



Cochise County

Development Services
Planning Division

Public Programs...Personal Service
www.cochise.az.gov

APPLICATION FOR A SPECIAL USE

Applicant's Name: _____

Name of All Property Owner(s): _____

Applicant Mailing Address:

| Street # | Town | State | Zip code |
|---|------|-------|----------|
| Subject Property Address (if different than mailing address): | | | |
| Street # | Town | State | Zip code |

Email Address: _____

Phone Number: _____

Tax Parcel Number: _____

Current Zoning Designation: _____

Comprehensive Plan Land Use Category/Growth Area: _____

Comprehensive Plan Land Use Designation: _____

Area Plan Designation (if applicable): _____

Size of Property (in acreage or square feet): _____

How many acres will be cleared and developed? _____

Describe your relationship to this application. (Select one)

I am the property owner

I am an authorized agent for the property owner

Bisbee Office
1415 Melody Lane, Building F
Bisbee, Arizona 85603
520-432-9300
520-432-9278 fax
planningandzoning@cochise.az.gov

If the applicant is not the property owner, please attach a notarized letter of authorization to this application.

The Purpose of a Special Use

Special Uses include uses or activities with a greater potential for impacts on neighboring properties than the permitted uses in a Zoning District. Examples of Special Uses are manufacturing, RV Parks, guest ranches, hospitals and schools. These more intense uses must be carefully reviewed to decide if they could make good neighbors to the existing uses. For this reason, a Special Use Permit requires a public hearing and approval by the Planning and Zoning Commission before it is allowed.

What is the Process?

1. Pre-application meeting with County planning staff.
2. Citizen Review Process – the applicant must send notice to all property owners within a radius of no less than 300 feet of the subject parcel(s), as shown on the most recent available records of the last property tax assessment. The County Zoning Inspector may expand the mailed notification area to greater than a 300-foot radius at time of application acceptance if there are compatibility concerns associated with the request.
3. Application Submittal
4. Technical review by relevant internal staff and external agencies
5. Public Hearing – Planning and Zoning Commission (Approval/Denial)

Appeals

The Commission action can be appealed to the Board of Supervisors by anyone who disagrees with the outcome. Appeals must be filed within fifteen (15) calendar days of the Commission action. The applications are available online "Appeal: Board of Supervisors."

Required Submittals

1. This application
2. Citizen Review Report
3. Site plan -drawn to scale showing the existing and proposed District boundaries and an accurate legal description of the area being petitioned for amendment. See "concept plan instructions for special uses" (included in this application). Please see our website for an example plan: <https://www.cochise.az.gov/development-services/special-uses>
4. Letter of Authorization (for authorized agents, if applicable)
5. Hazardous or polluting materials attachment (only if hazardous materials are proposed, if applicable)
6. Deed restrictions (if applicable)
7. Outdoor lighting, manufacturers specifications (if applicable)
8. Processing Fee

Concept Plan Instructions for Special Uses

Sometimes, an applicant will seek approval for a particular special use or uses on a piece of property well ahead of actual construction or operation of that use. Often the exact dimensions of structures or configuration of uses on the property are not known yet until the uses have been approved and the applicant has invested resources into site planning. The Zoning Regulations allow for the submittal of a "Concept Plan" in lieu of a site plan in the case of phased special uses on one property or a special use where construction is not anticipated within one year. However, if the use(s) are approved by the Planning and Zoning Commission, then a detailed site plan meeting the requirements of the Zoning Regulations will be required for each use or phase and shall be in substantial conformance with the approved special use. If the site plan is not within substantial conformance with the approved use and concept plan, then the special use will need to be reviewed, in a public hearing, by the Commission once again to modify the original proposal. **Note: any**

anticipated waivers of site development standards such as setbacks, screening, landscaping or parking spaces must be requested, justified, and approved by the Commission prior to the issuance of a building permit.

In order to adequately review the proposed special use(s) on a piece of property, a Concept Plan must include at a minimum the following information:

- Parcel boundaries and adjacent roads;
- The general location, size and height of all structures and uses (existing and proposed), including minimum setbacks from parcel boundaries, washes and roads;
- The general location and minimum number of parking spaces to be provided, including proposed surface and width of driveways;
- Proposed screening and landscaping;
- Any significant topographical features (washes, hills, rock outcroppings, wetlands) and cultural features of the property and adjacent parcels;
- If applicable, project phasing (approximate schedule of uses and construction) and any other information deemed necessary to effectively review the Special Use.

Please state the reason for this request and why it should be supported.

Identify the utility company/service provider for each of the following services and state if additional provisions or future connections are required in the space below.

| Service Provider | Service Provider | Additional Provisions Required |
|-------------------------|-------------------------|---------------------------------------|
| Water/Well | | |
| Sewer/Septic | | |
| Electricity | | |
| Natural Gas | | |
| Telephone | | |
| Fire Protection | | |
| Waste Disposal | | |

Is this request consistent with all deed restrictions or private covenants in effect for this property? If applicable, please include a copy of these restrictions/covenants with this application.

Yes
 No
 Not applicable (no deed restrictions or covenants)

Describe all **existing** structures/uses present on the subject parcel. Note: the size and location of existing structures must be shown on the accompanying site plan.

Describe all **proposed** structures/uses on the parcel that to be placed on the parcel. Note: the size and location of proposed structures must be shown on the accompanying site plan.

Is the proposed special use consistent with stated purpose of the current zoning district? Explain.

Describe all intermediate and final products/services that will be produced/offered/sold, if applicable.

What materials will be used to construct the new building(s)? (Note, for an existing building(s), please also list the construction type(s), i.e., factory-built building, wood, block, metal).

Will the project be constructed/completed within one year or phased?

One year

Phased

If this is a phased project, describe the phases here and physically depict them on the site plan.

What are the days and hours of operation (if applicable)?

Days of the week: _____

_____ AM to _____ PM

Number of employees (if applicable):

Initially _____ Future: _____

Total average daily traffic generated (non-residential uses):

How many vehicles will be entering and leaving the site (per day)? _____

Total trucks (e.g., by type, number of wheels, or weight)? _____

Estimate which direction(s) and on which road(s) the traffic will travel from the site.

If more than one direction, estimate the percentage that travel in each direction.

At what time of day, day of week and season (if applicable) is traffic the heaviest?

Water Use:

Estimate the total gallons of water needed for the proposed use: per day _____ per year _____

Please indicate your water source _____

If your property is served by a private well, show the existing or proposed location on the site plan.

List any strategies you will employ, on site, to minimize water use, recycle water, and/or enhance onsite natural recharge.

Will your property be served by a septic system? Yes No

If yes, show the septic tank, leach field and 100% expansion area on the site plan, and indicate whether the system is existing or proposed.

Does your parcel have permanent legal access*? If no, what steps are you taking to obtain such access? (*Our Zoning Regulations state that no building permit for a nonresidential use shall be issued unless a site has permanent and direct access to a publicly maintained street or street where a private maintenance agreement is in place. Said access shall be not less than twenty (20) feet wide throughout its entire length and shall adjoin the site for a minimum distance of twenty (20) feet. If access is from a private road or easement provide documentation of your right to use this road or easement and a private maintenance agreement.)

Which streets or easements will be used for traffic entering or exiting the property? (Please label on the accompanying plan)

What impact will this have on the traffic volume of roads serving this subject property?

How many driveway cuts are proposed along streets or easements to allow site access? State whether this is an increase/decrease and whether any existing cuts will need relocation.

Does the subject parcel have site access onto a major road?

Yes No

Are you requesting any modifications or waivers from site development standards? If yes, explain.

Is the subject property within Sierra Vista Sub-Watershed Overlay Zone? If so, please indicate this, and that you understand that it may be subject to additional plan reviews and inspections whenever a building permit is required.

Yes, and I understand the permitting requirements No, it's outside the boundaries

Please describe your citizen review process (if applicable). Specifically, state whether you received any responses to your mailed notice or public meeting. Explain how your special use application has incorporated the feedback you received.

Describe any outdoor activity associated with your special use proposal, if applicable.

Will outdoor storage of equipment, materials or products be needed? If yes, show the location on the site plan. Describe any measures to be taken to screen this storage from neighboring properties.

Will any noise or vibrations be produced that can be heard or felt on neighboring properties on a regular basis? if yes; describe the level and duration of this noise. What measures are you proposing to prevent this noise from being heard on neighboring properties?

Will odors be created? If yes, what measures will be taken to prevent these odors from escaping onto neighboring properties?

Will any on-site activities attract pests, such as flies or mice? If yes, what measures will be taken to prevent a nuisance on neighboring properties?

Will additional dust be created on a regular basis? If yes, what measures will be taken to prevent this dust from escaping onto neighboring properties or roadways?

Is outdoor lighting proposed? If yes, show the location(s) on the site plan. Indicate how neighboring properties and roadways will be shielded from light spillover. Please submit manufacturer's specifications for all light fixtures.

Yes No See Note 8 -Form Attachment

Will you be performing any off-site construction (e.g., access aprons, driveways, and culverts)? If yes, show details on the site plan. Note: The County may require off-site improvements reasonably related to the impacts of the use such as road or drainage improvements.

Yes No See Note 9 -Form Attachment

Show on-site drainage flow on the site plan. Will drainage patterns on site be changed? If so, please indicate on the site plan and describe below.

Drainage flow arrows are shown on the site plan. Drainage patterns will not change dramatically as minimal grading is needed. A preliminary hydrology report is provided as Attachment D in the Narrative/Supporting Documents Report.

If more than one acre is to be cleared, describe the proposed dust and erosion control measures to be used and show on site plan, if appropriate.

A water truck, or possibly environmentally safe polymers will be used for dust control during construction. Stormwater Pollution Prevention Plan (SWPPP) best management practices (e.g. silt fencing/straw wattles/rock-lined entrance) will be employed to reduce water erosion and soil transmission until permanent soil stabilization is achieved. Disturbed soils will be permanently stabilized through re-seeding (temporarily disturbance areas) and compaction and/or paving (permanent disturbance area such as roads and parking spaces).

Do you anticipate the use of any hazardous or dangerous materials? If yes, please complete a "Hazardous or Polluting Materials Attachment" and attach it to this application.

Yes No

I hereby certify that I am the owner or duly authorized owner's agent and all information in this questionnaire, in the Joint Permit Application and on the site plan is accurate. I understand that if any information is false, it may be grounds for revocation of the Commercial Use/ Building/ Special Use Permit. In addition, I hereby request all inspections necessary to process this application, and if the permit is issued, I request all inspections necessary to monitor progress, and document completion, at all stages of the work related to this permit. Failure to obtain permits may result in fines or other penalties.

Diana Mandova (Agent) for THSI, bn, LLC 6/27/23
Applicant Signature Date

APPLICATION FOR A SPECIAL USE ATTACHMENT 1. APPLICATION FORM EXTENDED RESPONSES

Note 1.

The majority of the Project site is owned by the Applicant (THIS bn, LLC). The Applicant has executed a purchase agreement for the remainder of the Project site to allow the Applicant all rights to build on those parcels (i.e. LIBERTY LAND & CATTLE, LLC [205-28-001 205-28-003B] and WAYNE D. ANDERSON [205-40-001]).

Note 2.

Very little annual water consumption is required during the 40-year life of the solar Project. The Project requires less than 230,000 gallons per year; that's equivalent to about 4 residential homes assuming 146 gallons/day per average AZ resident according to the Arizona Department of Water Resources (ADWR).

Based on a study by Elliott D. Pollack & Company (2022),¹ the Project is expected to provide an economic boost to the area:

- More than 250 direct jobs to be created during construction. Valuable experience in high demand, high paying industry.
- Over \$259M in regional economic uplift through this infrastructure investment over the life of the Project.
- \$34M in local, state, and property tax revenue.
- The Project will generate up to 5 long-term jobs for operations and maintenance activities during the lifetime of the Project.

The Project site was carefully selected and the Project layout has been thoughtfully designed. The rural location reduces visual impacts that could potentially affect neighbors and the public. The Project is situated in proximity to an existing Arizona Electric Power Cooperative (AEPCO) transmission line (immediately north) which will be the point of interconnection for the Project's associated 1.5 mile long 230 kV gen-tie power line. The Arizona Corporation Commission (ACC) evaluated the Project's proposed gen-tie line relative to numerous environmental factors specified in Section 40-360.06, Arizona Revised Statutes. The ACC approved a Certificate of Environmental Compatibility (CEC) issued by the Arizona Power Plant and Transmission Line Siting Committee for the Project interconnection in April 2023. The ACC process and period of time it takes to be scheduled for the ACC hearings can often be lengthy; therefore, the Applicant elected to secure that approval ahead of the SUP application for this Project.

In Cochise County, Solar Energy Power Plants and their related facilities are allowed in RU zones with a SUP, subject to Section 1824 site development standards (605.08, 607.51). This SUP request is consistent with the land use designations of the comprehensive plan and transportation plans and the Project site is located outside master development plans and area plan areas.

¹ Elliott D. Pollack & Company. 2022. Three Sisters Solar Project Economic & Fiscal Impact Report Cochise County, Arizona. Prepared for THSI bn, LLC. Scottsdale, Arizona. October 2022.

Note 3.

The Applicant has contacted the County Emergency Management Director and will prepare an Emergency Response Plan including emergency contacts, hazard analysis and instructions for various emergency situations. The Applicant is also coordinating with the fire departments (Sunsites, Pearce, and Willcox) as they would be among the likely first responders.

The Applicant will prepare a construction waste management plan to ensure proper waste disposal and convey compliance requirements during bidding/pre-con meetings.

Note 4.

During operations and maintenance of the Project (most of the Project life), the Project will be remotely monitored through a supervisory control and data acquisition (SCADA) system or manned by 1-3 passenger vehicles/pickup trucks that would visit the site as needed (not expected to be daily).

During construction, approximately 200 passenger vehicles are anticipated daily (during the peak 5 months) declining on either side of the construction peak time. All delivery vehicles are accounted for in Note 5.

Note 5.

In a regular year, during operations and maintenance of the Project, we do not expect heavy trucks will need to visit the site regularly, but it is expected that maintenance at regular intervals (i.e., year 5, year 10, etc.), would require a total of 20 heavy trucks over the course of a month.

Equipment deliveries over the life of construction are expected to include approximately twenty-five (25) 40 ft. container trucks/day and five (5) flatbed trucks/day during the peak 5 months of construction. There will be a total of three to five (3-5) oversized loads delivered over the entire construction period (not daily). Heavy construction equipment (e.g. bulldozers, cranes, pile drivers, folk lifts, etc.) will be used during the construction phase of the Project, but equipment would remain at the site (will not travel on the roads to the site daily).

Note 6.

Water consumption for the Project will be minimal. During construction, the Project will require water for dust control and soil compaction. It is estimated that approximately 50 acre-feet per month would be used during construction over an estimated 18-month period.

Water use during the 40-year life of the Project is limited to panel cleaning. The Project will use less than 230,000 gallons of water per year. That's equivalent to about 4 residential homes assuming 146 gallons/day per average AZ resident according to ADWR conservation information (<https://new.azwater.gov/conservation/public-resources>).

It is anticipated that a new non-potable well would be installed within the Project site to provide the water for construction and for cleaning of the solar panels after construction. Existing well sites as mapped by ADWR are provided on the Site Plan. If required, a new well site will be sited prior to development service review of a final Site Plan.

Note 7.**MODIFICATIONS/WAIVERS FOR DESIGN STANDARDS:****REQUEST #1: SETBACKS**

Requirement: *Setbacks from all property boundaries and road travel ways for Solar Energy Power Plants shall be, at minimum, twice the minimum setback requirement for the respective Zoning District [RU-4 = 20-feet (40 ft total)] or shall equal the height of the tallest structure, whichever is greater.*

Response: Request setback distance to be measured from the outer edge of the solar energy system array, excluding security fencing, screening, or berm for design flexibility.

REQUEST #2: POWER & COMMUNICATION LINES

Requirement: *All on-site utility and transmission lines, including power and communication lines running between banks of solar panels and to nearby electric substations or interconnections with buildings shall be buried underground to the maximum extent feasible. Power and communication lines between the project and the point of interconnection with the transmission system may be overhead.*

Response: There is no real benefit to having cables buried within the Project site. The Project site proposes to include above-ground, low- to medium-voltage lines that will not be visible beyond the Project site. Furthermore, keeping these lines above ground enables operations and maintenance staff to safely conduct inspections and access the lines during the repair and/or replacement of Project equipment in a timely and cost-effective manner.

REQUEST #3: DECOMMISSIONING AND SITE RESTORATION

Requirement: *All applications for a Solar Energy Power Plant must include a Decommissioning Plan, acceptable to the County, to ensure that all system components are properly decommissioned upon the end of their operational life, cessation of use, or determination of abandonment. The Decommissioning Plan shall state how the facility will be decommissioned and will include a Professional Engineer's estimated cost of decommissioning, the financial resources to be used to accomplish decommissioning, and the financial assurances necessary to fund the decommissioning.*

Response: The Applicant is requesting this requirement be submitted with the building permit rather than SUP, so that the estimate can be made according to the basis of the final design.

POTENTIAL CONDITIONS FROM PRE-APPLICATION RESPONSE FORM:**REQUEST #4:**

Requirement: *g. Pursuant to 1824.03 of the Zoning Regulations, which mandates wildlife-friendly fencing, the applicant shall reserve a 6–8-inch gap between the ground surface and the bottom of the perimeter fencing.*

Response: In our meetings with the Arizona Game and Fish Department (AGFD) for this Project, we reviewed fence height, bottom fence gap and fence types. It was determined that a 4-to-8-inch gap is acceptable in this location. AGFD accepts a 4-inch gap between the ground surface and bottom of the perimeter fencing for

this Project, based on the smallest size that would accommodate kit fox permeability. The applicant proposes 4 inches for security reasons.

REQUEST #5:

Requirement: h. *The commission grants a waiver from setback required to internal parcel boundaries. Instead, minimum setbacks of 40' shall only be applied to the exterior boundaries of the Project indicated by the concept plan.*

Response: Please see "Setbacks" listed above.

Note 8.

Project lighting at the substation will be installed as recommended by NEC guidelines with at least two-foot candles of strength and shielded to shine down and reduce glare to surrounding areas. Lights around equipment, inverter skids and site entrances (spaced one per approximately 20-30 acres), will be motion detection or switch activated.

Note 9.

Offsite construction related to the Project will include the proposed maintenance of Kimzey Road from Kansas Settlement Road. In addition, the Applicant will construct a generation transmission line to connect the Project substation to the point of interconnection to the AEPSCO system as shown on the Site Plan.

Note 10.

The construction phase of the Project is likely to temporarily cause fugitive dust related to grading, vehicle traffic and other construction activities. Dust and erosion control measures will be detailed in a Stormwater Pollution Prevention Plan. The Construction General Permit would follow ADEQ and EPA requirements. The following BMPs would be incorporated to minimize fugitive dust and wind erosion:

- Minimize grading and vegetation removal.
- In areas where vegetation removal and/or grading is required, schedule the process of vegetation removal to the minimum time required prior to module installation.
- Limit vehicle speed on access road and on solar facility roads to 15 miles per hour.
- Apply water to disturbed soil areas using water trucks to control dust and maintain proper moisture levels for soil compaction. Minimize over application of water to prevent runoff and ponding.
- Suspend grading during periods of high wind.
- Cover all trucks hauling soil or other loose material in and out of the proposed Project site.
- Gravel or aggregate should be used where access roads meet paved roads to limit off-site disturbance and prevent mud and dirt track-out.

A Notice of Intent to Clear Land will be filed with the Arizona Department of Agriculture, prior to clearing/trimming vegetation.



Cochise County

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APPLICATION FOR A SPECIAL USE

Applicant's Name: THSI bn, LLC

Name of All Property Owner(s): Majority owned by the Applicant; see Note 1 -Form Attach

Applicant Mailing Address:

13123 E. Emerald Coast Pkwy Inlet Beach, FL 32461

| Street # | Town | State | Zip code |
|----------|------|-------|----------|
| | | | |

Subject Property Address (if different than mailing address):

Not applicable; no situs address assigned

| Street # | Town | State | Zip code |
|----------|------|-------|----------|
| | | | |

Email Address: erik@brightnightpower.com (Applicant), dsandoval@westlandresources.com (Agent)

Phone Number: 1-602-549-4243 (Applicant), 1-520-206-9585 (Agent)

Tax Parcel Number: 205-01-006,-01-002A,-27-002B,-21-002D,-40-002A,-28-003B, 28-001, 4

Current Zoning Designation: RU-4

Comprehensive Plan Land Use Category/Growth Area: D-Rural Areas

Comprehensive Plan Land Use Designation: Rural

Area Plan Designation (if applicable): Not applicable

Size of Property (in acreage or square feet): Approximately 2,450 acres

How many acres will be cleared and developed? Approximately 2,000 acres, depending on the final civil plans

Describe your relationship to this application. (Select one)



I am the property owner



I am an authorized agent for the property owner

Bisbee Office

1415 Melody Lane, Building F
Bisbee, Arizona 85603
520-432-9300
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anticipated waivers of site development standards such as setbacks, screening, landscaping or parking spaces must be requested, justified, and approved by the Commission prior to the issuance of a building permit.

In order to adequately review the proposed special use(s) on a piece of property, a Concept Plan must include at a minimum the following information:

- Parcel boundaries and adjacent roads;
- The general location, size and height of all structures and uses (existing and proposed), including minimum setbacks from parcel boundaries, washes and roads;
- The general location and minimum number of parking spaces to be provided, including proposed surface and width of driveways;
- Proposed screening and landscaping;
- Any significant topographical features (washes, hills, rock outcroppings, wetlands) and cultural features of the property and adjacent parcels;
- If applicable, project phasing (approximate schedule of uses and construction) and any other information deemed necessary to effectively review the Special Use.

Please state the reason for this request and why it should be supported.

The Applicant is requesting a Cochise County Special Use Permit (SUP) for approval to construct and operate a solar energy power plant with battery energy storage system. Regional power plants are being retired and electric utility companies/cooperatives continue to update their energy portfolios to include renewable energy sources such as solar generation facilities. The Three Sisters Solar Project (the Project) will provide up to 300 megawatts (MW) of clean renewable power, equivalent to the annual electricity use of 70,000 homes. The Project offers enhanced grid resiliency and support for future load growth needs and strategically positions Arizona to attract more industry to the state via clean power availability. Also see Note 2 -Form Attachment.



Identify the utility company/service provider for each of the following services and state if additional provisions or future connections are required in the space below.

| Service Provider | Service Provider | Additional Provisions Required |
|-------------------------|---|---|
| Water/Well | Onsite well to be used for construction and periodic solar panel (module) cleaning. | The Applicant will file NOI to drill a well if new well is needed (ADWR). |
| Sewer/Septic | Not applicable | |
| Electricity | Sulphur Springs Valley Electric Cooperative – for station service | |
| Natural Gas | Not applicable | |
| Telephone | Cellular (Not applicable) | |
| Fire Protection | Outside Fire District Boundaries | See Note 3 -Form Attachment |
| Waste Disposal | Trash to be removed from site by contractors as it is generated | See Note 3 -Form Attachment |

Is this request consistent with all deed restrictions or private covenants in effect for this property? If applicable, please include a copy of these restrictions/covenants with this application.

- Yes
 No
 Not applicable (no deed restrictions or covenants)

Describe all **existing** structures/uses present on the subject parcel. Note: the size and location of existing structures must be shown on the accompanying site plan.

There are two structures associated with residences near the terminus of Anderson Road on parcel 205-28-001 (see Site Plan). These structures will be removed or re-purposed for operation and maintenance storage when the Project is built. With the exception of existing water wells, the remainder of the Project site is vacant and currently used for cattle grazing.

Describe all **proposed** structures/uses on the parcel that to be placed on the parcel. Note: the size and location of proposed structures must be shown on the accompanying site plan.

The Project would be comprised of rows of solar modules mounted on racking equipment that tracks the sun throughout the day. The racking equipment sits on top of steel piles that are directly driven into the ground. All the solar modules are connected to photo voltaic inverters using a network of conductors and safety disconnect boxes. These inverters will be used to convert the direct current power generated by the solar modules to alternating current power, while the medium voltage transformers located next to each inverter will then “step up” the low voltage power to medium voltage. The output power from each transformer is collected using conductors which carry the power to the Project substation. The power is then stepped up to transmission voltage, using the main power transformer located at the substation, before connecting to the gen tie power line. A battery energy storage system (BFSS) is planned to be constructed as part of the Project which will require inverters.

Is the proposed special use consistent with stated purpose of the current zoning district? Explain.

The Project site is located in zoning district RU-4 and designated as Category D. The proposed solar and battery energy storage facilities are consistent with the stated purpose of these districts. Category D areas include the outlying rural areas between cities and unincorporated communities and characterized by a low rate of growth; unimproved roads; low density, large lot rural residential development; agricultural production; and large tracts of undeveloped private and public lands. Non-residential development is geared toward providing local services, tourism or intensive uses that are not appropriate in more densely populated parts of the county, such as power plants and feedlots. Pursuant to the Cochise County Zoning Ordinance, solar energy power plants may be permitted in RU zoning districts by Special Use Authorization only.

Describe all intermediate and final products/services that will be produced/offered/sold, if applicable.

The Project will generate electricity to be sold under long-term Power Purchase Agreements (PPAs) with an investor-owned utility company/cooperative. An alternative would be for the Project to sell energy to a manufacturer located directly on site.

What materials will be used to construct the new building(s)? (Note, for an existing building(s), please also list the construction type(s), i.e., factory-built building, wood, block, metal).

There will be multiple structures erected (fabricated metal buildings or shipping containers) which will be used during O&M for storage of spare parts and equipment.

Will the project be constructed/completed within one year or phased?



One year



Phased

If this is a phased project, describe the phases here and physically depict them on the site plan.

Construction of the 300-MW Project will be completed at once over the course of an 18-month period. Construction will ultimately be driven by the needs of the customer / offtaker, but is generally expected to commence in the second half of 2024.

What are the days and hours of operation (if applicable)?

Days of the week: everyday

12 AM to 12 PM

Number of employees (if applicable):

Initially 250 Future: ≤5 (O&M)

Total average daily traffic generated (non-residential uses):

How many vehicles will be entering and leaving the site (per day)? see Note 4 -Form Attachment

Total trucks (e.g., by type, number of wheels, or weight)? see Note 5 -Form Attachment

Estimate which direction(s) and on which road(s) the traffic will travel from the site.

Ingress/egress both from I-10, to Kansas Settlement Road to Kimzey Road

If more than one direction, estimate the percentage that travel in each direction.

Not applicable

At what time of day, day of week and season (if applicable) is traffic the heaviest?

During daylight hours mid-way through construction of the Project.

Water Use:

Estimate the total gallons of water needed for the proposed use: per day 0 per year 230,000

Please indicate your water source See Note 6 -Form Attachment

If your property is served by a private well, show the existing or proposed location on the site plan.

List any strategies you will employ, on site, to minimize water use, recycle water, and/or enhance onsite natural recharge.

Water consumption is not needed to generate electricity from solar panels. Module washing will be periodically necessary to maintain solar panel productivity. The Site Plan was designed to avoid natural drainages and flood areas to allow for continued onsite conveyance and natural recharge, as applicable.

Will your property be served by a septic system? Yes No

If yes, show the septic tank, leach field and 100% expansion area on the site plan, and indicate whether the system is existing or proposed.

Does your parcel have permanent legal access*? If no, what steps are you taking to obtain such access? (*Our Zoning Regulations state that no building permit for a nonresidential use shall be issued unless a site has permanent and direct access to a publicly maintained street or street where a private maintenance agreement is in place. Said access shall be not less than twenty (20) feet wide throughout its entire length and shall adjoin the site for a minimum distance of twenty (20) feet. If access is from a private road or easement provide documentation of your right to use this road or easement and a private maintenance agreement.)

Yes, permanent and direct access to the Project site is provided from a dedicated public road, Kimzey Road (via Kansas Settlement Road), and then south via a private easement along Section 8 (Document No. 2013-22254) and the east along Section 17 via a private easement (Document No. 8802-03998). The private easements are a minimum of 20 ft wide. Kimzey is a county maintained road; however, Applicant will maintain the easements and Kimzey Road, including dust suppression, grading and compaction, during construction.

Which streets or easements will be used for traffic entering or exiting the property? (Please label on the accompanying plan)

Ingress and egress will both occur from the proposed access gate at the intersection of Kimzey Road and South Anderson Road (see Site Plan and description from previous question).

What impact will this have on the traffic volume of roads serving this subject property?

The impact from the Project to traffic volume will occur primarily during the construction period of the Project. It is estimated that there will be 15-30 delivery trucks/day on average and construction vehicles could be up to 160/day during the peak of construction (such peak to last about 2-3 months). Once the Project is operational, there will be very minimal traffic as the Project will be remotely monitored through a supervisory control and data acquisition (SCADA) system/manned daily by 1-3 trucks per day (similar to a residence). For more information about traffic use for operation of the Project, see Attachment G (Traffic Statement Report) in Narrative/Supporting Documents Report.

How many driveway cuts are proposed along streets or easements to allow site access? State whether this is an increase/decrease and whether any existing cuts will need relocation.

The Project will use an existing public road; public access will end at the entrance to the Project site at an access gate. No driveway cuts are proposed.

Does the subject parcel have site access onto a major road?

Yes No

Are you requesting any modifications or waivers from site development standards? If yes, explain.
Yes, please see Note 7 on Attach 1.

Is the subject property within Sierra Vista Sub-Watershed Overlay Zone? If so, please indicate this, and that you understand that it may be subject to additional plan reviews and inspections whenever a building permit is required.

Yes, and I understand the permitting requirements No, it's outside the boundaries

Please describe your citizen review process (if applicable). Specifically, state whether you received any responses to your mailed notice or public meeting. Explain how your special use application has incorporated the feedback you received.

See Attachment B (Citizen Review Report) in Narrative/Supporting Documents Report.

Describe any outdoor activity associated with your special use proposal, if applicable.

The Project will be constructed and operated outdoors.

Will outdoor storage of equipment, materials or products be needed? If yes, show the location on the site plan. Describe any measures to be taken to screen this storage from neighboring properties.

During construction, a temporary laydown yard will be needed to store equipment and materials. Given the remote location of the Project, and the fact that the laydown yard is a temporary use during construction, the applicant is not proposing to screen the Project equipment and materials stored at the laydown yard. The Project will also include a small on-site operations and maintenance facility that will be used to store spare parts and maintenance equipment. Please refer to the proposed Site Plan for the location of the temporary laydown yard and operations and maintenance facility.

Will any noise or vibrations be produced that can be heard or felt on neighboring properties on a regular basis? if yes; describe the level and duration of this noise. What measures are you proposing to prevent this noise from being heard on neighboring properties?

Once the Project is operational, the Project will not produce any noise or vibrations that can be heard or felt on neighboring properties. The majority of the noise will be produced during the construction period, though noise impacts to neighboring properties are limited due to the rural location of the Project.

Will odors be created? If yes, what measures will be taken to prevent these odors from escaping onto neighboring properties?

The Project will not produce any odors.

Will any on-site activities attract pests, such as flies or mice? If yes, what measures will be taken to prevent a nuisance on neighboring properties?

There will be no on-site activities which attract pests.

Will additional dust be created on a regular basis? If yes, what measures will be taken to prevent this dust from escaping onto neighboring properties or roadways?

Dust will be created by construction traffic and will be minimized along public roadways using a suppressant (e.g. gravel/aggregate base and/or dust palliative with the use of water from an on-site well or water trucks) as needed prior to and during construction. Post-construction, areas of temporary disturbance will be seeded to restore vegetation. While trees and bushes will need to be removed within the developed areas of the Project site, grasses and short vegetation will remain or be trimmed to the extent practical. Areas of temporary disturbance will be re-stabilized with the application of native seed, re-seeding shall coincide with annual winter and summer rains to avoid the need for irrigation and further water consumption.

Is outdoor lighting proposed? If yes, show the location(s) on the site plan. Indicate how neighboring properties and roadways will be shielded from light spillover. Please submit manufacturer's specifications for all light fixtures.

Yes No See Note 8 -Form Attachment

Will you be performing any off-site construction (e.g., access aprons, driveways, and culverts)? If yes, show details on the site plan. Note: The County may require off-site improvements reasonably related to the impacts of the use such as road or drainage improvements.

Yes No See Note 9 -Form Attachment

Show on-site drainage flow on the site plan. Will drainage patterns on site be changed? If so, please indicate on the site plan and describe below.

Drainage flow arrows are shown on the site plan. Drainage patterns will not change dramatically as minimal grading is needed. A preliminary hydrology report is provided as Attachment D in the Narrative/Supporting Documents Report.

If more than one acre is to be cleared, describe the proposed dust and erosion control measures to be used and show on site plan, if appropriate.

A water truck, or possibly environmentally safe polymers will be used for dust control during construction. Stormwater Pollution Prevention Plan (SWPPP) best management practices (e.g. silt fencing/straw wattles/rock-lined entrance) will be employed to reduce water erosion and soil transmission until permanent soil stabilization is achieved. Disturbed soils will be permanently stabilized through re-seeding (temporarily disturbance areas) and compaction and/or paving (permanent disturbance area such as roads and parking spaces).

Do you anticipate the use of any hazardous or dangerous materials? If yes, please complete a "Hazardous or Polluting Materials Attachment" and attach it to this application.

Yes No

I hereby certify that I am the owner or duly authorized owner's agent and all information in this questionnaire, in the Joint Permit Application and on the site plan is accurate. I understand that if any information is false, it may be grounds for revocation of the Commercial Use/ Building/ Special Use Permit. In addition, I hereby request all inspections necessary to process this application, and if the permit is issued, I request all inspections necessary to monitor progress, and document completion, at all stages of the work related to this permit. Failure to obtain permits may result in fines or other penalties.

Diana Mandova (Agent) for THSI, bn, LLC 6/27/23
Applicant Signature Date

APPLICATION FOR A SPECIAL USE ATTACHMENT 1. APPLICATION FORM EXTENDED RESPONSES

Note 1.

The majority of the Project site is owned by the Applicant (THIS bn, LLC). The Applicant has executed a purchase agreement for the remainder of the Project site to allow the Applicant all rights to build on those parcels (i.e. LIBERTY LAND & CATTLE, LLC [205-28-001 205-28-003B] and WAYNE D. ANDERSON [205-40-001]).

Note 2.

Very little annual water consumption is required during the 40-year life of the solar Project. The Project requires less than 230,000 gallons per year; that's equivalent to about 4 residential homes assuming 146 gallons/day per average AZ resident according to the Arizona Department of Water Resources (ADWR).

Based on a study by Elliott D. Pollack & Company (2022),¹ the Project is expected to provide an economic boost to the area:

- More than 250 direct jobs to be created during construction. Valuable experience in high demand, high paying industry.
- Over \$259M in regional economic uplift through this infrastructure investment over the life of the Project.
- \$34M in local, state, and property tax revenue.
- The Project will generate up to 5 long-term jobs for operations and maintenance activities during the lifetime of the Project.

The Project site was carefully selected and the Project layout has been thoughtfully designed. The rural location reduces visual impacts that could potentially affect neighbors and the public. The Project is situated in proximity to an existing Arizona Electric Power Cooperative (AEPCO) transmission line (immediately north) which will be the point of interconnection for the Project's associated 1.5 mile long 230 kV gen-tie power line. The Arizona Corporation Commission (ACC) evaluated the Project's proposed gen-tie line relative to numerous environmental factors specified in Section 40-360.06, Arizona Revised Statutes. The ACC approved a Certificate of Environmental Compatibility (CEC) issued by the Arizona Power Plant and Transmission Line Siting Committee for the Project interconnection in April 2023. The ACC process and period of time it takes to be scheduled for the ACC hearings can often be lengthy; therefore, the Applicant elected to secure that approval ahead of the SUP application for this Project.

In Cochise County, Solar Energy Power Plants and their related facilities are allowed in RU zones with a SUP, subject to Section 1824 site development standards (605.08, 607.51). This SUP request is consistent with the land use designations of the comprehensive plan and transportation plans and the Project site is located outside master development plans and area plan areas.

¹ Elliott D. Pollack & Company. 2022. Three Sisters Solar Project Economic & Fiscal Impact Report Cochise County, Arizona. Prepared for THSI bn, LLC. Scottsdale, Arizona. October 2022.

Note 3.

The Applicant has contacted the County Emergency Management Director and will prepare an Emergency Response Plan including emergency contacts, hazard analysis and instructions for various emergency situations. The Applicant is also coordinating with the fire departments (Sunsites, Pearce, and Willcox) as they would be among the likely first responders.

The Applicant will prepare a construction waste management plan to ensure proper waste disposal and convey compliance requirements during bidding/pre-con meetings.

Note 4.

During operations and maintenance of the Project (most of the Project life), the Project will be remotely monitored through a supervisory control and data acquisition (SCADA) system or manned by 1-3 passenger vehicles/pickup trucks that would visit the site as needed (not expected to be daily).

During construction, approximately 200 passenger vehicles are anticipated daily (during the peak 5 months) declining on either side of the construction peak time. All delivery vehicles are accounted for in Note 5.

Note 5.

In a regular year, during operations and maintenance of the Project, we do not expect heavy trucks will need to visit the site regularly, but it is expected that maintenance at regular intervals (i.e., year 5, year 10, etc.), would require a total of 20 heavy trucks over the course of a month.

Equipment deliveries over the life of construction are expected to include approximately twenty-five (25) 40 ft. container trucks/day and five (5) flatbed trucks/day during the peak 5 months of construction. There will be a total of three to five (3-5) oversized loads delivered over the entire construction period (not daily). Heavy construction equipment (e.g. bulldozers, cranes, pile drivers, folk lifts, etc.) will be used during the construction phase of the Project, but equipment would remain at the site (will not travel on the roads to the site daily).

Note 6.

Water consumption for the Project will be minimal. During construction, the Project will require water for dust control and soil compaction. It is estimated that approximately 50 acre-feet per month would be used during construction over an estimated 18-month period.

Water use during the 40-year life of the Project is limited to panel cleaning. The Project will use less than 230,000 gallons of water per year. That's equivalent to about 4 residential homes assuming 146 gallons/day per average AZ resident according to ADWR conservation information (<https://new.azwater.gov/conservation/public-resources>).

It is anticipated that a new non-potable well would be installed within the Project site to provide the water for construction and for cleaning of the solar panels after construction. Existing well sites as mapped by ADWR are provided on the Site Plan. If required, a new well site will be sited prior to development service review of a final Site Plan.

Note 7.**MODIFICATIONS/WAIVERS FOR DESIGN STANDARDS:****REQUEST #1: SETBACKS**

Requirement: *Setbacks from all property boundaries and road travel ways for Solar Energy Power Plants shall be, at minimum, twice the minimum setback requirement for the respective Zoning District [RU-4 = 20-feet (40 ft total)] or shall equal the height of the tallest structure, whichever is greater.*

Response: Request setback distance to be measured from the outer edge of the solar energy system array, excluding security fencing, screening, or berm for design flexibility.

REQUEST #2: POWER & COMMUNICATION LINES

Requirement: *All on-site utility and transmission lines, including power and communication lines running between banks of solar panels and to nearby electric substations or interconnections with buildings shall be buried underground to the maximum extent feasible. Power and communication lines between the project and the point of interconnection with the transmission system may be overhead.*

Response: There is no real benefit to having cables buried within the Project site. The Project site proposes to include above-ground, low- to medium-voltage lines that will not be visible beyond the Project site. Furthermore, keeping these lines above ground enables operations and maintenance staff to safely conduct inspections and access the lines during the repair and/or replacement of Project equipment in a timely and cost-effective manner.

REQUEST #3: DECOMMISSIONING AND SITE RESTORATION

Requirement: *All applications for a Solar Energy Power Plant must include a Decommissioning Plan, acceptable to the County, to ensure that all system components are properly decommissioned upon the end of their operational life, cessation of use, or determination of abandonment. The Decommissioning Plan shall state how the facility will be decommissioned and will include a Professional Engineer's estimated cost of decommissioning, the financial resources to be used to accomplish decommissioning, and the financial assurances necessary to fund the decommissioning.*

Response: The Applicant is requesting this requirement be submitted with the building permit rather than SUP, so that the estimate can be made according to the basis of the final design.

POTENTIAL CONDITIONS FROM PRE-APPLICATION RESPONSE FORM:**REQUEST #4:**

Requirement: *g. Pursuant to 1824.03 of the Zoning Regulations, which mandates wildlife-friendly fencing, the applicant shall reserve a 6–8-inch gap between the ground surface and the bottom of the perimeter fencing.*

Response: In our meetings with the Arizona Game and Fish Department (AGFD) for this Project, we reviewed fence height, bottom fence gap and fence types. It was determined that a 4-to-8-inch gap is acceptable in this location. AGFD accepts a 4-inch gap between the ground surface and bottom of the perimeter fencing for

this Project, based on the smallest size that would accommodate kit fox permeability. The applicant proposes 4 inches for security reasons.

REQUEST #5:

Requirement: h. *The commission grants a waiver from setback required to internal parcel boundaries. Instead, minimum setbacks of 40' shall only be applied to the exterior boundaries of the Project indicated by the concept plan.*

Response: Please see "Setbacks" listed above.

Note 8.

Project lighting at the substation will be installed as recommended by NEC guidelines with at least two-foot candles of strength and shielded to shine down and reduce glare to surrounding areas. Lights around equipment, inverter skids and site entrances (spaced one per approximately 20-30 acres), will be motion detection or switch activated.

Note 9.

Offsite construction related to the Project will include the proposed maintenance of Kimzey Road from Kansas Settlement Road. In addition, the Applicant will construct a generation transmission line to connect the Project substation to the point of interconnection to the AEPSCO system as shown on the Site Plan.

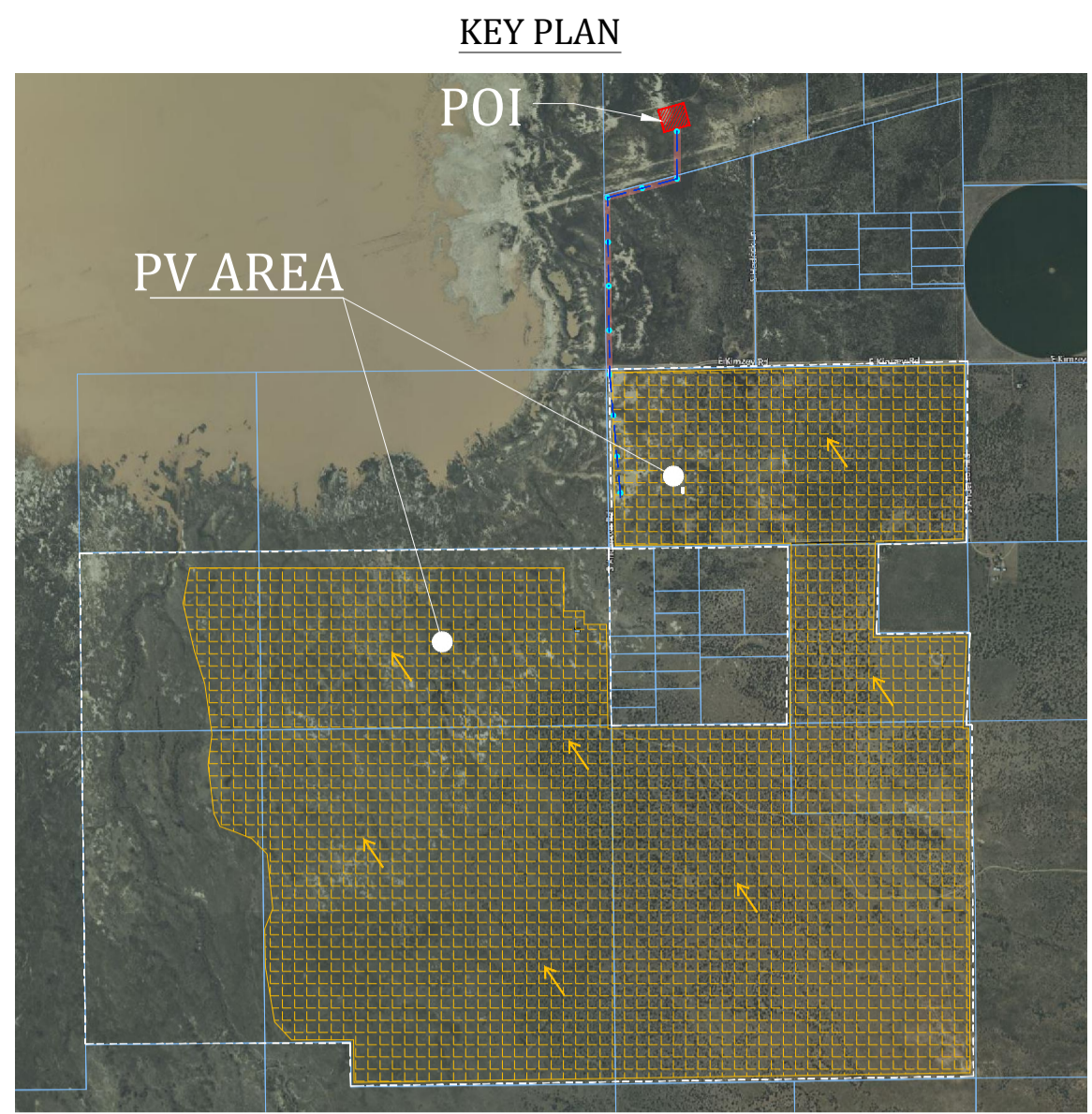
Note 10.

The construction phase of the Project is likely to temporarily cause fugitive dust related to grading, vehicle traffic and other construction activities. Dust and erosion control measures will be detailed in a Stormwater Pollution Prevention Plan. The Construction General Permit would follow ADEQ and EPA requirements. The following BMPs would be incorporated to minimize fugitive dust and wind erosion:

- Minimize grading and vegetation removal.
- In areas where vegetation removal and/or grading is required, schedule the process of vegetation removal to the minimum time required prior to module installation.
- Limit vehicle speed on access road and on solar facility roads to 15 miles per hour.
- Apply water to disturbed soil areas using water trucks to control dust and maintain proper moisture levels for soil compaction. Minimize over application of water to prevent runoff and ponding.
- Suspend grading during periods of high wind.
- Cover all trucks hauling soil or other loose material in and out of the proposed Project site.
- Gravel or aggregate should be used where access roads meet paved roads to limit off-site disturbance and prevent mud and dirt track-out.

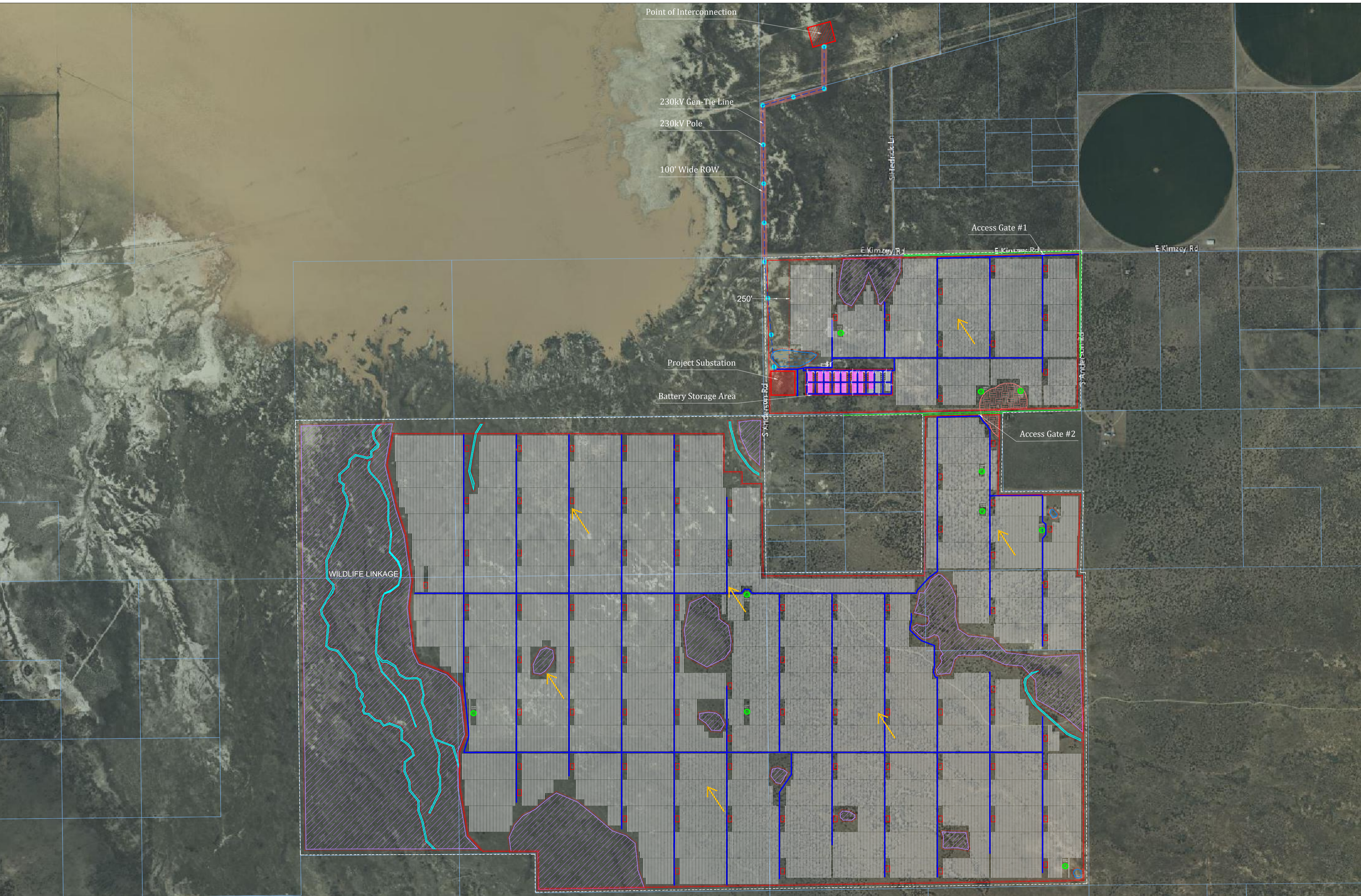
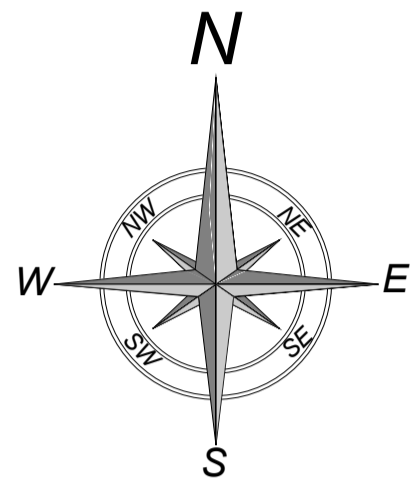
A Notice of Intent to Clear Land will be filed with the Arizona Department of Agriculture, prior to clearing/trimming vegetation.

NOT FOR CONSTRUCTION



| LEGENDS:- | |
|-----------|------------------------|
| SYMBOL | DESCRIPTION |
| --- | SITE BOUNDARY |
| --- | SITE FENCE |
| --- | SETBACK LINE |
| --- | NATURAL DRAIN |
| --- | POND (CATTLE TANK) |
| --- | RESIDENCES |
| --- | FLOOD AREA |
| --- | TRACKER |
| --- | EXISTING WELL LOCATION |
| --- | COUNTY ROAD |
| --- | INVERTER SKID |

| LEGENDS:- | |
|-----------|----------------------------|
| SYMBOL | DESCRIPTION |
| --- | PLANT INTERNAL ROADS (15') |
| --- | 230kV POLE |
| --- | 230kV GEN-TIE LINE |
| --- | 100' WIDE ROW |
| --- | PARCEL AREA |
| --- | ACCESS GATE |
| --- | FLOW LINE |



| Project Details | |
|-----------------------------|----------------|
| Site latitude | 32° 2'45.41"N |
| Site longitude | 109°50'22.89"W |
| Solar PV DC capacity | 360.003 MWp |
| Solar PV AC capacity at POI | 300MW |
| DC AC ratio at POI | 1.200 |
| Evacuation voltage | 230kV |
| Module wattage | 525Wp |
| Module type | Bifacial |
| Module quantity | 685720 |
| Module per string | 28 |
| Total strings | 24490 |
| Inverter rating | 4MWac |
| Inverter type | Central |
| Inverter quantity | 91 |
| Racking type | ATI Tracker |
| Pitch | 24.15 Feet |
| Ground coverage ratio | 30% |
| Tracker quantity_4 String | 5512 |
| Tracker quantity_3 String | 688 |
| Tracker quantity_2 String | 189 |
| Total tracker quantity | 6389 |
| BESS Capacity | 300MW |
| BESS MWh | 1200MWh |
| BESS Inverter Rating | 4.2MW |
| BESS Transformer Rating | 4.2MVA |
| BESS Inverter Quantity | 78 |
| Available land area | 2442 acres |
| Land area used for PV | 1982 acres |

Note:-
 * All Dimensions Are in Feet.
 * Coordinates System : UTM Zone 12N
 * Perennial ground cover to be maintained to the extent practical.
 * O&M Structure to include office spaces, and spare part sheds.

| DATE | REV. | REVISION HISTORY | DRN. BY | CKD. BY | APPD. BY |
|------------|------|---------------------------|---------|---------|----------|
| 2023-06-22 | 04 | LAND BOUNDARY REVISED | YS | PS | KP |
| 2023-03-23 | 03 | TRACKER DETAIL ADDED | MA | PS | KP |
| 2023-03-14 | 02 | POI & GEN TIE ROW REVISED | MA | PS | KP |
| 2022-10-10 | 01 | LAND BOUNDARY REVISED | YS | PS | KP |
| 2022-03-31 | 00 | FIRST ISSUE | YS | PS | KP |

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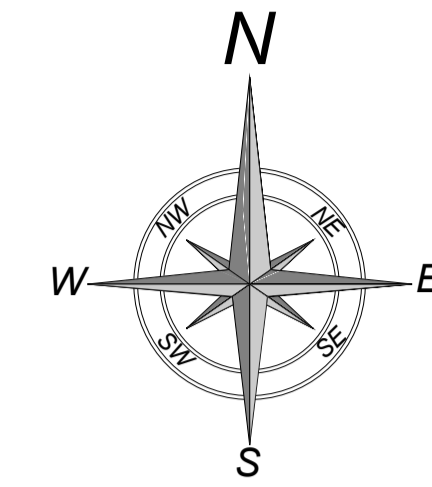
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TITLE:- PLANT LAYOUT (PVS)

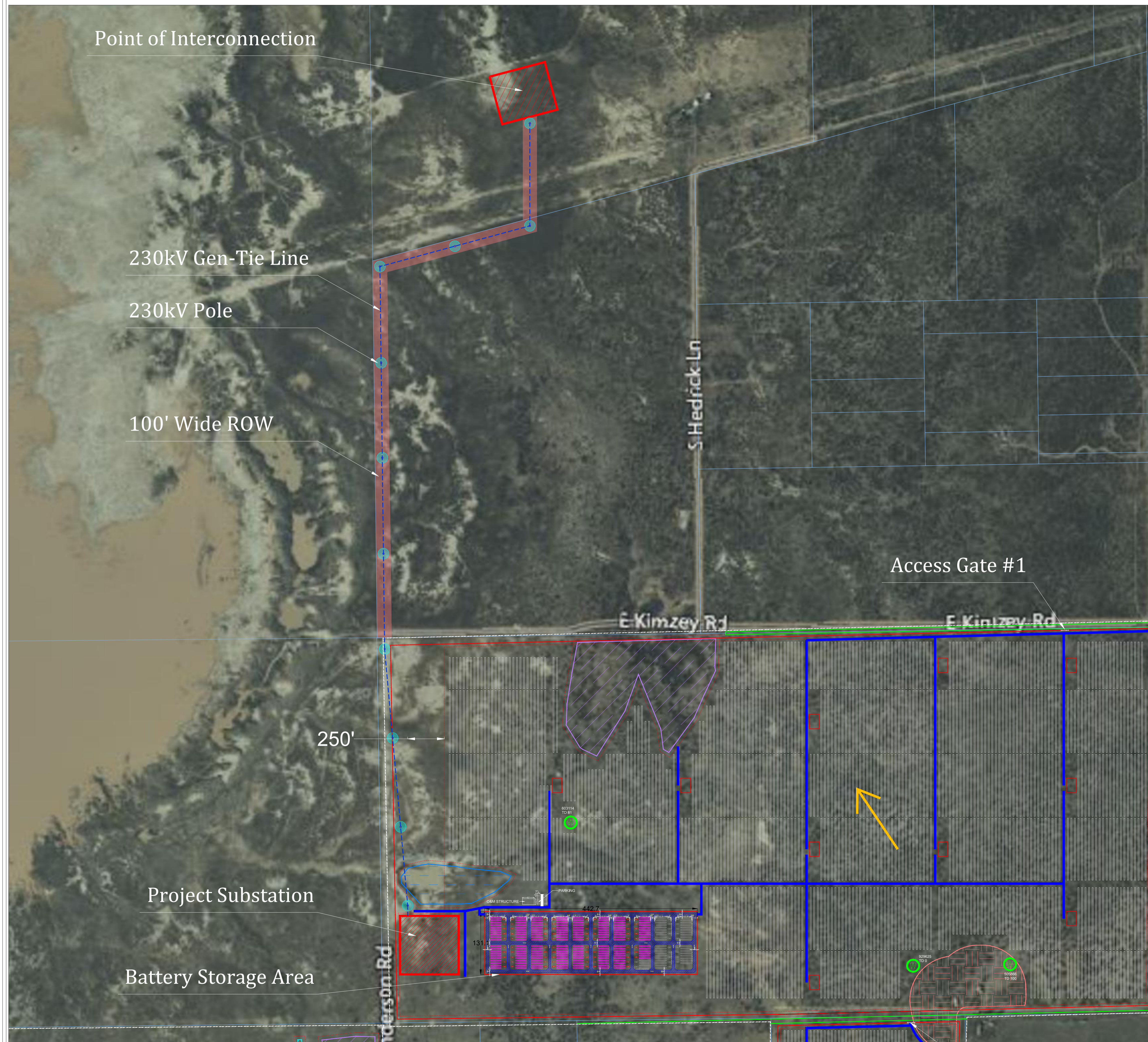
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NOT FOR CONSTRUCTION



| LEGENDS:- | |
|-----------|--------------------|
| SYMBOL | DESCRIPTION |
| --- | SITE BOUNDARY |
| — | SITE FENCE |
| ○ | 230kV POLE |
| --- | 230kV GEN-TIE LINE |
| █ | 100' WIDE ROW |
| — | PARCEL AREA |
| → | FLOW LINE |



Note:-
 * All Dimensions Are in Feet.
 * Coordinates System : UTM Zone 12N
 * Perennial ground cover to be maintained to the extent practical.
 * O&M Structure to include office spaces, and spare part sheds.

| DATE | REV. | REVISION HISTORY | DRN. BY | CKD. BY | APPD. BY |
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| 2022-03-31 | 00 | FIRST ISSUE | YS | PS | KP |

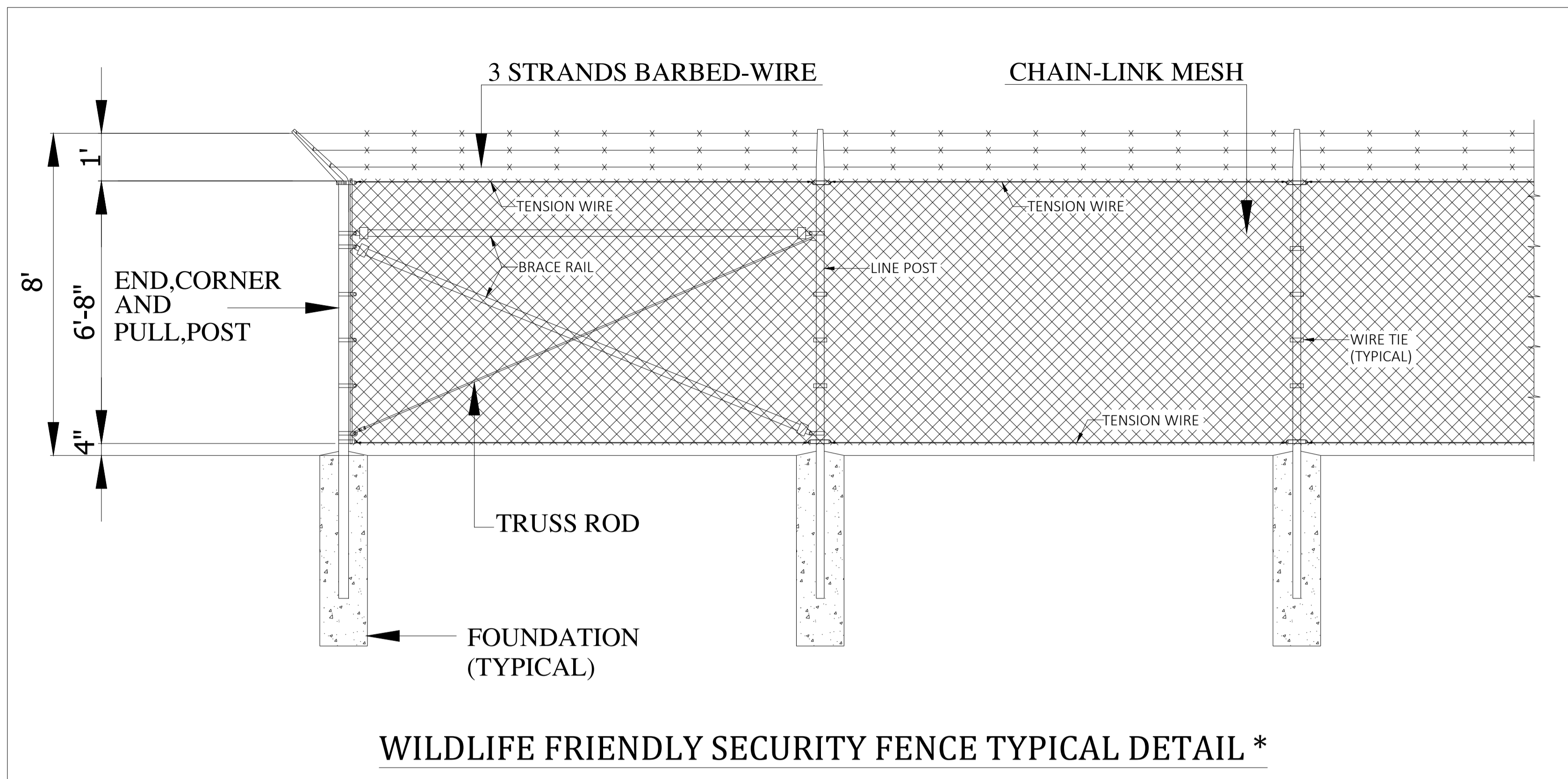
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PROJECT NAME: THREE SISTERS (THSI)

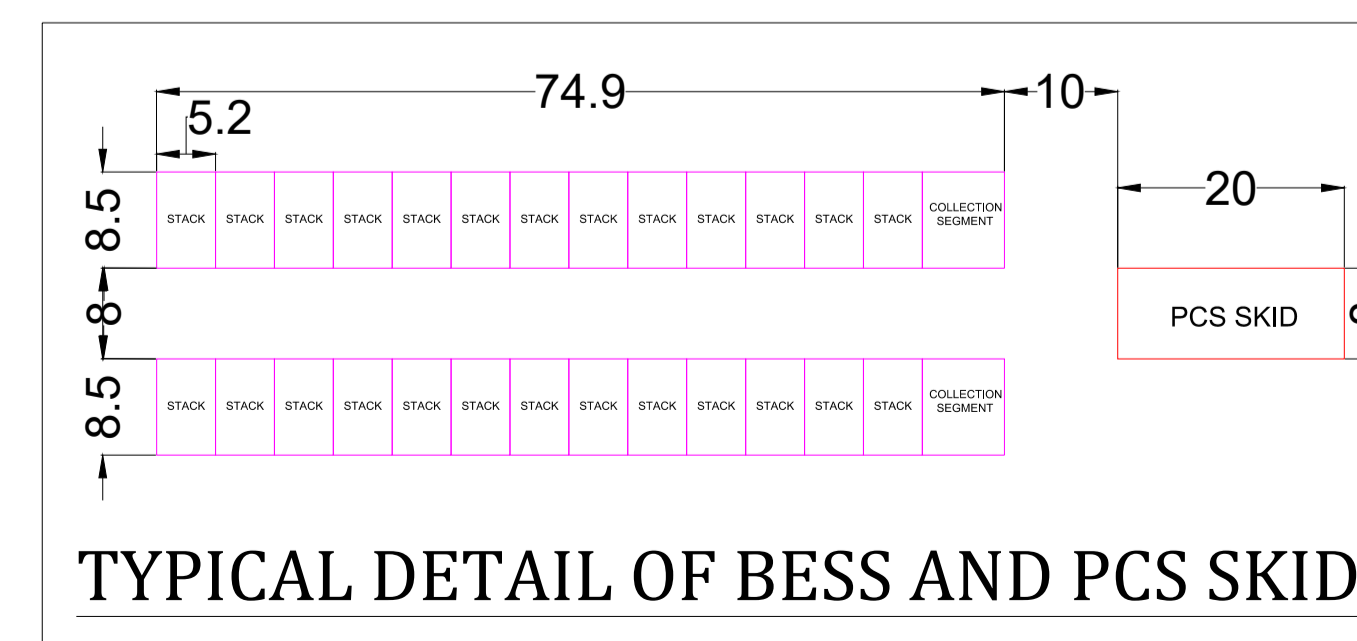
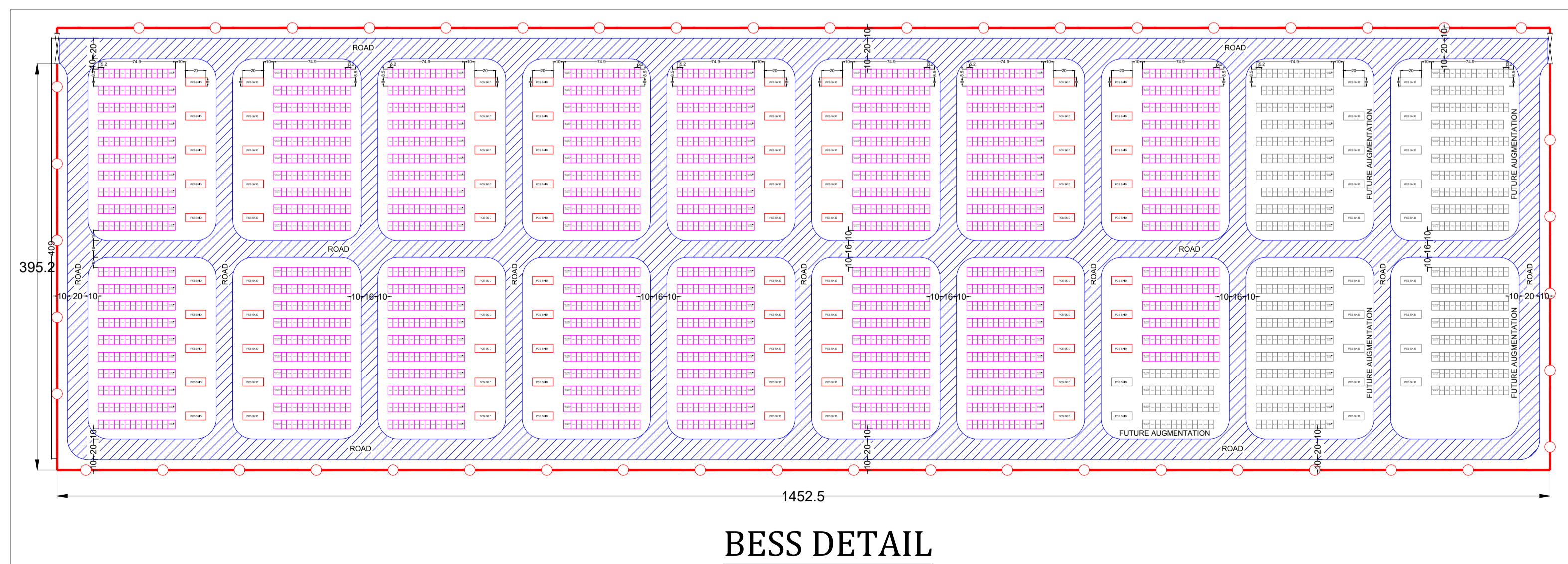
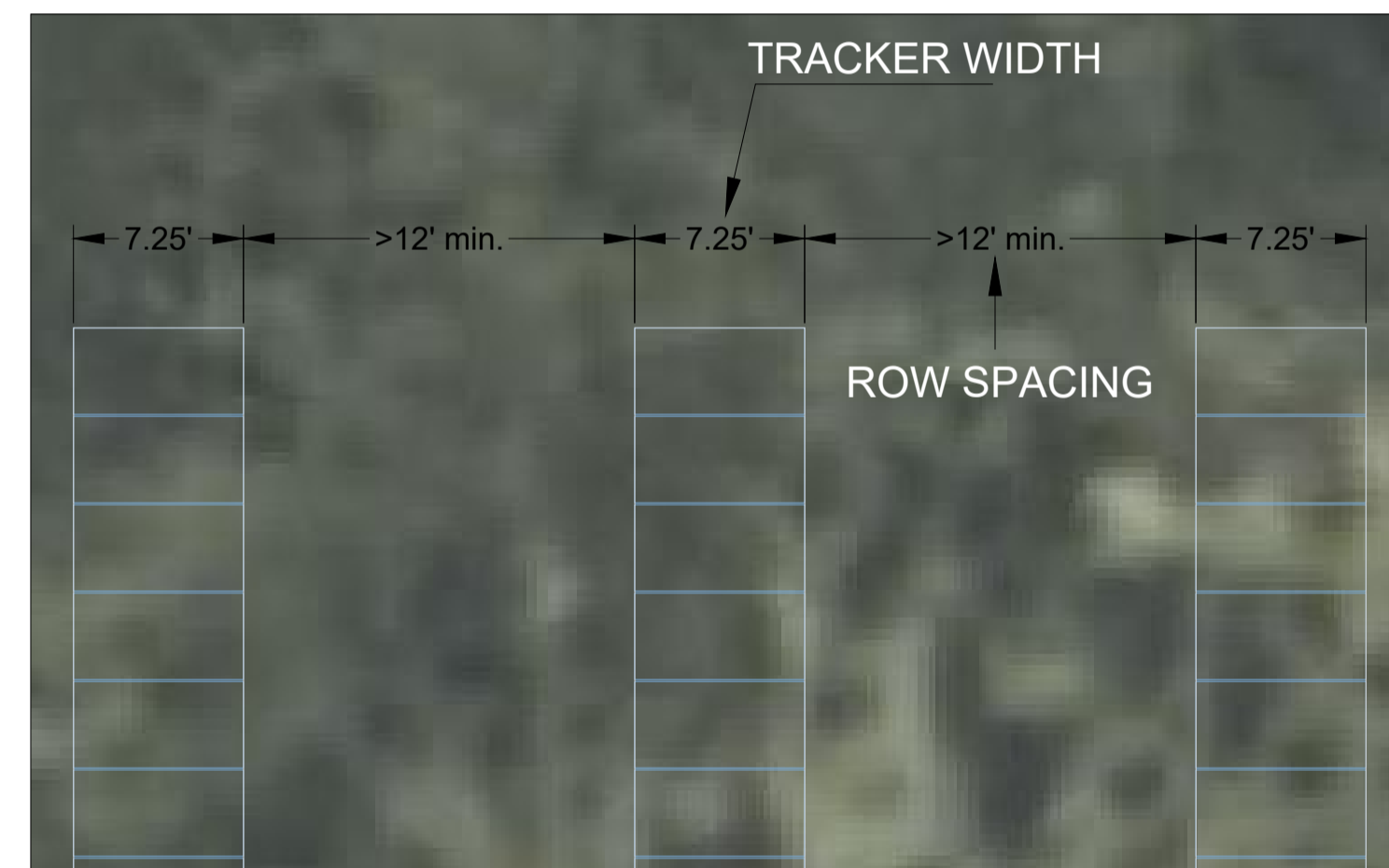
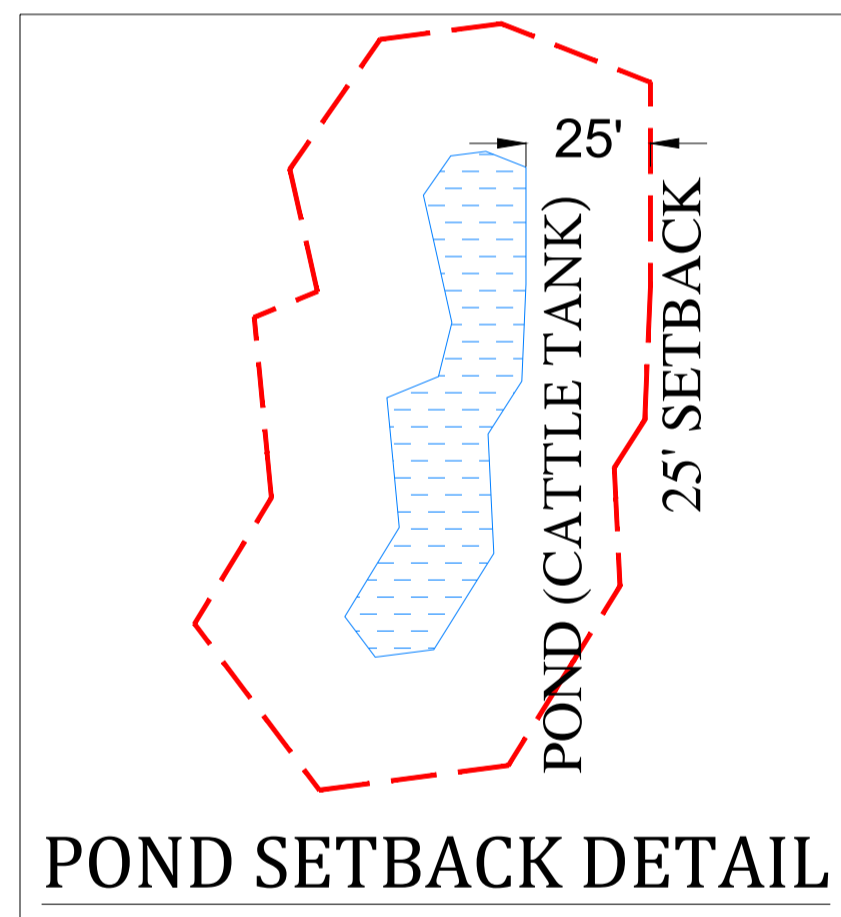
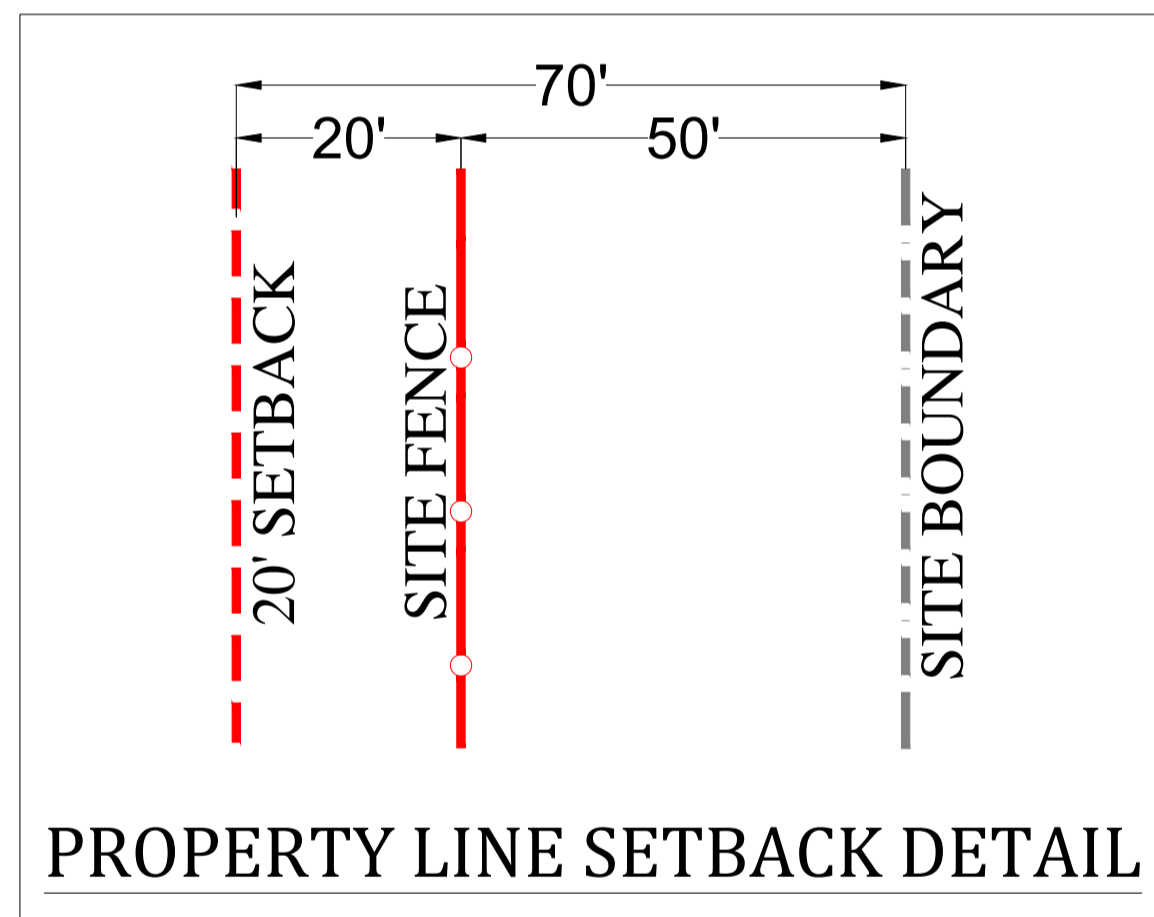
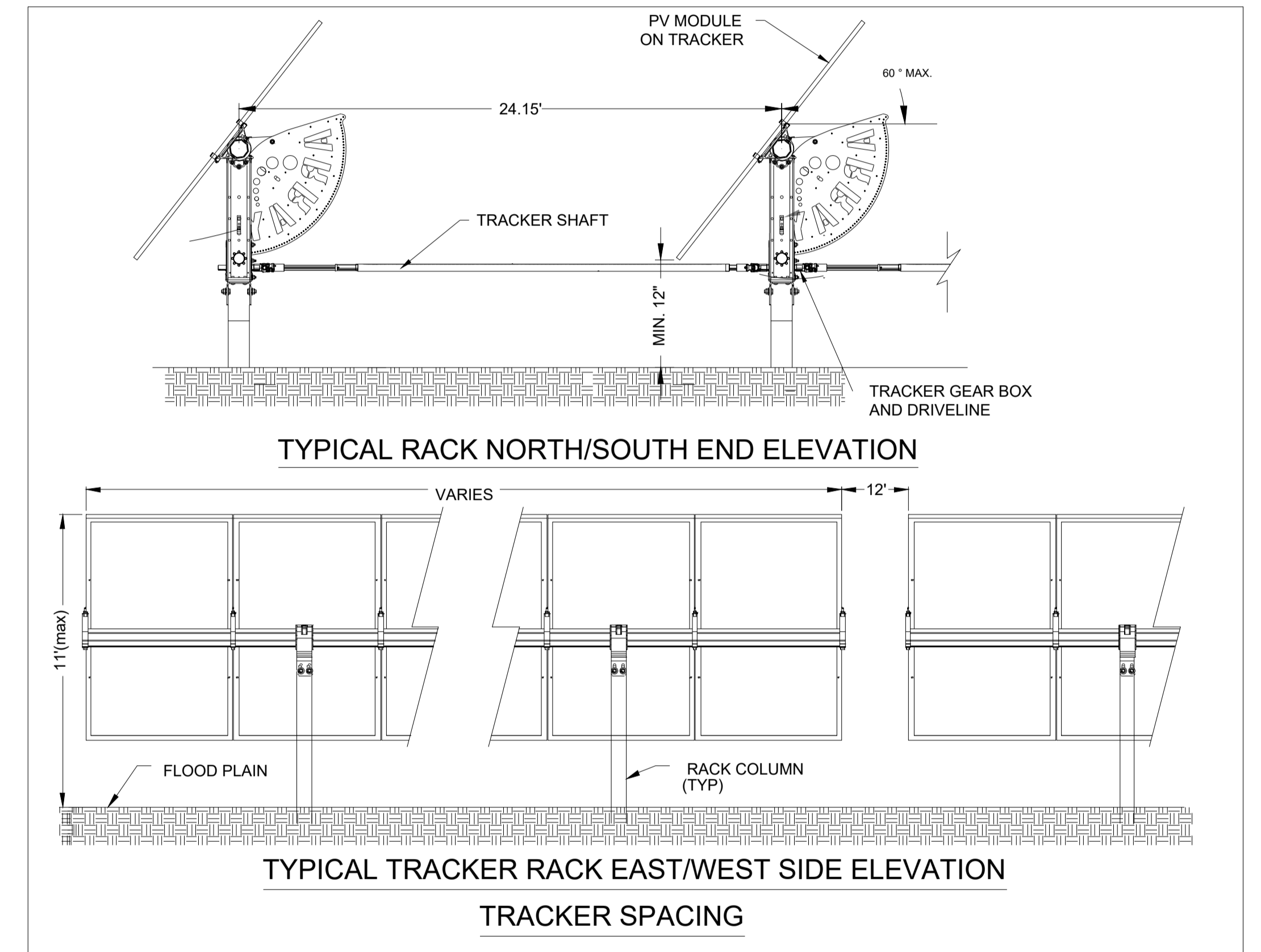
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| SCALE | PURPOSE CODE | DRAWING NO. | REV. | SHEET |
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| Setback details | |
|---------------------------------------|---------------|
| Setback description | Setback value |
| Plant property line and fence setback | 50' |
| Area between fence and array | 20' |
| Pond (cattle tank) setback | 25' |
| County road setback | 50' |
| Flood area setback | 25' |
| Residential setback | 300' |



- Note:-
 * All Dimensions Are in Feet.
 * Coordinates System : UTM Zone 12N
 * Perennial ground cover to be maintained to the extent practical.
 * O&M Structure to include office spaces, and spare part sheds.
 * The fence specification is based on the Game and Fish Dept's recommendations

| DATE | REV. | REVISION HISTORY | DRN. BY | CKD. BY | APPD. BY |
|------------|------|---------------------------|---------|---------|----------|
| 2023-06-22 | 04 | LAND BOUNDARY REVISED | YS | PS | KP |
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| 2022-03-31 | 00 | FIRST ISSUE | YS | PS | KP |

| | | | | | |
|--|--------------------------|-------------|------|--------|--|
| BRIGHTNIGHT | BrightNight Power | | | | |
| PROJECT NAME | THREE SISTERS (THSI) | | | | |
| TITLE:- | PLANT LAYOUT (PVS) | | | | |
| SCALE | PURPOSE CODE | DRAWING NO. | REV. | SHEET | |
| NTS | ISSUE FOR PERMIT | 00 | 04 | 3 OF 3 | |
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**THREE SISTERS SOLAR PROJECT
SPECIAL USE PERMIT APPLICATION
NARRATIVE AND SUPPORTING DOCUMENTS**

Prepared for:

Cochise County Planning and Zoning Division
1415 Melody Lane, Building F – Bisbee, Arizona 85603

Prepared by:

WestLand Engineering & Environmental Services
4001 E. Paradise Falls Drive – Tucson, Arizona 85712

And

BRIGHTNIGHT
Power when you need it

June 29, 2023

Table of Contents

| | | |
|-------|---|----|
| 1. | APPLICANT BACKGROUND INFORMATION | 1 |
| 2. | CITIZEN REVIEW PROCESS | 1 |
| 3. | PROJECT LOCATION | 1 |
| 4. | PROJECT DESCRIPTION | 2 |
| 5. | EXISTING LAND USE..... | 2 |
| 6. | PLANNED LAND USE | 3 |
| 7. | SCENIC VALUES..... | 3 |
| 8. | NOISE EMISSIONS | 4 |
| 9. | COMMUNICATION INTERFERENCE | 4 |
| 10. | WATERS OF THE UNITED STATES (WETLANDS)..... | 5 |
| 11. | CULTURAL RESOURCES..... | 5 |
| 12. | BIOLOGICAL RESOURCES..... | 6 |
| 12.1. | Federal and State Programs | 6 |
| 12.2. | Endangered Species Act Compliance..... | 7 |
| 12.3. | Habitat | 7 |
| 12.4. | Wildlife | 8 |
| 12.5. | Plants | 9 |
| 12.6. | Biological Conclusion | 9 |
| 13. | VOLUNTARY ENVIRONMENTAL COMMITMENTS..... | 9 |
| 13.1. | General..... | 10 |
| 13.2. | Gen-tie Line | 10 |
| 13.3. | Solar Facility and BESS | 11 |
| 14. | REFERENCES..... | 12 |

Figures

(follow text)

- Figure 1. Vicinity Map
- Figure 2. Facility Overview Map

Attachments

- Attachment A. Agent Designation
- Attachment B. Citizen Review Report
- Attachment C. Visual Simulations
- Attachment D. Hydrology Report
- Attachment E. Approved Jurisdictional Determination Request
- Attachment F. Biological Evaluation
- Attachment G. Traffic Statement Report

1. APPLICANT BACKGROUND INFORMATION

The Three Sisters Solar Project (the Project) is proposed by THSI bn, LLC (the Applicant), a wholly owned subsidiary of BNC DevCo, LLC, a joint venture between BrightNight, LLC (BrightNight) and Cordelio Power. BrightNight is the lead developer for the Project. BrightNight is a privately held independent power producer that develops, owns, and manages renewable power facilities; BrightNight's management team has prior experience developing over 10,000 megawatts of generating capacity and grid-scale energy systems. Cordelio Power is a renewable power producer that manages an operating portfolio of more than 1,200 megawatts of renewable power assets in Canada and the United States. Cordelio Power also oversees a growing pipeline of more than 19,000 megawatts of wind, solar, and storage projects spread across the United States.

Applicant Contact Information

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Agent Contact Information

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WestLand Engineering & Environmental Services
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Applicant contact information for the Project is provided above. THSI bn, LLC, has provided an executed agent designation letter for electronic submittal of the Special Use Permit (SUP) application (**Attachment A**).

2. CITIZEN REVIEW PROCESS

The Applicant conducted two major public outreach efforts in connection with the Project: (1) Arizona Corporation Commission outreach associated with the gen-tie line for the Project, and (2) Cochise County SUP citizen outreach associated with the solar energy power plant and battery storage facility. A separate memorandum summarizing these efforts is provided as **Attachment B**.

3. PROJECT LOCATION

The Three Sisters Solar Project is a planned renewable power generation project located on private lands in Cochise County, Arizona. The Project site is situated southeast of the Wilcox Playa entirely within unincorporated Cochise County. It is approximately 11 miles southeast of Interstate 10 (I-10), 14 miles south of the City of Willcox and approximately 2 miles east of U.S. Highway 191 (US 191). The Project includes construction of a photovoltaic (PV) solar facility, battery energy storage system (BESS), and a 1.5-mile generation-tie (gen-tie) line. The solar facility and BESS areas are situated in portions of Sections 12 and 13 in T16S, R24E and portions of Sections 7, 8, 17 and 18 in T16S, R25E.

The Project site is located outside of the Buffalo Solider Electronic Testing Range (Cochise County 2015). A Vicinity Map and Facility Overview Map are provided as **Figures 1 and 2**. A separate (Concept/Preliminary) Site Plan is appended to the application.

4. PROJECT DESCRIPTION

The Project consists of a 300-megawatt PV solar facility plus BESS that will interconnect to the grid via a 1.5-mile gen-tie line and newly constructed switchyard. The gen-tie will run north from the on-site substation to the newly constructed switchyard and interconnect to the existing 230-kV transmission line operated by Arizona Electric Power Cooperative (AEPCCO). The Applicant proposes to construct and operate the Project to deliver electricity generated by the Project to local Cochise County electrical districts and/or other public power agencies and utilities in Arizona and the Southwest. The PV solar facility and BESS will be compliant with industry standards and safety codes like NEC 2017, NFPA, IEEE 1547, IEC 61730, UL 1703, UL 1741 and FPA 855, UL 9540A, UL 9540, UL 1973, UN DOT 38.3 respectively.

5. EXISTING LAND USE

Existing land uses within and adjoining the Project site (within 0.5-miles) is primarily vacant with limited agricultural activities and a few single-family residences. The Project site has historically been used for cattle grazing as part of Liberty Ranch.

The Apache Generating Station is a natural gas and coal-fueled power plant and substation located approximately 2 miles northwest of the Project site. This facility is operated by Arizona Electric Power Cooperative and Arizona G&T Cooperatives (AEPCCO). The Apache Solar Project, a 20-megawatt PV generating facility near US 191, was constructed in 2017 and feeds into the Apache Generating Station.

The Wilcox Dry Lake Bombing Range is within the Wilcox Playa, approximately 1.5 miles north of the Project site. The Bombing Range was acquired in 1943 by the Department of Defense for use by Davis-Monthan Field for bombing and air to ground gunnery training (UXOINFO.com). The Wilcox Playa was designated a National Natural Landmark in 1966 (National Park Service 2023).

The Willcox Playa Wildlife Area, administered by the Arizona Game and Fish Department (AGFD), is located east of the dry lake and more than five miles northeast of the Project site. The 600-acre Wildlife Area is known as an Important Bird Area (IBA), supporting sandhill cranes that roost in the area, as well as other waterbirds and birds of prey (AGFD 2023). The Applicant has coordinated with AGFD since its initial public outreach efforts as part of the Certificate of Environmental Compatibility (CEC). The Applicant and AGFD have together reviewed and discussed the potential impacts of the solar and battery areas and the gen-tie line and AGFD recommendations. The Applicant is planning to implement conservation design considerations and mitigation measures to minimize potential impacts to special status species and wildlife; see **Section 13**.

6. PLANNED LAND USE

Based on the current Cochise County Comprehensive Plan, the Project site and 5-mile radius surrounding the Project site are within Growth Area Plan Designation Category D – Rural Area geared toward providing local services, tourism, or intensive uses not appropriate in more densely populated parts of the County, such as power plants and feedlots. (Cochise County 2015). The parcels within the Project site are designated RU-4 Rural. Solar energy power plants may be allowed in RU zones with a Special Use Authorization.

The University of Arizona conducted a Renewable Energy Opportunity Analysis for Pima, Santa Cruz, and Cochise counties in Arizona (University of Arizona 2013). This analysis indicated a significant portion of the Project site is suitable for both small-scale (less than 5 megawatts) and large-scale (greater than 5 megawatts) solar facilities (University of Arizona 2013). The Cochise County Comprehensive Plan (Cochise County 2015) encourages renewable energy development within the framework provided in University of Arizona's Renewable Energy Opportunity Analysis suitability study (University of Arizona 2013). Renewable Energy is identified as an element of the Comprehensive Plan Goals and Policies (Article 1)(E).

7. SCENIC VALUES

Visual concerns associated with the Project include potential impacts to both scenery and sensitive viewers. Impacts to the scenery as a resource are generally based on whether the Project would change the character of the landscape such that the relative scenic quality of the landscape would diminish. It is assumed the industrial appearance of the Project would contrast with the characteristics of the primarily undeveloped desert landscape and would, therefore, impact the scenic quality of the landscape to some degree. However, sensitive viewers for this Project would be limited, including residences and their travel routes. The residences west of the Project site would have level, unobstructed views of the Project. Viewers travelling along roads within the vicinity would have relatively level, unobstructed to partially obstructed views of the Project. The nearest regional travel route is US 191 to the west, approximately 2 miles from the Project's facilities.

The landscape surrounding the Project is characterized by desert vegetation, agricultural lands, the adjacent Willcox Playa, and anthropogenic structures including existing transmission lines and ranching related structures such as fencing. There are no wild and scenic rivers, national scenic and/or backcountry byways, national monuments, or other designated scenic areas at the Project site.

The Willcox Playa hosts 5,000-10,000 overwintering sandhill cranes (*Grus canadensis*) and other migratory bird species every year. There are two viewing areas along the Willcox Playa, the Apache Station Wildlife Viewing Area on the southwest extent of the Willcox Playa at AEPCO's Apache generating station and viewing within the Willcox Playa Wildlife Area managed by the AGFD in the northeast section of the Willcox Playa. Views of the Project would be largely blocked by adjacent vegetation and/or topography.

Visual simulations have been conducted from a variety of key observation points (KOPs) (**Attachment C**). In general, the Project is not visible or is only minimally visible from the observation points with the exception of KOP #6, near a residence adjacent to the Project.

Disturbance resulting from construction (dust, movement, etc.) would be temporary and largely short in duration, and visible effects from active construction would diminish significantly after commissioning. Because of the small scale of vegetation disturbance required, there would be minimal visible contrasts.

In 1966, the National Park Service designated the Willcox Playa, as a National Natural Landmark. National Natural Landmarks are selected “...for their outstanding condition, illustrative value, rarity, diversity, and value to science and education.” National Natural Landmarks are not part of the National Park system, rather they are owned by various landowners including non-federal entities and participation in the program is voluntary. The proposed Project is not expected to affect resources that would impact this designation.

Due to the rural character of the area, the presence of existing transmission lines to the north and general lack of public access, there would be a limited number of viewers traveling near the Project site. The Project may reduce the scenic quality for travelers along roads adjacent to the Project, but few people would be impacted by the Project.

8. NOISE EMISSIONS

Noise impacts associated with utility-scale solar and battery projects occur primarily during construction. Heavy equipment is needed for site preparation and construction, similar to any construction project. Once operational, electrical discharge from transmission lines, operation of inverters, and the rotation of solar trackers can create humming or buzzing noises, though these noises will be minimal and would not affect any area outside the Project. Cochise County does not have an ordinance addressing noise levels in this zone; however, the Cochise County Zoning Regulations identify noise and vibration violations as public nuisances which are reportable.

There are no noise-sensitive receptors (NSRs) near the Project. The areas nearest the Project Area which may be affected by Project construction noise include farmlands and cattle structures. These areas are not considered NSRs, and rarely contain people who would be affected by noise emissions. Therefore, noise impacts during operations and maintenance of the Project are expected to be negligible due to the absence of NSRs (i.e., no measurable change in current conditions) to minor in magnitude (i.e., a small, but measurable change in current conditions).

9. COMMUNICATION INTERFERENCE

The Project is not expected to interfere with normal radio reception. The Project would operate under Federal Communications Commission (FCC) regulations which require that best engineering principles be used to guard against harmful interference to authorized radio users. For the Project, the level of

radio/television/equipment interference would be very low. According to the National Renewable Energy Laboratory (NREL 2017) the risk of electromagnetic and/or radar interference from PV arrays is low risk. PV systems equipment such as transformers and electric cables are not sources of electromagnetic interference (EMI) because of their low frequency (60 hertz [Hz]) of operation and PV panels themselves do not emit EMI.

Fort Huachuca is the largest military installation in Arizona, located near Sierra Vista in Cochise County. Fort Huachuca has a long history of providing electronic and communications testing and training for national defense. Their facilities include the 2,500 square mile Buffalo Soldier Electronic Test Range (U.S. Army 2022). The Project is located well outside the Buffalo Soldier Electronic Test Range. The applicant has identified Fort Huachuca as a Project stakeholder and has coordinated directly with the Office of the Commanding General to address any Project concerns. A direct communication with Alanna Riggs who works with Matt Walsh, in the Office of the Commanding General, on December 15, 2022, noted that Fort Huachuca had no concerns with regards to the proposed Project. The Project is located outside its electrical testing range complex and is near the existing AEPSCO line so does not present a new feature on the landscape. The Project will comply with all Federal Aviation Administration and FCC rules.

10. WATERS OF THE UNITED STATES (WETLANDS)

A hydrology report has been prepared to support engineering for the Project (**Attachment D**). Additionally, surface water features at the Project site were evaluated for their potential to be considered waters of the United States (WOTUS) by the U.S. Army Corps of Engineers (USACE). An Approved Jurisdictional Determination (AJD) request was submitted to the USACE on March 10, 2023 and is under review (**Attachment E**). Since submittal of that request, additional land area on the east side of the Project is under contract for acquisition and a supplement request will be submitted.

There is only one surface water feature at the Project site with potential to be considered jurisdictional and this feature is located on the west portion of the Project site where wildlife linkage/flood prone land has been identified. This portion of the Project site will not be developed for the Project. No wetlands will be impacted by the Project.

11. CULTURAL RESOURCES

A Class I cultural resource records review was completed for the Project site and surrounding area. The majority of previously conducted surveys are associated with public infrastructure north of the Project site. Known cultural sites including artifact scatter occur within a mile of the Project site to the north. No archaeological resources were identified within the Project site. The entirety of the Project site has not been previously surveyed for cultural resources. The Project site is comprised entirely of private lands, there are no federal or state permits/approvals that require a pedestrian clearance survey. However, care will be given to archeological discoveries during construction. Arizona strictly regulates the removal and disposition

of human remains and associated funerary objects on private properties. Any discoveries in connection to human remains or funerary objects would result in a temporary stop work order and coordination with the State Historic Preservation Office (SHPO).

12. BIOLOGICAL RESOURCES

A Biological Evaluation was prepared for the Project to assist with documenting federal and state environmental regulation compliance (**Attachment F**). Federal and state agency jurisdiction over sensitive biological resources are described and addressed below. **Section 13** provides a summary of voluntary environmental commitments made by the Applicant for the Project. These commitments were developed in coordination with AGFD and their recommendations to conserve natural resources and mitigate potential environmental impacts.

12.1. FEDERAL AND STATE PROGRAMS

Laws and policies protecting rare species on private lands in Arizona include the following:

- The U.S. Fish and Wildlife Service (USFWS) administers the Endangered Species Act (ESA) of 1973, as amended. The ESA protects species listed as threatened or endangered from “take” (generally, directly, or indirectly harming or disturbing listed species and/or their habitat). Prior to being listed as threatened or endangered, a proposed listing rule is issued. When agency priorities take precedence over certain listing actions, species may also be designated as candidates, to be evaluated and potentially listed when no longer precluded by higher-priority actions. The ESA also allows for the designation of critical habitat (areas essential to the survival and recovery of listed species), although designation of critical habitat is not always required when a species is listed. Critical habitat is an administrative designation of a defined area with specific characteristics important to the survival and recovery of a listed species. Designation of critical habitat can affect federal actions, but not state or private actions that do not have a federal nexus.
- The USFWS Division of Migratory Birds administers the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (Eagle Act). The MBTA prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when authorized by the USFWS. The Eagle Act prohibits anyone, without a permit, from taking (including disturbing) eagles, and their parts, nests, or eggs.
- The AGFD manages and conserves wildlife in Arizona. Nearly all take of wildlife is regulated in some manner through the hunting and fishing license system. Arizona does not have a counterpart to the federal ESA, but a list of rare species (Wildlife Species of Concern) was created in 1996 without creating any specific statutory protections for those species. However, hunting regulations are used to provide some protection, and no hunting or capture of Wildlife Species of Concern is currently allowed.

- The Arizona State Wildlife Action Plan (SWAP) provides strategies and conservation actions for managing Arizona's fish, wildlife, and wildlife habitats that are in greatest need of conservation. The current SWAP was updated in 2022 for a 10-year period as funded through a state-federal partnership and grant program (AGFD 2022). The SWAP identifies several tiers of Species of Greatest Conservation Need (SGCN) based on vulnerability criteria.
- Native plants in Arizona are managed by the Arizona Department of Agriculture (AZDA), which regulates harvest and salvage. Harvest or salvage of most plant species may be permitted or required. Plants listed as Highly Safeguarded may only be taken or salvaged for scientific or conservation purposes and include plants that may become jeopardized or are in danger of extinction throughout all or a significant portion of their ranges and includes plants resident to the state and listed as endangered, threatened, or category 1 in the ESA.

12.2. ENDANGERED SPECIES ACT COMPLIANCE

A Biological Evaluation prepared for the Project identifies seven species listed under ESA for consideration. This list was generated using the USFWS Information for Planning and Consultation (IPaC) tool. The species included: jaguar (*Panthera onca*), northern aplomado falcon (*Falco femoralis septentrionalis*), yellow-billed cuckoo (YBC; *Coccyzus americanus*), northern Mexican gartersnake (*Thamnophis eques megalops*), Chiricahua leopard frog (*Rana chiricahuensis*), monarch butterfly (*Danaus plexippus*), and Wright's marsh thistle (*Cirsium wrightii*). Only one species, the monarch butterfly, has a potential to occur in the Project site, and the potential to occur is "unlikely."

The monarch butterfly is a "candidate" ESA species (USFWS 2020). Breeding and migratory populations occur throughout Arizona. Some adults overwinter in the low deserts of Arizona in areas where food resources are abundant. These areas are generally represented by urban environments including Yuma, Phoenix and Tucson (Morris, Kline, and Morris 2015). Due to the lack of milkweed and the predominance of grasses and invasive weedy species, preferred foraging habitat for the monarch butterfly is absent and this species is unlikely to occur in the Project site.

The Project is not anticipated to potentially affect any other federally listed species or designated critical habitat.

12.3. HABITAT

The Project site is mapped within the Semidesert Grassland biotic community (The Nature Conservancy 2012) and is within the southern end of the Willcox Playa/Cochise Lakes IBA. This IBA is described as containing a broad alkaline lakebed fringed with semi-desert grassland, with a seasonally flooded playa that serves as wintering and migratory stopovers for shorebirds and waterfowl (Tucson Audubon Society 2012). No proposed or designated critical habitat occurs within the Project site.

Cattle tanks located at the Project site and backwater drainages extending from the playa were observed to have water during the site visit on September 29, 2022. Areas with ponding water were also observed within the Project site following rain.

Land use at the Project site and vicinity includes operation and maintenance of existing energy generation and distribution infrastructure, agriculture, cattle grazing, rural housing, transportation via U.S. Highway 191 and other smaller roads, wildlife viewing, and other recreational activities.

There is a wildlife connectivity zone located within the footprint of the Project site. This connectivity zone is identified as the Willcox Playa Wildlife Linkage and has been identified for the following species: bobcat, Chiricahua leopard frog, javelina, kit fox, Mexican spotted owl, mountain lion, mule deer, ornate box turtle, plains leopard frog, pronghorn, Texas horned lizard, and western burrowing owl (The Arizona Wildlife Linkages Workgroup 2006). The Project is not expected to create a barrier to wildlife movement through the area and loss of vegetation will be minimized.

The Willcox Playa is a Bureau of Land Management (BLM) Designated Area of Critical Environmental Concern (ACEC) located adjacent to the Project site. This was identified as an ACEC due to being a national natural landmark and a Pleistocene Epoch lakebed (BLM 1991). The Project site is not within this ACEC and there will no impacts to the ACEC associated with the construction, operation, or maintenance of the Project.

12.4. WILDLIFE

The Arizona Game and Fish Department HDMS tool was queried for occurrence records within 3 miles of the Project site including species of greatest conservation need (SGCN). Results for the Project include plains leopard frog, Chiricahua leopard frog, white-faced ibis, desert box turtle, and ornate box turtle and numerous others that are predicted to intersect with the Project site, based on predicted range models.

Sandhill cranes were observed within the Project site by biologists during field reconnaissance. The western burrowing owl was not observed but is known to occur within the Willcox Playa Wildlife Linkage that crosses a portion of the Project site. The Willcox Playa/ Cochise Lakes IBA provides habitat for a variety of bird species including those protected by the MBTA. The Willcox Playa supports the second largest over-wintering concentration of sandhill cranes in Arizona and also provides important habitat for a great number of bird species including shorebirds.

Considering the specific habitat requirements for these species and the habitat at the Project site, the land available in the vicinity of the Project site, and the conservation and mitigation measures being undertaken by the Applicant (**Section 13**), the proposed Project is not anticipated to pose significant risk to any of these sensitive species.

12.5. PLANTS

Vegetation composition within the Project site consists primarily of low-density grasses and upland tree and shrub species. Vegetation observed is dominated by mixed grasses and included Four-wing saltbush (*Atriplex canescens*), invasive Russian thistle (*Salsola* sp.), shrub-sized velvet mesquite (*Prosopis velutina*), burroweed (*Isocoma tenuisecta*), invasive tamarisk, yucca (*Yucca* spp.) and cholla cacti (*Cylindropuntia* spp.)

Best Management Practices (BMPs) will be implemented during Project construction to minimize impacts to native plants listed in Arizona's Native Plant Law, and to minimize the potential introduction or spread of invasive plant species. BMPs may include but are not limited to washing vehicles entering and exiting the site and implementing erosion control features. The HDMS report did not identify any additional sensitive plant species within the Project site.

12.6. BIOLOGICAL CONCLUSION

The Project is not likely to affect any special status species. No species afforded protection under the ESA are present and none will be affected by the Project. No protected areas, or areas of significant biological wealth are within the Project site, and mitigation measures implemented for burrowing owls and other nesting birds will address potential impacts to those species. A wildlife linkage area will be preserved along the western portion of the Project site where natural drainages are present.

Potential impacts to wildlife associated with construction and operation of the Project include loss of habitat, temporary displacement during construction, direct mortality of wildlife that are less mobile such as snakes, lizards, and small mammals, and altering, displacing, or disrupting the breeding and foraging behavior of wildlife. These impacts are expected to be minor given the overall footprint of the Project relative to available suitable habitat in the surrounding region, the short-term and relatively benign nature of construction activities required for solar facility installation, and BMPs to be implemented prior to and during construction. Overall, the amount of habitat that will be impacted by Project activities will be minimal in comparison to total available habitat in the general area, and the limited loss of individuals will not impact local populations. No critical habitat for any protected species will be impacted by the Project.

13. VOLUNTARY ENVIRONMENTAL COMMITMENTS

The Project site was carefully selected to minimize impacts to the environment and the local community. The Project is sited on available private land with few nearby residents in a rural area near existing transmission power infrastructure. While the Project will avoid a federal nexus and thus a formal Environmental Impact Statement (National Environmental Policy Act; NEPA review), the Applicant: (1) commissioned a Biological Evaluation for the Project, (2) completed a comprehensive environmental review

for the gen-tie line (as part of their Certificate of Environmental Compatibility)¹, and (3) worked with professional biologists and held two meetings with the AGFD to research and discuss effective options to minimize and offset potential negative impacts of the Project to the natural environment. This section summarizes the resulting commitments made by the Applicant.

Considering the proximity of the Willcox Playa and Cochise IBAs, special importance was given to overwintering sandhill cranes and other avian species. Specifically, sandhill crane mortalities have been associated with transmission line strikes (Dwyer et al. 2019, Avian Power Line Interaction Committee 2012, Murphy et al. 2016, Rioux et al. 2013, etc.). This is due to direct line collisions; not electrocution. Factors contributing to strikes include: (1) taking off or returning to the roosting site, during low visibility periods, (2) flock is disturbed and flushed during nocturnal periods, (3) first year cranes, implying learning curve, and (4) proximity to body of water (400 ft.). Available research relating to line strikes indicate that lighting dramatically reduces strikes.

The Project will conform to all applicable federal, state, and local statutes, regulations, and enforceable plans. Additionally, proposed voluntary conservation and mitigation measures planned for the Project are listed below.

13.1. GENERAL

- Preconstruction Surveys (migratory birds, species of greatest conservation need, other)
 - western burrowing owl
 - active nest avoidance
 - desert box turtle
 - ornate box turtle
 - plains leopard frog
 - eagle nests records request (complete)
 - kit fox
 - noxious weeds
 - monarch scorecard

13.2. GEN-TIE LINE

- Sited with consideration of proximity to an existing transmission pathway (shortest route to minimize environmental effects)

¹ Environmental factors to be considered for certificate of environmental compatibility: (1) existing plans of the state, local government and private entities, (2) fish, wildlife and plant life and associated forms of life, (3) areas of biological wealth or sensitive species, (4) noise emission levels and interference with communication signals, (5) proposed availability of the site to the public for recreational purposes, (6) existing scenic areas, historic sites and structures or archaeological sites, (7) any additional factors.

- Ultraviolet light emitters will be used on the line to prevent strikes by sandhill cranes and other avian species; demonstrated to reduce collision with the power line by 98% (Dwyer et al. 2019)

13.3. SOLAR FACILITY AND BESS

- Wildlife Connectivity Preservation
 - Sited to avoid FEMA floodplain and wildlife linkages (western-most portion of Project site)
 - AGFD wildlife fencing guidelines, modified for the Project to optimize mobility for animals but provide exclusion for specific species (mule deer)
- (Anti) Avian Attraction
 - Panels will be spaced apart to break up any reflective appearance (3m panel 7m gap) (30% ground cover ratio (GCR); typically ranges from 30%-60% GCR in U.S.)
 - Solar panels will have anti-reflective coating
- Light Mitigation
 - Lighting designed around producing minimum light required for safe operation
 - Lights will be motion detection and/or switch-activated with the exception of the substation area where the lights will be shielded to limit the area of illumination
- Vegetation Management – Native Vegetation
 - Limit site disturbance and grading to greatest extent practicable
 - File Notice of Intent to Clear Land with Arizona Department of Agriculture (ADA) and specify intent to allow salvage, if applicable
 - Educating all construction personnel regarding noxious weeds, pre-construction surveys, and the importance of preventive measures and treatment methods as part of pre-construction onboarding process

14. REFERENCES

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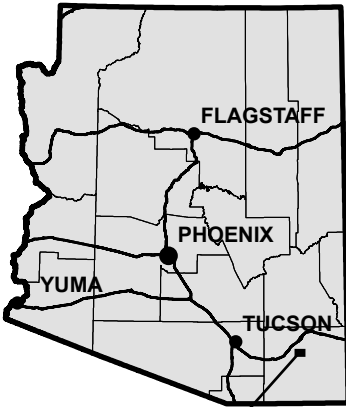
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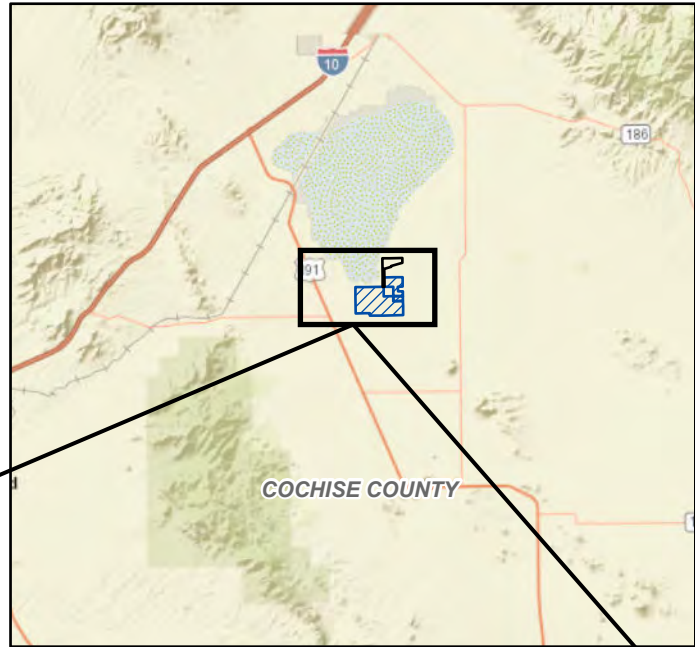
FIGURES

ARIZONA

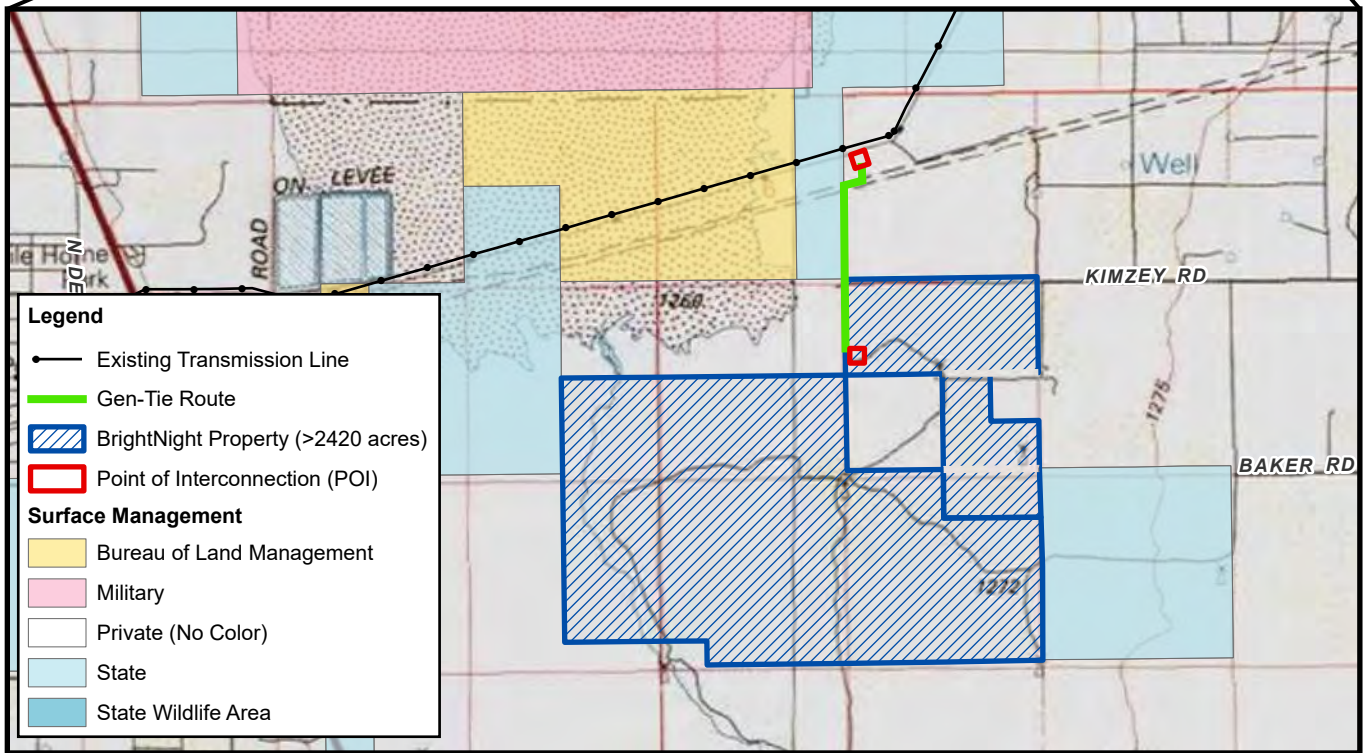


PROJECT LOCATION

PROJECT VICINITY



Approximate Scale 1 inch equals 10 miles



Legend

- Existing Transmission Line
- Gen-Tie Route
- ▨ BrightNight Property (>2420 acres)
- Point of Interconnection (POI)

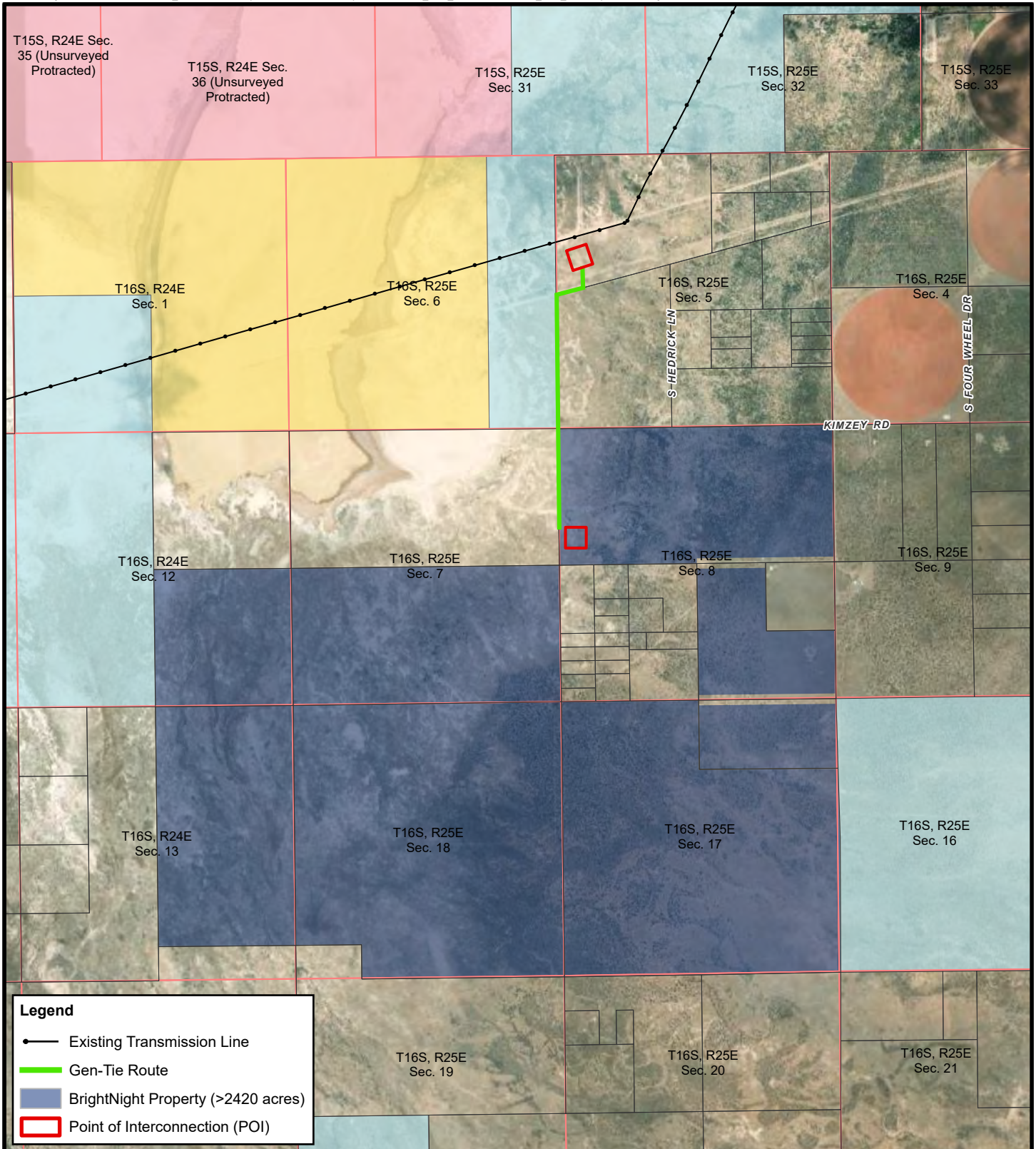
Surface Management

- Bureau of Land Management
- Military
- Private (No Color)
- State
- State Wildlife Area

Proposed Transmission Corridor within:
 T16S, R25E, Portions of Sections 5-8,
 Cochise County, Arizona,
 Willcox 1:100,000 USGS Quadrangle
 Projection: NAD 1983 UTM Zone 12N
 Surface Management: BLM ArcGIS Service accessed 5/31/2023
 Image Source: ArcGIS Online, World Street Map

THSI bn, LLC
 Three Sisters Solar Project
 Special Use Permit Application

VICINITY MAP
 Figure 1



Legend

- Existing Transmission Line
- Gen-Tie Route
- BrightNight Property (>2420 acres)
- Point of Interconnection (POI)

Proposed Transmission corridor within:
 T16S, R25E, Portions of Sections 5-8,
 Cochise County, Arizona,
 Surface Management: BLM ArcGIS Service accessed 5/31/2023
 Image Source: Maxar 9/17/2021 and 3/19/2022

THSI bn, LLC
Three Sisters Solar Project
Special Use Permit Application
 SOLAR ENERGY GENERATING
 FACILITY OVERVIEW

Figure 2



ATTACHMENT A
Agent Designation

June 16, 2023

COCHISE COUNTY
Planning and Zoning Division
1415 Melody Lane, Building F
Bisbee, AZ 85603

**RE: AGENT DESIGNATION LETTER
THREE SISTERS SOLAR PROJECT - SPECIAL USE PERMIT APPLICATION**

THSI bn, LLC (the Applicant) is requesting a Cochise County Special Use Permit (SUP) for approval to construct and operate a solar energy power plant with battery energy storage system for approximately 2,450 acres in Cochise County, Arizona. The Three Sisters Solar Project (the Project) is planned on property zoned RU-4, located at Assessor Parcel Numbers 205-01-006, 205-01-002A, 205-27-002B, 205-21-002D, 205-40-002A, 205-28-003B, 205-28-001, and 205-40-001.

The Applicant is the current property owner or has executed a purchase agreement to allow the rights to build on these above parcels for the Project. With this letter, I designate WestLand Engineering & Environmental Services as my agent for the purposes of the Special Use Permit Application submittal. The agent contact information is:

Diana Sandoval, Env. Planner
WestLand Engineering & Environmental
4001 E. Paradise Falls Dr.
Tucson, AZ 85712
Telephone: 1-520-206-9585
Email: dsandoval@westlandresources.com

If you have any questions or require additional information, please do not hesitate to contact me.

Respectfully,


Martin Hermann (Jun 27, 2023 15:01 GMT+2)

Signature of Owner Representative

June 26, 2023

Date

Martin A. Hermann

Typed/Printed Name of Representative

(888) 614-2626

Phone Number

Manager, THSI bn, LLC

Title of Representative






THSI bn LLLC - Agent Designation Letter - Westland (executed)

Final Audit Report

2023-06-27

| | |
|-----------------|---|
| Created: | 2023-06-26 |
| By: | Amy Sussman (amy@brightnightenergy.com) |
| Status: | Signed |
| Transaction ID: | CBJCHBCAABAxAxUtTrujO58_7gKVTqByR5i_slaDYVBAW |

"THSI bn LLLC - Agent Designation Letter - Westland (executed)" History

-  Document created by Amy Sussman (amy@brightnightenergy.com)
2023-06-26 - 5:39:39 PM GMT- IP address: 96.78.165.9
-  Document emailed to Martin Hermann (martin@brightnightenergy.com) for signature
2023-06-26 - 5:40:11 PM GMT
-  Email viewed by Martin Hermann (martin@brightnightenergy.com)
2023-06-27 - 1:00:47 PM GMT- IP address: 104.47.70.126
-  Document e-signed by Martin Hermann (martin@brightnightenergy.com)
Signature Date: 2023-06-27 - 1:01:04 PM GMT - Time Source: server- IP address: 107.116.79.140
-  Agreement completed.
2023-06-27 - 1:01:04 PM GMT

ATTACHMENT B
Citizen Review Report

THREE SISTERS SOLAR PROJECT CITIZEN REVIEW REPORT

Prepared for: Cochise County, Arizona Planning and Zoning Division
Prepared by: BrightNight, LLC (THSI bn, LLC) and
WestLand Engineering & Environmental Services (WestLand)
Date: June 29, 2023

Table of Contents

| | |
|--|---|
| 1. OUTREACH PHILOSOPHY/COMMUNITY ASSESSMENT..... | 1 |
| 2. OUTREACH SUMMARY..... | 1 |
| 3. CORPORATION COMMISSION CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY | 1 |
| 3.1. Newsletter Mailings..... | 2 |
| 3.2. Newspaper Publication..... | 2 |
| 3.3. In-person Open House #1 | 2 |
| 3.4. Notice of CEC Hearing Distribution | 3 |
| 3.5. Project Website..... | 3 |
| 3.6. Dedicated Project Email | 3 |
| 3.7. Social Media Campaign..... | 3 |
| 3.8. Agency Comments and Responses | 4 |
| 3.9. Comments and Responses | 4 |
| 4. COCHISE COUNTY SPECIAL USE PERMIT | 5 |
| 4.1. Newsletter Mailings..... | 5 |
| 4.2. Newspaper Publication | 5 |
| 4.3. Business Canvassing | 5 |
| 4.4. In-person Open House #2 | 5 |
| 4.5. Project Website..... | 6 |
| 4.6. Dedicated Project Email | 6 |
| 4.7. Comments and Responses | 6 |

Appendices

Arizona Corporation Commission CEC Outreach

- Appendix 1. Stakeholder Letters and Flyer
- Appendix 2. USACE Email Letter
- Appendix 3. AGFD Email Letter
- Appendix 4. AZ Governor Office Letter
- Appendix 5. Project Website
- Appendix 6. Open House Sign-in Sheet
- Appendix 7. Community Brochure
- Appendix 8. Comment Form
- Appendix 9. Newspapers Affidavit of Publication

Cochise County Special Use Permit Outreach

- Appendix 10. Project Newsletter with Open House Invitation in English and Spanish (mailed 6/5/23)
- Appendix 11. Mailing List within 2 miles of Project Site
- Appendix 12. Mailing List of Project Stakeholders (email and mailing list)
- Appendix 13. Project Website (dated 6/20/23)
- Appendix 14. Open House Sign-in Sheet
- Appendix 15. Community Brochure (Open House Handouts)
- Appendix 16. Comment Form
- Appendix 17. Newspaper Publication Documentation (published on 6/7/23)
- Appendix 18. Photos from the Open House

1. OUTREACH PHILOSOPHY/COMMUNITY ASSESSMENT

THSI bn, LLC (the Applicant) aims to pair community engagement with every step of a project's lifecycle, from development through long-term operation. As a result, project designs and their role in the community are tailored to the unique needs of every region served. This initiates with a comprehensive regional and community assessment and proceeds into engagement with all interested elected officials and government agencies and the general public, including neighbors.

The Applicant's strategic approach includes the following: (1) listen to local needs, norms, and goals, (2) apply feedback to project designs and long-term local support investments, and (3) educate and build engaged stakeholders. This is accomplished using the tools below:

- Community newsletters.
- Newspaper publications.
- Project webpage.
- Open house meetings.
- Community project brochure.
- Paid social media to ensure project information sharing.
- Visiting local businesses in-person.
- Visualization (project simulations).
- Economic impact assessment.
- Philanthropic support.
- Local organization support.

2. OUTREACH SUMMARY

To reach the affected residents and agencies, the Applicant instituted multiple public participation activities, including public open house meetings, jurisdictional meetings, agency briefings, newsletter mailings, newspaper advertisements, and a website. The public was able to call or email members of the Project team using contact information distributed in the materials listed above.

The Applicant also reached out to several stakeholders directly to review the Project including County Supervisor – Ms. Peggy Judd, the Willcox Chamber of Commerce, head of police and fire, the County Emergency Management Director, and local fire departments. Feedback was received on how the public may view the proposed Project and how the Applicant could optimize the Project.

3. CORPORATION COMMISSION CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY

Below, please find a summary of the specific community engagement efforts conducted for the Arizona Corporation Commission (ACC) Certificate of Environmental Compatibility (CEC). This was completed as

a requirement for the gen-tie transmission line, but also referred to the solar power generation and battery storage portion of the Project.

3.1. NEWSLETTER MAILINGS

- Applicant targeted a 2-mile “study area” for public communications (newsletter mailing) in Spanish and English.
 - Mailing list includes property owners and physical addresses based on assessor records (public records).
 - Mailed on 11/18/22 to 52 addresses (residents and landowners) in the 2-mile study area and 35 agencies and key stakeholders.
 - Project description and map with open house invitation.
 - Following the mailing, it was noted that a street was erroneously labeled S. Anderson Road on the map, therefore, a revised mailing was sent on 11/23/22 to correct that mapping error.

3.2. NEWSPAPER PUBLICATION

- Herald/Review Media distributes as a weekly newspaper.
 - Project description and map with open house invitation.
 - Circulation – 14,620.
 - Ran on 11/23/22.
- Arizona Daily Star distributes as a daily newspaper.
 - Project description and map with open house invitation.
 - Circulation – 238,000.
 - Ran on 11/23/22.

3.3. IN-PERSON OPEN HOUSE #1

The format of the meeting was an informal open house arrangement held from 5:00 to 7:00 p.m., which allowed community members to attend at their convenience, review informational displays, and have one-on-one personal communication with members of the Project team to provide comments or ask questions. The meeting consisted of several stations with large maps and text boards with highlighted details of the Project, including the Project’s purpose and need, proposed facilities, permitting requirements, and photo realistic simulations. A community brochure summarizing the Project was developed for the website and distributed to attendees. Comment forms were available to allow attendees to provide input on the proposed Project.

- Held on 12/7/22; Willcox Community Center – Willcox.
- Approximately 20 poster boards.
- Project team reps from THSI bn, LLC and WestLand.

- Five people signed in. Attendees included private landowners and representatives from the County planner's office, the Arizona Department of Environmental Quality (ADEQ), Arizona Electric Power Cooperative (AEPCO), and Arizona Game and Fish Department (AGFD).
- Generally factual questions from participants.

3.4. NOTICE OF CEC HEARING DISTRIBUTION

- Notice published in the Arizona Daily Star (1/26-1/27/23) and the Willcox Herald (2/1/23).
 - Arizona Daily Star is the newspaper of record for Willcox.
 - Herald/Review is the local newspaper and is circulated in Willcox on Wednesdays.
- Notice posted on (2) 2-foot x 3-foot signs installed along Kansas Settlement Rd.
 - Notice letter mailed to 52 addresses (property owners and tenants) and 35 agencies and key stakeholder on 2/8/23.
 - Public viewing locations for the CEC Application - Elsie S. Hogan Community Library (100 N Curtis Ave, Willcox, AZ 85643).

3.5. PROJECT WEBSITE

The Project website (<https://brightnightpower.com/three-sisters/>) was created and continually maintained to provide access to information and electronic versions of distributed materials. Through the website, viewers can access Project information and are provided contact information for submitting their comments or questions. The website address was advertised in newsletters, at the public open house, and in a paid newspaper advertisement.

- Frequently updated.
- Contact information for the Three Sisters Project team, in addition to the Project email.
- Spanish-language Project information.
- Web address included with public communications for the Project.

3.6. DEDICATED PROJECT EMAIL

- Continuously monitored by WestLand.
- Included with public communications for the Project.

3.7. SOCIAL MEDIA CAMPAIGN

- Inform the public of the CEC Hearing, opportunities for public participation, invite feedback, and provide general Project education.
- 126,000 Cochise County Residents, 72% Adult Residents Use one social media platform; audience of 90,756 (Facebook, Instagram, Twitter, NextDoor)

- 31,512 of Cochise County residents are Spanish-speaking.
- Budget of \$10,000 available to ensure we reached our audience at least 1.5 times.
- Public advertisement for comments on the Cochise County/Three Sisters Gen-Tie project appeared across social media users' news feeds 64,586 times between January 9 and February 17, 2023.
- The campaign generated strong engagement with a smaller audience than other communities we've engaged across Arizona. Advertisements resulted in: 62 comments or reactions, 548 clicks, 590 webpage visits, and 1 email inquiry.

3.8. AGENCY COMMENTS AND RESPONSES

The Applicant received email correspondence in response to the mailings from the United States Army Corps of Engineers, the AGFD, and the Arizona Governor's office.

Throughout the Project, team members held meetings with local jurisdiction and agency representatives, including elected officials and planning staff and others to relay information on the Project, answer questions, and request feedback. These meetings enabled the Project team to identify stakeholder issues, consider suggestions during the planning process, and relay information on developments in the Project. The Applicant also met with and received information from private landowners/lessees during the planning process.

Two key stakeholders identified by the county planning staff included Fort Huachuca and Boeing. Fort Huachuca conducts electromagnetic field testing and Boeing uses the Willcox Playa to land spacecraft. A contact with the Office of the General at Fort Huachuca indicated that there were no concerns with regards to the Project as it was not within their testing area, and it is in close proximity to an existing transmission line. Boeing has not yet provided a response. Boeing has the option to utilize the Willcox Playa as a landing area for the Starliner spacecraft at a site in the northcentral portion of the Willcox Playa which is unlikely to be affected by the Project.

3.9. COMMENTS AND RESPONSES

The AGFD provided Project recommendations regarding the Project's design and operation in their response letter. The Applicant, together with their environmental consultant, conducted additional research to address each of the AGFD concerns and recommendations. The Applicant hosted two virtual meetings with several AGFD staff to discuss their recommendations to minimize potential impacts of the Project to the natural environment. Voluntary conservation and mitigation measures are planned for the Project based on these discussions in the SUP Application Narrative (see Section 13- *Voluntary Environmental Commitments*). The AGFD expressed their interest in obtaining pre-construction survey results as well as records of animal deaths recorded at the Project site during regular inspections of the facility.

The Applicant has met with several private landowners near the Project and secured land and easements. They have also responded to basic requests for additional information about the Project. There were no concerns raised by the general public for the proposed Project.

4. COCHISE COUNTY SPECIAL USE PERMIT

Although Cochise County did not require additional engagement with the public following the ACC public outreach, the Applicant voluntarily conducted additional public outreach including advertising for, and holding a public open house meeting to provide an overview of the Project and address any questions/concerns. It was determined the social media campaign for the CEC was not particularly effective, so this was not repeated for the voluntary SUP outreach effort. Additional public outreach completed specifically for the SUP is presented below.

4.1. NEWSLETTER MAILINGS

- Open House notice mailed as part of the newsletter mailing (Spanish and English).
 - Landowners/residents within 2 miles of the Project, and
 - Project stakeholders (lists attached).

4.2. NEWSPAPER PUBLICATION

- Notice published in the Willcox Herald (6/7/23).
 - Herald/Review is the local newspaper and is circulated in Willcox on Wednesdays.

4.3. BUSINESS CANVASSING

On June 20 and 21, prior to the second open house, the Applicant visited several businesses in Wilcox to inform people in the community about the Project, invite them to the open house, solicit opinions about the Project and collect signatures of support in the community. As of the date of submission of this application, several local businesses and organizations have signed in support of the Project. The Applicant intends to collect more signatures in support of the Project prior to the Planning and Zoning Commission hearing.

4.4. IN-PERSON OPEN HOUSE #2

The format of the meeting was an informal open house arrangement held from 5:00 to 6:30 p.m., which allowed community members to attend at their convenience, review informational displays, and have one-on-one personal communication with members of the Project team to provide comments or ask questions. The meeting consisted of stations with large maps and text boards with highlighted details of the Project, including the Project's purpose and need, proposed facilities, permitting requirements, and photo realistic simulations focused on the solar and battery facilities. A Project handout was developed and made available to attendees. Comment forms were available to allow attendees to provide input on the proposed Project.

- Held on 6/21/23; Willcox Community Center – Willcox.
- Approximately 20 poster boards.
- Project team reps THSI bn, LLC and WestLand.
- Four people signed in; an additional three people attended but did not wish to sign in.
- Generally factual questions from participants.
- Comments included a desire for the Project's generated power to be distributed locally and that the access roads along Kimzey/Baker to be maintained.

4.5. PROJECT WEBSITE

- Updated after ACC approval and prior to the SUP open house.
- Contact information for the Three Sisters Project team, in addition to the Project email.
- Web address included with public communications for the Project.

4.6. DEDICATED PROJECT EMAIL

- Continuously monitored by WestLand.
- Included with public communications for the Project.

4.7. COMMENTS AND RESPONSES

In response to the newsletter and invitation to open house, County supervisor commented that she received the newsletter and would be out of town during our open house. The Project team was able to meet Supervisor Judd at her offices the day before the open house, and we received a warm reception and expression of support for the Project.

During the second open house, the following comments and responses were provided:

- In general, attendees were broadly supportive of the Project.
- Some attendees expressed appreciation that the Project was on private property (and not on state or federal land), and one local rancher indicated that a solar project was an ideal use of the property.
- Some attendees did express a desire for the Project's generated power to be distributed locally (i.e., in southern Arizona) and for the access roads along Kimzey/Baker to be maintained. The Applicant responded that they do plan to improve the road as needed and ensure that dust and erosion is not problematic for neighbors. Contact information was exchanged to continue conversations.
- No formal public comment cards were submitted.

ARIZONA CORPORATION COMMISSION
CEC OUTREACH

APPENDIX 1.
Stakeholder Letters and Flyer



Willcox Playa

This second notice is being provided to correct a mapping error on Google Earth. The alignment for S. Anderson Road has been corrected.

Join us / Unete a nosotros!

Learn more about the Three Sisters Solar and Gen-Tie Line project

Aprende mas acerca del proyecto Solar y Línea Gen-Tie Tres Hermanas

Open House

Wednesday, December 7, 2022

5:00 to 7:00PM

Willcox Community Center
312 W Stewart Street
Willcox, Arizona 85643

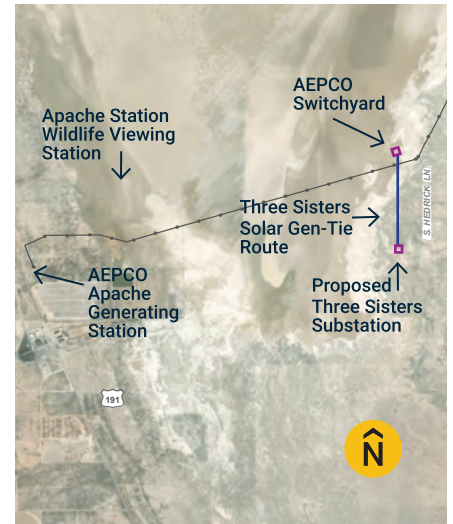
Open House: Three Sisters Solar Project

Solar Project and Gen-Tie Line

BrightNight, LLC is proposing the Three Sisters Solar Project and Transmission Line Project (Three Sisters Project) in unincorporated Cochise County, AZ. The Three Sisters Project would consist of the development of approximately 2,000 acres for the solar array and a one-mile 230 kV gen-tie transmission line (Gen-Tie Line). The Gen-Tie Line will interconnect the Project to the regional electric transmission grid at the existing AEPCO 230kV transmission line, providing power to utilities and customers in Arizona and the Southwest. The Project will include up to 300 megawatts (MW) of photovoltaic solar power arrays and a 4-hour duration of battery storage. The Gen-Tie Line will require a Certificate of Environmental Compatibility (CEC) from the Arizona Corporation Commission (ACC) and the solar array and battery storage area requires approval through a Cochise County Special Use Permit (SUP).

The public is invited to attend an open house to learn more about the Three Sisters Project. This is your opportunity to ask questions and submit any comments or concerns. Representatives from BrightNight will be available to answer questions.

Esta segunda nota se proporciona para corregir un error en el mapa de Google Earth. El alineamiento para la carretera S. Anderson ha sido corregido.



Detail of Gen-Tie Line Adjacent to Willcox Playa / Detalle de la Línea Gen-Tie adyacente a la Playa Willcox

Open House: Proyecto Solar Tres Hermanas

Proyecto Solar y Línea Gen-Tie

BrightNight, LLC esta proponiendo el Proyecto Solar Tres Hermanas y Línea de Transmisión (Proyecto Tres Hermanas) en el condado no incorporado Cochise en AZ. El Proyecto Tres Hermanas consistirá en el desarrollo de aproximadamente 2,352 acres para la matriz solar y una línea de transmisión gen-tie de 230 kV de una milla de largo. La Línea Gen-Tie va a interconectar el Proyecto con la red de transmisión eléctrica regional en la línea de transmisión existente AEPCO 230kV suministrando electricidad para servicios públicos y clientes en Arizona y en el Suroeste. El Proyecto incluirá hasta 300 megawatts (MW) de matrices de energía solar fotovoltaica y un almacenamiento de batería con duración de 4 horas. La Línea Gen-Tie va a requerir un Certificado de Compatibilidad Ambiental (CEC) de la Comisión Corporativa de Arizona (ACC) y el área de matriz solar y de almacenamiento de batería requiere aprobación a través de un Permiso Especial del Condado Cochise (SUP).

El público en general está invitado al open house para aprender más acerca del Proyecto Tres Hermanas. Esta es tu oportunidad para hacer preguntas y someter comentarios o preocupaciones. Representantes de BrightNight estarán disponibles para contestar preguntas.



Three Sisters Solar Project

Attn: **Maribeth Sawchuk, VP Communications**
 13123 E Emerald Coast Pkwy, Suite B#158
 Inlet Beach, Florida 32461



More Three Sisters Project Details

The solar array and battery storage area is situated on undeveloped private lands presently used for cattle grazing southeast of the Willcox Playa located approximately 11 miles southeast of Interstate 10, 14 miles south of the city of Willcox, Arizona and approximately 2 miles east of U.S. Highway 191. The solar and battery portion of the project will be located on approximately 2,000 acres of privately owned land. The 1-mile transmission line will include 7 to 10 power poles, a 20-ft wide access road for construction a maintenance and a switchyard at the point of interconnection. A substation will be constructed as part of the array area at the southern portion of the line. All features associated with the transmission line are located on private lands.

Detalles Acerca del Proyecto Tres Hermanas

La matriz solar y área de almacenamiento de batería esta situada en tierras privadas no desarrolladas que se usan en la actualidad para pastoreo de ganado al sureste de la Playa Willcox, aproximadamente 11 millas al sureste de la Interestatal 10, 14 millas sur de la ciudad de Willcox, Arizona y aproximadamente 2 millas este de la carretera U. S. 191. La porción solar y de batería del proyecto estará localizada en aproximadamente 2,000 acres de propiedad privada. La línea de transmisión de 1-milla incluirá entre 7 y 10 postes de electricidad, una calle de 20-pies de ancho para acceso a la construcción, mantenimiento y un patio de maniobras en el punto de interconexión. Una subestación será construida como parte del área de matriz en la porción sureña de la línea. Todas las características asociadas con la línea de transmisión están localizadas en tierras privadas.

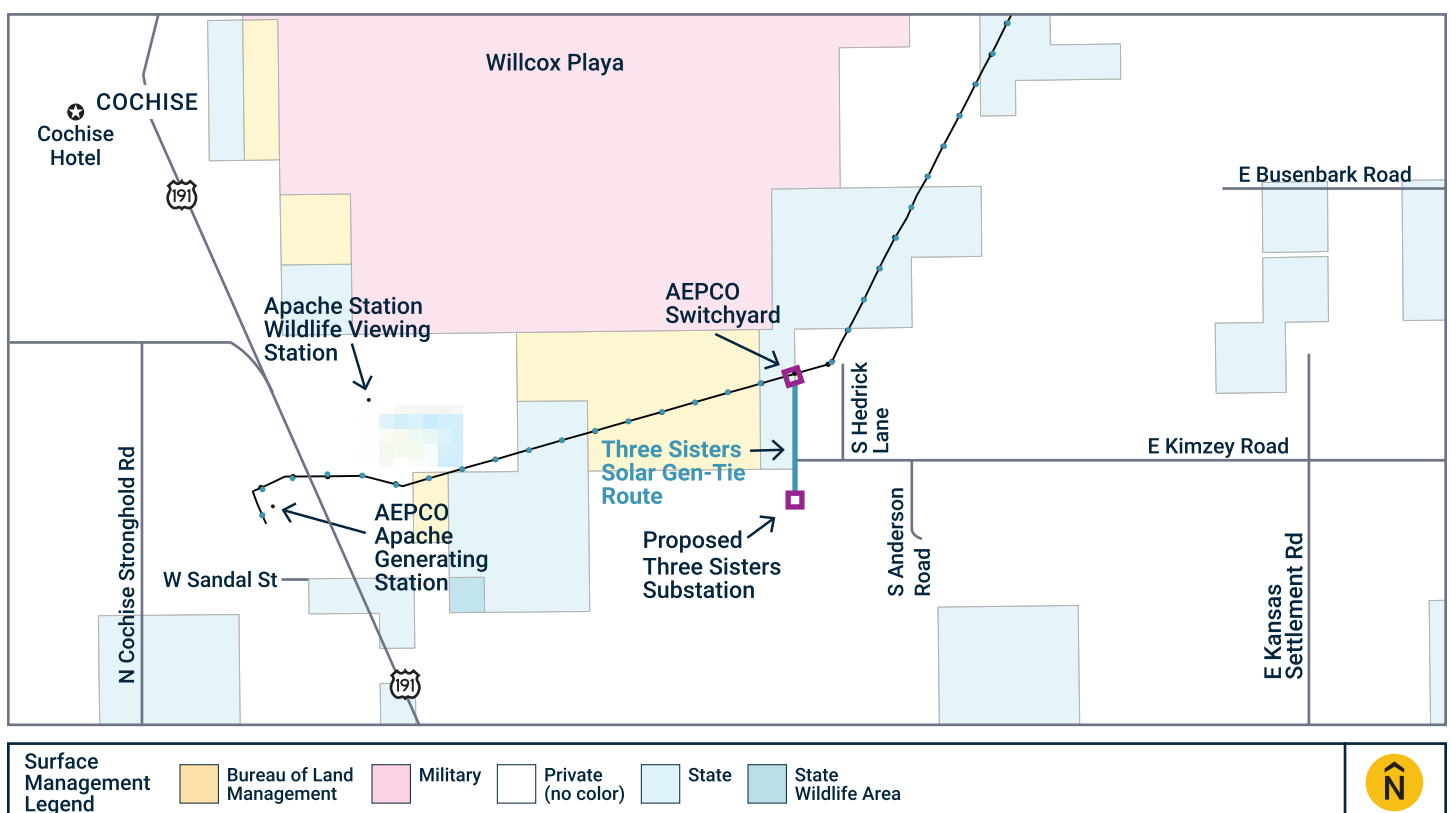
For more project information visit / Para más información acerca del proyecto favor visitar:

<https://brightnightpower.com/three-sisters/>

To provide comments, email to / Favor enviar tus comentarios por correo electrónico a:

BN_ThreeSistersSolarProject@westlandresources.com

Gen-Tie Line Location Map / Mapa de Ubicación de la Línea Gen-Tie





13123 E Emerald Coast Pkwy
Ste B#158
Inlet Beach, FL 32461

This second notice is being provided to correct a mapping error on Google Earth. The alignment for S. Anderson Road has been corrected.

Dear Stakeholder,

This letter provides notice of and invites you to learn about, or provide input on, BrightNight Power's proposed **Three Sisters Solar and Generation Intertie Transmission Line (Project)**, in Cochise County, Arizona. The Project involves an approximately 1-mile, 230 kilovolt (kV) generation intertie transmission line (gen-tie) that would be part of a larger solar energy facility known as the Three Sisters Project. The gen-tie would connect the Three Sisters Solar Power Project to the regional power grid via the existing AEPCO transmission line. The proposed route for the gen-tie shown on the enclosed map is located on private lands.

The Arizona Corporation Commission (ACC) and Arizona Power Plant and Transmission Line Siting Committee (Line Siting Committee) are the state permitting authorities for new transmission lines. BrightNight plans to apply for a Certificate of Environmental Compatibility from the ACC and Line Siting Committee to construct and operate the proposed 230 kV gen-tie. BrightNight will also coordinate with Cochise County to obtain a special use permit for the solar facility.

BrightNight is hosting an in-person open house for the Three Sisters Solar Project, where the community can learn more about the proposed 1-mile transmission line. Members of the BrightNight project team will be in attendance to review the broader project it supports and the associate community benefits, such as over \$250 million in economic uplift to the area, according to an Elliott Pollock & Associates report, and over \$34 million in local, state, and property tax revenues. Additionally, it is expected to require more than 250 jobs during construction. If you're interested in learning more, or have questions regarding the proposal, we welcome your attendance at the following location, date, and time.

Willcox Community Center
312 W Stewart St
Willcox, AZ 85643

December 7, 2022
5:00 PM – 7:00 PM

In the meantime, please visit our Project website at: <https://brightnightpower.com/three-sisters/>
To provide comments, email to: BN_ThreeSistersSolarProject@westlandresources.com

We welcome your input and questions. Please do not hesitate to reach the Project Team at the contact information above:

Sincerely,

A handwritten signature in blue ink, appearing to read "Erik Ellis".

Erik Ellis
Vice President, Development

APPENDIX 2.
USACE Email Letter



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT
3636 N CENTAL AVENUE, SUITE 900
PHOENIX, ARIZONA 85012-1939

December 1, 2022

SUBJECT: Permit Application Request

Erik Ellis
BrightNight
13123 East Emerald Coast Parkway, Suite B#158
Inlet Beach, Florida 32461

Dear Mr. Ellis:

It has come to my attention that you plan to construct and operate a proposed 230 kV gen-tie located in Cochise County, Arizona.

This activity may require a Department of Army (DA) permit from the U.S. Army Corps of Engineers. A DA permit is required for the discharge of dredged or fill material into, including any redeposit of dredged material other than incidental fallback within, "waters of the U.S.", including wetlands and adjacent wetlands pursuant to Section 404 of the Clean Water Act of 1972. Examples include, but are not limited to the following activities:

- a. creating fills for residential or commercial development, placing bank protection, temporary or permanent stockpiling of excavated material, building road crossings, backfilling for utility line crossings and constructing outfall structures, dams, levees, groins, weirs, or other structures;
- b. mechanized land clearing and grading which involve filling low areas or land leveling, ditching, channelizing and other excavation activities that would have the effect of destroying or degrading waters of the U.S.;
- c. allowing runoff or overflow from a contained land or water disposal area to re-enter a water of the U.S.; and
- d. placing pilings when such placement has or would have the effect of a discharge of fill material.

An application for a DA permit is available on our website: <http://www.spl.usace.army.mil/Missions/Regulatory/PermitProcess.aspx>. If you have any questions, please contact Lisa Robinson at (602) 230-6958 or via email at Lisa.E.Robinson@usace.army.mil. Please refer to this letter and SPL-2022-00703 in your reply. Please help me to evaluate and improve the regulatory experience for others by completing the [customer survey](https://regulatory.ops.usace.army.mil/customer-service-survey/) form at <https://regulatory.ops.usace.army.mil/customer-service-survey/>.

-2-

Sincerely,

A handwritten signature in blue ink that reads "Sallie Diebolt". The signature is written in a cursive style with a long horizontal stroke at the end.

Sallie Diebolt
Chief, Arizona Branch
Regulatory Division

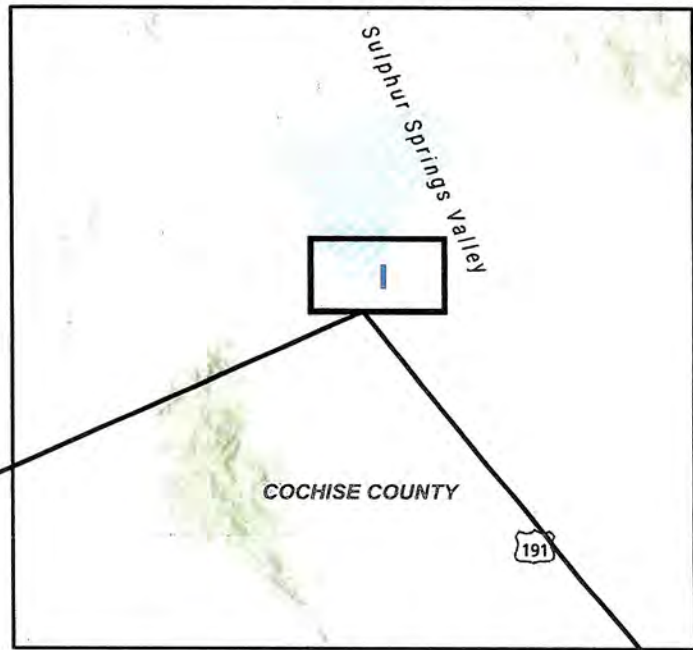
Enclosure(s)

ARIZONA

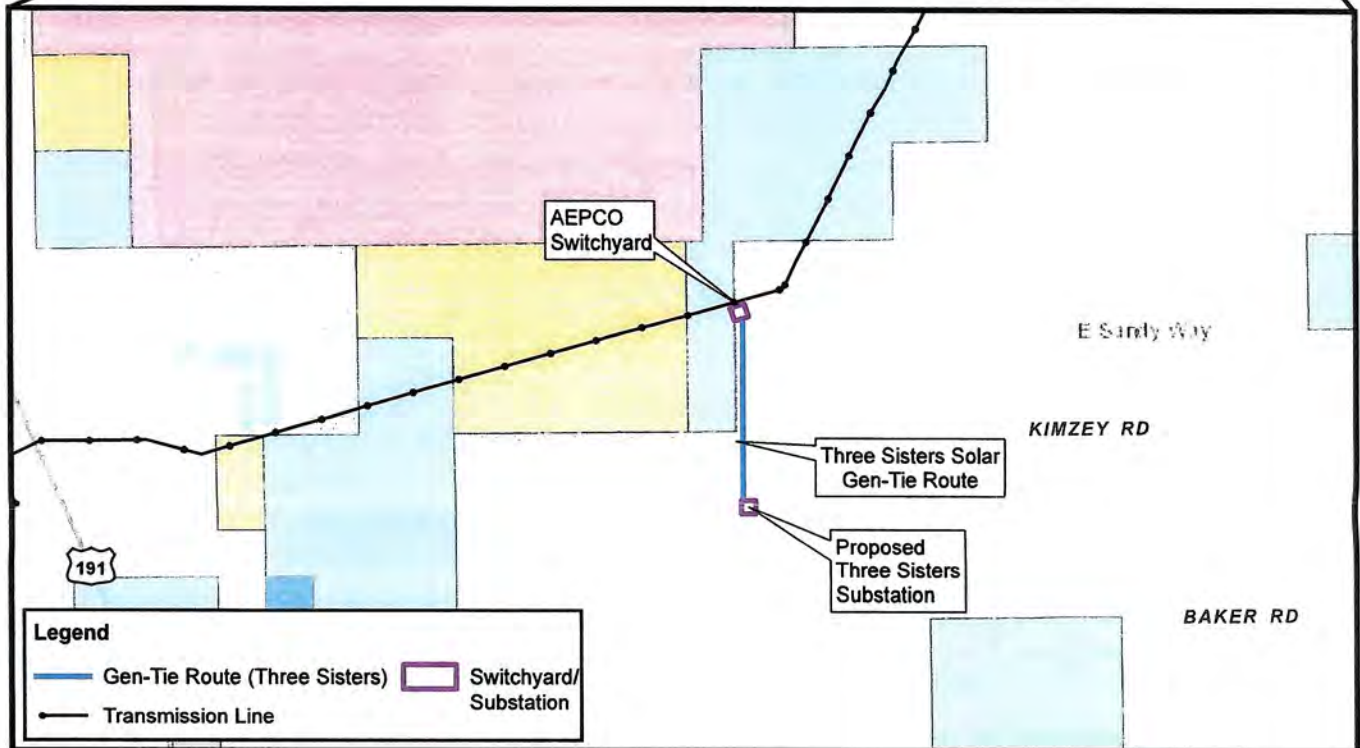


PROJECT LOCATION

PROJECT VICINITY



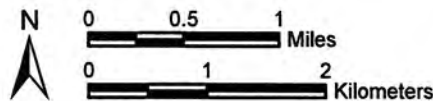
Approximate Scale 1 inch equals 10 miles

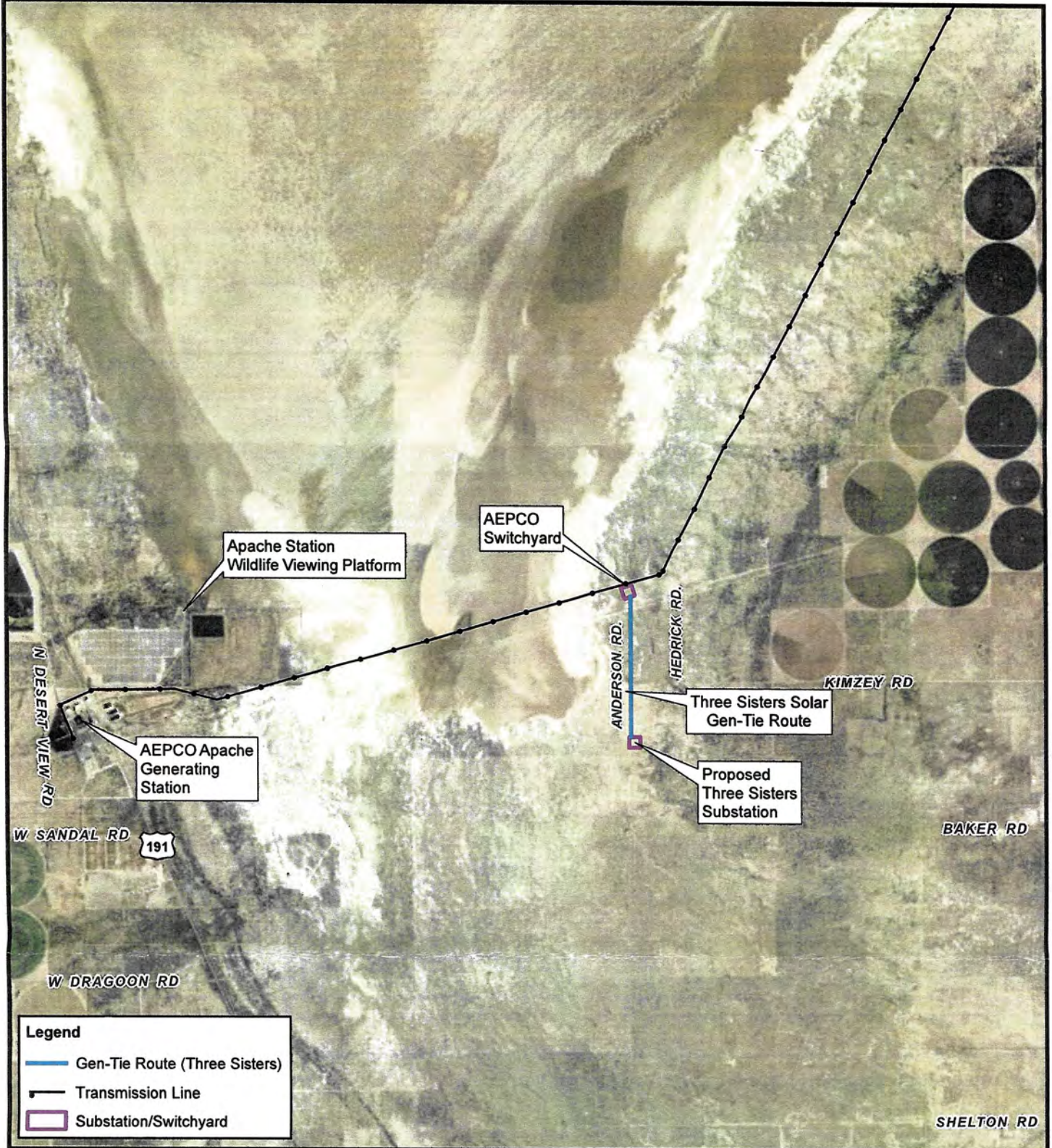


Gen-Tie Route within:
T16S, R25E, Portions of Sections 5 and 8,
Cochise County, Arizona,
Willcox 1:100,000 USGS Quadrangle
Projection: NAD 1983 UTM Zone 12N
Surface Management: BLM ArcGIS Service accessed 10/28/2022
Image Source: ArcGIS Online, World Topographic Map

BRIGHTNIGHT, LLC Three Sisters Solar Project and Gen-Tie Line Certificate of Environmental Compatibility

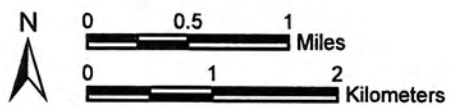
VICINITY MAP





Gen-Tie Route within:
 T16S, R25E, Portions of Sections 5 and 8,
 Cochise County, Arizona,
 Image Source: Maxar 10/07/2020

BRIGHTNIGHT, LLC
 Three Sisters Solar Project and Gen-Tie Line
 Certificate of Environmental Compatibility



AERIAL OVERVIEW

APPENDIX 3.
AGFD Email Letter

Catherine Esquer

From: Laura Paulson <lpaulson@azgfd.gov>
Sent: Tuesday, December 6, 2022 12:30 PM
To: BN_Three Sisters Solar Project
Cc: John Windes
Subject: Three Sisters Solar

Dear Three Sisters Project Team,

The Arizona Game and Fish Department recently received notice of a public meeting at Willcox Community Center to be held on December 7, 2022. We understand the proposed project involves an approximate 1-mile, 230 kV generation intertie transmission line that would be part of a larger solar energy facility in Cochise County, Arizona.

Are you able to provide information on the proposed Three Sisters Solar Energy facility itself (e.g. location shape files and the project concept)? This would greatly aid the Department's preliminary review of the project and help us develop feedback and formal recommendations for the project proponent's consideration.

Thank you in advance for any information you are able to provide. We look forward to hearing from you and coordinating with you as the project moves forward. Please do not hesitate to reach out to me should you have any questions or concerns regarding this request.

Best regards,

--

LAURA PAULSON | REGION 5 HABITAT, EVALUATION AND LANDS SPECIALIST
HABITAT EVALUATION, PUBLIC ACCESS AND LANDS
ARIZONA GAME AND FISH DEPARTMENT

OFFICE: 520.388.4447
MOBILE: 520.833.1833
EMAIL: lpaulson@azgfd.gov

azgfd.gov | 555 N Greasewood Rd Tucson, AZ 85745

Join our new [Conservation Membership](#) program and ensure a wildlife legacy for the future.



January 6, 2023

Ms. Kimberly Otero
Westland Engineering and Environmental Services, Inc.
4001 E. Paradise Falls Drive
Tucson, Arizona 85712

Electronically submitted to kotero@westlandresources.com

RE: Three Sisters Solar and Generation Intertie Transmission Line project

Dear Ms. Otero:

The Arizona Game and Fish Department (Department) appreciates the opportunity to review the proposed Three Sisters Solar and Generation Intertie Transmission Line project. The Department understands that BrightNight Power, Inc. (BrightNight) proposes to develop the Three Sisters Solar Power Project on approximately 2,000 acres of private land south of the city of Willcox in Cochise County, Arizona. The project includes construction of a one-mile, 230 kilovolt (kV) Generation Intertie transmission line that would connect the Three Sisters Solar Power Project to the regional power grid via the existing AEPSCO transmission line. The larger facility would include an approximate 2,000-acre solar array and two sub-stations and would occur on the southeast border of the Willcox Playa in undeveloped semi-desert grassland and Chihuahuan desert scrub.

Under Title 17 of the Arizona Revised Statutes, the Department, by and through the Arizona Game and Fish Commission (Commission), has jurisdictional authority and public trust responsibilities to conserve and protect the state fish and wildlife resources. In addition, the Department manages threatened and endangered species through authorities of Section 6 of the Endangered Species Act and the Department's Section 10(a)(1)(A) permit. It is the mission of the Department to conserve and protect Arizona's diverse fish and wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

The Department recognizes the importance of planning efforts to develop renewable energy locations that contribute to regional and state economic growth needs and would like to work closely with BrightNight and Westland Engineering and Environmental Consultants, Inc. (Westland) during the planning and development of this facility. The Department recognizes that appropriate coordination, proper planning, and voluntary implementation of best management practices allow projects to be developed that avoid, minimize, or offset potential impacts to wildlife and recreational access during development and operation of the facilities. For your consideration, the Department provides the following comments based on the agency's statutory

azgfd.gov | 520.628.5376

TUCSON OFFICE: 555 N. GREASEWOOD ROAD, TUCSON AZ 85745

**GOVERNOR: DOUGLAS A. DUCEY COMMISSIONERS: CHAIRMAN JAMES E. GOUGHNOUR, PAYSON | TODD G. GEILER, PRESCOTT
CLAY HERNANDEZ, TUCSON | MARSHA PETRIE SUE, SCOTTSDALE | LELAND S. "BILL" BRAKE, ELGIN
DIRECTOR: TY E. GRAY DEPUTY DIRECTOR: TOM P. FINLEY**

authorities, public trust responsibilities, and special expertise related to wildlife resources and recreation.

Arizona has recently seen an increase in the number of proposed and in-development renewable energy generation projects. Although each of these projects individually may have a minimal impact on the broader landscape, cumulatively these projects could result in loss of habitat, impact wildlife movements and populations, and affect wildlife-related recreation. Additionally, long-term effects to wildlife can extend several kilometers beyond the footprint of a solar project area ([Sawyer et al. 2022¹](#)). It is important to consider potential cumulative effects of projects such as the Three Sisters Solar facility, and Department staff are available to assist in identifying potential cumulative impacts to wildlife and associated voluntary conservation measures that can be implemented for the project.

The Department generated a project specific report using its Online Environmental Review Tool, or ERT. The tool can be found at <https://ert.azgfd.gov>. The ERT report identifies documented occurrences of special status species occurring within three miles of the project vicinity, as well as State Species of Greatest Conservation Need (SGCN) and Species of Economic and Recreation Importance (SERI), predicted or observed within the project vicinity. A PDF of the ERT report (HGIS-17990), dated December 13, 2022, is attached for your review and reference. The report does not provide an exhaustive list of species that could occur in the project area but can be used to guide preliminary decisions and assessment of the proposed project and conservation measures.

The project area occurs less than 0.25 miles from the [Willcox Playa/Cochise Lakes Important Bird Area²](#) (IBA). The Willcox Playa/Cochise Lakes area is of state and regional significance and serves as an important overwintering ground for Sandhill Cranes and numerous other avian species, including several shorebirds. Sandhill Cranes are present on the playa between October and March, and fly between roosting and feeding sites several times a day. Within the Sulphur Springs Valley, cranes typically travel between roost sites such as Crane Lake and Whitewater Draw to the many grain fields in the area.

The Department has concerns regarding the potential for bird fatalities or injuries (i.e., bird strikes) if avian species mistake the solar panels for open water. Large-scale solar photovoltaic facilities can result in bird mortality due to habitat loss, collision with panels, attraction due to an optical illusion of water, and unknown causes ([Kosciuch et al. 2020³](#)). The Department would welcome the opportunity to explore conservation measures with BrightNight that aim to reduce potential strikes and mortality of cranes and other avian species and to discuss additional elements that could further the state of knowledge of the potential cumulative effects of energy development on crane populations in the project area. Some additional recommendations include:

- Although some daytime reflectivity would still be expected, non-reflective coatings on the solar panels can reduce the appearance of the array as a body of water and reduce the

¹ <https://esajournals.onlinelibrary.wiley.com/doi/10.1002/fec.2498>

² https://aziba.org/?page_id=712

³ <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0232034>

attraction of birds to the site. Powerline strikes are a significant source of mortality for cranes and other large birds. Diverters or line marking devices can help reduce these effects. Recent research indicates that near-ultraviolet light Avian Collision Avoidance Systems can reduce the occurrence of crane strikes ([Dwyer et al. 2019⁴](#)).

- To minimize strike hazards for the cranes, the Department recommends siting the solar array and Gen-Tie line away from roost and agricultural fields to the maximum extent possible.
- The Department encourages BrightNight to implement post-construction monitoring for avian injuries and fatalities. Recommendations for monitoring design and frequency can be found in the U.S. Geological Survey's 2016 [Mortality Monitoring Design for Utility-Scale Solar Power Facilities⁵](#). Any avian injuries or fatalities should be reported both to the Department and by using the U.S. Fish and Wildlife Service's [Injury and Mortality Reporting⁶](#) website. Department staff are available to assist in developing the monitoring protocol and to further refine the monitoring and reporting recommendations in order to develop feasible and repeatable protocols to be implemented during operations. The Department is also available to help determine adaptive management measures based on results of the post-construction monitoring. For example, the U.S. Geological Survey has been conducting research that indicates birds are most attracted to solar arrays around midday and tilting of panels during key times of strikes could reduce bird attraction.

The Department offers the following recommendations to reduce impacts to wildlife and habitat based on the project information provided, review of the ERT Report, and knowledge of the project area. The Department also recommends reviewing [Guidelines for Solar Development in Arizona⁷](#) for more information.

- The Western Burrowing Owl, a special status species that is regulated under the Migratory Bird Treaty Act (MBTA), could occur within the project area. The Department recommends conducting occupancy surveys for western burrowing owls throughout the project area. Guidelines for conducting this survey are found in [Burrowing Owl Project Clearance Guidance for Landowners⁸](#). Please note that the surveys should be conducted by a surveyor who is certified by the Department or has similar qualifications. If an active burrowing owl burrow is detected, please contact the Department and the [U.S. Fish and Wildlife Service⁹](#) for direction, in accordance with the guidelines.
- The ERT report indicates four state Species of Greatest Conservation Need (SGCN) – White-faced Ibis, Desert Box Turtle, Ornate Box Turtle, and Plains Leopard Frog – have been documented within three miles of the project footprint. The Department

⁴https://www.researchgate.net/publication/333903783_Near-ultraviolet_light_reduced_Sandhill_Crane_collisions_with_a_power_line_by_98

⁵<https://pubs.usgs.gov/of/2016/1087/ofr20161087.pdf>

⁶<https://ecos.fws.gov/imr/welcome>

⁷<https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/FinalSolarGuidelines03122010.pdf>

⁸<https://www.azgfd.com/wildlife/speciesofgreatestconservneed/raptor-management/burrowing-owl-mangement/>

⁹<https://www.fws.gov/office/arizona-ecological-services/contact-us>

recommends documenting any observations of these species within the project area and is available to provide recommendations on targeted species surveys and suitable conservation measures. A variety of other SGCN also have the potential to occur within the project area. If wildlife are encountered during construction activities, the Department recommends moving them outside of the construction area, no more than 0.25 mile outside the project boundary within similar habitat.

- The Department recommends conducting avian surveys in order to better understand potential impacts and to inform conservation measures. Additionally, the Department recommends conducting surveys for nesting birds prior to construction activities that occur during the breeding season. The vegetation within the project area may provide nesting opportunities for avian species that are regulated under the MBTA and protected under state law. Breeding season for birds in this area is generally mid-January through late September, and raptor nesting season is generally January through late June. If it is anticipated the project will not be in compliance with MBTA, the Department recommends contacting the USFWS for technical assistance.
- Birds of prey, such as raptors, owls, vultures, and eagles, several species of which are known to occur in the project vicinity, are vulnerable to powerline strikes and electrocution during construction and operation of transmission lines; power poles can also serve as perches for birds of prey. The Department recommends implementing appropriate design features for these structures to minimize impacts to these species, including following standards established by the Avian Power Line Interaction Committee (APLIC), which can be found in [*Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006*](#)¹⁰ and [*Reduced Avian Collisions with Power Lines: The State of the Art in 2012*](#)¹¹. The Department's Raptor Management Coordinator, Tuk Jacobson, can provide information about any known eagle nesting areas in the vicinity as well as further information on specific design features and best management practices (raptors@azgfd.gov or 623-236-7575).
- Kit Fox could occur within the project area. Surveys for this species are encouraged to determine presence and to inform pre-construction activities. Department staff are available to assist in identifying suitable conservation measures if foxes or their burrows are detected, such as placing one-way exclosures that allow Kit Foxes to exit the burrows and disperse to adjacent lands.

Maintaining habitat connectivity is a high priority for the Department, and wildlife movement corridors are important for wildlife to respond to changing environmental conditions. If this project is approved, the Department is available to share its expertise on measures to reduce impacts to connectivity, including the following:

- The Department recommends maintaining open corridors across the project area to facilitate wildlife movement. The Department is available to provide assistance in identifying wildlife movement corridors during project development and to assist in identifying strategies for site design to maintain the ephemeral washes that occur in the project area in their natural state. These washes serve multiple functions in the

¹⁰ [https://www.aplic.org/uploads/files/2643/SuggestedPractices2006\(LR-2\).pdf](https://www.aplic.org/uploads/files/2643/SuggestedPractices2006(LR-2).pdf)

¹¹ https://www.aplic.org/uploads/files/15518/Reducing_Avian_Collisions_2012watermarkLR.pdf

ecosystem. Not only do they provide for hydrologic flow, which is important in areas that receive infrequent and isolated precipitation events, but these washes also contain riparian habitat that serve as landscape-level conveyance corridors for wildlife movement.

- To the extent possible, the Department recommends retaining habitat features underneath the panels, including vegetation and soils, instead of grading the entire site. The topography in the majority of the site is flat and would require minimal trimming of shrubs and existing vegetation to install the panels. Keeping the existing soil and root structures intact would serve to minimize erosional run-off and help reduce biodiversity loss within the site ([Grotsky and Hernandez 2020](#)¹²).
- The Department's [Wildlife Compatible Fencing Guidelines](#)¹³ provide information on how fencing impacts wildlife, ways to design fencing to prevent wildlife entanglement and impalement, and to ensure wildlife movement is not restricted. Department personnel are available as resources to help determine appropriate fencing design and layout that will achieve its objective while reducing impact to wildlife, such as leaving a 6–8-inch gap between the ground surface and bottom of the fence to allow for smaller wildlife species to move freely through the area and make use of any habitat within the project boundary.

Finally, the Department offers the following general recommendations to reduce potential impacts to wildlife and habitat during construction and operation of the facility:

- To minimize the potential introduction or spread of exotic invasive species, including aquatic and terrestrial plants, animals, insects, and pathogens, the Department recommends washing and/or decontaminating equipment before entering and leaving the site. See the [Arizona Department of Agriculture website](#)¹⁴ for a list of prohibited and restricted noxious weeds and the [Arizona Native Plant Society](#)¹⁵ for recommendations on how to control them. To view a list of documented invasive species or to report invasive species in or near your project area, visit [iMapInvasives](#)¹⁶, which is a national cloud-based application for tracking and managing invasive species.
- If trenching will occur for the proposed project, the Department recommends that trenching and backfilling crews be close together to minimize the amount of open trenches at any given time. Where trenches cannot be back-filled immediately, the Department recommends escape ramps be constructed at least every 90 meters. Escape ramps can be short lateral trenches or wooden planks sloping to the surface. The Department recommends that slopes be less than 45 degrees (1:1) and trenches that have been left open overnight be inspected to remove animals prior to backfilling.
- The Department recommends revegetating disturbed areas with native drought-tolerant species that represent the pre-construction vegetation characteristics and the surrounding landscape. Landscaping with native plants can help support wildlife and pollinator species in the area while reducing dust and erosion.

¹² <https://www.nature.com/articles/s41893-020-0574-x>

¹³ https://s3.amazonaws.com/azgfd-portal-wordpress/PortallImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/110125_AGFD_fencing_guidelines.pdf

¹⁴ <https://agriculture.az.gov/pestspest-control/agriculture-pests/noxious-weeds>

¹⁵ <https://aznps.com/invas>

¹⁶ <https://imap.natureserve.org/imap/services/page/map.html>

- Artificial lighting could impair the ability of nocturnal animals to navigate (e.g., owls, migratory birds, bats, and other nocturnal mammals) and may affect wildlife behavior and populations ([Davies et. al. 2013¹⁷](#)). The Department recommends using only the minimum amount of light needed for safety. The Department encourages the use of motion sensing lighting and narrow spectrum lighting as often as possible to lower the range of species affected by lighting. All lighting should be shielded, canted, or cut to ensure that light reaches only areas needing illumination.

The Department appreciates the opportunity to provide input on the Three Sisters Solar Project and looks forward to further coordination. If you have any questions regarding these comments or for further coordination, please contact Laura Paulson, the Region V Habitat, Evaluation, and Lands Specialist, at lpaulson@azgfd.gov or 520-388-4447.

Sincerely,



Raul Vega
Regional Supervisor, Tucson

Cc: Luke Thompson, Habitat, Evaluation, and Lands Branch Chief
Ginger Ritter, Project Evaluation Program Supervisor
Tiffany Sprague, Project Evaluation Program Specialist
John Windes, Region V Habitat Program Manager

AZGFD #M22-11305203

¹⁷ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3657119>

APPENDIX 4.
AZ Governor Office Letter



STATE OF ARIZONA

DOUGLAS A. DUCEY
GOVERNOR

EXECUTIVE OFFICE

November 28, 2022

Erik Ellis
13123 E Emerald Coast Pkwy
B158,
Inlet Beach, FL 32461

To Whom It May Concern,

Thank you for contacting the Governor's Office.

All meeting and event requests for the Governor must be detailed and submitted online to the Scheduling Office for review and consideration.

Thank you again for contacting the Governor's Office.

Sincerely,
Governor's Office of Constituent Services
CS/ga

APPENDIX 5.
Project Website



Three Sisters Solar Project

Delivering valuable capacity to fast-growing Cochise County, Arizona

The BrightNight Three Sisters project will feature 300-megawatts (MW) of solar and 300MW / 1200MWh of battery storage. Located on 2,300-acres in Cochise County, Arizona, this dispatchable power project will provide valuable capacity and economic investment to the region and its energy users. Also, it's infrastructure will operate without added burden to public systems such water and roads.

300 MW

Of clean, renewable energy

\$259M

Total economic investment over the life of the project

\$24.6M

In tax revenue over the life of the project

\$48.7M

In direct economic output during construction

250

Construction jobs and 3-5 permanent O&M careers

\$15.9M

In local labor income during construction

We are committed to sustainable
infrastructure



Agrivoltaics

A solar farm combined with a traditional agricultural activity, such as grazing, is referred to as "agrivoltaics." Sheep grazing maintains productive land and reduces vegetation management costs. Also, sheep are solar friendly; in fact, they enjoy the shade from our solar panels!



Pollinator Habitat

Once construction is complete, the project site will be seeded with a pollinator mix for ground cover. This approach will create a valuable pollinator habitat, increase crop production for neighboring farms, and reduce costly ground maintenance.



Low Water Impact

Solar + storage electricity is a smart choice for water conservation; this form of electricity generation requires minimal water use for occasional module cleaning.

Talk to the Three Sisters Team!

If you're interested in learning more about this project, our team can provide the latest information on project permitting and construction.

CONTACT



Ron Kiecana

Chief Development Officer

704-996-9307

ron@brightnightpower.com

CONTACT



Erik Ellis

Vice President of Development

602-549-4243

erik@brightnightpower.com

[ABOUT](#)

[CAREERS](#)

[CONTACT US](#)

[in](#)

[PRIVACY POLICY](#) [TERMS OF USE](#)

© 2022 BrightNight

APPENDIX 6.
Open House Sign-in Sheet

APPENDIX 7.
Community Brochure

Three Sisters Solar Project

Cochise County, Arizona



300 megawatts solar produced per year = **Power for nearly 40,000 homes**



Clean energy produced per year = **528,000 metric tons of CO₂** kept from entering the atmosphere

Who Is BrightNight

- BrightNight is a US based, renewable power company working to provide clean power projects for a decarbonized energy future.
- Our experts have a long professional history with more than 10,000 megawatts of projects installed and operated successfully.
- As an independent power producer, we work to become a part of your community so we can support your region's long-term goals over the life of our project.



The Three Sisters Solar Project will create **250 jobs** during construction and **3-5 permanent careers** in operations and maintenance.



The Three Sisters renewable power infrastructure will generate **\$48.7M in direct economic output** and **\$24.6M in local tax revenue** over the life of the project.



Panels are secured to posts which are driven into the ground without concrete. **This makes them especially environmentally friendly for the land they call home.**



When a solar project's life is complete, the project is removed, the site is turned to its original condition, and **the majority of project materials will be recycled.**



A common misconception is that solar panels create glare. However, **solar panels are designed to absorb sunlight** and convert the sun's rays into energy. Because of this, panels are designed to avoid producing glare as any light reflected is lost energy.



We incorporate some of the largest greenspaces around our projects in the industry. In areas where neighbors might be within view of our project, we design "vegetative screening" which is a **landscape plan that includes mature trees and plants** to shield the public view of the project.



Solar panels and their components are safe for the plants, animals, and people who live around them. Remember, the fundamental purpose of solar energy is to be environmentally friendly. As such, panels **do not generate emissions of any kind and do not pose any health risks.**



Solar projects make great neighbors! **They operate quietly and are monitored remotely.** You won't be able to hear the day-to-day operation of the project and you'll only notice onsite personnel for occasional maintenance on equipment and landscaping.



Our solar projects are safe and secure. We monitor the projects 24/7 with remote monitoring technology. And we install fencing around the perimeter to prevent unauthorized entry.



The Three Sisters Solar Project will produce significant tax revenue over the life of the project. These funds will go directly to local schools, fire districts, and Cochise County.

APPENDIX 8.
Comment Form

APPENDIX 9.
Newspapers Affidavit of Publication

AFFIDAVIT OF PUBLICATION

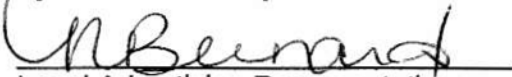
STATE OF ARIZONA)
 :SS.
County of Cochise)

Nancy Bernard, being first duly sworn, deposes and says that: (he) (she) is the Legal Advertising Representative of the Herald/Review Media newspaper printed and published three days a week in the City of Sierra Vista, County of Cochise, State of Arizona that this affidavit is Page 1 of 2 with the full text of the sworn-to notice set forth on the pages that follow, and the hereto attached was printed and published correctly in the regular and entire issue of said Herald/Review Media:

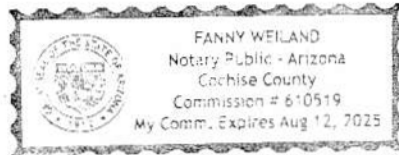
PUBLICATION DATES:
23 Nov 2022

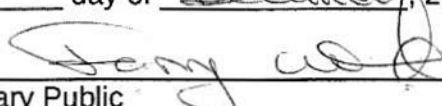
Notice ID: E9iUh2fqwgNSivXmANJh
Notice Name: Notice of Public Open House

Request of:
WestLand Engineering & Environmental Services
4001
by: Catherine Esquer


Legal Advertising Representative

VERIFICATION
STATE OF ARIZONA
COUNTY OF COCHISE



Signed or attested before me on this
7th day of December, 2022.

Notary Public
My Commission Expires: 8/12/2025

PUBLIC NOTICE

Notice of Public Open House for Preparation of Certificate of Environmental Compatibility (CEC) from the Arizona Corporation Commission (ACC) for BrightNight, LLC's Three Sisters Solar Project in Cochise County, Arizona

PROJECT:
BrightNight, LLC is proposing the Three Sisters Solar Project (Project) in unincorporated Cochise County, Arizona. The Project would consist of the development of approximately 2,000 acres for the solar array and a one-mile 230 kV gen-tie transmission line. The gen-tie line will interconnect the Project to the regional electric transmission grid at the existing AEPCCO 230kV transmission line, providing power to utilities and customers in Arizona and the Southwest. The project will include 300-megawatts (MW) of solar and 300MW / 1200MWh of battery storage. The array and battery storage area requires approval through a Cochise County Special Use Permit (SUP) and the transmission line will require a Certificate of Environmental Compatibility (CEC) from the Arizona Corporation Commission (ACC).

The solar array and battery storage area is situated on approximately 2,000 acres of undeveloped private lands presently used for cattle grazing southeast of the Willcox Playa located approximately 11 miles southeast of Interstate 10, 14 miles south of the town of Willcox, Arizona and approximately 2 miles east of U.S. Highway 191.

The 1-mile transmission line will include 7 to 10 power poles, a 20-ft wide access road for construction a maintenance and a new switchyard at the point of interconnection. A new substation will be constructed as part of the array area at the southern portion of the line.

DATES:
The public will have the opportunity learn more about the Project and provide comment during the public open house to be held at the Willcox Community Center located at 312 W. Stewart Street in Willcox, AZ. The public open house will be held on Wednesday, December 7 from 5:00- 7:00

PM. Refreshments will be provided.

PROJECT INFORMATION:

Project Information can be found online at: <https://brightnightpower.com/three-sisters>

Comments or Questions can be directed to: BN_ThreeSistersSolarProject@westlandresources.com

Publish: November 23, 2022

PUBLIC NOTICE

**PUBLIC NOTICE
Notice of Public Open House for Preparation of Certificate of Environmental Compatibility (CEC) from the Arizona Corporation Commission (ACC) for Bright-Night, LLC's Three Sisters Solar Project in Cochise County, Arizona**

PROJECT:

BrightNight, LLC is proposing the Three Sisters Solar Project (Project) in unincorporated Cochise County, Arizona. The Project would consist of the development of approximately 2,000 acres for the solar array and a one-mile 230 kV gen-tie transmission line. The gen-tie line will interconnect the

Project to the regional electric transmission grid at the existing AEP CO 230kV transmission line, providing power to utilities and customers in Arizona and the Southwest. The project will include 300-megawatts (MW) of solar and 300MW / 1200MWh of battery storage. The array and battery storage area requires approval through a Cochise County Special Use Permit (SUP) and the transmission line will require a Certificate of Environmental Compatibility (CEC) from the Arizona Corporation Commission (ACC).

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PROJECT INFORMATION:

Project Information can be found online at: <https://brightnightpower.com/three-sisters>

Comments or Questions can be directed to: BN_ThreeSistersSolarProject@westlandresources.com

Publish: November 23, 2022

**COCHISE COUNTY
SPECIAL USE PERMIT OUTREACH**

APPENDIX 10.
Project Newsletter with Open House Invitation
in English and Spanish (mailed 6/5/23)



13123 E Emerald Coast Pkwy
Ste B#158
Inlet Beach, FL 32461
info@brightnightpower.com

6/1/23

NAME
ADDRESS
ADDRESS

Dear Stakeholder and Neighbor,

BrightNight, a leading renewable power company, is proposing the Three Sisters Solar Project (Project) in Cochise County, AZ situated southeast of the Willcox Playa within unincorporated Cochise County. The Project is approximately 11 miles southeast of Interstate 10 (I-10), 14 miles south of the city of Willcox and approximately 2 miles east of U.S. Highway 191 (US 191), as shown in Attachment A to this letter. The Three Sisters Project would consist of the development of approximately 2,000 acres for a solar array with battery storage facility and a 1.5-mile long 230 kV gen-tie transmission line. The transmission gen-tie line will interconnect the Project to the regional electric transmission grid at the existing AEPCO 230 kV transmission line via a switchyard, providing clean, locally produced energy to utilities and customers in Arizona and the Southwest. A new substation will be constructed as part of the solar array and battery storage facility at the southern end of the gen-tie line. The Project will include up to 300 megawatts (MW) of photovoltaic solar power arrays and a 4-hour duration of battery storage system.

The gen-tie line was unanimously approved through a state public hearing and permitting process and has received a Certificate of Environmental Compatibility (CEC) from the Arizona Corporation Commission (ACC) on April 17, 2023. BrightNight will be submitting their application for the Cochise County Special Use Permit in late June 2023 to initiate the permit process for the solar and storage portion of the Project.

You are cordially invited to attend our second open house to learn more about BrightNight and the Three Sisters Project. We are happy to share our Project plans with the community along with the broader regional benefits this type of infrastructure investment will provide, including:

- Investment of \$259M in the local economy over the life of the Project, according to a study performed by Elliott Pollack and Associates
- Generation of \$34M in local property taxes, benefiting Cochise County and the local school districts
- Creation of 250-300 construction jobs and 3-5 long-term careers in operations and maintenance
- Attraction for major industries to the region prioritizing access to renewable power, and
- Production of enough clean, locally produced energy on an annual basis to power over 70,000 homes



During the information session, we will have informational displays including example photos of the equipment, the proposed project layout, and visual simulations from several vantage points around the Project area.

We also look forward to sharing details of our collaboration with Liberty Wildlife, the Pinal County Gold Canyon Garden Club, and Natural Restorations as part of our statewide initiative to conserve and support Arizona's invaluable flora and fauna. The BrightNight project team will be onsite to address questions and explain their process for bringing this project through construction and into operation.

We welcome your attendance at the following location, date, and time:

Willcox Community Center
312 W. Stewart Street
Willcox, AZ 85643

June 21, 2023
5:00 PM – 6:30 PM

Please visit our Project website at: <http://brightnightpower.com/three-sisters/>

To provide comments, email to: BN_ThreeSistersSolarProject@westlandresources.com

We welcome your input and questions. Please do not hesitate to reach the Project Team directly at the contact information above.

Sincerely,

A handwritten signature in blue ink, appearing to read "Erik Ellis", is placed above the printed name.

Erik Ellis
Vice President, Development



13123 E Emerald Coast Pkwy
Ste B#158
Inlet Beach, FL 32461
info@brightnightpower.com

Apreciado Sr.

Línea de dirección 1
Línea de dirección 2

Fecha: 1/6/23

Estimado interesado y vecino,

BrightNight, una destacada compañía de energía renovable, está proponiendo el Proyecto Solar Tres Hermanas (Proyecto) en el condado de Cochise, Arizona, ubicado al sureste de Willcox Playa, dentro del condado de Cochise no incorporado. El Proyecto se encuentra aproximadamente a 11 millas al sureste de la Interestatal 10 (I-10), a 14 millas al sur de la ciudad de Willcox y aproximadamente a 2 millas al este de la Carretera Estadounidense 191 (US 191), como se muestra en el Anexo A adjunto a esta carta. El Proyecto Tres Hermanas consistiría en el desarrollo de aproximadamente 2,000 hectáreas para una matriz solar con instalaciones de almacenamiento de baterías y una línea de transmisión interconexión de generación (gen-tie) de 230 kV de 1.5 millas de longitud. La gen-tie interconectará el Proyecto con la matriz de electricidad regional en la línea de transmisión de 230 kV existente de AEPCO a través de una subestación, proporcionando energía limpia y producida localmente a servicios públicos y clientes en Arizona y el suroeste. Se construirá una nueva subestación como parte de la matriz solar y las instalaciones de almacenamiento de baterías en el extremo sur de la línea de transmisión gen-tie. El Proyecto incluirá hasta 300 megavatios (MW) de energía solar fotovoltaica y un sistema de almacenamiento de baterías con una duración de 4 horas.

La línea gen-tie fue aprobada de manera unánime a través de un proceso de audiencia pública y permisos estatales, y ha recibido un Certificado de Compatibilidad Ambiental (CEC) de la Comisión de la Corporación de Arizona (ACC) el 17 de abril de 2023. BrightNight presentará su solicitud para el Permiso de Uso Especial del Condado de Cochise a fines de junio de 2023 para iniciar el proceso de permisos para la parte solar y de almacenamiento del Proyecto.

Lo invitamos cordialmente a asistir a nuestra segunda jornada de puertas abiertas para obtener más información sobre BrightNight y el Proyecto Tres Hermanas. Nos complace compartir nuestros planes de Proyecto con la comunidad, junto con los beneficios regionales más amplios que este tipo de inversión en infraestructura proporcionará, incluyendo:

- Una inversión de \$259 millones en la economía local durante la vida del Proyecto, según un estudio realizado por Elliott Pollack y Asociados.
- Generación de \$34 millones en impuestos locales a la propiedad, beneficiando al condado de Cochise y a los distritos escolares locales.
- Creación de 250-300 puestos de trabajo durante la construcción y de 3-5 empleos a largo plazo en operaciones y mantenimiento.
- Atracción de importantes industrias a la región, priorizando el acceso a energía renovable.



- Producción de suficiente energía limpia y producida localmente, a nivel anual, para abastecer más de 70,000 hogares.

Durante la sesión informativa, tendremos exhibiciones informativas que incluirán fotos ejemplares del equipamiento, el diseño propuesto del proyecto y simulaciones visuales desde varios puntos de vista en el área del Proyecto.

También esperamos compartir detalles de nuestra colaboración con Liberty Wildlife, el Club de Jardinería de Gold Canyon del condado de Pinal, y Natural Restorations como parte de nuestra iniciativa estatal para conservar y apoyar la valiosa flora y fauna de Arizona. El equipo del proyecto de BrightNight estará presente para responder a preguntas y explicar su proceso para llevar este proyecto desde la construcción hasta la operación.

Le damos la bienvenida a su asistencia en la siguiente ubicación, fecha y hora:

Centro Comunitario de Willcox
312 W. Stewart Street
Willcox, AZ 85643

21 de Junio de 2023
5:00 PM – 6:30 PM

Por favor, visite nuestro sitio web del Proyecto en: <http://brightnightpower.com/three-sisters/>

Para enviar comentarios, envíe un correo electrónico a:
BN_ThreeSistersSolarProject@westlandresources.com

Agradecemos sus aportes y preguntas. No dude en comunicarse directamente con el Equipo del Proyecto utilizando la información de contacto mencionada anteriormente.

Atentamente,

A handwritten signature in blue ink, appearing to read "Erik Ellis".

Erik Ellis
Vicepresidente, Desarrollo

APPENDIX 11.
Mailing List within 2 miles of Project Site

JACQUESHA J ALLEN
JULIEN R LEWIS
7500 EMMETT F LOWRY EXPY
APT 2108
TEXAS CITY, TX 77591

DAVID ANDERSON
ROBERT G ANDERSON, ET AL.
9028 N 38TH DR
PHOENIX, AZ 85051

DAVID L ANDERSON
ROBERT G ANDERSON, ET AL.
7288 N SILVER SHADOWS HTS PL
TUCSON, AZ 85743

WAYNE D ANDERSON
PO BOX 26427
TUCSON, AZ 85726

ALEJANDRO D ARRIAGA
2536 FILBERT ST
OAKLAND, CA 94607

KATHLEEN AUTREY
WAYNE ANDERSON
3227 N WILSON AVE
TUCSON, AZ 85719

KATHLEEN M AUTREY
WAYNE ANDERSON, ET AL.
7288 N SILVER SHADOWS HTS PL
TUCSON, AZ 85743

LINDA M & ERIC R BURNS
3220 N EASY ST
COCHISE, AZ 85606

JOSE LUIS & CYNTHIA B CARBAJAL
3110 N EASY ST
COCHISE, AZ 85606

COJANIS FAMILY TRUST
5525 E COPPER ST
TUCSON, AZ 85712

DAVID ADVENTURE LLC
1106 2ND ST APT 851
ENCINITAS, CA 92024

DONALD R ETUX EBNER
5576 PASEO MANZANILLO
TUCSON, AZ 85750

RICHARD G ELLIS
JERRY W ELLIS
PO BOX 315
WILLCOX, AZ 85644

FOLASA FAOA
18195 W LUNDBERG ST
SURPRISE, AZ 85388

MARGARET P FORGACH
4435 N SUMMER PL
TUCSON, AZ 85749

MARSHALL A & MICHELLE L
GOODWIN
1788 E KHARMA WAY
BENSON, AZ 85602

WILLIAM HEZLITT
KELLY HEZLITT, ET AL.
9475 S ROXANNE DR
TUCSON, AZ 85736

J-148 LLC
3306 N CIRCLE I RD
WILLCOX, AZ 85643

JACK J & ANNE E JOHANSEN
4372 4TH ST
WAYNE, MI 48184

JOHNSON RUTH
TESTAMENTARY TRUST
1720 W GRISWOLD RD
PHOENIX, AZ 85021

KAI TRUST
JOHN KAI, JR LLC ET AL.
P O BOX 2305
CORTARA, AZ 85652

AMANDEEP KAUR
PO BOX 636
CHOWCHILLA, CA 93610

KH TRANSPORTING LLC
9000 E BELLEVUE ST
TUCSON, AZ 85715

KIMERLY HOLDINGS LLC
1245 W GLENROSA AVE
PHOENIX, AZ 85013

ELSIE KLINE
PO BOX 1642
MOLINE, IL 61266

MERISSA LANCASTER
PRESTON JENKINS
15 WATERVILLE ST
WATERBURY, CT 6710

LIBERTY LAND & CATTLE CO, LLC
8387 N ORACLE RD STE 100
TUCSON, AZ 85704

BRADLEY J & HOLLY DUPUIS LLOYD
2245 N CONESTOGA AVE
TUCSON, AZ 85749

JEFFREY DOUGLAS MCINTYRE
1040 CAROLYN DR
WEST CHESTER, PA 19382

MILLER FAMILY LIVING TRUST
564 W 150 N
OREM, UT 84057

LUCIA MONTES
29398 N BLACKFOOT DAISY DR
QUEEN CREEK, AZ 85143

OMAR MONTES
29398 N BLACKFOOT DAISY DR
SAN TAN VALLEY, AZ 85143

FEIBE NAKIWALA
PO BOX 905
WILLCOX, AZ 85644

MARGARET M (PEGGY) O NEILL
BROWN LIVING TRUST
UNKNOWN ADDRESS
, 0
NOT MAILED

CHARLIE OAKES
11859 N 140TH LN
SURPRISE, AZ 85379

ROBERT EDWARD PACA
PACA BARBARA ET AL.
118 HERITAGE RD NE
DEMING, NM 88030

PEGGY E PARKS
3164 N EASY ST
COCHISE, AZ 85606

PONCHER S SALT CRK VLY
PROJECT INC
3252 SMOKE RD
VALPARAISO, IN 46385

TREVOR T PROBANDT
1106 2ND ST #851
ENCINITAS, CA 92024

EDWARD
3637 ANTISDALE AVE
CLEVELAND HGHS, OH 44118

REAL ESTATE MARKETPLACE LLC
2435 IRON POINT RD # 1028
FOLSOM, CA 95630

RESTORATION AMERICA INC
2815 FORBS AVE STE 107
HOFFMAN ESTATES, IL 60192

RIVERVIEW LLP
dba CORONADO FARMS LLP
26406 470TH AVE
MORRIS, MN 56267

DALE L RUSHTON
3440 TEXAS AVE
SIMI VALLEY, CA 93063

SCHUTZ MICHAEL FAM TRUST
3010 N 34TH PL
PHOENIX, AZ 85018

SHEET FAMILY TRUST
ADAM SHEET LIVING TRUST
7487 E MARIPOSA GRANDE DR
SCOTTSDALE, AZ 85255

CAROL L SMITH
REVOCABLE TRUST
6205 N PASCOLA CIR
TUCSON, AZ 85718

DEBRA A SOTOA
5417 LOS CAPANOS DR
SIERRA VISTA, AZ 85635

GARRY DIRK SOUTH
8404 S ANDERSON RD
WILLCOX, AZ 85643

KYLE & ANGELIQUESULLIVAN
5822 N TROON ST
COEUR D ALENE, ID 83815

CHING FANG SUN
10130 NW 54TH TER
DORAL, FL 33178

JEAN MARIE THOMPSON
10350 INWOOD RD
OSCEOLA, IN 46561

RICK & MINH TRUONG
938 E KNIGHTSBRIDGE WAY
GILBERT, AZ 85297

APPENDIX 12.
Mailing List of Project Stakeholders
(email and mailing list)

STAKEHOLDER LIST OF EMAILED SUP OPEN HOUSE NOTICES

(Phone and email information for non-public government contacts has been redacted for privacy)

| Contacts | Company | Phone Number | Email |
|---------------------------------|--------------------------------|--------------|--|
| Frank Shelton (Land Owner) | Shelton Ranch, LLC | redacted | N/A |
| William Riggs (Owner) | R9 Contracting | redacted | redacted |
| Kevin Wulf (Marketing Outreach) | River View | redacted | redacted |
| Rudy Schmidt (Farming) | River View | N/A | redacted |
| Christopher Werner (Farming) | River View | N/A | redacted |
| Adrian Cazares (Farming) | River View | N/A | redacted |
| Charlie Oakes | N/A | N/A | redacted |
| Peggy Judd | Cochise County Supervisor | 520-432-9200 | piudd@cochise.az.gov |
| Adam Sheet (Land Owner) | Land south of Andy Way | redacted | redacted |
| Dan Coxworth | Economic Development Services | 520-432-9268 | dcoxworth@cochise.az.gov |
| Robert Kirschmann | Planner | 520-432-9248 | RKirschmann@cochise.az.gov |
| Lisa Kramme | KMK Contracting | redacted | redacted |
| Jeff Stoddard | Director of Public Works | N/A | jstoddard@willcox.az.gov |
| Caleb Blaschke | Planner for Cochise County | N/A | cblaschke@willcox.gov |
| Daniel S. Duchon | Emergency Management, Director | 520-346-1044 | Dduchon@cochise.az.gov |
| | | | |
| | | | |
| | | | |
| | | | |



13123 E Emerald Coast Pkwy
Suite B #158
Inlet Beach, Florida 32461

Arizona Ecological Services Field Office – Tucson
U.S. Fish and Wildlife Service
201 N Bonita Avenue, Suite 141
Tucson, AZ 85745



13123 E Emerald Coast Pkwy
Suite B #158
Inlet Beach, Florida 32461

Sallie Diebolt, Chief
U.S. Army Corps of Engineers
3636 North Central Avenue, Suite 900
Phoenix, AZ 85012



13123 E Emerald Coast Pkwy
Suite B #158
Inlet Beach, Florida 32461

Matthew Walsh,
U.S. Army Intelligence Center of Excellence
1903 Hatfield St, Bldg 62711
Fort Huachuca, AZ 85613



13123 E Emerald Coast Pkwy
Suite B #158
Inlet Beach, Florida 32461

Billy Kovacs, District Director
Office of U.S. Congresswoman Ann Kirkpatrick, District 2
1636 N. Swan Rd
Tucson, AZ 85701



13123 E Emerald Coast Pkwy
Suite B #158
Inlet Beach, Florida 32461

Troy Kimball, Constituent Affairs Representative
Office of U.S. Senator Kyrsten Sinema
20 E. Ochoa St
Tucson, AZ 85701



13123 E Emerald Coast Pkwy
Suite B #158
Inlet Beach, Florida 32461

Karla Avalos, District Director
Office of U.S. Senator Mark Kelly
1661 N. Swan Rd
Tucson, AZ 85712



13123 E Emerald Coast Pkwy
Suite B #158
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Becky Akes, Councilman
City of Willcox
101 S. Railroad Ave Suite B
Willcox, AZ 85643



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Inlet Beach, Florida 32461

Greg Hancock, Councilman
City of Willcox
101 S. Railroad Ave Suite B
Willcox, AZ 85643



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Paul Sheats, Councilman
City of Willcox
101 S. Railroad Ave Suite B
Willcox, AZ 85643



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Inlet Beach, Florida 32461

Rachel Garza, Councilman
City of Willcox
101 S. Railroad Ave Suite B
Willcox, AZ 85643



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Suite B #158
Inlet Beach, Florida 32461

Carl Hestand, Councilman
City of Willcox
101 S. Railroad Ave Suite B
Willcox, AZ 85643



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Suite B #158
Inlet Beach, Florida 32461

Mike Laws, Mayor
City of Willcox
101 S. Railroad Ave Suite B
Willcox, AZ 85643



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Suite B #158
Inlet Beach, Florida 32461

Tim Bowlby, Vice Mayor
City of Willcox
101 S. Railroad Ave Suite B
Willcox, AZ 85643



13123 E Emerald Coast Pkwy
Suite B #158
Inlet Beach, Florida 32461

Crystal Hadfield, City Clerk/Finance Director
City of Willcox
101 S. Railroad Ave Suite B
Willcox, AZ 85643



13123 E Emerald Coast Pkwy
Suite B #158
Inlet Beach, Florida 32461

Dale Hadfield, Fire Chief/Director of Public Safety
City of Willcox
320 West Rex Allen Drive
Willcox, AZ 85643



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Suite B #158
Inlet Beach, Florida 32461

Caleb Blaschke, City Manager
City of Willcox
101 S. Railroad Ave Suite B
Willcox, AZ 85643



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Suite B #158
Inlet Beach, Florida 32461

Jeff Stoddard, Building Official/Utilities Director
City of Willcox
101 S. Railroad Ave Suite B
Willcox, AZ 85643



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Suite B #158
Inlet Beach, Florida 32461

Jackie Watkins
Director of Engineering & Natural Resources
Cochise County
1415 Melody Lane Building F
Bisbee, AZ 85603



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Suite B #158
Inlet Beach, Florida 32461

Peggy Judd, District 3 Supervisor, Vice-Chairman
Cochise County Board of Supervisors
1415 Melody Lane Building G
Bisbee, AZ 85603



13123 E Emerald Coast Pkwy
Suite B #158
Inlet Beach, Florida 32461

Tom Crosby, District 1 Supervisor
Cochise County Board of Supervisors
1415 Melody Lane Building G
Bisbee, AZ 85603



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Inlet Beach, Florida 32461

Ann English, District 2 County Supervisor, Chairman
Cochise County Board of Supervisors
1415 Melody Lane Building G
Bisbee, AZ 85603



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Suite B #158
Inlet Beach, Florida 32461

Jackie Watkins, Director
Cochise County Flood Control District
1415 Melody Lane Building F
Bisbee, AZ 85603



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Suite B #158
Inlet Beach, Florida 32461

Martin Haverty, Director of Public Works
Cochise County Public Works
1415 Melody Lane, Building F
Bisbee, AZ 85603



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Inlet Beach, Florida 32461

Project Evaluation Program, Habitat Branch
Arizona Game and Fish Department
5000 W. Carefree Hwy
Phoenix, AZ 85086



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Suite B #158
Inlet Beach, Florida 32461

Gail Griffin, AZ State House of Representatives, LD 14
Arizona State Representatives
1700 W Washington St, Room 225
Phoenix, AZ 85007



13123 E Emerald Coast Pkwy
Suite B #158
Inlet Beach, Florida 32461

David Gowan
Arizona State Senate, LD 14
1700 W Washington St, Room 200
Phoenix, AZ 85007



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Suite B #158
Inlet Beach, Florida 32461

Randi Bellassai, Assistant Director
Arizona Department of Mines and Minerals
1955 E 6th St
Tucson, AZ 85719



13123 E Emerald Coast Pkwy
Suite B #158
Inlet Beach, Florida 32461

Roderick Lane, District Engineer
Arizona Department of Transportation
1221 S Second Ave
Tucson, AZ 85713



13123 E Emerald Coast Pkwy
Suite B #158
Inlet Beach, Florida 32461

Bob Broscheid, Executive Director
Arizona State Parks and Recreation Department
23751 N 23rd Ave, #190
Phoenix, AZ 85085



13123 E Emerald Coast Pkwy
Suite B #158
Inlet Beach, Florida 32461

Lorraine Rivera, District Director
Office of Arizona Governor Douglas Ducey
400 W Congress St, Suite 504
Tucson, AZ 85701



13123 E Emerald Coast Pkwy
Suite B #158
Inlet Beach, Florida 32461

The Honorable Doug Ducey, Governor
Office of the Governor
1700 W Washington St
Phoenix, AZ 85007



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Suite B #158
Inlet Beach, Florida 32461

Mary L. Jackson
AEPCO
PO Box 670
Benson, AZ 85602



13123 E Emerald Coast Pkwy
Suite B #158
Inlet Beach, Florida 32461

Kathy Thatcher, President of the Board
AEPCO
1000 S. Highway 80
Benson, AZ 85602



13123 E Emerald Coast Pkwy
Suite B #158
Inlet Beach, Florida 32461

Curtis Nolan, Board President
SSVEC
350 N. Haskell Drive
Willcox, AZ 85643



13123 E Emerald Coast Pkwy
Suite B #158
Inlet Beach, Florida 32461

Kevin Barnes
AEPCO
1000 S. Highway 80
Benson, AZ 85602

APPENDIX 13.
Project Website (dated 6/20/23)



INVESTING IN THE SAFE, RELIABLE, CLEAN POWER FUTURE
OF COCHISE COUNTY, AZ

Three Sisters Solar Project

Delivering valuable capacity to fast-growing Cochise County, Arizona

The BrightNight Three Sisters project will feature 300-megawatts (MW) of solar and 300MW / 1200MWh of battery storage. Located on 2,300-acres in Cochise County, Arizona, this dispatchable power project will provide valuable capacity and economic investment to the region and its energy users. Also, it's infrastructure will operate without added burden to public systems such water and roads.

300 MW

Of clean, renewable energy

\$259M

Total economic investment over the life of the project

\$34.1M

In tax revenue over the life of the project

\$48.7M

In direct economic output during construction

250

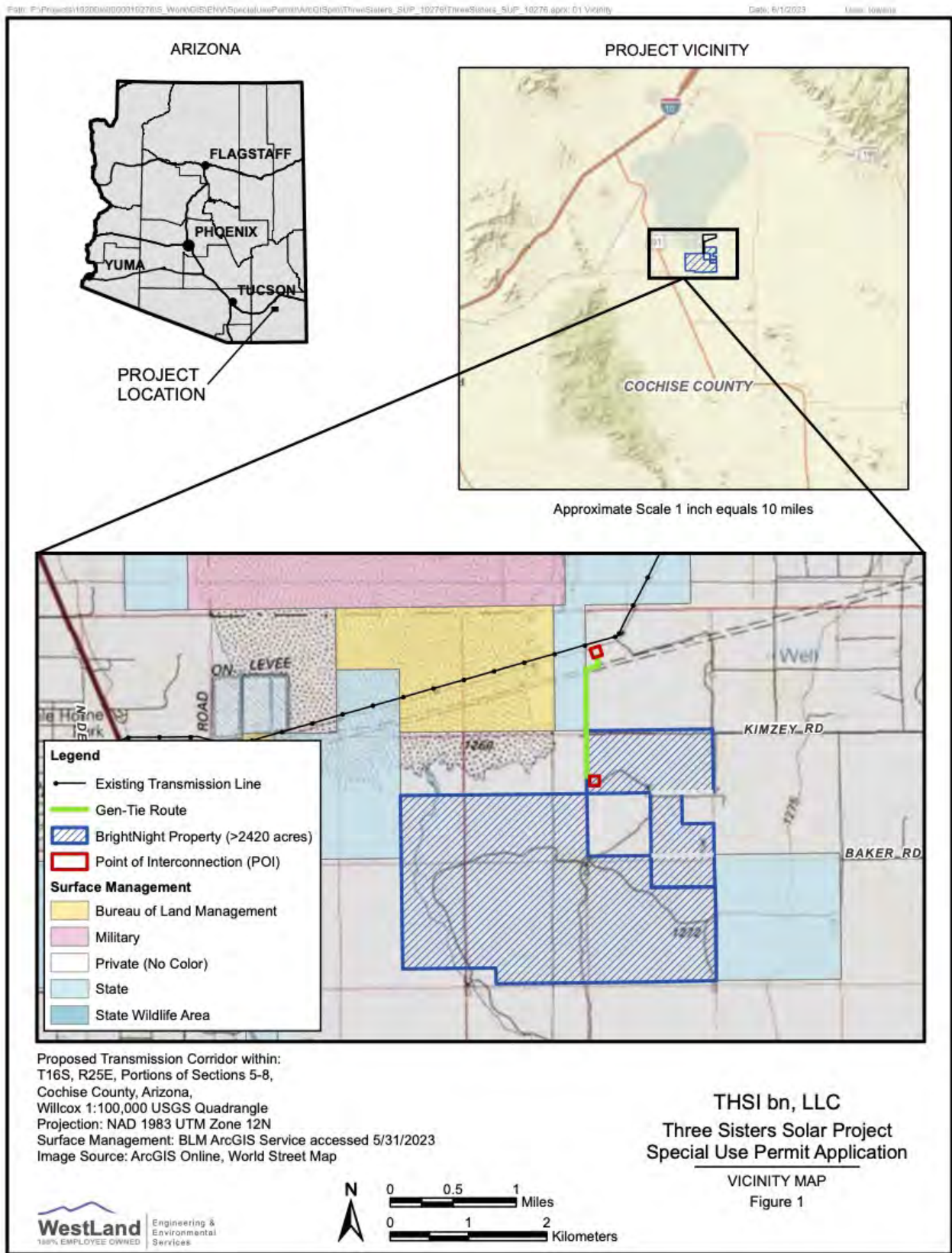
Construction jobs and 3-5 permanent O&M careers

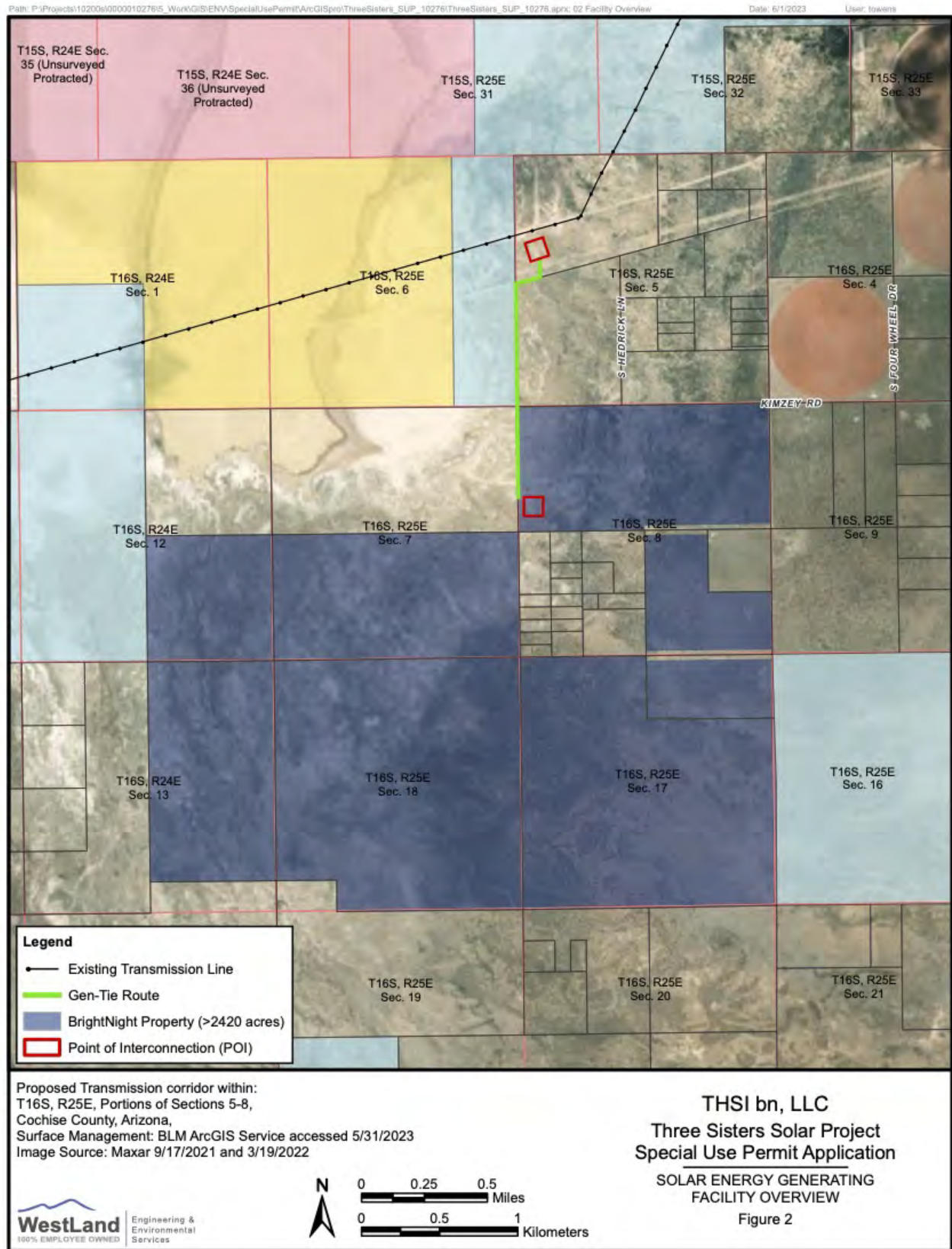
\$15.9M

In local labor income during construction

Project Location

The BrightNight Three Sisters Solar Project is located approximately 11 miles southeast of Interstate 10 (I-10), 14 miles south of the city of Willcox, and approximately 2 miles east of U.S. Highway 191 (US 191). Please refer to the maps below for a detailed depiction of the project's location.





Past Events & Documents

- [Application for Certificate of Environmental Compatibility + Exhibits](#)
- [Folleto de aviso público](#)
- **Feb. 27 – Mar. 1 – Certificate of Environmental Compatibility (CEC) Line Siting Hearing**
- **Feb. 27, 5:30- 6:30PM – CEC Hearing public comment period; The Willcox Community Center; 312 W Stewart St, Willcox, AZ 85643**
- [Prefiling Conference](#) – The Arizona Power Plant and Transmission Line Siting Committee
- [Gen-Tie Route Tour](#), Feb. 28, 9AM – Please refer to this route guide and map for details of the planned gen-tie route tour.
- [Pre-Conference Hearing](#) – CEC Pre-Conference Hearing documentation for the Three Sisters gen-tie proposal
- [Community Notice](#) – Informational notice distributed to project community members
- [Three Sisters CEC Hearing Transcript – Feb. 27, 2023](#) – Transcript of testimony provided on Day 1 of the Three Sisters CEC hearing for the proposed project gen-tie
- [Three Sisters CEC Hearing Transcript – Feb. 28, 2023](#) – Transcript of testimony provided on Day 2 of the Three Sisters CEC hearing for the proposed project gen-tie
- [Three Sisters CEC Committee Approval](#) – The Certificate of Environmental Compatibility (CEC) is granted to the BrightNight and its successors for the

construction of Three Sisters Solar 230 Kilovolt Gen-Tie Project by a vote of 9 to 0 in BrightNight's favor

Upcoming Events

- **Three Sisters Community Open House – June 21, 2023** – Join BrightNight and the Three Sisters project team to learn more about the benefits and proposed construction timeline. Experts will be on hand with project simulations and informational brochures to answer your questions. The Open House will take place at the Wilcox Community Center (312 W. Stewart Street, Wilcox, AZ 85643) from 5:00PM – 6:30PM.
- **Special Use Permit Hearing** – We are pleased to pursue a special use permit for our solar project from Cochise County. The date of the hearing is TBD. Updates to the schedule will be made here ASAP. Please visit this page for the latest information on all project related dates and documents.

Three Sisters Community Notices

- **CEC Transmission Line Permit Community Notice** – Informational notice distributed to project community members detailing the line siting permitting process and infrastructure details
- **Special Use Permit Community Notice** – Informational notice distributed to community members with details pertaining to the solar project infrastructure, the intent to request a Special Use Permit, and invitation details for a Three Sisters Community Open House event

Project FAQs

Thanks to exciting renewable energy adoption across the United States, most people are familiar with the benefits of solar power. But how it's developed, constructed, and maintained is complex. We've compiled a few FAQs to help address your questions.

- + How are solar projects installed?

- + How much electricity is generated by solar panels?

- + How do developers select the land they want for a solar project?

- + Why would a landowner choose to let a solar developer lease their land for a solar project?

- + What are the environmental benefits of a renewable power project for the community?

- + What are the financial benefits of a renewable power project for a community?

- + How do solar projects affect surrounding property values?

- + Is solar compatible with agriculture?

- + Do solar projects create glare?

- + Are there any health and safety concerns related to a solar project?

- + Are there long-term groundwater or stormwater concerns with utility-scale solar?

- + Who is responsible for the decommissioning of a solar project?

Talk to the Three Sisters Team

If you're interested in learning more about this project, our team can provide the latest information on project permitting and construction.

CONTACT



Ron Kiecana

Chief Development Officer
704-996-9307
ron@brightnightpower.com

CONTACT



Erik Ellis
Vice President of Development
602-549-4243
erik@brightnightpower.com

[ABOUT](#) [CAREERS](#) [CONTACT US](#)

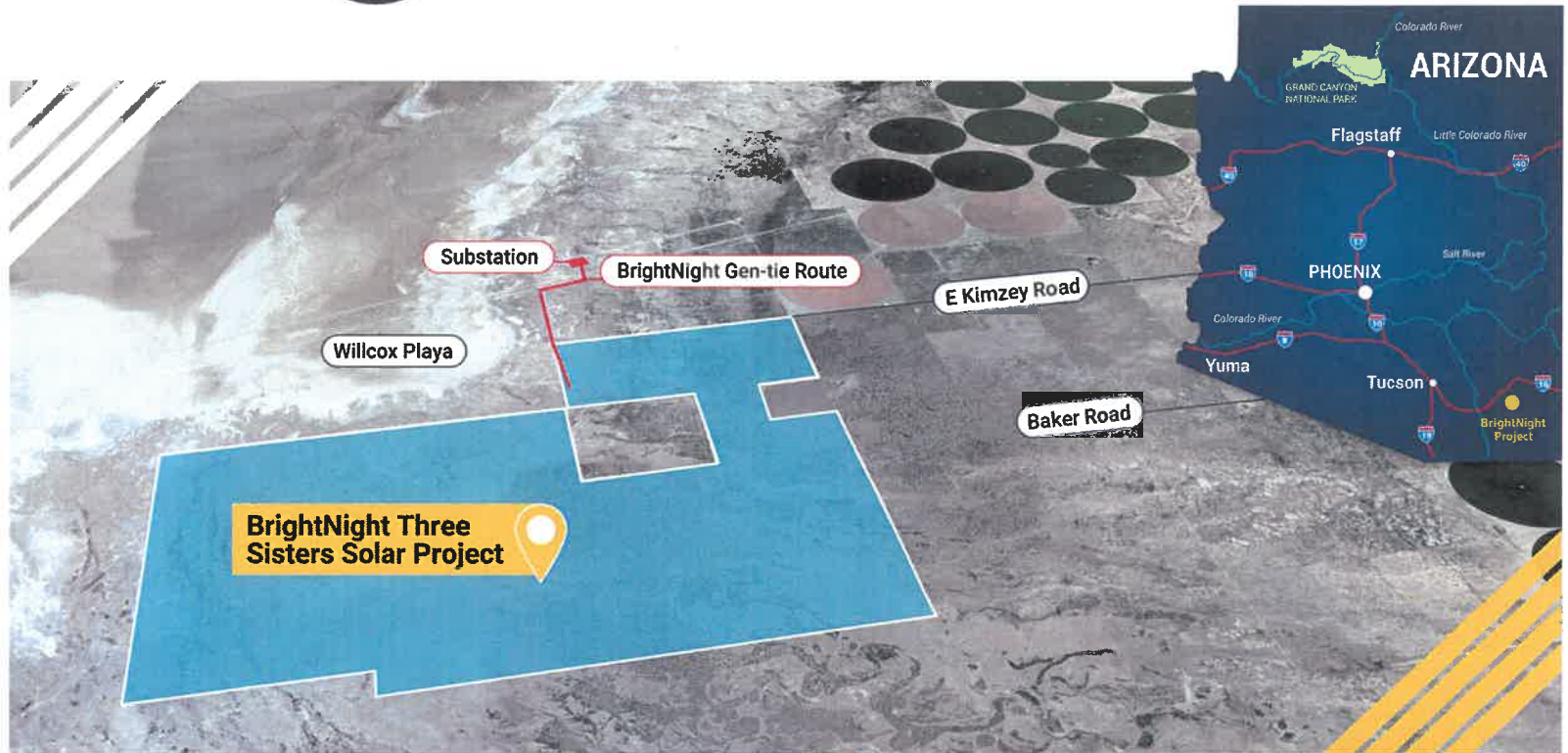


[PRIVACY POLICY](#) [TERMS OF USE](#)

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APPENDIX 14.
Open House Sign-in Sheet

APPENDIX 15.
Community Brochure (Open House Handouts)



Three Sisters

Delivering valuable capacity to a growing region

The BrightNight Three Sisters project will feature 300-megawatts (MW) of solar and 300MW / 1200MWh of battery storage. Located in Cochise County, Arizona, this dispatchable power project will provide valuable capacity and economic investment to the region and its energy users.

Regional project benefits include:



\$34M+ in tax revenue over the life of the project



250-300 jobs during construction



Up to **5 permanent** operations and maintenance (O&M) jobs



Valuable infrastructure that operates without added burden to public systems such as water and roads

The BrightNight Difference

Dispatchable

Our designs overcome the limitations of standard intermittent renewable energy

Hybrid

We combine renewable energy sources to deliver leading dispatchability

Optimized

Our proprietary software considers a broad set of customer data to optimize every solution

Large-scale

BrightNight projects are replacing baseload generation previously met by non-renewable sources

High Value - Low Cost

Innovative designs, technology selection, and our proprietary software deliver the highest value project at the lowest cost

Sustainable infrastructure

BrightNight strives to integrate sustainable development and long-term operations and maintenance practices. This approach is good for our project communities and often reduces project maintenance costs. The Three Sisters project will be a model of sustainable infrastructure, featuring:

- **Low Water Use.** Solar + storage electricity is a smart choice for water conservation; this form of electricity generation requires minimal water use for occasional module cleaning.
- **Price Security.** Renewable power purchase agreements (PPA) offer long-term price stability for customers impacted by volatile natural gas costs.

Providing reliability for a utility customer

BrightNight specializes in the development, construction, and operation of dispatchable renewable power projects for utilities that are working to meet growing demand and address challenging reliability factors. The BrightNight Three Sisters project features include:

- **Capacity Replacement.** Our optimized solar + storage solution will provide valuable capacity ahead of planned coal generation retirements in the region
- **Battery Storage.** Optional battery storage available to support the delivery of “on demand” dispatchable renewable capacity
- **Ideal Location.** Our extensive site search secured an area with strong solar generation potential, favorable topography, and regional support for energy infrastructure development.

Ready to talk?

If you're interested in learning more about this project, our team can provide the latest information on project permitting and construction.



Ron Kiecana Chief Development Officer

Ron is an experienced leader with 28 years of proven success and \$3.6B in completed power generation projects. Prior to joining BrightNight, Ron co-founded IMG Midstream, which is the first company to develop and construct a 126 MW portfolio located near gas production areas.

ron@brightnightpower.com
704-996-9307



Erik Ellis Vice President of Development

Erik is an experienced leader with a deep understanding of storage and renewable power project development and business planning. He previously worked at leading companies, including GE, First Solar, EDF Renewables, and Arizona Public Service.

erik@brightnightpower.com
602-549-4243

Three Sisters Solar Project

Cochise County, Arizona



300 megawatts solar produced per year =
Power for nearly 40,000 homes



Clean energy produced per year =
528,000 metric tons of CO₂ kept from entering the atmosphere

Who Is BrightNight

- BrightNight is a US based, renewable power company working to provide clean power projects for a decarbonized energy future.
- Our experts have a long professional history with more than 10,000 megawatts of projects installed and operated successfully.
- As an independent power producer, we work to become a part of your community so we can support your region's long-term goals over the life of our project.



The Three Sisters Solar Project will create **250 jobs** during construction and **3-5 permanent careers** in operations and maintenance.



The Three Sisters renewable power infrastructure will generate **\$48.7M in direct economic output** and **\$24.6M in local tax revenue** over the life of the project.



Panels are secured to posts which are driven into the ground without concrete. **This makes them especially environmentally friendly for the land they call home.**



When a solar project's life is complete, the project is removed, the site is turned to its original condition, and **the majority of project materials will be recycled.**



A common misconception is that solar panels create glare. However, **solar panels are designed to absorb sunlight** and convert the sun's rays into energy. Because of this, panels are designed to avoid producing glare as any light reflected is lost energy.



We incorporate some of the largest greenspaces around our projects in the industry. In areas where neighbors might be within view of our project, we design "vegetative screening" which is a **landscape plan that includes mature trees and plants** to shield the public view of the project.



Solar panels and their components are safe for the plants, animals, and people who live around them. Remember, the fundamental purpose of solar energy is to be environmentally friendly. As such, panels **do not generate emissions of any kind and do not pose any health risks.**



Solar projects make great neighbors! **They operate quietly and are monitored remotely.** You won't be able to hear the day-to-day operation of the project and you'll only notice onsite personnel for occasional maintenance on equipment and landscaping.



Our solar projects are safe and secure. We monitor the projects 24/7 with remote monitoring technology. And we install fencing around the perimeter to prevent unauthorized entry.



The Three Sisters Solar Project will produce significant tax revenue over the life of the project. These funds will go directly to local schools, fire districts, and Cochise County.

**APPENDIX 16.
Comment Form**

APPENDIX 17.
Newspaper Publication Documentation
(published on 6/7/23)

Notice of Public Open House for a Special Use Permit from Cochise County for BrightNight’s Three Sisters Solar Project

PROJECT:

BrightNight, a leading renewable power company, is proposing the Three Sisters Solar Project (Project) situated southeast of the Willcox Playa within unincorporated Cochise County. The Project is approximately 11 miles southeast of Interstate 10 (I-10), 14 miles south of the city of Willcox and approximately 2 miles east of U.S. Highway 191 (US 191). The Three Sisters Project would consist of the development of approximately 2,000 acres for a solar array with battery storage facility and a 1.5-mile long 230 kV gen-tie transmission line. The transmission gen-tie line will interconnect the Project to the regional electric transmission grid at the existing AEPCO 230 kV transmission line via a switchyard, providing clean, locally produced energy to utilities and customers in Arizona and the Southwest. A new substation will be constructed as part of the solar array and battery storage facility at the southern end of the gen-tie line. The Project will include up to 300 megawatts (MW) of photovoltaic solar power arrays and a 4-hour duration of battery storage system.

The gen-tie line was unanimously approved through a state public hearing and permitting process and received a Certificate of Environmental Compatibility (CEC) from the Arizona Corporation Commission (ACC) on April 17, 2023. BrightNight will be submitting their application for the Cochise County Special Use Permit in late June 2023 to initiate the permit process for the solar and storage portion of the Project.

DATES:

The public will have the opportunity learn more about the Project and provide comment during the public open house to be held at the Willcox Community Center located at 312 W. Stewart Street in Willcox, AZ. The public open house will be held on Wednesday, June 21 from 5:00- 6:30 PM.

PROJECT INFORMATION:

Project Information can be found online at: <https://brightnightpower.com/three-sisters>

Comments or Questions can be directed to: BN_ThreeSistersSolarProject@westlandresources.com

Column Software PBC
 PO Box 208098
 Dallas, TX 75320-8098
help.column.us

Receipt number
 Invoice number C3A04844-0001
 Notice ID h0I93YKFwPBsk2gfXv0
 Publisher Herald/Review Media
 Date paid Jun 5, 2023
 Payment method MASTERCARD - 2456

Paid by
 WestLand Engineering and Environmental

| Description | Qty | Unit price | Amount |
|---------------------------|-----|------------|--------|
| 06/09/2023: Custom Notice | 1 | 104.43 | 104.43 |

=== Notes ===

Notice Name: Public Notice BrightNights 3 Sisters Solar

| | |
|--------------------|-----------------|
| Subtotal | \$104.43 |
| Tax | 1.60 |
| Amount paid | \$106.03 |

APPENDIX 18.
Photos from the Open House

Photos of SUP Open House Setup (Dec 21, 2023) at the Willcox Community Center



ATTACHMENT C
Visual Simulations

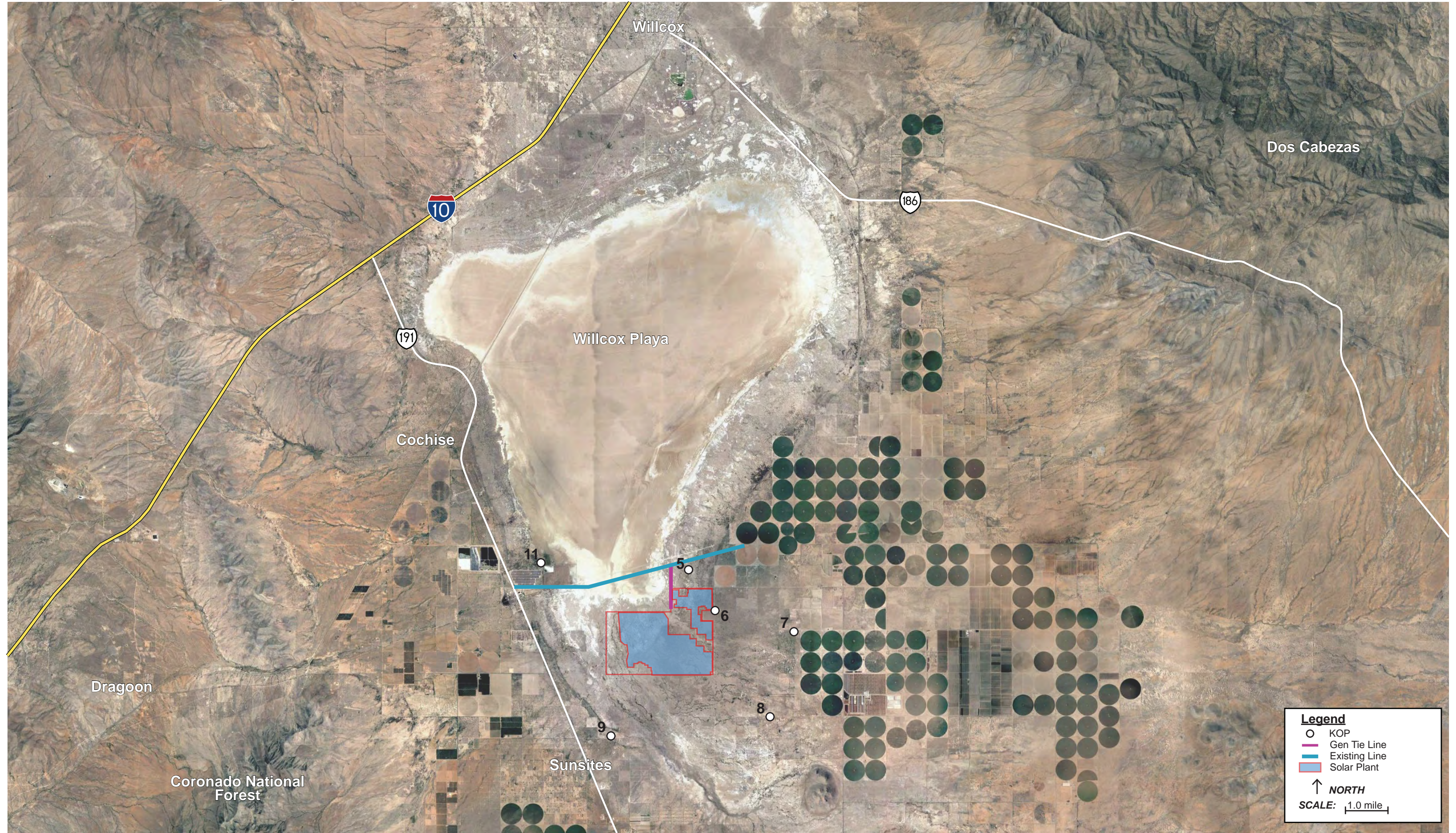


***Three Sisters Solar Project
Visual Resource Exhibit***

Visual Simulations

Prepared For:
Westland Resources, Inc.
by
Jeremy Palmer | Sole Proprietor

June 12, 2023



Preliminary Key Observation Points

Key Observation Point (KOP) # 5



Vicinity Map



Project Map

Legend

- Existing Transmission
- 230kV Line
- KOP



Legend

- KOP
- 230kV Pole
- 230kV Route
- Existing Line
- Solar Array
- Fence

Notes:

Camera Information

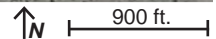
- Type: Canon EOS RP
- Sensor: CMOS (Full-Frame) 35.9mm x 24mm
- Lens: Canon RF 24-105mm f/4-7.1 IS STM
- Focal Length: 35mm | F-Stop: 5.6 | ISO:100
- Dimensions in pixel: 6240 x 4160

KOP

- Representative View for: residential traffic
- Location: South Hedrick Lane
- Latitude: 32.069543° N; Longitude: 109.823555° W
- View Point Elevation at Eye Level: 4,175 ft.
- Looking: south southeast
- Visible: Fencing, Solar Array Structures
- Image File Name: IMG_2063.JPG

Simulation Notes

- Photo Taken: May 26, 2023, 10:34 AM
- The image is based on a single photo and represent approximately 54 degree horizontal field of view.
- This view is approximately 1,695 feet north of the nearest object represented in the simulation.
- The simulation is based on the best information available and is preliminary. Final alignment and structure locations are subject to change based on final engineering and other factors.



Key Observation Point (KOP) #5



Existing Condition



Simulated Condition

Key Observation Point (KOP) # 6 west



Vicinity Map



Project Map

Legend

- Existing Transmission
- 230kV Line
- KOP



Legend

- KOP
- 230kV Pole
- 230kV Route
- Existing Line
- Solar Array
- Fence

↑N | 900 ft.

Notes:

Camera Information

- Type: Canon EOS RP
- Sensor: CMOS (Full-Frame) 35.9mm x 24mm
- Lens: Canon RF 24-105mm f/4-7.1 IS STM
- Focal Length: 50mm | F-Stop: 10 | ISO:100
- Dimensions in pixel: 6240 x 4160

KOP

- Representative View for: residential traffic
- Location: 8404 S. Anderson Road
- Latitude: 32.057744° N; Longitude: 109.813402° W
- View Point Elevation at Eye Level: 4,193 ft.
- Looking: west northwest
- Visible: Solar Array, Fence, and H-Frame Structures
- Image File Name: IMG_1717.JPG

Simulation Notes

- Photo Taken: October 08, 2022, 2:35 PM
- The image is based on a single photo and represent approximately 39.5 degree horizontal field of view.
- This view is approximately 68 feet southeast of the nearest structure represented in the simulation.
- The simulation is based on the best information available and is preliminary. Final alignment and structure locations are subject to change based on final engineering and other factors.

Key Observation Point (KOP) #6 west



Existing Condition



Simulated Condition

Key Observation Point (KOP) # 6 south



Vicinity Map



Project Map

- Legend**
- Existing Transmission
 - 230kV Line
 - KOP



- Legend**
- KOP
 - 230kV Pole
 - 230kV Route
 - Existing Line
 - Solar Array
 - Fence

↑N | 900 ft.

Notes:

Camera Information

- Type: Canon EOS RP
- Sensor: CMOS (Full-Frame) 35.9mm x 24mm
- Lens: Canon RF 24-105mm f/4-7.1 IS STM
- Focal Length: 50mm | F-Stop: 10 | ISO:100
- Dimensions in pixel: 6240 x 4160

KOP

- Representative View for: residential traffic
- Location: 8404 S. Anderson Road
- Latitude: 32.057744° N; Longitude: 109.813402° W
- View Point Elevation at Eye Level: 4,193 ft.
- Looking: southwest
- Visible: Solar Array, Fence, and H-Frame Structures
- Image File Name: IMG_1719.JPG

Simulation Notes

- Photo Taken: October 08, 2022, 2:35 PM
- The image is based on a single photo and represent approximately 39.5 degree horizontal field of view.
- This view is approximately 1,510 feet northeast of the nearest structure represented in the simulation.
- The simulation is based on the best information available and is preliminary. Final alignment and structure locations are subject to change based on final engineering and other factors.

Key Observation Point (KOP) #6 south



Existing Condition



Simulated Condition

Key Observation Point (KOP) # 7

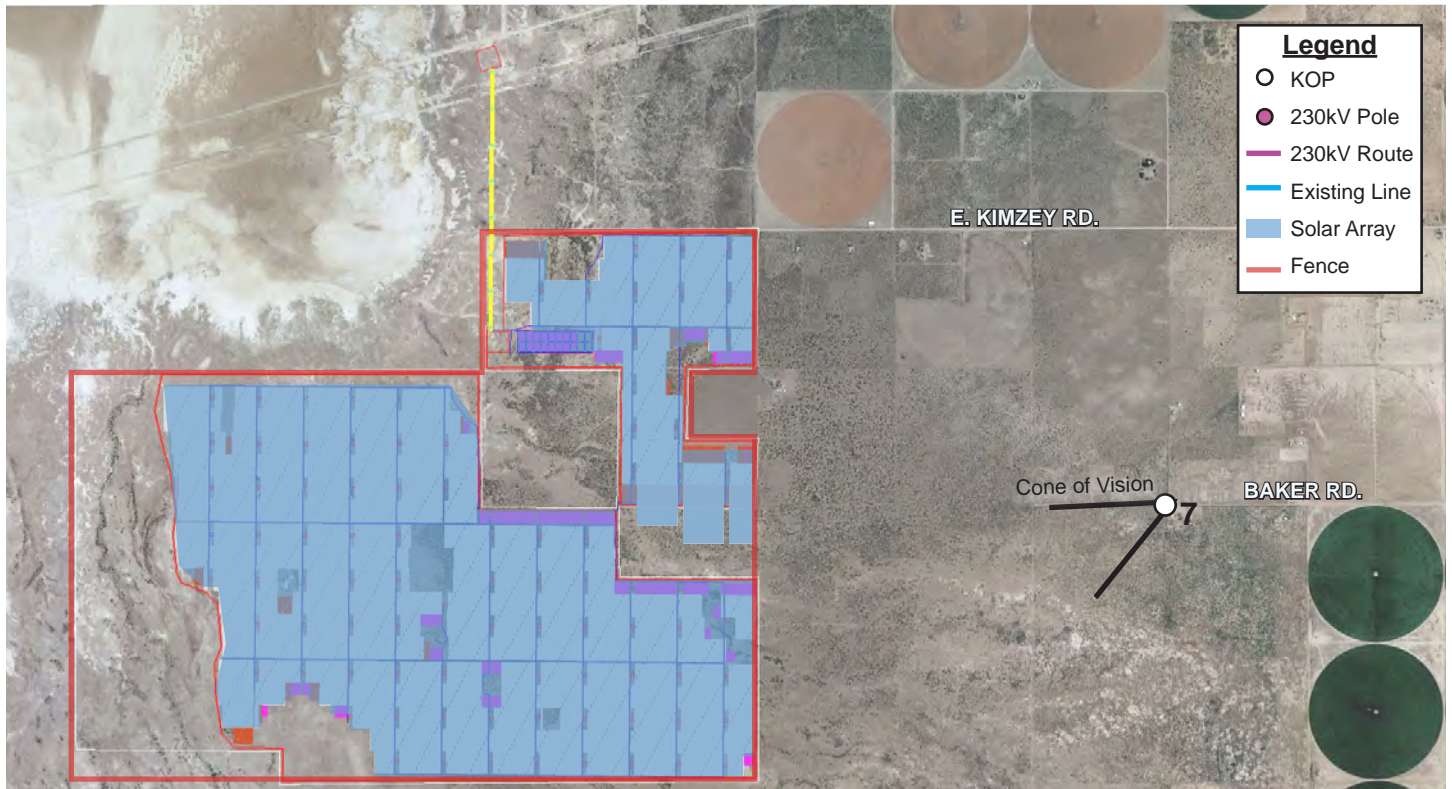


Vicinity Map



Project Map

- Legend**
- Existing Transmission
 - 230kV Line
 - KOP



↑N | 2,500 ft.

Notes:

Camera Information

- Type: Canon EOS RP
- Sensor: CMOS (Full-Frame) 35.9mm x 24mm
- Lens: Canon RF 24-105mm f/4-7.1 IS STM
- Focal Length: 35mm | F-Stop: 9 | ISO:100
- Dimensions in pixel: 6240 x 4160

KOP

- Representative View for: residential traffic and community center visitors
- Location: 2919 East Baker Road
- Latitude: 32.050507° N; Longitude: 109.788621° W
- View Point Elevation at Eye Level: 4,196 ft.
- Looking: west southwest
- Visible: Solar Array, Fence Structures
- Image File Name: IMG_2198.JPG

Simulation Notes

- Photo Taken: May 26, 2023, 11:13 AM
- The image is based on a single photo and represent approximately 54 degree horizontal field of view.
- This view is approximately 7,948 ft. east of the nearest structure represented in the simulation.
- The simulation is based on the best information available and is preliminary. Final alignment and structure locations are subject to change based on final engineering and other factors.

Key Observation Point (KOP) #7



Existing Condition



Simulated Condition

Key Observation Point (KOP) # 8



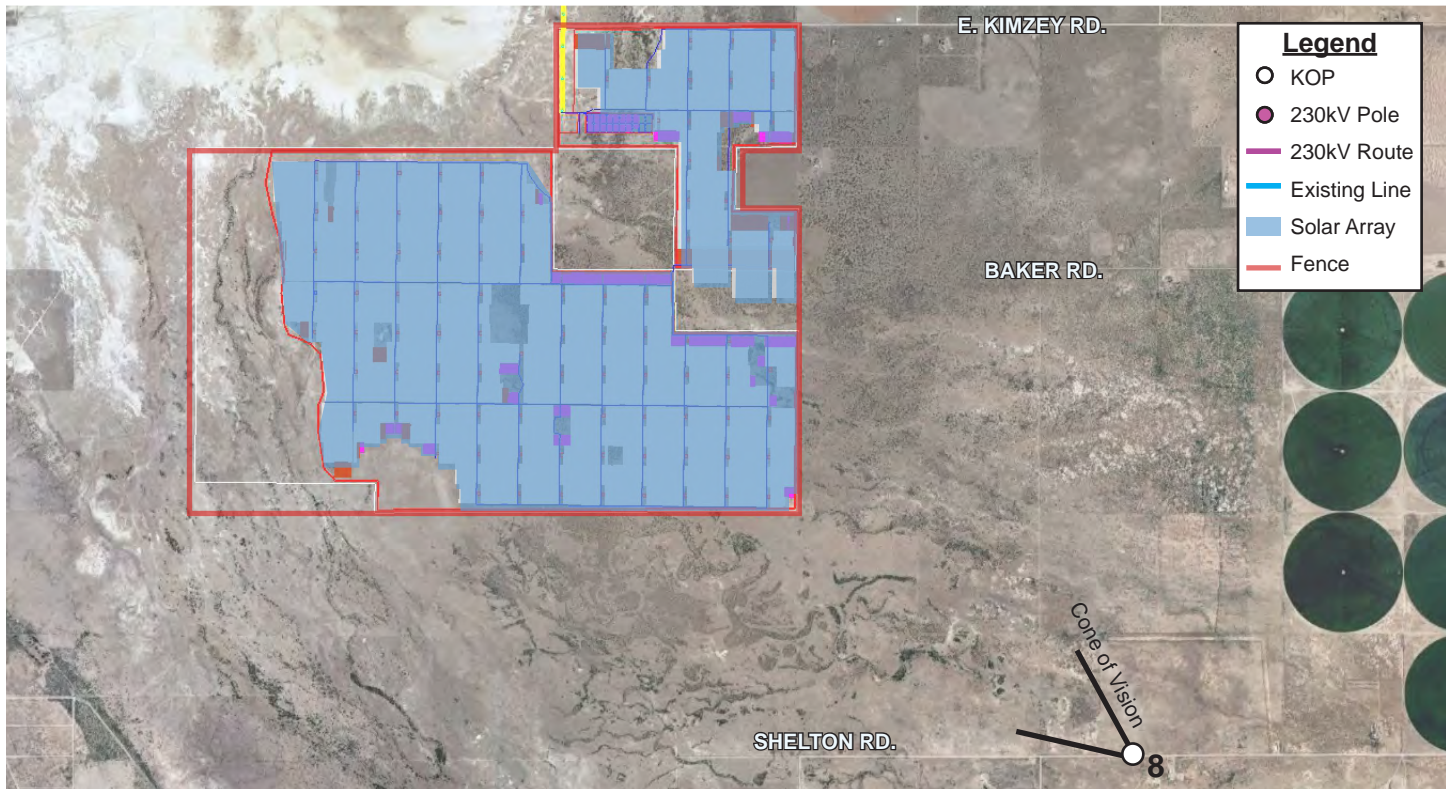
Vicinity Map



Project Map

Legend

- Existing Transmission
- 230kV Line
- KOP



Legend

- KOP
- 230kV Pole
- 230kV Route
- Existing Line
- Solar Array
- Fence

Notes:

Camera Information

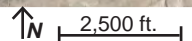
- Type: Canon EOS RP
- Sensor: CMOS (Full-Frame) 35.9mm x 24mm
- Lens: Canon RF 24-105mm f/4-7.1 IS STM
- Focal Length: 50mm | F-Stop: 10 | ISO:100
- Dimensions in pixel: 6240 x 4160

KOP

- Representative View for: residential traffic
- Location: 3000 East Shelton Road
- Latitude: 32.021561° N; Longitude: 109.790947° W
- View Point Elevation at Eye Level: 4,208 ft.
- Looking: northwest
- Visible: Solar Array, Substation, Fence, H-Frame Structures
- Image File Name: IMG_1784.JPG

Simulation Notes

- Photo Taken: October 08, 2022, 3:05 PM
- The image is based on a single photo and represent approximately 39.5 degree horizontal field of view.
- This view is approximately 3.41 miles southeast of the nearest structure represented in the simulation.
- The simulation is based on the best information available and is preliminary. Final alignment and structure locations are subject to change based on final engineering and other factors.



Key Observation Point (KOP) #8



Existing Condition



Simulated Condition

Key Observation Point (KOP) # 9

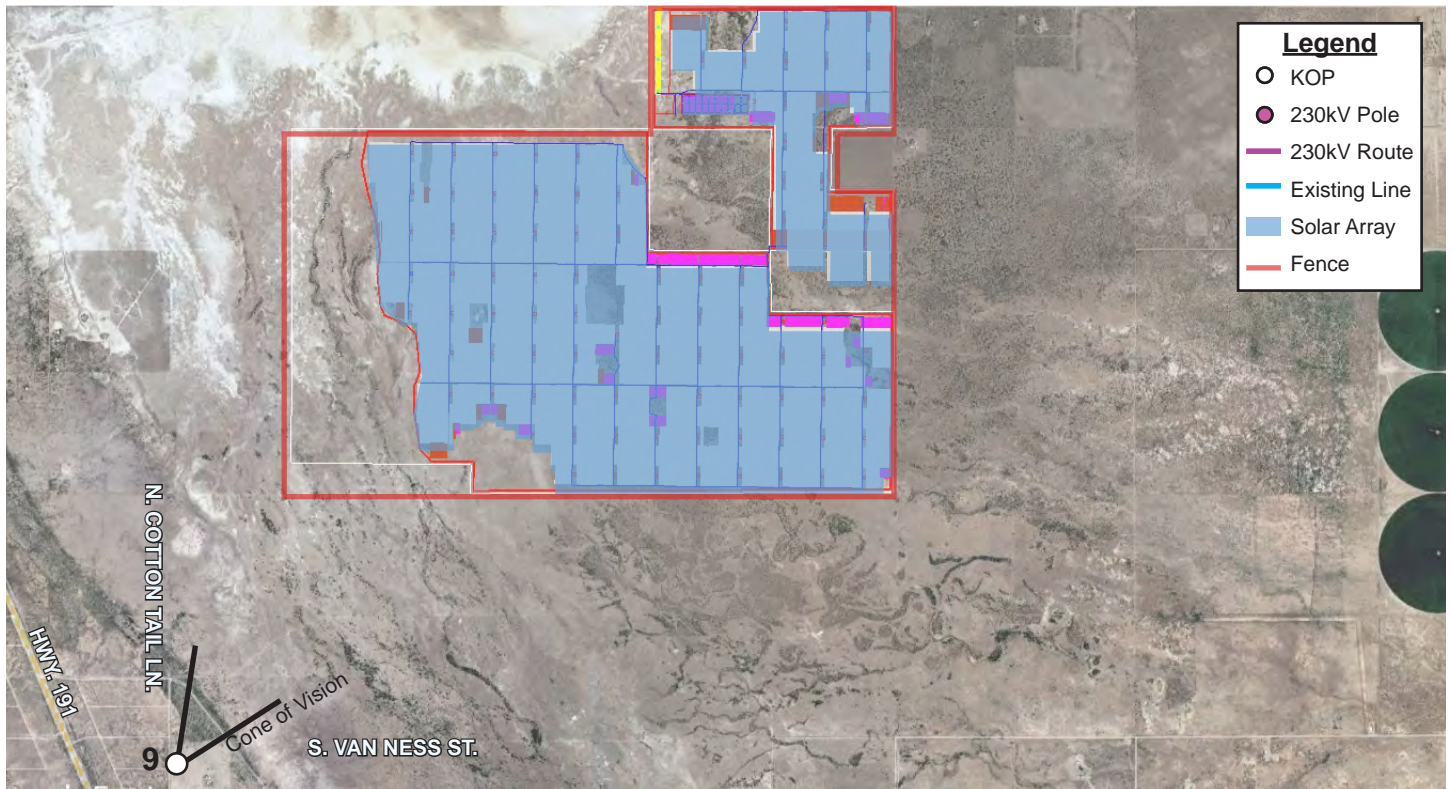


Vicinity Map



Project Map

- Legend**
- Existing Transmission
 - 230kV Line
 - KOP



- Legend**
- KOP
 - 230kV Pole
 - 230kV Route
 - Existing Line
 - Solar Array
 - Fence

Notes:

Camera Information

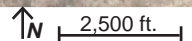
- Type: Canon EOS RP
- Sensor: CMOS (Full-Frame) 35.9mm x 24mm
- Lens: Canon RF 24-105mm f/4-7.1 IS STM
- Focal Length: 50mm | F-Stop: 7.1 | ISO:100
- Dimensions in pixel: 6240 x 4160

KOP

- Representative View for: residential traffic
- Location: 600 East Van Ness Street
- Latitude: 32.014152° N; Longitude: 109.856348° W
- View Point Elevation at Eye Level: 4,196 ft.
- Looking: north northeast
- Visible: Solar Array, Fence, Substation, H-Frame Structures
- Image File Name: IMG_1604.JPG

Simulation Notes

- Photo Taken: October 08, 2022, 12:53 PM
- The image is based on a single photo and represent approximately 39.5 degree horizontal field of view.
- This view is approximately 9,261 ft south southwest of the nearest structure represented in the simulation.
- The simulation is based on the best information available and is preliminary. Final alignment and structure locations are subject to change based on final engineering and other factors.



Key Observation Point (KOP) #9



Existing Condition



Simulated Condition

Key Observation Point (KOP) # 11



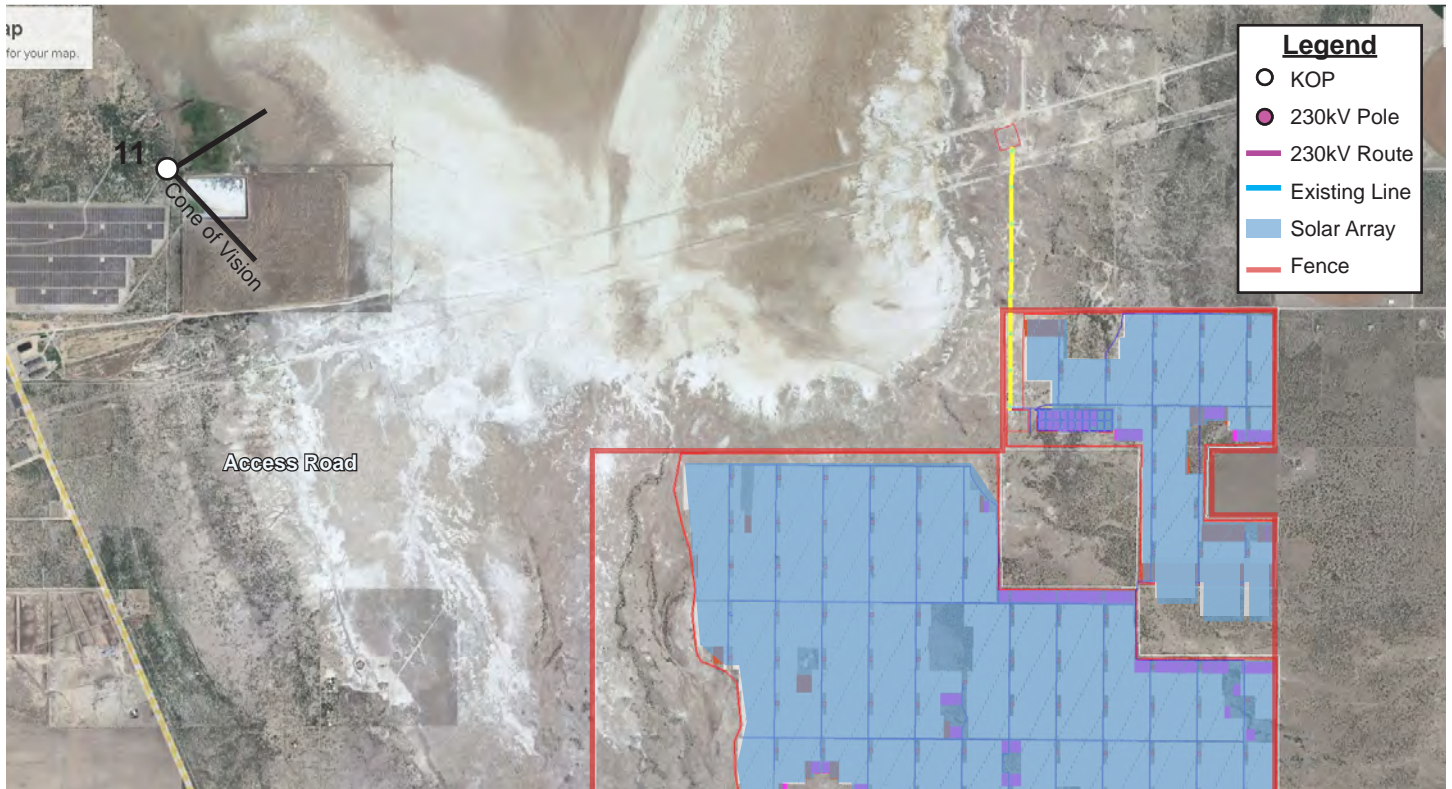
Vicinity Map



Project Map

Legend

- Existing Transmission
- 230kV Line
- KOP



Legend

- KOP
- 230kV Pole
- 230kV Route
- Existing Line
- Solar Array
- Fence

↑N 2,500 ft.

Notes:

Camera Information

- Type: Canon EOS RP
- Sensor: CMOS (Full-Frame) 35.9mm x 24mm
- Lens: Canon RF 24-105mm f/4-7.1 IS STM
- Focal Length: 24mm | F-Stop: 9 | ISO:100
- Dimensions in pixel: 6240 x 4160

KOP

- Representative View for: Recreational users at the Apache Station Wildlife Viewing Platform.
- Location: Apache Station Wildlife Viewing Platform
- Latitude: 32.072853° N; Longitude: 109.882656° W
- View Point Elevation at Eye Level: 4,158 ft.
- Looking: east
- Visible: Solar Array, Fence, and H-Frame Structures
- Image File Name: IMG_2278.JPG

Simulation Notes

- Photo Taken: May 26, 2023, 11:50 AM
- The image is based on a single photo and represent approximately 73.7 degree horizontal field of view.
- This view is approximately 3.06 miles west of the nearest pole represented in the simulation.
- The simulation is based on the best information available and is preliminary. Final alignment and structure locations are subject to change based on final engineering and other factors.

Key Observation Point (KOP) #11



Existing Condition



Simulated Condition

ATTACHMENT D
Hydrology Report



Three Sisters Hydrology Assessment Pre-Construction

Prepared for:

BRIGHTNIGHT

Brightnight
13123 East Emerald Coast Parkway,
Suite B #158
Inlet Beach, FL 32461

Prepared by:



Timmons Group
5840 Legacy Circle, Suite D220
Plano, TX 75024

Executive Summary

The purpose of this analysis is to provide hydrologic and hydraulic calculations throughout the study area to support the construction of the Three Sisters Solar Project. Depth and velocity quantities are desired at solar array locations to determine conflict areas for the solar array. Additionally, scour depths are utilized to avoid pile supports in areas where the potential for weakened foundations may occur or to inform where scour protection may be required.

The project site is located in Cochise County, Arizona, approximately 13 miles South from the city of Willcox, Arizona. The project site stretches approximately 2.5 miles east to west and 2.0 miles north to south. The project boundary runs approximately 2.6 miles along U.S. Highway 191 and south of Willcox Playa dry lake.

The method used to perform the depth and velocity analysis for the project site is a 2-dimensional software called FLO-2D. FLO-2D is a finite volume conservation flood routing model. It is a valuable tool for delineating flood hazards, regulating floodplain zoning or designing flood mitigation. The model will simulate river overbank flows, but it can also be used on unconventional flooding problems such as unconfined flows over complex alluvial fan topography or split channel flows. Its primary application for the Dutchman Solar Project is to determine flow depths and velocities affecting the placement of solar arrays to aid design. Results were then used to calculate approximate scour depths using the CSU Scour equation.

The following assumptions were made based on best engineering judgment in developing the hydrology calculations presented in this report:

1. 20'x20' hydrologic grid cell (project size dependent)
2. 100-year, 6-hour and 24-hour rainfall event
3. 3.71, 3.41 inches of rainfall (NOAA Atlas-14)
4. Ground cover: mainly Shrub/Scrub (62%)
5. Soil group: A – 1%, C – 45 %, D – 54 %
6. Curve number varying by soil type, land cover, and Antecedent Moisture Content (AMC)
7. Topography based on USGS TNM Download

Exhibits E-1, E-2, and E-3 show the concentration of flow depths, velocities, and expected scour depth respectively for the 100-year 6-hour based on pre-construction conditions. Exhibits E-4, E-5, and E-6 are for 100-year 24-hour results. Potential scour depths have been calculated using the Colorado State University “CSU Scour Equation” assuming one pier beam per cell location following FHWA HEC-18 manual. Results are for pre-construction conditions.

The potential flood depths during the 100-year event range from 0.5 feet to 8 feet within the project site boundary, where flow depths greater than 3 feet are contained within defined channels. Local ponding occurs from stagnate stormwater runoff which experience flow depths less than 3 feet. The buildable area within the site boundary encounter flow depths less than 3 feet outside of the northeast corner. Flow velocities are moderate due to the arid nature of the land cover. Similar to the flow depths, higher velocities are contained within the well-defined channels. As a result, potential scour is also relatively moderate outside major streams. Scour protection is typically recommended in areas showing scour depths greater than 1 foot, which involves protecting piles with riprap.

The AHJ lies with Cochise County. Stormwater management requirements must follow the guidelines established by ADEQ and are managed by the state. Typical facilities can achieve acceptable water quality by conserving open space with large portions of project site remaining undisturbed in a natural state. Where required, the use of detention basins can achieve water quality requirements. The feasibility of the project is highly achievable and ideal for a solar energy facility due to the minimal grading necessary for typical development. A post-construction analysis is recommended to verify that the proposed grading doesn't negatively impacts the existing hydraulics.

Deliverables

1. Shapefile of Flow Depth

Three_Sisters_Flow_Depth_100YR-6HR_Cell.shp
Three_Sisters_Flow_Depth_100YR-6HR_Contour.shp
Three_Sisters_Flow_Depth_100YR-24HR_Cell.shp
Three_Sisters_Flow_Depth_100YR-24HR_Contour.shp
Attribute “ID” = Grid Cell Number
Attribute “Flow Depth” = Max Flow Depth (Feet)

Depth



2. KMZ of Flow Depth

Three_Sisters_Flow_Depth_100YR.kmz
Three_Sisters_Flow_Depth_100YR-6HR.kmz
Overlay in Google Earth for graphical representation.

3. Shapefile of Velocity

Three_Sisters_Velocity_100YR-6HR_Cell.shp
Three_Sisters_Velocity_100YR-24HR_Cell.shp
Attribute “ID” = Grid Cell Number
Attribute “Velocity” = Velocity (FPS)

Velocity



4. KMZ of Velocity

Three_Sisters_Velocity_100YR.kmz
Three_Sisters_Velocity_100YR-6HR.kmz
Overlay in Google Earth for graphical representation.

5. Shapefile of Scour Depth


Three_Sisters_Scour_Depth_100YR-6HR_Cell.shp
Three_Sisters_Scour_Depth_100YR-6HR_Contour.shp
Three_Sisters_Scour_Depth_100YR-24HR_Cell.shp
Three_Sisters_Scour_Depth_100YR-24HR_Contour.shp
Attribute “Scour” = Potential Scour (Feet)

Depth













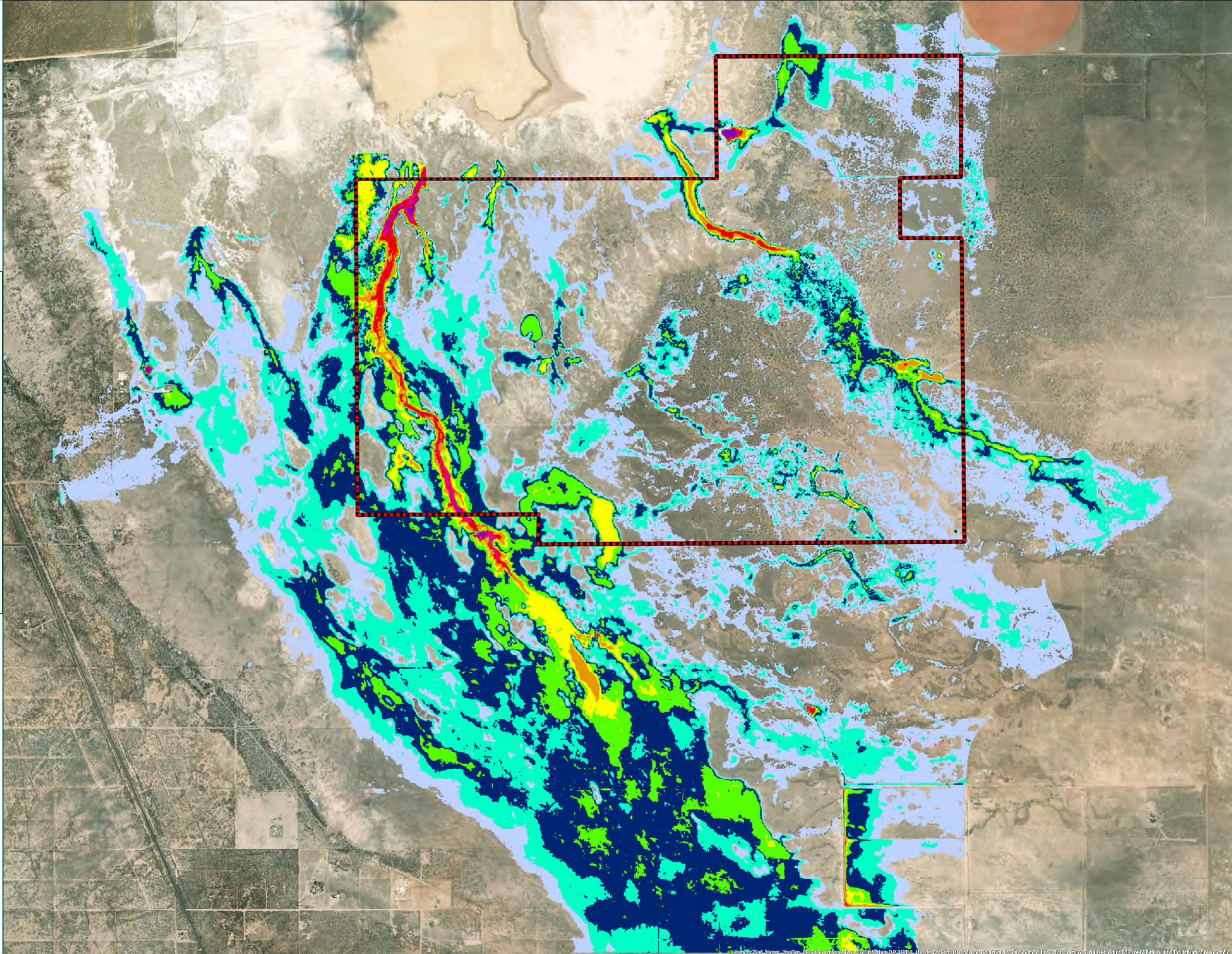
Exhibits

Legend

 Project Boundary

Flow Depth

-  < 0.5'
-  0.5' - 1.0'
-  1.0' - 1.5'
-  1.5' - 2.0'
-  2.0' - 2.5'
-  2.5' - 3.0'
-  3.0' - 4.0'
-  4.0' - 5.0'
-  5.0' - 6.0'
-  6.0' +



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 YOUR VISION ACHIEVED THROUGH OURS.
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 Phoenix, AZ 85021
 TEL: 480.810.0231
 www.timmons.com

BRIGHTNIGHT
 13123 East Emerald Coast Parkway, Suite B #158
 Phoenix, AZ 85044
 TEL: 837.813.8998
 www.brightnightpower.com

PROJECT NAME & LOCATION

**THREE SISTERS
 COCHISE COUNTY
 ARIZONA**

DATE: 5/26/2023
 PROJECT NUMBER: 55925
 PROJECT NAME: THREE SISTERS
 DESIGNED BY / DRAWN BY: HERNANDEZ/ELLIOTT

NOTES


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DRAWING DESCRIPTION

**FLO2D RESULTS:
 FLOW DEPTH -
 PRE-DEVELOPED
 100 YEAR - 6HR**



SCALE (FEET)

0 1,000 2,000











SCALE PRINTED AS 11X17 ARE HALF SCALE

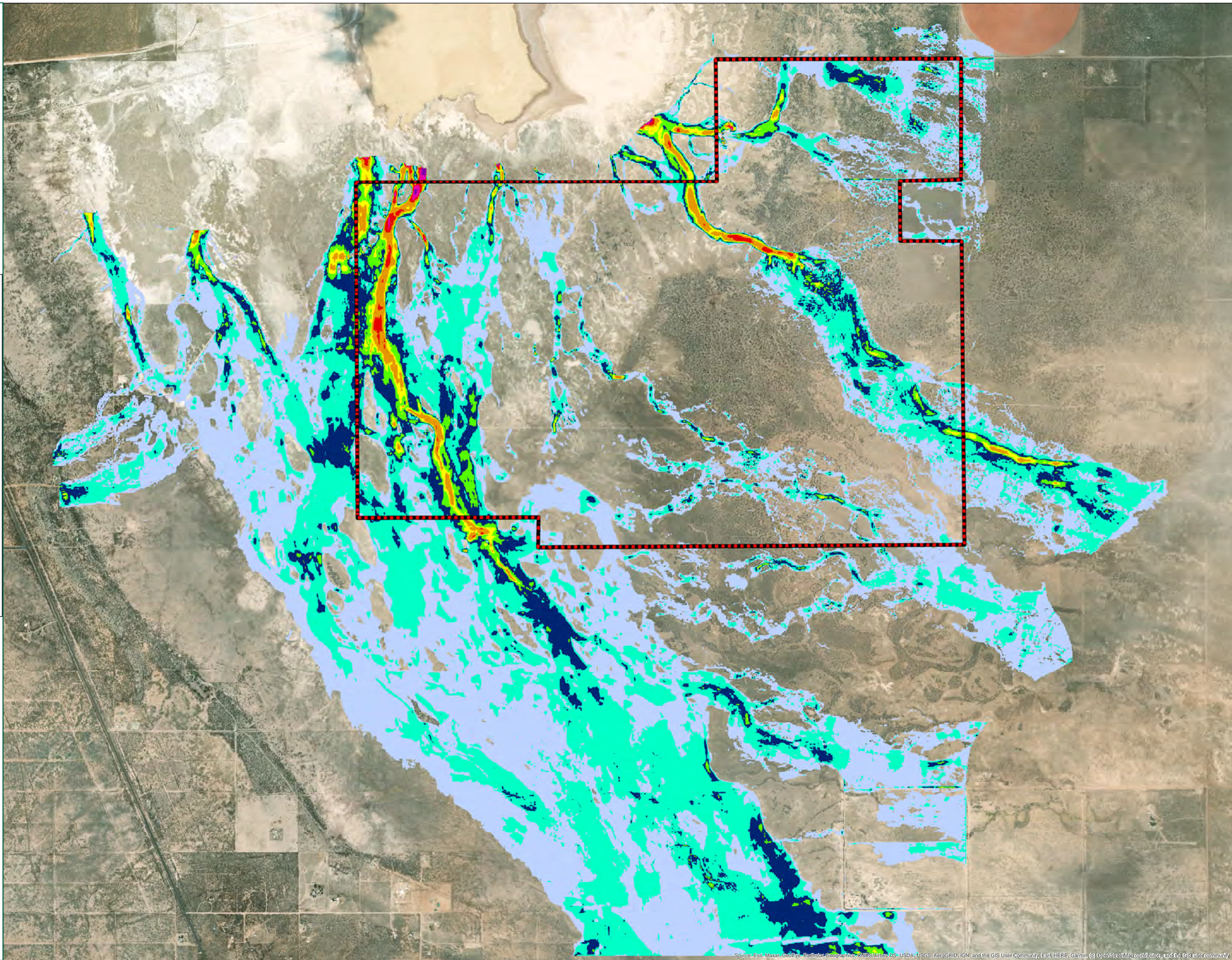
| SCALE | SHEET NUMBER |
|-------------|--------------|
| 1" = 1,000' | E-1 |

Legend

 Project Boundary

Velocity

-  < 0.5 fps
-  0.5 - 1.0 fps
-  1.0 - 1.5 fps
-  1.5 - 2.0 fps
-  2.0 - 2.5 fps
-  2.5 - 3.0 fps
-  3.0 - 4.0 fps
-  4.0 - 5.0 fps
-  5.0 - 6.0 fps
-  6.0 fps +




NOTES

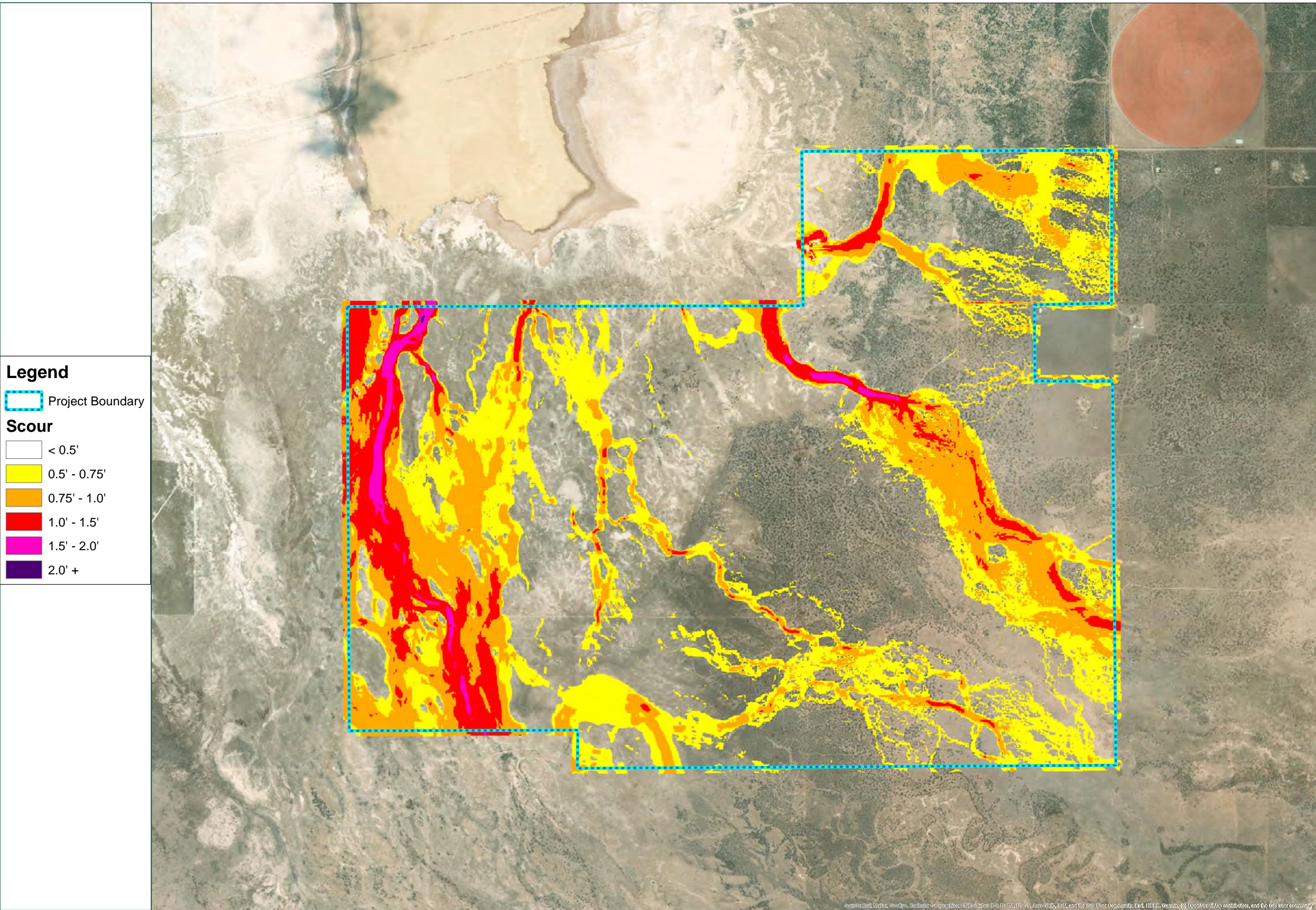
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DRAWING DESCRIPTION
**FLOOD RESULTS:
 VELOCITY -
 PRE-DEVELOPED
 100 YEAR - 6HR**


 SCALE (FEET)
 0 1,000 2,000
 PLANS PRINTED AS 11X17 ARE HALF SCALE
 SCALE SHEET NUMBER
 1" = 1,000' E-2

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS User Community



Legend

Project Boundary

Scour

- <math>< 0.5'</math>
- $0.5' - 0.75'$
- $0.75' - 1.0'$
- $1.0' - 1.5'$
- $1.5' - 2.0'$
- $2.0'+$

TIMMONS GROUP
 YOUR VISION ACHIEVED THROUGH OURS.
 7501 Lakeside Dr., Suite B250
 Phoenix, AZ 85021
 TEL: 480.810.0231
 www.timmons.com

BRIGHTNIGHT
 13123 East Emerald Coast Parkway, Suite B #158
 Phoenix, AZ 85044
 TEL: 877.813.9996
 www.brightnightpower.com

PROJECT NAME & LOCATION

THREE SISTERS
 COCHISE COUNTY
 ARIZONA

| | |
|------------------------|-------------------|
| DATE | 5/26/2023 |
| PROJECT NUMBER | 55925 |
| PROJECT NAME | THREE SISTERS |
| DESIGNED BY / DRAWN BY | HERNANDEZ/ELLIOTT |

NOTES

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REVISIONS

| # | DATE | DESCRIPTION |
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DRAWING DESCRIPTION

FLO2D RESULTS:
 SCOUR -
 PRE-DEVELOPED
 100 YEAR - 6HR


SCALE (FEET)

0 750 1,500











PLANS PRINTED AS 11X17 ARE HALF SCALE

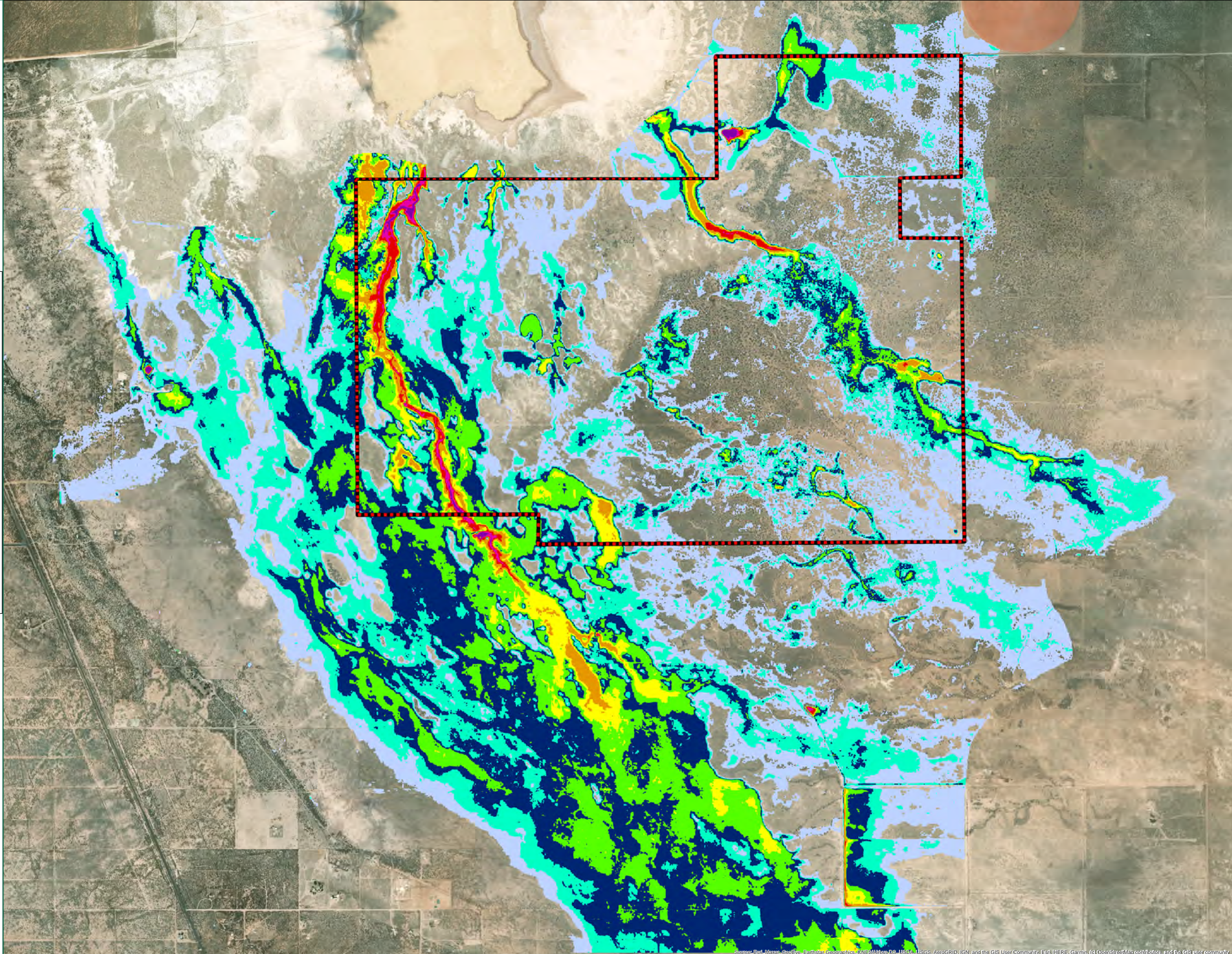
| | |
|-----------|--------------|
| SCALE | SHEET NUMBER |
| 1" = 800' | E-3 |

Legend

 Project Boundary

Flow Depth

-  < 0.5'
-  0.5' - 1.0'
-  1.0' - 1.5'
-  1.5' - 2.0'
-  2.0' - 2.5'
-  2.5' - 3.0'
-  3.0' - 4.0'
-  4.0' - 5.0'
-  5.0' - 6.0'
-  6.0' +



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 Phoenix, AZ 85044
 TEL: 837.813.9996
 www.brightnighpower.com

PROJECT NAME & LOCATION

**THREE SISTERS
 COCHISE COUNTY
 ARIZONA**

DATE: 5/26/2023
 PROJECT NUMBER: 55925
 PROJECT NAME: THREE SISTERS
 DESIGNED BY / DRAWN BY: HERNANDEZ/ELLIOTT

NOTES


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DRAWING DESCRIPTION

**FLO2D RESULTS:
 FLOW DEPTH -
 PRE-DEVELOPED
 100 YEAR - 24HR**




SCALE (FEET)

0 1,000 2,000











PLANS PRINTED AS 11X17 ARE HALF SCALE

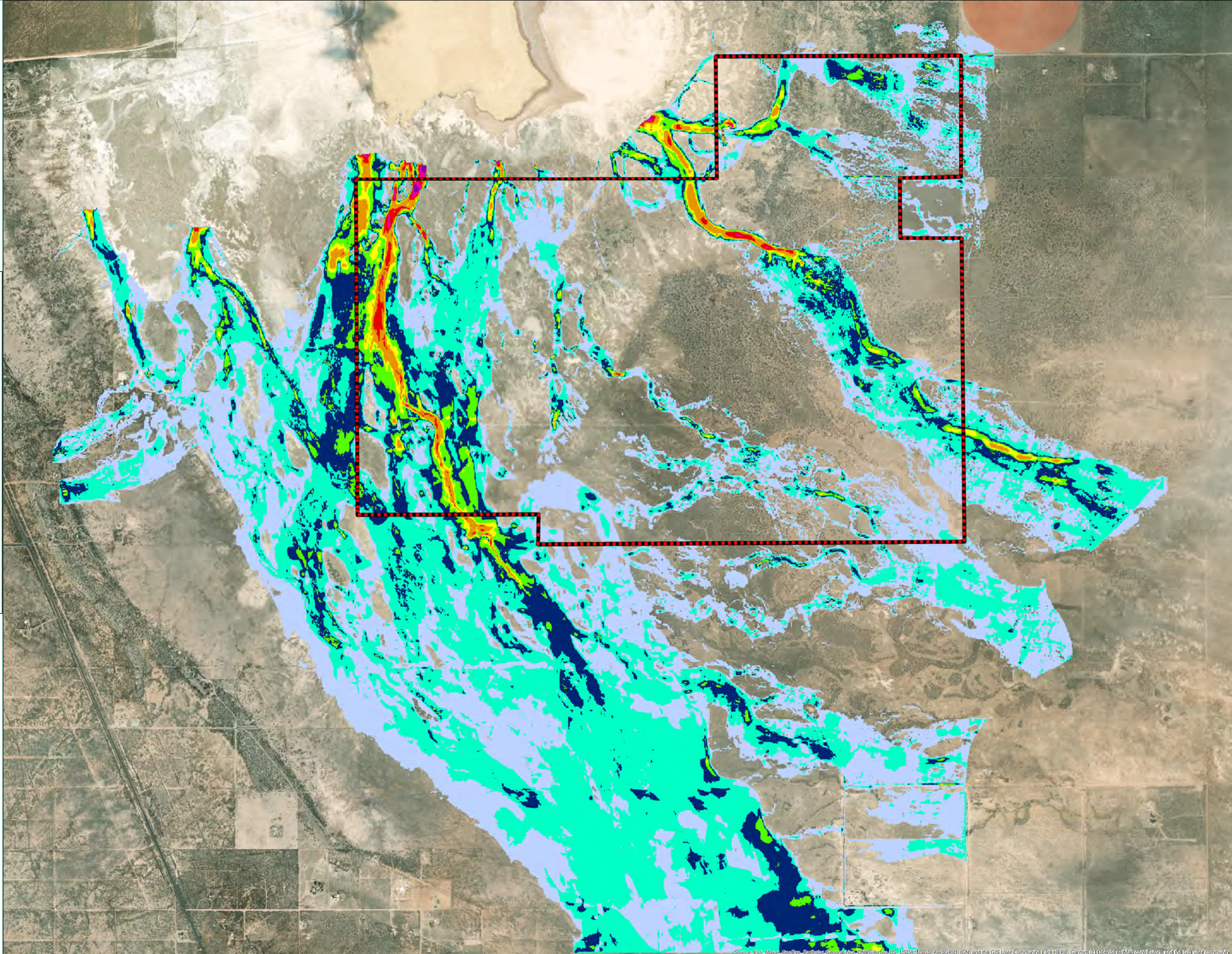
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| SCALE | SHEET NUMBER |
| 1" = 1,000' | E-4 |

Legend

 Project Boundary

Velocity

-  < 0.5 fps
-  0.5 - 1.0 fps
-  1.0 - 1.5 fps
-  1.5 - 2.0 fps
-  2.0 - 2.5 fps
-  2.5 - 3.0 fps
-  3.0 - 4.0 fps
-  4.0 - 5.0 fps
-  5.0 - 6.0 fps
-  6.0 fps +



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PROJECT NAME & LOCATION

**THREE SISTERS
 COCHISE COUNTY
 ARIZONA**

DATE: 5/26/2023
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DRAWING DESCRIPTION

**FLOOD RESULTS:
 VELOCITY -
 PRE-DEVELOPED
 100 YEAR - 24HR**



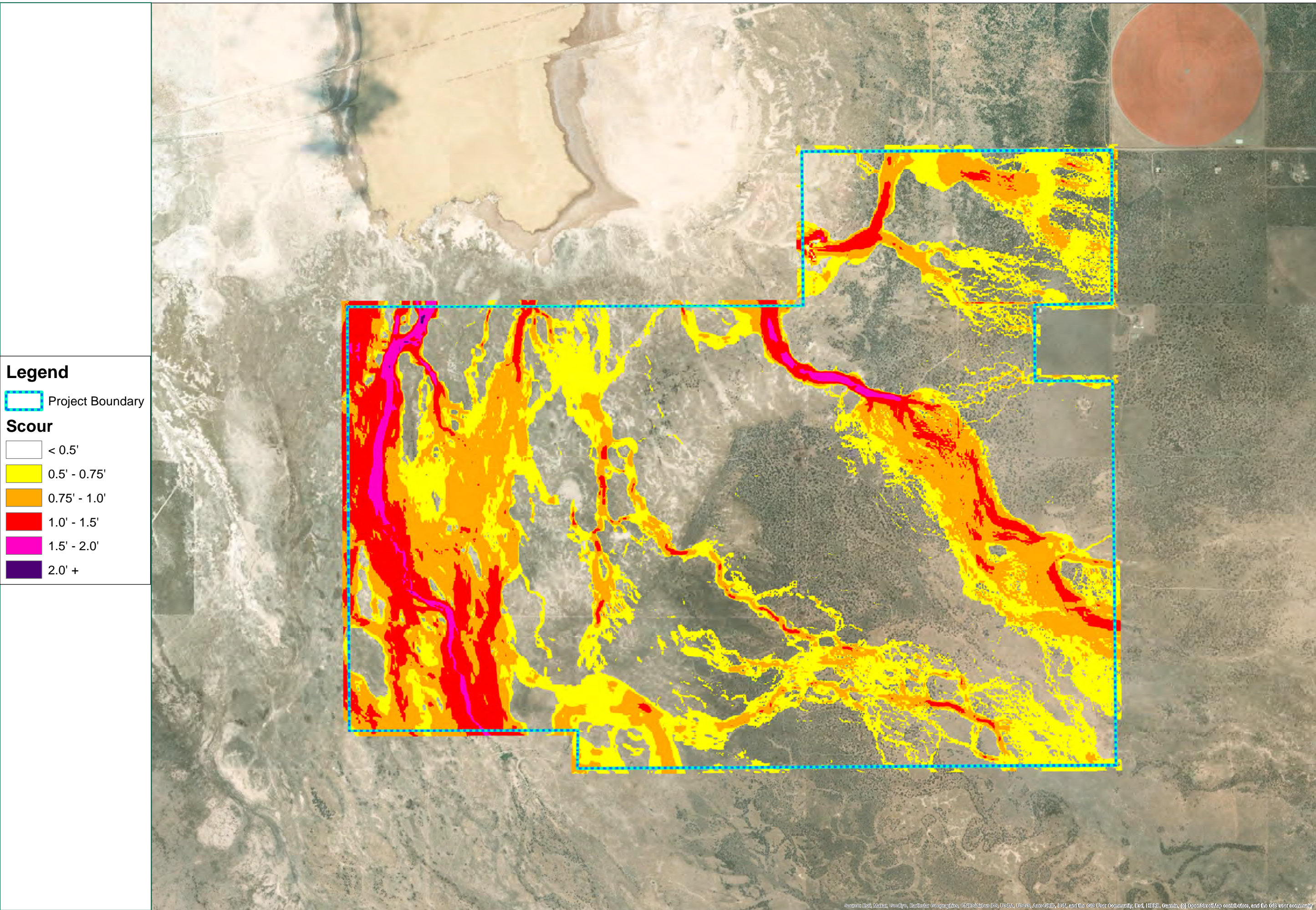
SCALE (FEET)

0 1,000 2,000

PLANS PRINTED AS 11X17 ARE HALF SCALE

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| SCALE | SHEET NUMBER |
| 1" = 1,000' | E-5 |

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS User Community



Legend

Project Boundary

Scour

- < 0.5'
- 0.5' - 0.75'
- 0.75' - 1.0'
- 1.0' - 1.5'
- 1.5' - 2.0'
- 2.0' +


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PROJECT NAME & LOCATION

**THREE SISTERS
COCHISE COUNTY
ARIZONA**

DATE: 5/26/2023

PROJECT NUMBER: 55925

PROJECT NAME: THREE SISTERS

DESIGNED BY / DRAWN BY: HERNANDEZ/ELLIOTT

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DRAWING DESCRIPTION

**FLO2D RESULTS:
SCOUR -
PRE-DEVELOPED
100 YEAR - 24HR**


 SCALE (FEET)
 0 750 1,500
 PLANS PRINTED AS 11X17 ARE HALF SCALE

| | |
|-----------|--------------|
| SCALE | SHEET NUMBER |
| 1" = 800' | E-6 |

Source: Esri, DeLorme, GeoEye, Earthstar Geographics, CNRS/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS User Community

ATTACHMENT E
Approved Jurisdictional Determination Request

Approved Jurisdictional Determination Request for The Three Sisters Solar Project

Prepared for:

BrightNight, LLC
13123 E. Emerald Coast Parkway, Suite B #158 – Inlet Beach, Florida 32461

Prepared by:

WestLand Engineering & Environmental Services
4001 E. Paradise Falls Drive – Tucson, Arizona 85712
+1 520-206-9585

WestLand Project Number: 10276

March 9, 2023



Table of Contents

| | |
|--|---|
| 1. INTRODUCTION..... | 1 |
| 2. DESCRIPTION OF ANALYSIS AREA | 1 |
| 3. WILLCOX PLAYA CONSIDERATIONS | 2 |
| 4. CLEAN WATER ACT ANALYSIS | 3 |
| 4.1. Analysis Area Surface Water Features..... | 3 |
| 4.2. TNWs and Wetlands Adjacent to TNWs..... | 4 |
| 4.3. Tributaries and Adjacent Wetlands..... | 4 |
| 4.4. Isolated Waters, the Use, Degradation, or Destruction of Which Could Affect Interstate Commerce Connection | 4 |
| 4.5. Non-Jurisdictional Waters..... | 4 |
| 5. REFERENCES..... | 5 |

Figures

- Figure 1. Vicinity
- Figure 2. Aerial Overview

Attachments

- Attachment 1. Request for Corps Jurisdictional Determination
- Attachment 2. Representative Photographs
- Attachment 3. Directions to the Analysis Area
- Attachment 4. Agent and Authorization Letter
- Attachment 5. Approved Jurisdictional Form

1. INTRODUCTION

WestLand Engineering & Environmental Services (WestLand) was retained by THSI bn, LLC (THSI, the Applicant) to evaluate an approximately 2,684-acre Analysis Area, south of the Willcox Playa in Cochise County, Arizona, for the potential to support waters of the United States (WOTUS). The Analysis Area includes the approximately 2000-acre site for the proposed solar energy facility and the Proposed Transmission Corridor (PTC) which includes the generation tie line (gen-tie) route with a 100-foot right-of-way (ROW), the proposed Project substation, and the proposed Project switchyard (Three Sisters Solar Project; the Project). The Analysis Area is located primarily on undeveloped private lands with a portion on State Trust lands managed by the Arizona State Land Department (ASLD) (**Figure 1**).

This Approved Jurisdictional Determination (AJD) request is being submitted by WestLand on behalf of the Applicant and is intended to facilitate and inform planning being undertaken by the Applicant. The AJD request form is included as **Attachment 1**, and representative photographs are included as **Attachment 2**. The Agent Designation letter and Authorization for Federal Access, and directions to the Analysis Area are provided as **Attachments 3 and 4**, respectively, as well as an AJD feature form as **Attachment 5**. A kmz file will be provided via email delineating potential WOTUS and containing photo points. Final AJD maps will be provided for Corps signature once the evaluation has been completed.

2. DESCRIPTION OF ANALYSIS AREA

The Analysis Area is located within the low-lying uplands south of the Willcox Playa. Topographic relief within the Analysis Area is minimal, with elevations ranging between 4,152 to 4,158 feet above mean sea level (amsl).

The Analysis Area is mapped within the Semidesert Grassland biotic community (Brown 1994, The Nature Conservancy 2012), with vegetation composition consisting primarily of low-density grasses and upland tree and shrub species. Vegetation observed included four-wing saltbush (*Atriplex canescens*), invasive Russian thistle (*Salsola sp.*), shrub-sized velvet mesquite (*Prosopis velutina*), burroweed (*Isocoma tenuisecta*), tamarisk, and mixed grasses. *Yucca* and *Cylindropuntia* cacti were also observed.

Discrete surface water features within the Analysis Area were limited to a single channel (Feature 1; **Attachment 2, Photos 1 and 2; Figure 2**) paralleling the western boundary of the Analysis Area. This feature exhibited an ordinary high water mark (OHWM), and the downgradient portion was inundated with surface water during the site visit as a result of recent rainfall events. No potential wetlands or other special aquatic sites were observed within the Analysis Area.

The Analysis Area is currently used for cattle grazing and contains dirt roadways, which may have altered some of the surface features within the Analysis Area. A cattle path has been created between ranching structures and the two cattle tanks east of the gen-tie alignment (**Attachment 2, Photo 17; Figure 2**). No surface water features within the Analysis Area are listed or mapped in the State of Arizona's surface water quality standards, though the Willcox Playa (north) and Turkey Creek (south of the Analysis Area) are (AAC 2019). Additionally, there are no features delineated in the National Hydrography Dataset (NHD) maintained by the U.S. Geological Survey (USGS), within the Analysis Area. The National Wetlands Inventory (NWI) maps several ephemeral features through the Analysis Area, including Feature 1 along the western extent of the Analysis Area; however, only Feature 1 exhibited a discernible OHWM based on aerial photo review. All the features in the Analysis Area are ephemeral and trend generally north toward the Willcox Playa (**Figure 2**).

3. WILLCOX PLAYA CONSIDERATIONS

The Willcox Playa occurs within the Willcox Basin, which forms the northern half of the northwest trending Sulphur Springs Valley in southeastern Arizona. The Willcox Basin comprises approximately 1,910 square miles bounded by the Dragoon and Winchester Mountains to the west, the Galiuro Mountains and Black Hills to the north, the Pinaleno, Dos Cabezas, and Chiricahua Mountains to the east, and the Swisshelm Mountains and a series of small hills to the south (USGS 2006).

The Willcox Basin is a closed, or endorheic, basin with all surface water drainage flowing to the southcentral part of the basin and into the Willcox Playa (ADWR 2009, 2018, USGS 2006, Waters 1989). Although a number of reaches of perennial and intermittent streams occur in the mountain ranges that bound the playa, all the streams within the Willcox Basin are ephemeral, or become ephemeral, by the time they reach the valley floor and discharge to the playa (ADWR 2009).

As implied by the name, the Willcox Playa is a typically dry ephemeral feature. After heavy rainfall events, runoff from the surrounding mountains and alluvial piedmonts accumulates in the playa, creating shallow, ephemeral ponds typically less than 12 inches deep. With a mean annual rainfall of 18.5 inches per year and a mean annual temperature of 90 degrees Fahrenheit, surface water and shallow groundwater evaporate within several days to a week if not recharged (Waters 1989).

The vast majority of the Willcox Playa is closed to the public due to the presence of the U.S. military's Willcox Dry Lake Bombing Range, which contains undetonated ordnance. Given the dry conditions associated with the playa and the limited access by the public, the playa is not currently used nor susceptible to use in waterborne interstate commerce.

While the prehistoric record indicates that deeper waterbodies occurred intermittently where the Willcox Playa currently exists (referred to collectively as Lake Cochise), those deeper-water conditions have not existed since the mid-Holocene, over 4,000 years ago (Waters 1989).

The only readily available evidence of watercraft on the playa, recent or otherwise, is a single reference to a Willcox local named Joe Duhon, who sailed his catamaran a mile out across the playa in 1990 after a heavy rain left 12 inches of standing water (Banks 1991). Mr. Duhon claims to be the only person who ever “sailed” the playa. This singular recorded occurrence does not meet the criteria for use, or susceptibility to being used in the future, for commercial navigation, including commercial waterborne recreation.

Given the above, the Willcox Playa does not meet the criteria of a TNW. This determination was confirmed by the Corps in the AJD for SPL-2020-00642). In addition, the Willcox Playa does not constitute an interstate water, an impoundment of other jurisdictional waters, or part of the territorial sea, and does not possess a nexus to interstate commerce under the definitions at 33 CFR 328.3(a)(2), (3), (4) & (6), and is, therefore, an isolated non-jurisdictional feature.

4. CLEAN WATER ACT ANALYSIS

4.1. ANALYSIS AREA SURFACE WATER FEATURES

WestLand conducted a ground survey in the Analysis Area on September 29, 2022, to assess site conditions, identify potential WOTUS, and document the physical characteristics of potentially jurisdictional features, including the identification of OHWM. The assessment of the physical characteristics of potentially jurisdictional features within the Analysis Area was informed by the August 2008 delineation manual *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* and the July 2010 update to the same (Lichvar and McColley 2008). Where appropriate, the OHWM was delineated within the surface water features based on one or more of the factors described by Lichvar and McColley (2008): a channel as indicated by an incision or scour line, sediment sorting, change in substrate, water stains on bedrock, and destruction of terrestrial vegetation. WestLand collected data at field-determined intervals, and photographs were taken at each data point. Were potential wetland areas identified, WestLand would have used the 1987 Corps of Engineers *Wetlands Delineation Manual* supplemented by the 2008 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* to evaluate and delineate areas exhibiting possible wetland criteria; however, no such areas were observed in the Analysis Area. Based upon the data collected during the field survey and review of aerial photographs, a subset of the data points and photograph locations were digitally transferred onto a recent aerial photograph using ArcGIS.

In WestLand’s judgment, using the practices typically used by the Corps in assessing channels in the arid southwest, an OHWM is present in approximately 4,932.74 linear feet of ephemeral flow channel (Feature 1) within the Analysis Area. Based on the observed width of these characteristics, the estimated total area of potential non-wetland WOTUS subject to evaluation under this SNA was approximately 1.2 acres, all within a single ephemeral channel. No wetlands or special aquatic features were identified in the Analysis Area.

During the site visit, Feature 1 was inundated with water as a result of recent rainfall and the playa being at near maximum capacity (**Attachment 2, Photos 1 and 2**). The antecedent precipitation for the Willcox Basin was significantly higher than the 30-year normal range throughout the month of August and September of 2022, thus backwater flooding occurring within this drainage is not unexpected. The vegetation within and along Feature 1 was dominated by alkali sacaton (*Sporobolus airoides*) and velvet mesquite (*Prosopis velutina*), which have a wetland indicator status of facultative and facultative upland (Lichvar et al. 2012, USACE 2018), respectively. Based on OHWM indicators and lack of hydrophytic vegetation, no additional wetland evaluation was completed.

4.2. TNWS AND WETLANDS ADJACENT TO TNWS

There are no TNWs or wetlands adjacent to TNWs in the Analysis Area.

4.3. TRIBUTARIES AND ADJACENT WETLANDS

There are no surface water features within the Analysis Area that are tributary to a TNW, an interstate water, or territorial sea.

4.4. ISOLATED WATERS, THE USE, DEGRADATION, OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE CONNECTION

To the extent that there remains a basis for regulating isolated waters (33 C.F.R. § 328.3(a)(3)) after the Supreme Court's decisions in *SWANCC* and *Rapanos*¹ it should be noted that the features in the Analysis Area: (1) are not used by interstate or foreign travelers (they are not open to public access); (2) do not contain fish or shellfish that are taken for sale in interstate commerce (because they are ephemeral); and (3) are not used for industrial purposes by industries in interstate commerce (when present, water is not used for any purpose). Therefore, Feature 1 would not qualify as an isolated WOTUS.

4.5. NON-JURISDICTIONAL WATERS

The Analysis Area surface feature considered in this analysis is non-jurisdictional.

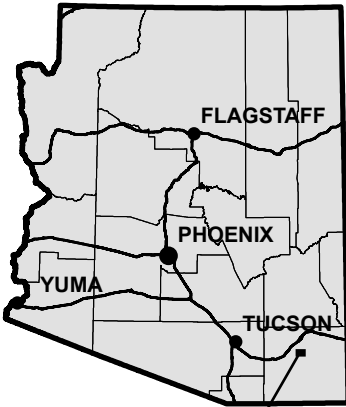
¹ See 68 Fed. Reg. 1991, 1996 (January 15, 2003) (in guidance interpreting *SWANCC*, EPA and the Corps note that: “. . . in light of *SWANCC*, it is uncertain whether there remains any basis for jurisdiction under the other rationales of § 328.3(a)(3)(i)–(iii) over isolated, non-navigable, intrastate waters [i.e., use of the water by interstate or foreign travelers for recreational or other purposes; the presence of fish or shellfish that could be taken and sold in interstate commerce; use of the water for industrial purposes by industries in interstate commerce].”)

5. REFERENCES

- Arizona Administrative Code. 2019. Title 18. Environmental Quality Chapter 11. Department of Environmental Quality - Water Quality Standards. Office of the Secretary of State, Administrative Rules Division. September 30, 2019.
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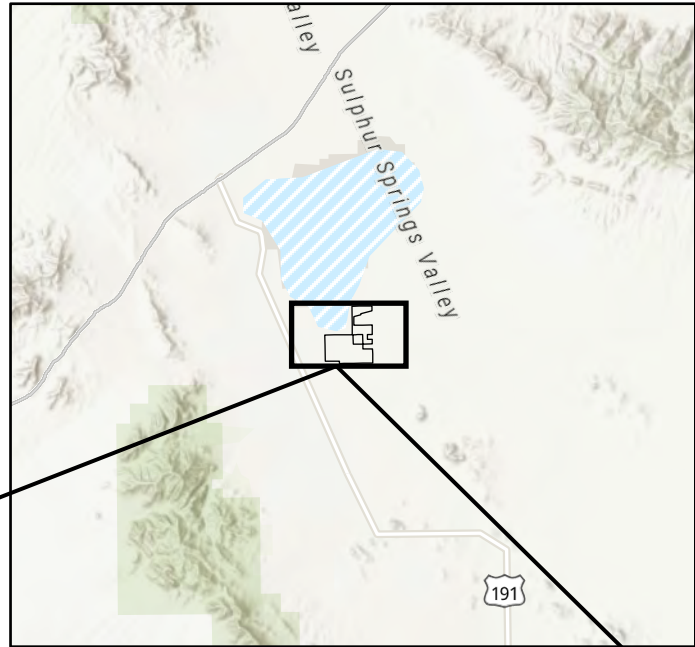
FIGURES

ARIZONA

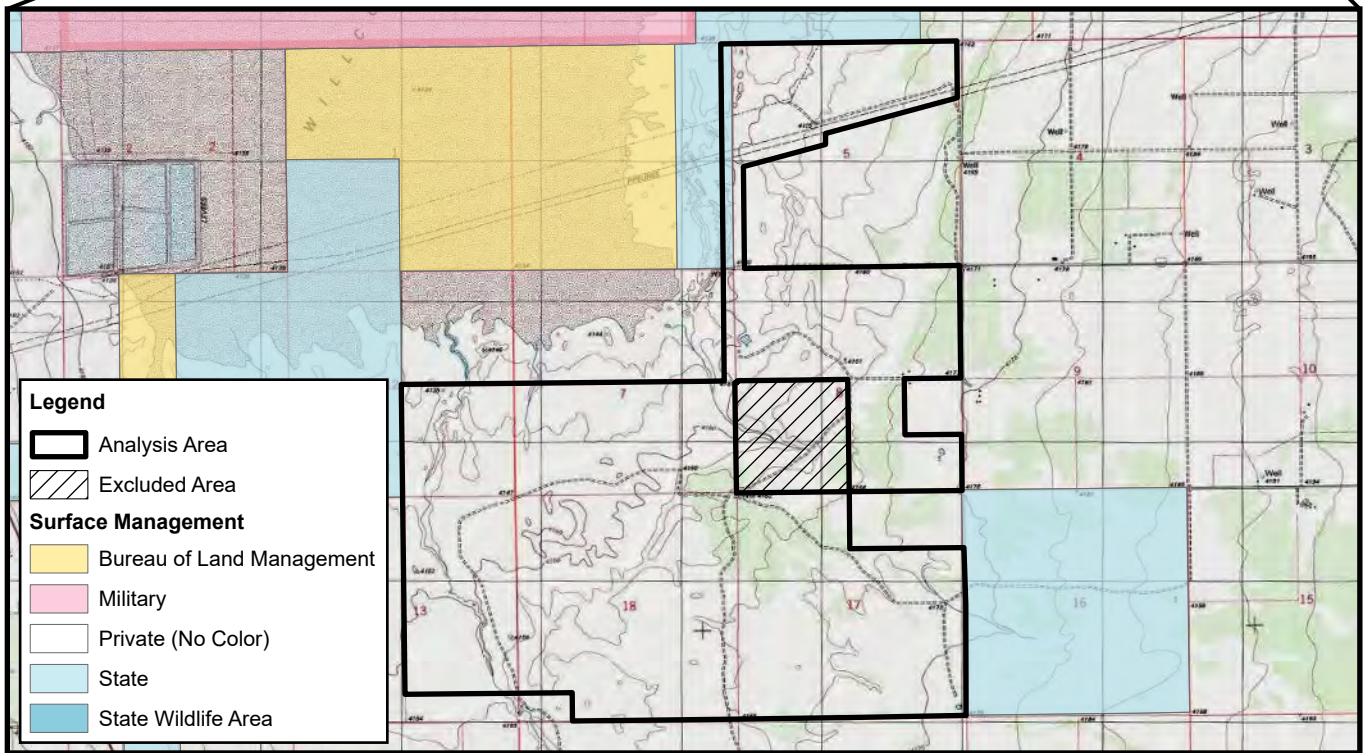


PROJECT LOCATION

PROJECT VICINITY



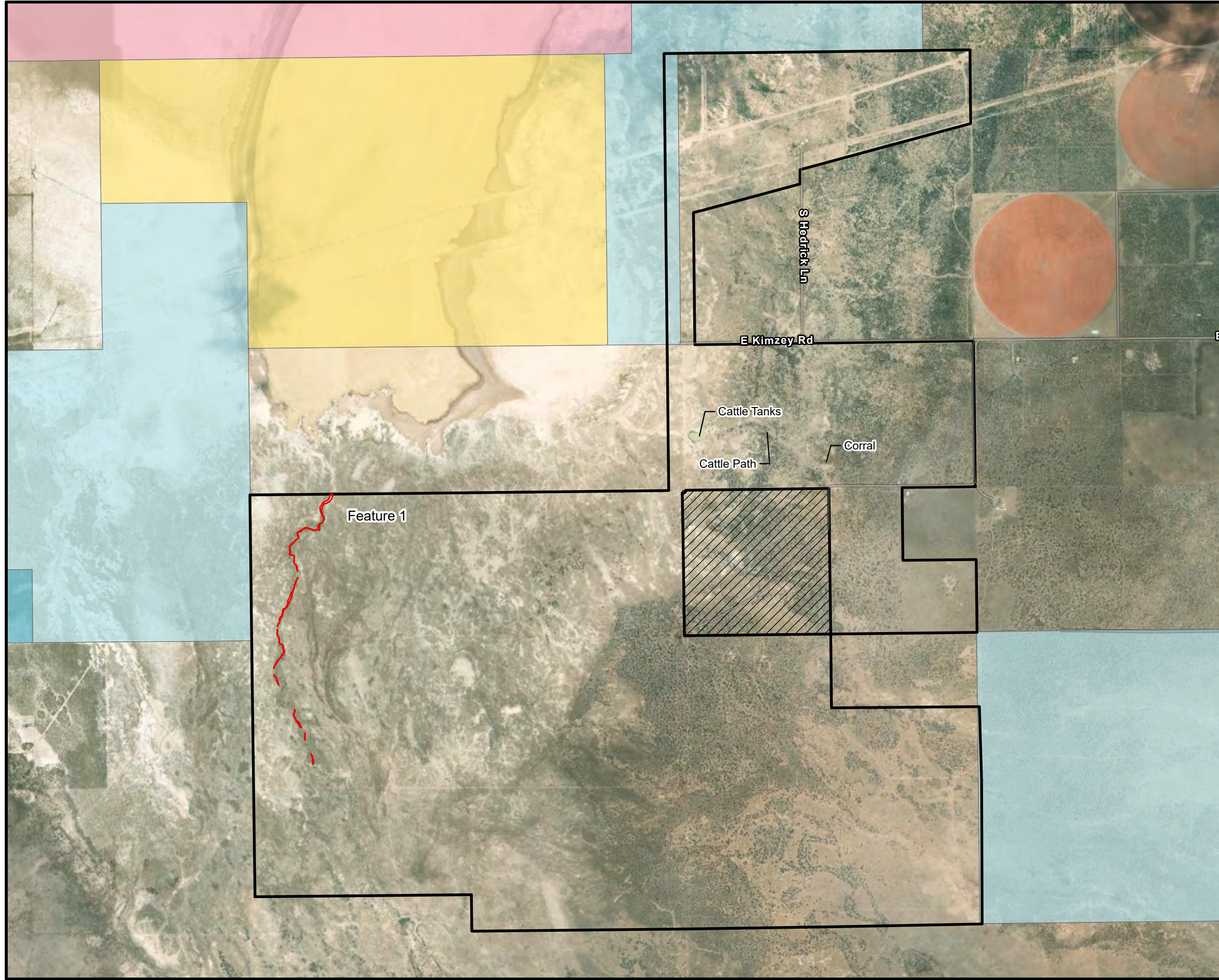
Approximate Scale 1 inch equals 10 miles



T16S, R24E, Portions of Sections 12 and 13,
 T16S, R25E, Portions of Sections 5-8, 17, and 18,
 Cochise County, Arizona,
 Willcox USGS 1:100,000 Quadrangle
 Projection: NAD 1983 UTM Zone 12N
 Surface Management: BLM ArcGIS Service accessed 12/16/2022
 Image Source: ArcGIS Online, World Topographic Map

BRIGHTNIGHT, LLC
 Three Sisters Solar Project
 and Gen-Tie Line
 Approved Jurisdictional Determination

VICINITY MAP
 Figure 1



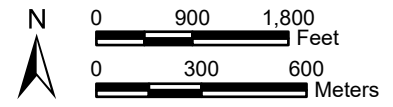
T16S, R24E, Portions of Sections 12 and 13,
 T16S, R25E, Portions of Sections 5-8, 17, and 18,
 Cochise County, Arizona,
 Projection: NAD 1983 UTM Zone 12N
 Surface Management: BLM ArcGIS Service accessed 12/16/2022
 Image Source: Maxar 02/23/2018 and 10/07/2020

Legend

- Analysis Area
- Excluded Area
- Ordinary High Water Mark

Surface Management

- Bureau of Land Management
- Military
- Private (No Color)
- State
- State Wildlife Area



Three Sisters Solar Project
 and Gen-Tie Line
 Approved Jurisdictional Determination
 AERIAL OVERVIEW
 Figure 2

ATTACHMENT 1
Request for Corps Jurisdictional Determination

Appendix 1 - REQUEST FOR CORPS JURISDICTIONAL DETERMINATION (JD)

To: Los Angeles District

- I am requesting a JD on property located at: _____
(Street Address)
City/Township/Parish: _____ County: _____ State: _____
Acreage of Parcel/Review Area for JD: _____
Section: _____ Township: _____ Range: _____
Latitude (decimal degrees): _____ Longitude (decimal degrees): _____
(For linear projects, please include the center point of the proposed alignment.)
- Please attach a survey/plat map and vicinity map identifying location and review area for the JD.
- I currently own this property. I plan to purchase this property.
- I am an agent/consultant acting on behalf of the requestor.
- Other (please explain): _____.
- Reason for request: (check as many as applicable)
 I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all aquatic resources.
 I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all jurisdictional aquatic resources under Corps authority.
 I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps, and the JD would be used to avoid and minimize impacts to jurisdictional aquatic resources and as an initial step in a future permitting process.
 I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps; this request is accompanied by my permit application and the JD is to be used in the permitting process.
 I intend to construct/develop a project or perform activities in a navigable water of the U.S. which is included on the district Section 10 list and/or is subject to the ebb and flow of the tide.
 A Corps JD is required in order to obtain my local/state authorization.
 I intend to contest jurisdiction over a particular aquatic resource and request the Corps confirm that jurisdiction does/does not exist over the aquatic resource on the parcel.
 I believe that the site may be comprised entirely of dry land.
 Other: _____
- Type of determination being requested:
 I am requesting an approved JD.
 I am requesting a preliminary JD.
 I am requesting a "no permit required" letter as I believe my proposed activity is not regulated.
 I am unclear as to which JD I would like to request and require additional information to inform my decision.

By signing below, you are indicating that you have the authority, or are acting as the duly authorized agent of a person or entity with such authority, to and do hereby grant Corps personnel right of entry to legally access the site if needed to perform the JD. Your signature shall be an affirmation that you possess the requisite property rights to request a JD on the subject property.

*Signature: _____ Date: _____

- Typed or printed name: _____
Company name: _____
Address: _____

Daytime phone no.: _____
Email address: _____

***Authorities:** Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Program of the U.S. Army Corps of Engineers; Final Rule for 33 CFR Parts 320-332.

Principal Purpose: The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the project area subject to federal jurisdiction under the regulatory authorities referenced above.

Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public, and may be made available as part of a public notice as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in the approved jurisdictional determination (AJD), which will be made available to the public on the District's website and on the Headquarters USACE website.

Disclosure: Submission of requested information is voluntary; however, if information is not provided, the request for an AJD cannot be evaluated nor can an AJD be issued.

ATTACHMENT 2
Representative Photographs



Photo 1.
Feature: 1
OHWM: No
Width: 11 feet
View: South
Notes: Looking south from the northern extent of Feature 1. No hydrophytic vegetation observed.



Photo 2.
Feature: 1
OHWM: No
Width: 11 feet
View: North
Notes: View of Feature 1 north of Photo 1 facing north toward the northern perimeter of the Analysis Area.



Photo 3.
Feature: N/A
OHWM: No
Width: N/A
View: West
Notes: View facing the western boundary of the Analysis Area and Feature 1 indicated by clusters of mesquite trees.



Photo 4.

Feature: N/A

OHWM: No

Width: N/A

View: South

Notes: View of the north central extent of the southwestern portion of the Analysis Area.



Photo 5.

Feature: N/A

OHWM: No

Width: N/A

View: East

Notes: Wetted area in the north central extent of the southwestern portion of the Analysis Area. No hydrophytic vegetation observed.



Photo 6.

Feature: N/A

OHWM: No

Width: N/A

View: South

Notes: View of the north central extent of the southwestern portion of the Analysis Area, and east of **Photo 5**. This area is dominated by grasses and flat sandy patches.



Photo 7.

Feature: N/A

OHWM: No

Width: N/A

View: South

Notes: Cluster of mesquite trees within sandy patch in north central extent of the southwestern portion of the Analysis Area and southeast of **Photo 6**.



Photo 8.

Feature: N/A

OHWM: No

Width: N/A

View: South

Notes: Southern extent of the southwestern portion of the Analysis Area.



Photo 9.

Feature: N/A

OHWM: No

Width: N/A

View: South

Notes: Southern extent of the southwestern portion of the Analysis Area.



Photo 10.
Feature: N/A
OHWM: No
Width: N/A
View: Northeast
Notes: Cattle path along central portion of Analysis Area.



Photo 11.
Feature: N/A
OHWM: No
Width: N/A
View: Northeast
Notes: Southwestern corner of the northeastern portion of the Analysis Area and to the east of the gen-tie and generating station boundaries.



Photo 12.
Feature: N/A
OHWM: No
Width: N/A
View: East
Notes: View of constructed cattle tank within the northeast portion of the Analysis Area.



Photo 13.
Feature: N/A
OHWM: No
Width: N/A
View: South
Notes: View of constructed cattle tank. Mesquite trees line the banks.



Photo 14.
Feature: N/A
OHWM: No
Width: N/A
View: North
Notes: View along gen-tie route of flat sandy patch.



Photo 15.
Feature: N/A
OHWM: No
Width: N/A
View: East
Notes: View east from the northwest corner of the northeast portion of the Analysis Area.



Photo 16.

Feature: N/A

OHWM: No

Width: N/A

View: South

Notes: View south within the western extent of the northeastern portion of the Analysis Area. Tall grasses, sand patches, and patches of mesquites can be seen here and in aerial photos.



Photo 17.

Feature: N/A

OHWM: No

Width: N/A

View: East

Notes: Ranching structures along southern extent of northeastern portion of the Analysis Area. The cattle path lies between these structures and the constructed cattle tanks to the west.



Photo 18.

Feature: N/A

OHWM: No

Width: N/A

View: East

Notes: View of road that runs through the northeastern portion of the Analysis Area.



Photo 19.
Feature: N/A
OHWM: No
Width: N/A
View: North
Notes: Dirt roadway along the eastern boundary of the northeastern portion of the Analysis Area.



Photo 20.
Feature: N/A
OHWM: No
Width: N/A
View: West
Notes: Dirt road along the northern border of the northeastern portion of the Analysis Area.



Photo 21.
Feature: N/A
OHWM: No
Width: N/A
View: East
Notes: View east from the proposed gen-tie alignment.



Photo 22.

Feature: N/A

OHWM: No

Width: N/A

View: North

Notes: Looking north from the southern extent of the proposed gen-tie line alignment. This area contains puddles from recent rains. No hydrophytic vegetation is present.



Photo 23.

Feature: N/A

OHWM: No

Width: N/A

View: South

Notes: Looking south from the southern extent of the proposed gen-tie line alignment. This area contains puddles from recent rains. No hydrophytic vegetation is present. Cattle structures south of the proposed alignment are pictured.



Photo 24.

Feature: N/A

OHWM: No

Width: N/A

View: South

Notes: Looking south from the southern extent of the proposed gen-tie line alignment.



Photo 25.

Feature: N/A

OHWM: No

Width: N/A

View: South

Notes: Looking south from the southern extent of the proposed gen-tie line alignment along sandy patches.



Photo 26.

Feature: N/A

OHWM: No

Width: N/A

View: South

Notes: Looking south from the central extent of the proposed gen-tie line alignment along sandy patches.



Photo 27.

Feature: N/A

OHWM: No

Width: N/A

View: East

Notes: Looking east from the central extent of the proposed gen-tie line alignment along sandy patches.



Photo 28.
Feature: N/A
OHWM: No
Width: N/A
View: North
Notes: Looking north from the central extent of the proposed gen-tie line alignment.



Photo 29.
Feature: N/A
OHWM: No
Width: N/A
View: East
Notes: Looking east from the northernmost point of the proposed gen-tie line alignment. An underground gas line indicator is pictured.

ATTACHMENT 3
Directions to the Analysis Area

3636 N Central Ave
to Willcox Playa Wildlife Area

3 hr 7 min

212.3 miles

IRS reimbursement:

\$124.19



Head west. Go for 0.1 mi.

Then 0.10 miles



Turn right toward N 2nd Ave. Go for 52 ft.

Then 0.01 miles



Turn left onto N 2nd Ave. Go for 36 ft.

Then 0.01 miles



Turn left onto W Columbus Ave. Go for 0.1 mi.

Then 0.15 miles



Turn right onto N Central Ave. Go for 1.6 mi.

Then 1.65 miles



Turn left onto E McDowell Rd. Go for 0.3 mi.

Then 0.26 miles



Turn right onto N 3rd St. Go for 0.2 mi.

Then 0.23 miles



Turn left and take ramp onto I-10 E (Papago Fwy). Go for 192 mi.

Then 191.84 miles



Take exit 336 toward To Taylor Rd. Go for 0.6 mi.

Then 0.55 miles



Continue on S Haskell Ave (I-10-BL). Go for 3.4 mi.

Then 3.42 miles



Turn right onto E Maley St (AZ-186). Go for 2.0 mi.

Then 1.96 miles



Continue on S Highway 186 (AZ-186). Go for 4.0 mi.

Then 3.97 miles



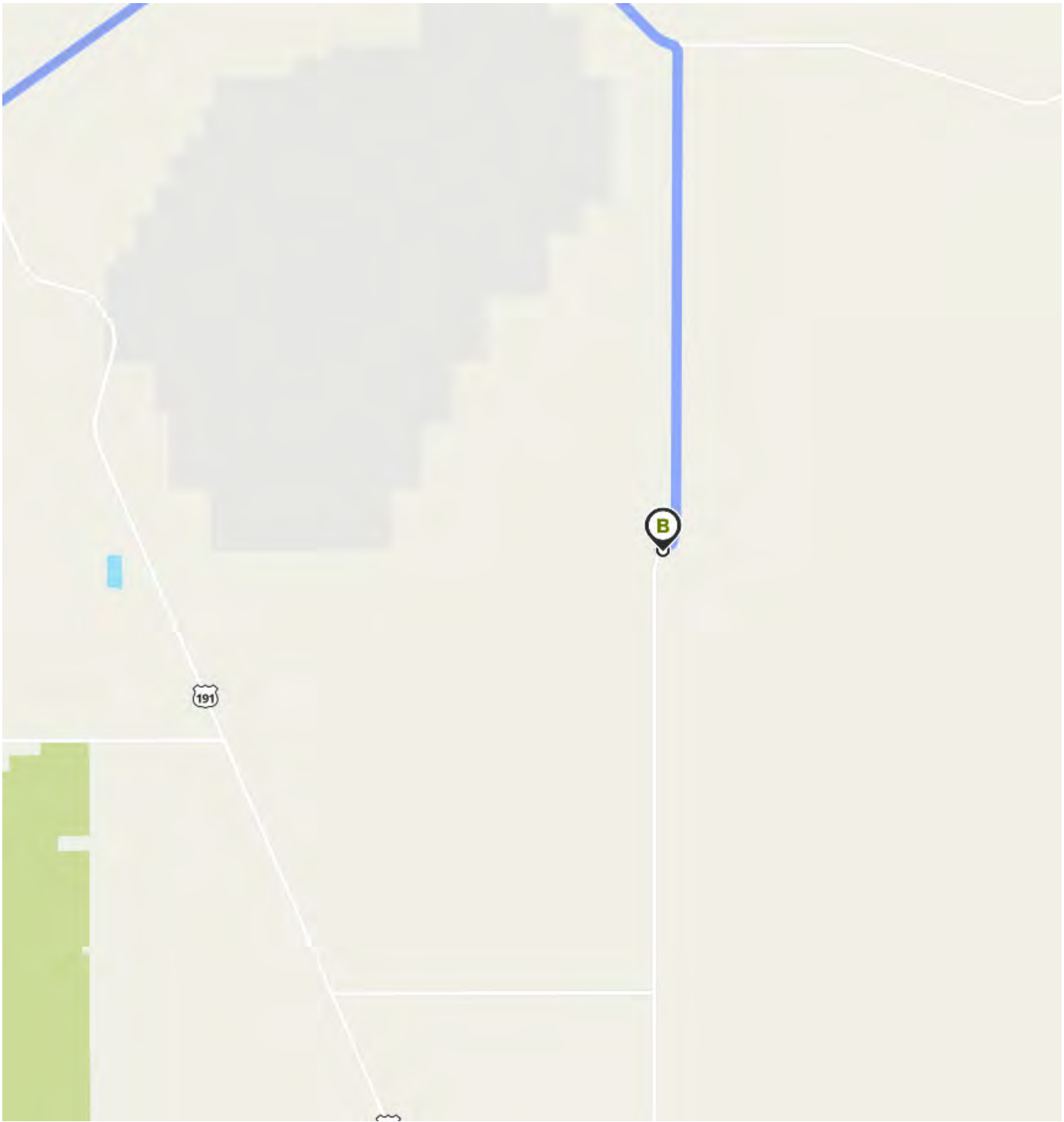
Keep right onto S Kansas Settlement Rd. Go for 8.1 mi.

Then 8.15 miles



Willcox Playa Wildlife Area

S Kansas Settlement Rd, Willcox, AZ 85643



ATTACHMENT 4
Agent and Authorization Letter

February 10, 2023

Ms. Sallie Diebolt
US ARMY CORPS OF ENGINEERS
3636 North Central Avenue
Suite 900
Phoenix, Arizona 85012

**RE: APPROVED JURISDICTIONAL WATERS DETERMINATION REQUEST FOR
THE THREE SISTERS SOLAR SITE, COSHISE COUNTY, ARIZONA
AGENT DESIGNATION AND AUTHORIZATION FOR FEDERAL ACCESS**

Dear Ms. Diebolt:

The Three Sisters Solar Project is proposed by THIS bn, LLC (Applicant). The Applicant owns or holds a lease for all lands within the Analysis Area. The Analysis Area subject to this approved jurisdictional determination is comprised entirely of privately held lands managed by Liberty Land & Cattle Co LLC. The contact information is:


Name: THSI bn, LLC
Mailing Address: 13123 E Emerald Coast Pkwy, Suite B #158
City/State/Zip Code: Inlet Beach, FL 32461

ACCESS AUTHORIZATION:

I hereby authorize the Army Corps of Engineers and other federal employees the right to access Liberty Land & Cattle Co LLC privately held property within the Analysis Area to conduct field investigations for the jurisdictional delineation.

If you have any questions or require additional information, please do not hesitate to contact me.

Respectfully,



Signature of Owner Representative

2/14/2023

Date

Lindsey Hesch, PWS

Typed/Printed Name of Representative

850-842-8264

Phone Number

Director, Permitting

Title of Representative

cc: Brian Lindenlaub, WestLand Engineering & Environmental Services

ATTACHMENT 5
Approved Jurisdictional Form

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Los Angeles District, File No. Pending

C. PROJECT LOCATION AND BACKGROUND INFORMATION: Feature 1

State: Arizona County/parish/borough: Cochise City: N/A
Center coordinates of site (lat/long in degree decimal format): Lat. 32.050197° **N**, Long. 109.85435278° **W**.
Universal Transverse Mercator:

Name of nearest waterbody:

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows:

Name of watershed or Hydrologic Unit Code (HUC):

- Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
 Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

- Office (Desk) Determination. Date: Pending
 Field Determination. Date(s):

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

- Waters subject to the ebb and flow of the tide.
 Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are no** "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

- TNWs, including territorial seas
 Wetlands adjacent to TNWs
 Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs
 Non-RPWs that flow directly or indirectly into TNWs
 Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
 Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
 Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
 Impoundments of jurisdictional waters
 Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: linear feet: width (ft) and/or acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: **Pick List**

Elevation of established OHWM (if known): .

2. Non-regulated waters/wetlands (check if applicable):³

- Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
Explain: **Feature 1 exhibits OHWM but is not tributary to a TNW.**

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW

Identify TNW: .

Summarize rationale supporting determination: .

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is “adjacent”:

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are “relatively permanent waters” (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: **Pick List**

Drainage area: **Pick List**

Average annual rainfall: inches

Average annual snowfall: inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **Pick List** river miles from TNW.

Project waters are **Pick List** river miles from RPW.

Project waters are **Pick List** aerial (straight) miles from TNW.

Project waters are **Pick List** aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain: .

Identify flow route to TNW⁵: .

Tributary stream order, if known: .

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

(b) General Tributary Characteristics (check all that apply):

- Tributary is:** Natural
 Artificial (man-made). Explain:
 Manipulated (man-altered). Explain:

Tributary properties with respect to top of bank (estimate):

Average width: feet
Average depth: feet
Average side slopes: **Pick List**.

Primary tributary substrate composition (check all that apply):

- | | | |
|--|--|-----------------------------------|
| <input type="checkbox"/> Silts | <input type="checkbox"/> Sands | <input type="checkbox"/> Concrete |
| <input type="checkbox"/> Cobbles | <input type="checkbox"/> Gravel | <input type="checkbox"/> Muck |
| <input type="checkbox"/> Bedrock | <input type="checkbox"/> Vegetation. Type/% cover: | |
| <input type="checkbox"/> Other. Explain: | | |

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:

Presence of run/riffle/pool complexes. Explain:

Tributary geometry: **Pick List**

Tributary gradient (approximate average slope): %

(c) Flow:

Tributary provides for: **Pick List**

Estimate average number of flow events in review area/year: **Pick List**

Describe flow regime:

Other information on duration and volume:

Surface flow is: **Pick List**. Characteristics:

Subsurface flow: **Pick List**. Explain findings:

- Dye (or other) test performed:

Tributary has (check all that apply):

- | | |
|---|---|
| <input type="checkbox"/> Bed and banks | |
| <input type="checkbox"/> OHWM ⁶ (check all indicators that apply): | |
| <input type="checkbox"/> clear, natural line impressed on the bank | <input type="checkbox"/> the presence of litter and debris |
| <input type="checkbox"/> changes in the character of soil | <input type="checkbox"/> destruction of terrestrial vegetation |
| <input type="checkbox"/> shelving | <input type="checkbox"/> the presence of wrack line |
| <input type="checkbox"/> vegetation matted down, bent, or absent | <input type="checkbox"/> sediment sorting |
| <input type="checkbox"/> leaf litter disturbed or washed away | <input type="checkbox"/> scour |
| <input type="checkbox"/> sediment deposition | <input type="checkbox"/> multiple observed or predicted flow events |
| <input type="checkbox"/> water staining | <input type="checkbox"/> abrupt change in plant community |
| <input type="checkbox"/> other (list): | |
| <input type="checkbox"/> Discontinuous OHWM. ⁷ Explain: | |

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- | | |
|--|--|
| <input checked="" type="checkbox"/> High Tide Line indicated by: | <input checked="" type="checkbox"/> Mean High Water Mark indicated by: |
| <input type="checkbox"/> oil or scum line along shore objects | <input type="checkbox"/> survey to available datum; |
| <input type="checkbox"/> fine shell or debris deposits (foreshore) | <input type="checkbox"/> physical markings; |
| <input type="checkbox"/> physical markings/characteristics | <input type="checkbox"/> vegetation lines/changes in vegetation types. |
| <input type="checkbox"/> tidal gauges | |
| <input type="checkbox"/> other (list): | |

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain:

Identify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

(iv) **Biological Characteristics. Channel supports (check all that apply):**

- Riparian corridor. Characteristics (type, average width):
- Wetland fringe. Characteristics:
- Habitat for:
 - Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings:

2. **Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: acres

Wetland type. Explain:

Wetland quality. Explain:

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain:

Surface flow is: **Pick List**

Characteristics:

Subsurface flow: **Pick List**. Explain findings:

Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain:

Ecological connection. Explain:

Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

Project waters are **Pick List** aerial (straight) miles from TNW.

Flow is from: **Pick List**.

Estimate approximate location of wetland as within the **Pick List** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:

Identify specific pollutants, if known:

(iii) **Biological Characteristics. Wetland supports (check all that apply):**

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. Explain:
- Habitat for:
 - Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings:

3. **Characteristics of all wetlands adjacent to the tributary (if any)**

All wetland(s) being considered in the cumulative analysis: **Pick List**

Approximately () acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N) Size (in acres) Directly abuts? (Y/N) Size (in acres)

Summarize overall biological, chemical and physical functions being performed: .

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .
3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:

- TNWs: linear feet width (ft), Or, acres.
- Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**

- Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
- Tributaries of TNW where tributaries have continuous flow “seasonally” (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: linear feet width (ft).
 Other non-wetland waters: acres.
Identify type(s) of waters: .

3. Non-RPWs⁸ that flow directly or indirectly into TNWs.

- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

- Tributary waters: linear feet width (ft).
 Other non-wetland waters: acres.
Identify type(s) of waters: .

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
 Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .
 Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.

- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.

- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. Impoundments of jurisdictional waters.⁹

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from "waters of the U.S.," or
 Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
 Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):¹⁰

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
 from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
 which are or could be used for industrial purposes by industries in interstate commerce.
 Interstate isolated waters. Explain: .
 Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

⁸See Footnote # 3.

⁹To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.
- Identify type(s) of waters: .
- Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
- Other: (explain, if not covered above): **Feature 1 exhibits OHWM but is not tributary to a TNW and has no connection to interstate commerce.**

interstate commerce.

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: WestLand Engineering & Environmental Services.
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: .
- Corps navigable waters' study: .
- U.S. Geological Survey Hydrologic Atlas: .
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: 1:100,000 Silver Bell Mountains.
- USDA Natural Resources Conservation Service Soil Survey. Citation: .
- National wetlands inventory map(s). Cite name: .
- State/Local wetland inventory map(s): .
- FEMA/FIRM maps: .
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): ArcGIS Online World Topo Map and Pima County 2020.
or Other (Name & Date): Ground Photographs 9/29/2020.
- Previous determination(s). File no. and date of response letter: .
- Applicable/supporting case law: .
- Applicable/supporting scientific literature: .
- Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD: Feature 1 is an ephemeral ponding area that does not convey, intercept or replace waters from any TNW, therefore, Feature 1 is not a potentially jurisdictional feature.

ATTACHMENT F
Biological Evaluation

Biological Evaluation for the Three Sisters Solar Project

Prepared for:

THSI bn, LLC, a subsidiary of BrightNight, LLC
13123 E Emerald Coast Pkwy, Suite B #158 – Inlet Beach Florida 32461

Prepared by:

WestLand Engineering & Environmental Services
4001 E. Paradise Falls Drive – Tucson, Arizona 85712
+1 520-206-9585

WestLand Project Number: 10276

January 17, 2023



Table of Contents

| | |
|---|----|
| 1. INTRODUCTION..... | 1 |
| 2. PROJECT LOCATION AND DESCRIPTION..... | 1 |
| 3. ENVIRONMENTAL SETTING OF THE ANALYSIS AREA..... | 2 |
| 3.1. Physiographic | 2 |
| 3.2. Climatic | 3 |
| 3.3. Surface Water..... | 3 |
| 3.4. Soil..... | 3 |
| 3.5. Vegetation..... | 3 |
| 3.6. Wildlife | 4 |
| 3.7. Existing Conditions | 6 |
| 4. METHODS | 6 |
| 5. POTENTIAL FOR SPECIAL-STATUS SPECIES TO OCCUR..... | 7 |
| 5.1. ESA Listed Species | 7 |
| 5.2. BGEPA Listed Species | 7 |
| 5.3. Migratory Bird Species Act | 7 |
| 6. REFERENCES CITED..... | 12 |

Tables

| | |
|--|---|
| Table 1. Mammal Species that May Occur in the Area | 4 |
| Table 2. Bird Species that May Occur in the Area..... | 5 |
| Table 3. Reptile and Amphibian Species that May Occur in the Area..... | 5 |
| Table 4. ESA Species Screening Analysis | 8 |

Figures

(follow text)

| |
|--|
| Figure 1. Vicinity Map |
| Figure 2a, b. Aerial Overview (with Solar Array) |
| Figure 3. National Wetland Inventory |
| Figure 4. Vegetation Map |

Appendices

- Appendix A. Representative Photographs of the Analysis Area
- Appendix B. NRCS Digital Web Soil Survey Report
- Appendix C. U.S. Fish and Wildlife Service Arizona Ecological Services Field Office Information, Planning, and Conservation System Online Query Report
- Appendix D. Arizona Game and Fish Department Heritage Data Management System Online Environmental Review Tool Query Report

1. INTRODUCTION

THSI bn, LLC (the Applicant, or THSI), a subsidiary of BNC Devco, LLC, which is a joint venture between BrightNight, LLC (BrightNight) and Cordelio Power (Cordelio) proposes the Three Sisters Solar Project, an up to 300 -megawatt (MW) photovoltaic solar energy generating facility with potential battery storage and associated approximately 1.5-mile-long generation transmission tie-in (gen-tie) line, Project substation, and Project switchyard located primarily on private lands south of Willcox, Cochise County, Arizona. Development of the Three Sisters Solar Project will require a special use permit (SUP) from Cochise County (Planning & Zoning Division) for the solar energy generating facility, and a Certificate of Environmental Compatibility (CEC) from the Arizona Corporation Commission (ACC) for the gen-tie line, substation, and switchyard (Project). This Biological Evaluation (BE) has been prepared to support acquisition of both authorizations and provides an assessment for both the solar energy generating facility, the gen-tie line, Project substation, and Project switchyard within a 500-foot buffer (Analysis Area).

For the purpose of this Biological Evaluation, special-status species are defined as species designated by the United States Fish and Wildlife Service (USFWS) as Endangered, Threatened, proposed for listing, or Candidate for listing under the Endangered Species Act (ESA), and species protected under the Bald and Golden Eagle Protection Act (BGEPA). Other species of concern within the area include the western burrowing owl (*Athene cunicularia*) and the sandhill crane (*Antigone canadensis*), both of which are protected under the Migratory Bird Treaty Act (MBTA). Given the noise and dust from proposed construction activities that may impact a broader area than the footprint of the Project, Photographs of the Project Area are provided in **Appendix A**. This 500-ft-wide corridor for the gen-tie line in combination with the proposed sites for the Project substation and Project switchyard create the Proposed Transmission Corridor considered in the analysis (**Figure 2a**). Additionally, this BE considers the proposed solar energy generating facility with potential battery energy storage.

The following sections provide: a description and location of the Project (**Section 2**), a description of the Analysis Area (**Section 3**), special-status species screening methods (**Section 4**), special-status species screening results (**Section 5**), and references cited (**Section 6**).

2. PROJECT LOCATION AND DESCRIPTION

Generation Transmission Tie-In Line Substation, and Switchyard

The Project will consist of a gen-tie line, Project substation, and Project switchyard to interconnect a proposed up to 300-MW photovoltaic solar energy generating facility with potential battery storage to an existing transmission line located approximately 10 miles south of Willcox, Arizona. The proposed gen-tie line will be approximately 1.5 miles in length running north-south along the southeastern side of the Willcox Playa, connecting to an existing transmission line that is owned and operated by Arizona Electric Power Cooperative, Inc. (AEPSCO), and transmits electric power from Apache Station Generating Station (625 MW of combined gross generating capacity) produced from burning natural gas, or coal.

The proposed Project substation will convert power generated or stored at the proposed up to 300-MW photovoltaic solar energy generating facility to a voltage compatible with the existing transmission line. The proposed gen-tie line and 20-foot-wide access road will ultimately be 100 feet in width from the proposed Project substation occupying approximately 400 by 400 feet (3.6 acres) within an approximately 8-acre site at the south terminus to the approximately 400 by 400 feet (3.6 acres) Project switchyard within an approximately 8-acre site at the north terminus which will be similar in size to the substation. The Proposed Transmission Corridor will be located primarily on privately-owned lands. **Figures 2a and 2b** depict the facilities associated with this CEC application and the existing AEPCO line. The proposed Project switchyard at the north end will interconnect the gen-tie to the existing AEPCO transmission line. The potential footprint of disturbance within the 100-foot-wide eight-of-way, Project Substation and Project switchyard is approximately 13.1 acres.

Solar Energy Generating Facility with Battery Storage

The proposed site for the solar energy generating facility with potential battery storage (the Site) consists of the development of approximately 2,000 acres adjacent to and south of the gen-tie line. The Site is situated on undeveloped private lands southeast of the Willcox Playa located approximately 11 miles southeast of Interstate 10, 14 miles south of the city of Willcox, Arizona, and approximately 2 miles east of U.S. Highway 191. The Site is bound on the north, south, and east by undeveloped private land and on the west, by undeveloped private and Arizona State Trust lands.

3. ENVIRONMENTAL SETTING OF THE ANALYSIS AREA

3.1. PHYSIOGRAPHIC

The Analysis Area is located in the Basin and Range physiographic province (Ffolliott 1999), within the Northern Sulphur Springs Valley physiographic area near the southeastern edge of the Willcox Playa (Trapp and Reynolds 1995; **Figure 1**). The Analysis Area is adjacent to the southeastern extent of the playa and occurs at approximately 4,152 to 4,158 ft above mean sea level (amsl). Geologic substrate within the Analysis Area is broadly mapped primarily as Holocene surficial deposits with the major constituents of fluvial silt and clay and minor constituents of alluvial sand and gravel (Richard et al. 2000).

Terrain in the general area is essentially flat, with elevations ranging from approximately 4,150 to 4,187 feet amsl. The western-most portion of the array area has more relief and includes floodplain area that will be set-aside and preserved as open space.

3.2. CLIMATIC

Temperature and precipitation data was collected from the National Oceanic and Atmospheric Administration (NOAA) Cooperative Station in Willcox, Arizona (WRCC 2016).¹ Climatic conditions are characterized by hot summers (94.5° F average temperature in July, the hottest month), mild winters (25.9° F average temperature in January, the coldest month) and low precipitation. The average annual precipitation in the Town of Willcox is 12.18 inches.

3.3. SURFACE WATER

The Willcox Playa is an endorheic (closed) basin, with all surface water drainage flowing to the southcentral portion of the playa. Although perennial and intermittent stream reaches occur in the mountain ranges that bound the playa, all drainage features within the Willcox Playa become ephemeral before discharging into the playa. After heavy rainfall events, runoff from the surrounding mountains and alluvial piedmonts accumulates in the playa, creating shallow, ephemeral ponds, and these shallow surface waters evaporate within several days if not recharged (Waters 1989). There are several ephemeral drainage features and ponds within the Site. An approved jurisdictional delineation (AJD) was prepared that documents that these surface water features are not jurisdictional. This is being reviewed by the Army Corps of Engineers.

Within the Analysis Area for the gen-tie line, cattle tanks located at the south end of the Analysis Area and backwater drainages extending from the playa were observed to have water during the site visit on September 29, 2022, that resulted from recent rainfall events.

3.4. SOIL

The Analysis Area consists of somewhat poorly drained Crot sandy loam with 0- to 1-percent slopes, which is often associated with flats and terraces (**Appendix B**).

3.5. VEGETATION

The Analysis Area and the Site are mapped within the Semidesert Grassland biotic community (The Nature Conservancy 2012). Vegetation composition within the Analysis Area and the Site consists primarily of low-density grasses and upland tree and shrub species.

Within the Analysis Area vegetation observed included four-wing saltbush (*Atriplex canescens*), invasive Russian thistle (*Salsola sp.*), shrub-sized velvet mesquite (*Prosopis velutina*), burroweed (*Isocoma tenuisecta*), invasive tamarisk, and mixed grasses. Yucca (*Yucca spp.*) and cholla cacti (*Cylindropuntia spp.*) were also observed.

¹ Western Regional Climate Center accessed online November 1, 2022.

3.6. WILDLIFE

A site visit was conducted on September 29, 2022, by Breck Jacoby and Dave Ward, qualified WestLand biologists familiar with the vegetation and wildlife of the region. During this site visit, wildlife observed included numerous birds such as sandhill crane (*Antigone canadensis*), loggerhead shrike (*Lanius ludovicianus*), common raven (*Corvus corax*), great horned owl (*Bubo virginianus*), and several sparrow and swallow species. Other wildlife observed included jackrabbit (*Lepus townsendii*), small rodents, and a variety of lizards.

Western burrowing owl was not observed during the site visit but is known to occur within the Willcox Playa Wildlife Linkage that crosses a portion of the Analysis Area including portions of the gen-tie line and the solar array (The Arizona Wildlife Linkages Workgroup 2006) (**Appendix D, Important Areas, pg. 6**). The Willcox Playa Wildlife Linkage is reported to include the following species: bobcat (*Lynx rufus*), Chiricahua leopard frog (*Lithobates chiricahuensis*), javelina (*Tayassuidae*), kit fox (*Vulpes macrotis*), Mexican spotted owl (*Strix occidentalis lucida*), mountain lion (*Puma concolor*), mule deer (*Odocoileus hemionus*), ornate box turtle (*Terrapene ornata*), plains leopard frog (*Lithobates blairi*), pronghorn (*Antilocapra americana*), Texas horned lizard (*Phrynosoma cornutum*), and western burrowing owl (*Athene cunicularia hypugaea*).

The Analysis Area is located at the southern end of the Willcox Playa/Cochise Lakes Important Bird Area (IBA). This IBA is described as containing a broad alkaline lakebed fringed with semi-desert grassland, with a seasonally flooded playa that serves as wintering and migratory stopovers for shorebirds and waterfowl (Tucson Audubon Society 2012).

General wildlife whose range overlaps the Analysis Area or are associated with its mapped biotic community (semidesert grassland) are listed in **Tables 1 through 3**.

Table 1. Mammal Species that May Occur in the Area

| Species Name | Common Name |
|-----------------------------------|----------------------------|
| <i>Antilocapra americana</i> | Pronghorn |
| <i>Canis latrans</i> | Coyote |
| <i>Dicotyles tajacu</i> | Javelina |
| <i>Dipodomys merriami</i> | Merriam's kangaroo rat |
| <i>D. ordii</i> | Ord's kangaroo rat |
| <i>D. spectabilis</i> | Banner-tailed kangaroo rat |
| <i>Lepus californicus</i> | Black-tailed jackrabbit |
| <i>Neotoma albigula</i> | White-throated woodrat |
| <i>N. micropus</i> | Southern plains woodrat |
| <i>Odocoileus hemionus crooki</i> | Mule deer |
| <i>O. virginianus</i> | White-tailed deer |
| <i>Onychomys torridus</i> | Southern grasshopper mouse |
| <i>Chaetodipus hispidus</i> | Hispid pocket mouse |
| <i>Peromyscus leucopus</i> | White-footed mouse |
| <i>Sigmodon fulviventer</i> | Tawny-bellied cotton rat |

| Species Name | Common Name |
|-------------------------------|-------------------------|
| <i>S. hispidus</i> | Hispid cotton rat |
| <i>Spermophilus spilosoma</i> | Spotted ground squirrel |
| <i>Taxidea taxus</i> | Badger |

Table 2. Bird Species that May Occur in the Area

| Species Name | Common Name |
|--|--------------------------|
| <i>Aimophila cassinii</i> | Cassin's sparrow |
| <i>Amphispiza bilineata</i> | Black-throated sparrow |
| <i>Athene cunicularia</i> | Burrowing owl |
| <i>Auriparus flaviceps</i> | Verdin |
| <i>Buteo swainsoni</i> | Swainson's hawk |
| <i>Callipepla squamata</i> | Scaled quail |
| <i>Campylorhynchus brunneicapillus</i> | Cactus wren |
| <i>Carpodacus mexicanus</i> | House finch |
| <i>Chondestes grammacus</i> | Lark sparrow |
| <i>Corvus cryptoleucus</i> | White-necked raven |
| <i>Eremophila alpestris</i> | Horned lark |
| <i>Falco mexicanus</i> | Prairie falcon |
| <i>F. sparverius</i> | American kestrel |
| <i>Geococcyx californianus</i> | Roadrunner |
| <i>Hirundo rustica</i> | Barn swallow |
| <i>Icterus parisorum</i> | Scott's oriole |
| <i>Lanius ludovicianus</i> | Loggerhead shrike |
| <i>Lophortyx gambelii</i> | Gambel's quail |
| <i>Mimus polyglottos</i> | Mockingbird |
| <i>Molothrus ater</i> | Brown-headed cowbird |
| <i>Myiarchus cinerascens</i> | Ash-throated flycatcher |
| <i>Phalaenoptilus nuttallii</i> | Poorwill |
| <i>Picoides scalaris</i> | Ladder-backed woodpecker |
| <i>Polioptila melanura</i> | Black-tailed gnatcatcher |
| <i>Sayornis saya</i> | Say's phoebe |
| <i>Sturnella neglecta</i> | Western meadowlark |
| <i>S. magna</i> | Eastern meadowlark |
| <i>Toxostoma curvirostre</i> | Curve-billed thrasher |
| <i>Tyrannus verticalis</i> | Western kingbird |
| <i>Zenaida macroura</i> | Mourning dove |

Table 3. Reptile and Amphibian Species that May Occur in the Area

| Species Name | Common Name |
|------------------------------------|-----------------------------|
| <i>Bufo debilis insidiosus</i> | Western green toad |
| <i>Cnemidophorus uniparens</i> | Desert grassland whiptail |
| <i>Heterodon nasicus</i> | Western hooknose snake |
| <i>Heterodon nasicus kennerlyi</i> | Mexican hognose snake |
| <i>Holbrookia texana scitula</i> | Southwestern earless lizard |
| <i>Terrapene ornata luteola</i> | Desert box turtle |

3.7. EXISTING CONDITIONS

Land use in the Analysis Area and vicinity includes operation and maintenance of existing energy generation, transmission, and distribution infrastructure, agriculture, cattle grazing, rural housing, transportation via U.S. Highway 191 and other smaller roads, wildlife viewing, and other recreational activities. The Project Area is adjacent to the Willcox Playa and does not include recreational facilities or residential structures. Cattle grazing and two manmade tanks are located within the Project Area.

4. METHODS

A screening analysis was completed to evaluate the potential for special-status species or proposed or designated critical habitat to occur within the Analysis Area. ESA-listed species and critical habitat considered for evaluation are those that were identified in the USFWS Information for Planning and Consultation (IPaC) report generated for the Project (**Appendix C**; September 28, 2022). The determinations of potential for special-status species to occur within the Analysis Area were based on a review of:

- The natural history and known geographical and elevational ranges of the species.
- Results of an Arizona Game and Fish Department (AGFD) Heritage Data Management System (HDMS) online environmental review tool query that provided records of special-status species within 3 miles of the Project (**Appendix D**).
- Other occurrence records in published or grey literature, including citizen science data, and unpublished data.

Observations recorded during a site visit conducted September 29, 2022, to identify habitat types and evaluate the potential for special-status species to be present in the Analysis Area and general vicinity. The criteria used to determine the potential of occurrence of each species included in this screening analysis are defined as follows:

Present: The species has been observed to occur within the Analysis Area, the Analysis Area is within the known range and distribution of the species, and habitat characteristics required by the species are present.

Possible: There are no known records of the species within the Analysis Area, but the known, current distribution of the species includes the Analysis Area, and the required habitat characteristics of the species appear to be present in the Analysis Area. Given the uncertainty associated with species identification and accuracy of the location of observations from eBird and other citizen science databases, observations associated with citizen science databases suggest that a species is possible within the Analysis Area but do not confirm presence.

Unlikely: The known, current distribution of the species does not include the Analysis Area, but the distribution of the species is close enough such that the Analysis Area may be within the dispersal or foraging distance of the species, and they may show up as transients. The habitat characteristics required by the species may be present in the Analysis Area.

None: The Analysis Area is outside of the known distribution of the species, or the habitat characteristics required by the species are not present.

5. POTENTIAL FOR SPECIAL-STATUS SPECIES TO OCCUR

The results of the special-status species screening analyses are provided in **Table 4**. An overview of the federal protection status, known suitable habitat, total range, distribution in Arizona, and potential to occur within the Analysis Area for ESA and other special-status species is provided in **Table 4**.

5.1. ESA LISTED SPECIES

The IPaC list generated for this Project (**Appendix C**) included seven special-status species: jaguar (*Panthera onca*), Northern aplomado falcon (*Falco femoralis septentrionalis*), yellow-billed cuckoo (*Coccyzus americanus*), Northern Mexican gartersnake (*Thamnophis eques megalops*), Chiricahua leopard frog (*Rana chiricahuensis*), monarch butterfly (*Danaus plexippus*), and Wright's marsh thistle (*Cirsium wrightii*; **Table 1**). Of these seven species, one species was determined to have the potential to occur of **Unlikely** (monarch butterfly), and six were determined to have the potential to occur of **None**. These determinations and explanations for these findings are provided in **Table 4**.

5.2. BGEPA LISTED SPECIES

BGEPA species include golden eagle (*Aquila chrysaetos*) and bald eagle (*Haliaeetus leucocephalus*). Though neither had HDMS records within 3 miles of the Analysis Area (**Appendix D**), a number of eBird records exist from the vicinity of the Analysis Area. These records are generally from the winter and early spring period and suggest seasonal presence of foraging eagles, though no suitable nesting habitat occurs in the Analysis Area or its vicinity.

5.3. MIGRATORY BIRD SPECIES ACT

As described in **Section 3.6**, MBTA species including western burrowing owl and sandhill crane are known to use Willcox Playa adjacent to the Analysis Area. Birds protected by the MBTA are likely to pass through the area during migration, although nesting habitat within the Analysis Area is limited by the sparse nature of the vegetation and predominance of weedy species such as Russian thistle.

Table 4. ESA Species Screening Analysis

| Species Name | Federal Status | Known Suitable Habitat | Total Range | Distribution in Arizona | Potential to Occur |
|--|---|--|---|--|---|
| AMPHIBIANS | | | | | |
| <i>Lithobates chiricahuensis</i> Chiricahua leopard frog | Threatened (USFWS 2002, USFWS 2012); designated critical habitat (USFWS 2012). | Breeds in perennial to semi-permanent montane aquatic environments including cattle tanks, creeks, cienegas, pools, rivers, springs, lakes and reservoirs (USFWS 2011). Larvae are obligate on aquatic habitats whereas adults are primarily aquatic but also utilize terrestrial habitats (USFWS 2012). May disperse from occupied habitat one mile overland, three miles along intermittent drainages, and five miles along permanent water courses, or some combination thereof (USFWS 2012). Elevation: 3,200–8,890 ft (USFWS 2012). | Occurs in Arizona and New Mexico, U.S. and Sonora, Chihuahua and Durango, Mexico (USFWS 2012). | In Arizona, this species distribution is split into two areas, one within montane areas across the Mogollon Rim and the second in the mountains and valleys south of the Gila River (AGFD 2015). At the time of the initial listing (USFWS 2002), the frog was likely extant at an estimated 87 localities in Arizona. Surveys between 2002 and 2009 suggest that there has been a modest increase in the number of breeding sites (USFWS 2011). | None. There are HDMS records within 3 miles of the Analysis Area (Appendix D). The Analysis Area does not contain the aquatic habitats (creeks, cienegas, pools, rivers, streams etc.) this species requires. The Analysis Area is outside designated critical habitat for this species. |
| BIRDS | | | | | |
| <i>Coccyzus americanus</i> (western Distinct Population Segment) Yellow-billed cuckoo | Threatened (USFWS 2014b); designated critical habitat (USFWS 2021b). | In Arizona, most commonly found in lowland riparian woodlands where Fremont cottonwood, willow, velvet ash, Arizona walnut, mesquite, and tamarisk are dominant (USFWS 2013b). Also utilizes drier woodlands including mesquite bosques, drainages in desert scrub and desert grassland with a tree component, and Madrean evergreen woodlands in perennial, intermittent or ephemeral drainages (USFWS 2020c). This species typically occurs at elevations less than 6,600 ft amsl (AGFD 2011b). Western yellow-billed cuckoos may migrate along riparian corridors and surrounding upland vegetation (Hughes 2020). Elevation: Typically below 6,600 ft (AGFD 2011b). | This species is a long-distance neotropical migrant (Hughes 2020). At the species level, breeds throughout temperate North America south to Mexico and the Greater Antilles (Hughes 2020). The western DPS breeds west of the Continental Divide and the watershed boundary between the Rio Grande and Pecos River and the Chihuahuan Desert. The USFWS considers the historical breeding range to include southern British Columbia, Canada and in Washington, Idaho, Nevada, Oregon, Utah, western Colorado, southwestern Wyoming, California, Arizona, western New Mexico, and Texas, U.S. Breeding range extends into the Cape Region of Baja California Sur, Sonora, Sinaloa, western Chihuahua and northwestern Durango, Mexico (USFWS 2014b). Winters in South America, east of the Andes and typically south of the Amazon Basin in southern Brazil, Paraguay, Uruguay, eastern Bolivia and northern Argentina (USFWS 2014b). | More common in southern, central and the extreme northeastern portion of state, but occurs throughout the state where suitable habitat exists (AGFD 2011b). | None. The Analysis Area does not contain suitable lowland riparian woodlands this species requires. Additionally, there are no HDMS records within 3 miles of the Analysis Area (Appendix D). The Analysis Area is outside designated critical habitat for this species. |
| <i>Falco femoralis septentrionalis</i> Northern aplomado falcon | Endangered (USFWS 1986); no critical habitat; non-essential experimental population (USFWS 2006). | Within the U.S., this species uses coastal prairies, desert grasslands, oak woodlands and riparian gallery forest (Keddy-Hector, Pyle, and Pattern 2017). This species has historically occurred in relatively flat and open habitats (USFWS 2014d). Builds nests in large trees, cliffs, utility poles, artificial platforms or on the ground when elevated nest sites are not available (Keddy-Hector, Pyle, and Pattern 2017). This species is expected to use similar habitat year-round (Keddy-Hector, Pyle, and Pattern 2017). Elevation: In southwestern U.S., most common from 3,300–4,900 ft (AGFD 2001). | This species is mostly non-migratory, although local nomadic movement may occur (Keddy-Hector, Pyle, and Pattern 2017). The <i>septentrionalis</i> subspecies occurs in New Mexico and Texas, U.S. and the Mexican states of Chihuahua, northwestern Chiapas, western Campeche, Oaxaca, San Luis Potosi, Tabasco, and Vera Cruz (USFWS 2014d). | Historically occurred in the southern portion of the state but there are no substantiated breeding records since 1940. The most recently documented sighting in the state occurred in 1977, however, there was an unconfirmed report in 2005 from near the international border with Mexico (USFWS 2006). A non-essential experimental population, encompassing the entire state, was established in 2006 but we are unaware of any introduction of birds into Arizona (USFWS 2006). | None. The Analysis Area contains flat and open habitat, which is suitable for this species. However, there is limited knowledge of the distribution of this species in Arizona, no HDMS records within 3 miles of the Analysis Area (Appendix D), and no confirmed records of this species in Arizona for over 50 years. |

| Species Name | Federal Status | Known Suitable Habitat | Total Range | Distribution in Arizona | Potential to Occur |
|--|---|--|---|--|---|
| INSECTS | | | | | |
| <i>Danaus plexippus plexippus</i> Monarch butterfly | Candidate. (USFWS 2020a) | Monarch caterpillars feed exclusively on plants in the subfamily Asclepiadoideae (milkweed) and adults forage for nectar on a wide variety of flowers. This species can be found wherever milkweed occurs. Overwintering populations use the leaves, branches and trunks of large trees within forested groves. In California, both native tree species and eucalyptus trees are utilized (Jepsen et al. 2015). Elevation: In Arizona, found at all elevations (Morris, Kline, and Morris 2015). | <i>D. plexippus</i> occurs in North America, Central America, the Caribbean south to South America, Hawaii, Australia, some Pacific Islands, parts of Asia, Africa and southern Europe. Populations outside of the Americas may be non-native (Zhan et al. 2014). Most populations of the <i>plexippus</i> subspecies are migratory and breed in southern-most portions of all Canadian provinces except Newfoundland and Labrador, the conterminous U.S. states and the Mexican states of Baja California, Chihuahua, Coahuila, Nuevo León, Sonora and Tamaulipas. The wintering range of migratory populations includes coastal California and southern Florida, U.S. and the Mexican states of Baja California, Mexico and Michoacán (Jepsen et al. 2015). | Breeding and migratory populations occur throughout the state. Some adults overwinter in the low deserts of Arizona in areas where food resources are abundant. These areas are generally represented by urban environments including Yuma, Phoenix and Tucson (Morris, Kline, and Morris 2015). | Unlikely. This species is migratory and can be found where food resources are abundant. However, milkweed was not observed within the Analysis Area to support the monarch butterfly populations. There are no HDMS records within 3 miles (Appendix D). Preferred foraging habitat is absent in the Analysis Area due to the lack of milkweed and the predominance of grasses, four-wing saltbush, and Russian thistle. |
| MAMMALS | | | | | |
| <i>Panthera onca</i> Jaguar | Endangered (USFWS 1997); designated critical habitat (USFWS 2014a). | Range wide this species uses wide variety of habitat types. Jaguars use lowland wet vegetative communities, including marshy savanna and tropical rainforest. This species is also found in arid regions where it is found in tropical dry forest, thornscrub, desertscrub, chaparral, semi-desert grassland, Madrean evergreen woodland, deciduous forest, and conifer forest (USFWS 2018). Elevation: This species has been recorded from as high as 9,186 ft in the northern extent of its range (USFWS 2018). | Occurs in southern Arizona, southern New Mexico and southern Texas, U.S. Range extends southward through Mexico to northern Argentina (USFWS 2018). | Historically (i.e., prior to 1965), jaguars were reported at numerous locations in Arizona, as far north as the Grand Canyon; however, all Arizona records since 1965 have been in the southern portion of the state (Brown and López-González 2001, Wildlife Conservation Society 2021, accessed February 1, 2021). One record is from near Globe, and the remaining records are from the Atascosa, Baboquivari, Dos Cabezas, Huachuca, Patagonia, Peloncillo, Santa Rita and Whetstone mountains in the southeastern portion of the state. Between 1965 and 1986, only three jaguars were documented (and all were killed) in Arizona: in the Patagonia Mountains (1965), near the Santa Cruz River (1971), and in the Dos Cabeza Mountains (1986). No jaguars were reported in Arizona for 10 years between 1986 and 1996, but the number of sightings of this species in the southwestern U.S. has been on the rise since 1996. Seven possibly eight, individual jaguars were documented in the U.S. between 1996 and 2021: two in New Mexico and five or six in Arizona (Wildlife Conservation Society 2021). A single male jaguar has been documented in the Dos Cabeza and Chiricahua Mountains as recently as 2021 (Wildlife Conservation Society 2021). Because female jaguars have not been documented in the state for many years, individuals detected in Arizona are interpreted as part of a population that primarily occurs in adjoining regions of Mexico (USFWS 2018). | None. The Analysis Area lacks appropriate habitat, is rare in numbers in Arizona and there are no HDMS records within 3 miles (Appendix D). The Analysis Area is outside designated critical habitat for this species. |

| Species Name | Federal Status | Known Suitable Habitat | Total Range | Distribution in Arizona | Potential to Occur |
|--|---|---|---|--|--|
| PLANTS | | | | | |
| <i>Cirsium wrightii</i> Wright's marsh thistle | Positive 12-month finding (USFWS 2010). | This species is a wetland obligate which grows in saturated, often alkaline soils along streams, springs, seeps and marshes (Keil 2006, Lichvar et al. 2016, USFWS 2010). Elevation: 3,450–7,850 ft (USFWS 2010). | Historically in Arizona and New Mexico, U.S. and Chihuahua and possibly Sonora, Mexico (USFWS 2010). | This species has been extirpated from all known locations in Arizona (USFWS 2010). Historically, occurred in the San Bernardino Cienega, Cochise County (AGFD 2010). | None. The Analysis Area does not occur within known locations of this species in Arizona. Additionally, there is no suitable habitat within the Analysis Area, and there are no HDMS records within 3 miles (Appendix D). |
| REPTILES | | | | | |
| <i>Thamnophis eques megalops</i> Northern Mexican gartersnake | Threatened (USFWS 2014c); designated critical habitat (USFWS 2020b, U.S. Fish and Wildlife Service 2021a) | This species is strongly associated with water due to its primarily aquatic prey base and is heavily dependent on fish species. Occurs near or in ponds, cienegas, lowland river riparian forests and woodlands, and upland stream gallery forests. Avoids steep mountain canyons. Most abundant in densely vegetated habitat. Associated with a variety of biotic communities including Sonoran Desertscrub, Semidesert Grasslands, Interior Chaparral, Madrean Evergreen Woodland and into the lower reaches of Petran Montane Conifer Forest (AGFD 2012, USFWS 2013a). Northern Mexican gartersnakes may be found up to one mile (or more) away from water, using terrestrial habitat for brumation, digestion, or for thermoregulatory needs such as developing young (Jeff Servoss, USFWS pers. comm. to D. Cerasale, April 18, 2016). Elevation: 130–8,497 ft (USFWS 2014c) but is most common below 5,000 ft (AGFD 2012). | Occurs in Arizona and New Mexico, U.S. (USFWS 2014c). Although it is poorly known, the range extends into Mexico and is thought to include Sonora, Chihuahua, Durango, Coahuila, Zacatecas, Guanajuato, Nayarit, Hidalgo, Jalisco, San Luis Potosí, Aguascalientes, Tlaxcala, Puebla, México, Michoacán, Oaxaca, Veracruz, and Querétaro (AGFD 2012). | Occurs in fragmented populations south of Hwy I-40. There are five populations where individuals are reliably detected and include Page Springs and Bubbling Ponds State Fish Hatcheries along Oak Creek, lower Tonto Creek, the upper Santa Cruz River in the San Rafael Valley, the Bill Williams River and the upper and middle Verde River. This species is irregularly detected along the Agua Fria River, Little Ash Creek, the Black River, Big Bonito Creek, Redrock Canyon, Sonoita Creek, Scotia Canyon, Parker Canyon, Las Cienegas National Conservation Area and Cienega Creek Natural Preserve, Buenos Aires National Wildlife Refuge, Bear Creek, San Pedro River, Babocomari River and Cienega, Canelo Hills-Sonoita Grasslands Area, and the San Bernardino National Wildlife Refuge. The species is likely extirpated from the Lower Colorado River, the Lower Salt River, Sycamore Creek (Yavapai and Coconino counties), and the Lower Santa Cruz River (USFWS 2014c). | None. The Analysis Area does not contain suitable aquatic habitat this species requires. Additionally, there are no HDMS records within 3 miles (Appendix D). The Analysis Area is outside designated critical habitat for this species. |

Table 5. BGEPA Species Screening Study

| Species Name | Federal Status | Known Suitable Habitat | Total Range | Distribution in Arizona | Potential to Occur |
|---|---|--|--|--|---|
| <i>Haliaeetus leucocephalus</i> Bald Eagle | Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c) | Breeding is concentrated in coastal areas, along rivers, lakes or reservoirs. Typically breeds in forested areas with edge habitat within 1.3 miles of aquatic habitats suitable for foraging. Prefers areas of shallow water and shorelines for fishing and hunting wide variety of waterfowl, and small aquatic and terrestrial mammals. Fish are preferred prey, but carrion is used extensively whenever encountered. Nests away from human disturbance in large trees and rarely on cliff ledges or on the ground when trees are absent. Winters primarily in coastal areas or along major river systems with adequate prey availability and large trees for perching (Buehler 2020). Elevation: In Arizona, 460–7,930 ft (AGFD 2011a). | Migratory behavior varies among populations and age groups (Buehler 2020). Breeds south of the tundra throughout Canada and the U.S., excluding Hawaii. Additionally, small breeding populations occur in Baja California, Sonora and Chihuahua, Mexico (Buehler 2020). Winter range appears to be expanding as populations increase in size. Most populations are year-round residents with only the northern most populations in Alaska, U.S. and Canada withdrawing southward or to coastal areas (Fink et al. 2018). | A small resident population occupies the central part of the state, and a wintering population occurs in central and northern Arizona. Breeding territories occur at most large lakes and reservoirs and along portions of large rivers and creeks, including the Agua Fria, Bill Williams, Colorado, Little Colorado, Gila, Salt, San Carlos, San Francisco and Verde Rivers (AGFD 2011a, McCarty, Licence, and Jacobsen 2018). | Possible The Analysis Area is within the southern limit of this species' wintering range. There are no HDMS records within 3 miles of the Analysis Area (Appendix D) but there are numerous eBird records from the vicinity of the Analysis Area. These records are generally from the winter and early spring period and suggest seasonal presence of bald eagles as foraging individuals. No suitable nesting habitat occurs in the Analysis Area or vicinity and there are no known bald eagle breeding areas in southeastern Arizona. There is no critical habitat designated for this species. |
| <i>Aquila chrysaetos</i> Golden eagle | Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c) | Range-wide, breeds in a wide variety of open habitats, with nests typically on cliffs, and avoids heavily forested areas (Katzner et al. 2020). In Arizona, prefers pinyon-juniper woodlands and Sonoran desertscrub (Driscoll 2005). Constructs large nests on cliff ledges, rock outcrops, tall trees or, rarely, transmission towers (Driscoll 2005). Golden eagles are known to forage within 4.4 miles of the nest (Tesky 1994), generally in open habitats where prey is available (Katzner et al. 2020). Primarily feeds on small mammals (greater than 80% of prey items) but also consumes birds, reptiles and fish (Katzner et al. 2020). In the western U.S. average territory size ranges from 22 to 55 square miles (AGFD 2002). Elevation: In Arizona, typically breeds between 1,300–9,000 ft (Driscoll 2005). | This species is a short to medium-distance partial migrant with a Holarctic distribution (Katzner et al. 2020). In North America, primarily breeds in western portion of the continent from Alaska to central Mexico. Northern most populations are typically migratory. Year-round and non-breeding populations occur from central Saskatchewan to British Columbia, Canada and south throughout its range and sparsely in the eastern U.S. (Katzner et al. 2020). | Found in suitable habitat throughout the state (Driscoll 2005) but tend to vacate low desert areas during the summer (AGFD 2002). | Possible There are no HDMS records of this species within 3 miles of the Study Area (Appendix D) but there are numerous eBird records from the vicinity of the Analysis Area. These records are generally from the winter and early spring period and suggest seasonal presence of golden eagles as foraging individuals. No suitable nesting habitat occurs in the Analysis Area or vicinity. There is no critical habitat designated for this species. |

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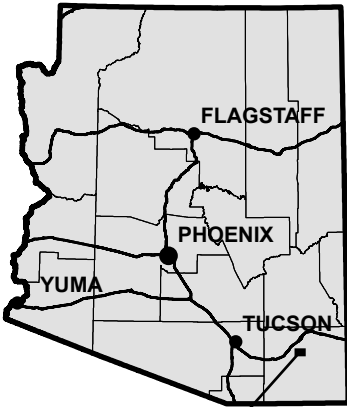
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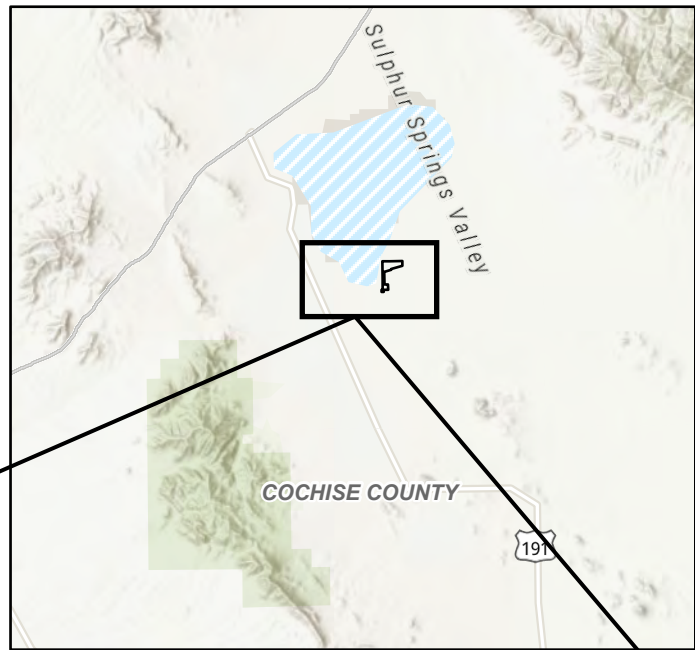
FIGURES

ARIZONA

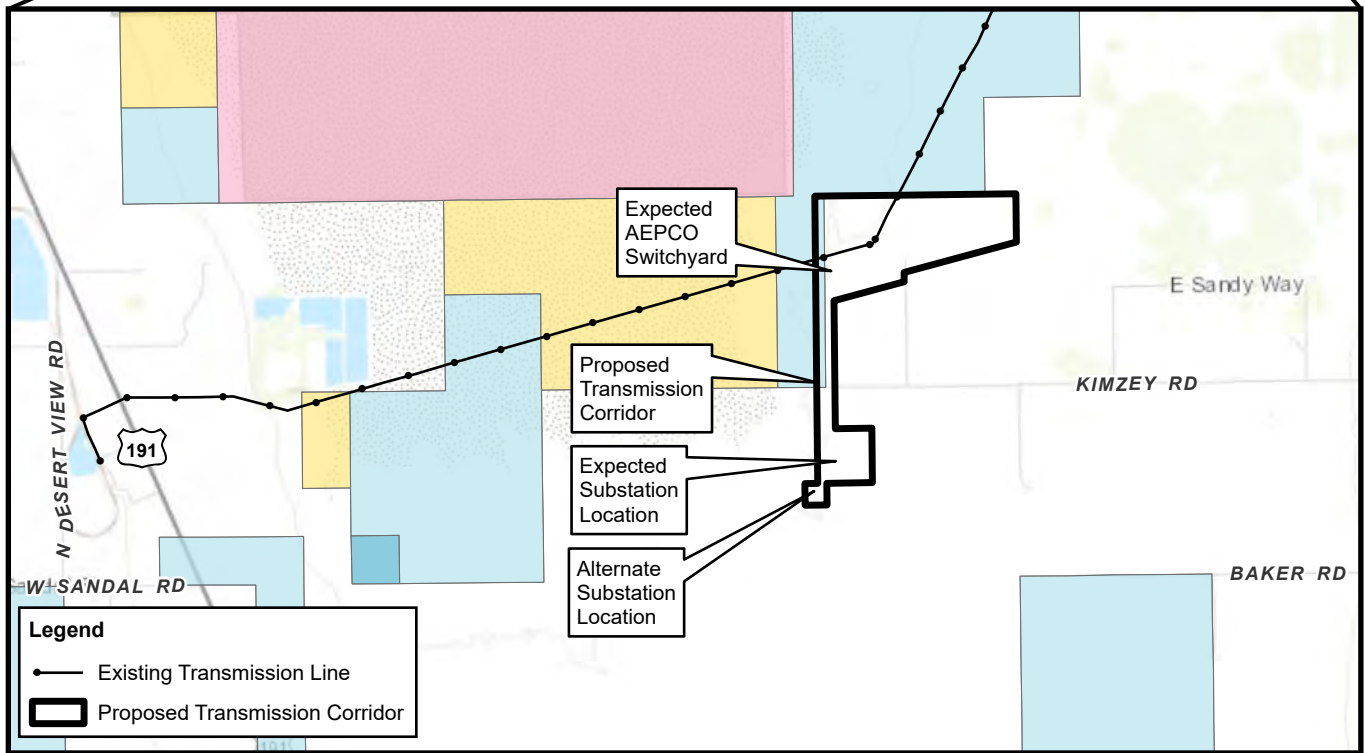


PROJECT LOCATION

PROJECT VICINITY



Approximate Scale 1 inch equals 10 miles



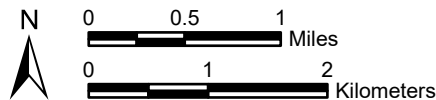
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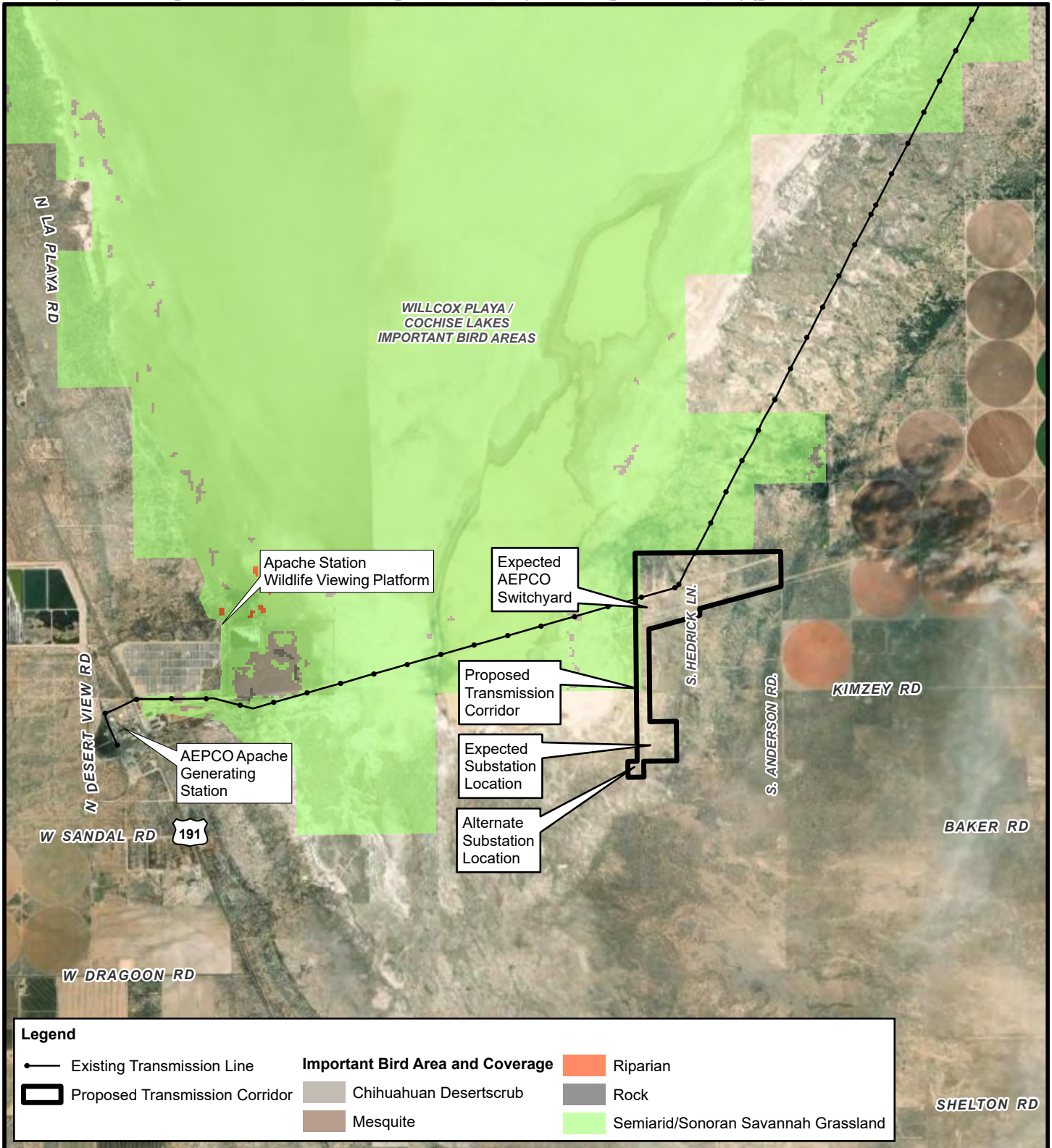
- Existing Transmission Line
- █ Proposed Transmission Corridor

Proposed Transmission Corridor within:
 T16S, R25E, Portions of Sections 5-8,
 Cochise County, Arizona,
 Willcox 1:100,000 USGS Quadrangle
 Projection: NAD 1983 UTM Zone 12N
 Surface Management: BLM ArcGIS Service accessed 1/12/2023
 Image Source: ArcGIS Online, World Topographic Map

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VICINITY MAP
 Figure 1





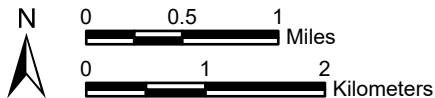
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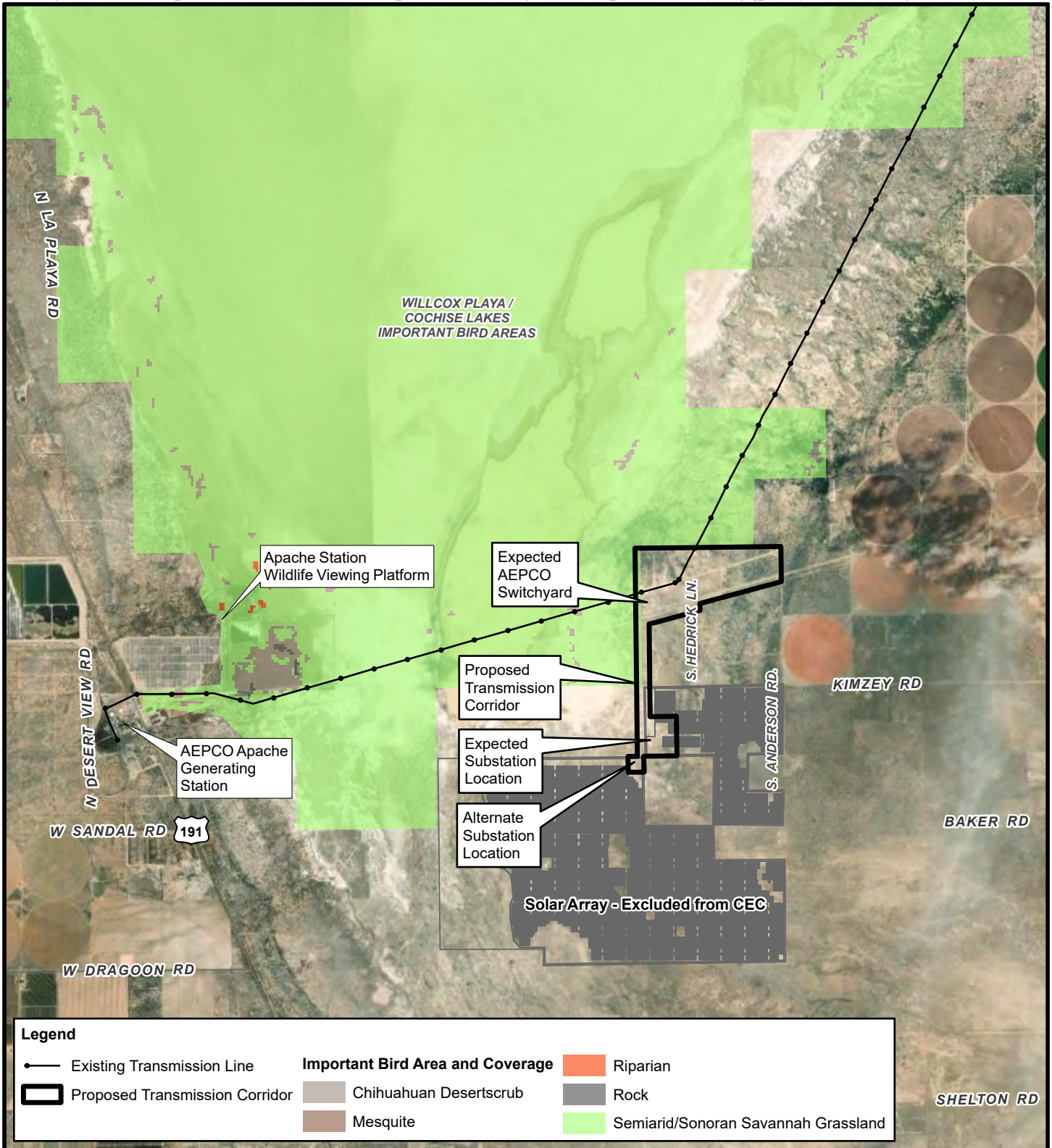
| | | |
|----------------------------------|---|---|
| — Existing Transmission Line | Important Bird Area and Coverage | Orange Riparian |
| ▭ Proposed Transmission Corridor | Grey Chihuahuan Desertscrub | Dark Grey Rock |
| | Brown Mesquite | Light Green Semiarid/Sonoran Savannah Grassland |

Proposed Transmission Corridor within:
 T16S, R25E, Portions of Sections 5-8,
 Cochise County, Arizona,
 Image Source: Maxar 9/17/2021 - 4/10/2022

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AERIAL OVERVIEW
 Figure 2a





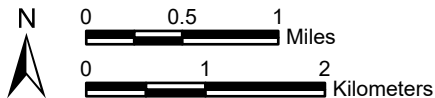
| Legend | | | |
|--------|--------------------------------|--|--------------------------------------|
| | Existing Transmission Line | | Semi-arid/Sonoran Savannah Grassland |
| | Proposed Transmission Corridor | | Chihuahuan Desertscrub |
| | | | Mesquite |
| | | | Riparian |
| | | | Rock |

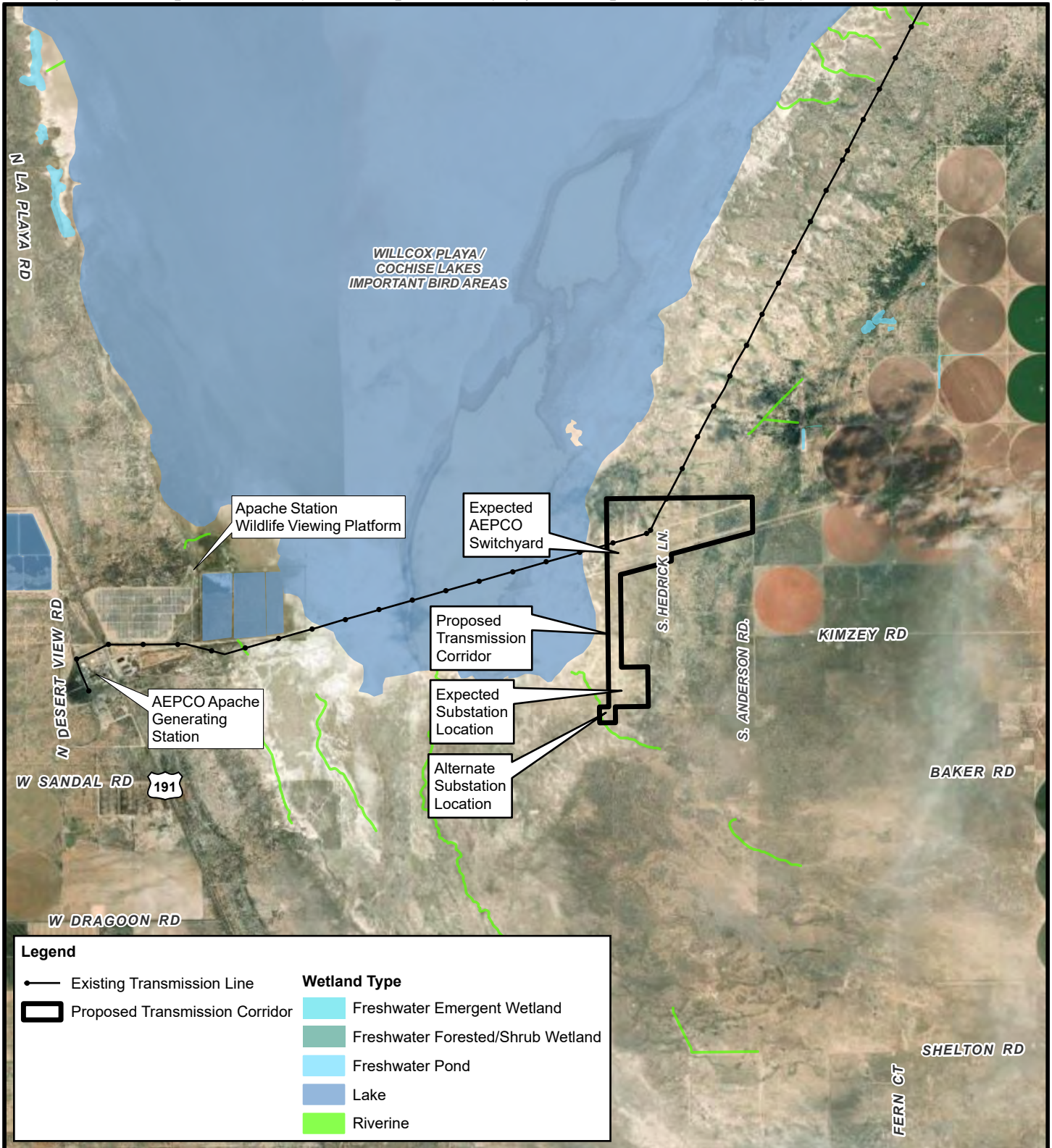
Proposed Transmission Corridor within:
 T16S, R25E, Portions of Sections 5-8,
 Cochise County, Arizona,
 Image Source: Maxar 9/17/2021 - 4/10/2022

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AERIAL OVERVIEW WITH SOLAR ARRAY

Figure 2b



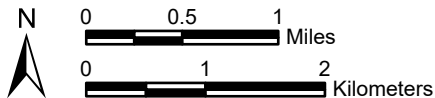


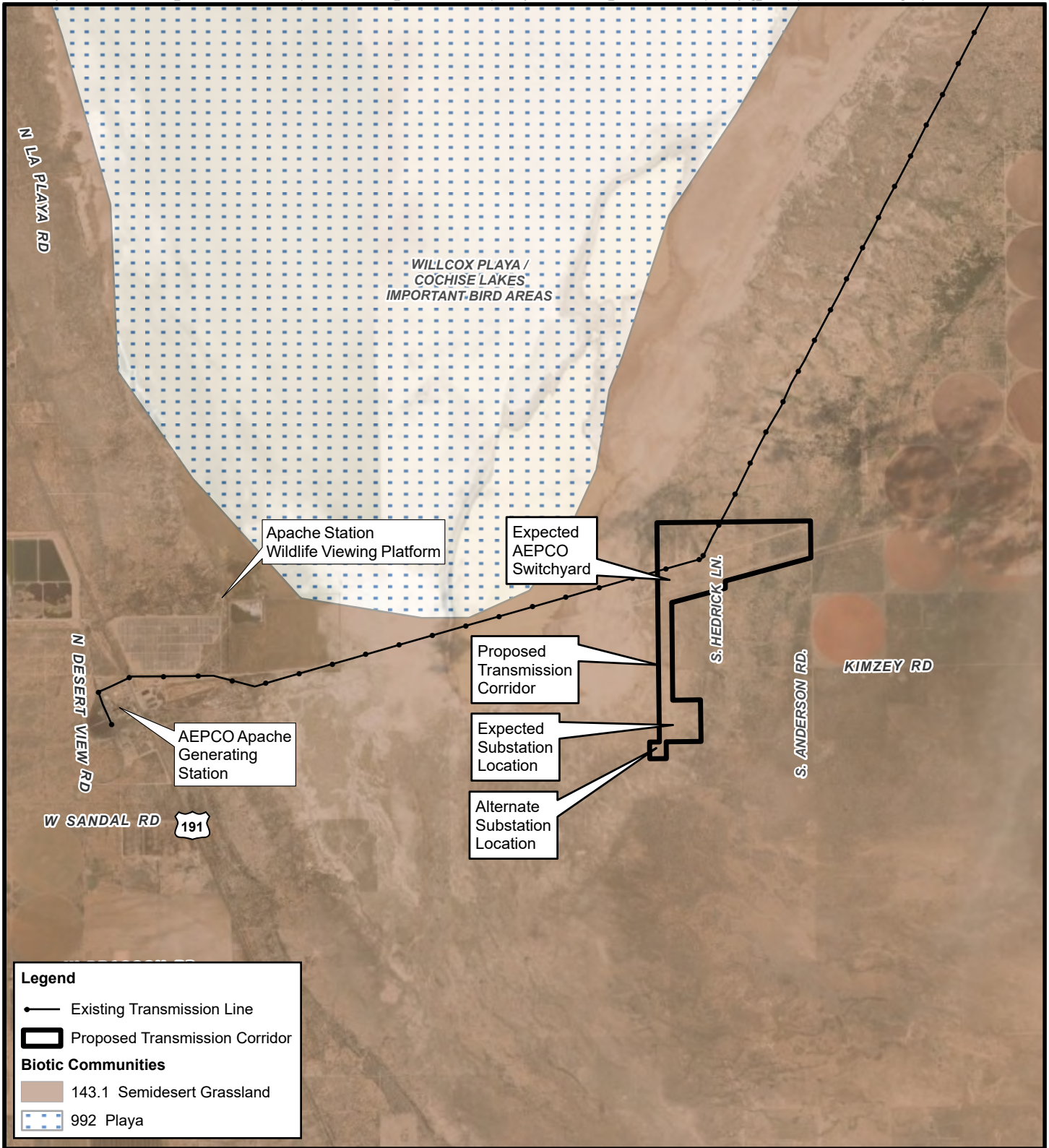
Proposed Transmission Corridor within:
 T16S, R25E, Portions of Sections 5-8,
 Cochise County, Arizona,
 USFWS National Wetland Inventory
 Image Source: Maxar 9/17/2021 - 4/10/2022

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 Exhibit B-2 Biological Evaluation

NATIONAL WETLAND INVENTORY

Figure 3





Legend

- Existing Transmission Line
- ▭ Proposed Transmission Corridor

Biotic Communities

- 143.1 Semidesert Grassland
- 992 Playa

Proposed Transmission Corridor within:
 T16S, R25E, Portions of Sections 5-8,
 Cochise County, Arizona,
 Brown & Lowe Biotic Communities of the Southwest (1980),
 developed by The Nature Conservancy in AZ (2004)
 Image Source: Maxar 9/17/2021 - 4/10/2022

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VEGETATION MAP
 Figure 4

N

APPENDIX A
Representative Photographs of the Analysis Area



Photo 1. View at the northern terminus of the Gen-tie line Project Area. Open grasses are visible with little diversity.



Photo 3. Overview of the grazing infrastructure located along Gen-tie line Project Area.



Photo 2. Shallow, ephemeral ponds located to the east, adjacent to the Gen-tie line Project Area.



Photo 4. Overview of the southern terminus and fencing along Gen-tie line Project Area.



Photo 5. Ephemeral wash located at the western portion of the larger solar array Project Area.



Photo 7. Overview of the general vegetation of the larger solar array Project Area dominated by open grassland.



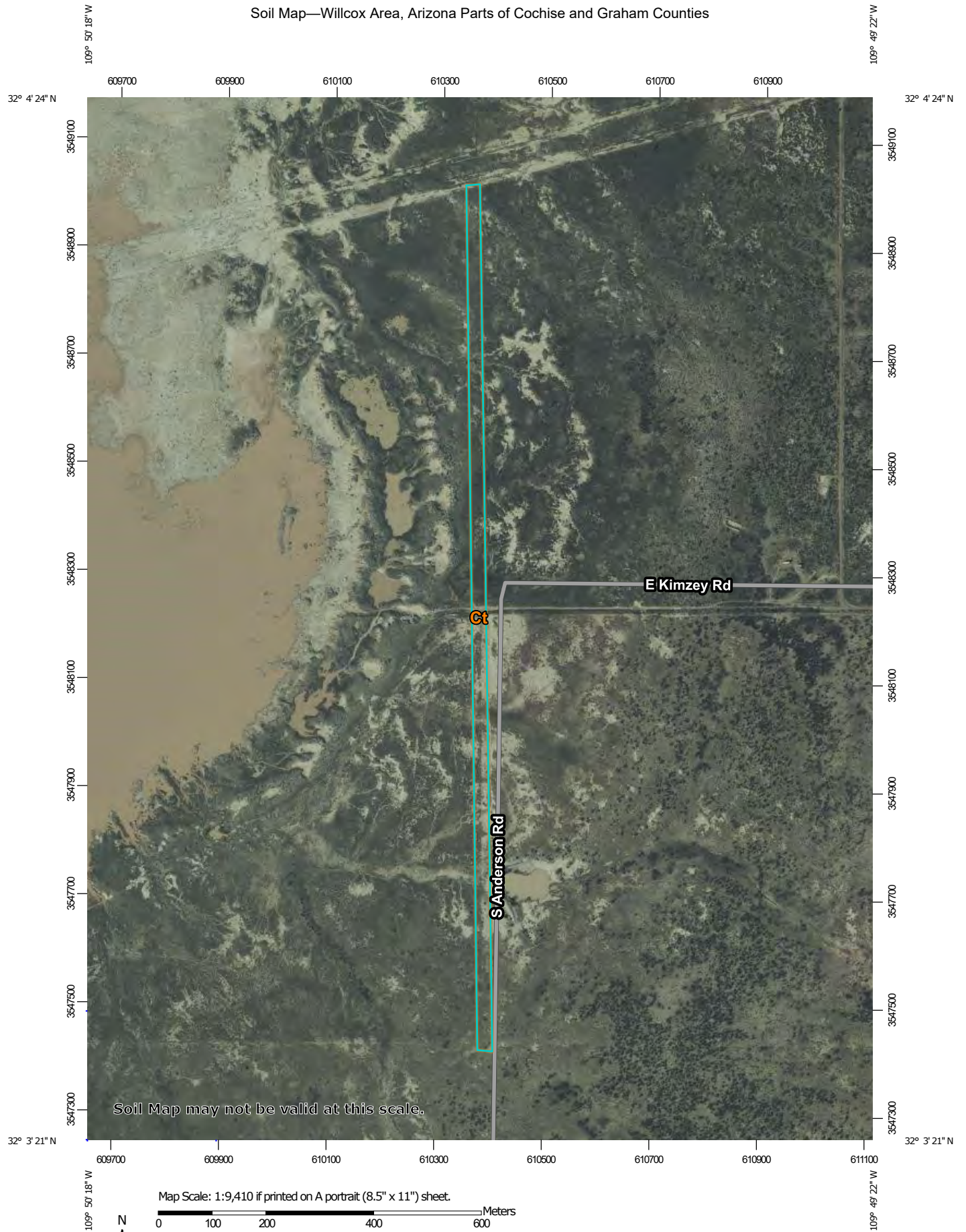
Photo 6. Section of the larger solar array Project Area with several velvet mesquite trees.



Photo 8. Overview of the fenceline within the larger solar array Project Area


APPENDIX B
NRCS Digital Web Soil Survey Report

Soil Map—Willcox Area, Arizona Parts of Cochise and Graham Counties





MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Willcox Area, Arizona Parts of Cochise and Graham Counties
Survey Area Data: Version 16, Aug 29, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 13, 2020—Feb 15, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|------------------------------------|-----------------|--------------|----------------|
| Ct | Crot sandy loam | 10.6 | 100.0% |
| Totals for Area of Interest | | 10.6 | 100.0% |

APPENDIX C
USFWS Arizona Ecological Services
Field Office IPaC Query Report

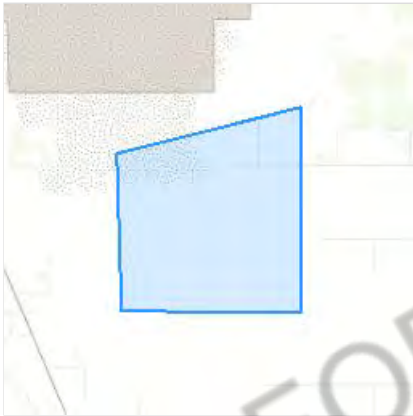
IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Cochise County, Arizona



Local office

Arizona Ecological Services Field Office

☎ (602) 242-0210

📅 (602) 242-2513

9828 North 31st Ave

#c3

Phoenix, AZ 85051-2517

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

| NAME | STATUS |
|---|------------|
| Jaguar <i>Panthera onca</i> Wherever found There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/3944 | Endangered |

Birds

| NAME | STATUS |
|------|--------|
|------|--------|

Northern Aplomado Falcon *Falco femoralis septentrionalis* EXPN
No critical habitat has been designated for this species.
<https://ecos.fws.gov/ecp/species/1923>

Yellow-billed Cuckoo *Coccyzus americanus* Threatened
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
<https://ecos.fws.gov/ecp/species/3911>

Reptiles

| NAME | STATUS |
|---|------------|
| Northern Mexican Gartersnake <i>Thamnophis eques megalops</i> Wherever found There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/7655 | Threatened |

Amphibians

| NAME | STATUS |
|--|------------|
| Chiricahua Leopard Frog <i>Rana chiricahuensis</i> Wherever found There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/1516 | Threatened |

Insects

| NAME | STATUS |
|---|-----------|
| Monarch Butterfly <i>Danaus plexippus</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743 | Candidate |

Flowering Plants

| NAME | STATUS |
|--|---------------------|
| Wright's Marsh Thistle <i>Cirsium wrightii</i> There is proposed critical habitat for this species. https://ecos.fws.gov/ecp/species/8963 | Proposed Threatened |

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

| NAME | BREEDING SEASON |
|---|-------------------------|
| Baird's Sparrow <i>Ammodramus bairdii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/5113 | Breeds elsewhere |
| Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626 | Breeds Oct 15 to Jul 31 |
| Bendire's Thrasher <i>Toxostoma bendirei</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9435 | Breeds Mar 15 to Jul 31 |
| Black-throated Gray Warbler <i>Dendroica nigrescens</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA | Breeds May 1 to Jul 20 |

Chestnut-collared Longspur *Calcarius ornatus*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Golden Eagle *Aquila chrysaetos*

Breeds Jan 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1680>

Western Grebe *Aechmophorus occidentalis*

Breeds Jun 1 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/6743>

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

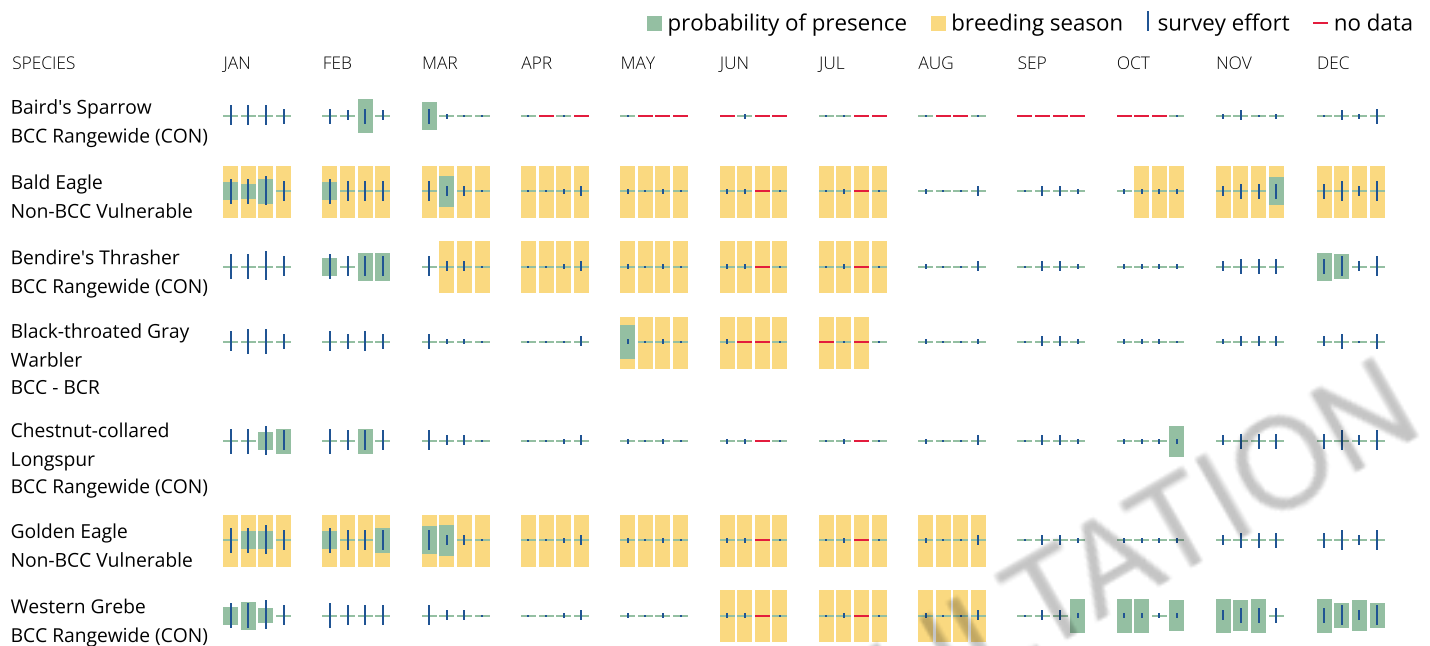
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Coastal Barrier Resources System

Projects within the [John H. Chafee Coastal Barrier Resources System](#) (CBRS) may be subject to the restrictions on federal expenditures and financial assistance and the consultation requirements of the Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501 et seq.). For more information, please contact the local [Ecological Services Field Office](#) or visit

the [CBRA Consultations website](#). The CBRA website provides tools such as a flow chart to help determine whether consultation is required and a template to facilitate the consultation process.

There are no known coastal barriers at this location.

Data limitations

The CBRS boundaries used in IPaC are representations of the controlling boundaries, which are depicted on the [official CBRS maps](#). The boundaries depicted in this layer are not to be considered authoritative for in/out determinations close to a CBRS boundary (i.e., within the "CBRS Buffer Zone" that appears as a hatched area on either side of the boundary). For projects that are very close to a CBRS boundary but do not clearly intersect a unit, you may contact the Service for an official determination by following the instructions here: <https://www.fws.gov/service/coastal-barrier-resources-system-property-documentation>

Data exclusions

CBRS units extend seaward out to either the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward extent of the units is not shown in the CBRS data, therefore projects in the offshore areas of units (e.g., dredging, breakwaters, offshore wind energy or oil and gas projects) may be subject to CBRA even if they do not intersect the CBRS data. For additional information, please contact CBRA@fws.gov.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

APPENDIX D
AGFD HDMS Online Environmental
Review Tool Query Report

Arizona Environmental Online Review Tool Report



Arizona Game and Fish Department Mission

To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

Project Name:

BrightNight Three Sisters

Project Description:

BrightNight Three Sisters

Project Type:

Energy Storage/Production/Transfer, Energy Transfer, Power line/electric line (new)

Contact Person:

Breck Jacoby

Organization:

WestLand Resources, Inc.

On Behalf Of:

CONSULTING

Project ID:

HGIS-17409

Please review the entire report for project type and/or species recommendations for the location information entered. Please retain a copy for future reference.

Disclaimer:

1. This Environmental Review is based on the project study area that was entered. The report must be updated if the project study area, location, or the type of project changes.
2. This is a preliminary environmental screening tool. It is not a substitute for the potential knowledge gained by having a biologist conduct a field survey of the project area. This review is also not intended to replace environmental consultation (including federal consultation under the Endangered Species Act), land use permitting, or the Departments review of site-specific projects.
3. The Departments Heritage Data Management System (HDMS) data is not intended to include potential distribution of special status species. Arizona is large and diverse with plants, animals, and environmental conditions that are ever changing. Consequently, many areas may contain species that biologists do not know about or species previously noted in a particular area may no longer occur there. HDMS data contains information about species occurrences that have actually been reported to the Department. Not all of Arizona has been surveyed for special status species, and surveys that have been conducted have varied greatly in scope and intensity. Such surveys may reveal previously undocumented population of species of special concern.
4. HabiMap Arizona data, specifically Species of Greatest Conservation Need (SGCN) under our State Wildlife Action Plan (SWAP) and Species of Economic and Recreational Importance (SERI), represent potential species distribution models for the State of Arizona which are subject to ongoing change, modification and refinement. The status of a wildlife resource can change quickly, and the availability of new data will necessitate a refined assessment.

Locations Accuracy Disclaimer:

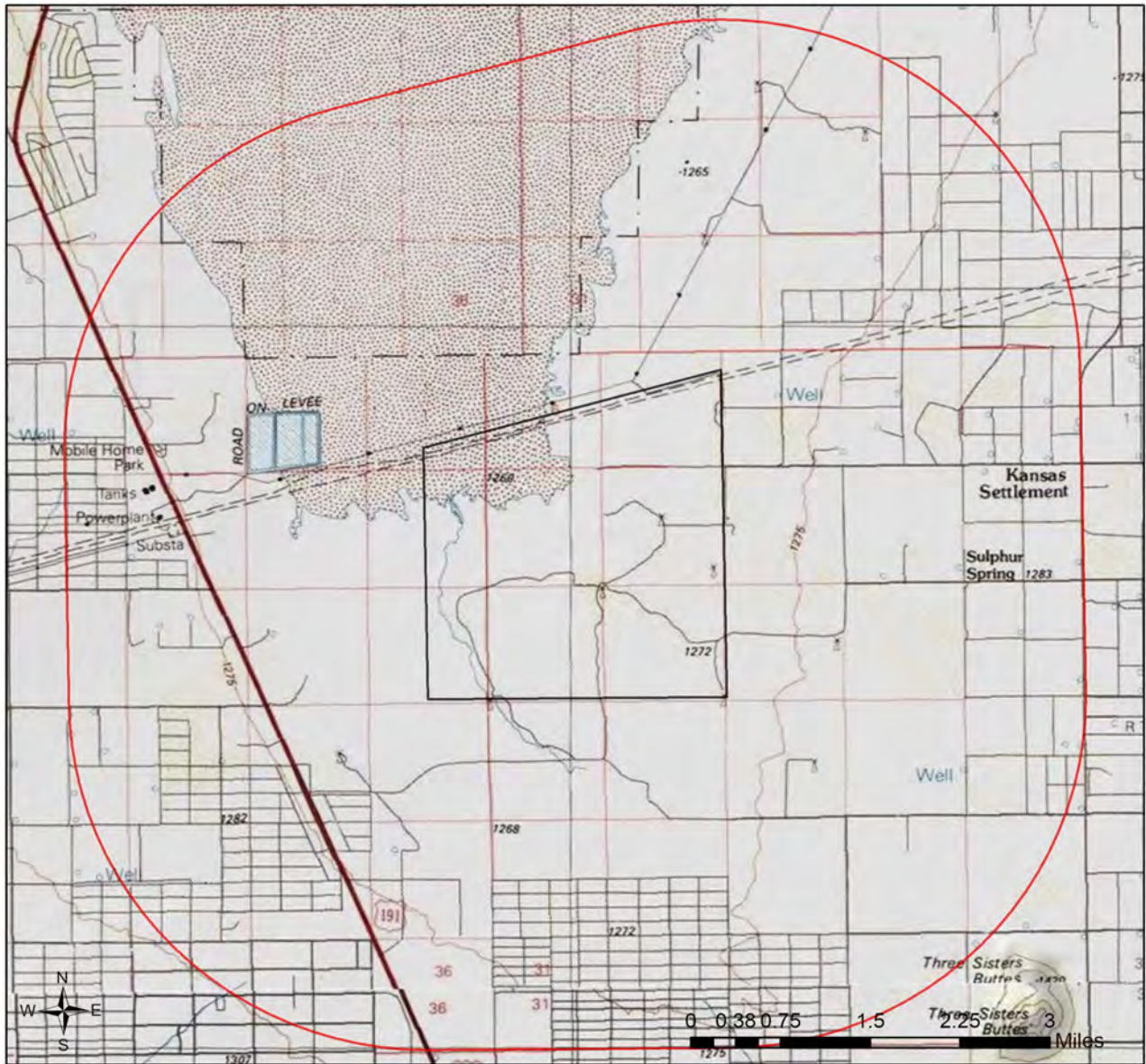
Project locations are assumed to be both precise and accurate for the purposes of environmental review. The creator/owner of the Project Review Report is solely responsible for the project location and thus the correctness of the Project Review Report content.

Recommendations Disclaimer:

1. The Department is interested in the conservation of all fish and wildlife resources, including those species listed in this report and those that may have not been documented within the project vicinity as well as other game and nongame wildlife.
2. Recommendations have been made by the Department, under authority of Arizona Revised Statutes Title 5 (Amusements and Sports), 17 (Game and Fish), and 28 (Transportation).
3. Potential impacts to fish and wildlife resources may be minimized or avoided by the recommendations generated from information submitted for your proposed project. These recommendations are preliminary in scope, designed to provide early considerations on all species of wildlife.
4. Making this information directly available does not substitute for the Department's review of project proposals, and should not decrease our opportunity to review and evaluate additional project information and/or new project proposals.
5. Further coordination with the Department requires the submittal of this Environmental Review Report with a cover letter and project plans or documentation that includes project narrative, acreage to be impacted, how construction or project activity(s) are to be accomplished, and project locality information (including site map). Once AGFD had received the information, please allow 30 days for completion of project reviews. Send requests to:
Project Evaluation Program, Habitat Branch
Arizona Game and Fish Department
5000 West Carefree Highway
Phoenix, Arizona 85086-5000
Phone Number: (623) 236-7600
Fax Number: (623) 236-7366
Or
PEP@azgfd.gov
6. Coordination may also be necessary under the National Environmental Policy Act (NEPA) and/or Endangered Species Act (ESA). Site specific recommendations may be proposed during further NEPA/ESA analysis or through coordination with affected agencies

BrightNight Three Sisters

USA Topo Basemap With Locator Map



- Buffered Project Boundary
- Project Boundary

Project Size (acres): 3,962.46

Lat/Long (DD): 32.0540 / -109.8339

County(s): Cochise

AGFD Region(s): Tucson

Township/Range(s): T16S, R24E; T16S, R25E

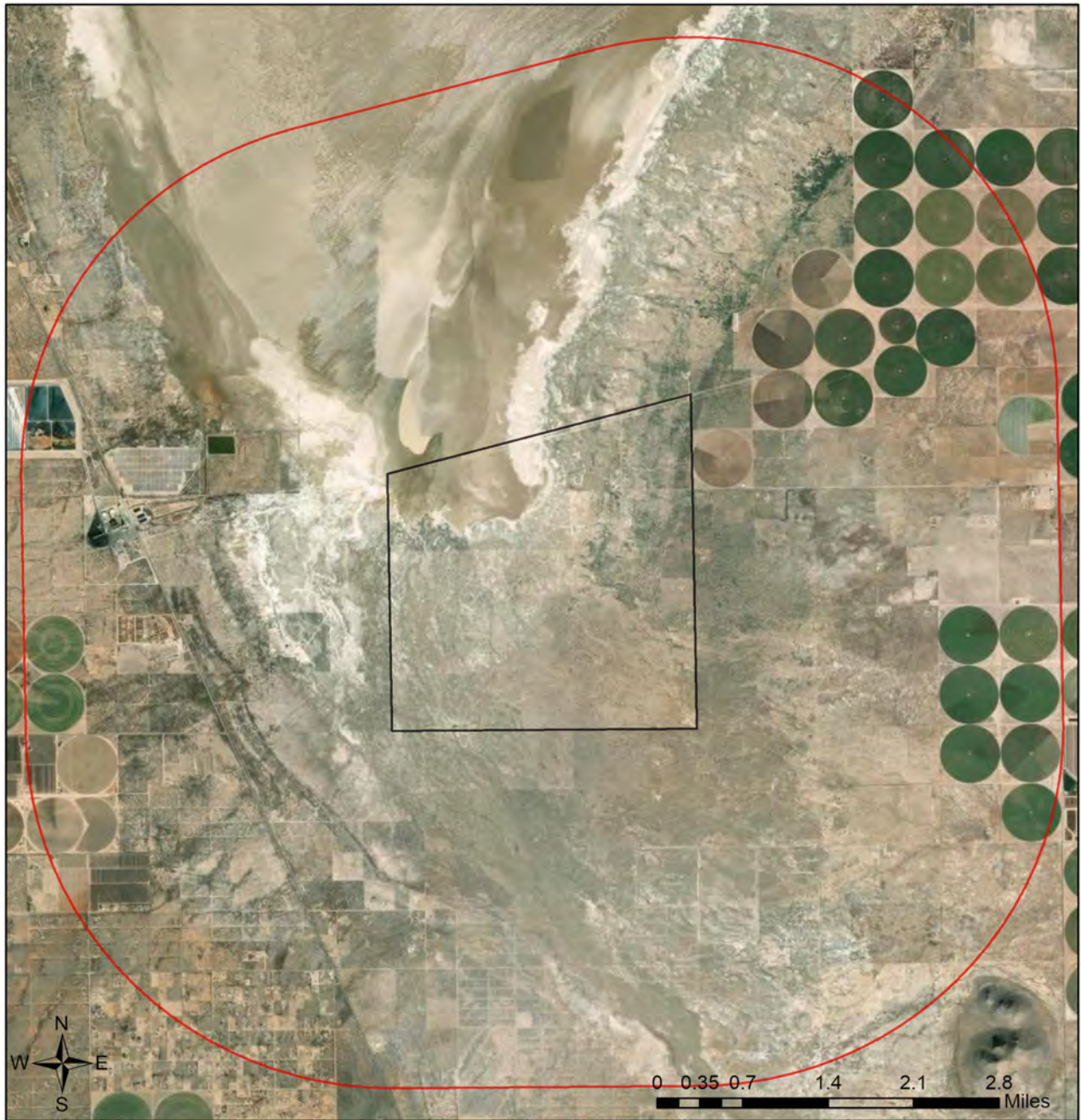
USGS Quad(s): SULPHUR SPRING



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community



BrightNight Three Sisters

Web Map As Submitted By User



-  Buffered Project Boundary
-  Project Boundary

Project Size (acres): 3,962.46

Lat/Long (DD): 32.0540 / -109.8339

County(s): Cochise

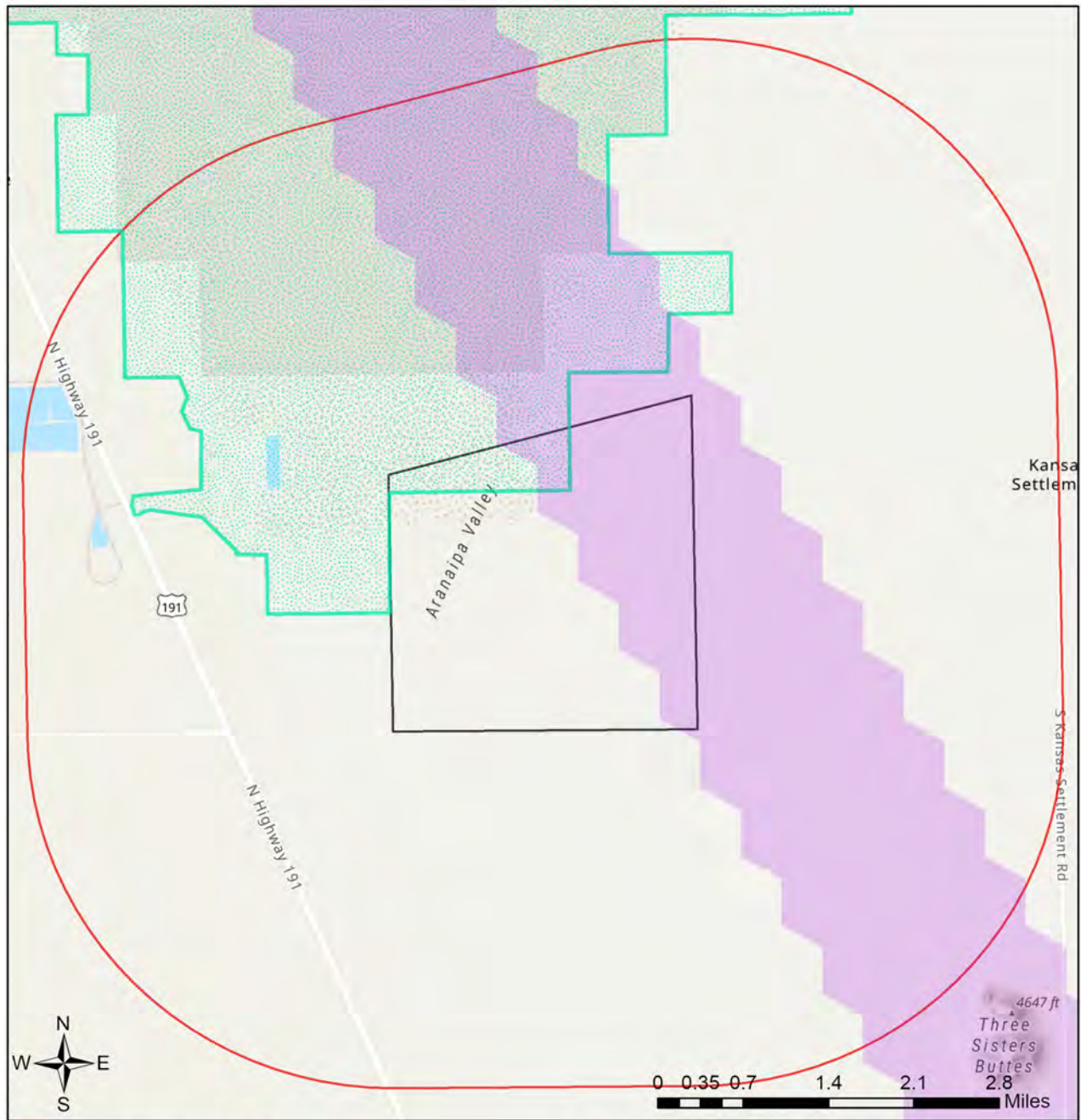
AGFD Region(s): Tucson

Township/Range(s): T16S, R24E; T16S, R25E

USGS Quad(s): SULPHUR SPRING

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

BrightNight Three Sisters Important Areas

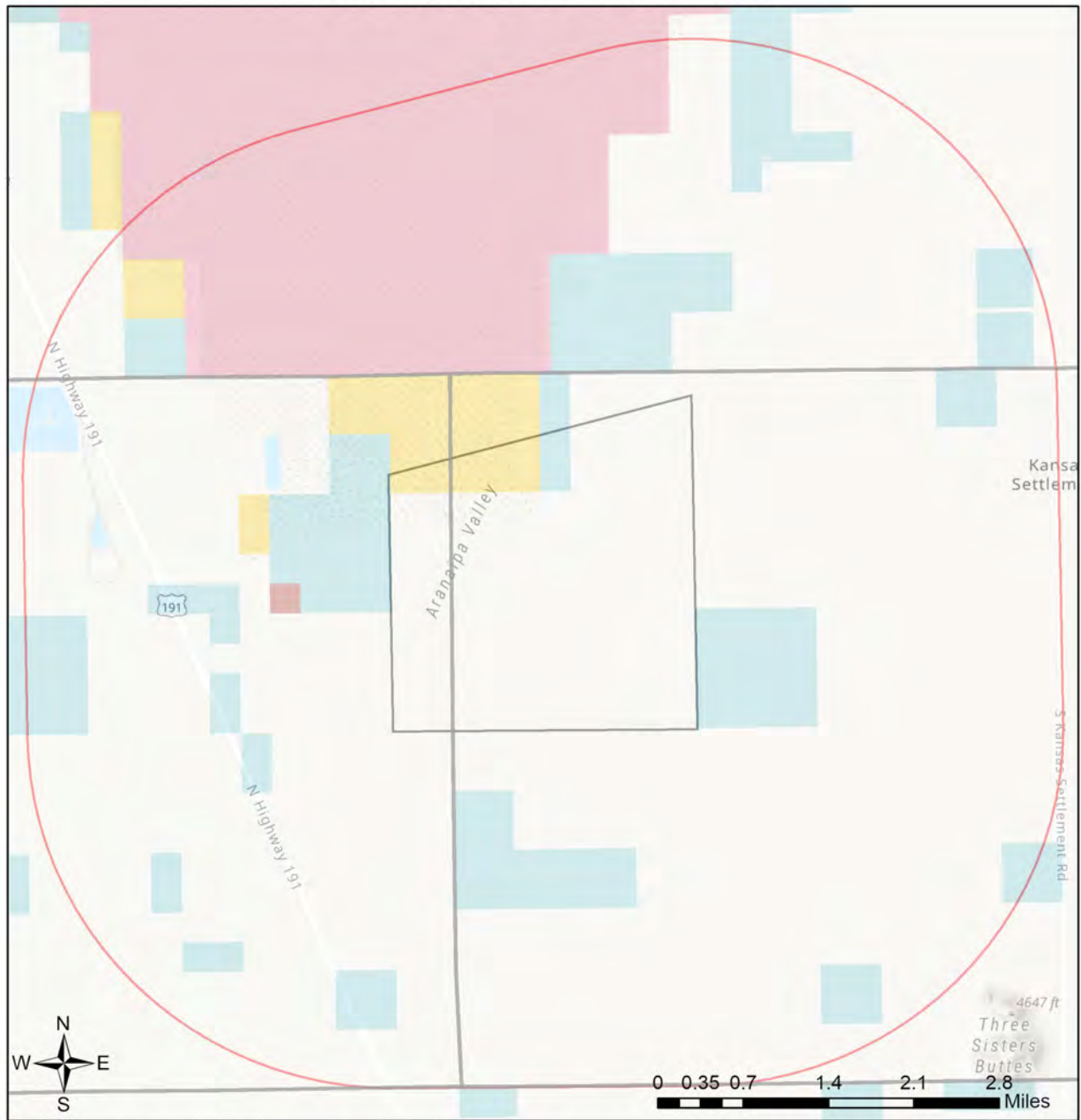


- Buffered Project Boundary
- Project Boundary
- Important Bird Areas
- Critical Habitat
- Pinal County Riparian
- Important Connectivity Zones
- Wildlife Connectivity

Project Size (acres): 3,962.46
 Lat/Long (DD): 32.0540 / -109.8339
 County(s): Cochise
 AGFD Region(s): Tucson
 Township/Range(s): T16S, R24E; T16S, R25E
 USGS Quad(s): SULPHUR SPRING

Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community
 Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

BrightNight Three Sisters Township/Ranges and Land Ownership



- | | |
|---|---|
| Buffered Project Boundary | National Park/Mon. |
| Project Boundary | Private |
| AZ Game & Fish Dept. | State & Regional Parks |
| BLM | State Trust |
| BOR | US Forest Service |
| Indian Res. | Wildlife Area/Refuge |
| Military | Township/Ranges |
| Mixed/Other | |

Project Size (acres): 3,962.46
 Lat/Long (DD): 32.0540 / -109.8339
 County(s): Cochise
 AGFD Region(s): Tucson
 Township/Range(s): T16S, R24E; T16S, R25E
 USGS Quad(s): SULPHUR SPRING

Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community
 Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Special Status Species Documented within 3 Miles of Project Vicinity

| Scientific Name | Common Name | FWS | USFS | BLM | NPL | SGCN |
|---------------------------|-------------------------|-----|------|-----|-----|------|
| Lithobates blairi | Plains Leopard Frog | | | S | | 1A |
| Lithobates chiricahuensis | Chiricahua Leopard Frog | LT | | | | 1A |
| Plegadis chihi | White-faced Ibis | SC | | | | |
| Terrapene ornata luteola | Desert Box Turtle | | | S | | 1A |
| Terrapene ornata | Ornate Box Turtle | | | S | | 1A |

Note: Status code definitions can be found at <https://www.azgfd.com/wildlife/planning/wildlifeguidelines/statusdefinitions/>

Special Areas Documented that Intersect with Project Footprint as Drawn

| Scientific Name | Common Name | FWS | USFS | BLM | NPL | SGCN |
|---------------------------------|-----------------------|-----|------|-----|-----|------|
| Important Connectivity Zone | Wildlife Connectivity | | | | | |
| Willcox Playa/Cochise Lakes IBA | Important Bird Area | | | | | |

Note: Status code definitions can be found at <https://www.azgfd.com/wildlife/planning/wildlifeguidelines/statusdefinitions/>

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

| Scientific Name | Common Name | FWS | USFS | BLM | NPL | SGCN |
|------------------------------------|-------------------------------|-----|------|-----|-----|------|
| Ammodramus savannarum ammoregus | Arizona grasshopper sparrow | | S | S | | 1B |
| Ammodramus savannarum perpallidus | Western Grasshopper Sparrow | | | | | 1B |
| Ammospermophilus harrisi | Harris' Antelope Squirrel | | | | | 1B |
| Anthus spragueii | Sprague's Pipit | SC | | | | 1A |
| Athene cucularia hypugaea | Western Burrowing Owl | SC | S | S | | 1B |
| Buteo regalis | Ferruginous Hawk | SC | | S | | 1B |
| Buteo swainsoni | Swainson's Hawk | | | | | 1C |
| Callipepla squamata | Scaled Quail | | | | | 1C |
| Calypte costae | Costa's Hummingbird | | | | | 1C |
| Cistothorus palustris | Marsh Wren | | | | | 1C |
| Coluber bilineatus | Sonoran Whipsnake | | | | | 1B |
| Corynorhinus townsendii pallescens | Pale Townsend's Big-eared Bat | SC | S | S | | 1B |
| Crotalus tigris | Tiger Rattlesnake | | | | | 1B |
| Cynanthus latirostris | Broad-billed Hummingbird | | S | | | 1B |
| Cynomys ludovicianus | Black-tailed Prairie Dog | CCA | | S | | 1A |
| Dipodomys spectabilis | Banner-tailed Kangaroo Rat | | | S | | 1B |
| Euderma maculatum | Spotted Bat | SC | S | S | | 1B |
| Eumops perotis californicus | Greater Western Bonneted Bat | SC | | S | | 1B |
| Falco peregrinus anatum | American Peregrine Falcon | SC | S | S | | 1A |

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

| Scientific Name | Common Name | FWS | USFS | BLM | NPL | SGCN |
|----------------------------------|---------------------------|--------------|------|-----|-----|------|
| <i>Haliaeetus leucocephalus</i> | Bald Eagle | SC, BGA | S | S | | 1A |
| <i>Heloderma suspectum</i> | Gila Monster | | | | | 1A |
| <i>Hypsiglena sp. nov.</i> | Hooded Nightsnake | | | | | 1B |
| <i>Lasiurus blossevillii</i> | Western Red Bat | | S | | | 1B |
| <i>Lasiurus xanthinus</i> | Western Yellow Bat | | S | | | 1B |
| <i>Leptonycteris yerbabuenae</i> | Lesser Long-nosed Bat | SC | | | | 1A |
| <i>Lepus alleni</i> | Antelope Jackrabbit | | | | | 1B |
| <i>Lithobates blairi</i> | Plains Leopard Frog | | | S | | 1A |
| <i>Lithobates chiricahuensis</i> | Chiricahua Leopard Frog | LT | | | | 1A |
| <i>Melanerpes uropygialis</i> | Gila Woodpecker | | | | | 1B |
| <i>Melospiza lincolni</i> | Lincoln's Sparrow | | | | | 1B |
| <i>Melospiza aberti</i> | Abert's Towhee | | S | | | 1B |
| <i>Micrathene whitneyi</i> | Elf Owl | | | | | 1C |
| <i>Micruroides euryxanthus</i> | Sonoran Coralsnake | | | | | 1B |
| <i>Myiarchus tyrannulus</i> | Brown-crested Flycatcher | | | | | 1C |
| <i>Myotis occultus</i> | Arizona Myotis | SC | | S | | 1B |
| <i>Myotis velifer</i> | Cave Myotis | SC | | S | | 1B |
| <i>Myotis yumanensis</i> | Yuma Myotis | SC | | | | 1B |
| <i>Nyctinomops femorosaccus</i> | Pocketed Free-tailed Bat | | | | | 1B |
| <i>Oreoscoptes montanus</i> | Sage Thrasher | | | | | 1C |
| <i>Oreothlypis luciae</i> | Lucy's Warbler | | | | | 1C |
| <i>Panthera onca</i> | Jaguar | LE | | | | 1A |
| <i>Passerculus sandwichensis</i> | Savannah Sparrow | | | | | 1B |
| <i>Peromyscus nasutus</i> | Northern Rock Deer mouse | | | | | 1B |
| <i>Peucaea botterii arizonae</i> | Arizona Botteri's Sparrow | | | S | | 1B |
| <i>Phrynosoma solare</i> | Regal Horned Lizard | | | | | 1B |
| <i>Setophaga petechia</i> | Yellow Warbler | | | | | 1B |
| <i>Spizella breweri</i> | Brewer's Sparrow | | | | | 1C |
| <i>Sturnella magna</i> | Eastern Meadowlark | | | | | 1C |
| <i>Tadarida brasiliensis</i> | Brazilian Free-tailed Bat | | | | | 1B |
| <i>Terrapene ornata</i> | Ornate Box Turtle | | | | | 1A |
| <i>Vireo bellii arizonae</i> | Arizona Bell's Vireo | | | | | 1B |
| <i>Vulpes macrotis</i> | Kit Fox | No Status | | | | 1B |

Species of Economic and Recreation Importance Predicted that Intersect with Project Footprint as Drawn

| Scientific Name | Common Name | FWS | USFS | BLM | NPL | SGCN |
|----------------------------|----------------|-----|------|-----|-----|------|
| <i>Callipepla gambelii</i> | Gambel's Quail | | | | | |

Species of Economic and Recreation Importance Predicted that Intersect with Project Footprint as Drawn

| Scientific Name | Common Name | FWS | USFS | BLM | NPL | SGCN |
|----------------------|--------------------|-----|------|-----|-----|------|
| Callipepla squamata | Scaled Quail | | | | | 1C |
| Odocoileus hemionus | Mule Deer | | | | | |
| Patagioenas fasciata | Band-tailed Pigeon | | | | | 1C |
| Pecari tajacu | Javelina | | | | | |
| Puma concolor | Mountain Lion | | | | | |
| Zenaida asiatica | White-winged Dove | | | | | |
| Zenaida macroura | Mourning Dove | | | | | |

Project Type: Energy Storage/Production/Transfer, Energy Transfer, Power line/electric line (new)

Project Type Recommendations:

Minimize the potential introduction or spread of exotic invasive species, including aquatic and terrestrial plants, animals, insects and pathogens. Precautions should be taken to wash and/or decontaminate all equipment utilized in the project activities before entering and leaving the site. See the Arizona Department of Agriculture website for a list of prohibited and restricted noxious weeds at <https://www.invasivespeciesinfo.gov/unitedstates/az.shtml> and the Arizona Native Plant Society <https://aznps.com/invas> for recommendations on how to control. To view a list of documented invasive species or to report invasive species in or near your project area visit iMapInvasives - a national cloud-based application for tracking and managing invasive species at <https://imap.natureserve.org/imap/services/page/map.html>.

- To build a list: zoom to your area of interest, use the identify/measure tool to draw a polygon around your area of interest, and select “See What’s Here” for a list of reported species. To export the list, you must have an account and be logged in. You can then use the export tool to draw a boundary and export the records in a csv file.

The Department recommends that wildlife surveys are conducted to determine if noise-sensitive species occur within the project area. Avoidance or minimization measures could include conducting project activities outside of breeding seasons.

For any powerlines built, proper design and construction of the transmission line is necessary to prevent or minimize risk of electrocution of raptors, owls, vultures, and golden or bald eagles, which are protected under state and federal laws. Limit project activities during the breeding season for birds, generally March through late August, depending on species in the local area (raptors breed in early February through May). Conduct avian surveys to determine bird species that may be utilizing the area and develop a plan to avoid disturbance during the nesting season. For underground powerlines, trenches should be covered or back-filled as soon as possible. Incorporate escape ramps in ditches or fencing along the perimeter to deter small mammals and herpetofauna (snakes, lizards, tortoise) from entering ditches. In addition, indirect affects to wildlife due to construction (timing of activity, clearing of rights-of-way, associated bridges and culverts, affects to wetlands, fences) should also be considered and mitigated.

Based on the project type entered, coordination with State Historic Preservation Office may be required (<https://azstateparks.com/>).

Based on the project type entered, coordination with U.S. Fish and Wildlife Service (Migratory Bird Treaty Act) may be required (<https://www.fws.gov/office/arizona-ecological-services>).

Vegetation restoration projects (including treatments of invasive or exotic species) should have a completed site-evaluation plan (identifying environmental conditions necessary to re-establish native vegetation), a revegetation plan (species, density, method of establishment), a short and long-term monitoring plan, including adaptive management guidelines to address needs for replacement vegetation.

Project Location and/or Species Recommendations:

HDMS records indicate that **Chiricahua Leopard Frogs** have been documented within the vicinity of your project area. Please review the Chiricahua Leopard Frog Management Guidelines found

at: <https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/FINALLithchirHabitatGdlns.pdf>

The analysis has detected one or more **Important Bird Areas** within your project vicinity. Please see http://aziba.org/?page_id=38 for details about the Important Bird Area(s) identified in the report.

HDMS records indicate that one or more **Listed, Proposed, or Candidate** species or **Critical Habitat** (Designated or Proposed) have been documented in the vicinity of your project. The Endangered Species Act (ESA) gives the US Fish and Wildlife Service (USFWS) regulatory authority over all federally listed species. Please contact USFWS Ecological Services Offices at <https://www.fws.gov/office/arizona-ecological-services> or:

Phoenix Main Office
9828 North 31st Avenue #C3
Phoenix, AZ 85051-2517
Phone: 602-242-0210
Fax: 602-242-2513

Tucson Sub-Office
201 N. Bonita Suite 141
Tucson, AZ 85745
Phone: 520-670-6144
Fax: 520-670-6155

Flagstaff Sub-Office
SW Forest Science Complex
2500 S. Pine Knoll Dr.
Flagstaff, AZ 86001
Phone: 928-556-2157
Fax: 928-556-2121

Analysis indicates that your project is located in the vicinity of an identified **wildlife habitat connectivity feature**. The **Statewide Wildlife Connectivity Assessment's Important Connectivity Zones** (ICZs) represent general areas throughout the landscape which contribute the most to permeability of the whole landscape. ICZs may be used to help identify, in part, areas where more discrete corridor modeling ought to occur. The reports provide recommendations for opportunities to preserve or enhance permeability. Project planning and implementation efforts should focus on maintaining and improving opportunities for wildlife permeability. For information pertaining to the linkage assessment and wildlife species that may be affected, please refer

to: https://s3.amazonaws.com/azgfd-portal-wordpress/azgfd/wp/wp-content/uploads/0001/01/23120719/ALIWCA_Final_Report_Perkl_2013_lowres.pdf.

Please contact the Project Evaluation Program (pep@azgfd.gov) for specific project recommendations.

ATTACHMENT G
Traffic Statement Report



Paul E. Basha, PE, PTOE
 Traffic Engineering Manager
 Suite 300, 7144 E. Stetson Drive
 Scottsdale, Arizona 85251
 Phone 480.505.3931
 PBasha@SummitLandMgmt.com

27 June 2023

TO: Cochise County

FROM: Paul E. Basha, PE, PTOE, Summit Land Management

RE: Traffic Statement for BrightNight Three Sisters Solar Farm

PROPERTY

BrightNight plans to build a solar farm southeast of Willcox in Cochise County, Arizona. The property is approximately 2,450 gross acres of currently vacant property. **Figure 1** provides an aerial photograph of the project vicinity.

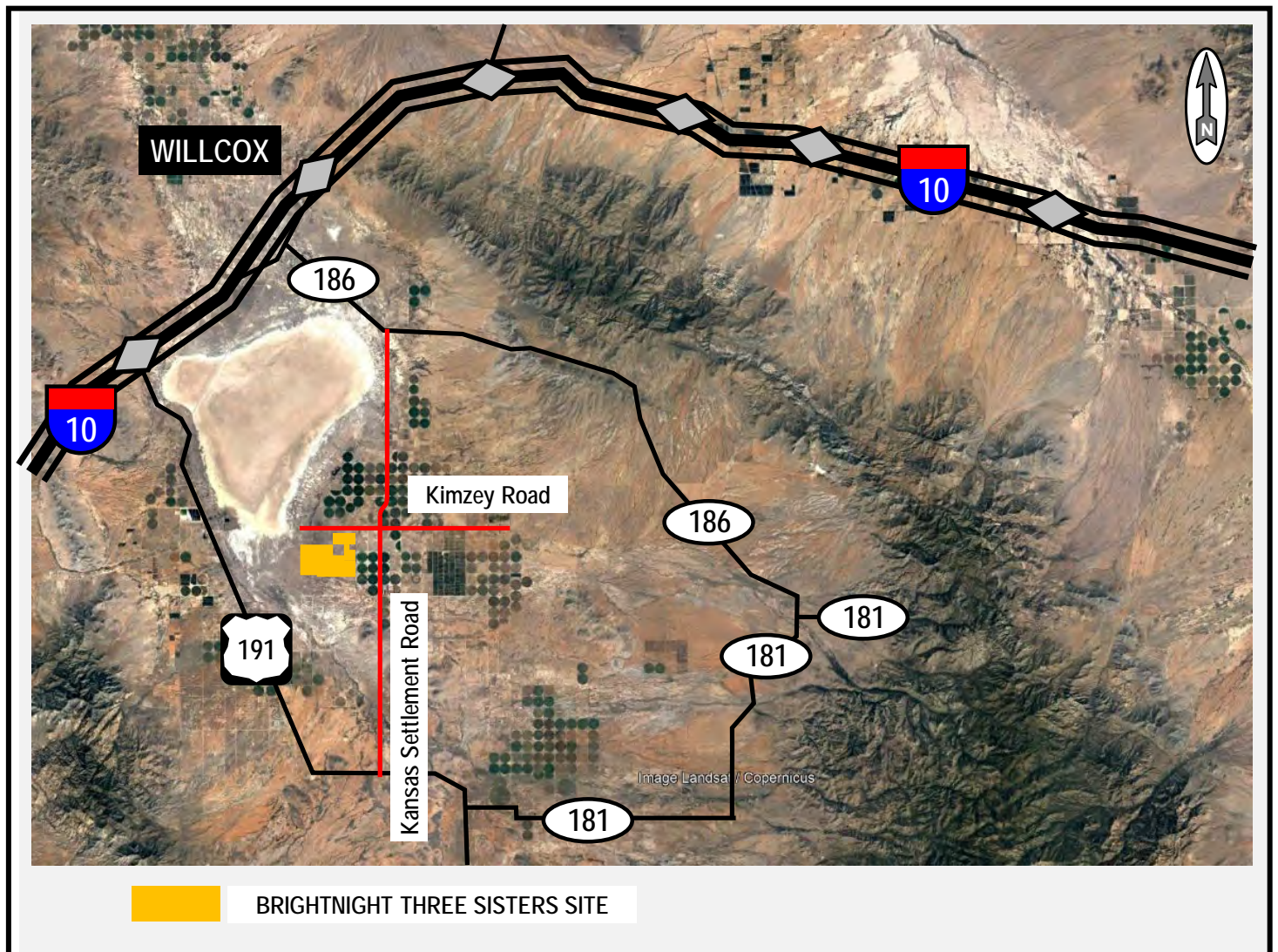


Figure 1: General Vicinity Aerial Photograph



Paul E. Basha, PE, PTOE
 480.505.3931
 PBasha@SummitLandMgmt.com

ACCESS

Figure 2 provides a schematic of the highway and street system that will serve the proposed solar farm.

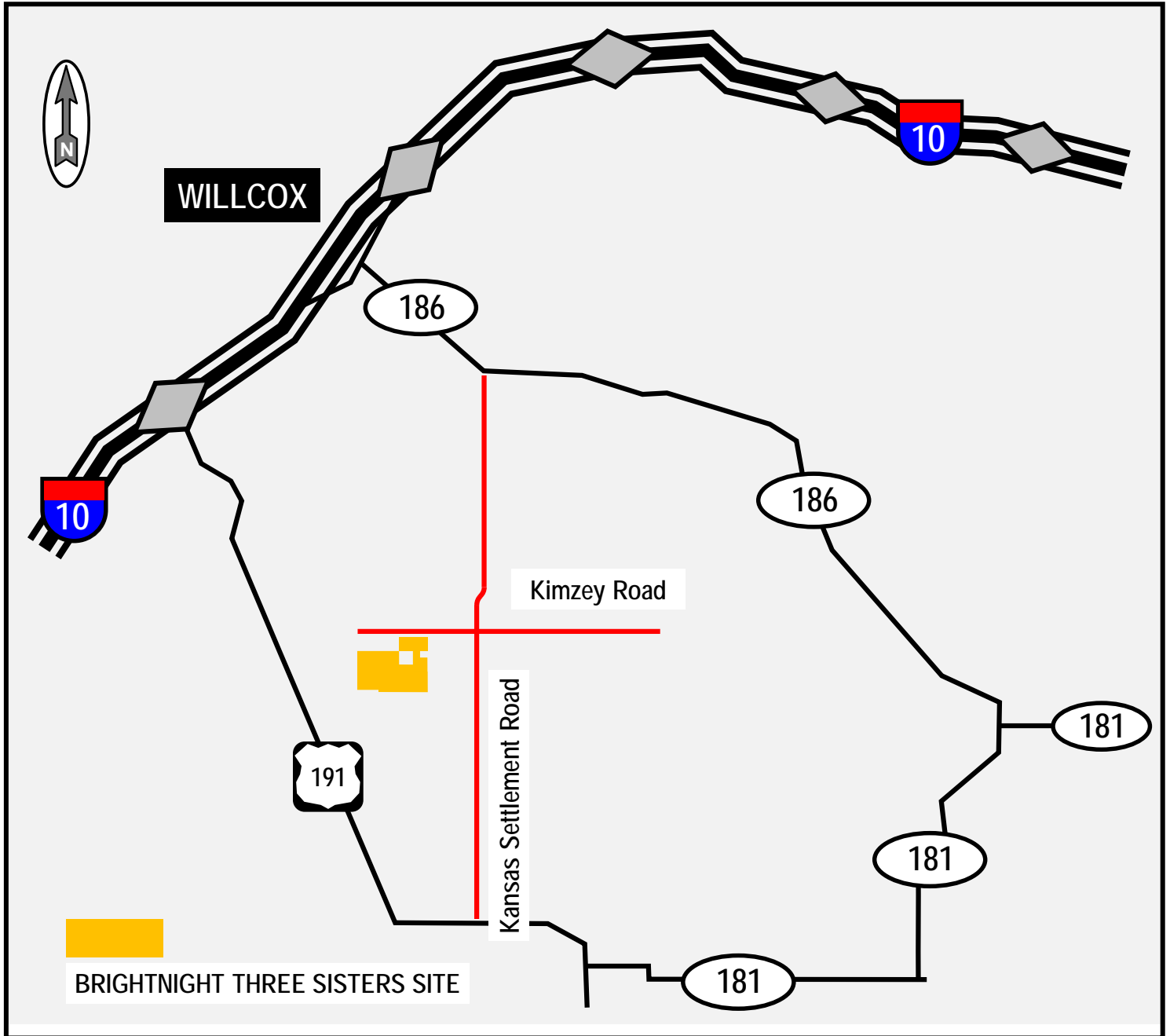


Figure 2: Highways and Street System

As indicated in both **Figure 1** and **Figure 2**, Kimzey Road and Kansas Settlement Road will provide access to the Three Sisters Solar Farm, utilizing SR-186 from the north or SR-191 from the south. Both SR-186 and SR-191 have interchanges with I-10.

Figure 3 depicts the Three Sisters Solar Farm site.

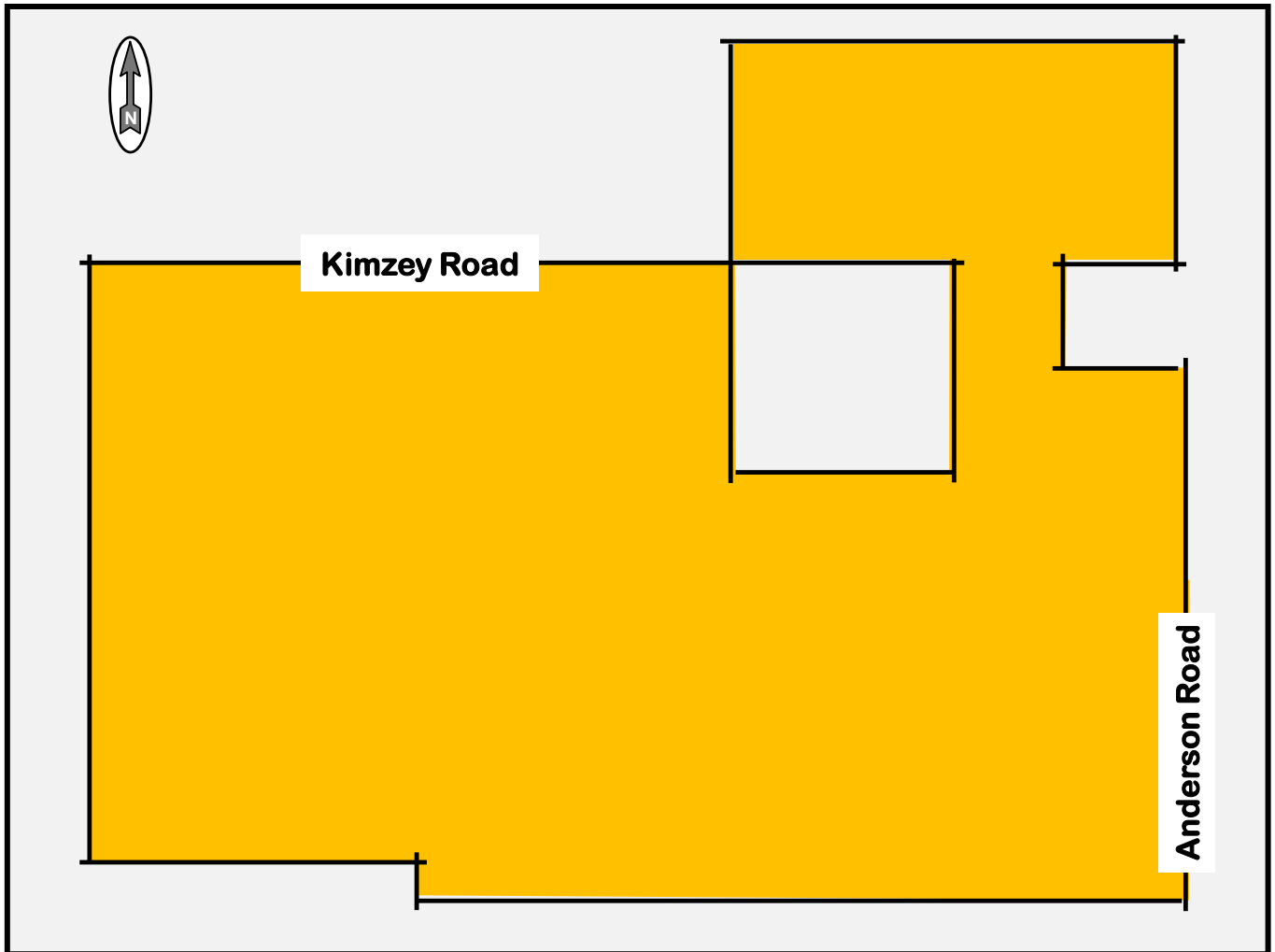


Figure 3: Three Sisters Solar Farm Property

TRAFFIC VOLUMES

The 2,450 acres of the proposed Three Sisters Solar Farm site are currently zoned for one single-family home per four (4) acres. Therefore, with current zoning, the site property could currently have a maximum of 613 single-family homes. **Table 1** provides an estimate of the weekday traffic volume that would be generated if the property were developed as 613 homes.

Table 1: Potential Trip Generation of Property Development with Current Zoning

| | ENTERING | EXITING | TOTAL |
|------------------------|----------|---------|-------|
| WEEKDAY DAILY | 2,888 | 2,888 | 5,776 |
| AM PEAK HOUR STREET | 145 | 412 | 557 |
| AM PEAK HOUR GENERATOR | 119 | 340 | 459 |
| PM PEAK HOUR STREET | 363 | 213 | 576 |
| PM PEAK HOUR GENERATOR | 388 | 218 | 606 |
| SATURDAY DAILY | 2,904 | 2,903 | 5,807 |
| PEAK HOUR GENERATOR | 305 | 259 | 564 |
| SUNDAY DAILY | 2,679 | 2,678 | 5,357 |
| PEAK HOUR GENERATOR | 269 | 239 | 508 |

The proposed Three Sisters Solar Farm will generate minimal traffic. The entire site will be monitored continuously by remote video surveillance. Approximately twice each month, equipment inspectors will visit the property. Potentially, these inspectors might arrive on the same day, though typically they would arrive on different days of the month.

Table 2 provides the trip generation estimate. Typically, the property would generate one trip every two (2) to three (3) weeks. One person is responsible for regularly examining all solar facilities throughout Arizona.

Table 2: Estimated Trip Generation Three Sisters Solar Farm

| PURPOSE | DAILY | AM HOURLY | PM HOURLY |
|--------------------------|-------|-----------|-----------|
| Twice Monthly Inspectors | 4 | 2 | 2 |

The solar farm will generate less than one-tenth of one percent of the daily traffic and less than four-tenths of one percent of the peak hourly traffic than the traffic generated by the current allowable land use of one-home-per-four-acres.

Please contact me at (480) 505-3931 or pbasha@summitlandmgmt.com, if you have any questions or would like to discuss this traffic statement.

Attachment:
 Trip Generation Calculations

| PROJECT | | BRIGHTNIGHT THREE SISTERS | | | | | |
|---|----------------------|--------------------------------------|----|--------------|--------------|--------------|--|
| PARCEL | | ENTIRE | | | | | |
| ITE LAND USE CATEGORY AND CODE | | SINGLE FAMILY DETACHED HOUSING - 210 | | | | | |
| INDEPENDENT VARIABLE | | DWELLING UNITS | | | | | |
| SIZE | | 613 | | | | | |
| | | ENTERING | | EXITING | | TOTAL | |
| WEEKDAY DAILY | | | | 50% | | 50% | |
| STUDIES and LOW, AVERAGE, AND HIGH SIZE | | 174 | 10 | 246 | 2,945 | | |
| MINIMUM RATE | LOW RATES SUSPECT | 4.65 | | 1,424 | 1,424 | 2,848 | |
| AVERAGE RATE | | 9.43 | | 2,888 | 2,888 | 5,776 | |
| MAXIMUM RATE | HIGH RATES SUSPECT | 22.61 | | 6,925 | 6,924 | 13,849 | |
| STANDARD DEVIATION | | 2.13 | | | | | |
| EQUATION: $\text{LN}(T) = 0.92 * \text{LN}(X) + 2.68$ | | $R^2 = 0.95$ | | 2,673 | 2,673 | 5,346 | |
| LARGEST OF AVERAGE OR EQUATION | | | | 2,888 | 2,888 | 5,776 | |
| AM PEAK HOUR ADJACENT STREET | | | | 26% | 74% | | |
| STUDIES and LOW, AVERAGE, AND HIGH SIZE | | 192 | 5 | 226 | 2,945 | | |
| MINIMUM RATE | LOW RATES ACCEPTABLE | 0.27 | | 43 | 122 | 165 | |
| AVERAGE RATE | | 0.70 | | 112 | 317 | 429 | |
| MAXIMUM RATE | HIGH RATES SUSPECT | 2.27 | | 361 | 1,029 | 1,390 | |
| STANDARD DEVIATION | | 0.24 | | | | | |
| EQUATION: $T = 0.91 * (X) + 0.12$ | | $R^2 = 0.90$ | | 145 | 412 | 557 | |
| LARGEST OF AVERAGE OR EQUATION | | | | 145 | 412 | 557 | |
| AM PEAK HOUR GENERATOR | | | | 26% | 74% | | |
| STUDIES and LOW, AVERAGE, AND HIGH SIZE | | 217 | 13 | 217 | 2,945 | | |
| MINIMUM RATE | LOW RATES ACCEPTABLE | 0.34 | | 54 | 154 | 208 | |
| AVERAGE RATE | | 0.75 | | 119 | 340 | 459 | |
| MAXIMUM RATE | HIGH RATES SUSPECT | 2.27 | | 361 | 1,029 | 1,390 | |
| STANDARD DEVIATION | | 0.25 | | | | | |
| EQUATION: $T = 0.71 * (X) + 7.23$ | | $R^2 = 0.91$ | | 115 | 327 | 442 | |
| LARGEST OF AVERAGE OR EQUATION | | | | 119 | 340 | 459 | |
| PM PEAK HOUR ADJACENT STREET | | | | 63% | 37% | | |
| STUDIES and LOW, AVERAGE, AND HIGH SIZE | | 208 | 12 | 248 | 2,945 | | |
| MINIMUM RATE | LOW RATES ACCEPTABLE | 0.35 | | 135 | 79 | 214 | |
| AVERAGE RATE | | 0.94 | | 363 | 213 | 576 | |
| MAXIMUM RATE | HIGH RATES SUSPECT | 2.98 | | 1,150 | 675 | 1,825 | |
| STANDARD DEVIATION | | 0.31 | | | | | |
| EQUATION: $\text{LN}(T) = 0.94 * \text{LN}(X) + 0.27$ | | $R^2 = 0.92$ | | 344 | 202 | 546 | |
| LARGEST OF AVERAGE OR EQUATION | | | | 363 | 213 | 576 | |
| PM PEAK HOUR GENERATOR | | | | 64% | 36% | | |
| STUDIES and LOW, AVERAGE, AND HIGH SIZE | | 178 | 12 | 203 | 1,781 | | |
| MINIMUM RATE | LOW RATES ACCEPTABLE | 0.49 | | 192 | 108 | 300 | |
| AVERAGE RATE | | 0.99 | | 388 | 218 | 606 | |
| MAXIMUM RATE | HIGH RATES SUSPECT | 2.98 | | 1,168 | 657 | 1,825 | |
| STANDARD DEVIATION | | 0.28 | | | | | |
| EQUATION: $\text{LN}(T) = 0.93 * \text{LN}(X) + 0.36$ | | $R^2 = 0.92$ | | 358 | 202 | 560 | |
| LARGEST OF AVERAGE OR EQUATION | | | | 388 | 218 | 606 | |

Checked by: PEB 6/20/2023

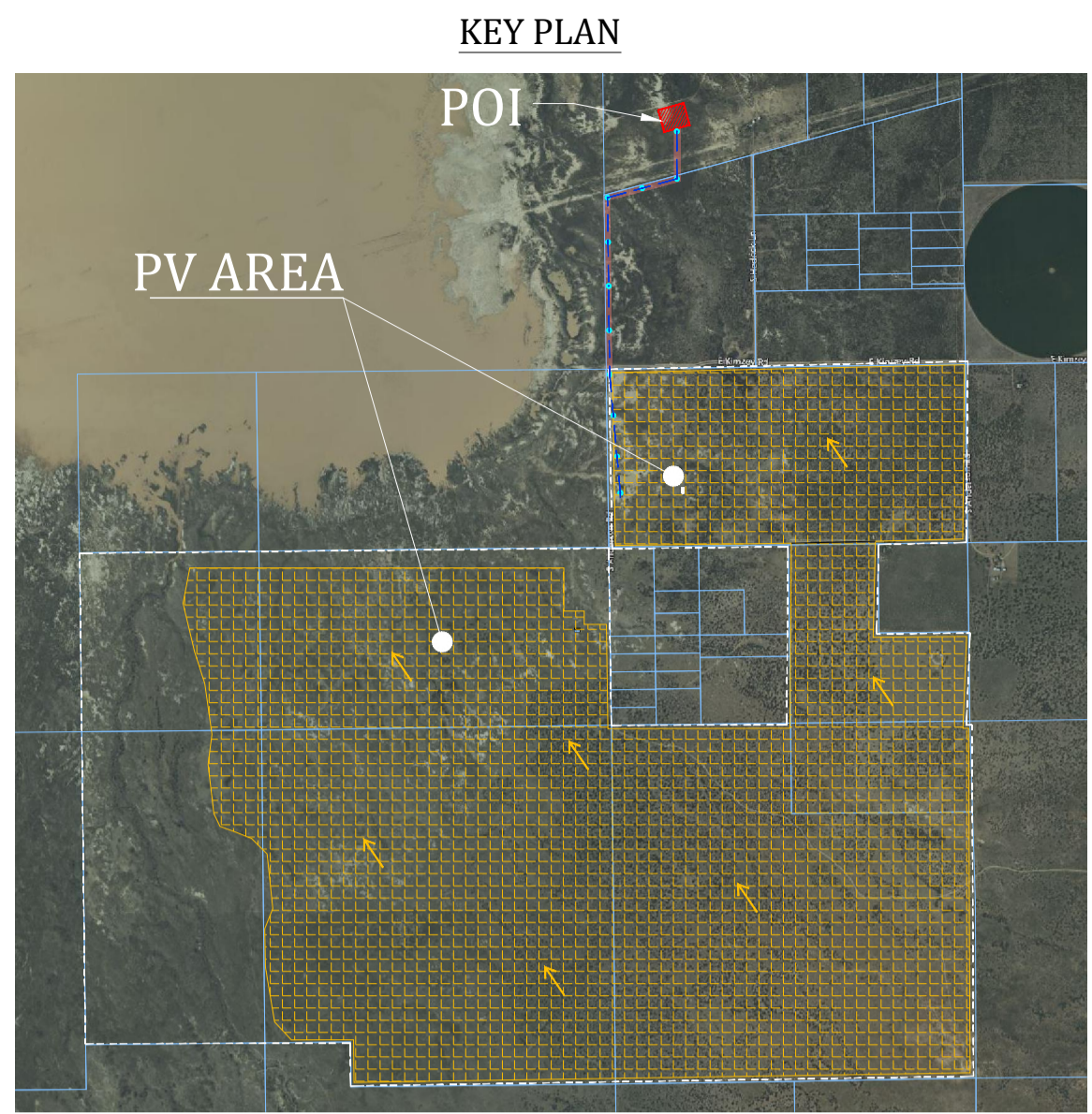


| PROJECT | | BRIGHTNIGHT THREE SISTERS | | | | | |
|---|----------------------|--------------------------------------|----|--------------|--------------|--------------|--|
| PARCEL | | ENTIRE | | | | | |
| SITE LAND USE CATEGORY AND CODE | | SINGLE FAMILY DETACHED HOUSING - 210 | | | | | |
| INDEPENDENT VARIABLE | | DWELLING UNITS | | | | | |
| SIZE | | 613 | | | | | |
| | | ENTERING | | EXITING | | SUM | |
| SATURDAY DAILY | | | | 50% | | 50% | |
| STUDIES and LOW, AVERAGE, AND HIGH SIZE | | 63 | 15 | 179 | 1,000 | | |
| MINIMUM RATE | LOW RATES SUSPECT | 3.36 | | 1,029 | 1,029 | 2,058 | |
| AVERAGE RATE | | 9.48 | | 2,904 | 2,903 | 5,807 | |
| MAXIMUM RATE | HIGH RATES SUSPECT | 16.52 | | 5,060 | 5,059 | 10,119 | |
| STANDARD DEVIATION | | 2.26 | | | | | |
| EQUATION: $LN(T) = 0.97 * LN(X) + 2.40$ | | $R^2 = 0.91$ | | 2,785 | 2,784 | 5,569 | |
| LARGEST OF AVERAGE OR EQUATION | | | | 2,904 | 2,903 | 5,807 | |
| PEAK HOUR GENERATOR | | | | 54% | 46% | | |
| STUDIES and LOW, AVERAGE, AND HIGH SIZE | | 42 | 15 | 152 | 644 | | |
| MINIMUM RATE | LOW RATES ACCEPTABLE | 0.41 | | 136 | 115 | 251 | |
| AVERAGE RATE | | 0.92 | | 305 | 259 | 564 | |
| MAXIMUM RATE | HIGH RATES SUSPECT | 1.78 | | 589 | 501 | 1,090 | |
| STANDARD DEVIATION | | 0.27 | | | | | |
| EQUATION: $T = 0.86 * (X) + 9.72$ | | $R^2 = 0.89$ | | 289 | 247 | 536 | |
| LARGEST OF AVERAGE OR EQUATION | | | | 305 | 259 | 564 | |
| SUNDAY DAILY | | | | 50% | 50% | | |
| STUDIES and LOW, AVERAGE, AND HIGH SIZE | | 60 | 15 | 186 | 1,000 | | |
| MINIMUM RATE | LOW RATES SUSPECT | 2.61 | | 800 | 799 | 1,599 | |
| AVERAGE RATE | | 8.48 | | 2,597 | 2,597 | 5,194 | |
| MAXIMUM RATE | HIGH RATES SUSPECT | 16.44 | | 5,035 | 5,035 | 10,070 | |
| STANDARD DEVIATION | | 1.74 | | | | | |
| EQUATION: $T = 8.86 * (X) - 70.09$ | | $R^2 = 0.94$ | | 2,679 | 2,678 | 5,357 | |
| LARGEST OF AVERAGE OR EQUATION | | | | 2,679 | 2,678 | 5,357 | |
| PEAK HOUR GENERATOR | | | | 53% | 47% | | |
| STUDIES and LOW, AVERAGE, AND HIGH SIZE | | 40 | 15 | 162 | 644 | | |
| MINIMUM RATE | LOW RATES SUSPECT | 0.36 | | 117 | 104 | 221 | |
| AVERAGE RATE | | 0.83 | | 269 | 239 | 508 | |
| MAXIMUM RATE | HIGH RATES SUSPECT | 1.67 | | 542 | 481 | 1,023 | |
| STANDARD DEVIATION | | 0.19 | | | | | |
| EQUATION: $T = 0.80 * (X) + 4.76$ | | $R^2 = 0.92$ | | 262 | 233 | 495 | |
| LARGEST OF AVERAGE OR EQUATION | | | | 269 | 239 | 508 | |

Checked by: PEB 6/20/2023

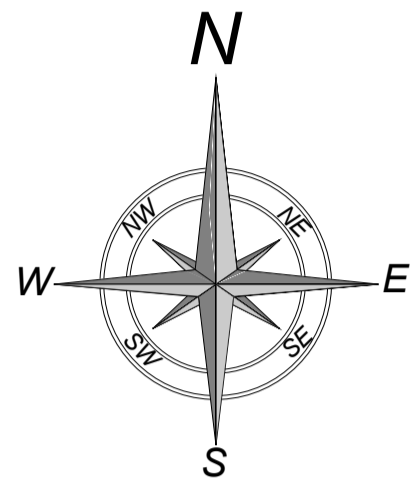


NOT FOR CONSTRUCTION

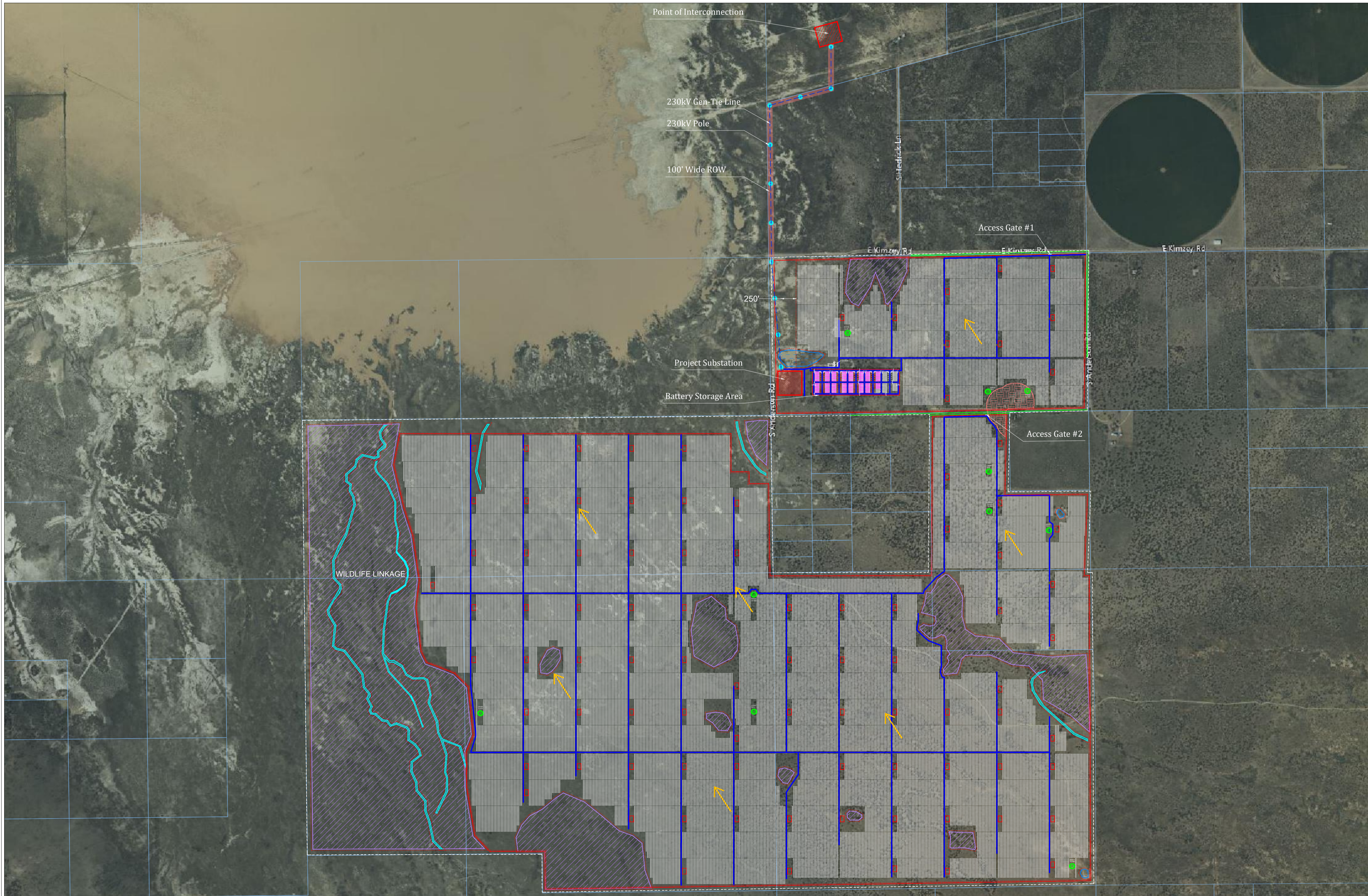


| LEGENDS:- | |
|-----------|------------------------|
| SYMBOL | DESCRIPTION |
| --- | SITE BOUNDARY |
| --- | SITE FENCE |
| --- | SETBACK LINE |
| --- | NATURAL DRAIN |
| --- | POND (CATTLE TANK) |
| --- | RESIDENCES |
| --- | FLOOD AREA |
| --- | TRACKER |
| --- | EXISTING WELL LOCATION |
| --- | COUNTY ROAD |
| --- | INVERTER SKID |

| LEGENDS:- | |
|-----------|----------------------------|
| SYMBOL | DESCRIPTION |
| --- | PLANT INTERNAL ROADS (15') |
| --- | 230kV POLE |
| --- | 230kV GEN-TIE LINE |
| --- | 100' WIDE ROW |
| --- | PARCEL AREA |
| --- | ACCESS GATE |
| --- | FLOW LINE |



| Project Details | |
|-----------------------------|----------------|
| Site latitude | 32° 2'45.41"N |
| Site longitude | 109°50'22.89"W |
| Solar PV DC capacity | 360.003 MWp |
| Solar PV AC capacity at POI | 300MW |
| DC AC ratio at POI | 1.200 |
| Evacuation voltage | 230kV |
| Module wattage | 525Wp |
| Module type | Bifacial |
| Module quantity | 685720 |
| Module per string | 28 |
| Total strings | 24490 |
| Inverter rating | 4MWac |
| Inverter type | Central |
| Inverter quantity | 91 |
| Racking type | ATI Tracker |
| Pitch | 24.15 Feet |
| Ground coverage ratio | 30% |
| Tracker quantity_4 String | 5512 |
| Tracker quantity_3 String | 688 |
| Tracker quantity_2 String | 189 |
| Total tracker quantity | 6389 |
| BESS Capacity | 300MW |
| BESS MWh | 1200MWh |
| BESS Inverter Rating | 4.2MW |
| BESS Transformer Rating | 4.2MVA |
| BESS Inverter Quantity | 78 |
| Available land area | 2442 acres |
| Land area used for PV | 1982 acres |



Note:-
 * All Dimensions Are in Feet.
 * Coordinates System : UTM Zone 12N
 * Perennial ground cover to be maintained to the extent practical.
 * O&M Structure to include office spaces, and spare part sheds.

| DATE | REV. | REVISION HISTORY | DRN. BY | CKD. BY | APPD. BY |
|------------|------|---------------------------|---------|---------|----------|
| 2023-06-22 | 04 | LAND BOUNDARY REVISED | YS | PS | KP |
| 2023-03-23 | 03 | TRACKER DETAIL ADDED | MA | PS | KP |
| 2023-03-14 | 02 | POI & GEN TIE ROW REVISED | MA | PS | KP |
| 2022-10-10 | 01 | LAND BOUNDARY REVISED | YS | PS | KP |
| 2022-03-31 | 00 | FIRST ISSUE | YS | PS | KP |

BRIGHTNIGHT **BrightNight Power**

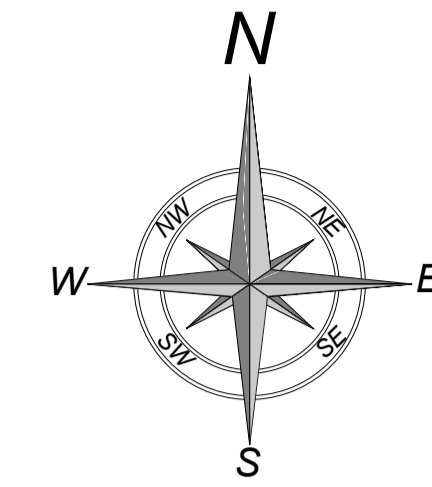
PROJECT NAME: THREE SISTERS (THSI)

TITLE:- PLANT LAYOUT (PVS)

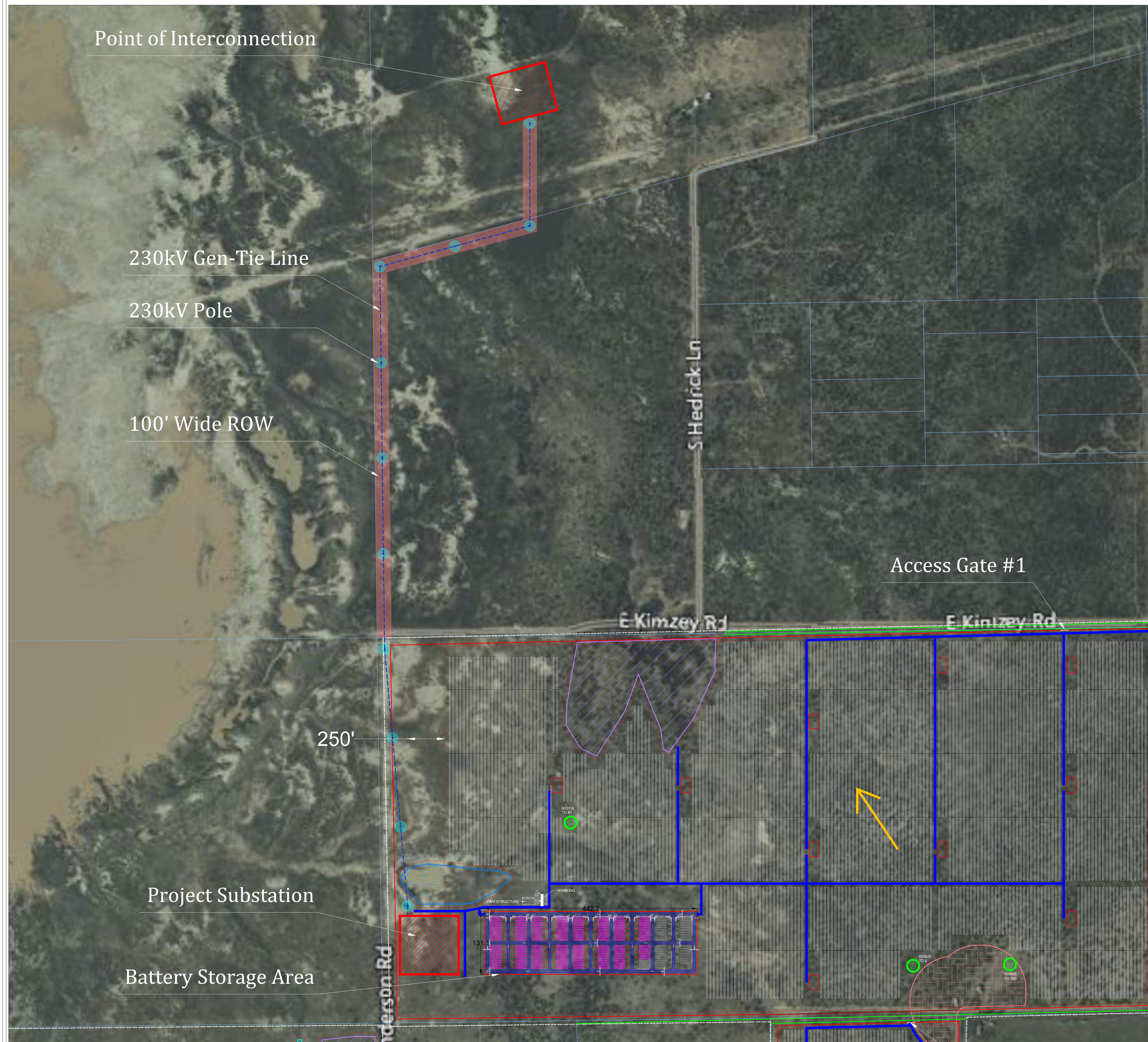
| SCALE | PURPOSE CODE | DRAWING NO. | REV. | SHEET |
|-------|------------------|-------------|------|--------|
| NTS | ISSUE FOR PERMIT | 00 | 04 | 1 OF 3 |

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NOT FOR CONSTRUCTION



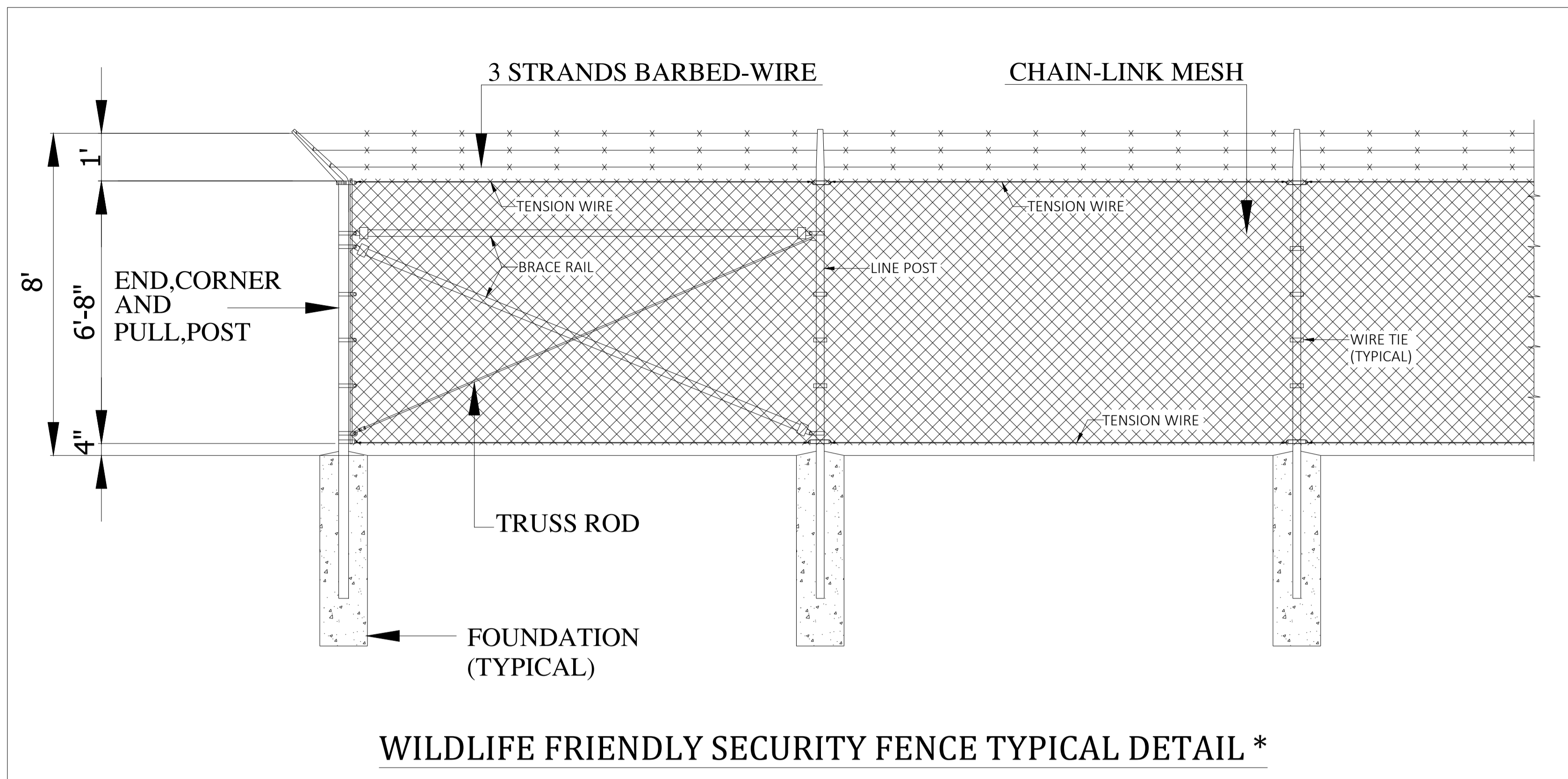
| LEGENDS:- | |
|-----------|--------------------|
| SYMBOL | DESCRIPTION |
| --- | SITE BOUNDARY |
| — | SITE FENCE |
| ○ | 230kV POLE |
| --- | 230kV GEN-TIE LINE |
| █ | 100' WIDE ROW |
| — | PARCEL AREA |
| → | FLOW LINE |



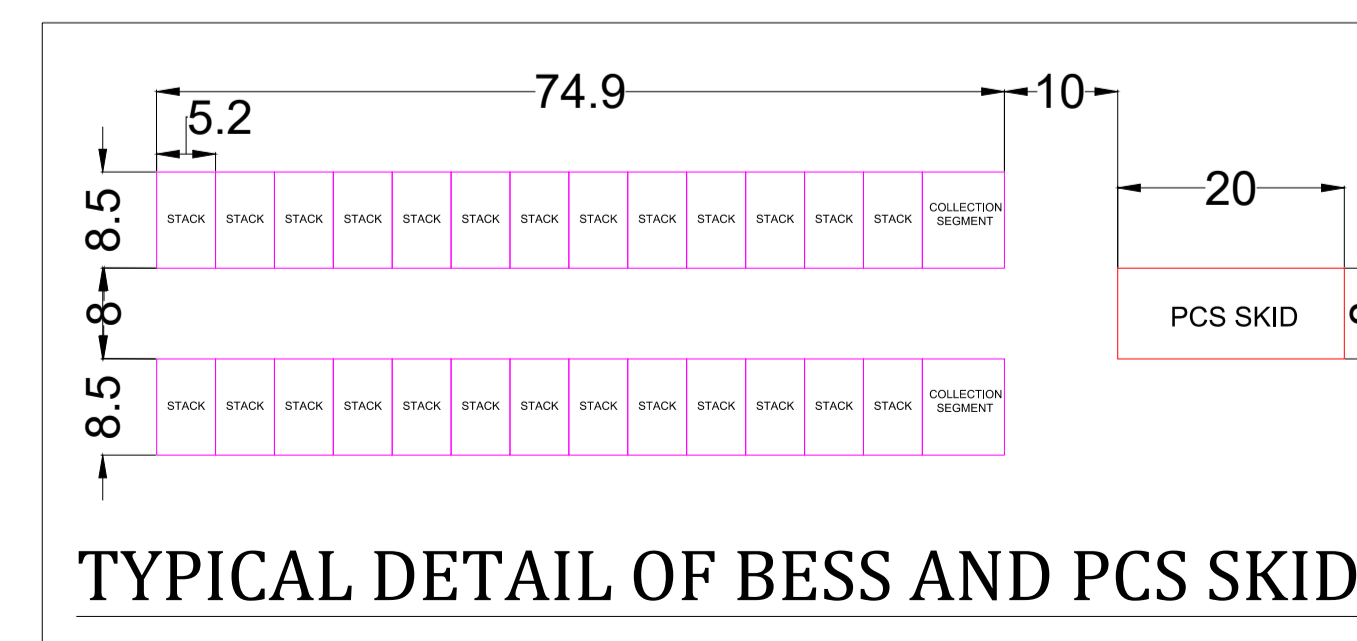
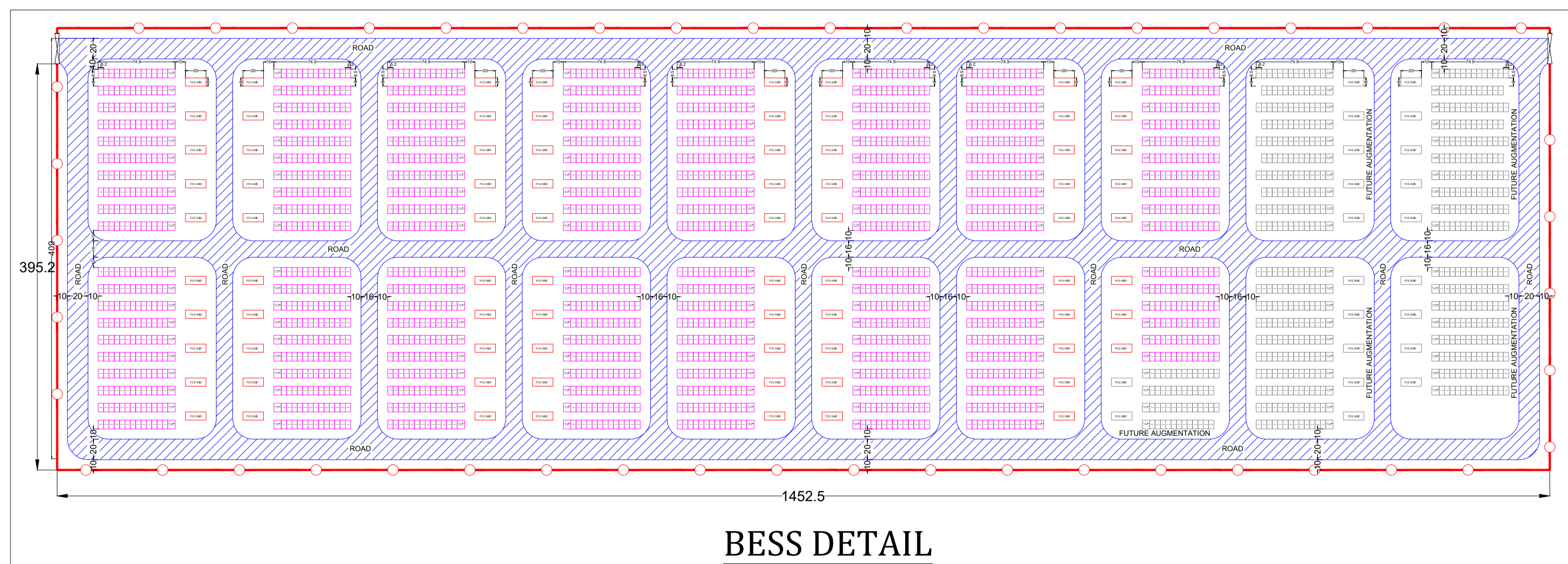
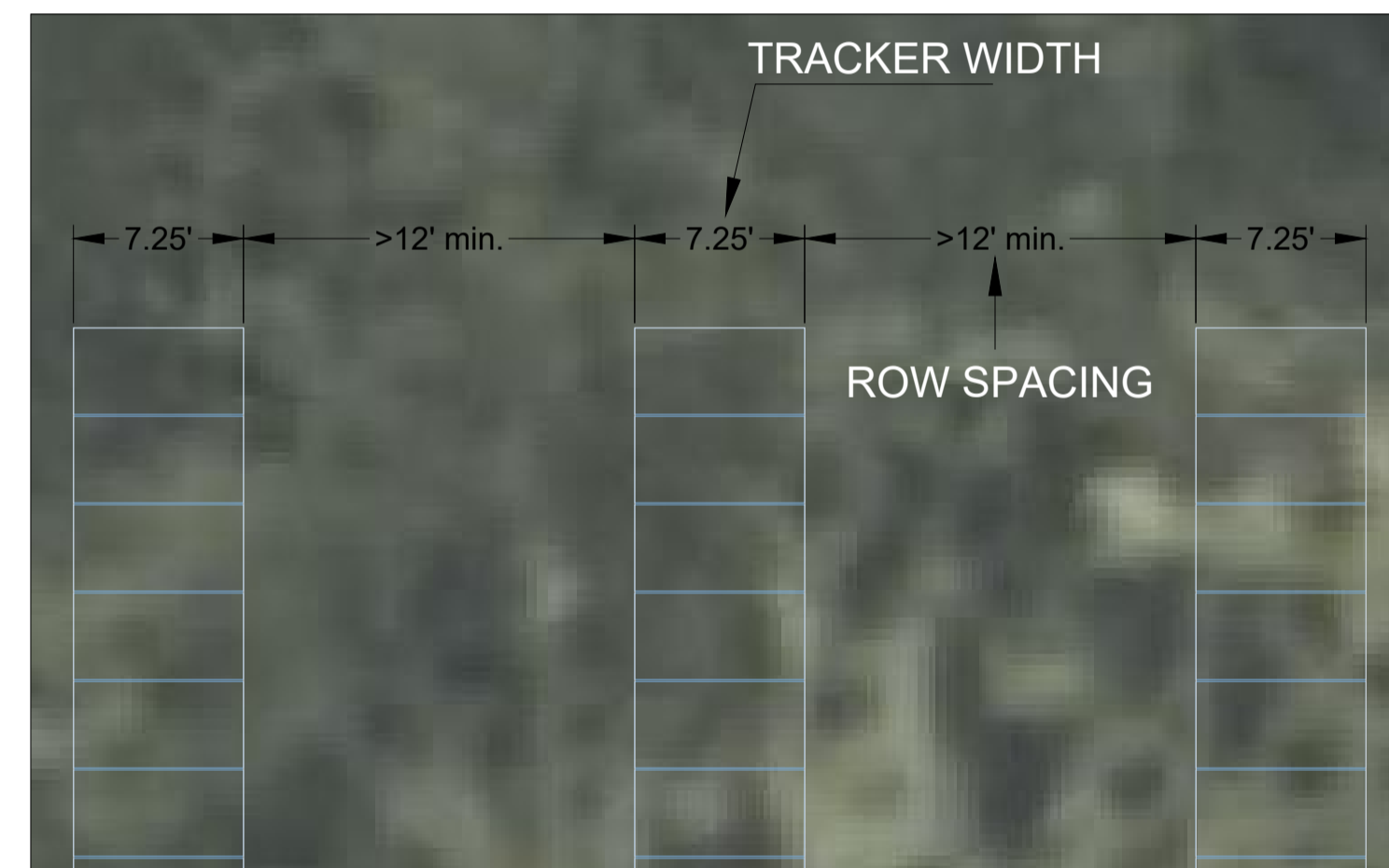
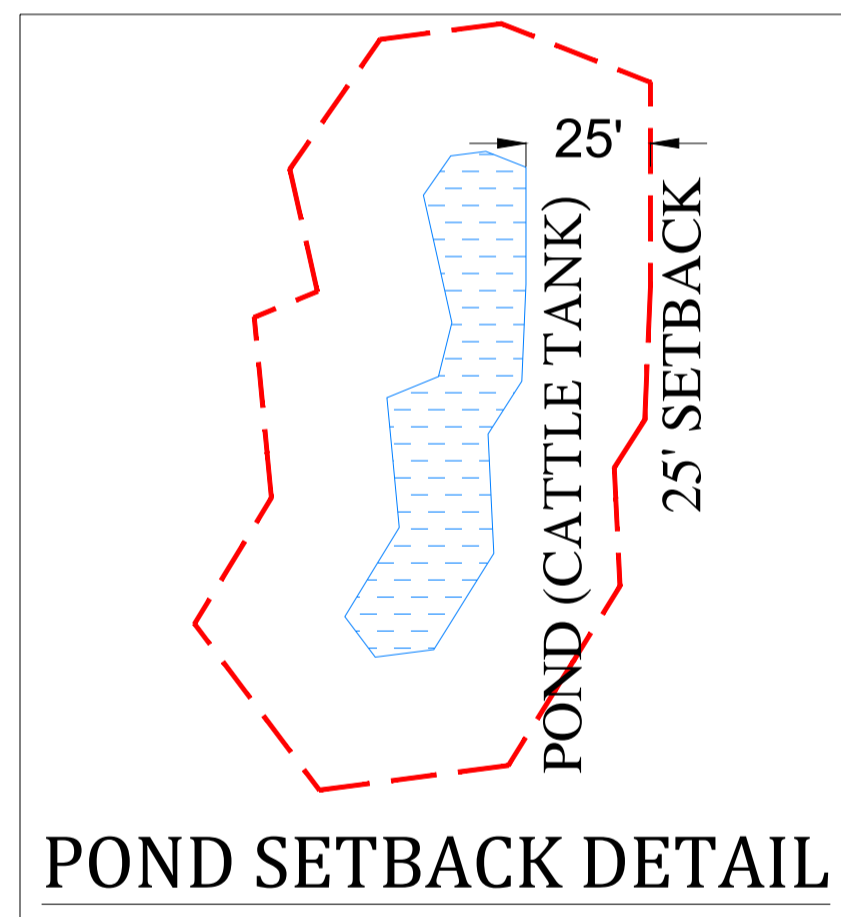
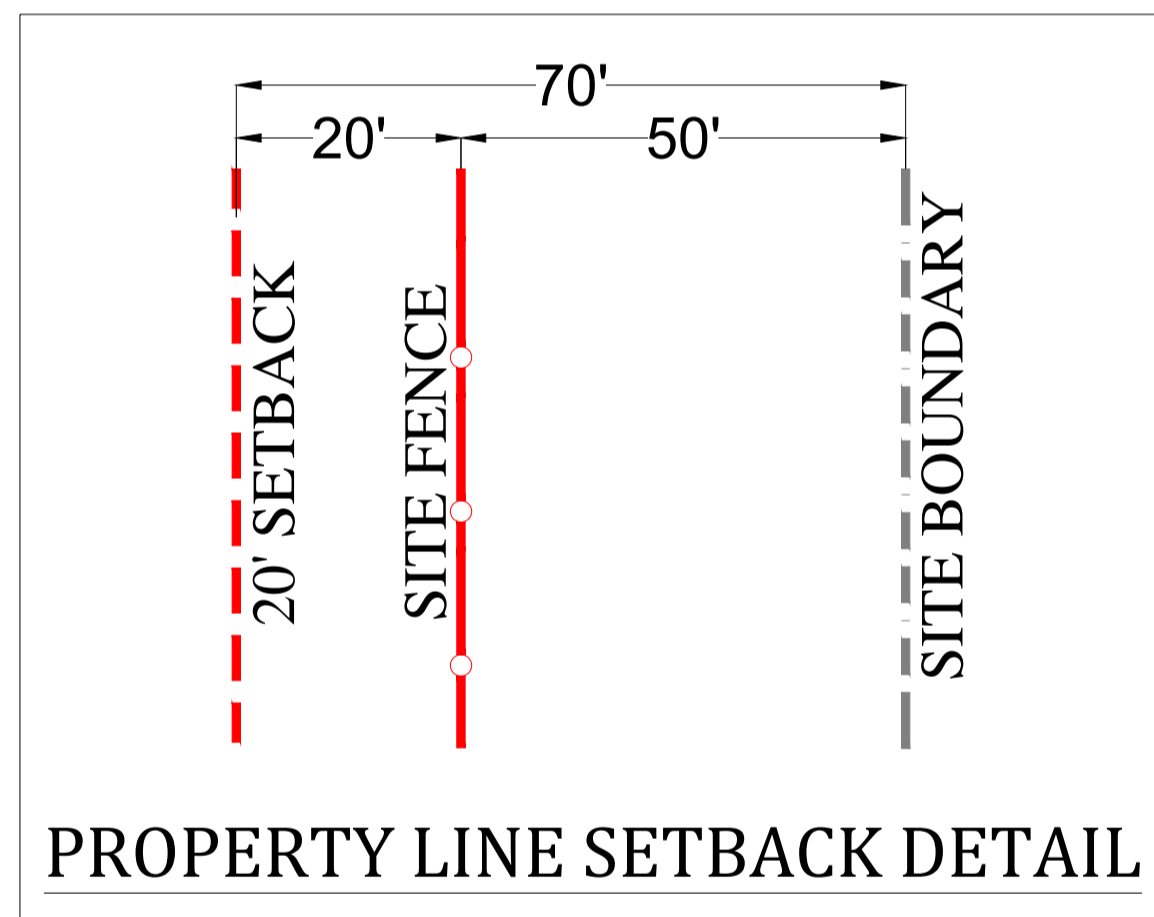
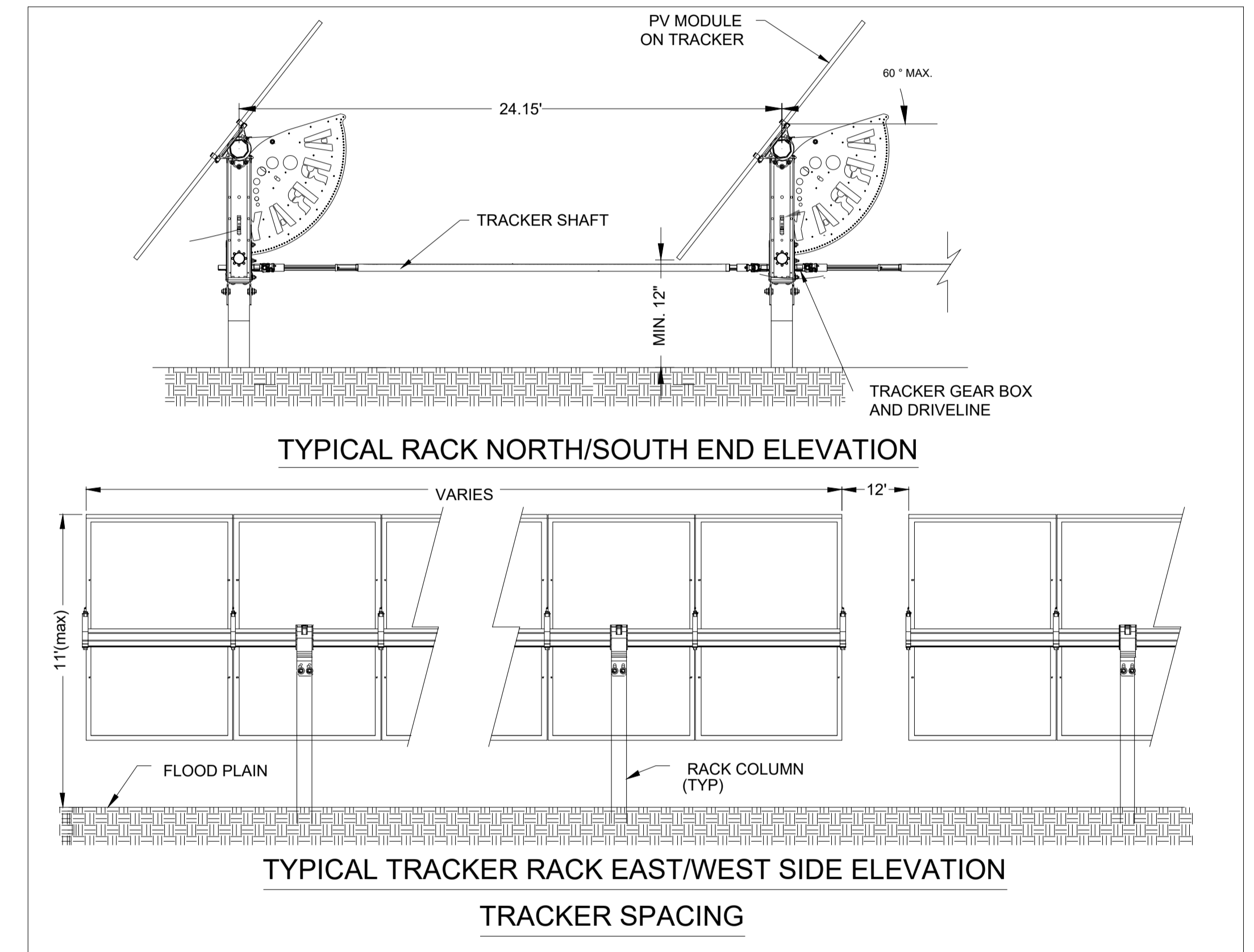
Note:-
 * All Dimensions Are in Feet.
 * Coordinates System : UTM Zone 12N
 * Perennial ground cover to be maintained to the extent practical.
 * O&M Structure to include office spaces, and spare part sheds.

| DATE | REV. | REVISION HISTORY | DRN. BY | CKD. BY | APPD. BY |
|------------|------|---------------------------|---------|---------|----------|
| 2023-06-22 | 04 | LAND BOUNDARY REVISED | YS | PS | KP |
| 2023-03-23 | 03 | TRACKER DETAIL ADDED | MA | PS | KP |
| 2023-03-14 | 02 | POI & GEN TIE ROW REVISED | MA | PS | KP |
| 2022-10-10 | 01 | LAND BOUNDARY REVISED | YS | PS | KP |
| 2022-03-31 | 00 | FIRST ISSUE | YS | PS | KP |

| | | | | | |
|--|--------------------------|-------------|------|--------|--|
| | BrightNight Power | | | | |
| PROJECT NAME | THREE SISTERS (THSI) | | | | |
| TITLE:- | PLANT LAYOUT (PVS) | | | | |
| SCALE | PURPOSE CODE | DRAWING NO. | REV. | SHEET | |
| NTS | ISSUE FOR PERMIT | 00 | 04 | 2 OF 3 | |
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| Setback details | |
|---------------------------------------|---------------|
| Setback description | Setback value |
| Plant property line and fence setback | 50' |
| Area between fence and array | 20' |
| Pond (cattle tank) setback | 25' |
| County road setback | 50' |
| Flood area setback | 25' |
| Residential setback | 300' |



- Note:-
 * All Dimensions Are in Feet.
 * Coordinates System : UTM Zone 12N
 * Perennial ground cover to be maintained to the extent practical.
 * O&M Structure to include office spaces, and spare part sheds.
 * The fence specification is based on the Game and Fish Dept's recommendations

| DATE | REV. | REVISION HISTORY | DRN. BY | CKD. BY | APPD. BY |
|------------|------|---------------------------|---------|---------|----------|
| 2023-06-22 | 04 | LAND BOUNDARY REVISED | YS | PS | KP |
| 2023-03-23 | 03 | TRACKER DETAIL ADDED | MA | PS | KP |
| 2023-03-14 | 02 | POI & GEN TIE ROW REVISED | MA | PS | KP |
| 2022-10-10 | 01 | LAND BOUNDARY REVISED | YS | PS | KP |
| 2022-03-31 | 00 | FIRST ISSUE | YS | PS | KP |

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|--|--------------------------|-------------|------|--------|--|
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| PROJECT NAME | THREE SISTERS (THSI) | | | | |
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| SCALE | PURPOSE CODE | DRAWING NO. | REV. | SHEET | |
| NTS | ISSUE FOR PERMIT | 00 | 04 | 3 OF 3 | |
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