



BOARD OF SUPERVISORS AGENDA ITEM REPORT

Requested Board Meeting Date: 7/2/2024

*= Mandatory, information must be provided

Click or tap the boxes to enter text. If not applicable, indicate "N/A".

***Title:**

P23CU00012 ANDRADA INVESTMENTS, LLC, ET AL – S. WILMOT ROAD TYPE II CONDITIONAL USE PERMIT

***Introduction/Background:**

Andrada Investments, LLC, et al requests a Type II Conditional Use Permit for a utility-scale renewable energy facility (solar energy field) in accordance with Section 18.07.030.Q of the Pima County Zoning Code in the in the Conditional RH (Rural Homestead), TR (Transitional), CB-1 (Local Business), SR (Suburban Ranch), and CR-5 (Multiple Residence) zones. The applicant is required to close the rezoning at the same hearing as the conditional use approval. The zoning of the site must be all RH in order for the conditional use permit to be approved. Project is located on parcels 305-23-018D, 305-23-018A, 305-23-026A, 305-23-027B, 305-23-0140, 305-22-0050, 305-22-004A, 305-22-004B, 305-22-0030.

***Discussion:**

The owner requests a Type II Conditional Use Permit to construct a solar energy facility.

***Conclusion:**

Approval of the conditional use permit would allow the owner to build a solar energy facility.

***Recommendation:**

The Hearing Administrator and staff recommend APPROVAL of the Type II Conditional Use Permit subject to standard and special conditions.

***Fiscal Impact:**

None

***Board of Supervisor District:**

☐ 1 ☐ 2 ☐ 3 ☒ 4 ☐ 5 ☐ All

Department: Development Services

Telephone: (520) 724-6675

Contact: Spencer Hickman, Senior Planner

Telephone: (520) 724-6498

Department Director Signature:

Date:

6-4-24

Deputy County Administrator Signature:

Date:

6/12/2024

County Administrator Signature:

Date:

6/13/2024



TO: Honorable Steve Christy, District 4

FROM: Chris Poirier, Deputy Director
Public Works-Development Services Department-Planning Division

DATE: May 30, 2024

SUBJECT: **P23CU00012 ANDRADA INVESTMENTS, LLC, ET AL – S. WILMOT ROAD**
(Conditional Use Type II – Utility-Scale Renewable Energy System)

The above referenced Conditional Use Permit is within your district and is scheduled for the Board of Supervisors' **TUESDAY, July 2, 2024** hearing.

REQUEST: For a **Type II Conditional Use Permit for a utility-scale renewable energy system**, in accordance with Section 18.07.030.Q of the Pima County Zoning Code, in the Conditional RH (Rural Homestead), TR (Transitional), CB-1 (Local Business), SR (Suburban Ranch), and CR-5 (Multiple Residence) zones. The applicant is required to close the prior rezoning at the same hearing as the conditional use approval. The zoning of the site must be all RH in order for the conditional use permit to be approved. The project is located on Parcel Nos. 305-23-018D, 305-23-018A, 305-23-026A, 305-23-027B, 305-23-0140, 305-22-0050, 305-22-004A, 305-22-004B, and 305-22-0030. (District 4)

OWNER: Andrada Investments, LLC, et al
2200 E River Rd, Ste 115
Tucson, AZ 85718

AGENT: Stephanie Rush
Wilmot Energy Center II, LLC
700 Universe Blvd E5E
Juno Beach, FL 33408

DISTRICT: 4

STAFF CONTACT: Spencer Hickman, Senior Planner

PUBLIC COMMENT TO DATE: As of May 30, 2024, 1 letter of public comment has been received. The comment is in opposition to the proposed project.

HEARING ADMINISTRATOR RECOMMENDATION: APPROVAL SUBJECT TO STANDARD AND SPECIAL CONDITIONS

MAEVEEN MARIE BEHAN CONSERVATION LANDS SYSTEM (CLS): The project is within the Important Riparian Area, Multiple Use Management Area, and Biological Core Management Area of the Maeveen Marie Behan Conservation Lands System (CLS).

TD/SH/ds
Attachments



BOARD OF SUPERVISORS MEMORANDUM

Subject: P23CU00012

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FOR JULY 2, 2024 MEETING OF THE BOARD OF SUPERVISORS

TO: HONORABLE BOARD OF SUPERVISORS

FROM: Chris Poirier, Deputy Director
Public Works-Development Services Department-Planning Division

DATE: May 30, 2024

ADVERTISED ITEM FOR PUBLIC HEARING

CONDITIONAL USE PERMIT

P23CU00012 ANDRADA INVESTMENTS, LLC, ET AL – S. WILMOT ROAD

Andrada Investments, LLC et. al., represented by Wilmot Energy Center II, request a Type II Conditional Use Permit for a utility-scale renewable energy facility in accordance with Section 18.07.030.Q of the Pima County Zoning Code, in the Conditional RH (Rural Homestead), TR (Transitional), CB-1 (Local Business), SR (Suburban Ranch), and CR-5 (Multiple Residence) zones. The applicant is required to close the prior rezoning at the same hearing as the conditional use approval. The zoning of the site must be all RH in order for the conditional use permit to be approved. The project is located on Parcel Nos. 305-23-018D, 305-23-018A, 305-23-026A, 305-23-027B, 305-23-0140, 305-22-0050, 305-22-004A, 305-22-004B, and 305-22-0030. Staff and the Hearing Administrator recommend **APPROVAL SUBJECT TO STANDARD AND SPECIAL CONDITIONS.** (District 4)

Summary of Hearing Administrator Hearing (May 8, 2024)

In accordance with Pima County Zoning Code Section 18.97.030.F.3, a public hearing was held on this application on May 8, 2024. The hearing was held in "hybrid" fashion, with both an in-person and online/virtual option for attending. The owner/applicant presented the case to the hearing administrator and answered all of his questions.

Two (2) members of the public attended the hearing in person to speak on the matter. One (1) of these speakers had also submitted a letter of protest/opposition to the proposed solar farm prior to the public hearing; it did not distinguish between the allowed REID portion and the proposed CUP portion. Apparently, the writer's opposition applies to the entire solar farm proposal. The speaker's comments made at the public hearing expressed a general displeasure with what she believes was poor and insufficient information provided to the public by the applicant and by Pima County. Additional objections pertained to her belief that a solar farm would prevent infrastructure expansion and growth in the area for decades, and that solar farms also present serious potential harms to human beings and that no studies have been provided on this point.

A second speaker raised questions about access for nearby property owners, dust control during and after construction, the treatment of wildlife encountered during construction, potential impact upon existing private potable wells, and downstream impacts upon existing drainage patterns. Her questions appeared to be satisfactorily answered by the applicant during the latter's rebuttal (which is their opportunity, per standard public hearing procedure, to reply to the public testimony heard).

Several other parties had joined in the meeting via the online/virtual option for the meeting, but none of these chose to speak when presented with the opportunity to do so. It was unclear as to whether these were members of the public or were property owners in the area.

After hearing all of the above, the Hearing Administrator thanked the applicant and those who attended the hearing, and stated that he would be providing his written recommendation to the Board of Supervisors in the coming days.

After visiting the subject property, considering the facts and testimony in this case, together with the materials submitted by the applicant, the Hearing Administrator recommends a APPROVAL of this request for a Type II conditional use permit for a utility-scale renewable energy facility (specifically, a "solar farm"). The applicant is advised that this is a recommendation to the Board of Supervisors, who will make the ultimate and final decision on this CUP request. Should the Board of Supervisors agree with the Hearing Administrator's recommendation for approval, it is suggested that this approval be granted subject to the following standard and special conditions which were promulgated by staff and further supported and amended by the Hearing Administrator.

Standard Conditions & Requirements pre the Pima County Zoning Code

1. A utility-scale renewable energy facility (including a "solar farm") is allowed in the RH zone as a conditional use per Section 18.07.030.Q.

Special Conditions – Hearing Administrator

The following Special Conditions incorporate detailed input provided by the Development Services Department, the Department of Transportation, Environmental Planning and the Regional Flood Control District.

1. The zoning of the project area shall revert to RH following a closure of the conditional rezoning on the site (Resolution 2022-69) at the same Board of Supervisors hearing as this CUP is approved.
2. The project shall comply with the general requirements listed in Section 18.07.030.Q.4:
 - a. The minimum required fencing for a ground-mounted system is a perimeter chain link fence (unless Section 18.49.040(G) applies, in which case another type of fencing/wall is required) meeting minimum setback requirements, however, the hearing administrator may recommend additional or alternative specific types of fencing, screening, and/or walls appropriate to the site and surrounding land use(s) and not otherwise prohibited by this title.
 - b. The site's permanent building, if any, shall utilize a southwestern color palette (desert tans, browns, rusts, greens) for those opaque surfaces that are not of indigenous or natural building materials. If the property is subject to the scenic route regulations of Chapter 18.77, the more restrictive requirements shall apply.
 - c. Solar energy systems shall be located such that prolonged and/or substantial

- concentrated solar radiation or glare shall not be directed onto abutting properties or roadways.
- d. Suitable warning signs containing a telephone number for emergency calls shall face all access approaches to the facility. No advertising on the signs is allowed.
 - e. The site shall be maintained in a trash and debris free manner.
 - f. Any renewable energy system which becomes inoperable shall at the owner's expense be made operational or shall be removed from the property within one year of the date system became inoperable. An appropriate reclamation and closure plan, including recycling, subject to the planning director's approval shall be required prior to removal.
- 3. Any affected Pima Pineapple Cactus that need to be transplanted must be transplanted on-site. Pima Pineapple Cactus may not be transplanted off-site per the standards of the NPPO.
 - 4. In the future event that the solar farm use is discontinued on the property and the solar panels and support infrastructure are removed, all impacted areas shall be hydroseeded to promote the re-establishment of ground cover and to enhance soil stabilization.

Flood Control Conditions:

- 5. Regional Flood Control District review and approval are required at the time of permitting.
- 6. The In-lieu Fee to mitigate for the disturbance to the Regulated Riparian Habitat will be paid at the time of development prior to issuance of the Site Construction Permit.
- 7. All proposed fencing shall meet the Technical Policy 005 Construction Standards for Fences and Walls within Regulatory Floodplains.
- 8. Access the crosses the floodplains between solar fields is prohibited to have fencing.
- 9. Encroachment into mapped Regulated Riparian Habitat, the local floodplain and flow corridors not shown on the approved site plan is prohibited.
- 10. The Regulated Riparian Habitat located within the Flood Control Resource Area shall be protected during construction and will remain undisturbed in perpetuity.

Department of Transportation Conditions:

- 11. The number, location, and design of the access points on Wilmot Road shall be determined at time of development plan submittal.
- 12. Prior to Development Plan approval, written proof of coordination with the City of Tucson Department of Transportation and Mobility is required regarding any access requirement for Andrada Road, access points, and traffic impacts to their roadway system.

Environmental Planning Conditions:

- 13. The property owner/developer shall achieve compliance with the Maeveen Marie Behan Conservation Lands System (CLS) Guidelines by providing a total of 83.8 acres of Natural Open Space within the portion of the project designated under the CLS as Biological Core Management Area.

TD/SH/ds
Attachments

C: Andrada Investments, LLC, ET AL

SUMMARY OF THE HEARING ADMINISTRATOR MEETING

In accordance with Pima County Zoning Code Section 18.97.030.F.3, a public hearing was held on this application on May 8, 2024. The hearing was held in “hybrid” fashion, with both an in-person and online/virtual option for attending. The owner/applicant presented the case to the hearing administrator and answered all of his questions.

Two (2) members of the public attended the hearing in person to speak on the matter. One (1) of these speakers had also submitted a letter of protest/opposition to the proposed solar farm prior to the public hearing; it did not distinguish between the allowed REID portion and the proposed CUP portion. Apparently, the writer’s opposition applies to the entire solar farm proposal. The speaker’s comments made at the public hearing expressed a general displeasure with what she believes was poor and insufficient information provided to the public by the applicant and by Pima County. Additional objections pertained to her belief that a solar farm would prevent infrastructure expansion and growth in the area for decades, and that solar farms also present serious potential harms to human beings and that no studies have been provided on this point.

A second speaker raised questions about access for nearby property owners, dust control during and after construction, the treatment of wildlife encountered during construction, potential impact upon existing private potable wells, and downstream impacts upon existing drainage patterns. Her questions appeared to be satisfactorily answered by the applicant during the latter’s rebuttal (which is their opportunity, per standard public hearing procedure, to reply to the public testimony heard).

Several other parties had joined in the meeting via the online/virtual option for the meeting, but none of these chose to speak when presented with the opportunity to do so. It was unclear as to whether these were members of the public or were property owners in the area.

After hearing all of the above, the Hearing Administrator thanked the applicant and those who attended the hearing, and stated that he would be providing his written recommendation to the Board of Supervisors in the coming days.

HEARING ADMINISTRATOR’S RECOMMENDATION

After visiting the subject property, considering the facts and testimony in this case, together with the materials submitted by the applicant, the Hearing Administrator recommends a **APPROVAL** of this request for a Type II conditional use permit for a utility-scale renewable energy facility (specifically, a “solar farm”). The applicant is advised that this is a *recommendation* to the Board of Supervisors, who will make the ultimate and final decision on this CUP request.

Should the Board of Supervisors agree with the Hearing Administrator’s recommendation for approval, it is suggested that this approval be granted subject to the following standard and special conditions which were promulgated by staff and further supported and amended by the Hearing Administrator.



P23CU00012

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FOR BOARD OF SUPERVISORS JULY 2, 2024 PUBLIC HEARING

TO: HONORABLE BOARD OF SUPERVISORS

FROM: Jim Portner, Hearing Administrator

DATE: May 16, 2024

DOCUMENT: P23CU00012

CONDITIONAL USE PERMIT REQUEST FOR PUBLIC HEARING:

Andrada Wilmot 180, LLC et. al., represented by Wilmot Energy Center II, request a Type II Conditional Use Permit for a utility-scale renewable energy facility in accordance with Section 18.07.030.Q of the Pima County Zoning Code, in the Conditional RH (Rural Homestead), TR (Transitional), CB-1 (Local Business), SR (Suburban Ranch), and CR-5 (Multiple Residence) zones. The applicant is required to close the prior rezoning at the same hearing as the conditional use approval. The zoning of the site must be all RH in order for the conditional use permit to be approved. The project is located on Parcel Nos. 305-23-018D, 305-23-018A, 305-23-026A, 305-23-027B, 305-23-0140, 305-22-0050, 305-22-004A, 305-22-004B, and 305-22-0030. (District 4)

CASE BACKGROUND AND PARTICULARS

This is a request to approve a conditional use permit for a utility-scale renewable energy facility, more specifically a “solar farm” that will deliver energy to Tucson Electric Power. It is important to note that the majority of the planned solar installation falls within the existing Renewable Energy Incentive District (REID) as established under Pima County Code Title 14. The proposed solar facility use is allowed by right within the REID and no conditional use permit (CUP) is required for that portion which lies within the District. This requested conditional use permit is only for that portion of the facility which lies outside of the REID.

Much of this area outside of the REID was included in a prior approved rezoning case that created TR (Transitional), CB-1 (Local Business), SR (Suburban Ranch), and CR-5 (Multiple Residence) zoning on the property. This prior rezoning case must be formally closed so that the underlying property can revert back to RH (Rural Homestead) zoning, within which the proposed solar farm and utility-scale renewable energy facility is permitted as a conditional use. As such, a separate application to close the aforementioned rezoning case is proceeding simultaneously with this CUP.

Standard Conditions & Requirements per the Pima County Zoning Code

1. A utility-scale renewable energy facility (including a “solar farm”) is allowed in the RH zone as a conditional use per Section 18.07.030.Q.

Special Conditions – Hearing Administrator

The following Special Conditions incorporate detailed input provided by the Development Services Department, the Department of Transportation, Environmental Planning and the Regional Flood Control District.

1. The zoning of the project area shall revert to RH following a closure of the conditional rezoning on the site (Resolution 2022-69) at the same Board of Supervisors hearing as this CUP is approved.
2. The project shall comply with the general requirements listed in Section 18.07.030.Q.4:
 - a. The minimum required fencing for a ground-mounted system is a perimeter chain link fence (unless Section 18.49.040(G) applies, in which case another type of fencing/wall is required) meeting minimum setback requirements, however, the hearing administrator may recommend additional or alternative specific types of fencing, screening, and/or walls appropriate to the site and surrounding land use(s) and not otherwise prohibited by this title.
 - b. The site's permanent building, if any, shall utilize a southwestern color palette (desert tans, browns, rusts, greens) for those opaque surfaces that are not of indigenous or natural building materials. If the property is subject to the scenic route regulations of Chapter 18.77, the more restrictive requirements shall apply.
 - c. Solar energy systems shall be located such that prolonged and/or substantial concentrated solar radiation or glare shall not be directed onto abutting properties or roadways.
 - d. Suitable warning signs containing a telephone number for emergency calls shall face all access approaches to the facility. No advertising on the signs is allowed.
 - e. The site shall be maintained in a trash and debris free manner.
 - f. Any renewable energy system which becomes inoperable shall at the owner's expense be made operational or shall be removed from the property within one year of the date system became inoperable. An appropriate reclamation and closure plan, including recycling, subject to the planning director's approval shall be required prior to removal.
3. Any affected Pima Pineapple Cactus that need to be transplanted must be transplanted on-site. Pima Pineapple Cactus may not be transplanted off-site per the standards of the NPPO.

4. In the future event that the solar farm use is discontinued on the property and the solar panels and support infrastructure are removed, all impacted areas shall be hydroseeded to promote the re-establishment of ground cover and to enhance soil stabilization.

Flood Control Conditions:

5. Regional Flood Control District review and approval are required at the time of permitting.
6. The In-lieu Fee to mitigate for the disturbance to the Regulated Riparian Habitat will be paid at the time of development prior to issuance of the Site Construction Permit.
7. All proposed fencing shall meet the Technical Policy 005 Construction Standards for Fences and Walls within Regulatory Floodplains.
8. Access across the floodplains between solar fields is prohibited to have fencing.
9. Encroachment into mapped Regulated Riparian Habitat, the local floodplain and flow corridors not shown on the approved site plan is prohibited.
10. The Regulated Riparian Habitat located within the Flood Control Resource Area shall be protected during construction and will remain undisturbed in perpetuity.

Department of Transportation Conditions:

11. The number, location, and design of the access points on Wilmot Road shall be determined at time of development plan submittal.
12. Prior to Development Plan approval, written proof of coordination with the City of Tucson Department of Transportation and Mobility is required regarding any access requirement for Andrada Road, access points, and traffic impacts to their roadway system.

Environmental Planning Conditions:

13. The property owner/developer shall achieve compliance with the Maeveen Marie Behan Conservation Lands System (CLS) Guidelines by providing a total of 83.8 acres of Natural Open Space within the portion of the project designated under the CLS as Biological Core Management Area.

REQUIRED STANDARDS AND FINDINGS

Following are the Hearing Administrator's findings relative to the standards set by Pima County Code Sec. 18.97.030.F.3.c. These Sections stipulate that the following standards be met by the proposed use:

- 1. It will not be in serious conflict with the objectives of the general land use plan or the area plan in which situated.**

The Pima County Comprehensive Plan designates the majority of this site as *Low Intensity Urban 3.0 (LIU)*, with a smaller portion designated as *Resource Sensitive (RS)*. The expressed purpose of *LIU* is generally to “designate areas for low density residential and other compatible uses.” The expressed purpose of *RS* is to “designate key larger parcels and land holdings with environmentally sensitive characteristics in close proximity to public preserves and other environmentally sensitive areas.”

The proposed utility-scale solar farm installation is a low-impact, quiet, and generally unobtrusive use; the surrounding properties are either vacant lands or developed as private residences on unsubdivided properties. The Hearing Administrator recalls that he has approved solar farms in the past within the *Low Intensity Rural* category. It is therefore his position that the proposed use can integrate well into this surrounding *LIU* land-use context without causing any undue harm or negative impacts to the nearby property owners.

Regarding that portion of the project that falls within the *RS (Resource Sensitive)* area, it must be noted that the applicant worked extensively with the Flood Control District (FCD) and Environmental Planning Department to ensure proper avoidance of mapped xeroriparian protected habitat areas. As such, the majority of the *RS* area is primarily set aside as preservation. What’s more, this same approach and staff coordination is true for the entire project (including that which falls within the *Low Intensity Urban [LIU]* area), such that protected habitat areas within the *LIU* are also being suitably avoided.

With all of the above being considered, the Hearing Administrator finds that the proposed conditional use permit application is not in conflict with the Comprehensive Plan.

2. It will provide safeguards for the protection of adjacent developed property, or if the adjacent property is undeveloped, for the legal permitted uses of such property.

It is the Hearing Administrator’s position that the proposed conditional use, if constructed in substantial conformance with the submitted concept drawings and design particulars, as well as with the *Special Conditions* prescribed above, will satisfactorily safeguard the adjacent properties and their permitted uses.

3. It has adequate accessibility to the County road network.

The property has direct access to S. Wilmot Road, a paved public street. It must be noted that, post construction, the amount of traffic to and from solar farms is negligible and limited largely to maintenance and occasional repair. Access is found to be adequate.

4. It has sufficient off-street parking and loading facilities, that will be developed in accordance with County engineering standards.

Parking s reviewed by staff at the time of final permitting. That shown on the submitted site plan has been coordinated with staff and appears to be sufficient.

5. **It will meet County standards in terms of control of noise, smoke, glare or heat, odors, vibrations, fly, ash, dust, fumes, vapors, gasses, and other forms of air pollution, liquids and solid wastes.**

It is the Hearing Administrator's finding that the new use poses no significant public threat in any of the above ways. While glare and heat-island impacts are a reasonable consideration, these effects will be largely dissipated within the the substantial setbacks being employed between the solar arrays and the adjacent residential properties.

6. **Hours of operation will not be detrimental to adjoining residents.**

Hours of operation are not considered a material concern due to the inherently quiet and low-impact nature of solar farms.

7. **Landscaping will be fully in conformance with zoning code regulations.**

Required setbacks and natural landscape buffers, etc. have been detailed on the submitted site plans. No further comment is warranted.

SONORAN DESERT CONSERVATION CONCEPT PLAN/ENVIRONMENTAL ISSUES

Comprehensive Plan Regional Environmental Policies — Conservation Lands System

In December, 2001 the Board of Supervisors incorporated the Maeveen Marie Behan Conservation Lands System (MMB-CLS) into the Comprehensive Plan 2001 Update as the Regional Environmental Policies. The MMB-CLS is the heart of the Sonoran Desert Conservation Plan (SDCP). On June 21, 2005, the Board of Supervisors amended the Comprehensive Plan Regional Environmental Policies and the MMB-CLS to reflect recommendations from the SDCP Science

Technical Advisory Committee that were based on new scientific and technical data. As adopted, Conservation Guidelines associated with the MMB-CLS establish conservation objectives for a variety of projects (e.g. rezoning actions, comprehensive plan amendments, Type II and Type III conditional use permits, etc.) that require discretionary decision by the Board of Supervisors. Conservation objectives include:

1. Important Riparian Areas — 95% undisturbed natural open space
2. Biological Core Management Areas — 80% undisturbed natural open space
3. Special Species Management Areas — 80% undisturbed natural open space
4. Multiple Use Management Areas — 66-2/3% undisturbed natural open space

The subject property lies within the MULTIPLE USE MANAGEMENT (MUMA) and BIOLOGICAL CORE MANAGEMENT categories of the MMB-CLS, as is much of the entire surrounding region, including the occupied/developed properties as well as the vacant ones.

Staff Commentary on Biological Impacts

Environmental Planning staff, together with staff from the Flood Control District, have reviewed this application in detail and provided extensive input as to the project design to ensure the proper avoidance and protection of designated xero-riparian and habitat areas on the subject property. Their recommended Special Conditions have been incorporated into the above Hearing Administrator recommendation to the Board of Supervisors.

Facts Confirmed by the Pima County Geographic Information System (GIS)

The following facts are confirmed by the Pima County GIS and the Sonoran Desert Conservation Plan maps with respect to this conditional use permit request:

Cactus Ferruginous Pygmy Owl. The subject property is not located within the Priority Conservation Area (PCA) for this species.

Western Burrowing Owl. The subject property is not located within the Priority Conservation Area for this species.

Pima Pineapple Cactus. The subject property is located within the Priority Conservation Area (PCA) for this species, as is the entire region surrounding this property.

Needle-Spined Pineapple Cactus. The subject property is not within the Priority Conservation Area (PCA) for this species.

RECOMMENDATIONS BY THE DEPARTMENT OF TRANSPORTATION (DOT) AND BY THE REGIONAL FLOOD CONTROL DISTRICT (RFCD):

The Department of Transportation (DOT) and the Regional Flood Control District (RFCD) have extensively reviewed this application and provided specific comments that are detailed within the April 26, 2024 staff report accompanying the Board of Supervisors packet on this agenda item. DOT and FCD recommendations have been incorporated into the *Special Conditions* put forth above by the Hearing Administrator.

attachments

cc: Carla Blackwell, Director, Development Services
Dan Ice, Chief Building Official
Chris Poirier, Planning Official
Tom Drzazgowski, Chief Zoning Inspector
Andrada Investments, LLC et. al., Owner
Wilmot Energy Center II, Applicant Representative



MEMORANDUM

PUBLIC HEARING – May 8, 2024

DATE: April 26, 2024

TO: Jim Portner, AICP, Hearing Administrator

FROM: Spencer Hickman, Senior Planner

SUBJECT: **P23CU00012 ANDRADA INVESTMENTS, LLC, ET AL – S. WILMOT ROAD**
Type II Conditional Use Permit
Scheduled for public hearing on May 8, 2024

LOCATION:

The project location is on land on the east side of S. Wilmot Road and south side of E. Andrada Road roughly 750 feet southeast of the intersection of N. Wilmot Road and E. Andrada Road. The project area totals approximately 1063.4 acres. The subject property contains parcels 305-23-018D, 305-23-018A, 305-23-026A, 305-23-027B, 305-23-0140, 305-22-0050, 305-22-004A, 305-22-004B, 305-22-0030. The properties are zoned RH (Rural Homestead), TR (Transitional), CB-1 (Local Business), SR (Suburban Ranch), and CR-5 (Multiple Residence). The listed zoning is conditional and the applicant is required to close the rezoning at the same hearing as the conditional use approval. The zoning of the site must be all RH in order for the conditional use permit to be approved.

SURROUNDING LAND USE OR CONTEXT:

The project area is made up of 9 privately-owned non-contiguous parcels located southeast of the intersection of Andrada Road and Wilmot Road. The majority of the surrounding properties surrounding the project are zoned RH, many developed with single-family residential of a rural nature. To the east of the project is State Trust Land, as is the property to the north of Andrada Road is located in City of Tucson city limits, and is zoned as City of Tucson RH. The vacant land between the east and west portions of the project is owned by the Bureau of Land Management. The properties north of Andrada Road are all owned by the State Land Trust. Approximately three miles to the north is another utility-scale solar facility.

PUBLIC COMMENT:

As of the writing of this report, April 26, 2024, staff has received no items of public comment.

PREVIOUS CASES ON PROPERTY:

Co9-11-008 – rezoning from RH to CR-5 (small lot option). Rezoning will be closed at the same Board of Supervisors hearing as the approval for this Conditional Use Permit.

BACKGROUND INFORMATION

The project area is made up of 9 privately-owned non-contiguous parcels located southeast of the intersection of Andrada Road and Wilmot Road. A large portion of the project is located in the Renewable Energy Incentive District (REID) (Pima County Code Title 14). The areas located

within the REID are not subject to the conditional use permit, and therefore the CUP is only applicable to the approximately 428.1 acres of the project area outside of the REID.

Some of the subject parcels are located within the Conservation Land System (CLS). The Multiple Use Management Areas and Biological Core Management Areas exist on the east side of the project, specifically parcels 305-22-0030, 305-22-004A, and 305-22-004B. The applicant is proposing to develop 20% of the Biological Core area, leaving the remaining 80% as undeveloped. Biological Core sets an 80% open space area for development. This can be accomplished by conserving property onsite or offsite. This project proposes to meet these requirements by preserving 80% onsite. There are also areas of Important Riparian Areas CLS type on the western portion of the project site.

The project proposal is to construct a utility-scale renewable energy system, specifically a solar-energy system. The main project components include several non-contiguous solar fields made up of PV panels mounted on solar trackers or fixed support structures. The solar trackers are designed to rotate the panel to keep the panel perpendicular to the sun's radiation at all times. Also included in the project is a battery-energy storage system (BESS), electrical collection systems, a substation, operations and maintenance building, and other associated infrastructure, such as perimeter fencing and access roads. The substation and operations building would be located near Andrada Road on parcel 305-22-0050. The substation and operations building are located in the REID and are not subject to this CUP.

Depending on final design, the site may be staffed or unstaffed. If a design is chosen that requires staff, the typical staffing for the finished operation would be 3-5 personnel during daytime hours, Monday through Friday. When full staffing is not available, the array would be monitored remotely. Security or maintenance staff may also be called back to the project for emergency operations purposes.

As part of the CUP approval, the applicant will adhere to the requirements of the Native Plant Preservation Ordinance (NPPO), including 30% natural open space (NOS) set aside. Final set-aside calculations will be finalized during the site construction permit stage, however the applicant anticipates that the 80% of the Biological Core CLS area that is being left natural will suffice to provide 30% NOS as required by the NPPO. The project will potentially effect 12 of the safeguarded Pima Pineapple Cactus, which will be transplanted on-site in accordance with Pima County Code Section 18.72.

Section 18.72 requires the minimum standard for site fencing to be chain-link, and fencing must meet the site setbacks. Barbed wire may also be used as long as it is above 6-feet from grade. The project is proposing to use chain-link fencing with barbed wire. The typical fencing detail shows the fence height at 6 feet, 3 inches, with barbed wire at 7 feet 3 inches. The fencing appears to meet RH setback requirements. Gates will be installed at site access points.

Site access roads are to be unpaved single-lane roads composed of crushed aggregate. Site plans show a total of 5 access points to either Wilmot or Andrada Road. Two access points are to Wilmot Road on the west side of the project, and three are to the north boundary on Andrada Road. Improvements made to Andrada Road will be determined at the time of permitting and will be subject to City of Tucson road standards for all portions of Andrada Road within City of Tucson city limits.

The project is required to install all required landscape bufferyards. The project zoning will revert to RH zoning at the time of final approval. Per the Pima County Landscape Manual, there is no bufferyard required when RH zoning is adjacent to RH zoning. A type-A bufferyards is required where the project abuts a public street, in this case Wilmot Road and Andrada Road. The applicant is proposing 20-foot bufferyards of Natural Undisturbed Desert, which adheres to the requirements for type-A bufferyards.

DEPARTMENT COMMENTS

Regional Flood Control Department

The Regional Flood Control District (District) has reviewed the site conditions for an approximately 961-acre solar field and offers the following informational comments:

1. This 961-acre project spans over an area southeast of the Wilmot and Andrada Road intersection where a local floodplain impacts a significant portion of the project area. The local floodplain was determined by Lee Moore West Local Floodplain Study (#10) effective February 28th, 2019. Within the local floodplain there are regulatory washes with an associated erosion hazard setback of 25', 50' and 100' and flow corridors.

The applicant met with the District to discuss the project impacts, development footprint and acceptable mitigation measures to the local floodplain, flow corridors and Regulated Riparian Habitat (RRH). The revised submittal provided the agreed upon development footprint requested by the District. The requirements found in Section 14.03.020.D, which emphasizes avoidance of flood corridors now has been met where the solar panels and the supporting infrastructure shall be located out of the flow corridors to the maximum extent possible.

2. Regulated Riparian Habitat (RRH) is mapped throughout the project boundaries. The applicable RRH Classifications within the project boundaries are Important Riparian Area (IRA) with an Underlying Classification of Xeroriparian Class C Habitat and Non-IRA Xeroriparian Class C and D. A plan has been provided that demonstrates more than 1/3 acre of mapped RRH will be disturbed by this project. The plan did not provide the method of mitigation. However, in discussions with the applicant the preferred method of mitigation is to pay a fee in-lieu of on-site planting. At the time of permitting a Riparian Habitat Mitigation Plan will be required to be submitted. Prior to permit issuance the fee must be paid.
3. The proposed fencing shall meet the Technical Policy 005 Construction Standards for Fences and Walls within Regulatory Floodplains effective May 18th, 2007 and thus revised effective May 18th, 2021. At the time of permitting the site plan shall provide applicable details. A condition will be applied to ensure the technical standards will be met.

The District has no objection to the conditional use permit, subject to the following conditions.

- a) Regional Flood Control District review and approval are required at the time of permitting.
- b) The In-lieu Fee to mitigate for the disturbance to the Regulated Riparian Habitat will be paid at the time of development prior to issuance of the Site Construction Permit.
- c) All proposed fencing shall meet the Technical Policy 005 Construction Standards for Fences and Walls within Regulatory Floodplains.
- d) Access across the floodplains between solar fields is prohibited.
- e) Encroachment into mapped Regulated Riparian Habitat, the local floodplain and flow corridors not shown on the approved site plan is prohibited.
- f) The Regulated Riparian Habitat located within the Flood Control Resource Area shall be protected during construction and will remain undisturbed in perpetuity.

Department of Transportation Comments

The Type II Conditional Use Permit (CUP) is located east of Wilmot Road, south of Andrada Road, and is proposing a Solar Facility. The Solar Facility will be located on disjunct locations comprising of nine parcels of land. The site is part of previously approved rezonings and is subject to transportation rezoning conditions per resolution 2022-69 and resolution 2023-15. Said rezoning will be reverted if this CUP is approved.

Wilmot Road is a two-lane, paved roadway maintained by Pima County with a posted speed limit of 50 miles per hour (mph). Wilmot Road is classified as a Rural Major Collector by its federal functional classification. The most recent traffic count for Wilmot Road is 4,625 average daily trips (ADT), with an approximate roadway capacity of 11,340 ADT.

Andrada Road is a dirt road within the jurisdiction of the City of Tucson. The applicant shall coordinate with the City of Tucson for any required access and off-site improvements on Andrada Road. Access points on Andrada Road for the easternmost portion of the site requires City of Tucson approval.

Two access points are proposed on Wilmot Road for the westernmost portion of the site. Gated entries are proposed for the site. The design of gated entries is subject to the Subdivision and Development Street Standards requirements and shall be reviewed at time of development plan submittal.

The proposed facility is expected to be operated by approximately 5 people on site daily and will not be open to the public. Given that the site is not open to the public and there are few number of staff on site, the proposed CUP will not impact the capacity of the nearby roadway system. The Department of Transportation recommends approval subject to the following conditions be applied:

1. The number, location, and design of the access points on Wilmot Road shall be determined at time of development plan submittal.
2. Prior to Development Plan approval, written proof of coordination with the City of Tucson Department of Transportation and Mobility is required regarding any access requirement for Andrada Road, access points, and traffic impacts to their roadway system.

Environmental Planning Comments

BIOLOGICAL RESOURCES

- The approx. 961-acre project area is partially within the Maeveen Marie Behan Conservation Lands System (CLS), with approx. 88.6 acres within the Multi-use Management Area designation and approx. 104.7 acres within the Biological Core Management Area Designation.
- The project area is within a Priority Conservation Area (PCA) for the Pima pineapple cactus. It is outside the PCAs for the Cactus ferruginous pygmy owl, Western burrowing owl, and Needle-spined pineapple cactus.
- Several washes and associated riparian habitat cross the project area. Disturbances to these resources are regulated by the Regional Flood Control District according to Pima County Code Chapter 16.30, Watercourse and Riparian Protection and Mitigation Requirements.
- None of the parcels within the project area are identified as a current acquisition priority nor were any identified as such under the 2004 bond program.
- The property is undeveloped and other than some dirt roads/trails appears largely undisturbed. Any disturbances to native vegetation is addressed via compliance with Pima County Code Chapter 18.72, Native Plant Preservation.

LANDSCAPE CONTEXT

The project area is located north of W. Sahuarita Road and east of S. Wilmot Rd. in the Upper Santa Cruz Planning Subarea, in a rural part of the County. The property is surrounded by low intensity residential land uses to the south and undeveloped State Trust Land to the east, west and north. Undeveloped parcels owned by the US Bureau of Land Management sit between the east and west portions of the project area. The closest County-owned Preserve is Bar V Ranch approx. seven miles to the east.

The project area is within the Lee Moore Wash Flow Corridors, an identified wildlife movement area that generally aligns with the area's riparian corridors and connects the Santa Rita Experimental Range/Coronado National Forest Wildlife Block to the Santa Cruz River (AGFD 2013). It is not within any CLS Critical Landscape Connections.

POTENTIAL IMPACT TO BIOLOGICAL RESOURCES AND CLS

According to the revised Conditional Use Permit application, the applicant is proposing to develop approx. 20.9 acres of the CLS Biological Core Management Area and will leave the remaining 83.8 acres, or 80 percent of the property, undisturbed. This meets the CLS Guidelines for the Biological Core Management Area which call for four (4) acres of natural open space to be set aside for every acre of disturbance. According to the application, there will be no disturbance in any other portion of the project area that is within the CLS.

In light of applicant's stated intent to fully comply with the CLS Guidelines, and in conjunction with the following recommended Special Condition, this project is not expected to significantly alter the condition or integrity of the biological resources in the area or the viability of the CLS.

RECOMMENDATIONS

Should the Board of Supervisors approve this request, the following should be included as Special Condition:

1. The property owner/developer shall achieve compliance with the Maeveen Marie Behan Conservation Lands System (CLS) Guidelines by providing a total of 83.8 acres of Natural Open Space within the portion of the project designated under the CLS as Biological Core Management Area.

Cultural Resources Comments

Please submit cultural resources survey reports and/or data recovery reports that have been completed. Need documents showing that the cultural resources compliance requirements have been met.

Davis-Monthan Air Force Base Comments

Davis-Monthan AFB has reviewed the proposed Conditional Use Permit for the approx. 1,063 solar farm near S Wilmot and Andrada Road. We believe this proposed land use will not have a negative impact on our mission at DM.

Tucson Airport Authority Comments

Thank you for the opportunity to comment on Pima County Conditional Use Permit, a request for a conditional use for utility grade solar at 14755 S Wilmot Road. This conditional use permit request is on multiple parcel totaling an area of approximately 1063.4 acres (parcel codes 305-12-018D, 305-23-018A, 305-23-026A, 305-23-027B, 305-23-0140, 305-22-0050, 305-22-004A, 305-22-004B, and 305-22-0030). This parcel is located approximately 5280 feet northeast of the intersection of East Sahuarita Road and South Wilmot Road. This development area occupies Section 6, Township 17S, Range 15E, of the Gila and Salt River Meridian and Section 4, Township 17S, Range 15E, of the Gila and Salt River Meridian. The Tucson Airport Authority approves the conditional use permit request.

STAFF RECOMMENDATION

Section 18.07.030.Q.3.C.2 of the permits a utility-scale renewable energy system in the conservation land system as a permitted use with the approval of a Type II conditional use permit. Staff recommends **APPROVAL** of the Type II Conditional Use Permit with the following conditions:

1. The zoning of the project area shall revert to RH following a closure of the conditional rezoning on the site (Resolution 2022-69) at the same Board of Supervisors hearing as this CUP is approved.
2. The project shall comply with the general requirements listed in Section 18.07.030.Q.4:
 - a. The minimum required fencing for a ground-mounted system is a perimeter chain link fence (unless Section 18.49.040(G) applies, in which case another type of fencing/wall is required) meeting minimum setback requirements, however, the hearing administrator may recommend additional or alternative specific types of fencing, screening, and/or walls appropriate to the site and surrounding land use(s) and not otherwise prohibited by this title.
 - b. The site's permanent building, if any, shall utilize a southwestern color palette (desert tans, browns, rusts, greens) for those opaque surfaces that are not of indigenous or natural building materials. If the property is subject to the scenic route regulations of Chapter 18.77, the more restrictive requirements shall apply.
 - c. Solar energy systems shall be located such that prolonged and/or substantial concentrated solar radiation or glare shall not be directed onto abutting properties or roadways.
 - d. Suitable warning signs containing a telephone number for emergency calls shall face all access approaches to the facility. No advertising on the signs is allowed.
 - e. The site shall be maintained in a trash and debris free manner.
 - f. Any renewable energy system which becomes inoperable shall at the owner's expense be made operational or shall be removed from the property within one year of the date system became inoperable. An appropriate reclamation and closure plan, including recycling, subject to the planning director's approval shall be required prior to removal.
3. Any effected Pima Pineapple Catus that need to be transplanted must be transplanted on-site. Pima Pineapple Cactus may not be transplanted off-site per the standards of the NPPO.

Flood Control Conditions:

4. Regional Flood Control District review and approval are required at the time of permitting.
5. The In-lieu Fee to mitigate for the disturbance to the Regulated Riparian Habitat will be paid at the time of development prior to issuance of the Site Construction Permit.
6. All proposed fencing shall meet the Technical Policy 005 Construction Standards for Fences and Walls within Regulatory Floodplains.
7. Access the crosses the floodplains between solar fields is prohibited.
8. Encroachment into mapped Regulated Riparian Habitat, the local floodplain and flow corridors not shown on the approved site plan is prohibited.
9. The Regulated Riparian Habitat located within the Flood Control Resource Area shall be protected during construction and will remain undisturbed in perpetuity.

Department of Transportation Conditions:

10. The number, location, and design of the access points on Wilmot Road shall be determined at time of development plan submittal.
11. Prior to Development Plan approval, written proof of coordination with the City of Tucson Department of Transportation and Mobility is required regarding any access requirement for Andrada Road, access points, and traffic impacts to their roadway system.

Environmental Planning Comments:

12. The property owner/developer shall achieve compliance with the Maeveen Marie Behan Conservation Lands System (CLS) Guidelines by providing a total of 83.8 acres of Natural Open Space within the portion of the project designated under the CLS as Biological Core Management Area.

Cultural Resources Comments:

13. The property owner/developer shall achieve compliance with the Maeveen Marie Behan Conservation Lands System (CLS) Guidelines by providing a total of 83.8 acres of Natural Open Space within the portion of the project designated under the CLS as Biological Core Management Area.

c: Tom Drzazgowski – Chief Zoning Inspector
Andrada Investments, LLC – Owner
Wilmot Energy Center II, LLC - Applicant



Conditional Use Permit Application

Property Owner: Andrada Wilmot 180 LLC, Andrada Invest Phone: 520-577-0200

Owner's Mailing Address, City, State & Zip: 2200 E River Road, Suite 115, Tucson AZ 85718

Applicant (if different from owner): Wilmot Energy Center II, L Phone: 561-386-7611

Applicant's Mailing Address, City, State & Zip: 700 Universe Blvd E5E/JB, Juno Beach, FL 3340

Applicant's or Owner's Email Address: stephanie.rush@nexteraenergy.com

Property Address or Tax Code: See attached narrative

Type of Use Proposed for the Property: Solar Facility and associated infrastructure. See attached narrative for additional information.

Discuss the proposed use and it's compatibility with the surrounding area: Solar Facility. See attached narrative for additional information.

☒ The applicant agrees to contact the [Regional Flood Control District](#) to discuss the proposal prior to application submittal.

☒ The applicant agrees to contact United States Fish and Wildlife Service at scott_richardson@fws.gov and provide a written notice that an application for a conditional use permit has been submitted a minimum of 15 days prior to the public hearing date.

This application is for a (Select one):

☐ Type I Conditional Use ☒ Type II Conditional Use ☐ Type III Conditional Use

Terms and Conditions

☒ I confirm the information provided is true and accurate to the best of my knowledge. I am the owner of the above described property or have been authorized by the owner to make this application. (By checking the box, I am electronically signing this application.)

Date: 08/29/2023



LETTER OF AUTHORIZATION

As required by Arizona Revised Statutes I hereby certify that I am the owner of the property referenced below and that the party whose name is listed below is authorized to take out Development Services permits in my name:

Parcels 30523027B, 30523018D, 30523018A, 30523026A, 305230140, 305220050, 30522004B, 30522004A, and 305220030

Property Address

Conditional Use Permit

Type of Permit Applied for: (SFR/MH/Remodel/Addition/Fence or Wall/Home Occupation/Child Care/Adult Care/Secondary Dwelling/Assisted Living/Group Home)

DocuSigned by:

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Signature of Applicant

August 30, 2023

Date

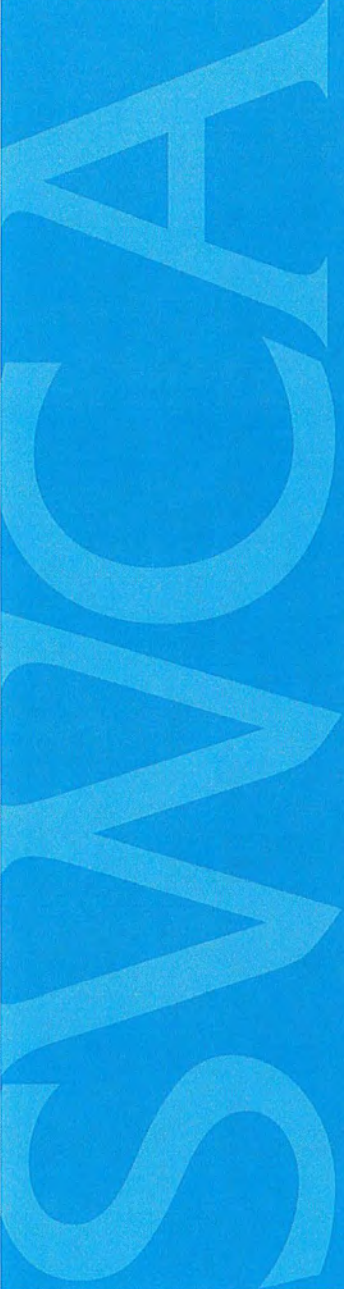
AUTHORIZED BY:

DocuSigned by:

A134925F8E6FA30...
Signature of Property Owner

8/30/2023

Date

The logo for SWCA Environmental Consultants is a large, light blue, stylized graphic of the letters 'SWCA' oriented vertically on the left side of the page.

Conditional Use Permit for the Wilmot II Solar Generation Project

APRIL 2024

PREPARED FOR
Pima County Development Services
ON BEHALF OF
Wilmot Energy Center II, LLC

PREPARED BY
SWCA Environmental Consultants

CONDITIONAL USE PERMIT FOR THE WILMOT II SOLAR GENERATION PROJECT

Prepared for

Pima County Development Services
130 West Congress Street
Tucson, Arizona 85701
Record Case Number: P23CU00012

Prepared by

SWCA Environmental Consultants
1645 South Plaza Way
Flagstaff, Arizona 86001
(928) 774-5500
www.swca.com

On Behalf of

Wilmot Energy Center II, LLC
700 Universe Boulevard
Juno Beach, Florida 33408
(202) 349-3347
Attn: Stephanie Rush

April 2024

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ACRONYMS AND ABBREVIATIONS

AC	alternating current
Applicant	Wilmot Energy Center II, LLC
BESS	battery energy storage system
CB-1	Local Business Zone
CLS	Conservation Lands System
CR-5	Multiple Residence Zone
CUP	conditional use permit
DC	direct current
O&M	operations and maintenance
PDEQ	Pima County Department of Environmental Quality
project	Wilmot II Solar Generation Project
PV	photovoltaic
REID	Renewable Energy Incentive District
RH	Rural Homestead Zone
RRH	Regulated Riparian Habitat
SR	Suburban Ranch Zone
TR	Transitional Zone

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1 INTRODUCTION

Wilmot Energy Center II, LLC (Applicant), a subsidiary of NextEra Energy Resources, LLC, proposes to construct, operate, and maintain the Wilmot II Solar Generation Project (project), a proposed photovoltaic (PV) solar and battery energy storage system (BESS) development located in unincorporated Pima County, Arizona (Figure 1). The project area consists of two disjunct locations consisting of nine parcels. The project area totals approximately 1,063.4 acres of private lands in portions of Sections 4–6, Township 17 South, Range 15 East (Appendix A) (Figure 2).

The project area includes lands zoned as Rural Homestead Zone (RH), Suburban Ranch Zone (SR), Multiple Residence Zone (CR-5), Transitional Zone (TR), and Local Business Zone (CB-1). Under Pima County Code of Ordinances Title 18, Chapter 18.07: Land Use Regulations: “Utility scale solar energy systems are considered primary uses and are permitted in the ... local business zone (CB-1)... subject to the following requirements: 1) Approval of a Type 1 conditional use permit; 2) Adherence to the performance standards in Section 18.43.020(B)(1); 3) The equivalent development standards as for a main structure or building of the underlying zone with the exception of maximum lot coverage restrictions and unless further expanded in setback or restricted in height in accordance with Section 18.07.030(Q)(4)(g); 4) Submittal of an approved solar development plan with the exception of roof-mounted systems; and 5) General requirements listed in Section 18.07.030(Q)(4) below” and “Utility scale solar energy systems are considered primary uses and are permitted in the ... rural homestead zone (RH), ... suburban ranch zone (SR), ...subject to the following requirements:... 2) Approval of a type II conditional use permit if the facility site is within any of the following conservation land categories established in the regional environmental element of the comprehensive plan, as may be amended: Important riparian area, Biological core management area, Multiple use management area, Special species management area, Scientific research area; 3) Adherence to the performance standards in Section 18.43.020(B)(1); 4) The equivalent development standards for a main structure or building of the underlying zone with the exceptions of maximum lot coverage restrictions not being applicable, a minimum site area of two acres for the SH zone, and unless further expanded in a setback or restricted in height in accordance with Section 18.07.030(Q)(4)(g); 5) Submittal of an approved solar development plan with the exception of roof-mounted systems; and 6) Subject to the general requirements listed in Section 18.07.030(Q)(4) below” (Pima County 2023a). The TR zone permits all uses, which is the same as the CR-5 zone and the CR-5 zone permits all uses outlined in Pima County Code of Ordinances Title 18, Chapter 18.09: General Residential and Rural Zoning Provisions, which includes permitting those uses under Pima County Code of Ordinances Title 18, Chapter 18.07: General Regulations and Exceptions.

The SR, CR-5, TR, and CB-1 zones are associated with previous rezonings of the properties (Resolution 2022-69, approved on November 15, 2022, and Ordinance 2017-5, approved on March 7, 2017). These rezonings would be cancelled and the entire project would revert to the RH zoning designation, which allows for a utility-scale solar facility as a conditional use.

Based on the Pima County Code of Ordinances, a utility-scale solar development is a conditional use in the RH zoning district and requires an approved Type II conditional use permit (CUP). This report is being submitted with the Applicant’s Type II CUP application. Its purpose is to provide Pima County with sufficient information regarding the project and facilitate the approval process. A copy of the Pima County CUP application for the project, including the Letter of Authorization, can be found in Appendix B. The project site plan delineating the areas to be permitted under the CUP is included in Appendix C.

Approximately 635.3 acres of the project area are also designated as a Renewable Energy Incentive District (REID) (Figure 3). According to Pima County Code Title 14, Chapter 14.03, Section

14.03.020.A: Incentive Plan, a CUP is not required in a REID (Pima County 2023a); therefore, the portions of the project area designated as a REID would not be included in this CUP and would be permitted separately.

Pima County Code of Ordinances Title 18, Chapter 18.07: General Regulations and Exceptions, Section 18.07.040: Land Use Exceptions, states, “Nothing in this code shall prevent the location, erection, alteration or maintenance of pipes, poles, wires, and similar installations necessary to distribute public facilities” (Pima County 2023a). Therefore, the Applicant has not included the generation-tie transmission line associated with this project as it is distributing electricity to the electrical grid. During a meeting on July 26, 2023 (see Section 7), the Applicant confirmed with Pima County that the generation-tie transmission line did not need to be included in the CUP as it would be collocated near an existing transmission line.

2 EXISTING AND PROPOSED LAND USES AND ZONING

The project consists of nine parcels in unincorporated Pima County that are all privately owned (Table 1). The *Pima Prospers: Pima County Comprehensive Plan Initiative* (Pima County 2015) provides objectives and descriptions for land use designations. Four of the nine parcels are designated Low Intensity Urban 3.0, two are designated Resource Sensitive, and three are designated as both (see Table 1).

The Low Intensity Urban land use objective is as follows:

“To designate areas for low density residential and other compatible uses and to provide incentives for residential conservation subdivisions to provide more natural open space. Density bonuses are offered in exchange for the provision of natural and/or functional open space. Natural open space must be set aside, where applicable, to preserve land with the highest resource value and be contiguous with other dedicated natural open space and public preserves.” (Pima County 2015)



Figure 1. Project overview.

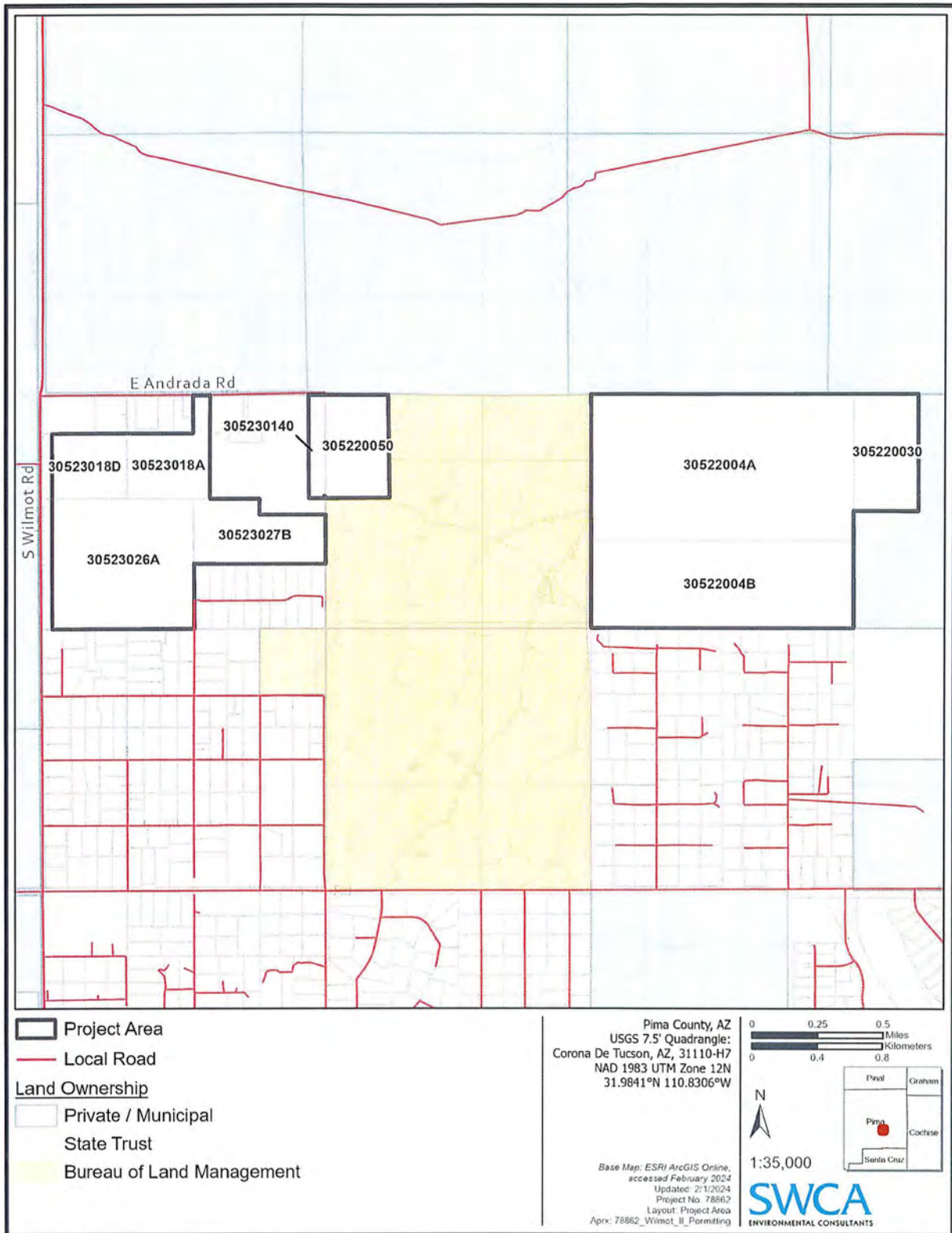


Figure 2. Project location.



Figure 3. Project zoning and districts.

The Resource Sensitive land use objective is as follows:

“To designate key larger parcels and land holdings with environmentally sensitive characteristics in close proximity to public preserves or other environmentally sensitive areas. Development of such land shall emphasize design that blends with the surrounding natural desert and provides connectivity to environmentally sensitive linkages in developing areas.” (Pima County 2015)

Table 1. Project Parcels

Project Parcel Number (assessor parcel number)	Parcel Size (acres)	Landowner	Comprehensive Plan Land Use Designation (acres and percent)	Current Zoning and District Designation (acres)
30523027B	69.9	Andrada Wilmot 180 LLC	Low intensity urban–3.0: 69.9 (100%)	CR-5: 19.4 (27.8%) RH: 0.1 (0.2%) REID: 50.4 (72%)
30523018D	45.4*	Andrada Wilmot 180 LLC	Low intensity urban–3.0: 45.4 (100%)	CR-5: 1.6 (3.5%) REID: 43.8 (96.5%)
30523018A	56.0	Andrada Wilmot 180 LLC	Low intensity urban–3.0: 56.0 (100%)	CR-5: 49.9 (89.0%) RH: 6.0 (10.7%) REID: 0.1 (0.3%)
30523026A	170.1*	Andrada Wilmot 180 LLC	Low intensity urban–3.0: 170.1 (100%)	CR-5: 77.7 (45.7%) REID: 92.4 (54.3%)
305230140	15.9	Andrada Investors LLC	Resource sensitive: 15.9 (100%)	RH: 15.7 (98.7%) REID: 0.2 (1.3%)
305220050	60.9	Andrada Investors LLC	Resource sensitive: 60.9 (100%)	RH: 2.9 (6%) REID: 58.0 (94%)
30522004B	215.2	Andrada Investors LLC	Low intensity urban–3.0: 133.3 (61.9%) Resource sensitive: 81.9 (38.1%)	SR: 68.4 (31.8%) CR-5: 32.3 (15.0%) RH: 6.7 (3.2%) REID: 107.8 (50%)
30522004A	358.6	Andrada Investors LLC	Low intensity urban–3.0: 345.0 (96.2%) Resource sensitive: 13.6 (3.8%)	CR-5: 37.0 (10.4%) TR: 17.7 (4.9%) SR: 10.6 (2.9%) RH: 7.8 (2.2%) CB-1: 2.9 (0.8%) REID: 282.6 (78.8%)
305220030	71.4	Andrada Investors LLC	Low intensity urban–3.0: 37.5 (52.5%) Resource sensitive: 33.9 (47.5%)	CR-5: 41.0 (57.4%) SR: 30.1 (42.2%) TR: 0.2 (0.3%) RH: 0.1 (0.1%)
Total	1,063.4	–	–	–

Source: Pima County (2023b)

*Indicates that the full parcel acreage is not included due to existing easements.

The portions of the project area proposed to be permitted as part of this CUP include those outside the REID (Figure 4) and total approximately 428.1 acres. The remaining portion of the project area would be within a REID and would be permitted separately.

All nine parcels are currently zoned RH, SR, CR-5, TR, and CB-1, which allows for a utility-scale solar facility as a conditional use. The Applicant would avoid developing most of the project in the areas designated Resource Sensitive in parcels 305220030, 30522004A, and 30522004B, as this land use is also a part of the Conservation Lands System (CLS) Biological Core Management Area (approximately 104.5 acres). The Applicant confirmed with Pima County Office of Sustainability and Conservation that up to 20% of the CLS Biological Core Management Area can be developed without triggering mitigation requirements. As such, the Applicant has proposed to develop approximately 20.9 acres of the CLS Biological Core Management Area as part of the project. The remaining 80% of the CLS Biological Core Management Area (approximately 83.6 acres) will remain undeveloped. Parcels 305230140 and 305220050, which are also designated Resource Sensitive, are not associated with the CLS and do not contain any known environmentally sensitive areas (see Appendix D, Biological Evaluation for additional information).

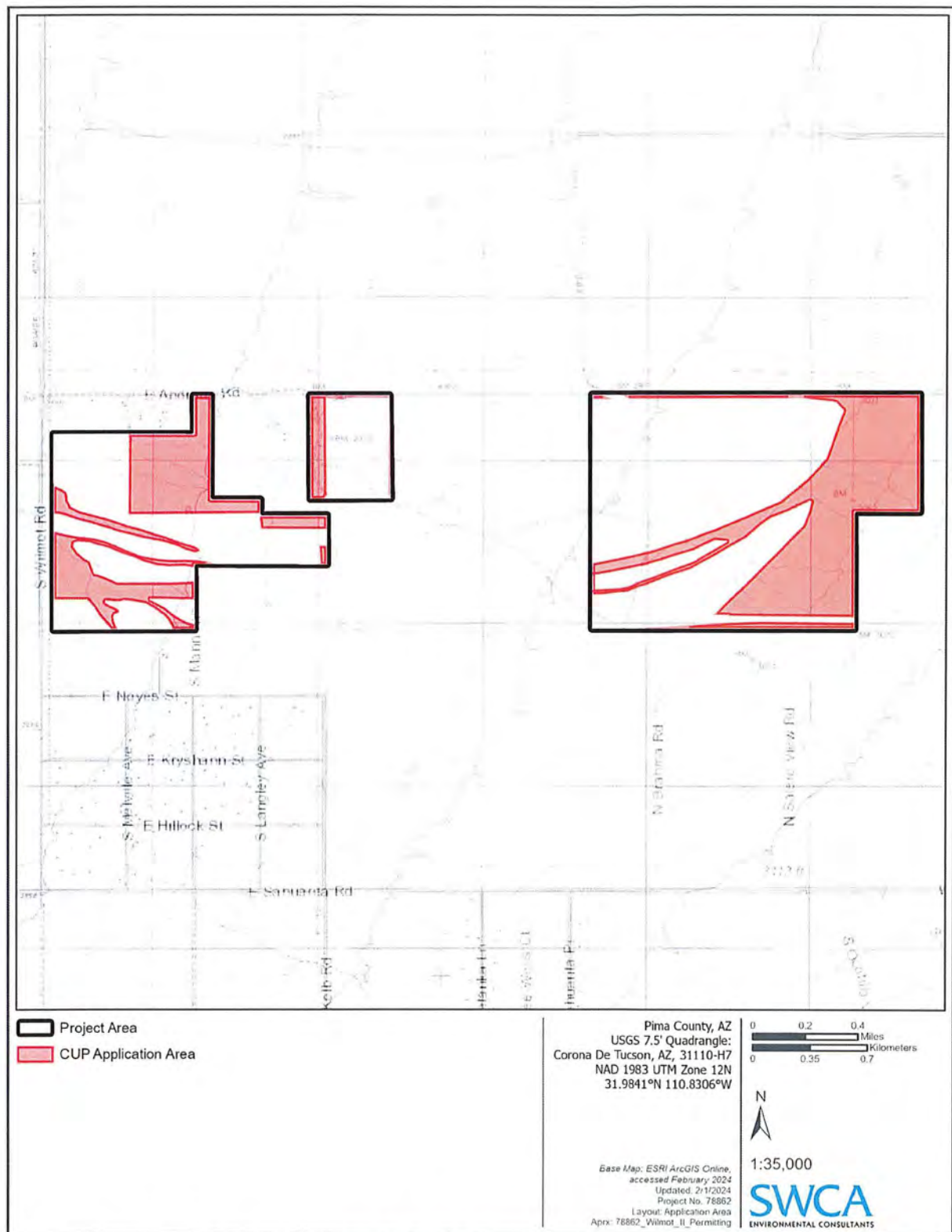


Figure 4. Project area portions covered by the CUP.

Although the Applicant will avoid the Regulated Riparian Habitat (RRH) in the project area to the extent practicable, the Applicant proposes that the portions of the RRH within the areas covered by the CUP be included in this application. The Applicant is anticipated to impact RRH in parcels 30523018D, 30523018A, and 30523026A significantly in order to accommodate avoiding areas identified by Pima County Regional Flood Control District to the extent practicable (see Section 7 for additional information). The Applicant will work with Pima County to identify which RRH portions would be impacted as part of further permitting processes. The RRH not impacted will be a part of the project 30% set-aside (see Section 6.2).

Although the CLS Biological Core Management Area is being permitted as part of the CUP (Figure 4), the Applicant is committed to only developing 20% of this area (approximately 20.9 acres) and leaving the remaining 80% (approximately 83.6 acres) undeveloped. This undeveloped portion of the CLS Biological Core Management Area would be a part of the required 30% set aside (see Section 6.2). No temporary or permanent project infrastructure would be placed in the undeveloped portion of the CLS Biological Core Management Area.

The Applicant will follow the noise regulations outlined in the Pima County Code of Ordinances Title 9, Chapter 9.30: Regulation of Excessive, Unnecessary and Annoying Noises (Pima County 2023a). If construction noise must occur outside the limits specified in Pima County Code of Ordinances Title 9, Chapter 9.30, Section 9.30.070: Construction of Buildings and Other Projects, the Applicant will obtain a permit as specified in Section 9.30.070.C prior to starting work (Pima County 2023a). The Applicant will also obtain a fugitive dust activity permit from the Pima County Department of Environmental Quality (PDEQ) prior to construction.

3 PROJECT DESCRIPTION

The proposed use for the project parcels would be solar generation, a BESS, substation, and associated infrastructure. The primary components of the project are expected to include the following:

- Solar field of PV panels/arrays
- Solar trackers or fixed support structures
- BESS
- Electrical collection system, including switchgear, power conversion stations, inverters, transformers, and collection lines
- Substation
- Associated infrastructure including site perimeter fencing, internal access roads and access driveways and gates
- Operations and maintenance (O&M) building

Each project component is described in greater detail below.

3.1 Solar Field

The project would use state-of-the-art PV technology by which the sun's light energy is converted directly into direct current (DC) electrical energy within the PV panels. The PV panels can be mounted together in different configurations, depending on the equipment selected, and on a common support framework. The panels are grouped together in solar arrays. The size of the array is based on the capacity

of the equipment selected and is intended to generate the desired overall voltage and current output. Current technology panels are installed on a racking system with support piles driven into the ground. The dimensions, size, and weight of each panel may differ at the time of installation, depending on the manufacturer and available technology. Options exist for both a tracker that uses one panel in portrait format or two panels in portrait, with the latter being favored if bifacial PV panels are used. Because solar energy technologies continue to evolve at a rapid rate, the exact arrangement and nature of the PV systems would be determined during the final design and provided to Pima County at that time.

3.2 Solar Trackers and/or Fixed Support Structures

There are different types of mounting structures for the panels, depending on whether the panels would be fixed in one position or track the sun's position during the day. A solar tracking mechanism maximizes solar energy conversion efficiency by keeping the panels perpendicular to the sun's energy rays throughout the day. This completed assembly of PV panels on the mounting structure is called a "tracker," as it tracks the sun. The PV panel rows would be oriented based on the mounting structure design; however, exact panel support structure types would be determined during the final project design. The single-axis tracker configuration is more complicated and is discussed in more detail below. A fixed support structure is also possible. The fixed structure would orient the panels in a permanent position at a certain angle to optimize production throughout the year without any mechanical movement or drive motors.

At this time, there are two types of single-axis tracker systems that may be selected for the project: a ganged tracker system or a standalone tracker system. A ganged tracker system uses one actuator to control multiple rows of PV panels through a series of mechanical linkages and/or gearboxes. A standalone tracker system uses a single actuator for each row of PV panels. The exact tracker manufacturer and model would be determined in the final design. All trackers are intended to function the same in terms of following the position of the sun.

Panel layout and spacing is optimized to balance energy production with peak capacity and would depend on the sun's angle and shading caused by the horizon surrounding the project. The spacing between the rows of trackers depends on site-specific features and tracker selection. Spacing would be identified in the final design but would allow clearance for maintenance vehicles and panel access.

3.3 Battery Energy Storage System

The BESS would be connected to the solar facility using an alternating current (AC)-coupled, DC-coupled system, or a combination of the two. Selection of an AC- or DC-coupled system is ultimately determined through off-taker preference and contract terms.

The AC-coupled system would be connected to a bidirectional inverter to convert DC energy to AC energy, allowing for energy to flow in or out of the batteries to provide charge and discharge. This AC energy would be coupled to the solar array at the busbars. Power switches and relays would protect the system. The system would consist of several centralized steel housing units, similar to shipping containers.

If a DC-coupled system is used, battery units would be stored in battery containers distributed throughout the solar arrays, adjacent to their respective inverters. The battery units would make use of the solar inverters, feeding them in DC power. Each battery module would be housed inside steel enclosures. The containers would be similar in size to the solar inverter skids. Each solar array would contain an inverter-battery area that would include battery containers, DC-DC converters, and an inverter and step-up unit.

Each inverter-battery site would be graded and consist of a mostly gravel surface. Battery enclosures would protect the battery modules from the elements and unauthorized personnel. The battery and solar inputs would be metered separately prior to signal inversion. The charge and discharge of the DC-coupled batteries would be controlled by a signal from the inverters; inverters would be controlled by a central control system. The battery management system would monitor the batteries' voltages, currents, and temperatures to detect any out-of-specification reading.

Each battery container would use an intelligent fire detection, alarm, and notification system, in which fire detectors would be photoelectric smoke detectors and thermal detectors. Detection of smoke or heat would trigger remote alarms to the Applicant's Renewable Operations Control Center and activate audible/visual alarms on the exterior of the battery storage containers. All systems would be maintained by a certified company. The Applicant would inspect battery storage systems for damage prior to installation and during routine maintenance and operations. Damaged systems would be handled in accordance with manufacturers' specifications. Damaged or spent batteries would be removed from the site and disposed of or recycled in accordance with federal and state laws. All systems comply with 2023 National Fire Protection Agency requirements and would be maintained by a certified company.

3.4 Electrical Collection System

PV panels generate a low-voltage DC electrical output that is not suitable for direct connection to the AC utility grid used in the United States. The electrical collection system would be designed to convert the output power from the PV panels from DC to AC, transform the power from low voltage to transmission-level voltage for connection to the grid, and supply auxiliary power to the tracker systems. The DC output from the PV arrays would be transmitted to inverters through a combination of aboveground and underground DC electrical cables. The project would use power inverter packages to accomplish the DC-to-AC power conversion process. The number of panels connected to each inverter is dependent on the specific model of panels, inverters, and their capacities, which would be selected in the final design. The resulting AC current from each inverter package would then be routed through cable or solid busbars to the adjacent medium-voltage step-up transformer. The output voltage from each inverter would be increased to the desired substation feed voltage by these step-up transformers. From the inverter pads, the collected AC power would be delivered to the on-site project substation.

Site geotechnical conditions permitting, the inverter pads of earthen material would be built up and then aggregate would be placed on top. The inverter skids would then be placed on driven pile, on each pad.

Each array would be connected using underground collection lines parallel and adjacent to the array access roads where possible. Electrical collection lines would likely be installed within the access road corridor, using direct bury methods, although conduit could be used in some situations. It is anticipated that during the construction a temporary disturbance width would be needed for the array access roads and collection lines. Once complete, the temporary disturbance corridor would be restored, leaving permanent access roads at original grade.

3.5 Project Substation

The AC current would leave the step-up transformers via underground lateral lines that may be routed into overhead electrical feeder lines. The feeder lines would be supported by poles and would dead-end at the on-site project substation. The project substation would consist of parallel sets of internal power distribution systems (i.e., buses and circuit breakers, disconnect switches, and multiple step-up transformers) to increase the voltage to the substation and transmission line voltage. The project substation and interconnections would be built for and would operate at that nominal voltage.

3.6 Ancillary Facilities

3.6.1 Roads and Access

Access to the project facilities would be from South Wilmot Road, approximately 8.8 miles south of the Interstate 10 intersection with South Wilmot Road. From South Wilmot Road, there would be five main points of access: three using the existing Andrada Road and two using a newly created access roads off of South Wilmot Road. The access point at the intersection of South Wilmot Road and Andrada Road would use the existing roadways to the extent practicable. However, should improvements to Andrada Road be required, the Applicant will work with City of Tucson Transportation and Mobility Department to obtain the necessary permits prior to construction of these improvements. The width and design of the access road on Andrada Road within the City of Tucson shall be determined at the time of permitting and subject to City of Tucson approval. The Applicant does not anticipate that either South Wilmot Road or Andrada Road would be closed for public access or use during project construction or operation. The newly created access roads would be an all-weather improved road with one lane in each direction. The roads would be sized to handle all potential vehicle traffic during construction. These roads would be closed to public access and may require a turnout from South Wilmot Road onto the project access road, depending on final engineering design. Auxiliary roads inside the facility footprint would use compacted native materials or gravel surface. Only a small portion of the overall project area may be paved, primarily the main access road and areas around the O&M building and project substation, and only if geotechnical conditions require this. The remaining portions of the project area would remain unpaved, with select roadways improved with road base and/or gravel. No road closures to South Wilmot Road are anticipated.

3.6.2 Site Security and Fencing

The entire project area would be fenced appropriately to restrict public access during construction and operations (see Appendix C for proposed fence locations). The security fencing would be installed around the project site array perimeter, substation, and other areas requiring controlled access. The fence posts would be set in concrete or driven into the ground. The fencing design specifics would be determined through the final design and approved by Pima County. The preliminary fencing design specifics and the identification of flow through fencing locations is included in the site plan (see Appendix C).

Controlled access gates would be located at all entrances to the project. Site gates would be swing- or rolling-type access gates. Access through the main gate would require an electronic swipe card to prevent unaccompanied visitors from accessing the project area. All project personnel, contractors, agency personnel, and visitors would be logged into and out of the facility at the main office during normal business hours. Visitors and non-project employees (except government personnel on government business) would be allowed entry only with approval from a staff member at the facility. Additional security may be provided through closed-circuit video surveillance cameras and anti-intrusion systems, as required, for protection of the project. The Applicant would ensure that Pima County and City of Tucson emergency services have the appropriate access to the project area and will work with Pima County and City of Tucson on this access.

3.6.3 Lighting System

Permanent outdoor night lighting would be provided at the administration/O&M building and the project substation, although some portable lighting may be required for maintenance activities that must be performed at night. Lighting would be kept to the minimum required for safety and security. Sensors, switches, and timers would be used to keep lighting turned off when not required, and all lights would

be hooded and directed downward, to minimize backscatter and off-site light. Lighting would be attached to buildings and other structural supports where possible or affixed to ground-mounted poles.

3.6.4 Fire Protection

Fire protection would be necessary during project construction and operations. During construction activities, a water truck or other portable trailer-mounted water tank would be kept on-site and available to workers for use in extinguishing small human-made fires. All vehicles working on-site would also carry a portable fire extinguisher. The fire protection systems for the project operations would include a fire protection water system for the administration/O&M building, portable water tanks (buffalos), and portable fire extinguishers. Additional emergency response would be provided externally by Pima County or the City of Tucson, if required.

Each battery container would use an intelligent fire detection, alarm, and notification system, in which fire detectors would be photoelectric smoke detectors and thermal detectors. Detection of smoke or heat would trigger remote alarms to the Applicant's Renewable Operations Control Center and activate audible/visual alarms on the exterior of the battery storage containers. All systems would be maintained by a certified company. The Applicant would inspect battery storage systems for damage prior to installation and during routine maintenance and operations. Damaged systems would be handled in accordance with manufacturers' specifications. Damaged or spent batteries would be removed from the site and disposed of or recycled in accordance with federal and state laws. All systems comply with 2023 National Fire Protection Agency requirements and would be maintained by a certified company.

3.7 Operations and Maintenance Building

The project would include an O&M building, consisting of a pre-engineered building near the project substation. The building would provide a small administrative area, a work area for performing minor repairs, and a storage (or warehouse) area for housing spare parts. The design and construction of the O&M building would be consistent with all applicable state and local building codes. Any water and sewage services will not be brought to the O&M building from the local utility. The Applicant plans to use water and sewage storage tanks that will be cycled on a regular schedule.

4 CONSTRUCTION OVERVIEW

The project would be designed in accordance with the latest edition of the International Building Code, state and local requirements, and applicable wind and seismic criteria for the project location. The engineering, procurement, and construction of the project would be performed under multiple contracts. Project construction would be undertaken in a sequential approach.

4.1 Construction Schedule, Personnel, and Equipment

Project construction is expected to occur over approximately 18 months, which includes mobilization, construction/installation, commissioning/testing, and demobilization. Table 2 provides the approximate duration and workforce requirements for the project construction phase.

Table 2. Project Construction Requirements

Item	Requirements
Construction schedule	18 months
Construction workers	200 to 300 personnel during peak construction activity, 100 to 150 personnel on average
Construction vehicle trips	200 to 250 average trips per day during construction, 5 to 10 average trips per day during operations
Commercial operations date	2025 or 2026

Note: All construction information is preliminary, approximate, and may change during final design.

Typical equipment that would be used for the project includes the following:

- Graders
- Excavators
- Bulldozers
- Backhoes
- Cutting machines
- End loaders
- Delivery trucks
- Trenching machines
- Pile drivers
- Flatbed trucks
- Cranes
- Rollers
- Electrical test equipment
- Off-road buggies
- Forklifts and carry decks
- Water supply trucks
- Water spray trucks
- Concrete mixers
- Compaction machines
- Survey equipment
- Light trucks

Construction would generally occur during daytime hours, Monday through Friday. Additional hours may be necessary to make up schedule deficiencies or to complete critical construction activities. For instance, during placement of concrete or during hot weather, it may be necessary to start work earlier to avoid some activities during high ambient temperatures. During the start-up phase of the project, some activities (such as equipment and system testing) may continue 24 hours per day, 7 days per week. As stated in Section 2, the Applicant may obtain a permit as required by Pima County Code of Ordinances Title 9, Chapter 9.30: Regulation of Excessive, Unnecessary and Annoying Noises, Section 9.30.070.C (Pima County 2023a), prior to starting this work if construction work is anticipated to exceed noise regulations.

4.2 Site Clearing/Grading/Excavation

The project would involve site grading and leveling. Grading and leveling is a technique that removes vegetation and surface soils, resulting in flat, smooth surfaces devoid of vegetation. This method is used in areas with steep slopes and/or dense vegetation with large, sharp sumps that can damage equipment. It is also used for preparing surfaces for primary roads, inverters, and buildings. Excavation, which involves removal of surface and subsurface soils, may be necessary in some cases (e.g., inverter and substation foundations). Grading and related heavy earthwork may also be used to install necessary drainage and flood control systems. Typical equipment used includes bulldozers, scrapers, graders, and excavators.

4.3 Major Equipment Installation

Construction of the tracker/mounting assemblies may be conducted in a single area; the assemblies would then be transported to the proper location and placed on the preinstalled supports. Alternatively, the array assembly may occur at the installation point. Final assembly typically involves tractors and forklifts to place the tracker/mounting assemblies onto the support structures. This work would require multiple crews at the site with vehicles, including special vehicles for transporting the arrays.

The tracker/mounting assembly installations would be constructed using either driven steel posts, screw piles, or possibly concrete foundations if required. As the solar arrays are installed, the balance of the plant would be constructed concurrently. Within the solar fields, the electrical and instrumentation/control wiring would be installed in underground trenches or aboveground. The wiring would be run to the location of the solar field controls, and the circuits would be checked.

Each array would be connected using underground collection lines parallel and adjacent to the array access roads where possible. Electrical collection lines would likely be installed within the access road corridor, using direct bury methods, although conduit could be used in some situations. It is anticipated that construction would require a temporary disturbance for the array access roads/collection lines. Once complete, the temporary disturbance corridor would be restored to the extent practicable, leaving only the array access road as permanent disturbance.

The rough grading of the project substation would begin early in the construction process. After rough grading is completed, construction of the substation would be turned over to the substation contractor. The substation contractor would install foundations, perform finish grading, and provide final rock cover at the end of substation construction. Concrete foundations would be necessary for particular pieces of equipment. Heavy foundations and equipment pads would be constructed using trenching machines, compactors, concrete trucks and pumpers, vibrators, forklifts, boom trucks, and large cranes. Similar to site grading, appropriate dust abatement measures would be followed as specified in the fugitive dust activity permit obtained from PDEQ. The administration/O&M building foundation and framework for the buildings would be placed as the construction progresses.

4.4 Battery Energy Storage System Installation

If a DC system is used, a shallow foundation would be placed next to as many inverters as are needed to achieve the required battery storage capacity. The battery containers would be delivered directly to the inverter locations and placed on the foundation. The battery containers would then be connected to the inverters by installing DC cables, AC auxiliary power, and fiber optics.

If an AC system is used, the project substation area would incorporate the additional space required for the BESS and additional inverters. The ground would be graded, and level concrete pads would be poured for battery containers. The battery containers would be placed and connected to the grounding grid. Underground conduit would be installed to connect the batteries and inverters to the control house inside the substation. Medium-voltage conductors from the inverters would be connected to the substation medium-voltage busbar.

5 OPERATIONS AND MAINTENANCE

5.1 Operations Staff and Vehicles

The project would be staffed by three to five operations personnel during daytime hours, Monday through Friday. When the project is not fully staffed, the project would be monitored remotely from the Applicant's parent company's Fleet Performance and Diagnostic Center in Juno Beach, Florida. Under emergency conditions, project staff would be notified and would return to the facility, as required. Specialty personnel may also be on-site during nonworking hours to perform specific maintenance functions as required.

O&M vehicles would include ¾-ton pickup trucks and small utility vehicles to perform on-site welding, lubricating, panel washing, and other maintenance activities. In addition, flatbed trucks, dump trucks, and front-end loaders may be present on-site at various times. Heavy-haul transport equipment would be brought to the site as needed for any major maintenance or equipment repair or replacement.

5.2 Operations and Maintenance Activities

Staff personnel would perform normal preventative maintenance, such as daily inspection of field components, condition assessment of critical equipment, and routine lubrication of equipment. Project facilities would be repainted regularly to maintain their appearance and protect them from the elements.

Based on data from PV plant operations in the Applicant's project fleet across the county, it is not anticipated that panel washing would be needed.

Vegetation would be maintained on-site through a combination of mowing or trimming native species and herbicide application on nonnative or noxious species. Native vegetation in areas that were mowed during construction would be maintained. Equipment would include a commercial-sized raised deck mower, or similar.

Road maintenance would be performed as needed. Paved roads would be swept, sealed, and/or overlaid as needed to preserve the asphalt surface from degradation. Potholes or damage to the road would be repaired as soon as practical. Grading and drainage would be maintained for gravel and earthen roads. Water would be applied as required by the fugitive dust activity permit obtained from PDEQ.

The project may operate as either a staffed or unstaffed site, to be determined after final design. Under normal circumstances for an unstaffed site, the project substation would be controlled remotely, and routine inspections by personnel would occur weekly or as needed under emergency conditions. In addition, all project substation structures would be annually inspected from the ground for corrosion, misalignment, and foundation condition. Ground inspection would include the inspection of hardware, insulator keys, and conductors. This inspection would also check conductors and fixtures for corrosion, breaks, broken insulators, and bad splices.

Battery systems have an initial right-size capacity (this includes auxiliary loads and losses) to deliver nameplate energy beginning the first day of operation. To maintain the same level of nameplate energy throughout the duration of the agreement, new batteries must be added to compensate for degradation of the initial batteries. The original building would be constructed to allow for the addition of new batteries as necessary. Periodic replacement of the batteries is expected based on usage and quarterly inspections, though it is not uncommon for the batteries to last longer than 10 years. Inspections of the

batteries would be performed as part of the preventive maintenance program. Spent batteries would be recycled or disposed of off-site in accordance with 40 Code of Federal Regulations 273.2 and 266.

Electric lines, support systems, and instrumentation and controls would be inspected regularly to ensure the safe, efficient, and economical operation of the project.

6 ENVIRONMENTAL CONSIDERATIONS

6.1 Water Use

6.1.1 Construction Water Use

Initial construction water usage would be in support of project site preparation and grading activities. During earthwork for the grading of access roads, foundations, equipment pads, and project components, the main use of water would be for compaction and dust control as will likely be required by the fugitive dust activity permit obtained from PDEQ. Smaller quantities would be required to prepare the concrete required for foundations and other minor uses. Water usage subsequent to earthwork activities would be in support of dust suppression as well as that normally required for construction of the building, substation, internal access roads, and solar arrays; this water usage may also be required by the fugitive dust activity permit obtained from PDEQ. The total water usage during construction would be approximately 2.5 million gallons per month for the approximate 18-month construction period.¹

Construction water needs for dust control and washing would be obtained from a commercially available source and trucked to the site.

6.1.2 Operation and Maintenance Water Use

Based on data from PV plant operations in the project fleet across the county, it is not anticipated that panel washing would be needed.

6.2 Native Plant Preservation

As part of the CUP, the Applicant must meet the native plant preservation requirements outlined in Pima County Code Title 18, Chapter 18.72: Native Plant Preservation (Pima County 2023a). For the portions of the project area subject to the CUP (see Section 2), the Applicant will set aside 30% for native plant preservation as required by the Pima County Code (see Appendix C for the set-aside areas). In addition, the preservation in place, salvage, and transplanting on-site of safeguarded plants, “crested,” and other saguaros (*Carnegiea* sp.) outside set-aside areas would be in conformance with the requirements in Pima County Code Title 18, Chapter 18.72 (Pima County 2023a). The Applicant will work with Pima County to produce a final project site plan that demonstrates that the required 30% has been set aside. However, the Applicant anticipates that 80% of the CLS Biological Core Management Area (approximately 83.6 acres) and some of the RRH will be set aside to meet the 30% set aside requirement.

¹ This is a preliminary estimate and may change during final project design, project construction, or project operation.

7 APPLICATION COORDINATION

The Applicant has conducted several meetings with Pima County as part of the CUP permitting process. The Applicant had an initial meeting with Pima County (including representatives from Pima County Regional Flood Control District) on May 4, 2023, to introduce the project and provide an initial site plan for Pima County feedback. During this meeting, Pima County informed the Applicant that a CUP was required for the portions of the project outside of the REID. Pima County indicated that the project could be permitted through a REID and CUP hybrid approach. The Pima County Regional Flood Control District indicated that in lieu fee impacts to RRH was the appropriate mitigation.

The Applicant met with Pima County officials on July 26, 2023. The purpose of this meeting was to present the latest project site plan design to Pima County and provide officials the opportunity to submit feedback on the design as well as for the Applicant to ask questions regarding the CUP process. During this meeting, Pima County officials did not identify any major concerns with the site plan design; however, they recommended that the site plan be enlarged to show more detail and to more clearly delineate areas designated as a REID from those covered by the CUP. The project site plan in Appendix C reflects these recommendations. Additionally, Pima County officials recommended that the Applicant consult with Davis-Monthan Air Force Base. The Applicant consulted with the Davis-Monthan Air Force Base regarding the project as Pima County requested and no major issues were identified. Finally, Pima County recommended that while the 30% set-aside areas are flexible and final locations do not need to be determined at this time, the Applicant should identify the major areas for the set-aside. The Applicant has identified these areas (see Section 6.2).

On September 26, 2023, the Pima County Regional Flood Control District (District) provided comments to the Applicant that additional areas needed to be avoided that were not identified on the site plan. The Applicant met with representatives of the District on November 6, 2023, to discuss these comments and identify how the District would like to review the next site plan. The Applicant provided the requested site plan on November 27, 2023, and the District identified the additional areas that needed to be avoided on November 30, 2023. The Applicant met with representatives of the District and the Pima County Office of Sustainability and Conservation on January 18, 2024, to discuss the project further and help identify which areas can be developed. The Applicant and the District indicated there were additional areas proposed for development that required the District's review. During this meeting, representatives of the Pima County Office of Sustainability and Conservation indicated that up to 20% of the CLS Biological Core Management Area could be developed for the project. The Applicant has continued to coordinate with the District regarding the project site plan (Appendix C) and has avoided the areas requested by the District to the extent feasible. The District approved the site plan as provided (Appendix C) on March 21, 2024.

Additionally, the Applicant is required to contact the U.S. Fish and Wildlife Service² at least 15 days prior to the public hearing date and provide written notice that this CUP application has been submitted. The Applicant will contact the U.S. Fish and Wildlife Service 15 days prior to the public hearing date.

7.1 Pima County Conditional Use Permit Comments

The Applicant submitted their draft CUP to Pima County on August 31, 2023. After reviewing the CUP application, Pima County departments and offices provided comments on the draft CUP application. The comments received and responses are provided in Table 3.

² scott_richardson@fws.gov

Table 3. Pima County CUP Application Comments and Responses

Pima County Department or Office	Comment	Response
Development Services	We would also like to see a few changes on the site plan: Please mark the required setbacks to all property lines.	The Applicant has revised the site plan (Appendix C) to include all required property line setbacks.
Development Services	We would also like to see a few changes on the site plan: ... The CLS area for the Biological Core Management Area is shown on the site plan, which is good. However would also like to see the Multiple Use management Area and the Important Riparian Areas marked as well (the Important Riparian Areas will overlap with the Regulated Riparian Areas, but we would like for them to be differentiated in some way).	The Applicant has revised the site plan (Appendix C) to include these areas.
Development Services	... Show landscaping on your site plan (or do a new plan for landscaping). I don't think exact detail on every plant used in the bufferyards will be needed at this time, but at least having a plan showing us what type of bufferyard will be used will be good for the CUP.	The Applicant has revised the site plan (Appendix C) to include landscaping.
Flood Control	This 961-acre project spans over an area southeast of the Wilmot and Andrada Road intersection where a local floodplain impacts a significant portion of the project area. The local floodplain was determined by Lee Moore West Local Floodplain Study (#10) effective February 28th, 2019. Within the local floodplain there are regulatory washes with an associated erosion hazard setback of 25', 50' and 100' and flow corridors. The delineation and preservation of flow corridors throughout the Lee Moore West is the preferred approach to development. Although it seems that this project is avoiding some of the local floodplains, there is still significant impact to the local floodplain and flow corridors as shown on the proposed site plan. The local floodplain and flow corridors are not delineated on the site plan as such it is difficult to determine the extent of the impact to the local floodplain. Delineate the floodplain and flow corridor boundaries on the site plan. Solar panels and the supporting infrastructure shall be located out of the flow corridors to the maximum extent possible.	The Applicant has created a new site plan (Appendix C) that shows project design and layout. The Applicant has coordinated with District on several occasions to develop this site plan.
Flood Control	Regulated Riparian Habitat (RRH) is mapped throughout the project boundaries. The applicable RRH Classifications within the project boundaries are Important Riparian Area (IRA) with an Underlying Classification of Xeroriparian Class C Habitat and Non-IRA Xeroriparian Class C and D. Provide a plan that shows the mapped RRH and identify the applicable classifications in the legend. The plan shall provide the total amount of RRH by classification and the impacted (disturbed) RRH by the project. If the project impacts more than a 1/3 acre of habitat, mitigation is required at the time of permitting.	The Applicant is submitting a Regulated Riparian Habitat Site Plan as requested (Appendix E).
Flood Control	The proposed fencing shall meet the Technical Policy 005 Construction Standards for Fences and Walls within Regulatory Floodplains, effective May 18th, 2007 and revised effective May 18th, 2021. The site plan shall provide applicable details. A condition will be forthcoming once an acceptable project layout is provided to the District.	The Applicant has reviewed this technical policy and has updated the site plan (Appendix C) accordingly. The addition of flow through fencing locations is included in the site plan (Appendix C).
Flood Control	When Tier 1 and 2 are evaluated for an acceptable site, criteria for the land area shall lie outside of Important Riparian Habitat and the incentive plan shall meet the requirements found in Section 14.03.020.D which emphasizes avoidance of flood corridors. Prior to resubmittal of the plan set, the District recommends scheduling a meeting to discuss the project impacts, development footprint and acceptable mitigation measures to the local floodplain, flow corridors and RRH.	The Applicant has created a new site plan (Appendix C) that shows project design and layout. The Applicant has coordinated with the District on several occasions to develop this site plan. The District approved the site plan on March 21, 2024.

Pima County Department or Office	Comment	Response
Office of Sustainability and Conservation	Please submit cultural resources survey reports and/or data recovery reports that have been completed. Need documents showing that the cultural resources compliance requirements have been met.	The Applicant provided a full cultural resource survey report for the project to the Pima County Office of Sustainability and Conservation on November 14, 2023. The Applicant is not including this report in the CUP application as the disclosure of sensitive cultural resources information is prohibited.
Development Services	The location of your office/maintenance buildings. I would say even if you haven't figured out exact building footprints yet, it would be good for us to at least see the general area of where your buildings are going to be and for those to be marked on your site plans.	The Applicant has revised the site plan (Appendix C) to include these areas.
Transportation Department	Section 3.6.1 Roads and access. The narrative indicates access to/from Andrada Road, and coordination with PC DOT should improvements be required. However, Andrada Road is under the Jurisdiction of City of Tucson and the right-of-way for Andrada Road appears to terminate short approximately 1.3 miles east of Wilmot Road at the proposed substation location. It is unclear if legal access exists to the easternmost portion of the project site. Indicate how legal access is provided to the property, if an easement exists provide recorded documentation. Consider coordinate with City of Tucson for any required right-of-way/easement.	The Applicant has revised Section 3.6.1 as requested. Legal access exists to the easternmost portion of the project through a right of way permit from the Arizona State Land Department. The Applicant has provided this easement information to Pima County as requested.
Transportation Department	The site plan indicates a 20-foot wide road to the substation. The callout should be removed, and the narrative to indicate that the width and design of the access road on Andrada Road within the City of Tucson shall be determined at the time of permitting and subject to City of Tucson approval.	The Applicant has created a new site plan (Appendix C) that removes this callout and has added this information into Section 3.6.1 as requested.
Transportation Department	Indicate number of access points for the project site areas along Andrada Road. The narrative/plan does not indicate access to the proposed substation.	The Applicant has created a new site plan (Appendix C) with this information.

Pima County Department or Office	Comment	Response
Office of Sustainability and Conservation	<p>BIOLOGICAL RESOURCES</p> <ul style="list-style-type: none"> o The approx. 961-acre project area is partially within the Maeveen Marie Behan Conservation Lands System (CLS), with approx. 88.6 acres within the Multi-use Management Area designation and approx. 104.7 acres within the Biological Core Management Area Designation. o The project area is within a Priority Conservation Area (PCA) for the Pima pineapple cactus. It is outside the PCAs for the Cactus ferruginous pygmy owl, Western burrowing owl, and Needle-spined pineapple cactus. o Several washes and associated riparian habitat cross the project area. Disturbances to these resources are regulated by the Regional Flood Control District according to Pima County Code Chapter 16.30, Watercourse and Riparian Protection and Mitigation Requirements. o None of the parcels within the project area are identified as a current acquisition priority nor were any identified as such under the 2004 bond program. o The property is undeveloped and other than some dirt roads/trails appears largely undisturbed. Any disturbances to native vegetation is addressed via compliance with Pima County Code Chapter 18.72, Native Plant Preservation. <p>LANDSCAPE CONTEXT</p> <p>The project area is located north of W. Sahuarita Road and east of S. Wilmot Rd. in the Upper Santa Cruz Planning Subarea, in a rural part of the County. The property is surrounded by low intensity residential land uses to the south and undeveloped State Trust Land to the east, west and north. Undeveloped parcels owned by the US Bureau of Land Management sit between the east and west portions of the project area. The closest County-owned Preserve is Bar V Ranch approx. seven miles to the east.</p> <p>The project area is within the Lee Moore Wash Flow Corridors, an identified wildlife movement area that generally aligns with the area's riparian corridors and connects the Santa Rita Experimental Range/Coronado National Forest Wildlife Block to the Santa Cruz River (AGFD 2013). It is not within any CLS Critical Landscape Connections.</p> <p>POTENTIAL IMPACT TO BIOLOGICAL RESOURCES AND CLS</p> <p>According to the Conditional Use Permit application, the portion of the project area located within the CLS will be avoided. In light of this, the project is not expected to significantly impact the condition or integrity of biological resources in the area or the viability of the CLS.</p> <p>OSC-Environmental Planning has no objection to this request.</p>	<p>The Applicant did not identify any CUP application updates based on this comment. There were no updates to the CUP application or associated appendices based on this comment.</p>

8 PLANNING AND ZONING COMPATIBILITY

Based on the standards outlined in Pima County Code Title 18, Chapter 18.97, Section 18.97.030.F.3.C for Type I and Type II CUPs (Pima County 2023a), the Applicant believes the project would be a compatible land use in RH zones. The list below presents each standard and a description of how the project meets the standards.

1) “It will not be in serious conflict with the objectives of the general land use plan or the area plan in which it is situated”

The project would not be in conflict with the land use plan objectives described in *Pima Prospers: Comprehensive Plan Initiative* (Pima County 2015). The Applicant would avoid developing most of the project in the areas designated Resource Sensitive in parcels 305220030, 30522004A, and 30522004B, as this land use is also a part of the CLS Biological Core Management Area (approximately 104.5 acres). The Applicant, after consulting with the Pima County Office of Sustainability and Conservation, has identified approximately 20.9 acres of the CLS Biological Core Management Area that would be developed for the project. The Applicant has confirmed with the Pima County Office of Sustainability and Conservation that up to 20% of the CLS Biological Core Management Area can be developed. The remaining 80% of the CLS Biological Core Management Area (approximately 83.6 acres) will remain undeveloped. The project also avoids development in the majority of the RRH. All nine parcels are currently zoned RH, SR, CR-5, TR, and CB-1, which allows for a utility-scale solar facility as a conditional use.

The proposed utility-scale solar installation is anticipated to be a low-impact, quiet, and generally unobtrusive use.

2) “It will provide safeguards for the protection of adjacent developed property, or if the adjacent property is undeveloped, the legal permitted uses of such property”

The project would not interfere with uses on adjacent properties, which are either vacant or residences. The Applicant would work with Pima County to minimize and mitigate impacts to nearby residences at the time of additional permitting as necessary. The project would not interfere with any surrounding vacant properties.

3) “It has adequate accessibility to the county road network”

The project has adequate accessibility to the county road network. Project access would be provided via existing roads. Primary access would be via South Wilmot Road and Andrada Road. No road closures to South Wilmot Road or Andrada Road are anticipated. South Wilmot Road is a designated “major route” on the Pima County Major Streets and Routes Plan.

4) “It has sufficient off-street parking and loading facilities, that will be developed in accordance with county engineering standards”

Project parking sufficiency and compliance with the Pima County Zoning Code will be verified at the time of additional permitting.

5) “It will meet county standards in terms of control of noise, smoke, glare or heat, odors, vibrations, fly ash, dust, fumes, vapors, gasses and other forms of air pollution, liquids, and solid wastes”

The project would be developed in accordance with Pima County engineering standards. It would meet Pima County standards in terms of control of noise, smoke, glare or heat, odors, vibrations, fly ash, dust, fumes, vapors, gases, and other forms of air pollution, liquids, and solid waste.

6) “Hours of operation will not be detrimental to adjoining residents”

The project would not have hours of operation detrimental to adjoining residents. The project would operate primarily during daylight hours and would generate minimal off-site nuisances.

7) “Landscaping will be fully in conformance with zoning code regulations”

Project landscaping and compliance with the Pima County Zoning Code will be verified at the time of additional permitting.

8) “Analyze the expected impact of the proposed development on the site and surroundings including, but not limited to, the expected impact on endangered and threatened species of plants and animals”

The project is likely to impact the endangered Pima pineapple cactus (*Coryphantha scheeri* var. *robustispina*), known to occur in the project area. The project may impact up to twelve individual plants; these plants will be transplanted out of the final construction footprint as identified within the mitigation plan and as allowed under the Pima County Section 10 permit coverage. The Applicant will only transplant those Pima pineapple cactus plants that would be impacted by the project, which would be determined during final engineering design. The Applicant will apply for Pima County Section 10 Certificate of Coverage prior to submitting their site construction permit. A transplanting protocol previously approved by the U.S. Fish and Wildlife Service for other projects in the region will be used to minimize the stress of transplanting. Coverage under Pima County’s Section 10 permit will allow for the Applicant to mitigate impacts to Pima pineapple cactus from project-related grading and ground disturbance.

The required Biological Impact Report is included in Appendix D, along with the Biological Evaluation for the project that analyzes potential impacts on endangered and threatened species of plants and animals.

9 LITERATURE CITED

- Pima County, 2015, *Pima Prospers: Pima County Comprehensive Plan Initiative*. Available at: <https://www.pima.gov/270/Pima-Prospers>. Accessed February 22024.
- . 2023a, Pima County Code. Available at: https://codelibrary.amlegal.com/codes/pimacounty/latest/pimacounty_az/0-0-0-1. Accessed February 2024.
- . 2023b, PimaMaps. Available at: <https://www.pima.gov/1949/PimaMaps/>. Accessed February 2024.

APPENDIX A

Legal Description

Hook M Ranch Legal Descriptions

Eastern Development Parcel

The eastern development parcel consists of three individual parcels of land which are recorded as:

- Parcel 305-22-0030
- Parcel 305-22-004A
- Parcel 305-22-004B

Collectively the legal description for the eastern development parcel is as follows:
Section 4 along with Lot 4 and the southwest quarter of the northwest quarter of Section 3, Township 17 South, Range 15 East, Gila and Salt River Meridian, Pima County, Arizona and contains 638.44 acres.

Western Development Parcel

The western undeveloped parcel consists of two individual parcels of land which are recorded as:

- Parcel 305-22-0050
- Parcel 305-23-0140

Collectively the legal description for the western undeveloped parcel is as follows:
Lot 4 and the southwest quarter of the northwest quarter of Section 5, along with Lot 11 and the east half of the east half of the southeast quarter of the northeast quarter of Section 6, Township 17 South, Range 15 East, Gila and Salt River Meridian, Pima County, Arizona and contains 78.88 acres.

ALTA/ACSM Land Title Survey

File No. 500-14501-TR

Legal Description (per title report):

EXHIBIT "A"

Parcel 1

The Southeast Quarter of the Northwest Quarter, AND the West Half of the West Half of the Southwest Quarter of the Northwest Quarter, AND Government Lot 2, EXCEPT the East 890 feet thereof, all in Section 6, Township 17 South, Range 15 East of the Gila and Salt River Meridian, Pima County, Arizona.

Parcel 2

The North Half of the Southeast Quarter of Section 6, Township 17 South, Range 15 East of the Gila and Salt River Meridian, Pima County, Arizona. Except that portion described as follows:

Beginning at Undercut Land Office Base Corner Type monumenting the east 1/4 corner corner of said Section 6, Block, which the northeast corner of said Section 6 is 1/4 mile North 60 degrees 00 minutes 27 seconds West, 794.94 feet distant;

Thence South 00 degrees 02 minutes 46 seconds East, along the survey line to said Section 6, a distance of 129.77 feet;

Thence South 88 degrees 04 minutes 11 seconds West, parallel to the north line of the said Northwest Quarter of the Southeast Quarter, a distance of 120.46 feet to the westerly corner of the said Northwest Quarter of the Southeast Quarter;

Thence North 00 degrees 00 minutes 00 seconds West, along said westerly line, a distance of 129.77 feet to the northwestern corner of the said Northwest Quarter of the Southeast Quarter;

Thence North 90 degrees 00 minutes 00 seconds East, along the easterly line of the said Northwest Quarter of the Southeast Quarter, a distance of 120.46 feet to the POINT OF BEGINNING.

Parcel 3

As memorialized by public notice as set forth in State Land Department Page-Way No. 1670294, recorded in Decker 8906 at page 208.

Schedule B - Section II Exceptions:

This survey was performed with the benefit of a Title Report issued by Old Republic National Title Insurance Company, File No. 500-14501-TR, dated June 27, 2013 and is subject to the following Schedule B Exceptions:

- TAXES AND ASSESSMENTS collectible by the County Treasurer, it has not yet due and payable for the following year: (Not Survey Related)
2013.
- PRESCRIPTION or exception in Pledge recorded in Decker Book 260 at Page 130.
Recorded in Decker Book: 260
Page: 130
Parties: certain facilities and associated matters.
- EASEMENT and rights incident thereto as set forth in subsection (P) listed.
Recorded in Decker Book: 260
Page: 137
Parties: certain facilities and associated matters.
- The existence of a right of way agreement recorded in Decker 8906 at Page 267 (Plotted).
- Terms and conditions of right of way agreement recorded in Decker 8906 at Page 267 (Plotted).

File No. 500-14504-TR

Legal Description (per title report):

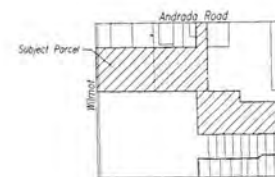
EXHIBIT "A"

Government Lots 5 and 6, all in Section 6, Township 17 South, Range 15 East, Gila and Salt River Meridian, Pima County, Arizona.

Schedule B - Section II Exceptions:

This survey was performed with the benefit of a Title Report issued by Old Republic National Title Insurance Company, File No. 500-14504-TR, dated June 27, 2013 and is subject to the following Schedule B Exceptions:

- TAXES AND ASSESSMENTS collectible by the County Treasurer, it has not yet due and payable for the following year: (Not Survey Related)
2013.
- PRESCRIPTION or exception in Pledge recorded in Decker Book 260 at Page 130.
Recorded in Decker Book: 260
Page: 130
Parties: certain facilities and associated matters.
- EASEMENT and rights incident thereto as set forth in subsection (P) listed.
Recorded in Decker Book: 260
Page: 137
Parties: certain facilities and associated matters.
- The existence of a right of way agreement recorded in Decker 8906 at Page 267 (Plotted).
- Terms and conditions of right of way agreement recorded in Decker 8906 at Page 267 (Plotted).



Location Map

Section 6,
Township 17 South, Range 15 East,
Gila and Salt River Meridian,
Pima County, Arizona
Scale: 3" = 1 mile

Table A Notes:

- Item 2: There is no address for this subject parcel.
- Item 4: The total area of the subject parcel is 7.811441 acres or 178.33 Acres.
- Item 6: The zoning of the subject parcel is the Rural Homestead Zone.
- Item 10: At the date of this survey no construction was observed on the subject parcel.

General Notes

1. Basis of Bearing: North 89°56'24" East to the north line of the northwest quarter of Section 6, based on GPS observations between the monuments at corners.
2. This survey was performed without the benefit of a utility blueprint. No guarantee can be made as to the existence and location of underground or hidden utilities.
3. All distances shown are measured in a calculated straight line unless noted, otherwise stated.
- (R) indicates a related measurement according to the subject Title Report.
- o indicates a closed measurement is noted.
- indicates a not 2" high tagged ELS 05111.

1. Alter rules

5/14/13

Arrow Land Survey, Inc.
LAND SURVEYING
CONSTRUCTION STAKING
3121 E. WINDFALL RD.
TUCSON, AZ 85716
(520) 881-2445 FAX
(520) 881-2445 FAX

Project Name and Address

ALTA/ACSM Land Title Survey
Portions of Section 6,
Township 17 South, Range 15 East,
Gila and Salt River Meridian
Pima County, Arizona

05230
July 26/13
1" = 200'

1
of
2

Certification:

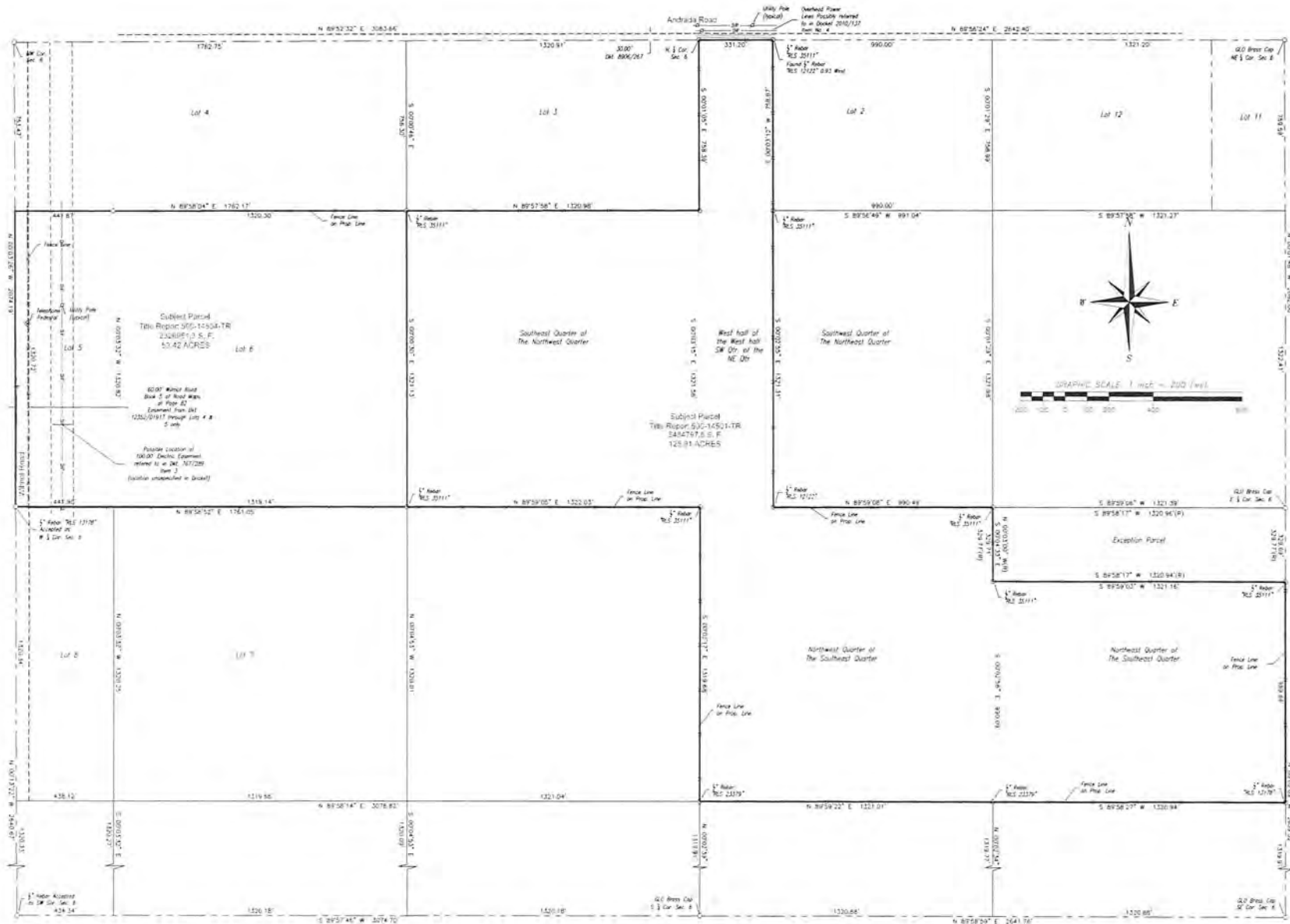
To: Old Republic Title Company Title Policies

This is to certify that the map or plan for survey on which it is based was made in accordance with the 2011 Minimum Standard Digital Requirements for ALTA/ACSM Land Title Surveys, properly executed and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

Date of Title Map: 06/14/2013

Geoffrey W. Bazz ELS 35,111





General Notes

1. Basis of Bearing: North 89°52'24\"/>
 2. This survey was performed within the limits of a utility easement. No guarantee can be made as to the existence and location of underground or buried utilities.
 3. All dimensions shown are measured at a calculated distance thereof unless otherwise noted.
- (R) indicates a record map present according to the relevant Title Report
- indicates a found monument as noted
- indicates a set 5' offset support RLS (1) (1)



Arrow Land Survey, Inc.
 LAND SURVEYING
 CONSTRUCTION STAKING
 1615 E. ALFREDA P BLVD.
 TUCSON, AZ 85716
 (520) 887-5150
 (520) 881-0466 FAX

Project Name and Address
ALTA ACSM Land Title Survey
 Portion of Section 5,
 Township 17 South Range 13 East
 Gila and Salt River Mountains
 Pima County, Arizona

ALTA/ACSM Land Title Survey

Legal Description (per title report):

PARCEL 1:
Government Lots 7, 8, 9 and 10, and the East half of the Southeast quarter of Section 6, Township 17 South, Range 15 East, Gila and Salt River Meridian, Pima County, Arizona;
EXCEPTING from said Lots 8 and 9, any portion lying within Wilcox Road right of way.

iv a/c/s 18 and 30

PARCEL 2:

An easement to the Grantor, its heirs, assigns, successors in interest and their invitees, social guests, licensees and permittees, an easement for ingress and egress, over and upon the West 60 feet of Government Lot 4 in A/S in said Section 6.

Schedule BII - Exceptions:

This survey was performed with the benefit of a Title Report issued by Stewart Title Guaranty Company, Order Number: 05504-6543, dated May 13, 2015 and is subject to the following Schedule B, Exceptions:

1. Taxes and assessments collectible by the County Treasurer, not yet due and payable for 2016.
Not Survey Related (NSR)
2. Any action by the County Auditor and/or Treasurer altering the current or prior tax assessment, subsequent to the date of the Policy of Title Insurance. (NSR)
3. Water rights, claims or title to water, and agreements, covenants, conditions or rights incident thereto, whether or not shown by the public records. (NSR)
4. Reservations or exceptions in Deeds or in Acts authorizing the issuance thereof. (NSR)
5. Any encumbrances or rights of way not disclosed by those public records which impart constructive notice and which are not visible and apparent from an inspection of the surface of said land. Unspecified
6. Matters shown on Book 5 of Road Maps, Page 82, of Wilcox Road along the West side of the captioned property.
Plotted

Schedule BII -Continued:

7. Right of Way Easement for electric transmission lines and appurtenances, and rights incident thereto, as set forth in instrument recorded in Docket 767, page 289, with continuing rights as disclosed in Docket 1326, Page 977.
Blanket Easement & Plotted
8. Easement for ingress and egress and rights incident thereto, as set forth in instrument recorded in Docket 1326, Page 977, in Docket 1361, Page 581, in Docket 9089, Page 481, and recent instrument of record.
Plotted
9. Easement for ingress and egress and rights incident thereto, as set forth in instrument recorded in Docket 8364, Page 769.
Plotted
10. Memorandum by the Pima County Board of Supervisors to name easement recorded in Docket 11741, Page 3582.
Plotted
11. Terms, conditions, provisions, obligations and liabilities of the easement for ingress and egress recorded in Docket 12352 at Page 1917. (Plotted 2.)
Plotted
12. Resolution No. 2096-249 providing for Amending Pima County Comprehensive Plan Land Use Map recorded in Docket 13647, Page 2438.
(NSR)
13. Any adverse claim to any portion of said land which has been created by artificial means or which is accretion, alluvion, dereliction or avulsion with particular reference to that portion of the subject property lying within any wash or arroyo.
(NSR)



Location Map
Section 6,
Township 17 South, Range 15 East,
Gila and Salt River Meridian,
Pima County, Arizona
Scale: 3" = 1 mile

Table A Notes:

- Item 2: There is currently no address given to this parcel.
- Item 3: The subject parcel falls in FEMA panel 3501 which was not revised. Dated September 28, 2010.
- Item 4: The area of the subject Parcel is 8,720,854.1 square feet or 199.57 acres as reported.
- Item 5: Parcel is shown R/W according to Pima County records, no endorsement was provided by Arizona.
- Item 6: The subject parcel contains no marked parking stations.
- Item 7: At the time of this survey, no airport construction was observed on the subject parcel.

Certification:

I, Stewart Title Guaranty Company,
Arizona, Wilcox, 10, LLC, as Arizona licensed survey company,
This is to certify that this map represents our best and true work and is correct within a
one-foot tolerance with the NAD 83 datum. This map was prepared for ALTA/ACSM
Land Title Survey, jointly established and controlled by ALTA and NSPS, and includes
items 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, and 14 of Title A thereof. This title work was
completed on 6/2/2015.

Date of Book Map: 6/2/2015

Taylor J. Webb PLS #706



General Notes

1. Base of Bearing: North 89°56'57" East, equated to the true line of the southeast quarter of Section 6, as shown.
2. This survey was performed without the benefit of a utility blueprint. No guarantee can be made as to the existence and location of underground or surface utilities.
3. All dimensions given are measured to a calculated derivative thereof unless otherwise noted.
4. Indicate to field monument as noted.

1 4384 Bm 9 Area Zoning: 5/26/15
Revised Legal Description

arrow Land Survey, Inc.
LAND SURVEYING
CONSTRUCTION STAKING
2121 E. KENDRALE RD.
TULSA, OK 74116
(918) 282-1215
(918) 282-1488 FAX

Project Name and Address
ALTA/ACSM Land Title Survey
Southeast Quarter
of Section 6
T17S R15E G5SR&M
Pima County, Arizona

15161

June 2015

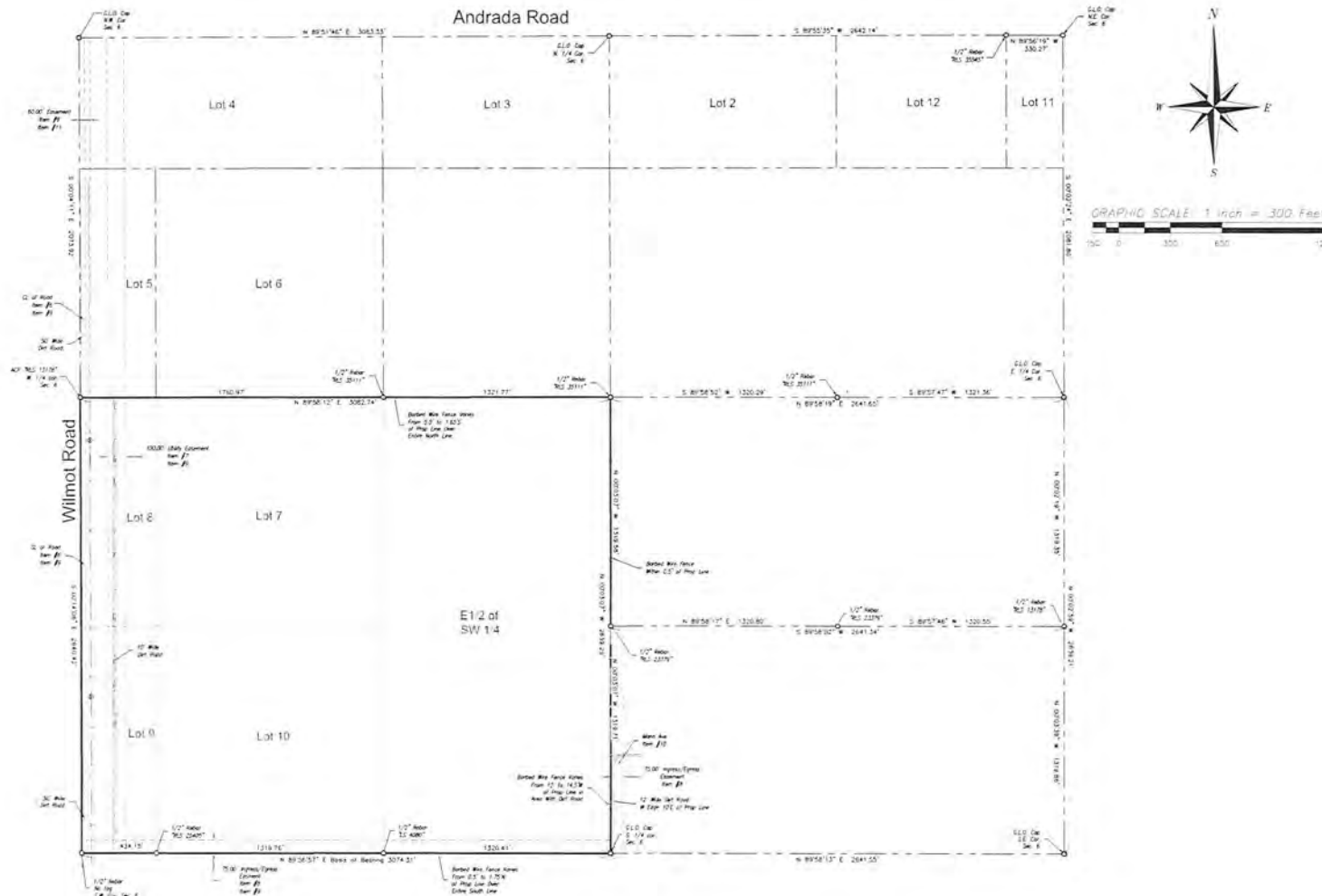
1" = 300'

1

of

2

ALTA/ACSM Land Title Survey



General Notes

1. Basis of Bearing: North 89°56'17" East, assumed to be the true line of the southeast quarter of Section 6, as shown.
 2. This survey was performed without the benefit of a utility blueprint. No guarantee can be made as to the existence and location of underground or surface utilities.
 3. All dimensions shown were measured or calculated, and no other measurements were taken.
- Includes 1 found measurement as noted.

Legend

- Survey Point
- Gas Well Access
- Telephone Easement
- Underground Utility Line

1 Label Item 9, Add Zoning Revised Legal Description 6/28/15

Arrow Land Survey, Inc.

LAND SURVEYING
CONSTRUCTION STAKING

3521 L. FAYETTE RD.
HOUSTON, AZ 85711
(602) 858-2165
(770) 881-0466 FAX

Project Name and Address

ALTA/ACSM Land Title Survey

Southwest Quarter
of Section 6
T17S R15E, G4S8B6M
Pima County, Arizona

15161
June 2015
1" = 300'

2
of
2

LEGAL DESCRIPTION

A LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF PIMA, STATE OF ARIZONA, AND IS DESCRIBED AS FOLLOWS:

PARCEL NO. 1

ALL THAT PORTION OF GOVERNMENT LOT 5, 6, 7 AND 8 AND THE EAST ONE-HALF OF THE SOUTHWEST ONE-QUARTER AND THE SOUTHWEST ONE-QUARTER OF THE SOUTHWEST ONE-QUARTER OF SECTION 6, TOWNSHIP 17 SOUTH, RANGE 15 EAST, GILA AND SALT RIVER MERIDIAN, PIMA COUNTY, ARIZONA, LING NORTHWEST CORNER OF THE FOLLOWING DESCRIBED LINE:

COMMENCING AT THE WEST ONE-QUARTER OF SAID SECTION 6, MONUMENTED BY A 1-1/2" D.I.D. BEARS CAP ON IRON FROM WHICH THE SOUTHWEST CORNER OF SAID SECTION 6 BEARS S 00°17'19" E AT A DISTANCE OF 2540.81 FEET AS MONUMENTED BY A 1"4" IRON.

THENCE UPON THE WEST LINE OF SAID SECTION 6, S 00°17'19" E A DISTANCE OF 418.82 FEET TO THE POINT OF BEGINNING.

THENCE N 89°40'41" E A DISTANCE OF 145.42 FEET.

THENCE S 71°01'01" E A DISTANCE OF 2087.46 FEET TO THE NORTHWEST CORNER OF THE SOUTH ONE-HALF OF THE SOUTHWEST ONE-QUARTER OF SAID SECTION 6 AND THE POINT OF TERMINATION.

EXCLUDING THE WEST 15.00 FEET OF SAID LOTS 5 AND 6.

(TOGETHER WITH PARCEL NO. 2)

GOVERNMENT LOT 7 AND THE WEST ONE-HALF OF THE WEST ONE-HALF OF THE SOUTHWEST ONE-QUARTER OF THE SOUTHWEST ONE-QUARTER OF SECTION 6, TOWNSHIP 17 SOUTH, RANGE 15 EAST, GILA AND SALT RIVER MERIDIAN, PIMA COUNTY, ARIZONA.

EXCLUDING THE WEST 15.00 FEET OF SAID LOT 7.

(TOGETHER WITH PARCEL NO. 3)

THE NORTH ONE-HALF OF THE SOUTHWEST ONE-QUARTER OF SECTION 6, TOWNSHIP 17 SOUTH, RANGE 15 EAST, GILA AND SALT RIVER MERIDIAN, PIMA COUNTY, ARIZONA.

ONE-QUARTER OF THE NORTH ONE-HALF OF THE SOUTHWEST ONE-QUARTER OF SAID SOUTHWEST ONE-QUARTER.

PARCEL NO. 2

ALL THAT PORTION OF GOVERNMENT LOT 5, 6, 7 AND 8 AND THE EAST ONE-HALF OF THE SOUTHWEST ONE-QUARTER AND THE SOUTHWEST ONE-QUARTER OF THE SOUTHWEST ONE-QUARTER OF SECTION 6, TOWNSHIP 17 SOUTH, RANGE 15 EAST, GILA AND SALT RIVER MERIDIAN, PIMA COUNTY, ARIZONA, LING NORTHWEST CORNER OF THE FOLLOWING DESCRIBED LINE:

COMMENCING AT THE WEST ONE-QUARTER OF SAID SECTION 6, MONUMENTED BY A 1-1/2" D.I.D. BEARS CAP ON IRON FROM WHICH THE SOUTHWEST CORNER OF SAID SECTION 6 BEARS S 00°17'19" E AT A DISTANCE OF 2540.81 FEET AS MONUMENTED BY A 1"4" IRON.

THENCE S 00°17'19" E A DISTANCE OF 418.82 FEET TO

THE POINT OF BEGINNING THENCE N 89°40'41" E

A DISTANCE OF 145.42 FEET.

THENCE S 71°01'01" E A DISTANCE OF 2087.46 FEET TO THE NORTHWEST CORNER OF THE SOUTH ONE-HALF OF THE SOUTHWEST ONE-QUARTER OF SAID SECTION 6 AND THE POINT OF TERMINATION.

EXCLUDING THE WEST 15.00 FEET OF SAID LOTS 5 AND 6.

SCHEDULE B II ITEMS (SURVEYOR COMMENTS)

1. PROPERTY TAXES, WHICH ARE A TAX NOT AT THE DISCRETION OF ANY ASSIGNEE'S CHOICE, ARE TO BE PAID FOR THE YEAR 2022.

2. INTENTIONAL - SUBJECT

3. INTENTIONAL - SUBJECT

4. INTENTIONAL - SUBJECT

5. INTENTIONAL - SUBJECT

6. INTENTIONAL - SUBJECT

7. INTENTIONAL - SUBJECT

8. INTENTIONAL - SUBJECT

9. INTENTIONAL - SUBJECT

10. INTENTIONAL - SUBJECT

11. INTENTIONAL - SUBJECT

12. INTENTIONAL - SUBJECT

13. INTENTIONAL - SUBJECT

14. INTENTIONAL - SUBJECT

15. INTENTIONAL - SUBJECT

16. INTENTIONAL - SUBJECT

17. INTENTIONAL - SUBJECT

18. INTENTIONAL - SUBJECT

19. INTENTIONAL - SUBJECT

20. INTENTIONAL - SUBJECT

21. INTENTIONAL - SUBJECT

22. INTENTIONAL - SUBJECT

23. INTENTIONAL - SUBJECT

24. INTENTIONAL - SUBJECT

25. INTENTIONAL - SUBJECT

26. INTENTIONAL - SUBJECT

27. INTENTIONAL - SUBJECT

28. INTENTIONAL - SUBJECT

SCHEDULE B II ITEMS (SURVEYOR COMMENTS)

1. EASEMENTS FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THEREOF, AS GRANTED IN A DOCUMENT:

PURPOSE: ADDRESS & LOTS
RECORDING DATE: JANUARY 2, 1989
RECORDING NO: DOCKET 1362, PAGE 281 (SHOWN ON SURVEY)

2. EASEMENTS FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THEREOF, AS GRANTED IN A DOCUMENT:

PURPOSE: ELECTRIC LIGHT AND POWER COMPANY, A CORPORATION
RECORDING DATE: OCTOBER 13, 1962
RECORDING NO: DOCKET 2010, PAGE 137
AFFECTS: LOTS 2, 3, 4 AND 12
(SUBJECT EASEMENT AFFECTS LOT 1 OF SAID PARCEL - SHOWN ON SURVEY)

3. EASEMENTS FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THEREOF, AS GRANTED IN A DOCUMENT:

PURPOSE: TUCSON GAS & ELECTRIC COMPANY
RECORDING DATE: MAY 17, 1973
RECORDING NO: DOCKET 4572, PAGE 184
AFFECTS: LOT 12 (NOT ON SUBJECT PARCEL - NOT SHOWN)

4. EASEMENTS FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THEREOF, AS GRANTED IN A DOCUMENT:

PURPOSE: ADDRESS & LOTS
RECORDING DATE: JULY 25, 1989
RECORDING NO: DOCKET 3288, PAGE 800
AFFECTS: LOTS 1, 2, 3, 4 AND 12 AND THE EAST HALF OF THE SOUTHWEST QUARTER (SHOWN ON SURVEY - IN PLANT READ R/W - S. 80' OF LOT 848)

5. MATTERS CONTAINED IN THAT CERTAIN DOCUMENT:

WILSON'S PUBLIC WORKS DEVELOPMENT SERVICES
REQUEST TO NAME STREET OR TACKLE RECORDING
DATE: FEBRUARY 21, 2002
RECORDING NO: DOCKET 1141, PAGE 182
REFERENCE IS HEREBY MADE TO SAID DOCUMENT FOR FULL PARTICULARS (UNLAWFUL - NOT ON SUBJECT PARCEL - SHOWN ON SURVEY)

6. RESOLUTION NO. 2009-148 FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THEREOF, AS DESCRIBED IN A DOCUMENT:

PURPOSE: COMMUNITY PLAN AMENDMENT
RECORDING DATE: APRIL 21, 2009
RECORDING NO: DOCKET 1362, PAGE 281
AFFECTS: SECTION 6, TOWNSHIP 17 S, RANGE 15 E (AFFECTS SUBJECT PARCEL - SEE SAID DOCUMENT FOR SPECIFICS)

7. RESOLUTION NO. 2009-148 FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THEREOF, AS DESCRIBED IN A DOCUMENT:

PURPOSE: COMMUNITY PLAN AMENDMENT
RECORDING DATE: SEPTEMBER 2, 2009
RECORDING NO: DOCKET 1362, PAGE 281
AFFECTS: SECTION 6, TOWNSHIP 17 S, RANGE 15 E (AFFECTS SUBJECT PARCEL - SEE SAID DOCUMENT FOR SPECIFICS)

8. RESOLUTION NO. 2009-148 FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THEREOF, AS DESCRIBED IN A DOCUMENT:

PURPOSE: COMMUNITY PLAN AMENDMENT
RECORDING DATE: SEPTEMBER 2, 2009
RECORDING NO: DOCKET 1362, PAGE 281
AFFECTS: SECTION 6, TOWNSHIP 17 S, RANGE 15 E (AFFECTS SUBJECT PARCEL - SEE SAID DOCUMENT FOR SPECIFICS)

9. INTENTIONAL - SUBJECT

10. OBSERVANCE 2014-10 FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THEREOF, AS DESCRIBED IN A DOCUMENT:

PURPOSE: COMMUNITY PLAN AMENDMENT
RECORDING DATE: JANUARY 15, 2014
RECORDING NO: DOCKET 1362, PAGE 281
AFFECTS: SECTION 6, TOWNSHIP 17 S, RANGE 15 E (AFFECTS SUBJECT PARCEL - SEE SAID DOCUMENT FOR SPECIFICS)

11. INTENTIONAL - SUBJECT

12. AS UNDISCLOSED, LATE WITH CERTAIN TERMS, CONDITIONS AND PROVISIONS SET FORTH HEREIN AS DESCRIBED IN THE DOCUMENT:

ASSIGNMENT AND ASSUMPTION OF LEASE-18
ANDRADA BLVD. NO. 12, IN ARIZONA LIMITED LIABILITY COMPANY
MAURICIO DE LA ROSA
RECORDING DATE: AUGUST 30, 2013
RECORDING NO: DOCKET 1420, PAGE 184
(AFFECTS SUBJECT PARCEL - SEE SAID DOCUMENT FOR SPECIFICS)

13. AS UNDISCLOSED, LATE WITH CERTAIN TERMS, CONDITIONS AND PROVISIONS SET FORTH HEREIN AS DESCRIBED IN THE DOCUMENT:

ASSIGNMENT AND ASSUMPTION OF LEASE-18
ANDRADA BLVD. NO. 12, IN ARIZONA LIMITED LIABILITY COMPANY
MAURICIO DE LA ROSA
RECORDING DATE: SEPTEMBER 11, 2013
RECORDING NO: DOCKET 1420, PAGE 184
(AFFECTS SUBJECT PARCEL - SEE SAID DOCUMENT FOR SPECIFICS)

14. AS UNDISCLOSED, LATE WITH CERTAIN TERMS, CONDITIONS AND PROVISIONS SET FORTH HEREIN AS DESCRIBED IN THE DOCUMENT:

ASSIGNMENT AND ASSUMPTION OF LEASE-18
ANDRADA BLVD. NO. 12, IN ARIZONA LIMITED LIABILITY COMPANY
MAURICIO DE LA ROSA
RECORDING DATE: SEPTEMBER 11, 2013
RECORDING NO: DOCKET 1420, PAGE 184
(AFFECTS SUBJECT PARCEL - SEE SAID DOCUMENT FOR SPECIFICS)

15. AS UNDISCLOSED, LATE WITH CERTAIN TERMS, CONDITIONS AND PROVISIONS SET FORTH HEREIN AS DESCRIBED IN THE DOCUMENT:

ASSIGNMENT AND ASSUMPTION OF LEASE-18
ANDRADA BLVD. NO. 12, IN ARIZONA LIMITED LIABILITY COMPANY
MAURICIO DE LA ROSA
RECORDING DATE: SEPTEMBER 11, 2013
RECORDING NO: DOCKET 1420, PAGE 184
(AFFECTS SUBJECT PARCEL - SEE SAID DOCUMENT FOR SPECIFICS)

16. AS UNDISCLOSED, LATE WITH CERTAIN TERMS, CONDITIONS AND PROVISIONS SET FORTH HEREIN AS DESCRIBED IN THE DOCUMENT:

ASSIGNMENT AND ASSUMPTION OF LEASE-18
ANDRADA BLVD. NO. 12, IN ARIZONA LIMITED LIABILITY COMPANY
MAURICIO DE LA ROSA
RECORDING DATE: SEPTEMBER 11, 2013
RECORDING NO: DOCKET 1420, PAGE 184
(AFFECTS SUBJECT PARCEL - SEE SAID DOCUMENT FOR SPECIFICS)

17. AS UNDISCLOSED, LATE WITH CERTAIN TERMS, CONDITIONS AND PROVISIONS SET FORTH HEREIN AS DESCRIBED IN THE DOCUMENT:

ASSIGNMENT AND ASSUMPTION OF LEASE-18
ANDRADA BLVD. NO. 12, IN ARIZONA LIMITED LIABILITY COMPANY
MAURICIO DE LA ROSA
RECORDING DATE: SEPTEMBER 11, 2013
RECORDING NO: DOCKET 1420, PAGE 184
(AFFECTS SUBJECT PARCEL - SEE SAID DOCUMENT FOR SPECIFICS)

18. AS UNDISCLOSED, LATE WITH CERTAIN TERMS, CONDITIONS AND PROVISIONS SET FORTH HEREIN AS DESCRIBED IN THE DOCUMENT:

ASSIGNMENT AND ASSUMPTION OF LEASE-18
ANDRADA BLVD. NO. 12, IN ARIZONA LIMITED LIABILITY COMPANY
MAURICIO DE LA ROSA
RECORDING DATE: SEPTEMBER 11, 2013
RECORDING NO: DOCKET 1420, PAGE 184
(AFFECTS SUBJECT PARCEL - SEE SAID DOCUMENT FOR SPECIFICS)

19. AS UNDISCLOSED, LATE WITH CERTAIN TERMS, CONDITIONS AND PROVISIONS SET FORTH HEREIN AS DESCRIBED IN THE DOCUMENT:

ASSIGNMENT AND ASSUMPTION OF LEASE-18
ANDRADA BLVD. NO. 12, IN ARIZONA LIMITED LIABILITY COMPANY
MAURICIO DE LA ROSA
RECORDING DATE: SEPTEMBER 11, 2013
RECORDING NO: DOCKET 1420, PAGE 184
(AFFECTS SUBJECT PARCEL - SEE SAID DOCUMENT FOR SPECIFICS)

20. AS UNDISCLOSED, LATE WITH CERTAIN TERMS, CONDITIONS AND PROVISIONS SET FORTH HEREIN AS DESCRIBED IN THE DOCUMENT:

ASSIGNMENT AND ASSUMPTION OF LEASE-18
ANDRADA BLVD. NO. 12, IN ARIZONA LIMITED LIABILITY COMPANY
MAURICIO DE LA ROSA
RECORDING DATE: SEPTEMBER 11, 2013
RECORDING NO: DOCKET 1420, PAGE 184
(AFFECTS SUBJECT PARCEL - SEE SAID DOCUMENT FOR SPECIFICS)

GENERAL NOTES

1. BASIS OF BEARING:
N 00°17'02" E AT A DISTANCE OF 1393.63' ALONG THE WEST LINE OF THE NORTHWEST ONE-QUARTER OF SECTION 6 FROM MONUMENTS AS SHOWN HEREIN FROM THE SW COR. OF SECTION 36, T-16-S, R-14-E, TO THE NW COR. OF SECTION 6, T-17-S, R-15-E, AS REFERENCED IN RECORD OF SURVEY SEQ. NO. 20100100160. SEE SAID SURVEY FOR CONTROL STATEMENT.

2. THIS SURVEY WAS PREPARED WITH THE BENEFIT OF A COMMITMENT FOR TITLE INSURANCE PREPARED BY FIDELITY NATIONAL TITLE - ISSUING OFFICE: 1 SOUTH CHURCH AVE., SUITE 1410, TUCSON, AZ, 85701

FILE NO. 20000796-020-BOR-PK3
WITH A COMMITMENT DATE OF JANUARY 10, 2022

PSOMAS ASSUMES NO LIABILITY FOR INCOMPLETE AND/OR INADEQUATE INFORMATION CONTAINED IN SAID REPORTS.

3. UTILITY NOTE:
ABOVE GROUND UTILITIES SHOWN PER FIELD SURVEY. NO BLUESTAKE OR UTILITY MAPS PROVIDED.

PSOMAS ASSUMES NO RESPONSIBILITY OR MAKES NO GUARANTEE THAT UTILITIES SHOWN COMPRISE ALL UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED.

4. AREA OF SUBJECT PARCEL:
TOTAL: 359.14 ACRES, MORE OR LESS.
PHASE 1: 234.24 ACRES, PHASE 2: 124.90 ACRES

5. DIMENSIONS SHOWN FROM PROPERTY TO EXISTING OBJECTS (UTILITIES, WALLS, FENCES AND OTHER IMPROVEMENTS) ARE MEASURED PERPENDICULAR TO THE PROPERTY LINE FROM THE EDGE OF THE OBJECT APPLICABLE FOR OBJECTS WITHIN 5' OF PROPERTY LINE.

6. REVA 2022 SUBJECT PARCEL LIES WITHIN FIRM MAP NO. 240100000, WITH A MAP EFFECTIVE DATE JUNE 16, 2011. NO PRINTED MAPS AVAILABLE.

7. RECTIFIED O'DONOGHUE WAS DERIVED FROM THE PAG (PIMA ASSOCIATION OF GOVERNMENTS) 1:25,000 PHOTOGRAPHY PLUS, DATED 2005. IT SHALL BE NOTED THAT SIGHT VARIATIONS IN THE ACTUAL LOCATIONS OF STRUCTURES OR OTHER LANDMARKS MAY OCCUR DUE TO THE INHERENT INADEQUACY OF THE PHOTOGRAPHY, I.E. TRANSLATION, ROTATION AND SCALE. NO FURTHER SIGHT VARIATIONS IN THE ACTUAL LOCATIONS OF STRUCTURES OR OTHER LANDMARKS MAY OCCUR DUE TO SAID SIGHT VARIATIONS.

8. CURRENT PROPERTY INFORMATION:
APN: 305-23-018A, APN: 305-23-018B, APN: 305-23-018C & APN: 305-23-018D
DEED SEQ. NO. 20137420846, DEED SEQ. NO. 20137420851, DEED SEQ. NO. 20137420856, DEED SEQ. NO. 20137420861
ANDRADA BLVD. NO. 12, IN ARIZONA LIMITED LIABILITY COMPANY
MAURICIO DE LA ROSA
RECORDING DATE: SEPTEMBER 11, 2013
RECORDING NO: DOCKET 1420, PAGE 184
(AFFECTS SUBJECT PARCEL - SEE SAID DOCUMENT FOR SPECIFICS)

9. CURRENT PROPERTY INFORMATION:
APN: 305-23-018A, APN: 305-23-018B, APN: 305-23-018C & APN: 305-23-018D
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ANDRADA BLVD. NO. 12, IN ARIZONA LIMITED LIABILITY COMPANY
MAURICIO DE LA ROSA
RECORDING DATE: SEPTEMBER 11, 2013
RECORDING NO: DOCKET 1420, PAGE 184
(AFFECTS SUBJECT PARCEL - SEE SAID DOCUMENT FOR SPECIFICS)

10. CURRENT PROPERTY INFORMATION:
APN: 305-23-018A, APN: 305-23-018B, APN: 305-23-018C & APN: 305-23-018D
DEED SEQ. NO. 20137420846, DEED SEQ. NO. 20137420851, DEED SEQ. NO. 20137420856, DEED SEQ. NO. 20137420861
ANDRADA BLVD. NO. 12, IN ARIZONA LIMITED LIABILITY COMPANY
MAURICIO DE LA ROSA
RECORDING DATE: SEPTEMBER 11, 2013
RECORDING NO: DOCKET 1420, PAGE 184
(AFFECTS SUBJECT PARCEL - SEE SAID DOCUMENT FOR SPECIFICS)

11. CURRENT PROPERTY INFORMATION:
APN: 305-23-018A, APN: 305-23-018B, APN: 305-23-018C & APN: 305-23-018D
DEED SEQ. NO. 20137420846, DEED SEQ. NO. 20137420851, DEED SEQ. NO. 20137420856, DEED SEQ. NO. 20137420861
ANDRADA BLVD. NO. 12, IN ARIZONA LIMITED LIABILITY COMPANY
MAURICIO DE LA ROSA
RECORDING DATE: SEPTEMBER 11, 2013
RECORDING NO: DOCKET 1420, PAGE 184
(AFFECTS SUBJECT PARCEL - SEE SAID DOCUMENT FOR SPECIFICS)

12. CURRENT PROPERTY INFORMATION:
APN: 305-23-018A, APN: 305-23-018B, APN: 305-23-018C & APN: 305-23-018D
DEED SEQ. NO. 20137420846, DEED SEQ. NO. 20137420851, DEED SEQ. NO. 20137420856, DEED SEQ. NO. 20137420861
ANDRADA BLVD. NO. 12, IN ARIZONA LIMITED LIABILITY COMPANY
MAURICIO DE LA ROSA
RECORDING DATE: SEPTEMBER 11, 2013
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(AFFECTS SUBJECT PARCEL - SEE SAID DOCUMENT FOR SPECIFICS)

13. CURRENT PROPERTY INFORMATION:
APN: 305-23-018A, APN: 305-23-018B, APN: 305-23-018C & APN: 305-23-018D
DEED SEQ. NO. 20137420846, DEED SEQ. NO. 20137420851, DEED SEQ. NO. 20137420856, DEED SEQ. NO. 20137420861
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RECORDING DATE: SEPTEMBER 11, 2013
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14. CURRENT PROPERTY INFORMATION:
APN: 305-23-018A, APN: 305-23-018B, APN: 305-23-018C & APN: 305-23-018D
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(AFFECTS SUBJECT PARCEL - SEE SAID DOCUMENT FOR SPECIFICS)

16. CURRENT PROPERTY INFORMATION:
APN: 305-23-018A, APN: 305-23-018B, APN: 305-23-018C & APN: 305-23-018D
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17. CURRENT PROPERTY INFORMATION:
APN: 305-23-018A, APN: 305-23-018B, APN: 305-23-018C & APN: 305-23-018D
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ANDRADA BLVD. NO. 12, IN ARIZONA LIMITED LIABILITY COMPANY
MAURICIO DE LA ROSA
RECORDING DATE: SEPTEMBER 11, 2013
RECORDING NO: DOCKET 1420, PAGE 184
(AFFECTS SUBJECT PARCEL - SEE SAID DOCUMENT FOR SPECIFICS)

18. CURRENT PROPERTY INFORMATION:
APN: 305-23-018A, APN: 305-23-018B, APN: 305-23-018C & APN: 305-23-018D
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ANDRADA BLVD. NO. 12, IN ARIZONA LIMITED LIABILITY COMPANY
MAURICIO DE LA ROSA
RECORDING DATE: SEPTEMBER 11, 2013
RECORDING NO: DOCKET 1420, PAGE 184
(AFFECTS SUBJECT PARCEL - SEE SAID DOCUMENT FOR SPECIFICS)

19. CURRENT PROPERTY INFORMATION:
APN: 305-23-018A, APN: 305-23-018B, APN: 305-23-018C & APN: 305-23-018D
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ANDRADA BLVD. NO. 12, IN ARIZONA LIMITED LIABILITY COMPANY
MAURICIO DE LA ROSA
RECORDING DATE: SEPTEMBER 11, 2013
RECORDING NO: DOCKET 1420, PAGE 184
(AFFECTS SUBJECT PARCEL - SEE SAID DOCUMENT FOR SPECIFICS)

20. CURRENT PROPERTY INFORMATION:
APN: 305-23-018A, APN: 305-23-018B, APN: 305-23-018C & APN: 305-23-018D
DEED SEQ. NO. 20137420846, DEED SEQ. NO. 20137420851, DEED SEQ. NO. 20137420856, DEED SEQ. NO. 20137420861
ANDRADA BLVD. NO. 12, IN ARIZONA LIMITED LIABILITY COMPANY
MAURICIO DE LA ROSA
RECORDING DATE: SEPTEMBER 11, 2013
RECORDING NO: DOCKET 1420, PAGE 184
(AFFECTS SUBJECT PARCEL - SEE SAID DOCUMENT FOR SPECIFICS)

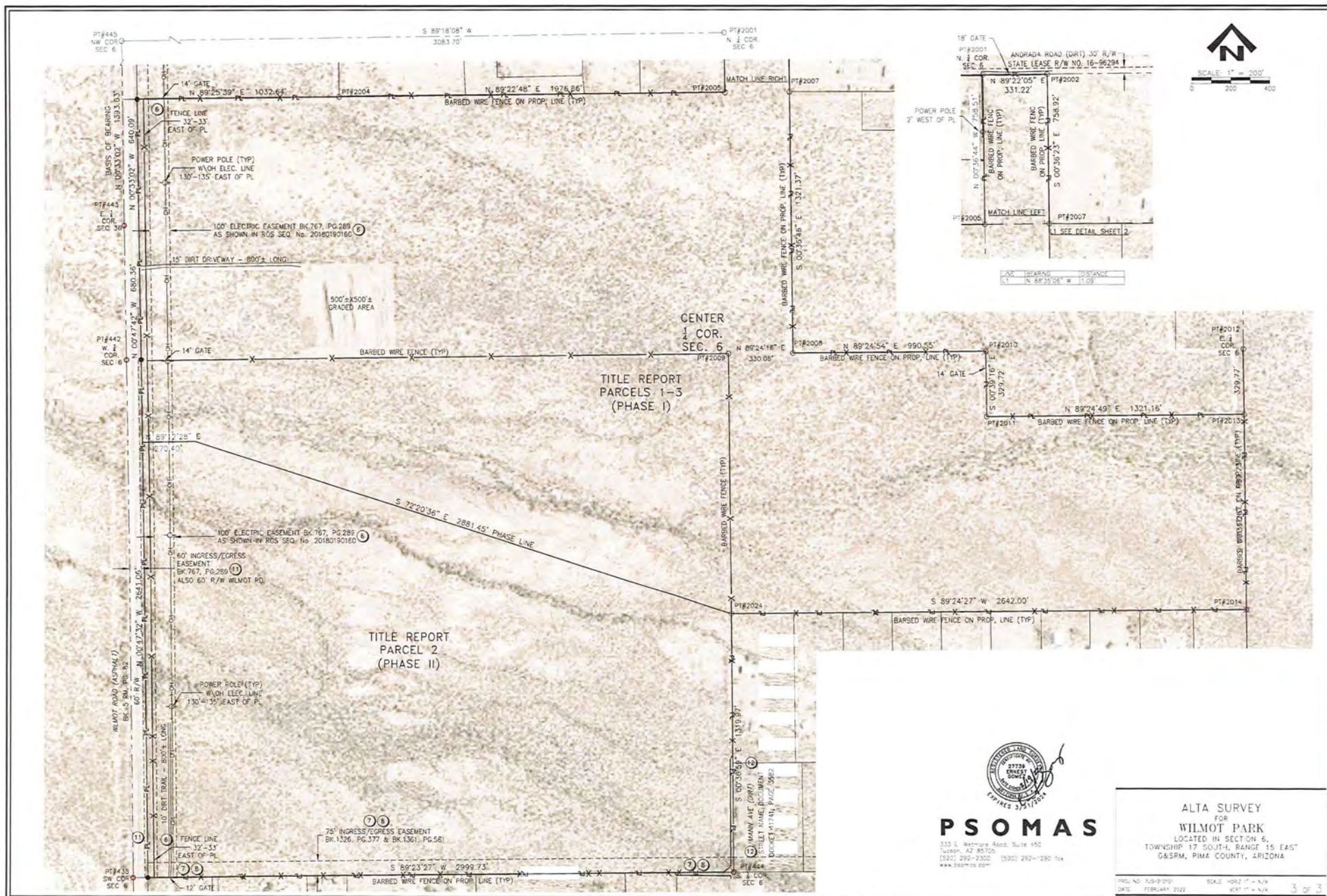
21. CURRENT PROPERTY INFORMATION:
APN: 305-23-018A, APN: 305-23-018B, APN: 305-23-018C & APN: 305-23-018D
DEED SEQ. NO. 20137420846, DEED SEQ. NO. 20137420851, DEED SEQ. NO. 20137420856, DEED SEQ. NO. 20137420861
ANDRADA BLVD. NO. 12, IN ARIZONA LIMITED LIABILITY COMPANY
MAURICIO DE LA ROSA
RECORDING DATE: SEPTEMBER 11, 2013
RECORDING NO: DOCKET 1420, PAGE 184
(AFFECTS SUBJECT PARCEL - SEE SAID DOCUMENT FOR SPECIFICS)

22. CURRENT PROPERTY INFORMATION:
APN: 305-23-018A, APN: 305-23-018B, APN: 305-23-018C & APN: 305-23-018D
DEED SEQ. NO. 20137420846, DEED SEQ. NO. 20137420851, DEED SEQ. NO. 20137420856, DEED SEQ. NO. 20137420861
ANDRADA BLVD. NO. 12, IN ARIZONA LIMITED LIABILITY COMPANY
MAURICIO DE LA ROSA
RECORDING DATE: SEPTEMBER 11, 2013
RECORDING NO: DOCKET 1420, PAGE 184
(AFFECTS SUBJECT PARCEL - SEE SAID DOCUMENT FOR SPECIFICS)

23. CURRENT PROPERTY INFORMATION:
APN: 305-23-018A, APN: 305-23-018B, APN: 305-23-018C & APN: 305-23-018D
DEED SEQ. NO. 20137420846, DEED SEQ. NO. 20137420851, DEED SEQ. NO. 20137420856, DEED SEQ. NO. 20137420861
ANDRADA BLVD. NO. 12, IN ARIZONA LIMITED LIABILITY COMPANY
MAURICIO DE LA ROSA
RECORDING DATE: SEPTEMBER 11, 2013
RECORDING NO: DOCKET 1420, PAGE 184
(AFFECTS SUBJECT PARCEL - SEE SAID DOCUMENT FOR SPECIFICS)

24. CURRENT PROPERTY INFORMATION:
APN: 305-23-018A, APN: 305-23-018B, APN: 305-23-018C & APN: 305-23-018D
DEED SEQ. NO. 20137420846, DEED SEQ. NO





APPENDIX B

Pima County Conditional Use Permit Application

APPENDIX C

Project Site Plan

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF PIMA, STATE OF ARIZONA, AND IS DESCRIBED AS FOLLOWS:

PARCEL 1
LOT 4 AND THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF
SECTION 3, TOWNSHIP 15 SOUTH, RANGE 10 EAST, CLIA AND SALT RIVER
BASE, AND MORGAN, GIMA COUNTY, ARIZONA.

SECTION 4, TOWNSHIP 13 SOUTH, RANGE 16 EAST, GILA AND SALT RIVER
BASIN AND MORGAN, PIMA COUNTY, ARIZONA, EXCEPT THE SOUTH HALF
OF THE SOUTH HALF AND THE SOUTH HALF OF THE NORTH HALF OF THE

PARCEL 3
THE SOUTH HALF OF THE SOUTH HALF AND THE SOUTH HALF OF THE
NORTH HALF OF THE SOUTH HALF OF SECTION 4, TOWNSHIP 17 SOUTH,
RANGE 15 EAST, GILA AND SALT RIVER BASIN AND
MOHAWK INDIAN COUNTY, ARIZONA.

PARCEL 4:
LDT 4 AND THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF
SECTION 5, TOWNSHIP 17 SOUTH, RANGE 15 EAST, GILA AND SALT RIVER
BASE AND MORGAN, HMA COUNTY, ARIZONA

RANGE 5
LOT 11 AND THE EAST HALF OF THE EAST HALF OF THE SOUTHEAST
QUARTER OF THE NORTHEAST QUARTER OF SECTION 6, TOWNSHIP 13
SOUTH, RANGE 15 EAST, GILA AND SALT RIVER BASIN AND
MOHICAN, PIMA COUNTY, ARIZONA

PARCEL B
THAT PORTION OF LAND WITHIN SECTION 6, TOWNSHIP 17 SOUTH, RANGE
15 EAST, CLAY AND SALT RIVER MERIDIAN, PIMA COUNTY, ARIZONA, MORE
PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A FOUND 1/2 INCH REBAR TAGGED "PLOT REF 3" PNA COUNTY DOT CONTROL POINT 175152 AND FROM WHICH A FOUND 1/2 INCH REBAR TAGGED "PLOT REF 21" PNA COUNTY DOT CONTROL POINT 175151 AND BEARS SOUTH 86 DEGREES 52 MINUTES 13 SECONDS EAST A DISTANCE OF 6884.35 FEET.

THE END OF THE EASTERN RIGHT-OF-WAY OF WILMOT ROAD, SOUTH-
EAST CORNER OF THE INTERSECTION OF WILMOT ROAD AND

TRAVEL ALONG THE COMMON LINE BETWEEN OLD ROUTE 10, WEST AND
EAST SIDES, 800' TO OLD ROUTE 10, 1/4 MILE FROM INTERSECTION WITH OLD 1.

DISTANCE OF 13' 55" FEET TO A PLAIN 1/2" INCH RUBBER
TAPSCOT 4.5" 12" ON THE NORTHWESTERS CORNER END OF PAROLE
100-93-000A

CHRYSLER CONTINUES ALONG S.W. CORNER AVE. 300' - 400' DISTANCE TO
THE WEST. A SECOND LANE A DISTANCE OF 25' TO 30' A ROAD
1/2 MILE BEHIND TARGET POINT 100' 1/4.

TWENTY ALONG THE SOUTHERLY LINE OF SAG PARCEL, NORTH 89
DEGREES 57 MINUTES 00 SECONDS EAST DISTANCE 10.3482 (10.35)
10.35

THINK ALONG - EASTERN END OF SAN JUAN, NORTH-NE CORNER
OF MOUNTAIN ROAD, 2.5 MI. N. OF A. 101 AND OF 101. 101 TO A. 101
- 101. 101 TO A. 101. 101 TO A. 101.

THREE RING WIRE SOLUTION - 1/2 OF PART. JOHN-23-2379. NORTH
83 DEGREE 58 MINUTES 28 SECONDS EAST AND 5000 IN 2566 75
FEET. 3/4 RING WIRE. 1/2 RING WIRE. 1/2 RING WIRE.

BOUNDS: DOWNSTREAM ALONG R. 50' W. 49' E. LINE OF PARCELS
 101-03-0000 NORTH 89 DEGREES 45 MINUTES 35 SECONDS EAST A
 DISTANCE OF 14.63 FEET TO A POINT 1/2 50' RIGHT BOUNDARY
 1/4 MILE

[illegible]

THESE ALLOCATIONS SONT EN VUE DES BESOINS DES MEMBRES DE LA COMMUNAUTE. LE BUDGET EST D'ENVIRON 100 MILLIARDS DE DOLLARS.

THREE ALONG THE NORTHERN, AND ON SAG RIVER, 10.7 N. 89.
DOUGLAS, 10.7 N. 89. DOUGLAS, 10.7 N. 89. DOUGLAS, 10.7 N. 89.
DOUGLAS, 10.7 N. 89. DOUGLAS, 10.7 N. 89. DOUGLAS, 10.7 N. 89.

W. ALONG THE EASTERN N. OF SAN CARLOS, N.M. IN 1908
 (N. 1/4 SEC. 35, T. 20 N., R. 10 E., S. 10 E.)

WINDY ALONG THE SHORELINE - ON 24 JUL, WINDY 20-25 KNOTS
AND 6-10' WAVES, SOLAR 69 DEGREES 31 MINUTE 22 SECONDS WEST
ON 25 JULY OF 230 DEGREE.

THENCE ALONG THE SOUTHERN * N. OF S&S HATCHERY, 88 CHAINS
40 MILES, 84 CHAINS, WEST TO DISTANCE OF 222.64 FEET TO THE

14071 AS A PORTION OF THE LAND CONVEYED TO THE COUNTY IN
SPECIAL WARRANT 3881 RECORDED JULY 11, 2014 IN RECORD NO.
2014-000148

FOR

PORTION OF SECTIONS 3, 4, 5, & 6, TOWNSHIP 17 SOUTH, RANGE 15 EAST, G&SRM

PIMA COUNTY, ARIZONA



OVERALL DEVELOPMENT MAP



SHEET LIST TABLE	
SHEET NUMBER	SHEET TITLE
2-0	COVER SHEET
0-0	GENERAL NOTES
1-0	GENERAL SITE PLAN, ASSESS
1-1	SITE PLAN
1-2	SITE PLAN
1-3	SITE PLAN
1-4	SITE PLAN
1-5	SITE PLAN
1-6	SITE PLAN
1-7	SITE PLAN
1-8	SITE PLAN
1-9	SITE PLAN
2-0	PLAN, SECTION 5
2-1	PLAN, SECTION 5
2-2	PLAN, SECTION 5
2-3	SECTION, SECTION 5

[illegible]

2025 RELEASE UNDER E.O. 14176

W.MOT - SOLAR
SOUTHEAST OF SOUTH W.MOT ROAD MILE 18.5, ANGELES FOR
GMA COUNTY, ARIZONA
DATED JAN 28 2003
REPORTED BY TERRACON SOLAR, TANTS, AZ

SAVE ROSE
BARKER JASON
WILSON ENERGY CENTER
750 LAVERGNE BL. EVARTS
JAN BEACH, FLORIDA 33408
772-233-9600

4517—ORN AND ASSOCIATES, INC.
100 WEST SOUTHERN AVENUE, SUITE 11
MOBILE 47 80210
(460) 561-7438

APPLICANT NAME	NEXTERA ENERGY RESOURCES, LLC
APN	305-23-015A
	305-23-018D
	305-23-028A
	305-23-027B
	305-23-043D
	305-22-005D
SOLAR DEVELOPMENT	205-22-003D
	305-22-004A
	305-22-004B
TOTAL AREA	107516 ACRES
ZONING	DP-S, RM, TR, SP, & CB-1
LAND USE DESIGNATION	RURAL DEVELOPMENT
SPECIFIC LAND USE	130 MW SOLAR PHOTOVOLTAIC ENERGY PRODUCTION FACILITY
SURROUNDING ZONING	RM (PIMA COUNTY) & RM (TUCSON)
SURROUNDING OWNERS	VARIES
FRONT SETBACK	50' MIN
REAR SETBACK	50' MIN
SIDE SETBACK	20' MIN
LANDSCAPE SETBACK	20' UNDISTURBED NATURAL DESERT

```

10  C=0; I=0; J=0;
11  DO WHILE C<=N
12    C=C+1
13    DO WHILE I<=M
14      I=I+1
15      DO WHILE J<=K
16        J=J+1
17        A(I,J,C)=1
18      END DO
19    END DO
20  END DO
21  STOP
22  END

```

WILMOT
ENERGY
CENTER II, LLC

Kimley»Horn
 2029 KIMLEY HORN AVE. ALBUQUERQUE, NM
 8001 W. 56th STREET, APT. 101, SUITE 301
 MESA, AZ 85205

PRELIMINARY
FOR REVIEW ONLY
NOT FOR CONSTRUCTION

Kimley-Horn

[illegible]

COVER SHEET

WILMOT II

C1.0



THE CONTRACTOR AND SUBCONTRACTORS SHOULD BE FAMILIAR WITH ALL STATE AND LOCAL REQUIREMENTS RELATED TO SITE CONSTRUCTION ACTIVITIES PRIOR TO COMMENCING WORK. ALL WORK SHALL CONFORM AS APPLICABLE TO THESE GOVERNING STANDARDS AND SPECIFICATIONS.

- ## DEMOLITION NOTES

WANT TO SEE A SAMPLE OF OUR WORK? VISIT US ONLINE AT WWW.MCMILLANCONSTRUCTION.COM OR CALL US AT 800-368-6622. WE'LL SHOW YOU THE QUALITY OF OUR CONSTRUCTION. **WE'VE GOT YOU COVERED.**

ALL PLANS, CONSTRUCTION MATERIALS, AND WORKMANSHIP WITHIN JURISDICTION'S RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH LOCAL OR COUNTY SPECIFICATIONS AND STANDARDS (LATEST EDITION) OR STATE SPECIFICATIONS AND STANDARDS (LATEST EDITION) IF NOT COVERED BY LOCAL OR COUNTY REGULATIONS.

- ## MAINTENANCE

PLEASE BE CONTACTED BY ALISON WATSON ON 020 7043 71457.

- PROJECT CLOSEOUT NOTES

[illegible]

SITE PLAN

SITE PLAN

SWR 44 12102 810
 575 44 NW881
 175 44 117055 04
 NW885 5V 10625
 vane/s/v
 0.00

Kimley-Horn

Kimley-Horn & Associates, Inc.
1001 West Southern Avenue, Suite 117
Mesa, AZ 85201
Phone: 480-201-0600
WWW.KH-CON.COM

WILMOT
ENERGY
CENTER II, LLC

[illegible]

NTS



KEY MAP

ESAHUARITA RD



TYPE OF AREA	ACRES TO BE DEVELOPED	TOTAL ACRES	% DEVELOPED
RE-O	332.54	602.05	55%
FRN	28.38	153.84	18%
CL	17.62	104.94	17%
CUP	251.11	473.11	53%

NO. 507 BACK - 40V RESISTANCE
574, 507, 502

THE NEW YORK PUBLIC LIBRARY

РЕПУБЛИКА БЪЛГАРИЯ, АЗБУКА (ИЛД)
ОБЩО


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 ASIA

50. By Apollonius

RIVERTRIP EQUIPMENT

WAVELENGTH (nm) ———→

STATE	STR. ACCESS

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3 SHEET C&G

STANDARD OPERATING SECURITY
 CONTROL DEPARTMENT: C-6

ENHANCING THE QUALITY OF THE ENVIRONMENT

RECEIVED: 1997 JAN 14

ACCEPTED: 1997 APR 15

ENDING OVERHEAD UTILITY LINE

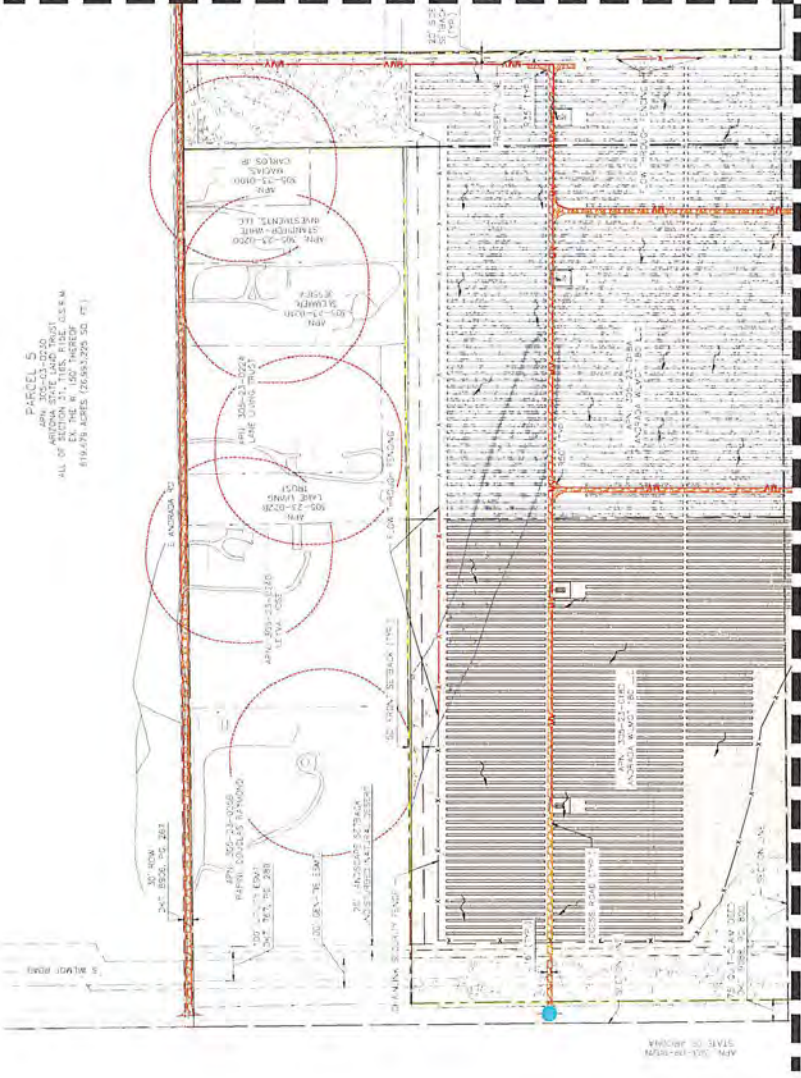
SECTION LINE

— — — — — ELEMENT LINE

SETBACK LINE

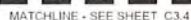
LEGEND


MATCHLINE - SEE SHEET C3.2




PARCEL 5
APN 305-03-0020
ARIZONA STATE LAND TRUST
ALL OF SECTION 21, T10N, R10E, Q.5R.4M
EX. THE W. 150' THEREOF
619.47% ACRES (26,983,325.50 S.F.)

MATCHLINE - SEE SHEET C3.3



REGISTRATION AREA
AREA

POSTAL ADDRESS AND PHONE NO.
OR FAX

CONCURRENCE AREA


[illegible]

LEGEND

SITE PLAN

KIMLEY-HORN
 791 793000
 (415)
 4/3/2024
 RAK AS SHWAN
 ESCORT RE. S.
 DRAWING: G2
 14-00000-000-0000

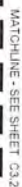
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Kimley-Horn
 ENGINEERS, INC. 111 STREET
 PL. NO. 24122, DALLAS, TEXAS

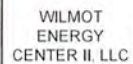
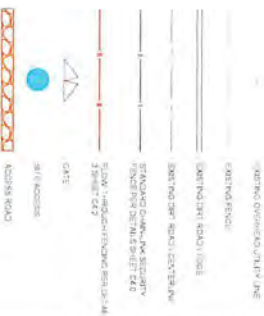
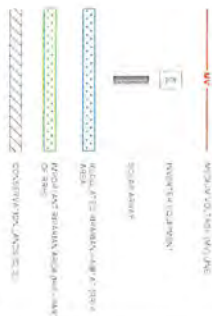
Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
1000 WEST SOUTHERN AVENUE, SUITE 130
MESA, AZ 85210
PHONE: 800-207-2986
WWW.KIMLEY-HORN.COM

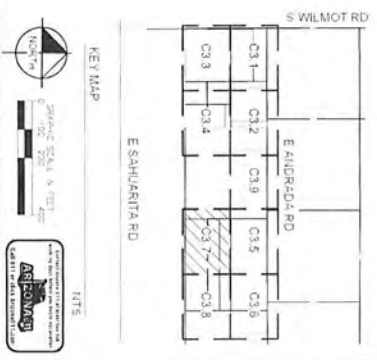
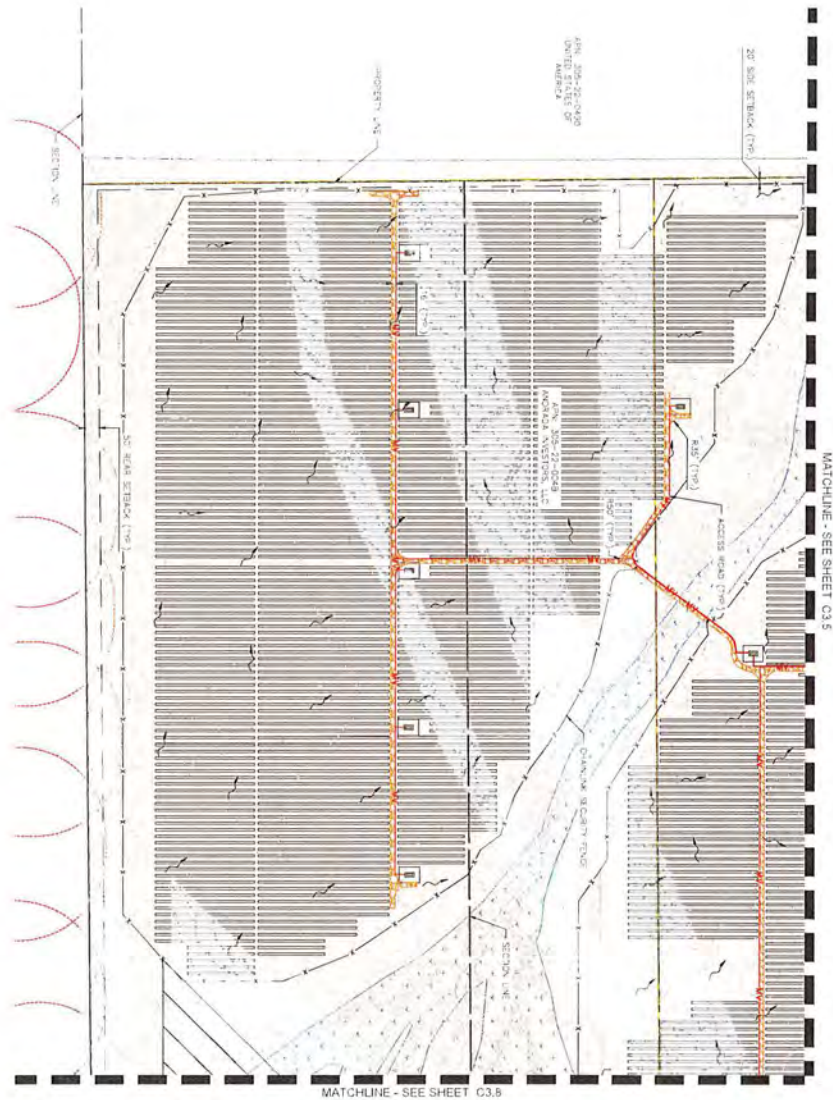
WILMOT
ENERGY
CENTER II, LLC

C3.3

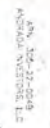
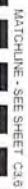


TYPE OF AKA ACRES TO BE DEVELOPED	TOTAL ACRES	% DEVELOPED
RED	332.54	53%
B884	153.84	18%
C45	17.62	17%
C4P	251.11	47%

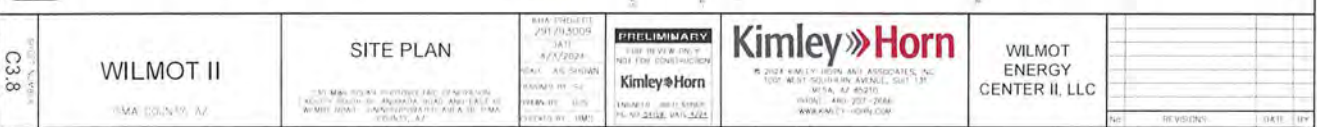


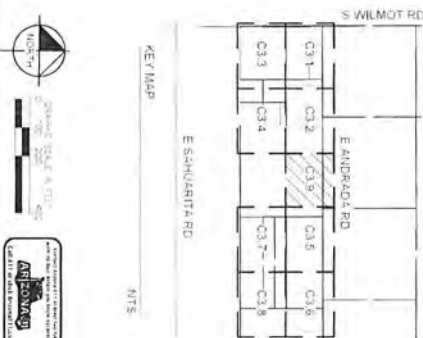
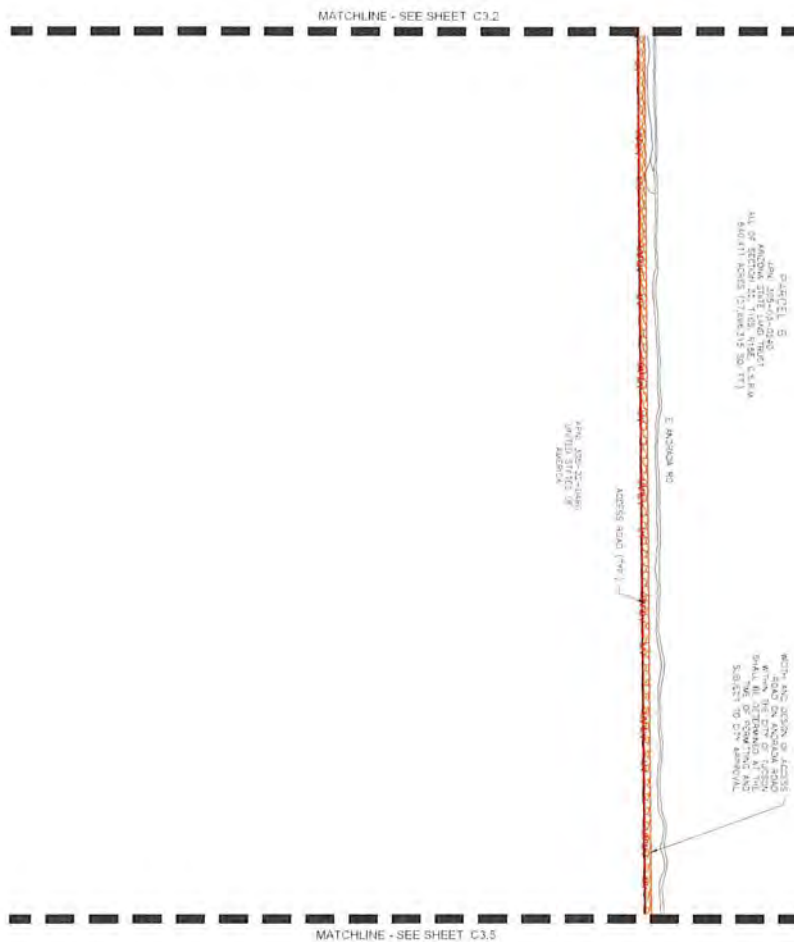
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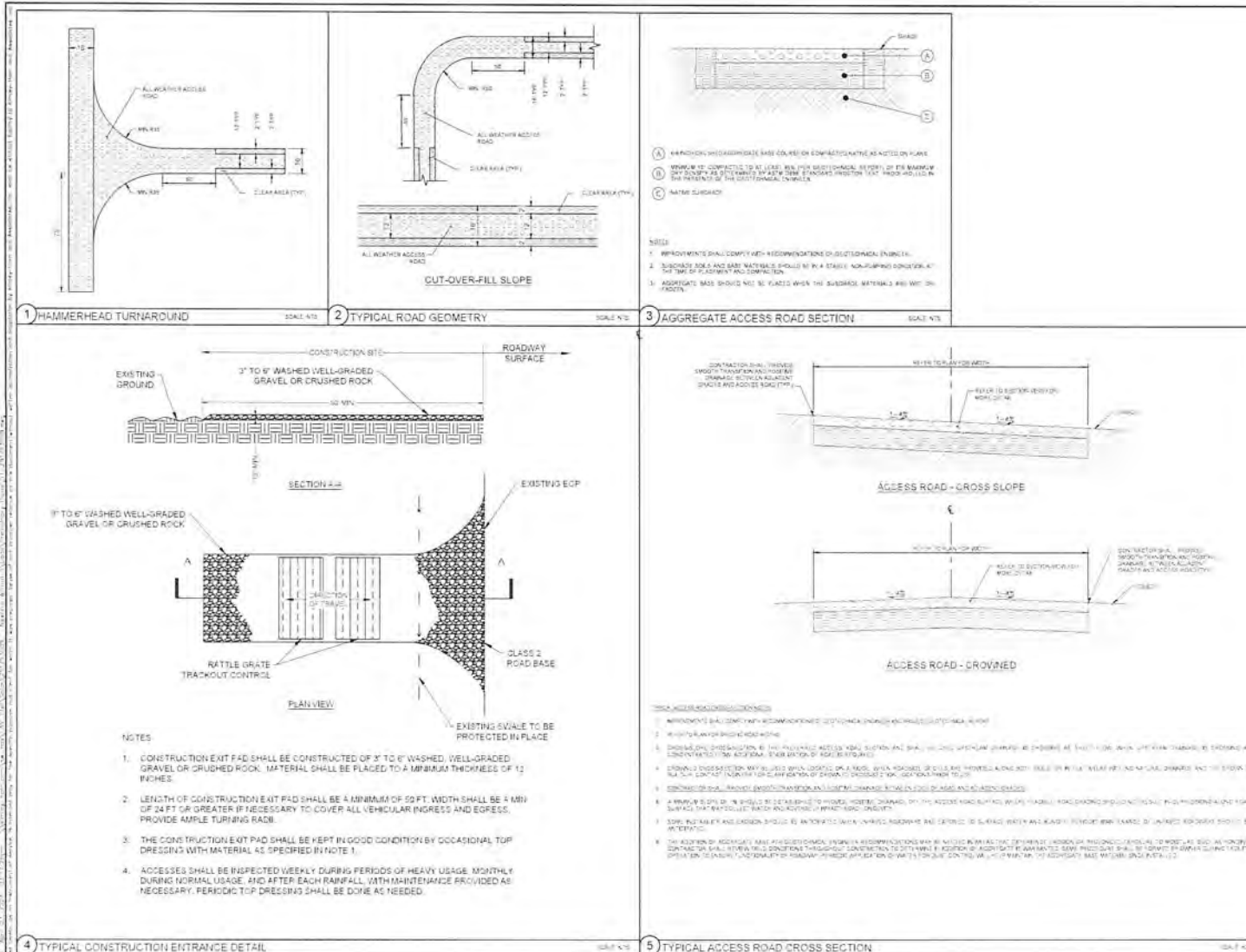
C3.7	<p>WILMOT II</p> <p>PRIMA COUNTY, AZ</p>	<p>SITE PLAN</p> <p>1.50 MW AC AIR COOLED GAS COMBUSTION TURBINE SYSTEM, ANTIWIND DRAIN AND EAST OF WILMOT ROAD, ANTIWIND ROAD, AKA OF PRIMA COUNTY, AZ</p>	<p>NOA: PRIMA CO 2/17/2020 DATE 4/3/2024 NOA: RES-TRANS ISSUED BY: SL FORM BY: SL ISSUED BY: JMS</p>	<p>PRELIMINARY</p> <p>1.50 MW AC AIR COOLED GAS COMBUSTION TURBINE SYSTEM, ANTIWIND DRAIN AND EAST OF WILMOT ROAD, ANTIWIND ROAD, AKA OF PRIMA COUNTY, AZ</p> <p>Kimley-Horn</p> <p>1000 N. 20TH STREET SUITE 200 PHOENIX, AZ 85016</p>	<p>Kimley-Horn</p> <p>2024 KIMLEY-HORN AND ASSOCIATES, INC. 7001 WEST SOUTHERN AVENUE, SUITE 100 MESA, AZ 85202 PHOENIX: 480-251-2666 WWW.KIMLEY-HORN.COM</p>	<p>WILMOT ENERGY CENTER II, LLC</p>	Rev	Revisions	Date	By



TYPE OF AREA	ACRES TO BE DEVELOPED	TOTAL ACRES	% DEVELOPED
RECD	332.64	602.05	55%
6694	28.30	151.84	18%
CLS	17.62	104.64	17%
CAP	251.11	471.11	53%



[illegible]



DATE	1/11/17
BY	WILMOT II
CHECKED	
APPROVED	

WILMOT ENERGY CENTER II, LLC

Kimley-Horn
 CONSULTING ENGINEERS AND ARCHITECTS, INC.
 2000 KIMLEY-HORN AVENUE, SUITE 100
 FARMINGTON, AR 72631-2946
 PHONE: 501-227-2946
 WWW.KH-USA.COM

Kimley-Horn
 CONSULTING ENGINEERS AND ARCHITECTS, INC.
 2000 KIMLEY-HORN AVENUE, SUITE 100
 FARMINGTON, AR 72631-2946
 PHONE: 501-227-2946
 WWW.KH-USA.COM

CIVIL DETAILS

WILMOT II
 WILMOT ENERGY CENTER II, LLC
 2000 KIMLEY-HORN AVENUE, SUITE 100
 FARMINGTON, AR 72631-2946
 PHONE: 501-227-2946
 WWW.KH-USA.COM

WILMOT II
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 2000 KIMLEY-HORN AVENUE, SUITE 100
 FARMINGTON, AR 72631-2946
 PHONE: 501-227-2946
 WWW.KH-USA.COM

C4.1



TELETYPE SURFACE ELEVATION ABOVE GRADE	# OF HORIZONTAL WIRES
0.5-1.0	2
1.0-1.5	3
1.5-2.0	4
2.0-2.5	5
2.5-3.0	6

APPENDIX D

Biological Impact Report and Biological Evaluation



201 N. Stone Avenue, Tucson, AZ 85701
(520) 724-9000
www.pima.gov/developmentservices

BIOLOGICAL IMPACT REPORT

(Not applicable for rezonings that require a site analysis)

The Biological Impact Report assists staff in assessing a proposed project's potential to impact sensitive biological resources and is required by the Pima County Zoning Code Chapter 18.91. A project's design should conserve these important resources.

The report will include information provided by both Pima County Planning staff (Part I) and the Applicant (Part II).

INSTRUCTIONS FOR SAVING FORM: 1) Download form to computer. 2) Fill out form as applicable. 3) Save completed form to computer. 4) Submit completed form to Pima County Development Services. **If you fill out the form before you download it, the info you entered will not be saved.**

Project ID (*case no., APN no., address, or other identifying info*):

Wilmot II Solar Project

Part I. Information Provided by Pima County Staff

Pima County Planning staff will provide the following information for the project site, as applicable:

1. Is the project located within any Maeveen Marie Behan Conservation Lands System (CLS) designation(s)? (Hold SHIFT for multiple selections) NA

Important Riparian Area
Biological Core
Multi-Use Management Area
2. Is the project within a CLS Special Species Management Area? No
3. Is the project in the vicinity of any of the six Critical Landscape Linkages? No
4. Is the project designated for acquisition as a Habitat Protection or Community Open Space property? No
5. Is the project located within a Priority Conservation Area for any of the following species?
 - a. Cactus ferruginous pygmy-owl: No
 - b. Western burrowing owl: No
 - c. Pima pineapple cactus: Yes
 - d. Needle-spined pineapple cactus: No

Part II. Information Provided by the Applicant

The Applicant will provide the following information to the best of their knowledge, as applicable:

1. Has the owner of the project site had any communications with County staff about Pima County potentially acquiring the property? No
If yes, provide a summary of those communications:
2. The following species are of particular interest to Pima County conservation efforts; please fill out the following table to the best of your knowledge:

Species	Ever found on project site?	If yes, date of last observation/survey?	Future surveys planned?
Cactus ferruginous pygmy owl	No		No
Western burrowing owl	No		No
Pima pineapple cactus	Yes	March 15, 2023	Yes
Needle-spined pineapple cactus	No		No

Questions about this form?

Contact the Office of Sustainability and Conservation at (520) 724-6940.

TECHNICAL MEMORANDUM

Prepared for: Alex Simons, Senior Environmental Specialist
Wilmot Energy Center, LLC
Albuquerque, New Mexico
Sent via email to Alex.Simons@nexteraenergy.com

From: Neil Clark, Staff Biologist

Date: July 11, 2023, revised August 31, 2023, revised October 23, 2023, revised February 23, 2024

Re: **Biological Resources Evaluation for the Wilmot Energy Center II Project,
Pima County, Arizona / SWCA Project No. 78862**

INTRODUCTION

SWCA Environmental Consultants (SWCA) has prepared this biological resources evaluation (BRE) to document compliance with federal, state, and local biological regulations for the proposed Wilmot Energy Center II Project in Pima County, Arizona (project). Wilmot Energy Center, LLC, proposes to develop a solar energy project on two distinct and separate parcels. The study area for this BRE includes the solar facilities (the solar project area), a generation-tie overhead transmission line (gen-tie project) right-of-way (gen-tie project area), and additional areas that were originally considered but subsequently removed from the project areas including a wider gen-tie corridor to allow for flexibility for gen-tie siting (Figures 1 and 2). The final solar project area totals approximately 1,063.4 acres of private lands and is entirely within unincorporated Pima County. The west parcel totals approximately 418.2 acres and the east parcel totals approximately 645.2 acres. The gen-tie project consists of 6.6 miles of a gen-tie corridor along the northern boundary of the western solar project area parcel, continuing north along the east side of Wilmot Road before turning west, crossing Wilmot Road to connect with an existing substation. The gen-tie project area for purposes of this BRE is a 100-foot-wide corridor plus additional access roads and temporary stringing easements, totaling approximately 89.9 acres (31.6 acres on private land and 58.3 acres on land administered by the Arizona State Land Department [ASLD]). The study area is approximately 1,987.6 acres (1,368.7 acres on private land and 618.9 acres on land administered by ASLD).

The study area is 4.7 miles southwest of Interstate 10 (I-10) both east and west of South Wilmot Road, in portions of Sections 13 and 14, Township 16 South, Range 14 East; Sections 18 and 19 and 30 through 34, Township 16 South, Range 15 East; and Sections 3 through 6, Township 17 South, Range 15 East, Gila and Salt River Baseline Meridian on the Tucson SW, Tucson SE, and Corona de Tucson, Arizona, U.S. Geological Survey 7.5-minute quadrangles (see Figure 2).

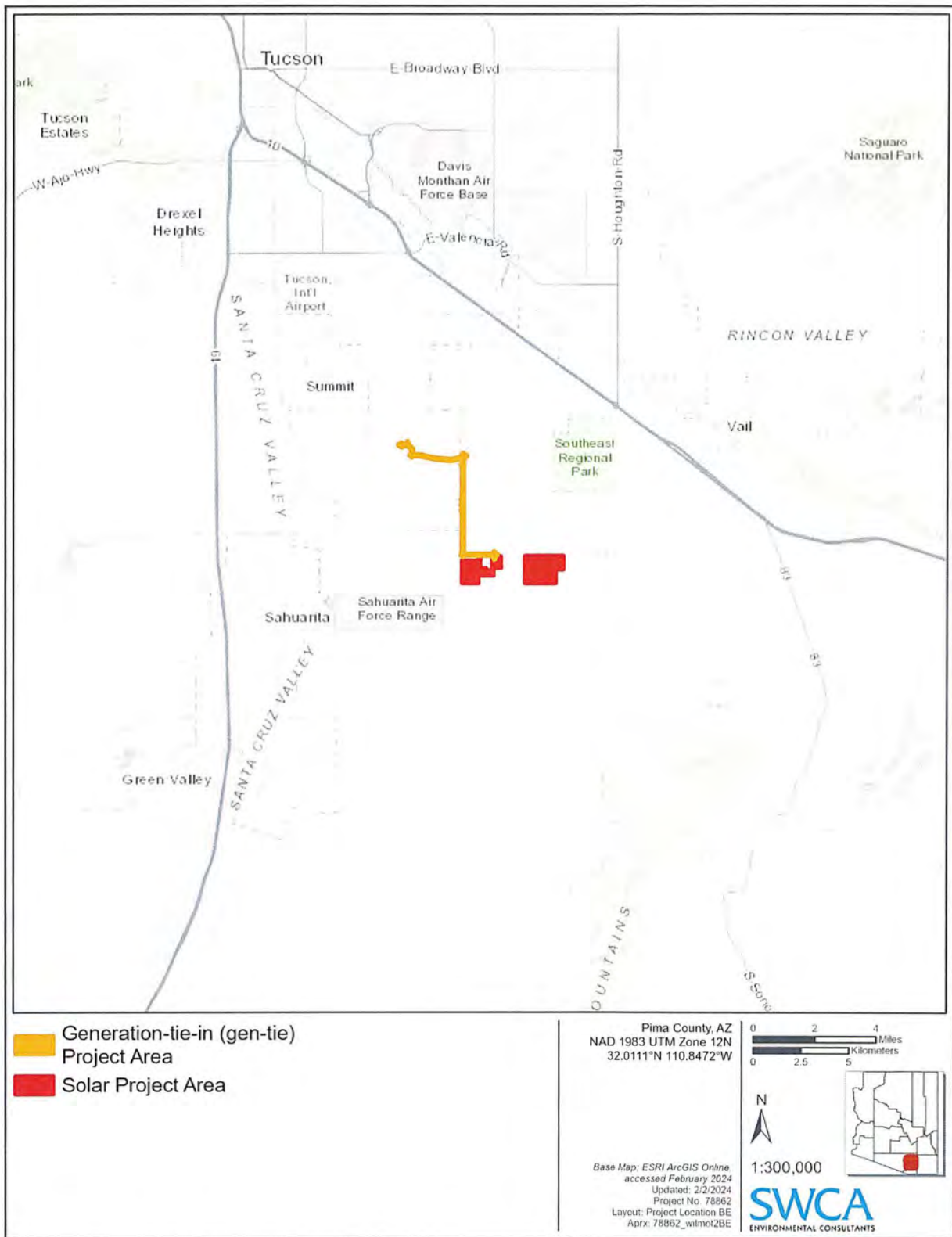


Figure 1. General location of the project areas.

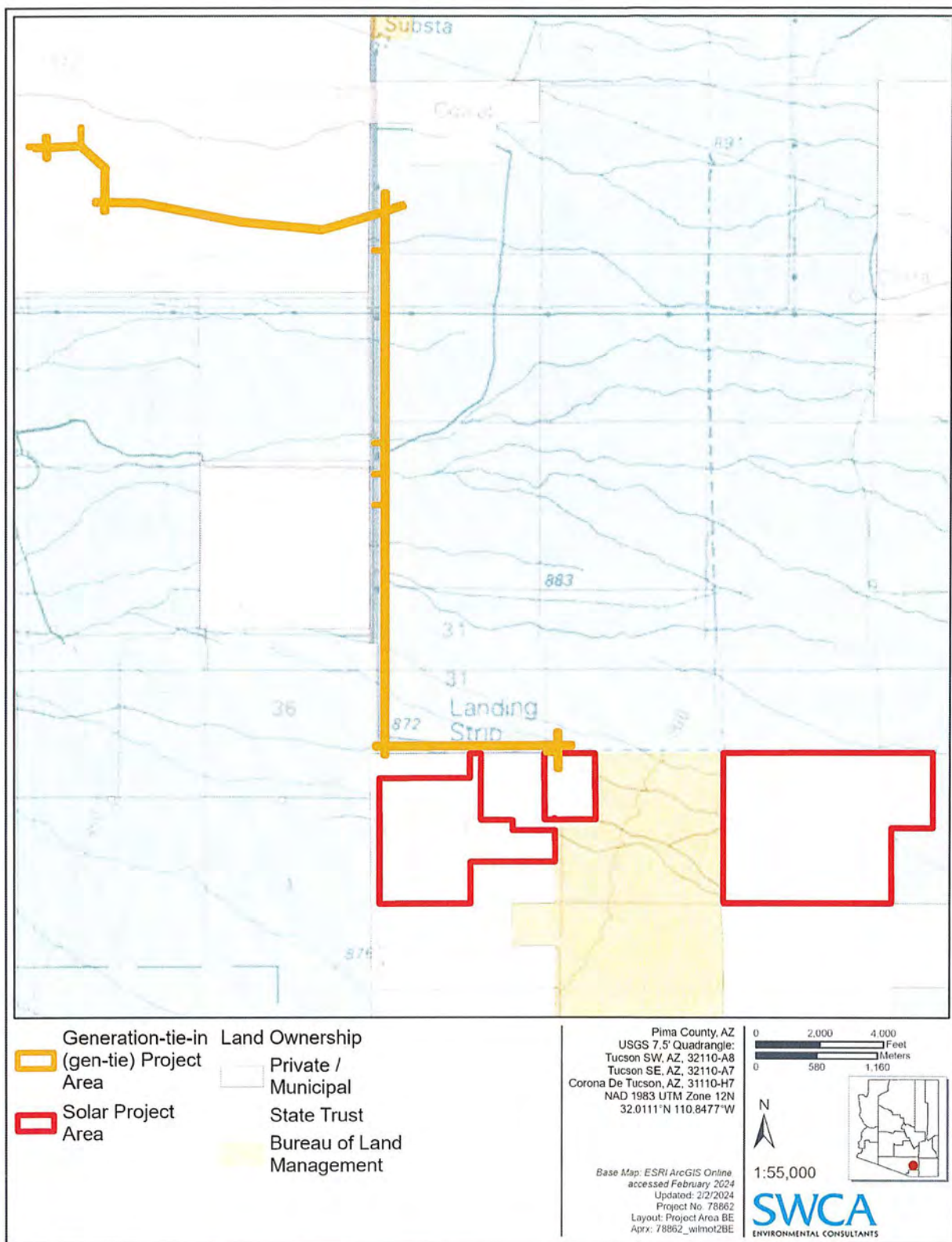


Figure 2. Location of project areas.

This BRE addresses the Endangered Species Act of 1973 (16 United States Code [USC] 1531 et seq.) (ESA), the Migratory Bird Treaty Act of 1918 (16 USC 703–712) (MBTA), the Bald and Golden Eagle Protection Act of 1940, as amended (16 USC 668–668d or 50 Code of Federal Regulations 22) (Bald and Golden Eagle Act), the Arizona Department of Agriculture (ADA)–administered Arizona Native Plant Law (Arizona Revised Statutes 3-904), the ADA’s noxious weed regulations (Arizona Administrative Code R3-4-245), and Pima County Ordinance 18.72, Native Plant Preservation. In addition, this report addresses relevant items in the Arizona Game and Fish Department (AGFD) *Guidelines for Solar Development in Arizona (Guidelines)* (AGFD 2010), such as biological resource categories (i.e., wildlife corridors and linkages) and wildlife habitat, and in Arizona’s State Wildlife Action Plan (AGFD 2022), such as special-status species (i.e., Species of Greatest Conservation Need [SGCN]). The Pima County Ordinance No. 2010 FC5, Watercourse and Riparian Habitat Protection and Mitigation Requirements, will be addressed in a separate technical memorandum. Regulated riparian habitat occurs within both the solar project area and the gen-tie project area; however, the gen-tie project is either within incorporated city of Tucson limits (and therefore the ordinance does not apply) or avoids or spans regulated riparian habitat west of Wilmot Road. Additionally, the City of Tucson Native Plant Preservation Ordinance (NPPO) applicability was researched for the gen-tie project area within city limits, and unless a permit is required from the City of Tucson for the gen-tie construction, the City of Tucson NPPO does not apply. Lastly, a native plant inventory required by ASLD as part of the gen-tie (i.e., utility) right-of-way acquisition is addressed in a separate report.

Portions of the solar project are within Pima County’s Renewable Energy Incentive District (REID) (Figure 3). Other portions will require a conditional use permit from Pima County, which requires the preparation of a biological impact report. SWCA prepared biological impact report separately. The biological impact report and this BRE were attached to the conditional use permit application.

The REID includes the following requirements related to biological resources. Pima County Ordinance 18.72, Native Plant Preservation (Pima County NPPO), shall be waived in part as follows:

- An inventory and mitigation plan for any saguaro (*Carnegiea gigantea*), desert ironwood (*Olneya tesota*), and safeguarded species as listed in Table 18.72.040-1 of the zoning code on the site shall be conducted by a qualified practitioner as defined in Pima County Ordinance Section 18.72.070 and provided upon submittal of the REID site plan.
- Where saguaro, ironwood, and safeguarded species cannot be preserved in place, they shall be transplanted on site or replaced at a 1:1 mitigation ratio when transplantation is not feasible. Pima pineapple cactus (*Coryphantha scheeri* var. *robustispina*) shall be transplanted and supplemented with one additional Pima pineapple cactus. Pima pineapple cactus will be replaced at a 2:1 mitigation ratio when transplantation is not feasible. Replacement specimens for saguaro shall be a minimum of 4 feet in height. The size of replacement specimens for ironwood and safeguarded species will conform to Table 18.72.090-1.
- The proposed location of transplanted plants shall be shown on the REID site plan, or if necessary for clarity on a separate plan, but a separate plan is not otherwise required.
- Replacement specimens and transplanted plants may be in any required buffer yard; and
- Off-site mitigation is an option subject to approval by the planning director or their designee.

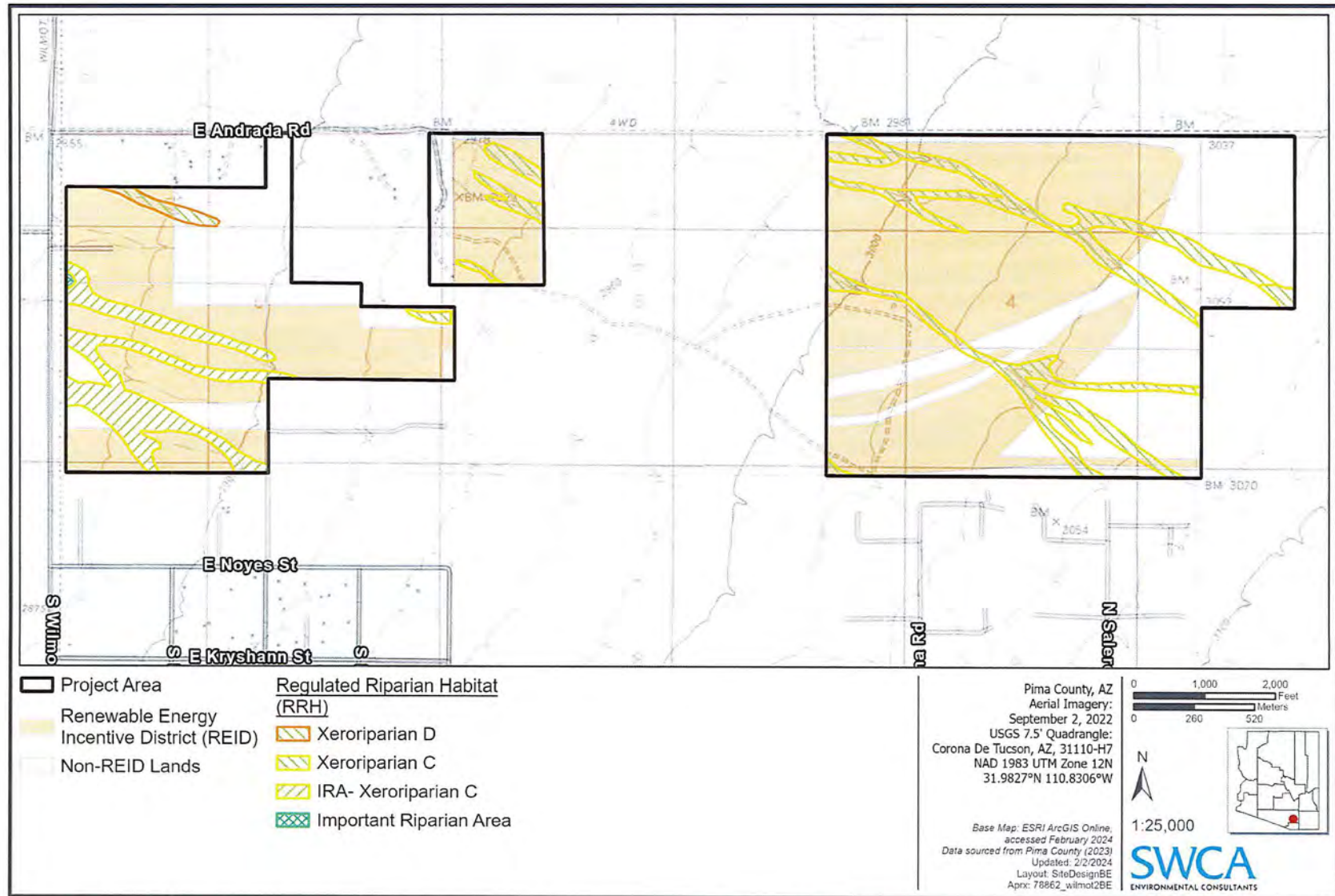


Figure 3. Solar project area depicting REID areas and Regulated Riparian Habitat classifications.

METHODS

SWCA biologists visited the study area described above on February 13 and 14, 23 and 24, and 27 and 28; March 1 through 3, 6 through 10, and 13 through 15, June 5 through 7 and 9 in 2023, and January 8 and 9, 2024. The site visits consisted of a pedestrian survey to evaluate vegetation and other habitat features considered important to the potential occurrence of special-status plant and animal species. This field reconnaissance included a species-specific survey for the saguaro cactus (*Carnegiea gigantea*) and the federally endangered Pima pineapple cactus within the solar project area, and a species-specific survey for the Pima pineapple cactus within portions of the gen-tie project area, focused on locations where impacts would be likely to occur (i.e., access road footprint, stringing easements, and pole construction pads). Pima pineapple cactus surveys within the gen-tie project area focused on areas to be impacted under current site plans and did not cover the entire 100-foot width of the gen-tie project area. If site plans change, additional Pima pineapple cactus surveys within the gen-tie project area may be necessary. Pima pineapple cactus surveys followed a modified Roller protocol (Roller 1996), with surveyors walking 4 to 6 meters apart in belt transects.

Vegetation was classified to the community level according to the map “Biotic Communities of the Southwest” (Brown 1994). The Natural Resources Conservation Service PLANTS database was used for plant naming conventions (Natural Resources Conservation Service 2023). Federally listed plants are referred to by the nomenclature used by the U.S. Fish and Wildlife Service (USFWS) for listing.

RESULTS

Ecological Overview

The study area is within the Arizona Upland subdivision of the Sonoran Desertscrub biotic community (Brown 1994) at elevations ranging from approximately 2,720 to 3070 feet above mean sea level (amsl). The Santa Rita Mountains occur approximately 5 miles southeast of the study area and the Santa Cruz River lies approximately 6 miles west of the study area. There are no state-level wildlife corridors or wildlife linkages mapped within the study area. One Pima County riparian movement area as mapped in *The Pima County Wildlife Connectivity Assessment: Report on Stakeholder Input* (AGFD 2012) overlaps with the footprint of the project: the Lee Moore Wash Flow Corridors. This wildlife linkage connects the Santa Rita Experimental Range/Coronado National Forest Wildland Block with the Santa Cruz River Riparian Area, although no focal species have been identified within the corridor (AGFD 2012). The extreme eastern section of the eastern solar project area occurs within two Pima County Conservation Land Systems, a Multiple Use Management Area and Biological Core Management Area (Pima County Maps 2023). The extreme eastern part of the gen-tie project area will overlap with a Multiple Use Management Area (Pima County Maps 2023); however, in this area, the gen-tie project area is within city of Tucson limits. Land uses in the study area and surrounding areas include primarily desertscrub, rural residential development, and grazing. The topography of the study area is relatively flat and slopes roughly from the southeast to the northwest with a few ephemeral surface water features throughout the study area.

Vegetation

The vegetation community species and structure were similar between the solar and gen-tie project areas. A full list of plant species observed during surveys is in Appendix A. The study area was dominated by creosote bush (*Larrea tridentata*), catclaw acacia (*Senegalia greggii*), jumping cholla (*Cylindropuntia fulgida*), velvet mesquite (*Prosopis velutina*), whitethorn acacia (*Vachellia constricta*), and yellow paloverde (*Parkinsonia microphylla*). Other species that commonly occurred were brittlebush (*Encelia farinosa*), burroweed (*Isocoma tenuisecta*), cactus apple (*Opuntia engelmannii*), candy barrel cactus

(*Ferocactus wislizeni*), Christmas cactus (*Cylindropuntia leptocaulis*), desert wolfberry (*Lycium macrodon*), fairyduster (*Calliandra eriophylla*), fourwing saltbush (*Atriplex canescens*), lotebush (*Ziziphus obtusifolia*), ocotillo (*Fouquieria splendens*), saguaro, spidergrass (*Aristida ternipes*), spiny hackberry (*Celtis ehrenbergiana*), tree cholla (*Cylindropuntia imbricata*), and triangle bur ragweed (*Ambrosia deltoidea*).

Pima pineapple cacti were observed in the solar project area and within the study area outside of the project areas. No milkweed (*Asclepias* spp.) plants were observed in the study area.

Nonnative plant species observed consisted of Bermudagrass (*Cynodon dactylon*), buffelgrass (*Pennisetum ciliare*), prickly Russian thistle (*Salsola tragus*), and Asian mustard (*Brassica tournefortii*).

Wildlife

Twenty-eight avian species were documented within the study area during the site visit (see Appendix A for the full list).

Other wildlife observed were antelope jackrabbit (*Lepus alleni*), black-tailed jackrabbit (*Lepus californicus*), desert cottontail (*Sylvilagus audubonii*), round-tailed ground squirrel (*Xerospermophilus tereticaudus*), and coyote (*Canis latrans*).

Endangered Species Act

The species evaluated in this BRE were based on the species listed as endangered or threatened under the ESA, as well as non-essential experimental population (EXPN) and candidate species for Pima County, Arizona. The ESA specifically prohibits the “take” of a listed wildlife species. However, the ESA does not provide the same take protections of plant species, except on federal land. Take is defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to engage in any such conduct.”

In addition, project-specific information regarding protected species and their critical habitat is available online through the USFWS Information for Planning and Consultation (IPaC) database (USFWS 2024). The project-specific IPaC list (Appendix B) includes species that are currently listed as endangered or threatened under the ESA, as well as EXPN and candidate species (USFWS 2024). The following 13 species appear on the project-specific list: Arizona eryngo (*Eryngium sparganophyllum*), cactus ferruginous pygmy-owl (*Glaucoedidium brasilianum cactorum*), California least tern (*Sterna antillarum browni*), Chiricahua leopard frog (*Rana chiricahuensis*), Gila chub (*Gila intermedia*), Gila topminnow (*Poeciliopsis occidentalis*), jaguar (*Panthera onca*), monarch butterfly (*Danaus plexippus*), ocelot (*Leopardus pardalis*), Pima pineapple cactus, Sonoyta mud turtle (*Kinosternon sonoriense longifemorale*), southwestern willow flycatcher (*Empidonax traillii extimus*), and yellow-billed cuckoo (*Coccyzus americanus*). Table 1 provides additional information on these species. To determine whether any federally listed species have been documented in or near the project areas, SWCA also accessed the Arizona Heritage Geographic Information System (AZHGIS) database (AGFD 2024) (Appendix C).

Two of the 27 species listed for Pima County by the USFWS have the potential to occur or are known to occur in the project areas, the monarch butterfly and Pima pineapple cactus, respectively. This project *may impact individual* monarch butterflies but is *not likely to result in a trend toward federal listing or loss of population viability*. Twelve Pima pineapple cactus individuals were found in the project areas, 10 of which were found during species-specific surveys of the solar project area and two of which were recorded within the gen-tie project area. An additional five Pima pineapple cacti were found during other natural resources surveys in the overall study area, one of which is located just outside of the boundary of the gen-tie project area. The final site design is not known. However, it is unlikely that all of the Pima pineapple cacti can be avoided as these plants are located in upland areas suitable for development of

solar arrays and access roads. Therefore, the project *may affect* and is *likely to adversely affect* Pima pineapple cactus individuals. Any cacti that cannot be avoided will be transplanted before construction, as allowed for by the REID and coverage provided by Pima County's Habitat Conservation Plan (HCP). The project areas are either clearly beyond the known geographic or elevational range of the remaining 25 species, or do not contain vegetation or landscape features known to support these species, or both (see Table 1). The project, as proposed, would have no effect on any of the remaining 25 species listed under the ESA. The results of the IPaC project-specific query (see Appendix B) indicate no proposed or designated critical habitat in the solar project area or gen-tie project area.

Table 1. Federally Listed Species Potentially Occurring in Pima County, Arizona

Common Name (Scientific Name)	Status*	Range or Habitat Requirements	Potential for Occurrence in Project Areas	Determination of Effect
Acuña cactus (<i>Echinomastus erectocentrus</i> var. <i>acunensis</i>)	E	Found on the tops or upper halves of the side slopes of broad, dissected hills of granite or andesite at elevations between 1,200 and 2,600 feet above mean sea level (amsl) in the Arizona Upland subdivision of the Sonoran desertscrub biome. In Arizona, known to occur in the Puerto Blanco Mountains, Little Ajo and Saucedo Mountains, and hills between Florence and Kearney, north and south of the Gila River.	Unlikely to occur. No side slopes of broad, dissected hills of granite or andesite are in the project areas, and the project areas are distant from the nearest known populations of this species.	No effect.
Arizona eryngo (<i>Eryngium sparganophyllum</i>)	E	This perennial forb occurs in spring-fed ciénega wetlands in moist to saturated organic alkali soils (USFWS 2020a). Plants thrive in full sun in areas without nonnative plant species or excessive woody vegetation. In Arizona, occurs in three disjunct populations in Pima and Cochise Counties at elevations from 2,707 to 4,000 feet amsl: Agua Caliente Ranch, where it is extirpated but reintroduced; La Cebadilla Ciénega, near Tanque Verde Wash east of Tucson; and in Lewis Springs Ciénega within the San Pedro Riparian National Conservation Area.	Unlikely to occur. The project areas are not within the current range of this species and do not contain ciénega wetland habitat.	No effect.
Bartram's stonecrop (<i>Graptopetalum bartramii</i>)	T	Occurs on rocky outcrops in shrub live oak (<i>Quercus</i> spp.) grasslands along meandering arroyos on sides of rugged canyons at elevations from 3,650 to 6,700 feet amsl. Typically occurs in areas with heavy litter cover and shade, where moisture drips from rocks, and often within Madrean evergreen woodland. In Arizona, occurs in the Atascosa-Pajarito, Baboquivari, Chiricahua, Dragoon, Mule, Patagonia, Rincon, Santa Rita, and Whetstone Mountains.	Unlikely to occur. The project areas are below the elevational range of this species, are far from known locations, and suitable habitat is not present.	No effect.
Beardless chinchweed (<i>Pectis imberbis</i>)	E	Typically occurs in grasslands at lower elevations and oak woodlands and tropical deciduous forests at higher elevations. Found at elevations from 3,773 to 5,660 feet amsl. However, has also been observed on disturbed road cuts, arroyo cuts, and unstable rocky slopes in areas where it has little competition for sunlight. In the United States, it occurs in the Atascosa-Pajarito, Huachuca, Patagonia, and Santa Rita Mountains, and the Canelo Hills.	Unlikely to occur. The project areas are below the elevational range of this species, are far from known locations, and suitable habitat is not present.	No effect.

Common Name (Scientific Name)	Status*	Range or Habitat Requirements	Potential for Occurrence in Project Areas	Determination of Effect
Cactus ferruginous pygmy-owl (<i>Glaucidium brasilianum cactorum</i>)	T	Found in heavily wooded xeroriparian washes with large saguaros (<i>Carnegiea gigantea</i>) or trees with suitable cavities in Sonoran desertscrub or semidesert grassland. This species' distribution is currently limited to portions of Pima County in Arizona. In addition, "pygmy-owls continue to be absent from Pinal County and around Tucson where they were found as recently as the early 2000s" (USFWS 2023b). This species still occupies historical locations in the Altar Valley, Avra Valley, and Organ Pipe Cactus National Monument, and it is known to occur on the Tohono O'odam Nation (USFWS 2022). Its population appears stable in the Altar Valley, but it is extirpated or declining in areas outside the Altar Valley (USFWS 2022).	Unlikely to occur. The project areas contain heavily vegetated washes and suitable saguaro or tree habitat, and the project areas are within the published range of this species (USFWS 2023a). However, this species is unlikely to occur. The project areas are outside the current distribution of this species (i.e., 1990–current distribution as digitized from Figure 4.6 in USFWS 2022). In addition, the project areas are separated from the closest known locations of this species (in Altar Valley) by more than 20 miles, with the Pima Mine, the Mission Mine, and associated pit mines, dumps, and tailings ponds and I-19 acting as likely barriers to dispersal from a known population to the project areas. No sites surveyed west of I-10 or I-19 had evidence of pygmy-owl occupancy in spring 2020 (USFWS 2022).	No effect.
California least tern (<i>Sterna antillarum browni</i>)	E	Forms nesting colonies on barren to sparsely vegetated areas. Nests in shallow depressions on open sandy beaches, sandbars, gravel pits, or exposed flats along shorelines of inland rivers, lakes, reservoirs, and drainage systems at elevations below 2,000 feet amsl. Found in Maricopa, Mohave, and Pima Counties.	Unlikely to occur. The project areas do not contain habitats similar to those used by this species; there are no open sandy beaches, sand bars, gravel pits, or exposed shorelines of inland rivers, lakes, reservoirs, or drainage systems.	No effect.
Chiricahua leopard frog (<i>Rana chiricahuensis</i>)	T	Restricted to springs, livestock tanks, and streams in the upper portions of watersheds at elevations between 3,281 and 8,890 feet amsl in central, east-central, and southeastern Arizona. Populations in central and east-central Arizona are disjunct from those in southeastern Arizona and may be distinct species.	Unlikely to occur. No suitable habitat for this species is within or adjacent to the project areas.	No effect.
Desert pupfish (<i>Cyprinodon macularius</i>)	E	Found in shallow waters of desert springs, small streams, and marshes at elevations below 5,000 feet amsl. One natural population still occurs in Quitobaquito Springs and Quitobaquito Pond in Pima County, and reintroductions have been made in Pima, Pinal, Maricopa, Graham, Cochise, La Paz, and Yavapai Counties.	Unlikely to occur. No aquatic habitats are in or adjacent to the project areas.	No effect.
Gila chub (<i>Gila intermedia</i>)	E	Normally found in smaller headwater streams, ciénegas, and springs or marshes of the Gila River Basin at elevations between 2,720 and 5,420 feet amsl.	Unlikely to occur. No aquatic habitats are in or adjacent to the project areas.	No effect.

Common Name (Scientific Name)	Status*	Range or Habitat Requirements	Potential for Occurrence in Project Areas	Determination of Effect
Gila topminnow (including Yaqui) (<i>Poeciliopsis occidentalis</i>)	E	Occurs in small streams, springs, and ciénegas at elevations below 4,500 feet amsl, primarily in shallow areas with aquatic vegetation and debris for cover. In Arizona, most of the remaining native populations are in the Santa Cruz River system.	Unlikely to occur. No aquatic habitats are in or adjacent to the project areas.	No effect.
Huachuca water umbel (<i>Lilaeopsis schaffneriana</i> var. <i>recurva</i>)	E	Semiaquatic to aquatic perennial found in shallow water or saturated soil of ciénegas or marshy wetlands at elevations between 4,000 and 6,500 feet amsl. Known to occur in the Huachuca Mountains, Canelo Hills, headwaters of the Santa Cruz River downstream to Black Draw, and the San Pedro River.	Unlikely to occur. No aquatic habitats are in or adjacent to the project areas. Further, the project areas are below the elevational range of this species.	No effect.
Jaguar (<i>Panthera onca</i>)	E	Of 25 reliable historical jaguar sightings (from 1902 to 2001), most were in scrub grasslands (56%) and Madrean evergreen forests (20%). All were within 6.2 miles of a water source, and most occurred in moderately rugged to extremely rugged terrain. All sightings were at elevations between 3,399 and 8,999 feet amsl (Hatten et al. 2005). Additionally, river valleys and other drainage features likely provide travel corridors for jaguars, along with higher prey densities, cooler air, and denser vegetation than surrounding habitats (Jaguar Recovery Team and USFWS 2012).	Unlikely to occur. Although the project areas are within the geographic range of this species, jaguars are unlikely to occur because of the proximity to human populations and the lack of suitable habitat in the project areas.	No effect.
Kearney's blue-star (<i>Amsonia kearneyana</i>)	E	Found on dry, open slopes (20 to 30 degrees) at elevations between 4,000 and 6,000 feet amsl in the transition zone between Madrean evergreen woodland and interior chaparral. Also occurs at elevations between 3,600 and 3,800 feet amsl on stable, partially shaded, coarse alluvium along dry washes under deciduous riparian trees and shrubs in the Sonoran desertscrub or desertscrub-grassland ecotone. Known only from a west-facing drainage in the Baboquivari Mountains.	Unlikely to occur. This species is only known to occur in a few small populations in the Baboquivari Mountains more than 40 miles southwest of the project areas.	No effect.
Masked bobwhite (<i>Colinus virginianus ridgwayi</i>)	E	Found at elevations between 1,000 and 4,000 feet amsl in desert grasslands with diverse, moderately dense native grasses and forbs and adequate brush cover. This subspecies has been found to be closely associated with prairie acacia (<i>Acacia angustissima</i>). Known only from reintroduced populations on Buenos Aires National Wildlife Refuge.	Unlikely to occur. The habitats in the project areas are not similar to those used by the species, and the project areas are more than 45 miles northeast of the Buenos Aires National Wildlife Refuge.	No effect.
Mexican spotted owl (<i>Strix occidentalis lucida</i>)	T	Found in mature montane forests and woodlands and steep, shady, wooded canyons. Can also be found in mixed-conifer and pine-oak (<i>Pinus</i> spp.– <i>Quercus</i> spp.) vegetation types. Generally nests in older forests of mixed conifers or ponderosa pine (<i>Pinus ponderosa</i>)–Gambel oak (<i>Quercus gambelii</i>). Nests in live trees on natural platforms (e.g., dwarf mistletoe [<i>Arceuthobium</i> spp.] brooms), snags, and canyon walls at elevations between 4,100 and 9,000 feet amsl.	Unlikely to occur. There are no mature montane forests; steep, shady wooded canyons; or appropriate vegetation types within the project areas. The project areas are also outside the elevational range of this species.	No effect.

Common Name (Scientific Name)	Status*	Range or Habitat Requirements	Potential for Occurrence in Project Areas	Determination of Effect
Mexican wolf (<i>Canis lupus baileyi</i>)	E/EXP N	Prefer mountain woodlands, in areas with access to water, adequate denning sites, abundant prey, and lack of roads or other human disturbance.	Unlikely to occur. The project areas are adjacent to significant human disturbance and do not contain suitable mountain woodland habitat. The project is within the 10(j) Experimental Population Area Zone 2 but there are no known or planned introductions in this vicinity (USFWS 2015).	No effect.
Monarch butterfly (<i>Danaus plexippus</i>)	C	A migratory species found in a variety of habitats. Monarchs require milkweed (<i>Asclepias</i> spp.) for breeding (USFWS 2020b). During fall migration in Arizona, monarchs favor nectar from native plants including sunflowers (<i>Helianthus</i> spp.), rabbitbrush (<i>Chrysothamnus</i> spp.), desertbroom (<i>Baccharis sarothroides</i>), sweetbush (<i>Bebbia juncea</i>), thistles (Family Asteraceae), mule-fat (<i>Baccharis salicifolia</i>), milkweeds, and a variety of other native and garden plants (Morris et al. 2015). Populations in Arizona can migrate either to California or Mexico for winter (USFWS 2020b) or may overwinter in the low deserts in California or Arizona (Morris et al. 2015). In the southwestern United States, migrating monarchs often occur near water sources (e.g., rivers, streams, riparian corridors, roadside ditches, irrigated gardens) (USFWS 2020b). In the low deserts of Arizona, monarchs breed in late August to early September (Morris et al. 2015).	May occur seasonally. Although no milkweed plants that could be used for reproduction were identified within the project areas, flowering plants are available within the project areas and vicinity that this species could use while foraging during migration or when otherwise seasonally present in southern Arizona.	May impact individuals but is not likely to result in a trend toward federal listing or loss of viability.
Nichol's Turk's head cactus (<i>Echinocactus horizonthalonius</i> var. <i>nicholii</i>)	E	Found in Sonoran desertscrub with limestone-derived alluvium at elevations between 2,000 and 3,600 feet amsl. In Arizona, its known range is limited to the Waterman and Vekol Mountains.	Unlikely to occur. Although they have been recorded within 5 miles of the site in the past, this is likely a mistaken identification record. No limestone-derived alluvium soils are in the project areas, and the nearest known population of this species is more than 42 miles northwest of the project areas in the Waterman Mountains.	No effect.
Northern aplomado falcon (<i>Falco femoralis</i>)	EXP N	The species has somewhat variable habitat preferences, with historical habitats in Arizona, including semidesert grassland or riparian associations with scattered trees and shrubs at elevations from 3,300 to 4,900 feet amsl. They do not build their own nests but occupy old stick nests left by raptors, and those of Chihuahuan ravens (<i>Corvus cryptoleucus</i>) are used extensively. Nests are typically in mesquite (<i>Prosopis</i> spp.), yucca (<i>Yucca</i> spp.), or low bushes.	Unlikely to occur. Although the boundary of the 10(j) reintroduction area includes all of New Mexico and Arizona, birds have only been released in New Mexico. This species has not been credibly recorded in Arizona since 1940 (AGFD 2022), and the last nesting record is from 1887 (Wheeler 2003). The project areas are below the elevational range of this species and do not contain suitable grassland habitat.	No effect.

Common Name (Scientific Name)	Status*	Range or Habitat Requirements	Potential for Occurrence in Project Areas	Determination of Effect
Northern Mexican gartersnake (<i>Thamnophis eques megalops</i>)	T	This species is most abundant at elevations between 3,000 and 5,000 feet amsl in densely vegetated habitat surrounding ciénegas, streams, and stock tanks, in or near water along streams in valley floors and generally open areas, but not in steep mountain canyon stream habitat (Rosen and Schwalbe 1988). Considered extant in fragmented populations within the middle to upper Verde River drainage, middle to lower Tonto Creek, Cienega Creek, and a small number of isolated wetland habitats elsewhere in southeastern Arizona.	Unlikely to occur. No aquatic or semiaquatic habitats are in or adjacent to the project areas.	No effect.
Ocelot (<i>Leopardus pardalis</i>)	E	In Arizona, typically observed in dense, brushy thickets at elevations below 8,000 feet amsl and often found in riparian bottomlands. Dense cover near the ground is an important habitat component, and ocelots completely avoid open country. In Arizona, there are seven recent confirmed sightings: one from Gila County (2010), five from Cochise County (2009, 2011, and 2012), and one from Pima County (2014), along with unconfirmed sightings in the Huachuca, Chiricahua, and Peloncillo Mountains.	Unlikely to occur. Ocelots are extremely rare; there are only a few ocelots currently known to occur in southern Arizona. The nearest known ocelot sighting is in the Santa Rita Mountains, more than 25 miles south of the project areas. The project areas are close to development. This makes the project areas unlikely to be used by this species.	No effect.
Pima pineapple cactus (<i>Coryphantha scheeri</i> var. <i>robustispina</i>)	E	Found on alluvial bajadas in sand or rocky loam soils that are on slopes with less than 10% grade within desert grassland and Sonoran desertscrub at elevations between 2,800 and 3,500 feet amsl. In Arizona, found in the Santa Cruz and Altar Valleys and Patagonia Mountains.	See species discussion, below.	See species discussion, below.
Sonoran pronghorn (<i>Antilocapra americana sonoriensis</i>)	E/EXP N	Found in Sonoran desertscrub within broad, intermountain, alluvial valleys with creosote bush (<i>Larrea tridentata</i>)–bursage (<i>Ambrosia</i> spp.) and paloverde (<i>Parkinsonia</i> spp.)–mixed cacti associations at elevations between 2,000 and 4,000 feet amsl. The only extant U.S. population is in southwestern Arizona.	Unlikely to occur. The project areas are not in a broad, intermountain alluvial valley. Additionally, the project areas are not in any known reintroduction areas and are far from the current occupied range of the species.	No effect.
Sonoyta mud turtle (<i>Kinostemon sonoriense longifemorale</i>)	E	In Arizona, found only in pond and stream habitat at Quitobaquito Springs in Organ Pipe Cactus National Monument. This subspecies of the more common Sonora mud turtle (<i>Kinostemon sonoriense sonoriense</i>) also occurs in Rio Sonoyta, Mexico.	Unlikely to occur. In Arizona, this species is found only in Quitobaquito Springs, more than 100 miles southwest of the project areas.	No effect.
Southwestern willow flycatcher (<i>Empidonax traillii extimus</i>)	E	Found in dense riparian habitats along streams, rivers, and other wetlands where cottonwood (<i>Populus</i> spp.), willow (<i>Salix</i> spp.), boxelder (<i>Acer negundo</i>), saltcedar (<i>Tamarix</i> spp.), Russian olive (<i>Elaeagnus angustifolia</i>), buttonbush (<i>Cephalanthus</i> spp.), and arrow weed (<i>Pluchea sericea</i>) are present. Nests are found in thickets of trees and shrubs, primarily those that are 13 to 23 feet tall among dense, homogeneous foliage. Habitat occurs at elevations below 8,500 feet amsl.	Unlikely to occur. There are no dense riparian habitats or streams, rivers, or other wetlands in the project areas.	No effect.

Common Name (Scientific Name)	Status*	Range or Habitat Requirements	Potential for Occurrence in Project Areas	Determination of Effect
Wright's marsh thistle (<i>Cirsium wrightii</i>)	T	A wetland obligate that occurs in wet, alkaline soils in spring seeps and marsh edges at elevations from 3,450 to 7,850 feet amsl (USFWS 2017). In Arizona, only known from the San Bernardino Cienega in Cochise County; however, the species is likely extirpated from Arizona as recent surveys failed to find the plant and the known site was devoid of suitable habitat (USFWS 2017). This species is currently known to occur in New Mexico within eight general localities.	Unlikely to occur. There are no wetlands in the project areas. Further, the project areas are distant from the known occurrences of this plant in New Mexico.	No effect.
Yellow-billed cuckoo (<i>Coccyzus americanus</i>)	T	Typically found in riparian woodland vegetation (cottonwood, willow, or saltcedar) at elevations below 6,600 feet amsl. Dense understory foliage appears to be an important factor in nest site selection. The highest concentrations in Arizona are along the Agua Fria, San Pedro, upper Santa Cruz, and Verde River drainages and Cienega and Sonoita Creeks.	Unlikely to occur. They have been recorded at Sahuarita Lake once, which is within 5 miles of the project areas, but the lake provides suitable habitat, and that individual was most likely a migrant. The project areas lack the suitable habitat the species favors.	No effect.

Note: Range or habitat information is from the AGFD Heritage Data Management System (AGFD 2023a); Arizona Rare Plant Field Guide (Arizona Rare Plant Committee, n.d. [2001]); and Arizona Breeding Bird Atlas (Corman and Wise-Gervais 2005); and USFWS Environmental Conservation Online System (USFWS 2023a).

* USFWS status definitions:

C = Candidate. Candidate species are those for which the USFWS has sufficient information on biological vulnerability and threats to support proposals to list as endangered or threatened under the ESA. However, proposed rules have not yet been issued because such actions are precluded at present by other listing activity.

E = Endangered. An animal or plant species in danger of extinction throughout all or a significant portion of its range.

EXPN = Non-Essential Experimental Population. Experimental populations of a species designated under Section 10(j) of the ESA for which the USFWS, through the best available information, believes is not essential for the continued existence of the species. Regulatory restrictions are considerably reduced under an EXPN designation.

T = Threatened. An animal or plant species likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

Pima pineapple cactus (*Coryphantha scheeri* var. *robustispina*)

Taxonomy: There are three Pima pineapple cactus varieties: var. *valida*, found in southeastern Arizona to Texas and Chihuahua, Mexico; var. *scheeri*, found in Mexico; and var. *robustispina*, found in south-central Arizona (AGFD 2023a).

Threats and Limiting Factors: Threats to Pima pineapple cactus include habitat loss due to mining, agriculture, road construction, and urbanization, as well as degradation of habitat from livestock grazing, introduction and spread of nonnative plant species, recreation, and border activities, and changing fire regimes and intensities due to increased fuel levels from nonnative plant species. Other threats or stressors that may also be impacting populations of this species include drought or climate change; illegal collection of the species; disease or predation on individuals, particularly those already affected by drought; small population size and isolation; and the fact that most individuals of this species occur on private or State Trust land where they are not subject to federal protection (USFWS 2016).

Habitat and Range Requirements: Pima pineapple cactus is found in alluvial basins and on ridges in desert grasslands and Sonoran desertscrub with little to no slope and sparse vegetation, between 2,300 and 4,200 feet amsl. The species blooms for only a short period during the summer rains and reproduces both by seed and asexually. Pollination is primarily accomplished by small black and white bees (AGFD 2023a; USFWS 2016, 2023a).

Range-wide Distribution and Abundance: Pima pineapple cactus is found in south-central Arizona and north-central Sonora, Mexico. Within Arizona, the species is found in Pima and Santa Cruz Counties, and its range is bounded by the Santa Rita Mountains to the east, the Baboquivari Mountains to the west, the city of Tucson to the north, and the U.S.-Mexico border to the south (AGFD 2023a).

Habitat Suitability and Potential for Occurrence: The project areas are within the geographical range of this species and contain suitable Sonoran desertscrub habitat. There are occurrence records for this species within 5 miles of the project areas (AGFD 2024). This species is known to occur in the project area.

Ten Pima pineapple cactus individuals were found in the solar facility portion of the project area. See *Native Plant Survey for the Wilmot II Energy Center Project in Pima County, Arizona* [SWCA 2023a] for detailed plant location information. Approximately 908 acres of upland habitat suitable for Pima pineapple cactus occurs within the solar project area.

Two individuals were found within portions of the gen-tie project area during protocol surveys, with an additional plant observed just outside of the project area boundary. Four additional Pima pineapple cacti were identified incidentally during natural resource surveys in the study area. Approximately 69 acres of upland habitat suitable for Pima pineapple cactus occurs within the gen-tie project area. Portions of the current gen-tie project area have not been surveyed for PPC; surveys for this species will be completed once the final gen-tie construction footprint is confirmed.

Effects: The project layout for solar panels, substation, access roads, poles, other permanent infrastructure, and areas of temporary disturbances has not been finalized. However, up to 12 individual Pima pineapple cactus plants have the potential to be impacted from transplanting prior to project area clearing and construction. Up to 10 of the 12 plants will be transplanted out of the final construction footprint as identified within the mitigation plan and as allowed under the Pima County Section 10 permit coverage (see "Incidental Take Coverage" below). Impacts to the remaining 2 plants in the gen-tie corridor will be minimized or avoided completely by fencing and/or design of the access road. A transplanting protocol previously approved by the U.S. Fish and Wildlife Service for other projects in the region will be used to minimize the stress of transplanting.

Impacts to plants would occur during the salvage and transplanting efforts. Individuals that can be avoided will be left in place and circumvented during construction activities (e.g., by fencing, flagging, and worker education). Any individuals that cannot be avoided will be transplanted out of harm's way to a portion of the site that will not be developed. Qualified biologists will salvage and transplant the cacti. In addition, ground disturbance can shower a layer of dust on the Pima pineapple cactus, which could have a minor and temporary impact on plant respiration. Pima pineapple cactus seeds are likely present on or within the ground soil of the solar project area. Construction may prevent or disrupt seed germination and growth. Ground-disturbing activities could lead to increased spread of invasive plant species, which can compete with Pima pineapple cactus individuals for space and resources (USFWS 2016). This could modify fire regimes, causing an increase in the frequency and severity of fire events, which could in turn negatively impact Pima pineapple cactus. The site already contains infestations of buffelgrass (mainly along the wash corridors), which is also known to occur abundantly along roads in the region (iMapInvasives 2023). Construction of solar array structures and associated infrastructure would reduce the number of buffelgrass plants in the project areas, potentially reducing the size of the immediate source population. Noxious weed management would reduce the likelihood of the reemergence of buffelgrass in the project area.

Determination of Effect

Project construction *may affect*, and is *likely to adversely affect*, Pima pineapple cactus. Direct effects to Pima pineapple cactus would occur to any individuals that cannot be avoided during construction and must be salvaged and transplanted. Indirect effects include the potential for project activities to contribute to the introduction or spread of buffelgrass in the region, which could cause an increase in the potential for fire or reduce the viability or reproduction of Pima pineapple cactus by preventing or disrupting seed generation and increasing competition for space or water availability (i.e., increase competition for resources).

Incidental Take Coverage: Although effects to the Pima pineapple cactus are expected to occur, no formal Section 7 consultation with the USFWS would be required because there is no federal nexus on the project; the client plans to opt into a certificate of coverage under the Pima County HCP (i.e., its Multi-Species Conservation Plan Section 10 permit) as part of the site construction and building permits processes. Coverage under Pima County's Section 10 permit will allow for the Applicant to mitigate impacts to Pima pineapple cactus from project-related grading and ground disturbance.

MIGRATORY BIRD TREATY ACT AND BALD AND GOLDEN EAGLE PROTECTION ACT

Twenty-eight avian species—all of which are covered under the MBTA except the Gambel's quail (*Callipepla gambelii*)—were observed in the study area during the site visit (see Appendix A).

Migratory bird species, including others that could occur but were not observed in the area, are protected under the MBTA, which provides federal protection to all migratory birds, including nests and eggs. To relocate or alter any MBTA-protected individuals or nests, a permit must be obtained from the USFWS to maintain compliance with the MBTA.

However, Section 1 of the Interim Empty Nest Policy of the USFWS, Region 2, states that if the nest is completely inactive at the time of destruction or movement, a permit is not required to comply with the MBTA. If vegetation clearing is expected to take place during the nesting season (i.e., between mid-February and late September, with the nesting season for raptors being January through late June), it is recommended that a nesting bird survey be conducted within two weeks of vegetation clearing activities to locate any active nests. Measures should then be taken to protect the nest from destruction and to avoid a violation of the MBTA.

Three great horned owl (*Buho virginianus*) nests, one red-tailed hawk (*Buteo jamaicensis*) nest, and one crested caracara (*Caracara plancus*) nest were found in the study area, all in large multi-armed saguaros. Dozens of small passerine-type bird nests were also observed, mostly in jumping cholla. These passerine nests were generally inactive, with only a few observed to be active.

Bald eagle (*Haliaeetus leucocephalus*) and golden eagle (*Aquila chrysaetos*) are protected under both the MBTA and the Bald and Golden Eagle Act. No suitable bald eagle nesting or foraging habitat (e.g., flowing rivers or lakes containing fish), and no tall trees or cliffs suitable for eagle perching are within the project areas. The project areas do not contain nesting sites for golden eagles, but individuals may fly over the project areas while foraging. Similarly, bald eagles could fly over the project areas during dispersal. No impacts would be expected to occur to either eagle species as a result of this project.

STATE OF ARIZONA SPECIAL-STATUS SPECIES

SGCN is an AGFD listing status that defines wildlife of conservation priority in the state of Arizona (described nationally as Wildlife of Greatest Conservation Need). As discussed in the State Wildlife Action Plan (AGFD 2022), SGCN are species of vertebrates, crustaceans, and mollusks that rank high in the vulnerability category and have been identified for immediate action. Each species was assessed in terms of vulnerability and assigned either a Tier 1, Tier 2, or Tier 3 ranking, with Tier 1 being the highest threat level (AGFD 2022).

The AZHGIS report (see Appendix C) indicates that there are records of occurrence for 32 special-status species within a 5-mile radius of the project areas: Abert's towhee (*Melospiza aberti*), American kestrel (*Falco sparverius*), Bailey's pocket mouse (*Chaetodipus baileyi*), black-throated sparrow (*Amphispiza bilineata*), Brazilian free-tailed bat (*Tadarida brasiliensis*), broad-billed hummingbird (*Cyananthus latirostris*), Bullock's oriole (*Icterus bullockii*), cactus wren (*Campylorhynchus brunneicapillus*), canyon towhee (*Melospiza fusca*), cave myotis (*Myotis velifer*), Costa's hummingbird (*Calypte costae*), Gila monster (*Heloderma suspectum*), Gila woodpecker (*Melanerpes uropygialis*), gilded flicker (*Colaptes chrysoides*), Harris' antelope squirrel (*Ammodramus harrisi*), Harris' hawk (*Parabuteo unicinctus*), pinkflower hedgehog cactus (*Echinocereus fasciculatus*), needle-spined pineapple cactus (*Echinomastus erectocentrus* var. *erectocentrus*), Nichol Turk's head cactus (*Echinocactus horizionthalonius* var. *nicholii*), Pima pineapple cactus, pyrrhuloxia (*Cardinalis sinuatus*), regal horned lizard (*Phrynosoma solare*), Rivoli's hummingbird (*Eugenes fulgens*), rufous-winged sparrow (*Peucaea carpalis*), Sinaloan narrow-mouthed toad (*Gastrophryne mazatlanensis*), Sonoran desert toad (*Incilius alvarius*), Sonoran desert tortoise (*Gopherus morafkai*), Swainson's hawk (*Buteo swainsoni*), Tumamoc globe-berry (*Tumamoca macdougalii*), verdin (*Auriparus flaviceps*), western yellow bat (*Lasiurus xanthinus*), and yellow-billed cuckoo. The AZHGIS report also indicates that a bat colony occurs within 5 miles of the project areas. This bat colony is likely in the nearby Santa Rita Mountains, as no caves, mines, or adits occur within the project areas. Nichol Turk's head cactus, Pima pineapple cactus, and yellow-billed cuckoo are discussed in Table 1.

Black-throated sparrow, cactus wren, Gila woodpecker, gilded flicker, pinkflower hedgehog cactus, and verdin were all observed in the study area (see Appendix A). The Brazilian free-tailed bat, cave myotis, and lesser long-nosed bat have the potential to forage in the project areas but would be unlikely to roost within it as no suitable hibernacula or day roosts occur (caves, abandoned buildings, cliff faces, riparian woodlands, or palm trees) (AGFD 2023a). However, a bat colony is also known to occur within 5 miles. The following bird species are unlikely to occur because the habitat they prefer does not occur in the project areas: Abert's towhee (i.e., brush along streams, woodlands, or suburban landscapes), broad-billed hummingbird (i.e., forests), Bullock's oriole (i.e., open woodlands), Rivoli's hummingbird (i.e., forests) (The Cornell Lab 2023). The following bird species occur in desert scrublands or desert grasslands (The Cornell Lab 2023) and may occur in the project areas: American kestrel, canyon towhee, Costa's hummingbird, Harris' hawk, pyrrhuloxia, rufous-winged sparrow, and Swainson's hawk. The following plant species have the potential to occur, although they were not observed during surveys: needle-spined pineapple cactus and Tumamoc globe-berry (AGFD 2023a). The Gila monster and regal horned lizard may occur in the project areas because suitable desertscrub habitat occurs (AGFD 2023b). The Sonoran desert tortoise may disperse across the project area, but its preferred habitat type (caliche caves or bajadas) (AGFD 2023a) does not occur on-site. The Sonoran desert toad may occur in the project areas in mud cracks, roadside puddles, or other locations in which water collects during monsoon storms; however, because no cattle tanks or streams occur, the species would be unlikely to breed in the project areas (AGFD 2023b). The Sinaloan narrow-mouthed toad is unlikely to occur because this species is usually found in the vicinity of streams, springs, and rain pools (AGFD 2023a). Bailey's pocket mouse and Harris' antelope squirrel have the potential to occur in the project areas because both species use desertscrub habitats (NatureServe 2023).

The AZHGIS report (see Appendix C) also indicates that the predicted range models for 85 SGCN species intersect the project footprint. Because of the moderate amount of biological diversity in the project areas, most of the 85 species will use the project areas either on a limited, seasonal, or year-round basis.

Finally, the AZHGIS report (see Appendix C) indicates that six Species of Economic and Recreation Importance are predicted to occur in or within a 5-mile radius of the project areas: Gambel's quail, mule deer (*Odocoileus hemionus*), javelina (*Pecari tajacu*), mountain lion (*Puma concolor*), white-winged dove (*Zenaida asiatica*), and mourning dove (*Zenaida macroura*). All these species, except for mountain lions, are likely to occur in the project areas because they are habitat generalists with widespread distributions in the Southwest. Mountain lions are unlikely to occur in the project areas because they are a relatively rare species that typically avoids areas with human activity, although they could use the area when moving from other more suitable habitat areas in the vicinity.

ARIZONA DEPARTMENT OF AGRICULTURE ARIZONA NATIVE PLANT LAW

Protected native plants classified under the Arizona Native Plant Law (Arizona Revised Statutes 3-904) are present in the study area. This law states that protected plants cannot be salvaged and transported from any land, including private land, without permission and a permit from the ADA, and it also requires notification prior to land clearing even if the plants would be destroyed. Highly Safeguarded native plants are those species for which removal is not allowed except with an ADA scientific permit; no collection of these plants is allowed. One species in the Highly Safeguarded category was observed, Pima pineapple cactus. Salvage Restricted native plants are those plants for which a salvage permit is required; collection is allowed only with a permit. Twelve Salvage Restricted plants were observed, Arizona pencil cholla (*Cylindropuntia arbuscula*), cactus apple, candy barrel cactus, Christmas cactus, Graham's nipple cactus (*Mammillaria grahamii*), jumping cholla, night-blooming cereus (*Peniocereus greggii*), ocotillo (*Fouquieria splendens*), pinkflower hedgehog cactus, saguaro, soap tree yucca (*Yucca elata*), and tree cholla. The Salvage Assessed category includes native plants for which a salvage permit is required for removal. Three species in this category were observed: blue paloverde (*Parkinsonia florida*), velvet mesquite, and yellow paloverde. Plants in the Harvest Restricted category are protected because they are subject to excessive harvesting or overcutting as a result of the intrinsic value of their byproducts, fiber, or woody parts, and a harvest permit is required. One species in this category, velvet mesquite, was observed in the study area. Velvet mesquite is in both the Salvage Assessed and Harvest Restricted categories.

The ADA Notice of Intent to Clear Land form is in Appendix D of this report. This form must be completed and submitted to the ADA prior to vegetation-removal activities. As noted on page 2 of the form, the advance notice required for submittal of the form is dependent on the amount of land that will be cleared. If native plants will be salvaged and replanted off-site, the applicant needs to include this information with the Notice of Intent to Clear Land form at the time of its submittal and request salvage permits.

ARIZONA DEPARTMENT OF AGRICULTURE NOXIOUS WEED REGULATIONS

The ADA defines three classes of noxious weeds in the State of Arizona:

- A Class A noxious weed is categorized as a species of plant that is not known to exist or that is of limited distribution in the state and is a high-priority pest for quarantine, control, or mitigation.

- A Class B noxious weed is categorized as a species of plant that is known to occur but of limited distribution in the state and may be a high-priority pest for quarantine, control, or mitigation if a significant threat to a crop, commodity, or habitat is known to exist.
- A Class C noxious weed is categorized as a species of plant that is widespread but may be recommended for active control based on risk assessment.

One Class B species (Saharan mustard, *Brassica tournefortii*) and one Class C species (buffelgrass) listed as Arizona noxious weed species were observed in the study area. Saharan mustard was found sporadically throughout the study area. Buffelgrass was common and observed along most of the washes in the study area.

ARIZONA GAME AND FISH DEPARTMENT SOLAR DEVELOPMENT GUIDANCE

The AGFD *Guidelines* outline regulations and important biological resource categories, such as wildlife corridors and linkages, and wildlife habitat (AGFD 2010). Arizona's State Wildlife Action Plan (AGFD 2022) describes special-status species, including SGCN. The relevant biological regulations as well as special-status species that should be considered for solar developments are addressed in this report.

The AGFD *Guidelines* also refer to potential solar site categories. In SWCA's opinion, the project areas fall under Resource Category III, which is defined by AGFD as follows: "Habitats in this category are of high to medium value for Arizona wildlife species and are relatively abundant on a statewide basis" (AGFD 2010).

The AGFD provided avoidance and minimization measures to reduce impacts to wildlife and their habitat to be considered for this type of project, which is categorized as "Energy Storage/Production/Transfer, Energy Production (generation), photovoltaic solar facility (new)," in the AZHGIS report (see Appendix C).

PIMA COUNTY NATIVE PLANT PRESERVATION ORDINANCE AND REGULATED RIPARIAN HABITAT ORDINANCE

Native Plant Preservation Ordinance

Twelve of the plant species documented in the study area are protected under the Pima County NPPO (see Appendix A): blue paloverde, candy barrel cactus, catclaw acacia, night-blooming cereus, ocotillo, Pima pineapple cactus, saguaro, soap tree yucca, spiny hackberry, velvet mesquite, whitethorn acacia, and yellow paloverde. This ordinance applies to the project areas that are within unincorporated Pima County and require a conditional use permit or other county permit. The potential for and extent of impacts on Pima County NPPO plants will be determined once the native plant mitigation plan is drafted. Required surveys for desert ironwood, saguaro, and Pima pineapple cactus to satisfy Pima County NPPO requirements for the 30% set-aside method for the solar project area were detailed in a separate report (SWCA 2023a).

Regulated Riparian Habitat Ordinance

The Regulated Riparian Habitat Ordinance (Pima County Ordinance 2005-FC-16.30) protects watercourses and washes by preserving or enhancing riparian vegetation and habitat along watercourses and floodplains. This ordinance applies to REID and non-REID areas within unincorporated Pima County. Figure 3 identifies regulated riparian habitats mapped within the solar project area. Pima County's *Regulated Riparian Habitat Mitigation Standards and Implementation Guidelines* (Pima

County Regional Flood Control District 2011) contain mitigation guidelines and standards and include the documentation required for a Riparian Habitat Mitigation Plan that would be necessary for impacts to regulated riparian habitat over 0.3 acre by project development activities. This ordinance was addressed for the solar project area in a separate report (SWCA 2023b).

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APPENDIX A

Floral and Faunal List

Table A.1. Plant Species Observed in the Project Area and Their Status

Common Name	Scientific Name	Observed in Solar Project Area	Observed in Transmission Project Area	Arizona Native Plant Law Protected Native Plant*	Pima County NPPO	ADA Noxious Weed Species
Arizona pencil cholla	<i>Cylindropuntia arbuscula</i>	X	X	SR		
Arizona sandmat	<i>Chamaesyce arizonica</i>	X	X			
Asian mustard† (=Saharan mustard)	<i>Brassica tournefortii</i>	X				Class B
Bajada lupine	<i>Lupinus concinnus</i>	X				
Bermudagrass†	<i>Cynodon dactylon</i>	X	X			
Blue paloverde	<i>Parkinsonia florida</i>	X	X	SA	X	
Brittlebush	<i>Encelia farinosa</i>	X				
Burroweed	<i>Isocoma tenuisecta</i>	X	X			
Buffelgrass†	<i>Pennisetum ciliare</i>	X	X			Class C
Cactus apple	<i>Opuntia engelmannii</i>	X	X	SR		
Candy barrel cactus	<i>Ferocactus wislizeni</i>	X	X	SR	X	
Catclaw acacia	<i>Senegalia greggii</i>	X	X		X	
Christmas cactus	<i>Cylindropuntia leptocaulis</i>	X	X	SR		
Creosote bush	<i>Larrea tridentata</i>	X	X			
Desert evening primrose	<i>Oenothera primiveris</i>	X				
Desert globemallow	<i>Sphaeralcea ambigua</i>	X	X			
Desert marigold	<i>Baileya multiradiata</i>	X				
Desert tobacco	<i>Nicotiana obtusifolia</i>	X	X			
Desert wolfberry	<i>Lycium macrodon</i>	X				
Desert zinnia	<i>Zinnia acerosa</i>	X				
Desertbroom	<i>Baccharis sarothroides</i>	X	X			
Devil's spineflower	<i>Chorizanthe rigida</i>	X	X			
Doubleclaw	<i>Proboscidea parviflora</i>	X	X			
Downy prairie clover	<i>Dalea neomexicana</i>	X				
Dwarf desertpeony	<i>Acourtia nana</i>	X				
Dwarf white milkvetch	<i>Astragalus didymocarpus</i>	X				
Fairyduster	<i>Calliandra eriophylla</i>	X				
Fourwing saltbush	<i>Atriplex canescens</i>	X	X			
Graham's nipple cactus	<i>Mammillaria grahamii</i>	X	X	SR		

Common Name	Scientific Name	Observed in Solar Project Area	Observed in Transmission Project Area	Arizona Native Plant Law Protected Native Plant*	Pima County NPPO	ADA Noxious Weed Species
Jumping cholla	<i>Cylindropuntia fulgida</i>	X	X	SR		
Lotebush	<i>Ziziphus obtusifolia</i>	X				
Menzies' fiddleneck	<i>Amsinckia menziesii</i>	X				
Mule-fat	<i>Baccharis salicifolia</i>	X				
New Mexico plumeseed	<i>Rafinesquia neomexicana</i>	X				
Nightblooming cereus	<i>Peniocereus greggii</i>	X		SR	X	
Ocotillo	<i>Fouquieria splendens</i>	X	X	SR	X	
Pima pineapple cactus	<i>Coryphantha scheeri</i> var. <i>robustispina</i>	X	X	HS	X	
pinkflower hedgehog cactus	<i>Echinocereus fasciculatus</i>	X		SR		
Prickly Russian thistle†	<i>Salsola tragus</i>	X	X			
Saguaro	<i>Carnegiea gigantea</i>	X	X	SR	X	
Soaptree yucca	<i>Yucca elata</i>	X	X	SR	X	
Spidergrass	<i>Aristida ternipes</i>	X	X			
Spiny hackberry	<i>Celtis ehrenbergiana</i>	X	X		X	
Tree cholla	<i>Cylindropuntia imbricata</i>	X	X	SR		
Triangle bur ragweed	<i>Ambrosia deltoidea</i>	X				
Velvet mesquite	<i>Prosopis velutina</i>	X	X	SA, HR	X	
Whitethorn acacia	<i>Vachellia constricta</i>	X	X		X	
Yellow paloverde	<i>Parkinsonia microphylla</i>	X	X	SA	X	

Note: Plant names follow the PLANTS database (Natural Resources Conservation Service 2023), except plants listed by USFWS are named according to listing documents.

* Arizona Native Plant Law status codes: HR = Harvest Restricted; HS = Highly Safeguarded; SA = Salvage Assessed; SR = Salvage Restricted.

† Nonnative species.

Table A.2. Bird Species Observed in the Project Area

Common Name	Scientific Name	Observed in Solar Project Area	Observed in Transmission Project Area
Abert's towhee	<i>Melospiza aberti</i>	X	X
American kestrel	<i>Falco sparverius</i>	X	
Ash-throated flycatcher	<i>Myiarchus cinerascens</i>	X	X
Black-tailed gnatcatcher	<i>Poliophtila melanura</i>	X	X

Black-throated sparrow	<i>Amphispiza bilineata</i>	X	X
Brewer's sparrow	<i>Spizella breweri</i>	X	
Cactus wren	<i>Catherpes mexicanus</i>	X	X
Common raven	<i>Corvus corax</i>	X	X
Cooper's hawk	<i>Accipiter cooperii</i>	X	
Crested caracara	<i>Caracara cheriway</i>	X	
Curve-billed thrasher	<i>Toxostoma curvirostre</i>	X	X
Gambel's quail	<i>Callipepla gambelii</i>	X	X
Gila woodpecker	<i>Melanerpes uropygialis</i>	X	X
Gilded flicker	<i>Colaptes chrysoides</i>	X	X
Great horned owl	<i>Bubo virginianus</i>	X	
Greater roadrunner	<i>Geococcyx californianus</i>	X	X
House finch	<i>Haemorhous mexicanus</i>	X	X
Ladder-backed woodpecker	<i>Picoides scalaris</i>	X	
Lesser goldfinch	<i>Spinus psaltria</i>	X	
Lucy's warbler	<i>Oreothlypis luciae</i>	X	X
Mallard	<i>Anas platyrhynchos</i>	X	
Mourning dove	<i>Zenaida macroura</i>	X	X
Phainopepla	<i>Phainopepla nitens</i>	X	
Red-tailed hawk	<i>Buteo jamaicensis</i>	X	X
Turkey vulture	<i>Cathartes aura</i>	X	X
Verdin	<i>Auriparus flaviceps</i>	X	X
White-crowned sparrow	<i>Zonotrichia leucophrys</i>	X	
White-winged dove	<i>Zenaida asiatica</i>	X	X
Zone-tailed hawk	<i>Buteo albonotatus</i>	X	

Table A.3. Wildlife Species Observed in the Project Area

Common Name	Scientific Name	Observed in Solar Project Area	Observed in Transmission Project Area
Antelope jackrabbit	<i>Lepus alleni</i>	X	
Black-tailed jackrabbit	<i>Lepus californicus</i>	X	
Coyote	<i>Canis latrans</i>	X	
Desert cottontail	<i>Sylvilagus audubonii</i>	X	X
Round-tailed ground squirrel	<i>Xerospermophilus tereticaudus</i>	X	X

APPENDIX B

USFWS IpaC Species List for the Project Areas

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

Pima County, Arizona



Local office

Arizona Ecological Services Field Office

☎ (602) 242-0210

📠 (602) 242-2513

9828 North 31st Ave

#c3

Phoenix, AZ 85051-2517

NOT FOR CONSULTATION

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
<p>Jaguar <i>Panthera onca</i></p> <p>Wherever found</p> <p>There is final critical habitat for this species. Your location does not overlap the critical habitat.</p> <p>https://ecos.fws.gov/ecp/species/3944</p>	Endangered
<p>Ocelot <i>Leopardus (=Felis) pardalis</i></p> <p>Wherever found</p> <p>No critical habitat has been designated for this species.</p> <p>https://ecos.fws.gov/ecp/species/4474</p>	Endangered

Birds

NAME	STATUS
<p>Cactus Ferruginous Pygmy-owl <i>Glaucidium brasilianum</i></p> <p>cactorum</p> <p>Wherever found</p> <p>There is final critical habitat for this species.</p> <p>https://ecos.fws.gov/ecp/species/1225</p>	Threatened
<p>California Least Tern <i>Sternula antillarum browni</i></p> <p>Wherever found</p> <p>No critical habitat has been designated for this species.</p> <p>https://ecos.fws.gov/ecp/species/8104</p>	Endangered
<p>Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i></p> <p>Wherever found</p> <p>There is final critical habitat for this species. Your location does not overlap the critical habitat.</p> <p>https://ecos.fws.gov/ecp/species/6749</p>	Endangered
<p>Yellow-billed Cuckoo <i>Coccyzus americanus</i></p> <p>There is final critical habitat for this species. Your location does not overlap the critical habitat.</p> <p>https://ecos.fws.gov/ecp/species/3911</p>	Threatened

Reptiles

NAME

STATUS

Sonoyta Mud Turtle *Kinosternon sonoriense longifemorale*

Endangered

Wherever found

There is **final** critical habitat for this species.<https://ecos.fws.gov/ecp/species/7276>

Amphibians

NAME

STATUS

Chiricahua Leopard Frog *Rana chiricahuensis*

Threatened

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>

Fishes

NAME

STATUS

Gila Chub *Gila intermedia*

Endangered

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.<https://ecos.fws.gov/ecp/species/51>Gila Topminnow (incl. Yaqui) *Poeciliopsis occidentalis*

Endangered

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/1116>

Insects

NAME

STATUS

Monarch Butterfly *Danaus plexippus*

Candidate

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/9743>

Flowering Plants

NAME

STATUS

Arizona Eryngo *Eryngium sparganophyllum*

Endangered

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

<https://ecos.fws.gov/ecp/species/10705>

Pima Pineapple Cactus *Coryphantha scheeri* var.

Endangered

robustispina

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/4919>

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.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act¹ and the Migratory Bird Treaty Act².

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats³, should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "[Supplemental Information on Migratory Birds and Eagles](#)".

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds
<https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds
<https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation->

[measures.pdf](#)

- Supplemental Information for Migratory Birds and Eagles in IPaC
<https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

There are bald and/or golden eagles in your project area.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON

Golden Eagle *Aquila chrysaetos*

Breeds Dec 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>

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 "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "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.

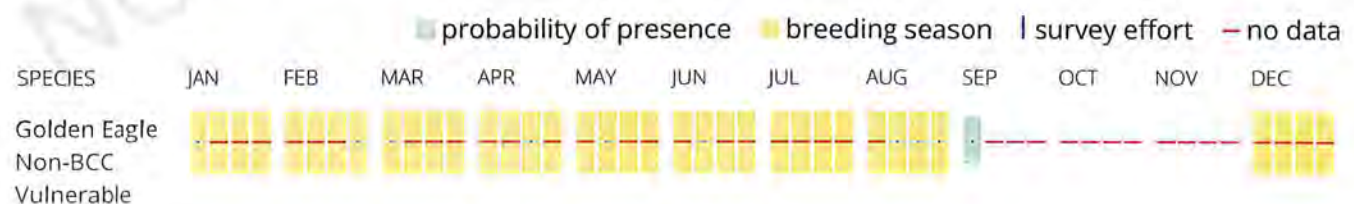
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

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.



What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence 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). To see 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 of bald and golden eagles 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 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. Please contact your local Fish and Wildlife Service Field Office if you have questions.

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 habitats³ should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "[Supplemental Information on Migratory Birds and Eagles](#)".

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:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and->

[golden-eagles-may-occur-project-action](#)

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, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON

Costa's Hummingbird *Calypte costae*

Breeds Jan 15 to Jun 10

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
<https://ecos.fws.gov/ecp/species/9470>

Gila Woodpecker *Melanerpes uropygialis*

Breeds Apr 1 to Aug 31

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
<https://ecos.fws.gov/ecp/species/5960>

Gilded Flicker *Colaptes chrysoides*

Breeds May 1 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
<https://ecos.fws.gov/ecp/species/2960>

Golden Eagle *Aquila chrysaetos*

Breeds Dec 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>

Lawrence's Goldfinch *Carduelis lawrencei*

Breeds Mar 20 to Sep 20

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9464>

Rufous-winged Sparrow *Aimophila carpalis*

Breeds Jun 15 to Sep 30

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

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 ["Supplemental Information on Migratory Birds and Eagles"](#), specifically the FAQ section titled "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.

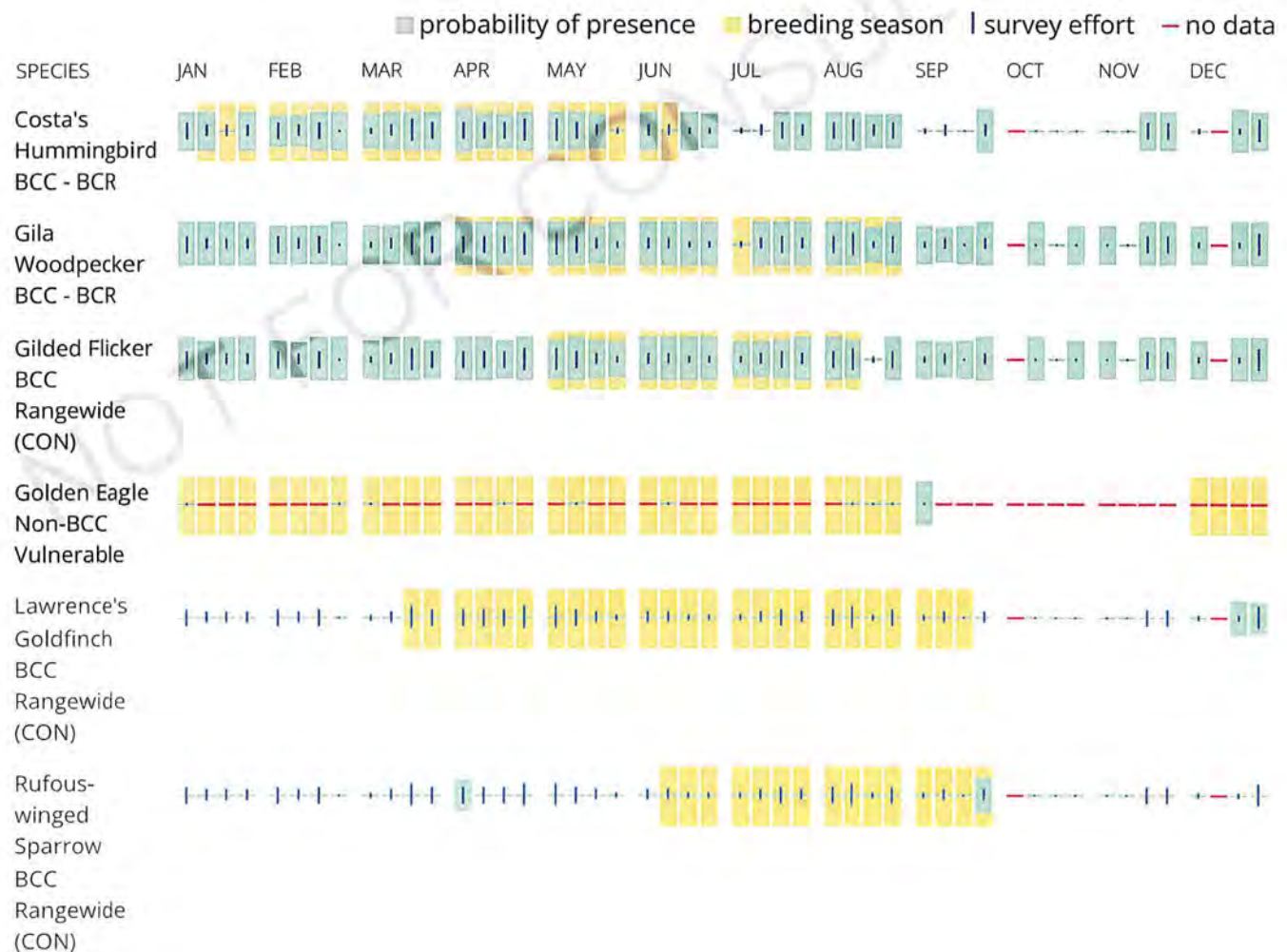
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

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.

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.

APPENDIX C

AZHGIS Online Environmental Review Tool 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:

Wilmot Energy Center II Project

Project Description:

Wilmot Energy Center, LLC, proposes to develop a solar energy project and gen-tie corridor.

Project Type:

Energy Storage/Production/Transfer, Energy Production (generation), photovoltaic solar facility (new)

Contact Person:

Stacy Campbell

Organization:

SWCA

On Behalf Of:

PRIVATE

Project ID:

HGIS-19476

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. Arizona Wildlife Conservation Strategy (AWCS), specifically Species of Greatest Conservation Need (SGCN), 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:

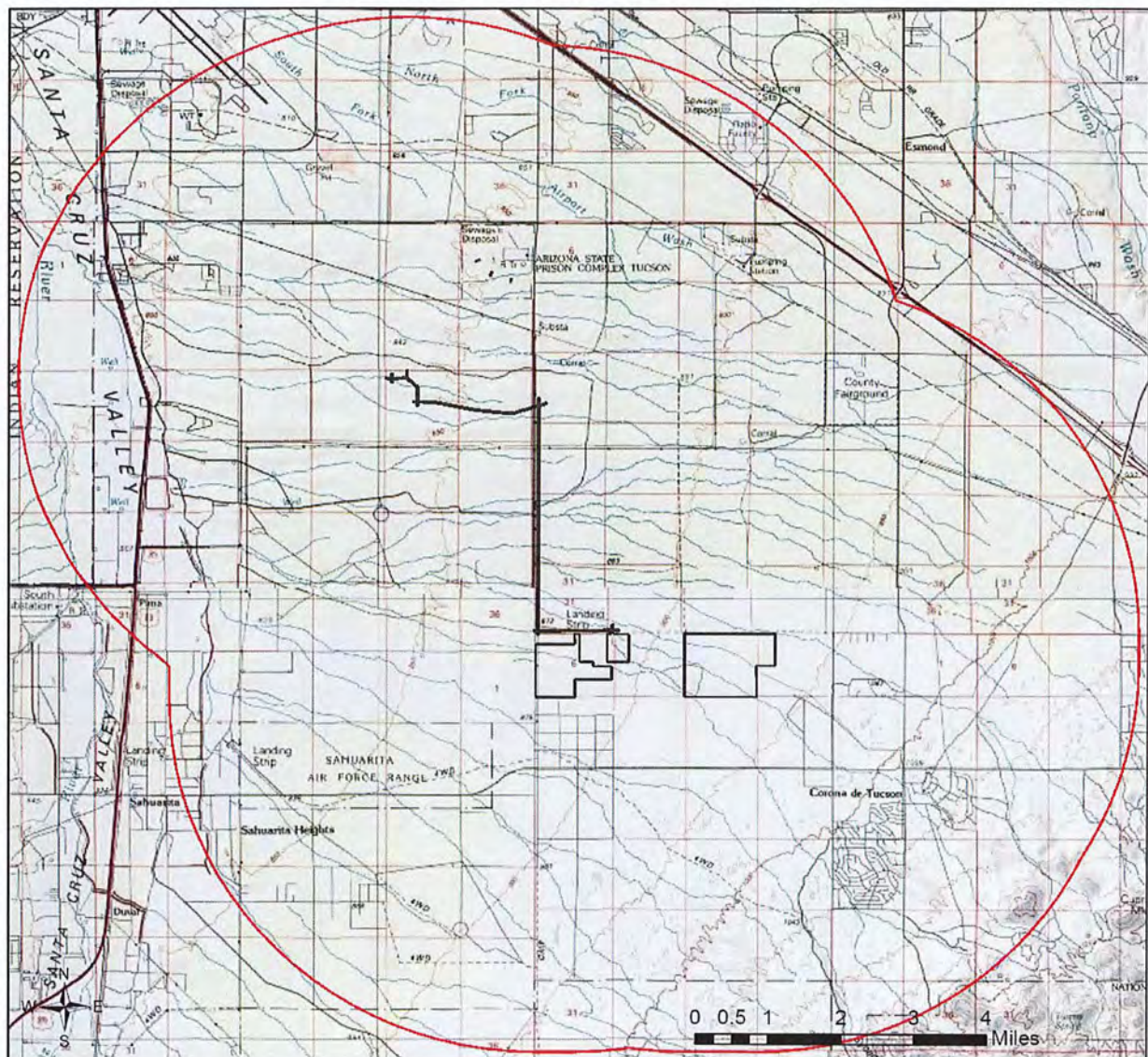
1. The Department is interested in the conservation of all fish and wildlife resources, including those species listed in this report and those that may have not been documented within the project vicinity as well as other game and nongame wildlife.
2. Recommendations have been made by the Department, 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

Wilmot Energy Center II Project USA Topo Basemap With Locator Map



-  Buffered Project Boundary
-  Project Boundary

Project Size (acres): 1,151.56

Lat/Long (DD): 31.9845 / -110.8139

County(s): Pima

AGFD Region(s): Tucson

Township/Range(s): T16S, R14E; T16S, R15E; T17S, R15E

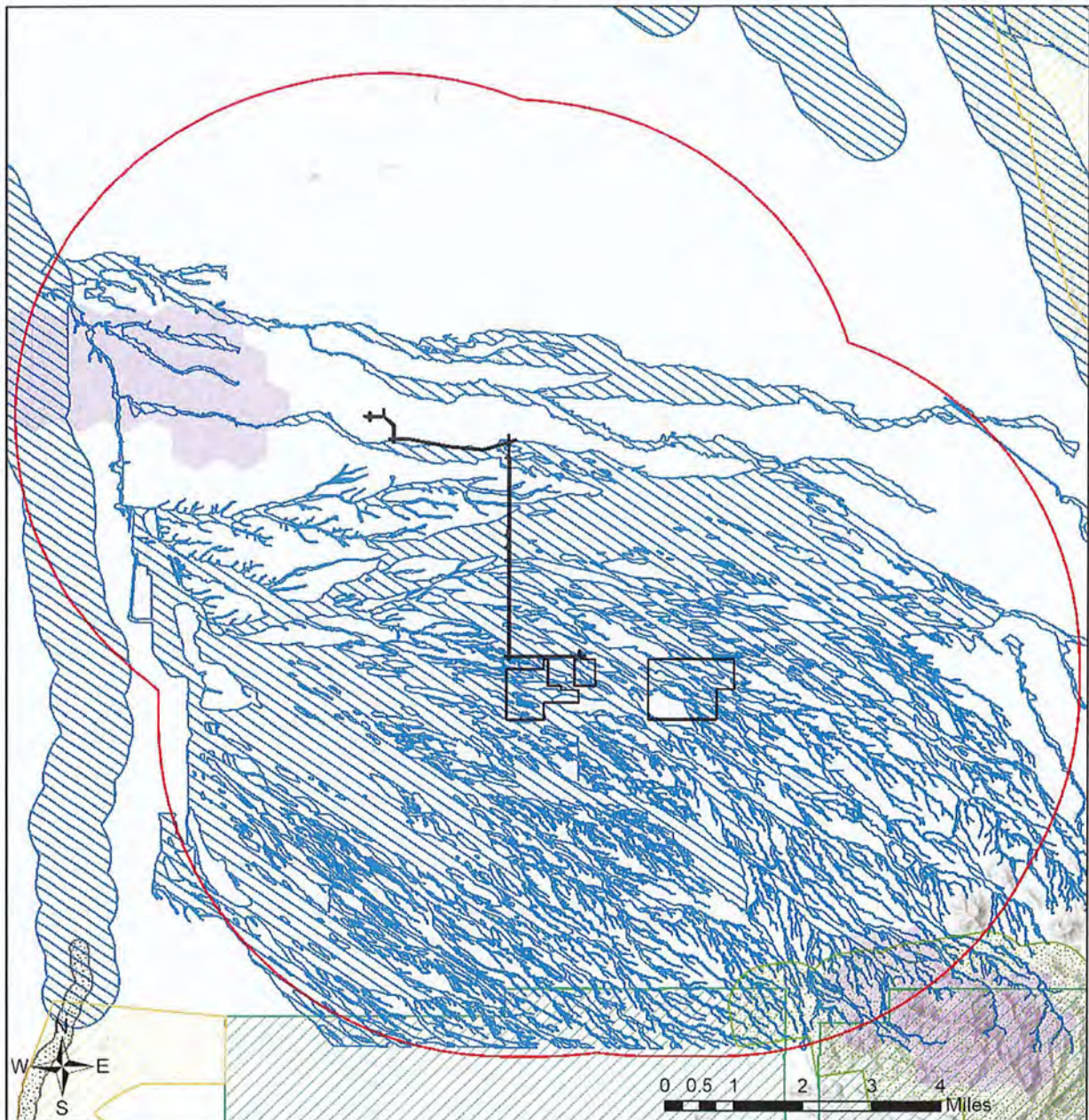
USGS Quad(s): CORONA DE TUCSON; TUCSON SE +

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



Wilmot Energy Center II Project

Web Map As Submitted By User



- Critical Habitat
- Wildlife Crossing Area
- Wildlife Movement Area - Diffuse
- Wildlife Movement Area - Landscape
- Wildlife Movement Area - Riparian/Wash
- Important Connectivity Zones
- Wildlife Connectivity
- Buffered Project Boundary
- Project Boundary

Project Size (acres): 1,151.56

Lat/Long (DD): 31.9845 / -110.8139

County(s): Pima

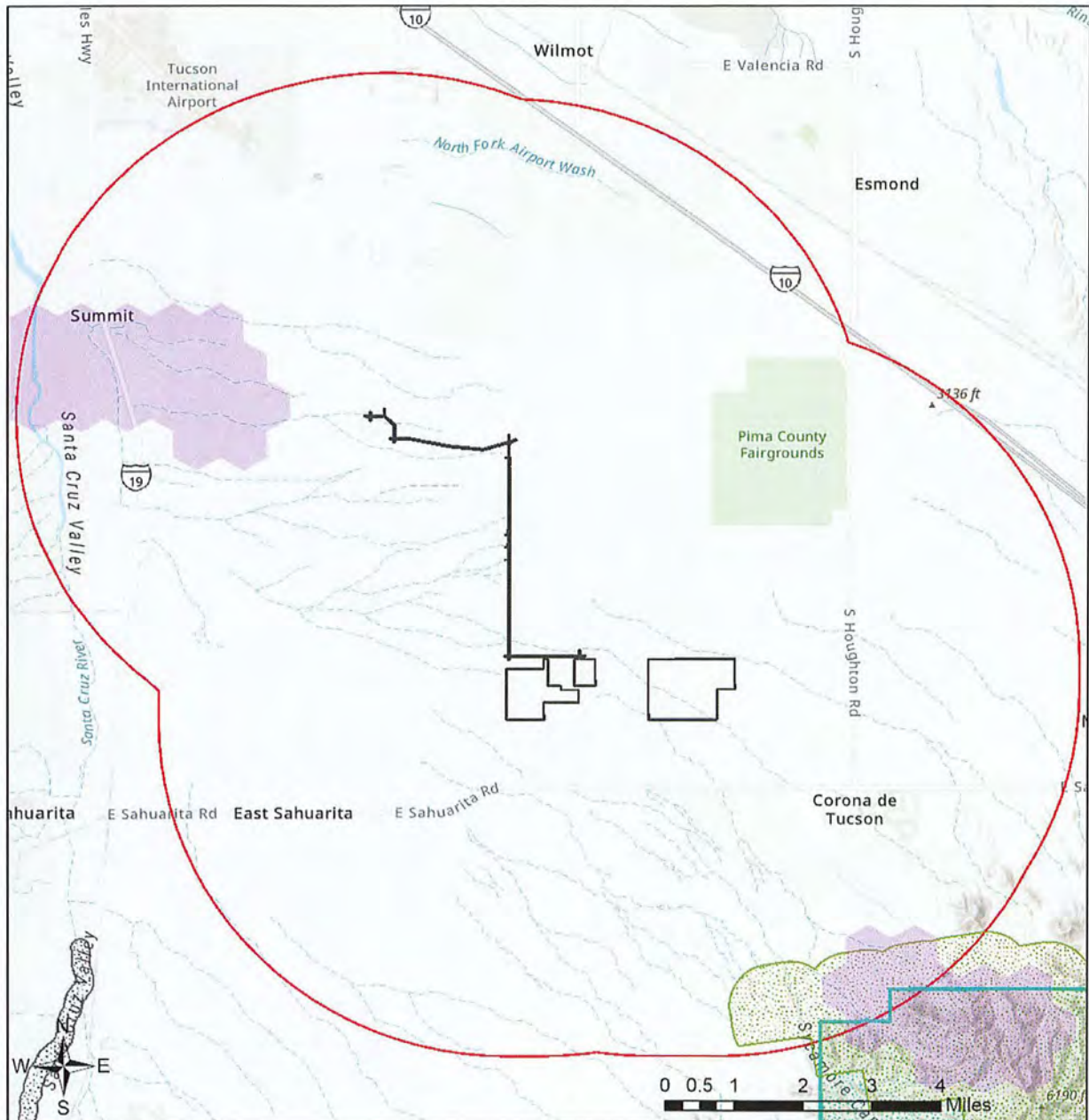
AGFD Region(s): Tucson

Township/Range(s): T16S, R14E; T16S, R15E; T17S, R15E

USGS Quad(s): CORONA DE TUCSON; TUCSON SE +

Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, H Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

Wilmot Energy Center II Project Important Areas



- Buffered Project Boundary
- Project Boundary
- Important Bird Areas
- Critical Habitat
- Pinal County Riparian
- Important Connectivity Zones
- Wildlife Connectivity

Project Size (acres): 1,151.56

Lat/Long (DD): 31.9845 / -110.8139

County(s): Pima

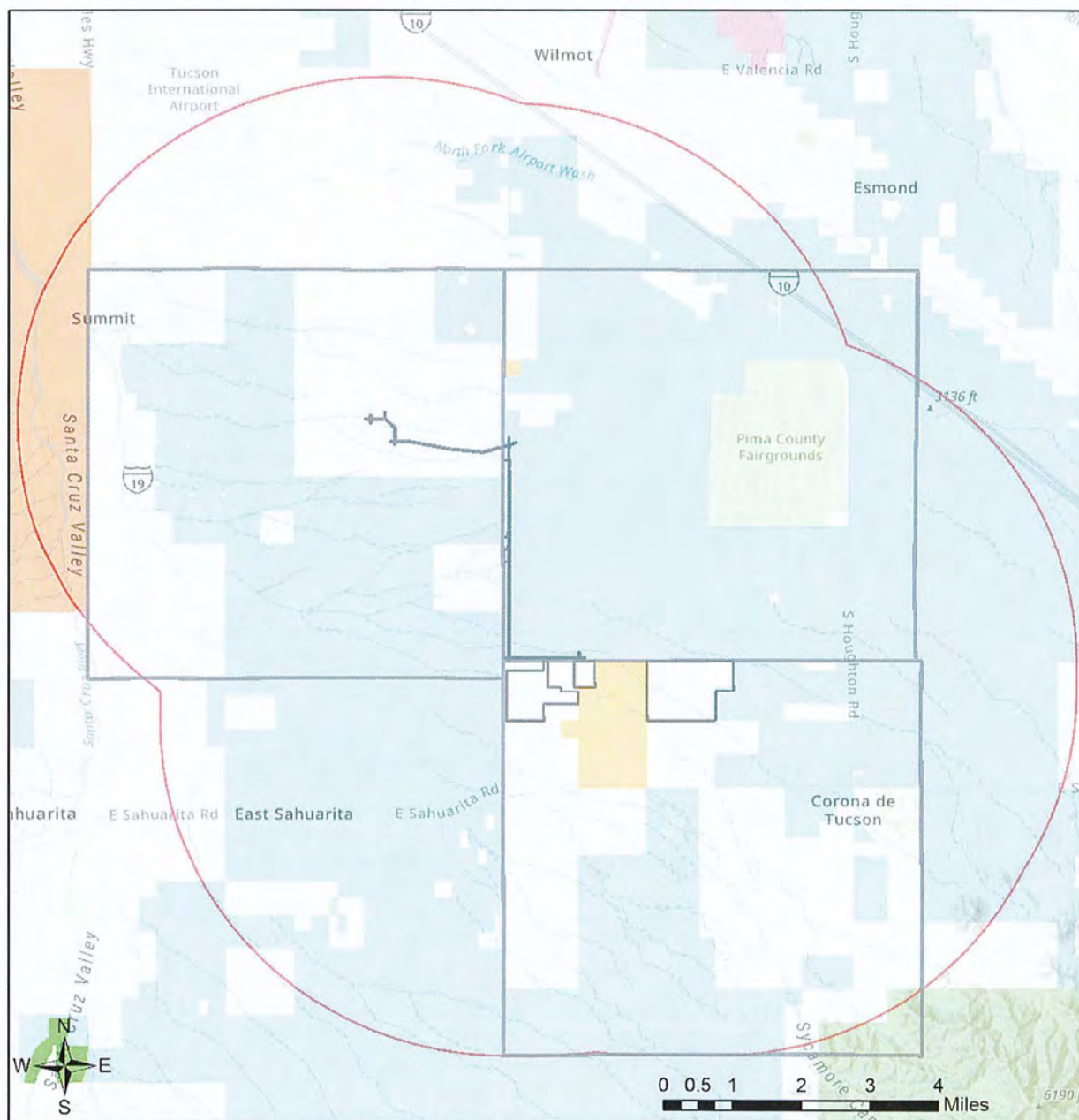
AGFD Region(s): Tucson

Township/Range(s): T16S, R14E; T16S, R15E; T17S, R15E

USGS Quad(s): CORONA DE TUCSON; TUCSON SE +

Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, II Robinson, NCEAS, MLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community
Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Wilmot Energy Center II Project 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): 1,151.56

Lat/Long (DD): 31.9845 / -110.8139

County(s): Pima

AGFD Region(s): Tucson

Township/Range(s): T16S, R14E; T16S, R15E; T17S, R15E

USGS Quad(s): CORONA DE TUCSON; TUCSON SE +

Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, H Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Special Status Species Documented within 5 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
<i>Ammospermophilus harrisi</i>	Harris' Antelope Squirrel					2
<i>Amphispiza bilineata</i>	Black-throated Sparrow					2
<i>Auriparus flaviceps</i>	Verdin					2
Bat Colony						
<i>Buteo swainsoni</i>	Swainson's Hawk					2
<i>Calypte costae</i>	Costa's Hummingbird					2
<i>Campylorhynchus brunneicapillus</i>	Cactus Wren					2
<i>Cardinalis sinuatus</i>	Pyrrhuloxia					2
<i>Chaetodipus baileyi</i>	Bailey's Pocket Mouse					2
<i>Coccyzus americanus</i>	Yellow-billed Cuckoo (Western DPS)	LT	S	S		1
<i>Colaptes chrysoides</i>	Gilded Flicker			S		2
<i>Coryphantha scheeri</i> var. <i>robustispina</i>	Pima Pineapple Cactus	LE			HS	
<i>Coryphantha scheeri</i> var. <i>robustispina</i>	Pima Pineapple Cactus	LE		S	HS	
<i>Cynanthus latirostris</i>	Broad-billed Hummingbird		S			2
<i>Echinocactus horizonthalonius</i> var. <i>nicholii</i>	Nichol Turk's Head Cactus	LE			HS	
<i>Echinocereus fasciculatus</i>	Magenta-flower Hedgehog-cactus				SR	
<i>Echinomastus erectocentrus</i> var. <i>erectocentrus</i>	Needle-spined Pineapple Cactus	SC			SR	
<i>Eugenes fulgens</i>	Rivoli's Hummingbird					2
<i>Falco sparverius</i>	American Kestrel					2
<i>Gastrophryne mazatlanensis</i>	Sinoloan Narrow-mouthed Toad			S		2
<i>Gopherus morafkai</i>	Sonoran Desert Tortoise	CCA	S	S		1
<i>Heloderma suspectum</i>	Gila Monster					1
<i>Icterus bullockii</i>	Bullock's Oriole					2
<i>Incilius alvarius</i>	Sonoran Desert Toad					2
<i>Lasiurus xanthinus</i>	Western Yellow Bat		S			2
<i>Melanerpes uropygialis</i>	Gila Woodpecker					2
<i>Melospiza aberti</i>	Abert's Towhee		S			2
<i>Melospiza fusca</i>	Canyon Towhee					2
<i>Myotis velifer</i>	Cave Myotis	SC		S		2
<i>Parabuteo unicinctus</i>	Harris's Hawk					2
<i>Peucaea carpalis</i>	Rufous-winged Sparrow					2
<i>Phrynosoma solare</i>	Regal Horned Lizard					2
<i>Tadarida brasiliensis</i>	Brazilian Free-tailed Bat					2
<i>Tumamoca macdougallii</i>	Tumamoc Globeberry	SC	S	S	SR	

Note: Status code definitions can be found at <https://www.azgfd.com/wildlife-conservation/on-the-ground-conservation/state-wildlife-action-plan/state-wildlife-action-plan-status-definitions/>.

Special Areas Documented that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Lee Moore Wash Flow Corridors	Pima County Wildlife Movement Area - Riparian/Wash					

Note: Status code definitions can be found at <https://www.azgfd.com/wildlife-conservation/on-the-ground-conservation/state-wildlife-action-plan/state-wildlife-action-plan-status-definitions/>.

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
Accipiter gentilis	Northern Goshawk	SC	S	S		2
Ammodramus savannarum perpallidus	Western Grasshopper Sparrow					
Ammospermophilus harrisi	Harris' Antelope Squirrel					
Anthus spragueii	Sprague's Pipit	SC				2
Aquila chrysaetos	Golden Eagle			S		2
Asio otus	Long-eared Owl					2
Aspidoscelis sonora	Sonoran Spotted Whiptail					2
Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	S		2
Auriparus flaviceps	Verdin					2
Botaurus lentiginosus	American Bittern					2
Buteo regalis	Ferruginous Hawk	SC		S		2
Buteo swainsoni	Swainson's Hawk					2
Buteogallus anthracinus	Common Black Hawk					2
Calcarius ornatus	Chestnut-collared Longspur					2
Callipepla squamata	Scaled Quail					2
Calypte costae	Costa's Hummingbird					2
Campostoma imberbe	Northern Beardless-Tyrannulet		S			2
Campylorhynchus brunneicapillus	Cactus Wren					2
Catharus ustulatus	Swainson's Thrush					2
Chaetodipus baileyi	Bailey's Pocket Mouse					2
Charadrius montanus	Mountain Plover	SC				2
Chilomeniscus stramineus	Variable Sandsnake					2
Choeronycteris mexicana	Mexican Long-tongued Bat	SC	S	S		2
Chordeiles minor	Common Nighthawk					2
Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)					
Colaptes chrysoides	Gilded Flicker			S		2
Coluber bilineatus	Sonoran Whipsnake					2
Columbina inca	Inca Dove					2
Corvus cryptoleucus	Chihuahuan Raven					2
Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat	SC	S	S		1
Crotalus tigris	Tiger Rattlesnake					2

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>Cynanthus latirostris</i>	Broad-billed Hummingbird		S			2
<i>Empidonax wrightii</i>	Gray Flycatcher					2
<i>Eumops perotis californicus</i>	Greater Western Bonneted Bat					
<i>Falco mexicanus</i>	Prairie Falcon					2
<i>Falco peregrinus anatum</i>	American Peregrine Falcon					
<i>Falco sparverius</i>	American Kestrel					2
<i>Gastrophryne mazatlanensis</i>	Sinoloan Narrow-mouthed Toad					
<i>Glaucidium brasilianum cactorum</i>	Cactus Ferruginous Pygmy-owl					
<i>Gopherus morafkai</i>	Sonoran Desert Tortoise	CCA	S	S		1
<i>Heloderma suspectum</i>	Gila Monster					1
<i>Icterus bullockii</i>	Bullock's Oriole					2
<i>Icterus cucullatus</i>	Hooded Oriole					2
<i>Icterus parisorum</i>	Scott's Oriole					2
<i>Incilius alvarius</i>	Sonoran Desert Toad					2
<i>Kinosternon sonoriense sonoriense</i>	Desert Mud Turtle					
<i>Lanius ludovicianus</i>	Loggerhead Shrike	SC				2
<i>Lasiurus blossevillii</i>	Western Red Bat		S			2
<i>Lasiurus cinereus</i>	Hoary Bat					2
<i>Lasiurus xanthinus</i>	Western Yellow Bat		S			2
<i>Leptonycteris yerbabuenae</i>	Lesser Long-nosed Bat	SC				1
<i>Lepus alleni</i>	Antelope Jackrabbit					2
<i>Lithobates yavapaiensis</i>	Lowland Leopard Frog	SC	S	S		1
<i>Macrotus californicus</i>	California Leaf-nosed Bat	SC		S		2
<i>Megascops kennicottii</i>	Western Screech-owl					
<i>Melanerpes uropygialis</i>	Gila Woodpecker					2
<i>Melospiza lincolnii</i>	Lincoln's Sparrow					2
<i>Melospiza aberti</i>	Abert's Towhee		S			2
<i>Micrathene whitneyi</i>	Elf Owl					
<i>Micruroides euryxanthus</i>	Sonoran Coralsnake					2
<i>Myadestes townsendi</i>	Townsend's Solitaire					2
<i>Myotis auriculus</i>	Southwestern Myotis					2
<i>Myotis thysanodes</i>	Fringed Myotis	SC				2
<i>Myotis velifer</i>	Cave Myotis	SC		S		2
<i>Myotis yumanensis</i>	Yuma Myotis	SC				2
<i>Neotoma mexicana mexicana</i>	Mexican Woodrat					2
<i>Notiosorex cockrumi</i>	Cockrum's Desert Shrew					2
<i>Nyctinomops femorosaccus</i>	Pocketed Free-tailed Bat					2
<i>Nyctinomops macrotis</i>	Big Free-tailed Bat	SC				2
<i>Parabuteo unicinctus</i>	Harris's Hawk					2

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>Passerculus sandwichensis</i>	Savannah Sparrow					2
<i>Perognathus amplus</i>	Arizona Pocket Mouse					2
<i>Peucaea carpalis</i>	Rufous-winged Sparrow					2
<i>Phrynosoma solare</i>	Regal Horned Lizard					2
<i>Phyllorhynchus browni</i>	Saddled Leaf-nosed Snake					2
<i>Pooecetes gramineus</i>	Vesper Sparrow					2
<i>Progne subis hesperia</i>	Desert Purple Martin					
<i>Setophaga nigrescens</i>	Black-throated Gray Warbler					2
<i>Sigmodon arizonae cienegae</i>	Arizona Cotton Rat					2
<i>Spizella breweri</i>	Brewer's Sparrow					2
<i>Tadarida brasiliensis</i>	Brazilian Free-tailed Bat					
<i>Terrapene ornata</i>	Ornate Box Turtle			S		1
<i>Thomomys umbrinus intermedius</i>	Southern Pocket Gopher					2
<i>Toxostoma bendirei</i>	Bendire's Thrasher					2
<i>Troglodytes pacificus</i>	Pacific Wren					2

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					
<i>Odocoileus hemionus</i>	Mule Deer					
<i>Pecari tajacu</i>	Javelina					
<i>Puma concolor</i>	Mountain Lion					
<i>Zenaida asiatica</i>	White-winged Dove					
<i>Zenaida macroura</i>	Mourning Dove					

Project Type: Energy Storage/Production/Transfer, Energy Production (generation), photovoltaic solar facility (new)

Project Type Recommendations:

During the planning stages of your project, please consider the local or regional needs of wildlife in regards to movement, connectivity, and access to habitat needs. Loss of this permeability prevents wildlife from accessing resources, finding mates, reduces gene flow, prevents wildlife from re-colonizing areas where local extirpations may have occurred, and ultimately prevents wildlife from contributing to ecosystem functions, such as pollination, seed dispersal, control of prey numbers, and resistance to invasive species. In many cases, streams and washes provide natural movement corridors for wildlife and should be maintained in their natural state. Uplands also support a large diversity of species, and should be contained within important wildlife movement corridors. In addition, maintaining biodiversity and ecosystem functions can be facilitated through improving designs of structures, fences, roadways, and culverts to promote passage for a variety of wildlife. Guidelines for many of these can be found

at: <https://www.azgfd.com/wildlife-conservation/planning-for-wildlife/planning-for-wildlife-wildlife-friendly-guidelines/>.

Consider impacts of outdoor lighting on wildlife and develop measures or alternatives that can be taken to increase human safety while minimizing potential impacts to wildlife. Conduct wildlife surveys to determine species within project area, and evaluate proposed activities based on species biology and natural history to determine if artificial lighting may disrupt behavior patterns or habitat use. Use only the minimum amount of light needed for safety. Narrow spectrum bulbs should be used 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.

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.

Minimization and mitigation of impacts to wildlife and fish species due to changes in water quality, quantity, chemistry, temperature, and alteration to flow regimes (timing, magnitude, duration, and frequency of floods) should be evaluated. Minimize impacts to springs, in-stream flow, and consider irrigation improvements to decrease water use. If dredging is a project component, consider timing of the project in order to minimize impacts to spawning fish and other aquatic species (include spawning seasons), and to reduce spread of exotic invasive species. We recommend early direct coordination with Project Evaluation Program for projects that could impact water resources, wetlands, streams, springs, and/or riparian habitats.

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.

The Department requests further coordination to provide project/species specific recommendations. please contact Project Evaluation Program directly at PEP@azgfd.gov.

Project Location and/or Species Recommendations:

HDMS records indicate that one or more native plants listed on the **Arizona Native Plant Law and Antiquities Act** have been documented within the vicinity of your project area. Please contact:

Arizona Department of Agriculture

1688 W Adams St.

Phoenix, AZ 85007

Phone: 602.542.4373

<https://agriculture.az.gov/sites/default/files/Native%20Plant%20Rules%20-%20AZ%20Dept%20of%20Ag.pdf> starts on page 44

Analysis indicates that your project is located in the vicinity of an identified **wildlife habitat connectivity feature**. The **County-level Stakeholder Assessments** contain five categories of data (Barrier/Development, Wildlife Crossing Area, Wildlife Movement Area- Diffuse, Wildlife movement Area- Landscape, Wildlife Movement Area- Riparian/Washes) that provide a context of select anthropogenic barriers, and potential connectivity. 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://www.azgfd.com/wildlife-conservation/planning-for-wildlife/planning-for-wildlife-identifying-corridors/>.

Please contact the Project Evaluation Program (pep@azgfd.gov) for specific project recommendations.

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

HDMS records indicate that **Sonoran Desert Tortoise** have been documented within the vicinity of your project area. Please review the Tortoise Handling Guidelines found at <https://s3.amazonaws.com/azgfd-portal-wordpress/PortallImages/files/wildlife/2014%20Tortoise%20handling%20guidelines.pdf>.

APPENDIX D

Notice of Intent to Clear Land Form



Arizona Department of Agriculture (AZDA)
Central Licensing
Physical Location: 1010 W Washington St., Phoenix, AZ 85007
Mailing Address: 1802 W Jackson St., #78 Phoenix, AZ 85007
Phone: (602) 542-6408 Fax: (602)542-0466
Website: <https://agriculture.az.gov> Email: licensing@azda.gov

Notice of Intent to Clear Land

ARS § 3-904

Pursuant to A.R.S. § 3-904 the undersigned, as Owner of the Property described herein, gives this Notice of Intent to Clear Land of protected native plants.

1. **Owner/landowner's agent.** The owner or landowner's agent of the Property upon which protected native plants will be affected:

Owner's Name _____ Phone _____

Address _____

Agent's Name _____ Phone _____

Address _____

2. **Property.** The description and location of the Property upon which protected native plants will be affected:

County _____

Name of Property/Project _____

Address _____

Physical Location (attach map) _____

(Note: Map must also show surrounding land for 1/2 mile in each direction)

Tax Parcel ID Nos. _____

Legal Description (or attach copy) _____

Number of Acres to be Cleared _____

3. **Owner's Intent.** Landowner's intentions when clearing private land of protected native plants.

☐ Owner intends to allow salvage of the plants, and agrees to be contacted by native plant salvagers.

☐ Owner intends to transplant the plants onto the same property, or to another property he also owns.

☐ Owner has already arranged for salvage of the plants.

☐ Owner does not intend to allow salvage of the plants.

☐ Other _____

4. **Approximate starting date.** _____

(See notice period listed on reverse side)

The information contained in this application is true and accurate to the best of my knowledge. I understand that providing false information is a felony in Arizona

Signature _____ Date _____

Notice to salvagers: Consent of the landowner is required before entering any lands described in this notice.

Explanation Of This Form

1. Notice of Intent to Clear Land.

The majority of the desert plants fall into one of four groups specially protected from theft, vandalism or unnecessary destruction. They include all of the cacti, the unique plants like Ocotillo, and trees like Ironwood, Palo Verde and Mesquite. In most cases the destruction of these protected plants may be avoided if the private landowner gives prior notice to the Arizona Department of Agriculture.

2. Notice Period.

When properly completed, this form is to be sent to the Department within the time periods described below. Landowners/developers are encouraged to salvage protected native plants whenever possible.

3. Information to Interested Parties.

The information in this notice will be posted in the applicable state office of the Department and mailed to those parties (salvage operators, revegetation experts) who have an interest in these plants and may approach the landowner with the possibility of saving the plant(s) from unnecessary destruction.

Notice to Landowner:

1. The owner may not begin destruction of protected native plants until he receives confirmation from the Arizona Department of Agriculture and the time prescribed below has elapsed. The "Confirmed" stamp only verifies that the Notice has been filed.

Size of area over which the Destruction of Plants will occur

Length of Notice Period

Less than one acre

20 days, oral or written

One acre or more, but less than 40 acres

30 days, written

40 acres or more

60 days, written

2. If you are clearing land over an area of less than one acre, oral notice may be given by calling the applicable state office at the telephone number given below.
3. If the land clearing or plant salvage does not occur within one year, a new Notice is required.

This Notice must be sent to the applicable state office of the Department of Agriculture at the address given below:

Central Licensing

Physical Location: 1010 W Washington St., Phoenix, AZ 85007

Mailing Address: 1802 W Jackson St., #78 Phoenix, AZ 85007

Email: licensing@azda.gov

Notice to salvagers: Consent of the landowner is required before entering any lands described in this notice.

APPENDIX E

Regulated Riparian Habitat Site Plan

RRH EXHIBIT

Kimley»Horn

[illegible]

THE AUTHOR'S ADDRESS: — — — — —

EXISTING PROPERTY LINE BOUNDARY HAS AN ASSUMED 30' POTENTIAL FROM A REAR SETBACK BUTTER AND AN ASSUMED 20' SETBACK FROM A SIDE SETBACK.

REH CLASSIFICATION	MAPPED REH (AC)	IMPACTED REH (AC)
XEROGRAPHIC D	5.42	4.56
XEROGRAPHIC C	92.71	9.11
IMPORTANT REPAIR AREAS C	54.11	14.68
IMPORTANT REPAIR AREAS	0.60	0.06
TOTAL	152.84	28.39



Re: Public Hearing Meeting Wednesday, May 8, 2024 Condition Use Permit for a utility-scale renewable energy Facility. Rezoning

Development Services Department
Planning Division

Attention: Spencer

To Whom It May Concern,

My name is Rebecca Ruth. I am contacting you today regarding the Wednesday May 8th 9:00 A.M. public hearing for the Type II Conditional Use Permit for Rezoning Andrada Investments LLC. I would like to protest, again. I protest this solar farm and I am against the rezoning of these parcels because it will kill growth and infrastructure in our area for 30 years, and for the environmental risks it presents to our properties.

The Staff Report and the Meeting Agenda were not posted until May 2, I believe, so this letter is a little last minute. I read the Title 14.01 General Provisions, the Meeting Agenda, and the Staff Report. I went back and reread the meeting invitations. None of these documents call the invasion of our unincorporated Pima County a solar farm.

I learned a lot from the Staff Report that I was not aware of. They said that as of the writing of their report on April 26, they had received no items of public comment. You probably meant regarding this CUP. I have written protest letters all along this process. It seems to me you should have them. Copies of protest letters should be sent down the line of process. None of my legitimate concerns are mentioned anywhere in Title 14 or in the Staff Report. The Staff Report recommends **Approval**. We haven't even been to the meeting yet! Before someone is approved for a Solar Farm, shouldn't the risks to citizens be assessed by Pima County first and conveyed to the people who are going to live next to it?

Title 14 does not mention any human concerns. Humans are not mentioned. Great care is given to the Pima Pineapple Cactus. Pima County has drafted a 44-page report on how to monitor them. Here's a sample:

[Pima County Ecological Monitoring Program](#) – 44 pages on finding and monitoring, and the condition assessment of the Pima Pineapple Cactus.

Teams of 2-3 observers familiar with PPC and their habitat will survey transects every three years. One observer will slowly move along each transect, being careful to stay on the line and to methodically inspect the area on and immediately adjacent to the line for PPC. A key assumption of the distance sampling technique is that objects of interest that are on the line are not missed. This observer will regularly pause and scan behind them to ensure that no PPC are missed. The other 1-2 observers will methodically walk in a sinuous manner, moving across the line back and forth to a distance of about 6 m from the line. In the event that 3 observers are working a transect, both observers will move back and forth across the line, but one will stay within ~5 m from the line and the other will move further from the line, up to 10-15 m.

Wow. If we are attacked by China, the Pima Pineapple Cactus will not save us. Actually, if these solar panels break and leak into the ground below, the Pima Pineapple Cactus will be the first to die. Unless they move it because that IS listed in title 14. The solar farm could be dangerous to them so they will be transplanted. Shouldn't the solar farm be transplanted instead? The little creatures who live in the ground will die also. We die later after we drink our water. I looked up the table of species listed in Title 14 and humans were not on it.

*This is telling: Title 14.03.020 **Incentive plan** (remember that) Minimum REID site boundary setback: Three hundred feet from (here it is) residential structures existing at the time of REID site establishment. What? That means that they think they can trespass on our property with their measuring tapes and measure NOT FROM THE BOUNDARY LINE OF YOUR PROPERTY, BUT FROM YOUR HOUSE! They can steal our land for their prosperity. Remember this is an incentive! This means that a solar farm can be closer to your property line than is safe for you, for the financial prosperity of the City of Tucson, Diamond Ventures, aka Andrada Investments and NextEra Energy. Conservation properties? Three hundred feet from their boundary lines. Studies have made clear that a solar farm should be at least 800ft or 1.2 miles away from a residential area. This farm will be 200 feet off our property lines. Did Pima County even check that? Oh yes! But they think they can use our properties as part of the measurement. So, if your house is set back 100 feet into YOUR land, it counts as part of their 300 feet. That is fraud.*

The map on the back of our meeting letter was an insult. I got the real map and sent it to my neighbors. it was shocking to all of us. The homeowners impacted by a solar farm deserve better. There needs to be a law regarding how close to a residential area a solar farm can be built and how many acres can be designated. We have never been given a map that tells us clearly what the site will look like.

The City of Tucson, Andrada Investments LLC., and NextEra Energy Resources stand to make multi-millions of dollars from this project, including huge tax incentives given to everyone involved in this solar farm project except for the people impacted by it. Unincorporated Pima County gets nothing. We are the ones that loose. No consideration was given to us. The Pineapple Cactus, Sahuaros, Ironwood Trees, the Biological Core, and the color of buildings is the concern of Pima County, not us. Title 14 does not consider the people or the pitfalls of a solar farm near residential areas.

I believe that it is right and fair to be financially compensated for stress, nuisance, frustration, worry, loss of property values, the 5-7-degree heat island effect, the theft our property lines, the chemical threat to our wells, the buzzing, glare, view, death to infrastructure and growth in our area for 30 years in this huge space because of this solar project, and the fact that there is no added value to our unincorporated Pima County. We do not benefit in any way from this solar farm, but we lose so much.

These risks have been previously documented.

Thank you for reading this.

Rebecca Ruth

