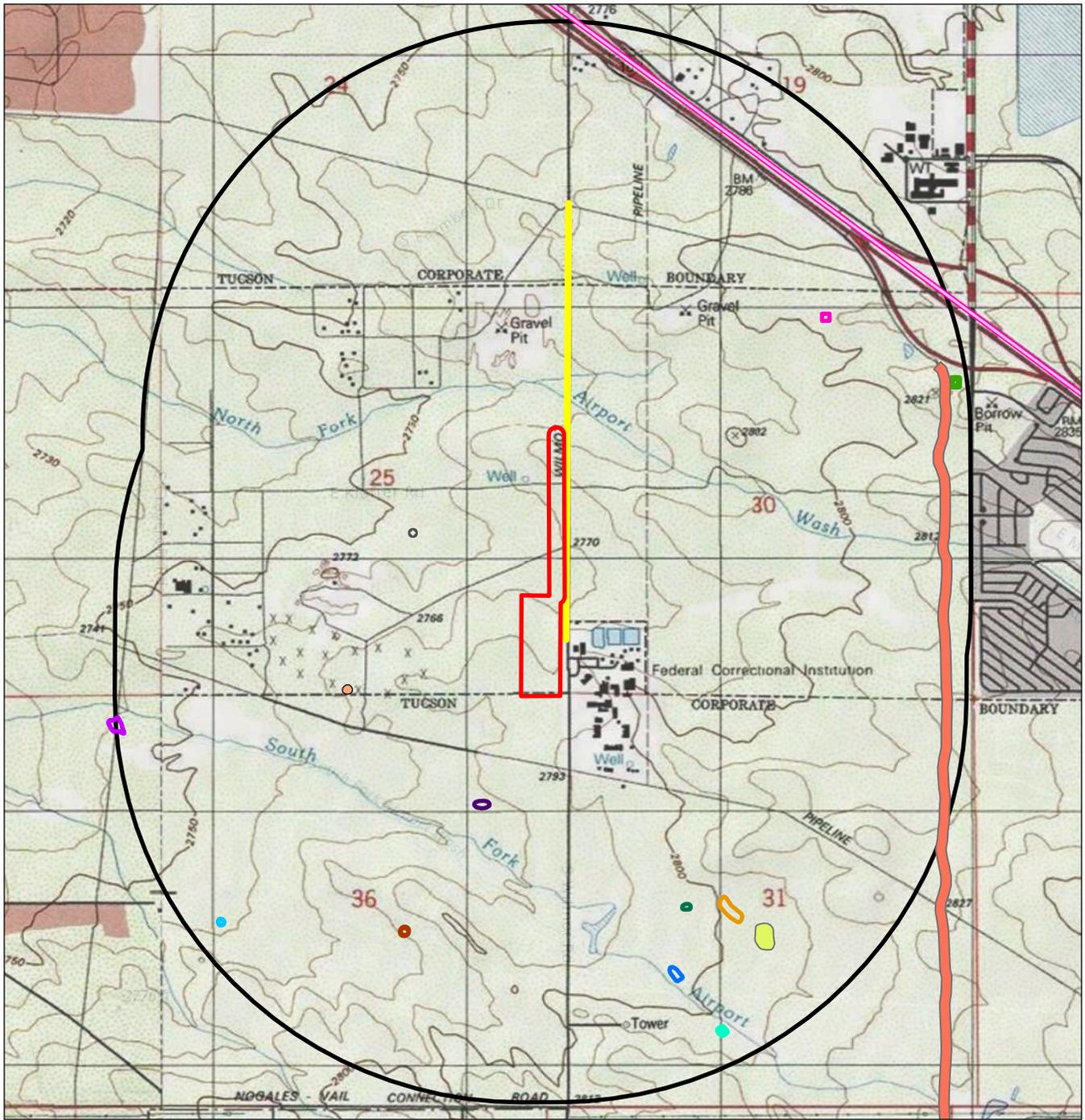
Project Location Prepared by KDLP on 2024-11-01
T15.0S R14.0E S25&36 IR by ST on 2024-11-01
Tucson SE, AZ 7.5' USGS Topo Quad

Client/Project 203724238
Mission Clean Energy, LLC
Solace Battery Energy Storage Project

Figure No.
Figure A-1
Title
Project Location

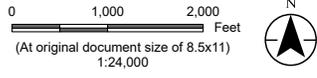
Notes
1. Coordinate System: NAD 1983 UTM Zone 12N
2. Data Sources: Esri, NASA, NGA, USGS, FEMA, Esri, CGIAR, USGS, Copyright © 2013 National Geographic Society, i-cubed, CONANP, Esri, TomTom, Garmin, Foursquare, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USFWS, CONANP, Esri, TomTom, Garmin, Foursquare, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS
3. Background: Topographic map from services on map.dfg.ca.gov.ags

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Notes
 1. Coordinate System: NAD 1983 UTM Zone 12N
 2. Data Sources: Esri, NASA, NGA, USGS, FEMA, Copyright © 2013 National Geographic Society, Incubed, CONANP, Esri, TomTom, Garmin, Foursquare, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USFWS, CONANP, Esri, TomTom, Garmin, Foursquare, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS, Esri, USGS
 3. Background: Topographic map from services on map.dfg.ca.gov/ags

- ▭ Project Boundary
- One-Mile Records Search Buffer
- Cultural Sites**
- AZ BB:13:399(ASM)
- AZ BB:13:400(ASM)
- AZ BB:13:616(ASM)
- AZ BB:13:617(ASM)
- AZ BB:13:618(ASM)
- AZ BB:13:619(ASM)
- AZ BB:13:62(ASM)
- AZ BB:13:622(ASM)
- AZ BB:13:660(ASM)
- AZ BB:13:661(ASM)
- AZ BB:13:669(ASM)
- AZ BB:13:670(ASM)
- AZ BB:13:671(ASM)
- AZ BB:13:672(ASM)
- AZ BB:13:745(ASM)
- AZ FF:9:17(ASM)



Project Location
 T15.0S R14.0E S25&36
 Tucson SE, AZ 7.5' USGS Topo Quad

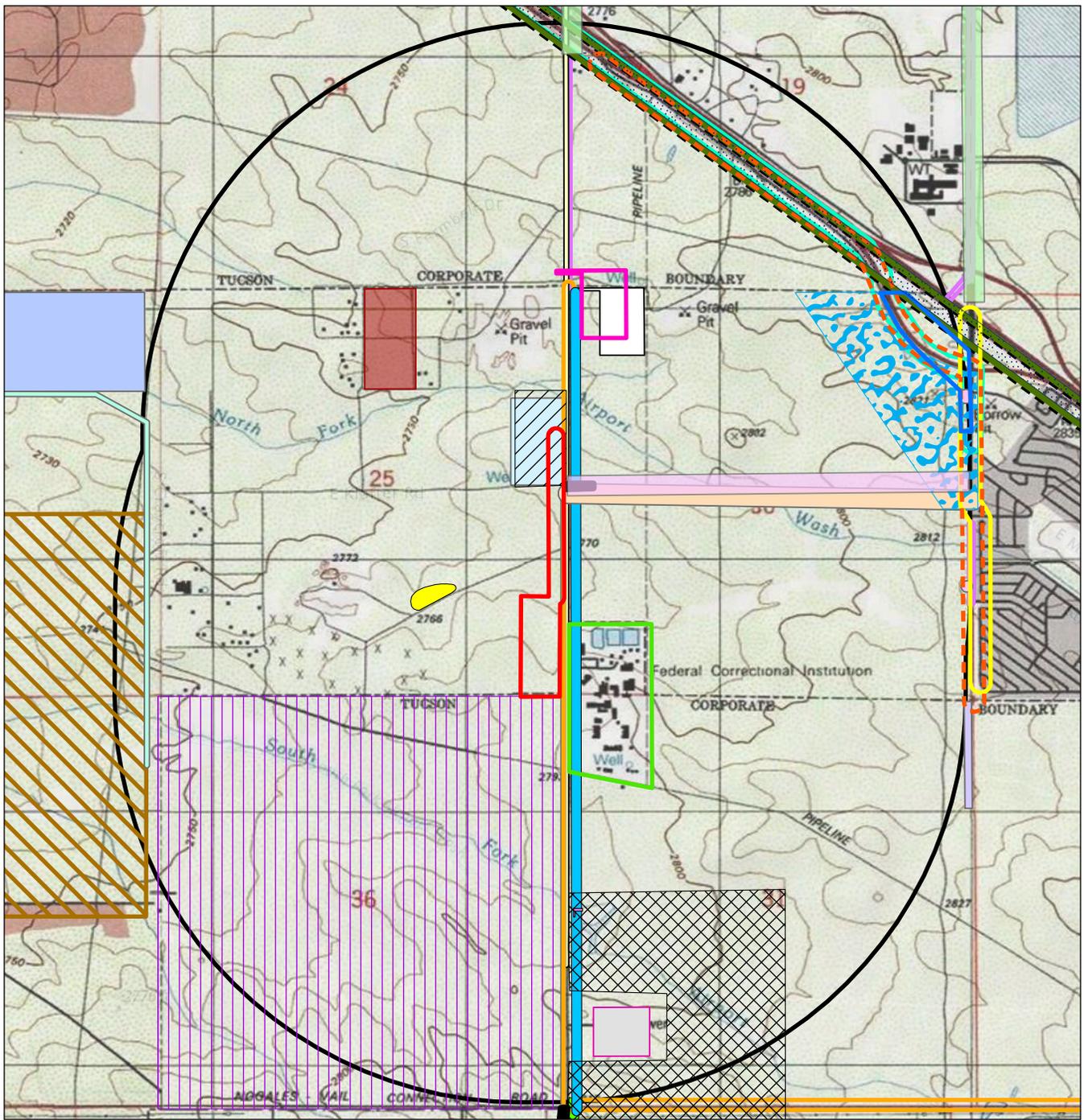
Client/Project
 Mission Clean Energy, LLC
 Solace Battery Energy Storage Project

203724238

Prepared by KDLP on 2024-11-01
 IR by ST on 2024-11-01

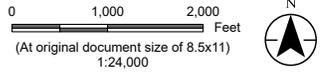
Figure No.
Figure A-2
Title
Previously Recorded Cultural Resources

V:\1857\Active\203724238\03_data\gis\proj\Solace_Solar\Solace_Solar.aprx Revised: 2024-11-01 By: kdelapena



Notes
 1. Coordinate System: NAD 1983 UTM Zone 12N
 2. Data Sources: Esri, NASA, NGA, USGS, FEMA, Copyright © 2013 National Geographic Society, i-cubed, CONANP, Esri, TomTom, Garmin, Foursquare, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USFWS, CONANP, Esri, TomTom, Garmin, Foursquare, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS, Esri, USGS
 3. Background: Topographic map from services on map.dfg.ca.gov/ags

- | | | |
|------------------------|----------------------------|---------------|
| Project Boundary | 1987-222.ASM | 2003-1480.ASM |
| One-Mile Search Buffer | 1990-2.ASM | 2003-497.ASM |
| 10.1352.SHPO | 1995-218.ASM | 2003-818.ASM |
| 10.159.SHPO | 1999-1.ASM/
7.2811.SHPO | 2003-917.ASM |
| 1986-214.ASM | 1999-23.ASM | 2004-567.ASM |
| 12-100-11.BLM | 1999-297.ASM | 2004-773.ASM |
| 1979-29.ASM | 2000-37.ASM | 2006-355.ASM |
| 1982-87.ASM | 2000-42.ASM | 2006-479.ASM |
| 1983-128.ASM | 2000-795.ASM | 2006-497.ASM |
| 1983-73.ASM | 2000-822.ASM | 2008-74.ASM |
| 1984-92.ASM | 2003-1375.ASM | 2021-470.ASM |
| 1986-1.ASM | | 2022-375.ASM |



Project Location Prepared by KDLP on 2024-11-01
 T15.0S R14.0E S25&36 IR by ST on 2024-11-01
 Tucson SE, AZ 7.5' USGS Topo Quad

Client/Project 203724238
 Mission Clean Energy, LLC
 Solace Battery Energy Storage Project

Figure No.
Figure A-3
Title
Previous Recorded Cultural Inventories

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APPENDIX D

Email Correspondence



Emma Riley <emma@missioncleanenergy.com>

Solace Energy Center - Pima County

2 messages

Madison Sanders <madison@missioncleanenergy.com>

Thu, Oct 2, 2025 at 7:25 AM

To: dtmpermits@tucsonaz.gov

Cc: Emma Riley <emma@missioncleanenergy.com>

Good morning,

Hope you are doing well. I'm checking up on my last email. Do you all have any feedback on the proposed road access for Solace Energy Center?

Thank you for your time.

[Quoted text hidden]

--

Madison Sanders

ph. 504.356.1626

Madison Sanders <madison@missioncleanenergy.com>

Tue, Sep 23, 2025 at 2:01 PM

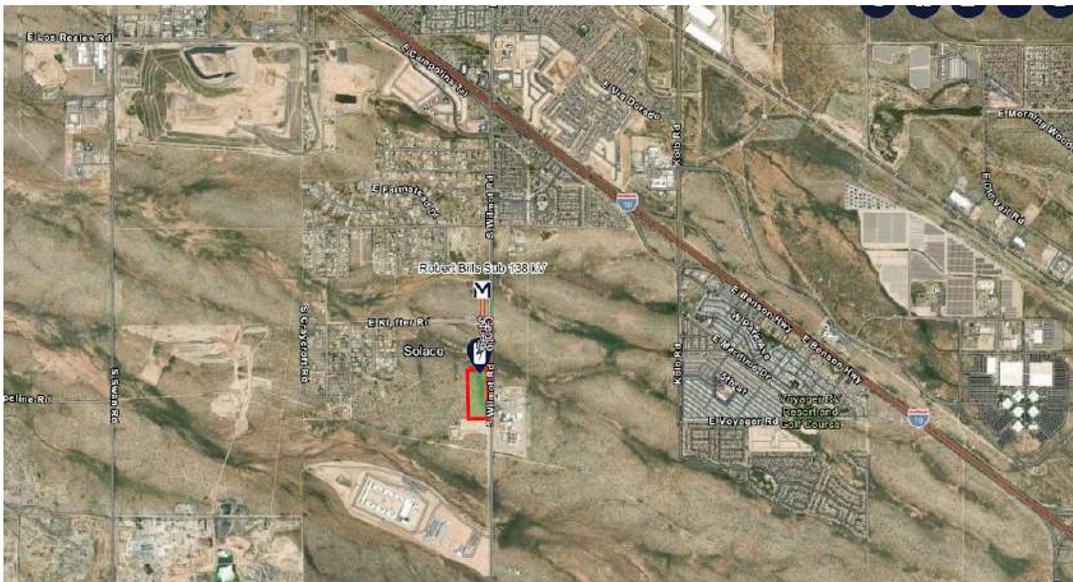
To: dtmpermits@tucsonaz.gov

Cc: Emma Riley <emma@missioncleanenergy.com>

Hello,

Thanks for your time last Friday to discuss Solace Energy Center. I've cc'd the Project Developer, Emma Riley, to answer any additional questions that I might not be able to answer.

Solace Energy Center is a 150MW standalone battery energy storage system located in unincorporated Pima County that will interconnect into the Robert Bills 138 kV Substation, see location below.



We are reaching out to get your feedback on the proposed road access (see attachment) for the Project and also if there are additional requirements to comply with.

Please let us know if you have any questions or need additional information. Thank you!

--

Best,



Madison Sanders
Senior Permitting Associate
ph. 504.356.1626
fax 415.840.0423



Solace_Site Plan 24x36_8.28.25.pdf
2656K



Emma Riley <emma@missioncleanenergy.com>

Solace Energy Center

3 messages

Madison Sanders <madison@missioncleanenergy.com>
To: Emma Riley <emma@missioncleanenergy.com>

Thu, Oct 23, 2025 at 2:05 PM

[Quoted text hidden]

[Quoted text hidden]

 **Solace Energy Center_8.18.25 (2).pdf**
5034K**Madison Sanders** <madison@missioncleanenergy.com>
To: district2@pima.gov
Cc: Emma Riley <emma@missioncleanenergy.com>

Mon, Aug 25, 2025 at 1:00 PM

Hello,

Hope you are doing well. I'm following up on my previous email and requesting a call to discuss the Solace Energy Center. We are hoping to introduce the project and answer any of your questions.

Please feel free to give me a call to further discuss.

[Quoted text hidden]

--

Madison Sanders

ph. 504.356.1626

Madison Sanders <madison@missioncleanenergy.com>
To: district2@pima.gov
Cc: Emma Riley <emma@missioncleanenergy.com>

Mon, Aug 18, 2025 at 8:05 AM

Good morning,

My name is Madison Sanders, and I work with Mission Clean Energy, a national utility-scale energy developer. I'm reaching out to introduce the Solace Energy Center, a proposed 150 MW Battery Energy Storage System (BESS) that would be located in District 2 of unincorporated Pima County, adjacent to the Federal Correctional Institution.

As part of the development process, the project has received a Comprehensive Plan Amendment approval. Next steps for the Project include rezoning and a Conditional Use Permit application submission. Since the project is located within District 2, we wanted to connect with you directly to provide background and request a call to answer any of your questions directly.

We would be glad to answer any questions you may have about the project or Battery Energy Storage Systems in general. For your reference, I've attached additional information about both the Solace Energy Center and BESS technology.

Thank you for your time and consideration.

--

Best,

**Madison Sanders**
Senior Permitting Associate
ph. 504.356.1626

 **Solace Energy Center_8.18.25 (2).pdf**
5034K

