APPLICATION

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AZ CORP COMMISSION
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ORIGINAL

Application for a Certificate of Environmental Compatibility

Gila Bend Power Partners, L.L.C.
500kV Transmission Line and Switchyard Project

Prepared for:

Arizona Power Plant and Transmission Line Siting Committee

Submitted by:

Gila Bend Power Partners, L.L.C.

Date: _____
Case No. _____

BEFORE THE
ARIZONA POWER PLANT AND TRANSMISSION LINE SITING COMMITTEE

In the matter of the Application of Gila Bend Power Partners and its assigns in conformance with the requirements of Arizona Revised Statutes 40-360.03 and 40-360.06 for a certificate of environmental compatibility authorizing construction of one 500kV transmission line and the Watermelon Switchyard in Maricopa County, Arizona originating at the proposed Gila Bend Power Partners Power Project located northwest of the center of the Town of Gila Bend, Arizona (Section 19, Township 5 South, Range 5 West, G&SRB&M) and terminating at the proposed Watermelon Switchyard Section 22, Township 5 South, Range 4 West, a distance of approximately 9 miles.	**Case No.** _____

APPLICATION FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY

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LIST OF ACRONYMS

ADA	Arizona Department of Agriculture
ADOT	Arizona Department of Transportation
AGFD	Arizona Game and Fish Department
APS	Arizona Public Service
A.R.S.	Arizona Revised Statutes
ASLD	Arizona State Land Department
BLM	Bureau of Land Management
CEC	Certificate of Environmental Compatibility
COE	Corps of Engineers
dB	decibels
dBA	"A" weighted decibels
EMF	electric and magnetic field
EPG	Environmental Planning Group, Inc.
G&SRB&M	Gila and Salt River Base and Meridian
GBIR	Gila Bend Indian Reservation
GBPP	Gila Bend Power Partners
kV	kilovolt
KOP	Key Observation Point
mm	millimeters
MSL	mean sea level
NEPA	National Environmental Policy Act
RMP	Resource Management Plan
SR	State Route
SRP	Salt River Project
UPRR	Union Pacific Railroad
USFWS	U.S. Fish and Wildlife Service

INTRODUCTION

Gila Bend Power Partners, L.L.C. (GBPP or Applicant) requests a certificate of environmental compatibility (CEC) from the Arizona Power Plant and Transmission Line Siting Committee (Siting Committee) for authority to construct one 500 kilovolt (kV) transmission line and an associated 500kV switchyard (the Project) in Maricopa County, Arizona.

The proposed 500kV transmission line will originate at the proposed GBPP Power Project, located approximately 6 miles northwest of the center of Gila Bend, Arizona as shown on Figure 1. The 9-mile 500kV transmission line will parallel Watermelon Road east for approximately 7.5 miles and terminate east of Highway 85 at the proposed switchyard (the Watermelon Switchyard). The Applicant is considering either side of Watermelon Road for the first approximate 3 miles. The proposed route would then be located on the south side of Watermelon Road consolidating the proposed line with the existing Arizona Public Service (APS) 230kV line—to be underbuilt on the same structure. This approach would result in greater spans and fewer transmission line structures than the existing 230kV line.

The proposed Watermelon Switchyard will be located at Section 22, Township 5 South, Range 4 West and will permit the transmission line to interconnect with the transmission system. The Watermelon Switchyard will be constructed to accommodate both the proposed transmission line and a loop-in from the Gila River Transmission Project (Case #102). Additionally, the Watermelon Switchyard is designed to allow the interconnection of two additional transmission lines should such a need arise.

Project construction is scheduled to begin in March 2002 and continue for approximately 9 months until operational in January 2003. GBPP is currently in discussions with APS and Salt River Project (SRP) regarding the construction, ownership, and operation of the Project, but formalized agreements have not yet been reached.

Power from the proposed GBPP Power Project (Case #106) will be transmitted to the Watermelon Switchyard via the proposed transmission lines. From the Watermelon Switchyard, power from the GBPP Power Project will be transmitted to the proposed Jojoba Switchyard and via an open-access agreement with APS concerning the Gila River line. Finally, power from the proposed GBPP Power Project will be transmitted to the Hassayampa Switchyard via a Memorandum of Understanding with SRP concerning GBPP's use of the certificated Saguaro line (Case #31), paralleling the PVNGS to Kyrene 500kV between PVNGS and Jojoba. GBPP and SRP have executed a Memorandum of Understanding concerning GBPP's use of the certificated Saguaro line.

The Project is environmentally compatible for the following reasons:

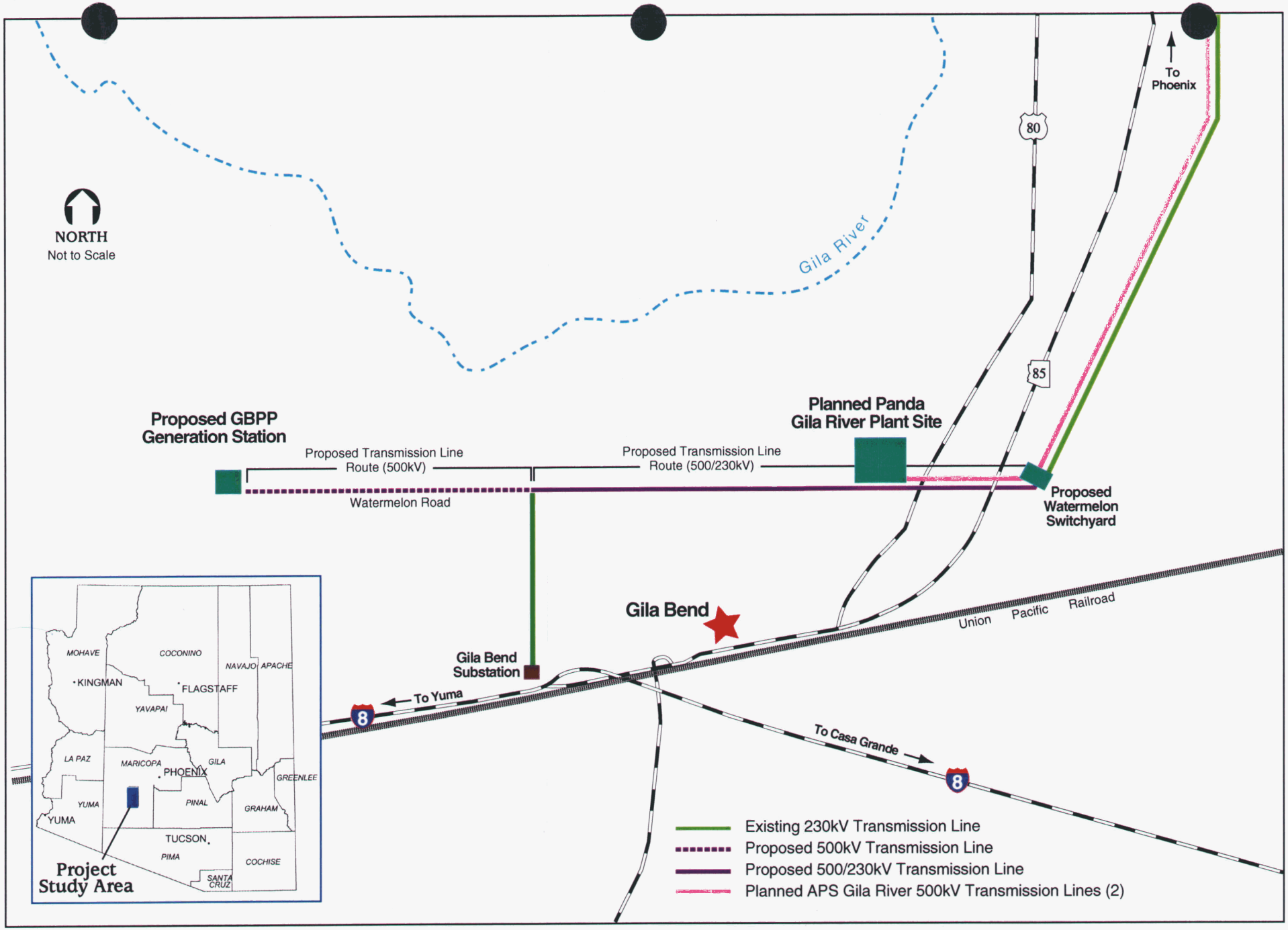
- Most of the proposed route is within or adjacent to an existing utility right-of-way or designated utility corridor.
- The Project will utilize existing access to minimize land disturbance during construction.

- Portions of the Project located within the Town of Gila Bend are situated in an open space corridor. The Project will not interfere with potential plans for future recreational improvements.

- The Project will not conflict with any planned recreational uses.

- The Project will not result in any long-term adverse effects to special status species, unique habitats, or cultural resources.

- The Project will use non-specular conductors and other site-specific mitigation measures as identified in the application. The Project will be consolidated with an existing 230kV transmission line for a distance of approximately 5 miles resulting in a reduction in the number of transmission line structures.



Project Location

Gila Bend Power Partners, L.L.C.

500kV Transmission Line and Switchyard Project

Figure 1

January 22, 2001

APPLICATION FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY

APPLICATION FOR
A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY

(Pursuant to A.R.S. 40-360.03 and 40-360.06)

1. Name and address of the Applicant (the Applicant):

Name: Gila Bend Power Partners, L.L.C.
Address: 5949 Sherry Lane, Suite 1880
Dallas, Texas 75225

2. Name, address and telephone number of a representative of the Applicant who has access to technical knowledge and background information concerning this application, and who will be available to answer questions or furnish additional information:

Name: Mr. Bob Walther, President
Industrial Power Technology
Address: 2227 Capricorn Way, Suite 101
Santa Rosa, California 95407
Telephone: 707-528-8900
Fax: 707-528-8901
E-mail: rcwalther@ipower.com

3. Dates on which the Applicant filed a Ten Year Plan in compliance with Arizona Revised Statutes (A.R.S.) Section 40-360.02, which the facilities for which this application is made were described:

Although not required under A.R.S. § 40-360.02, Gila Bend Power Partners, L.L.C. (GBPP) filed a Ten Year Plan for the GBPP Power Project with the Arizona Corporation Commission on January 31, 2000. This Project was not part of that plan because, at that time, it had not been determined GBPP would construct the Project.

GBPP intends to file a Ten Year Plan for this Project with the Arizona Corporation Commission by January 31, 2001 (or simultaneously with this application).

4. Description of the proposed facilities:

4.1 Description of electric generating plant: not applicable

4.2 Description of the proposed transmission line:

4.2.1 General Description:

4.2.1.1 Nominal voltage for which the lines are designed:

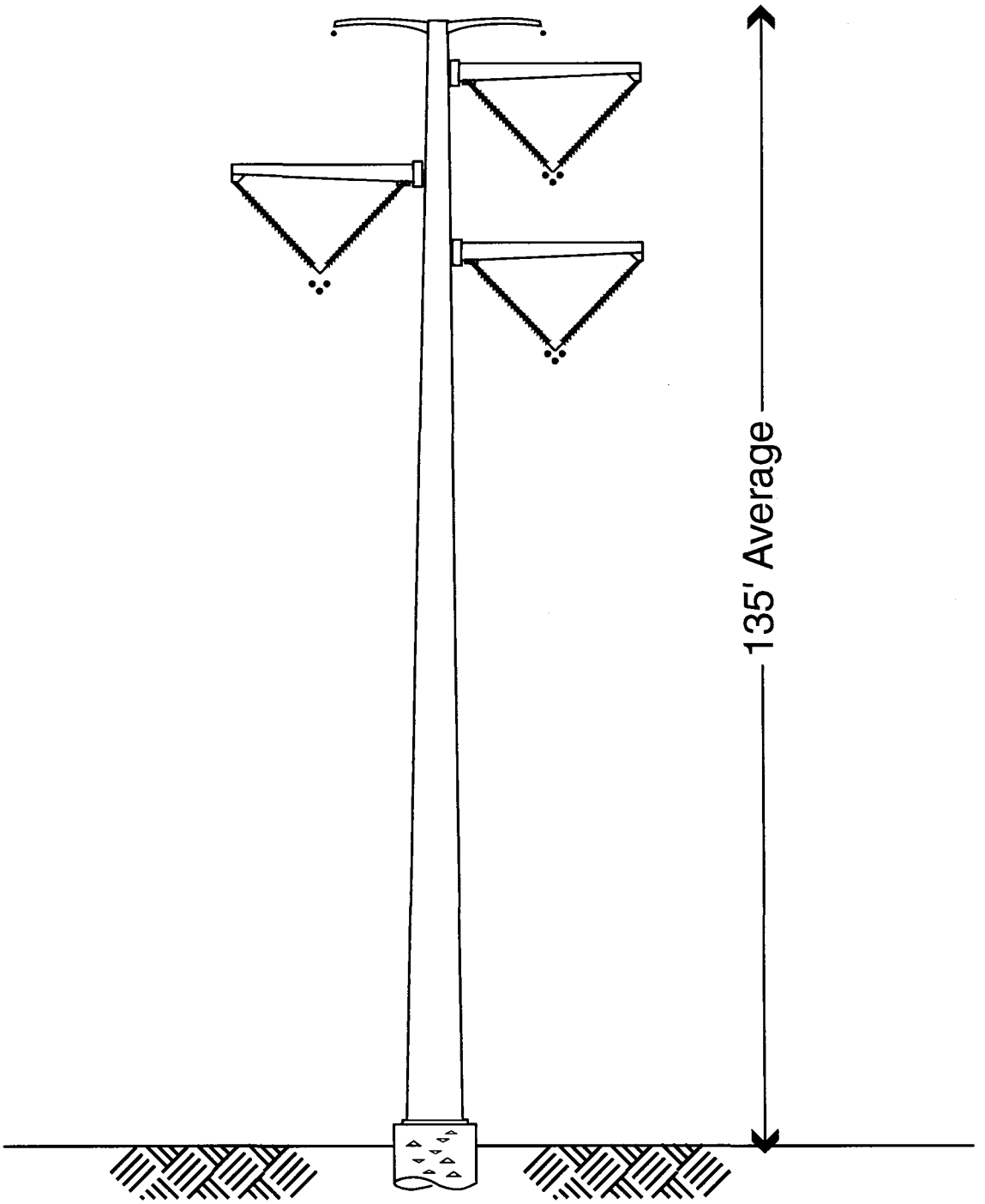
500kV alternating current; the Project also entails rearrangement of a pre-existing 230kV line.

4.2.1.2 Description of proposed structures:

The proposed 500kV transmission line will originate at the proposed GBPP Power Project, located approximately 6 miles northwest of the central portion of the Town of Gila Bend, Arizona. The 9-mile 500kV transmission line will follow Watermelon Road east, to a termination point at the proposed Watermelon Switchyard in Section 22, Township 5 South, Range 4 West. The 500kV transmission line will be designed for one three-phase circuit (three bundles of three conductors) and one fiber optic laced, static wire (Figure 2). In addition, the eastern approximate 5 miles will carry an existing APS 230kV three-phase circuit below the 500kV circuit, resulting in the removal of the existing 230kV structures and consolidation of both lines onto one set of structures (for that portion). The structures proposed are single tubular steel pole, as shown in Figure 3. The height of these structures will be approximately 135 feet, depending on the type of structure design and span length required. The span length between structures would be approximately 700 to 900 feet, subject to variation to achieve site-specific mitigation objectives. Final design characteristics will be determined in the detailed design phase of the Project.

4.2.1.3 Description of proposed switchyards:

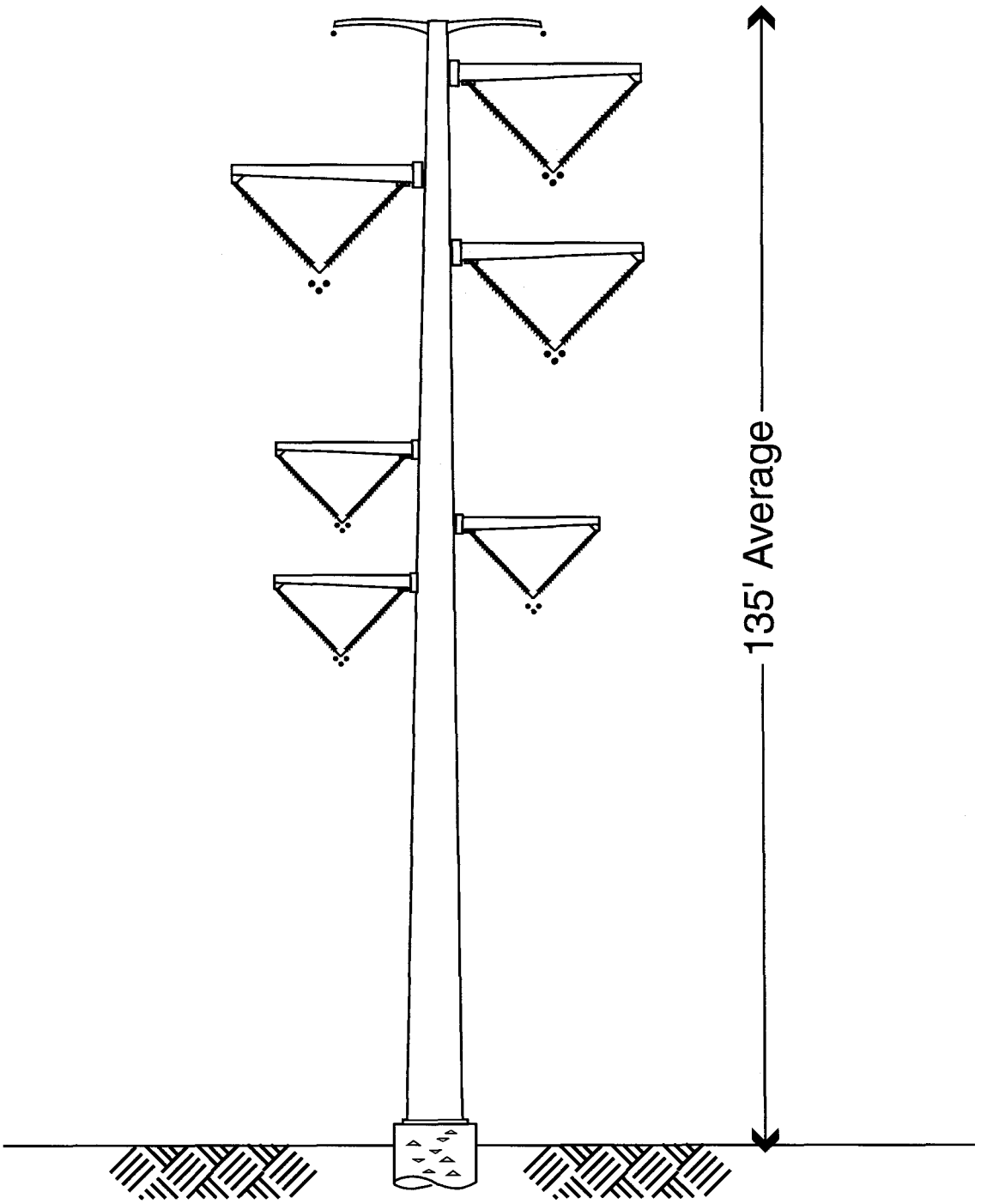
The proposed Watermelon 500kV switchyard will consist of a breaker-and-a-half configuration with six initial line positions. The new switchyard will be constructed east of the proposed GBPP Power Project. Current switchyard layout drawings show two future bays in the easternmost part of the yard (see Exhibits G-2 and G-3). Rigid-bus construction will be used for both the main buses and breaker bays. This will allow for a lower profile design than strain-bus. Bundled conductor will be used between 500kV bus and the power circuit breakers. Galvanized tapered tubular



Typical 500kV Structure

Gila Bend Power Partners, L.L.C.
500kV Transmission Line and Switchyard Project
Figure 2

January 22, 2001



Typical 500/230kV Structure

Gila Bend Power Partners, L.L.C.
500kV Transmission Line and Switchyard Project
Figure 3

January 22, 2001

steel structures will be used for all equipment supports (maximum height of approximately 117 feet). The switchyard control building will house the battery systems and all the protection and control equipment.

The proposed switchyard will be located in the southwestern corner of Section 22, Township 5 South, Range 4 West. The proposed switchyard site will require acquisition of approximately 40 acres of state land.

4.2.1.4 Purpose for constructing said transmission line:

The Project will interconnect the proposed GBPP Power Project to the Hassayampa Switchyard via the proposed Watermelon Switchyard to be constructed east of Gila Bend. The Watermelon Switchyard will interconnect with two planned APS Gila River 500kV transmission lines (Case No. 102, CEC issued in 2000) from the planned Panda Gila River, L.P. generation project to the proposed Jojoba Switchyard (Case No. 102, CEC issued in 2000). GBPP is coordinating with SRP to develop a new 500kV transmission line from the GBPP breaker and one-half position in the Hassayampa Switchyard to the Jojoba Switchyard. This portion of the proposed route is planned to be built as part of the Palo Verde to Saguaro transmission system (Case No. 31, CEC issued in 1977), which has an approved CEC paralleling the PVNGS to Kyrene 500kV between PVNGS and Jojoba.

4.2.2 General Location:

4.2.2.1 Description of the geographic points between which the transmission line will run:

The proposed 500kV transmission line will originate at the proposed GBPP Power Project located northwest of the center of Gila Bend, Arizona in Section 19, Township 5 South, Range 5 West, and will terminate at Section 22, Township 5 South, Range 4 West at the proposed Watermelon Switchyard.

4.2.2.2 Straight-line distance between such geographic points:

The straight-line distance of the proposed 500kV transmission line between the proposed GBPP Power Project and the proposed Watermelon Switchyard is approximately 9 miles.

4.2.2.3 Length of the transmission line for each alternate route:

The approximate length of the proposed route is 9 miles.

4.2.3 Detailed Dimensions:

4.2.3.1 Nominal width of right-of-way requested:

GBPP is requesting approval of a total right-of-way width of up to 200 feet. The exact location of the alignment will be determined according to right-of-way considerations, site-specific design, and environmental requirements. The switchyard would encompass approximately 40 acres.

4.2.3.2 Nominal length of span:

500kV: 900 feet
500/230kV (underbuild): 700 to 900 feet

4.2.3.3 Maximum height of supporting structures:

The maximum height of the proposed supporting structures will be approximately 140 feet above existing grade. The typical height of the supporting structures will be approximately 135 feet above existing grade. The maximum height of structures within the switchyard is approximately 117 feet above existing grade.

4.2.3.4 Minimum height of conductor above ground:

32 feet for 500kV lines
24 feet for 230kV line (underbuild)

4.2.4 Estimated costs of proposed transmission line and switchyard:

The anticipated cost of constructing the transmission line is approximately $6 million. The proposed Watermelon Switchyard is approximately $15 million.

4.2.5 Description of the proposed route:

The proposed 500kV transmission line will originate at the proposed GBPP Power Project, located approximately 6 miles northwest of the center of Gila Bend, Arizona and will travel east for approximately 9 miles and terminate at the proposed Watermelon Switchyard. An existing APS 230kV line will be

removed and underbuilt for approximately 5 miles into the proposed Watermelon Switchyard. The route is adjacent to Watermelon Road for 7.5 miles and parallels a 69kV line (approximately 5 miles) and the two planned APS Gila River 500kV lines (approximately 1 mile).

4.2.6 Land Ownership:

The proposed route traverses approximately 8.2 miles of private lands and approximately 0.8 mile of Arizona State Land Department (ASLD) land, for an overall length of approximately 9 miles. The proposed Watermelon Switchyard is located on approximately 40 acres of Arizona State Trust Land.

5. Jurisdictions:

5.1 Areas of jurisdiction (as defined in A.R.S. 40-360) affected by this route:

Areas of jurisdiction along the proposed route include the Town of Gila Bend and Maricopa County.

5.2 Designation of proposed sites or routes, if any, which are contrary to the zoning ordinances or master plans of affected areas of jurisdiction:

The proposed route is not located contrary to zoning ordinances or general plans of any affected areas of jurisdiction. Portions of the proposed route are located within or adjacent to an existing utility right-of-way and designated utility corridor.

6. Description of the environmental studies the Applicant has performed:

The environmental consulting firm of Environmental Planning Group, Inc. (EPG) coordinated the preparation of environmental studies to support the application.

Environmental resources studies, including inventory and impact assessment, were conducted. Potential impacts to land use and visual, biological, and cultural resources were evaluated. Existing data from various agencies, aerial photographs, maps, and literature were gathered and, where appropriate, field visits were conducted. A study corridor measuring 2 miles on each side of the proposed route's centerline and switchyard site was studied for potential visual resource and land use impacts. In addition, intensive cultural field surveys were conducted for both the proposed route and switchyard site.

Through an impact assessment process that compared the proposed Project and the existing environment, potential impacts were identified. In addition, mitigation measures were developed and recommended to reduce or eliminate impacts. Mitigation recommended by

EPG included use of nonspecular conductors; matching existing structure types, heights, and spans; dulled structures (both transmission line and all switchyard components); use of existing access; and cultural monitoring, if necessary.

Results of these studies are contained in the various exhibits within this document.

7. Rationale for Route Preference:

The proposed route described in this application is within the range of impacts deemed "environmentally compatible" in past Siting Committee decisions. The proposed route is the preferred route based on environmental, system planning, and cost considerations. Environmental advantages include the following:

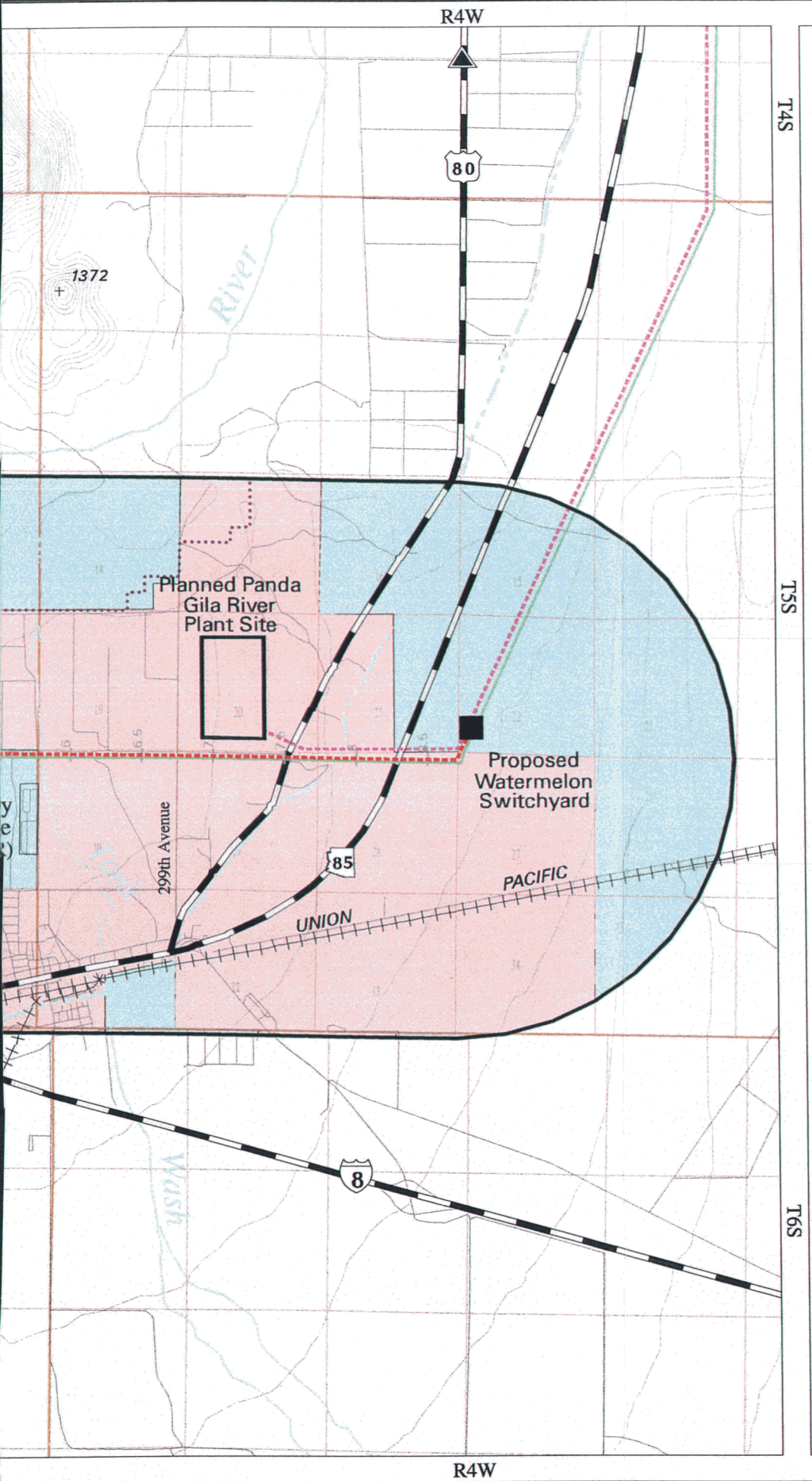
- The proposed route will consolidate transmission lines along portions of Watermelon Road and within or adjacent to an existing utility right-of-way and utility corridor.
- Low to indiscernible land use impacts are anticipated.
- Visual impacts for this route are anticipated to be minimal.
- No long-term or adverse effects to special status species or unique habitats will result from the construction of the proposed route.
- One cultural site recommended for eligibility on the National Register was identified and according to GBPP, will be spanned to avoid impacts. The site will be fenced/barricaded during construction.
- Audible noise and electric and magnetic fields are not anticipated to be of concern along the proposed route.

GILA BEND POWER PARTNERS, LLC

BY: _____
Authorized Agent

Original and 25 copies of the foregoing hand delivered and filed with the Director of Utilities, Arizona Corporation Commission, this _____ day of _____, 2001.

EXHIBIT A
LOCATION AND LAND USE MAPS



PROPOSED ROUTE AND JURISDICTION

Gila Bend Power Partners, L.L.C. 500kV Transmission Line and Switchyard Project

Exhibit A-1

Resource Inventory

- Town of Gila Bend
- Maricopa County

General Reference Features

- Existing Substations
- Proposed Switchyard
- Study Area Boundary
- Proposed Transmission Line Route
- Planned APS Gila River 500kV Transmission Lines (2)
- Existing 230kV Transmission Line
- Flowage Easement Boundary
- Interstate/Highway
- Roads
- Railroads
- Washes
- Canals
- Section Lines
- Township and Range Boundaries
- Contours

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January 22, 2001

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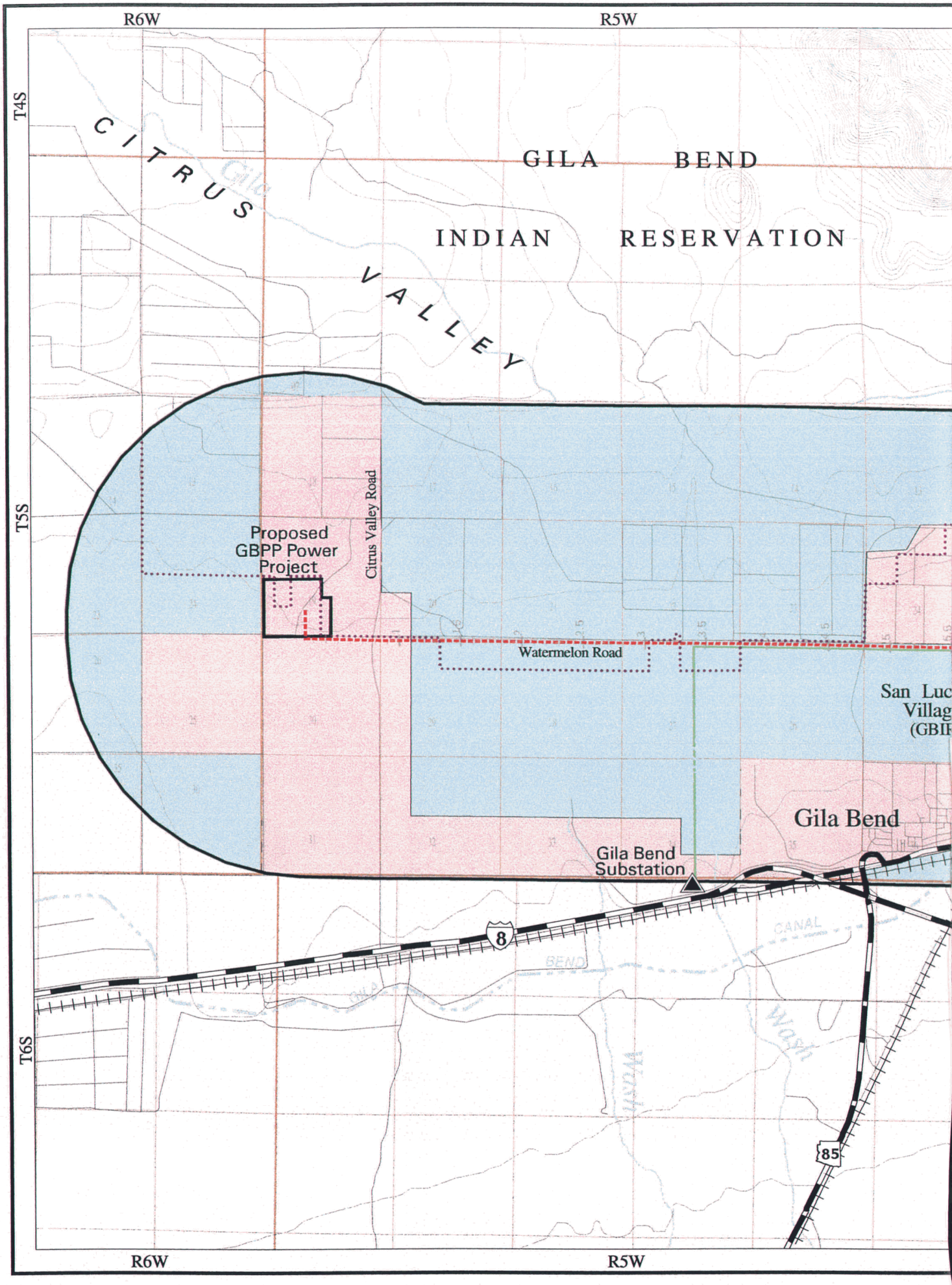
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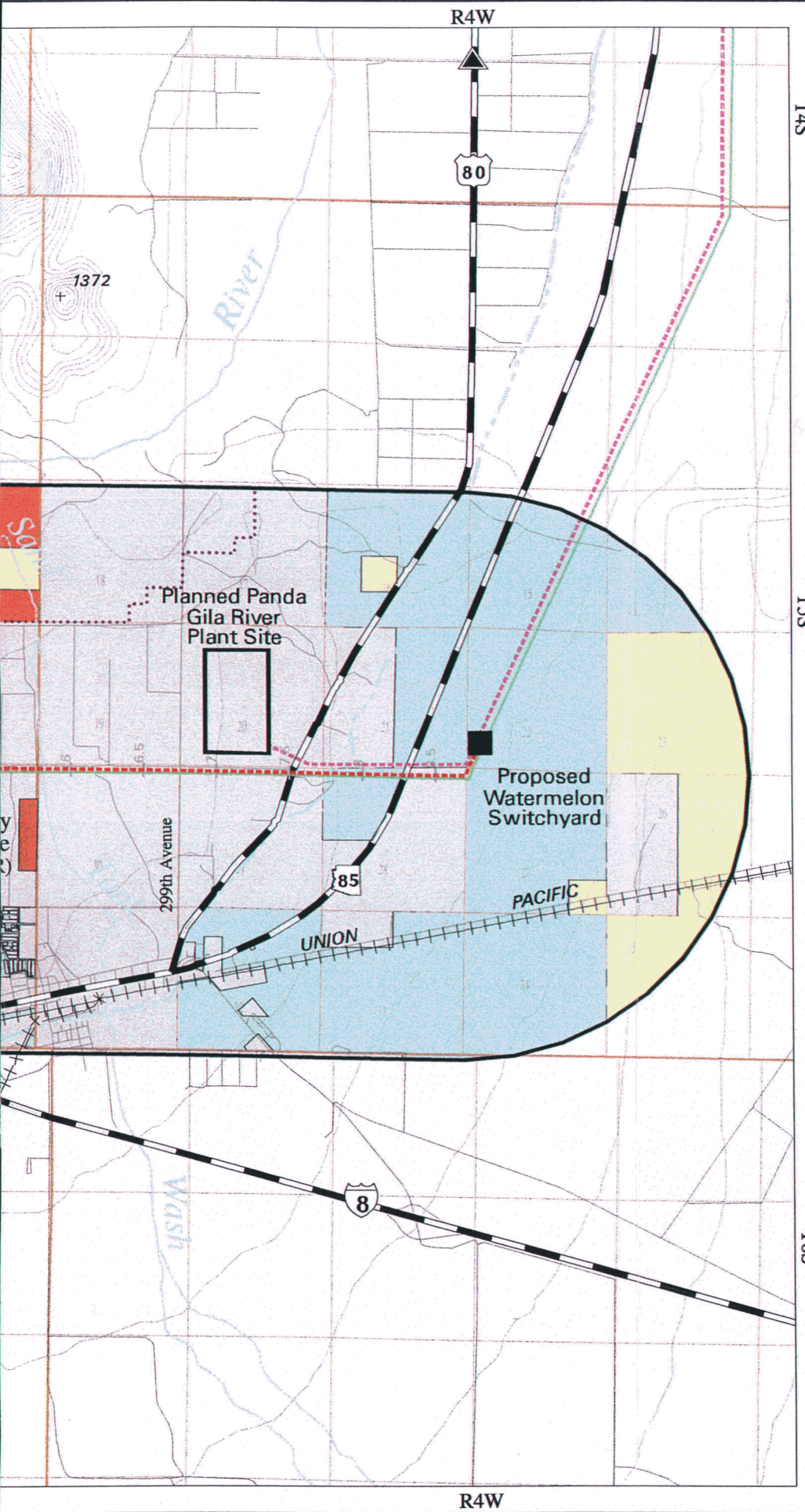

LAND OWNERSHIP

Gila Bend Power Partners, L.L.C.
500kV Transmission Line and Switchyard Project
Exhibit A-2

Resource Inventory

- Private
- State Trust Land
- Bureau of Land Management
- Indian Reservation

General Reference Features

- Existing Substations
- Proposed Switchyard
- Study Area Boundary
- Proposed Transmission Line Route
- Planned APS Gila River 500kV Transmission Lines (2)
- Existing 230kV Transmission Line
- Flowage Easement Boundary
- Interstate/Highway
- Roads
- Railroads
- Washes
- Canals
- Section Lines
- Township and Range Boundaries
- Contours

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January 22, 2001

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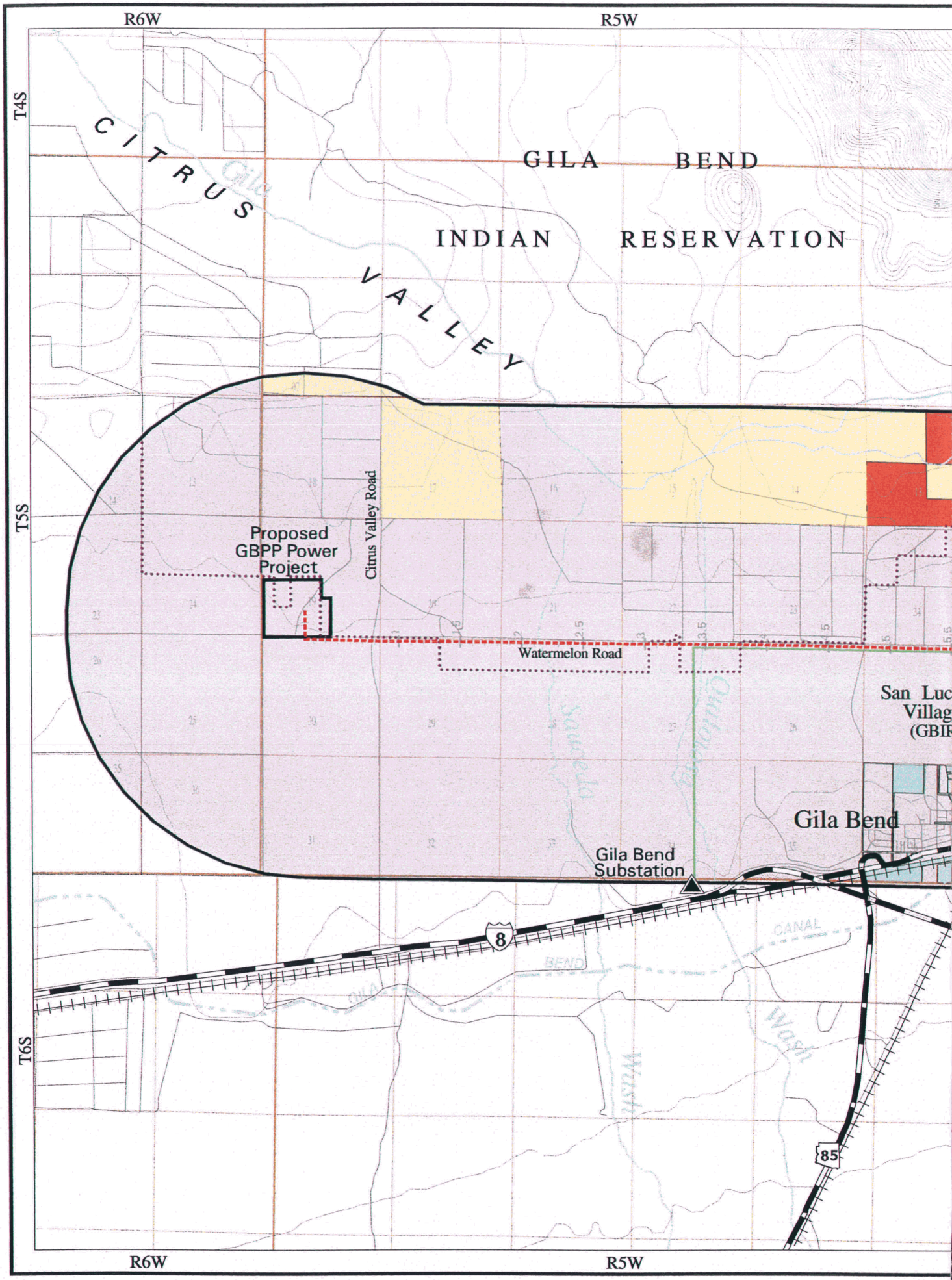
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GILA BEND INDIAN RESERVATION
Proposed GBPP Power Project
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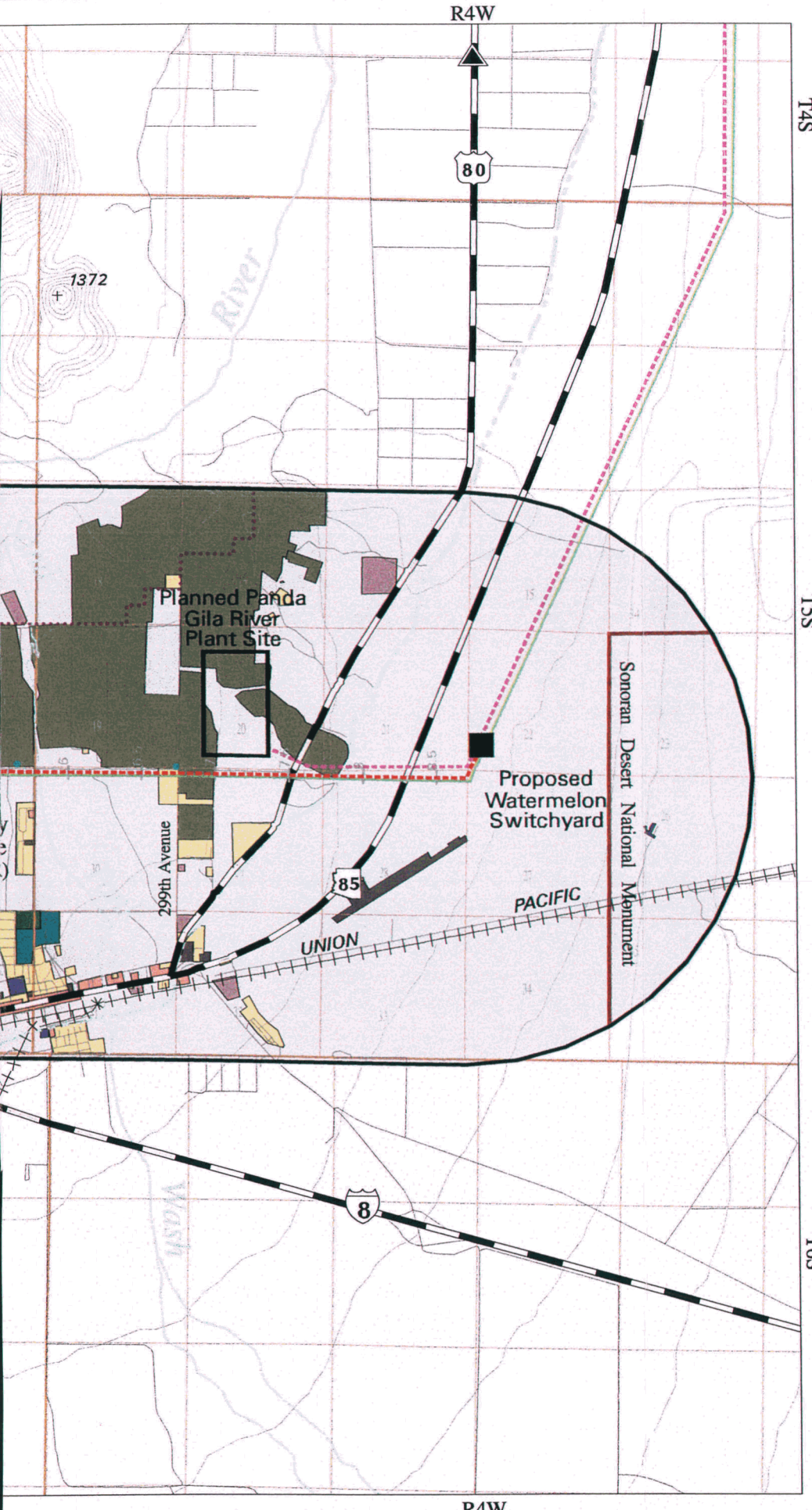
R5W



EXISTING LAND USE

Gila Bend Power Partners, L.L.C. 500kV Transmission Line and Switchyard Project

Exhibit A-3

Resource Inventory

- Farmstead/Residential
- Retail/Service
- Industrial
- Communication Facilities
- Public/Quasi-Public
- Parks/Open Space
- School/Educational Facilities
- Agriculture
- Vacant/Undeveloped
- Irrigation Pump
- Wells

General Reference Features

- Existing Substations
- Proposed Switchyard
- Study Area Boundary
- Proposed Transmission Line Route
- Planned APS Gila River 500kV Transmission Lines (2)
- Existing 230kV Transmission Line
- Flowage Easement Boundary
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- Roads
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- Washes
- Canals
- Section Lines
- Township and Range Boundaries
- Contours

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Scale in Miles

epg

January 22, 2001

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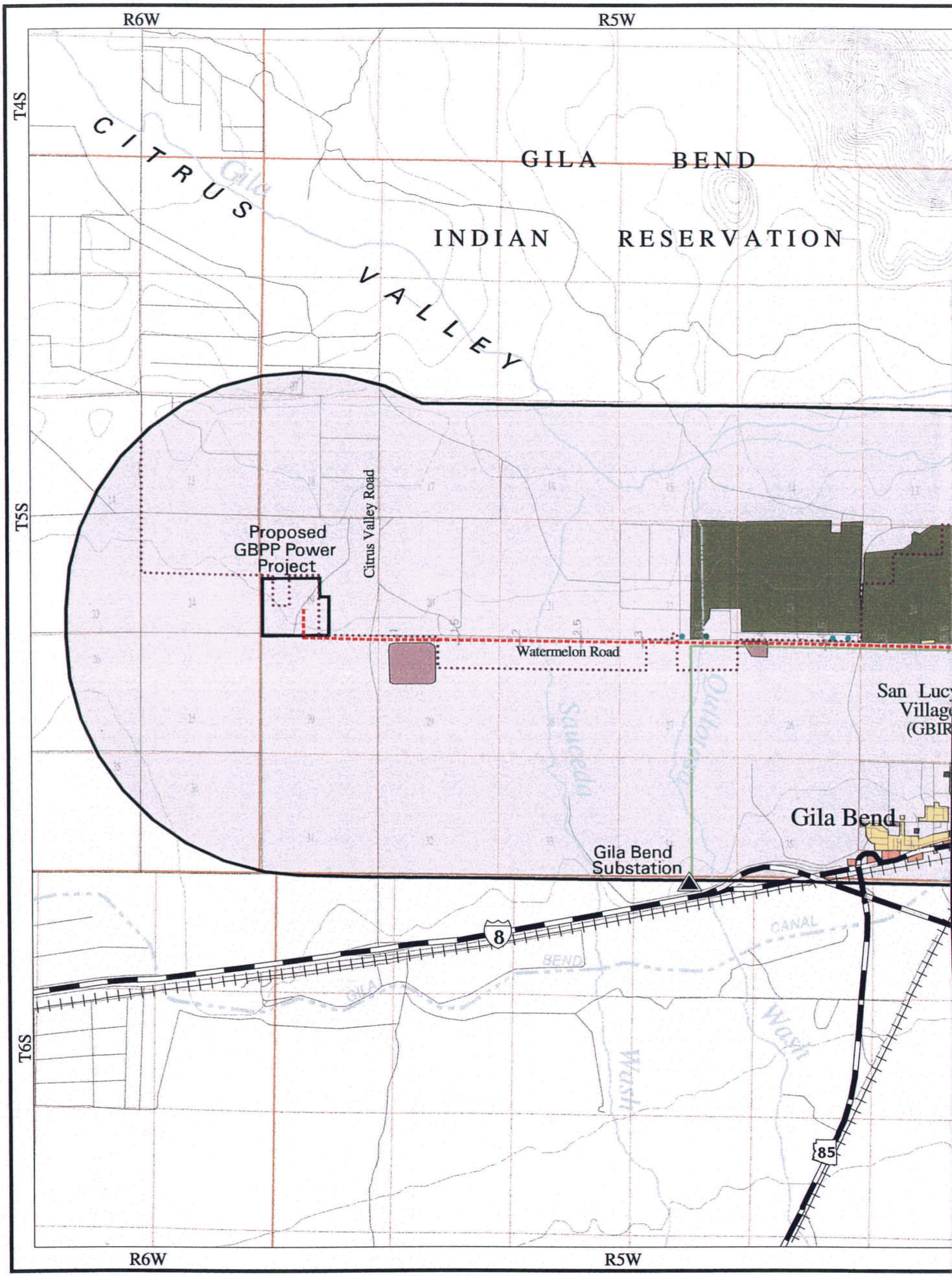
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CITRUS VALLEY
GILA BEND INDIAN RESERVATION
Gila
Proposed GBPP Power Project
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Watermelon Road
San Lucy Villag (GBIR
Gila Bend
Gila Bend Substation
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Wash
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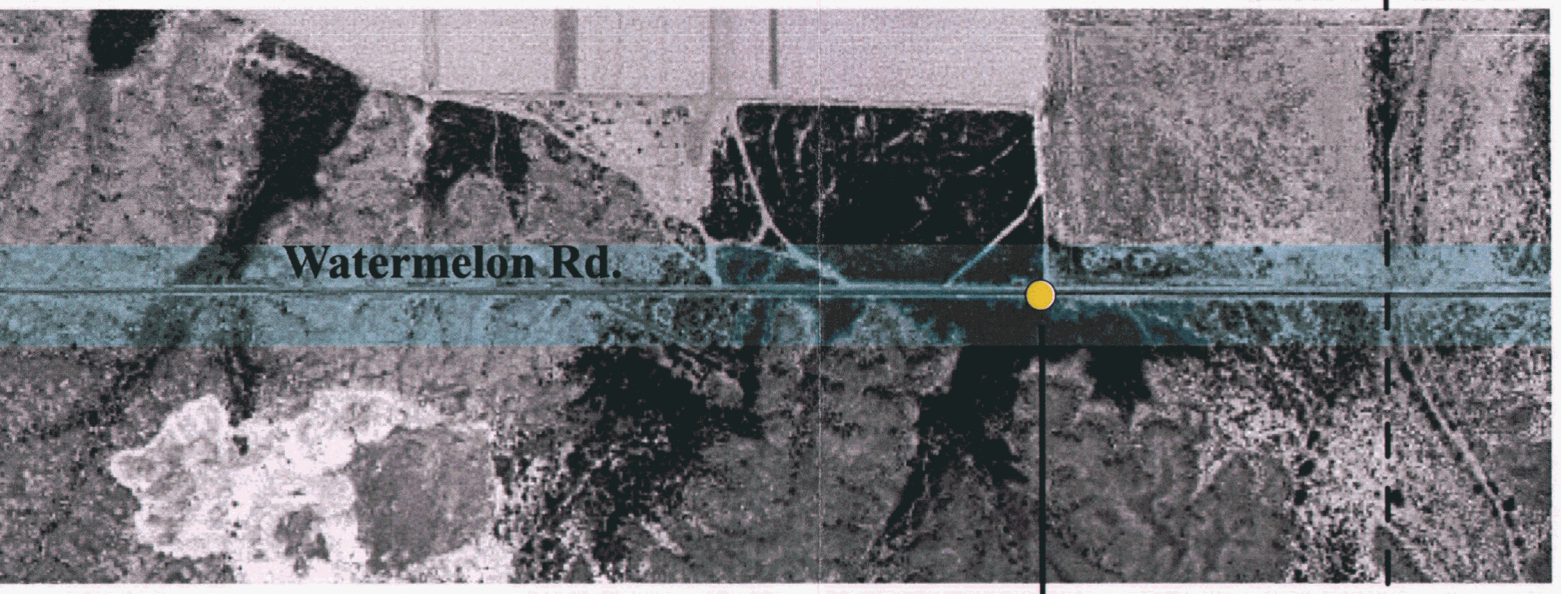


View East

View West

View East

MAP INDEX

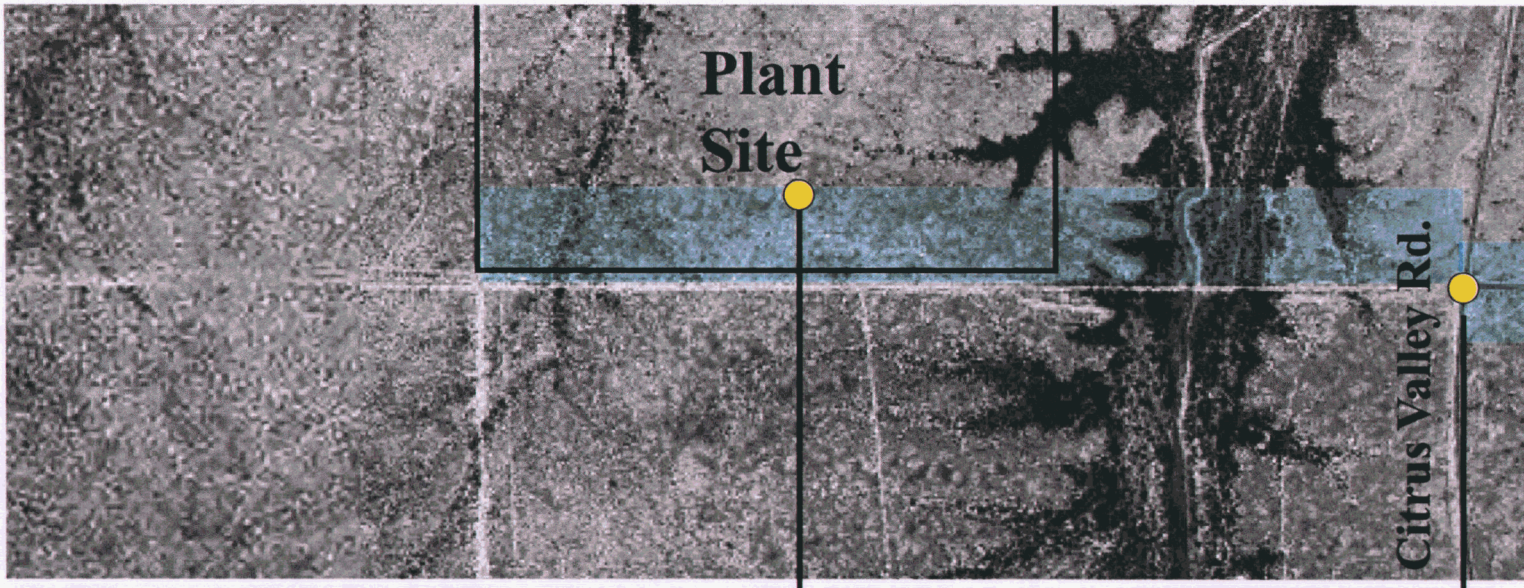
Sheet 1 of 4

Proposed Route and Switchyard Photos

Gila Bend Power Partners, L.L.C.

500kV Transmission Line and Switchyard Project

Figure A-4.1



View Southeast

View West

Legend

Transmission and Distribution Facilities

- Proposed Transmission Line Right-of-Way
- Existing 69kV
- Existing 230kV

- Match Line
- Photopoint

Scale in Feet

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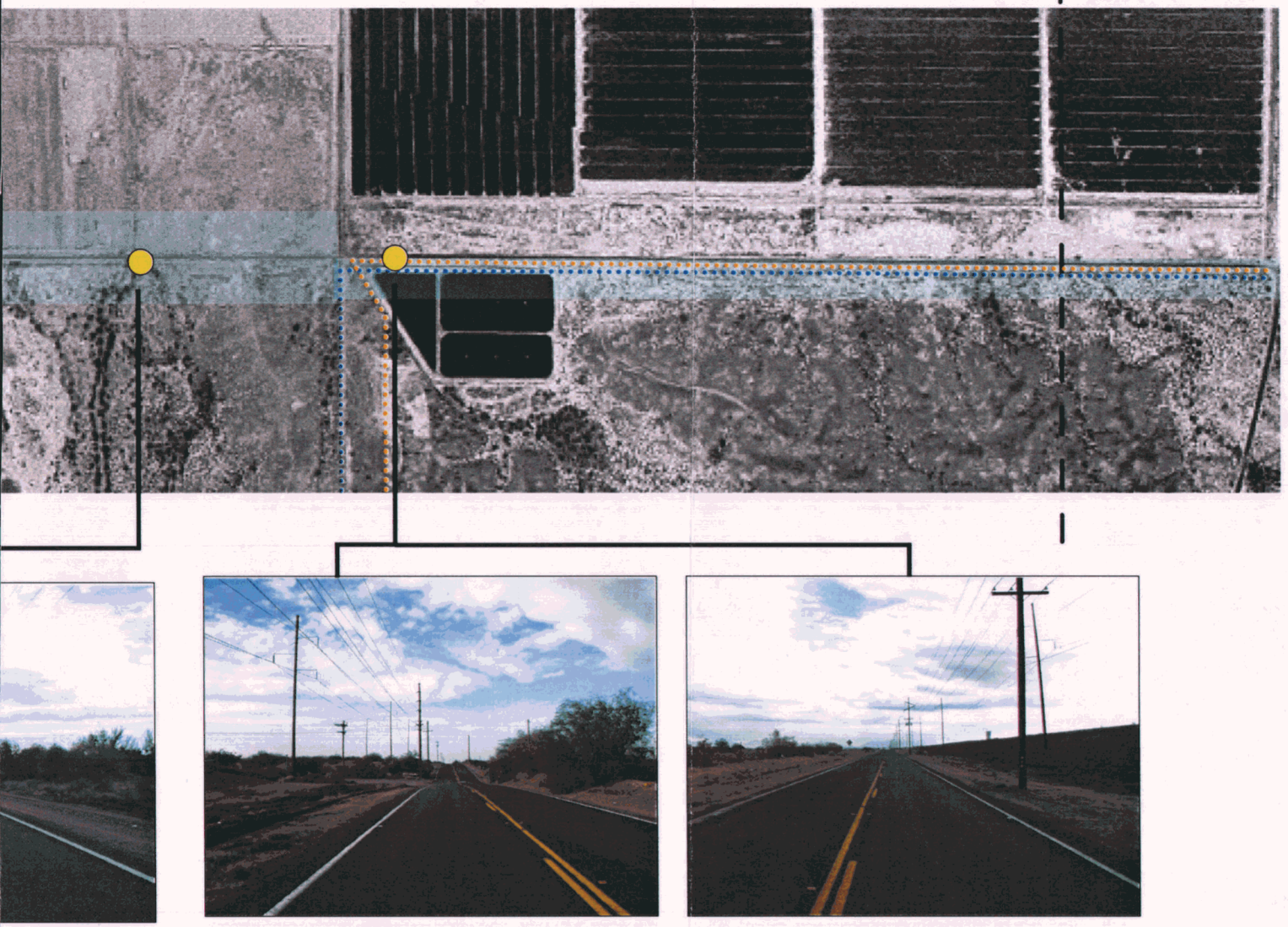
JANUARY 22, 2001



View West

View East

MAP INDEX

Sheet 2 of 4

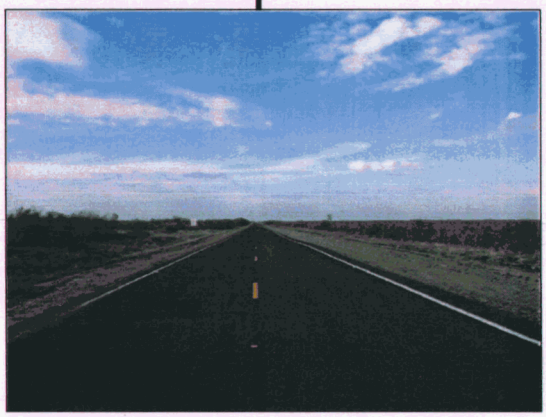
Proposed Route and Switchyard Photos

Gila Bend Power Partners, L.L.C.

500kV Transmission Line and Switchyard Project

Figure A-4.2

Sheet 1 | Sheet 2



View West

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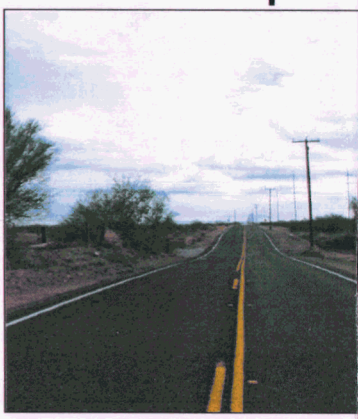

View East

LEGEND

Transmission and Distribution Facilities

- Proposed Transmission Line Right-of-Way
- Existing 69kV
- Existing 230kV

- Match Line
- Photopoint

Scale in Feet

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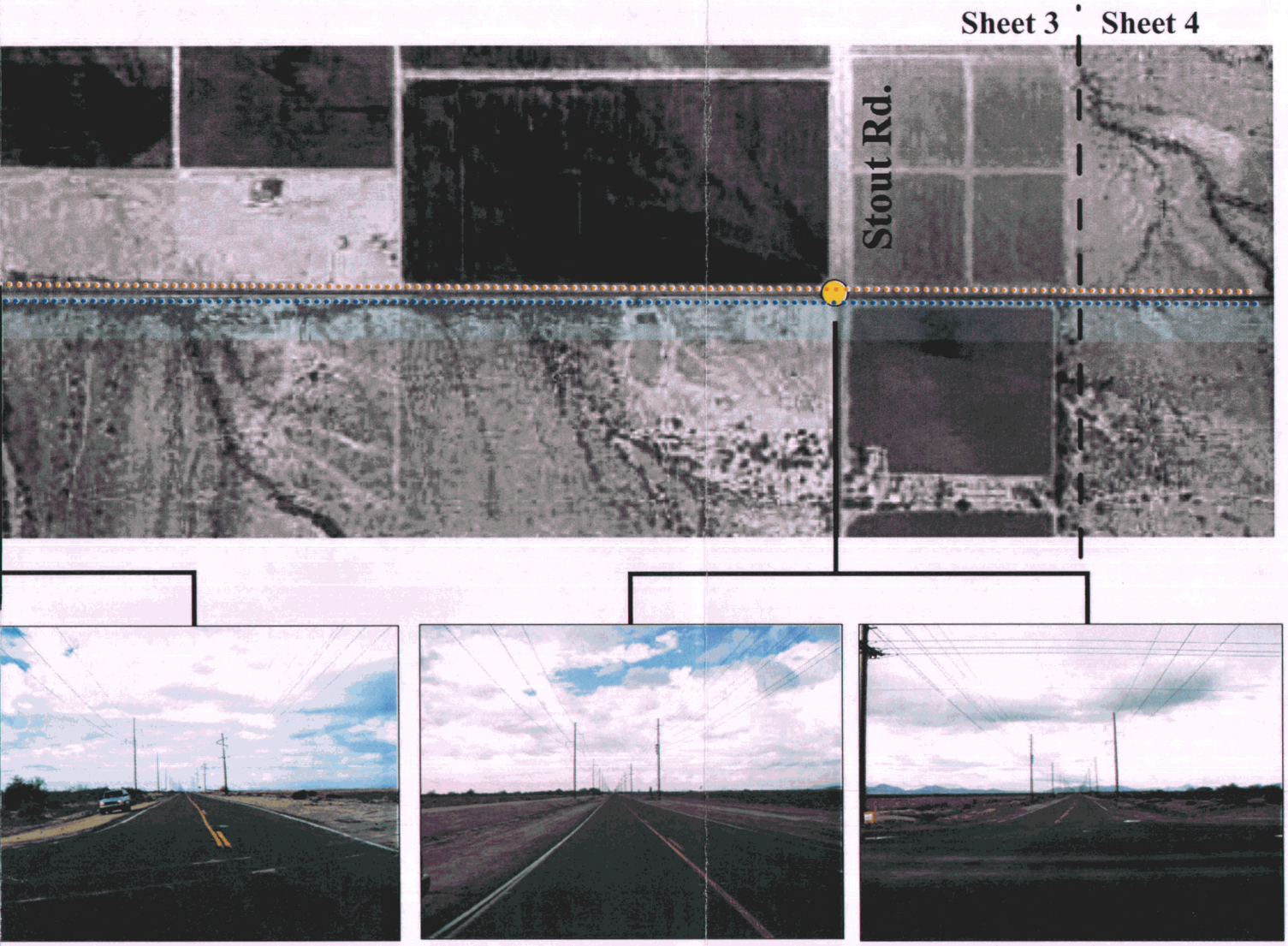
JANUARY 22, 2001

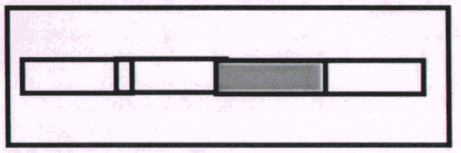


View East

View West

View East

MAP INDEX



Sheet 3 of 4

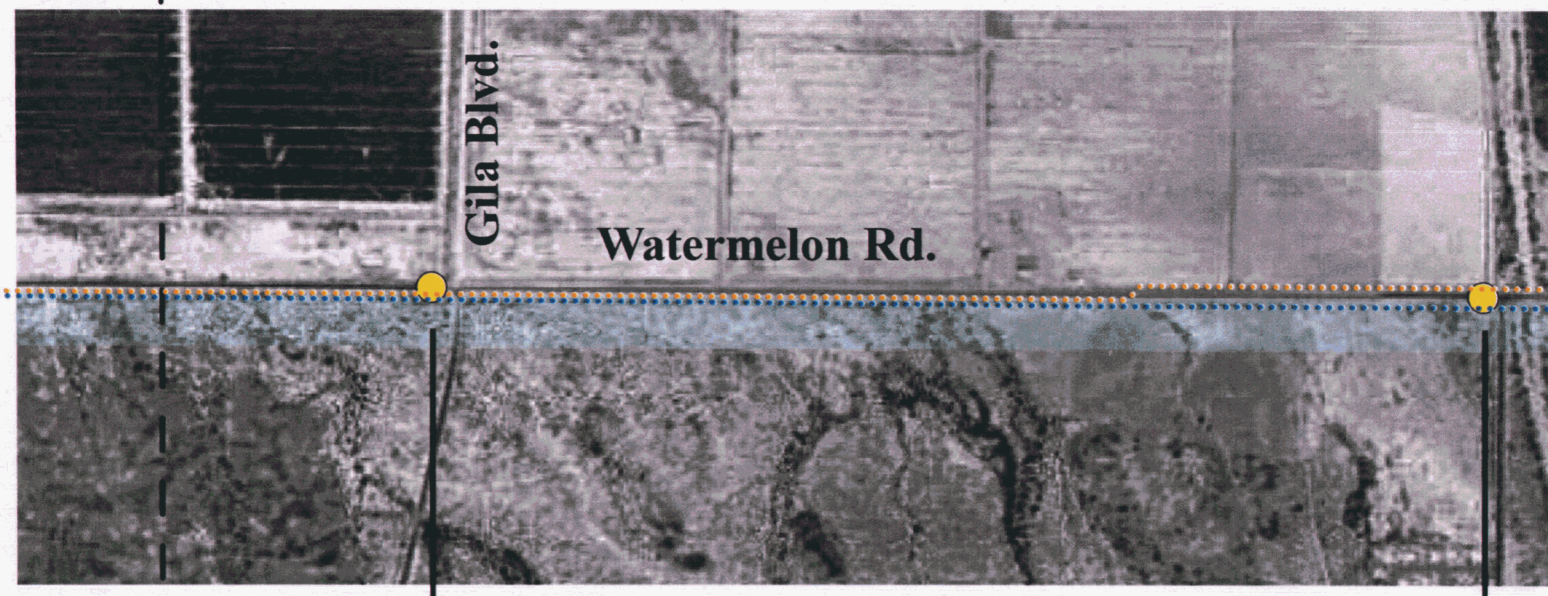
Proposed Route and Switchyard Photos

Gila Bend Power Partners, L.L.C.

500kV Transmission Line and Switchyard Project

Figure A-4.3

Sheet 2 | Sheet 3



View West

View East

View West

LEGEND

Transmission and Distribution Facilities

- Proposed Transmission Line Right-of-Way
- Existing 69kV
- Existing 230kV
- Match Line
- Photopoint

Scale in Feet

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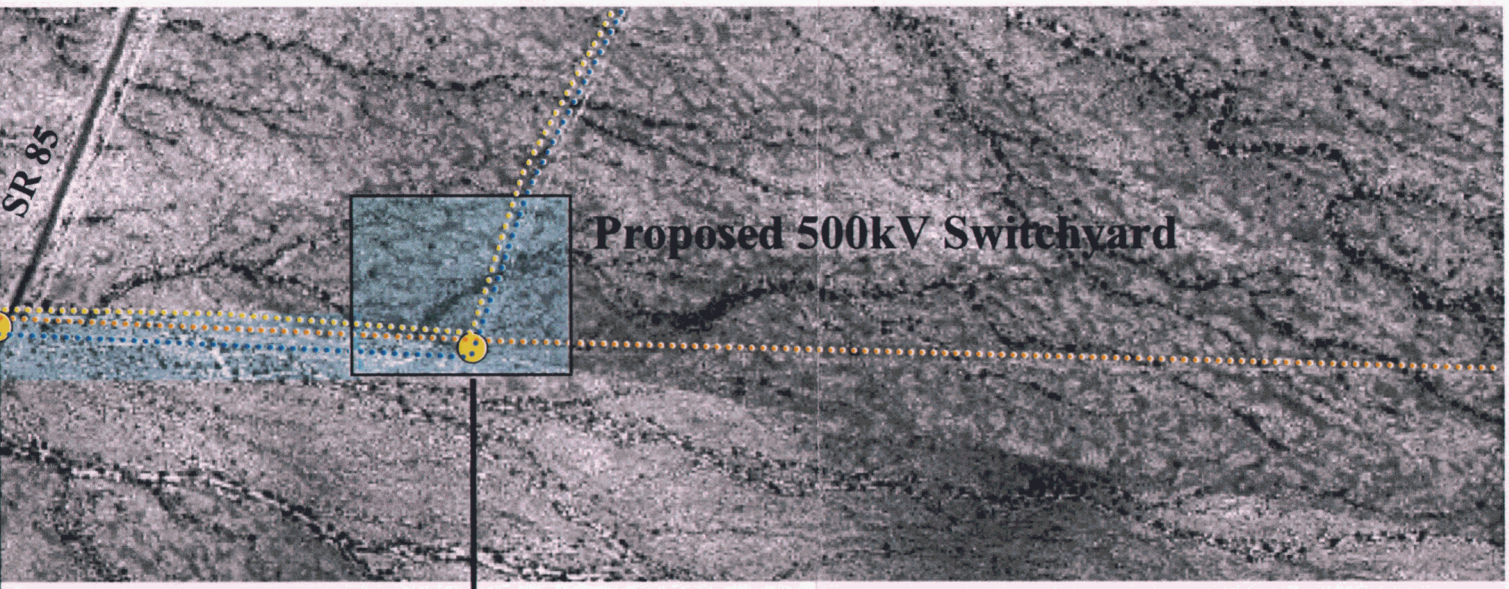
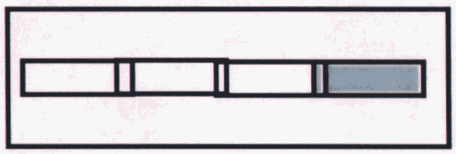
JANUARY 22, 2001



View West

View North

MAP INDEX



Sheet 4 of 4

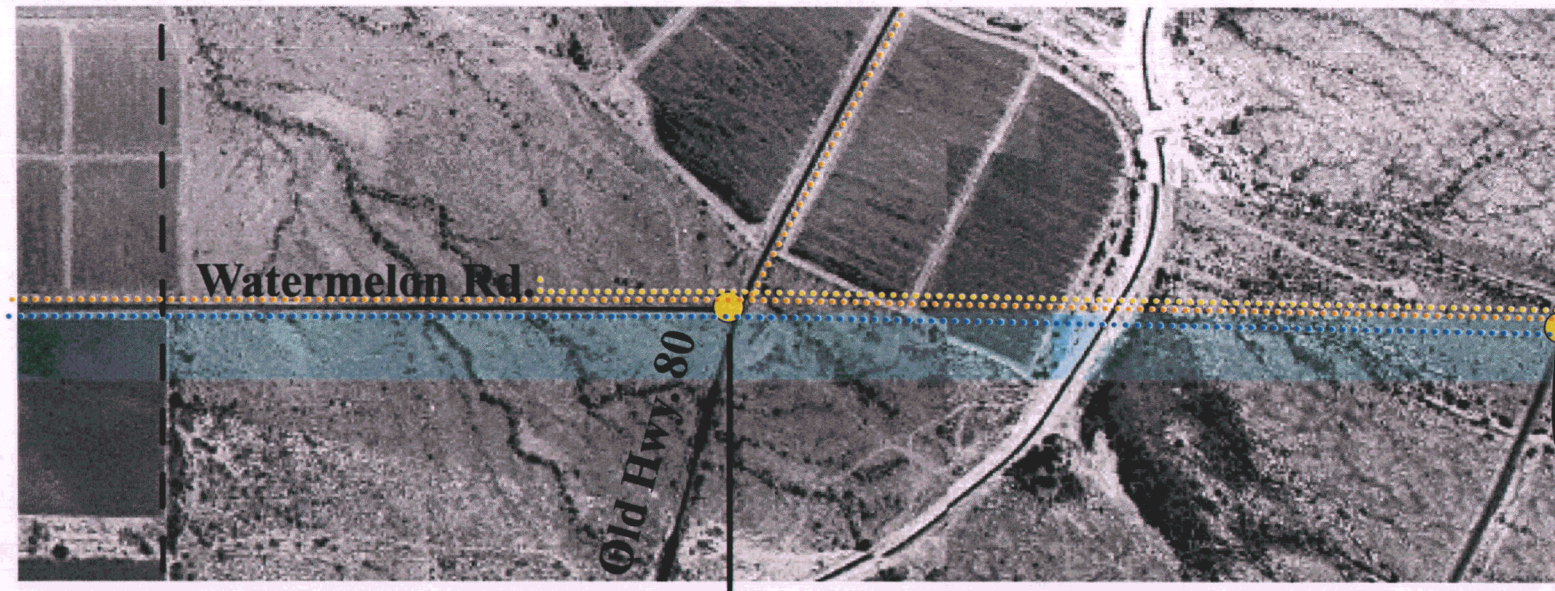
Proposed Route and Switchyard Photos

Gila Bend Power Partners, L.L.C.

500kV Transmission Line and Switchyard Project

Figure A-4.4

Sheet 3 | Sheet 4



View West

View East

View South

LEGEND

Transmission and Distribution Facilities

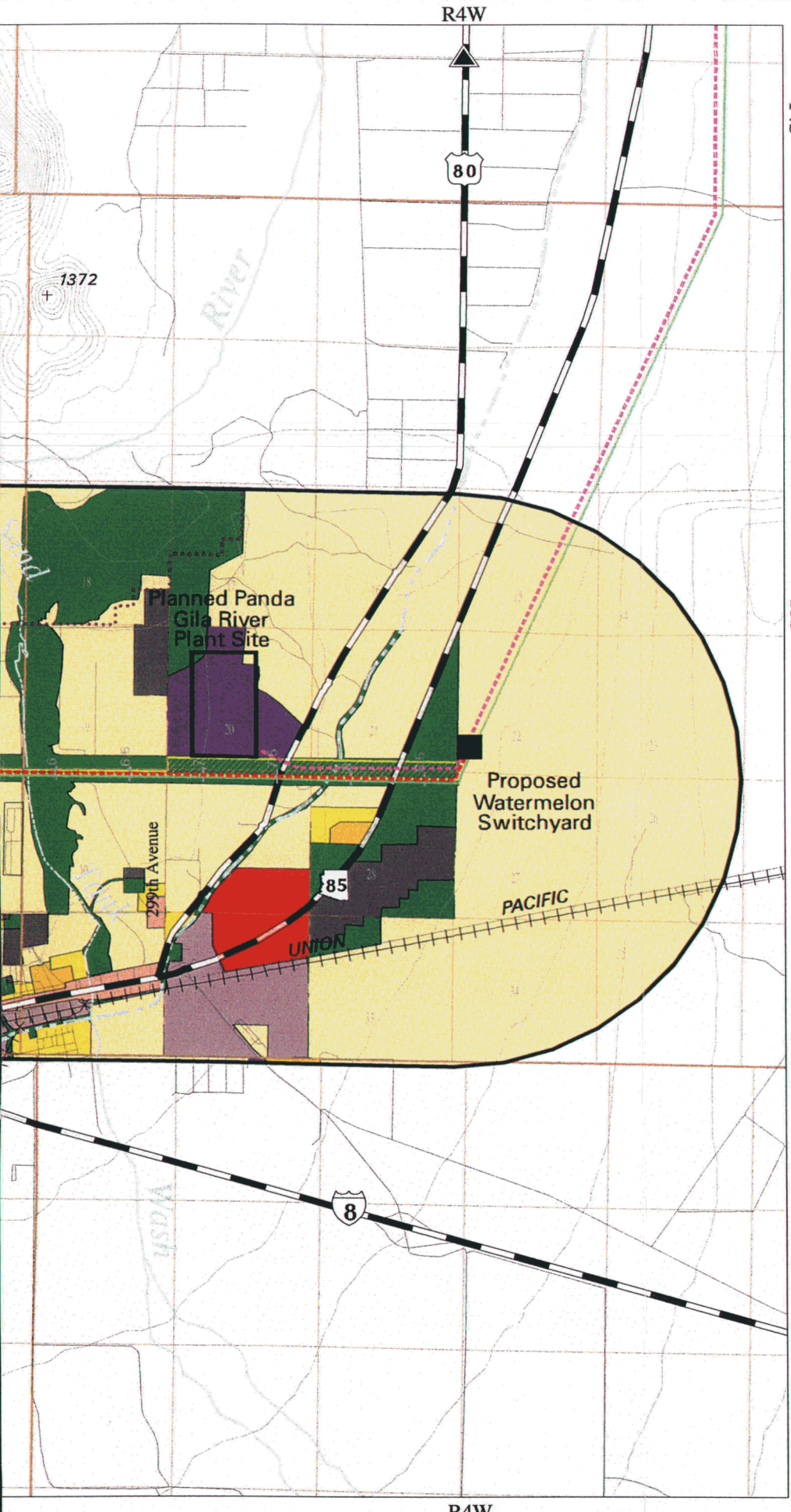
- Proposed Transmission Line Right-of-Way
- Existing 69kV
- Existing 230kV
- Approved 500kV APS/Gila River Transmission Line
- Match Line
- Photopoint

Scale in Feet

1000 0 1000

N

JANUARY 22, 2001



PLANNED AND FUTURE LAND USE

Gila Bend Power Partners, L.L.C. 500kV Transmission Line and Switchyard Project

Exhibit A-5

Resource Inventory

- Residential Low Density (0-2 du per acre)
- Residential Medium Density (2.1-15 du per acre)
- Residential High Density (15.1+ du per acre)
- Commercial - Retail/Service
- Commercial - Office/Business Park
- Light Industrial
- Heavy Industrial
- Public/Quasi-Public
- Parks/Open Space
- Unplanned
- Utility Corridor

General Reference Features

- Existing Substations
- Proposed Switchyard
- Study Area Boundary
- Proposed Transmission Line Route
- Planned APS Gila River 500kV Transmission Lines (2)
- Existing 230kV Transmission Line
- Flowage Easement Boundary
- Interstate/Highway
- Roads
- Railroads
- Washes
- Canals
- Section Lines
- Township and Range Boundaries
- Contours

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Scale in Miles

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January 22, 2001

m:/projects/gbpp/amls/futlu_3.aml

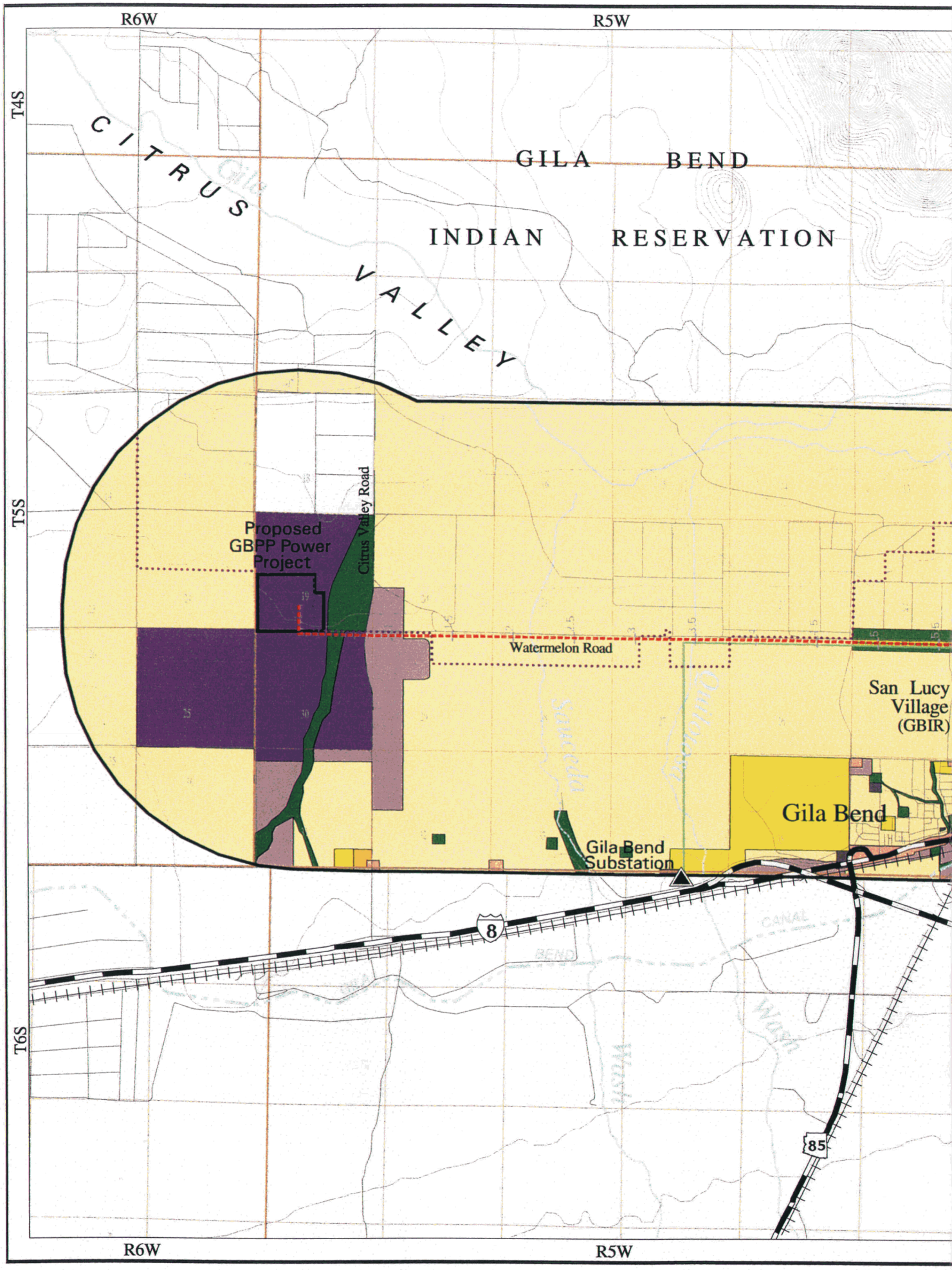
R6W
R5W
T4S
T5S
T6S
CITRUS VALLEY
GILA BEND INDIAN RESERVATION
Proposed GBPP Power Project
Citrus Valley Road
Watermelon Road
San Lucy Village (GBIR)
Gila Bend
Gila Bend Substation
8
85
CANAL
R6W
R5W

EXHIBIT B
ENVIRONMENTAL REPORT

EXHIBIT B
LAND USE EVALUATION REPORT

As stated in Arizona Corporation Commission Rules of Practice R-14-3-219:

"Attach any environmental studies which applicant has made or obtained in connection with the proposed site(s) or route(s). If an environmental report has been prepared for any federal agency or if a federal agency has prepared an environmental statement pursuant to Section 102 of the National Environmental Policy Act, a copy shall be included as part of this exhibit."

GBPP and EPG completed the environmental studies for the proposed 500kV transmission line and switchyard project between October 2000 and January 2001. This exhibit contains a description of the land use studies conducted for the Project. Studies regarding biological, visual, and cultural resources also were completed for this Project and are discussed in Exhibits C, D, and E.

This report describes the inventory of existing land use and land use plans and assessment of potential impacts that may occur as a result of construction and operation of the proposed GBPP 500kV Transmission Line and Switchyard Project. The land use inventory includes three major components: land ownership and jurisdiction, existing land use, and planned land use, i.e., future land use plans. The methods that were used for the land use inventory include review and interpretation of maps, aerial photographs and other documents, and field verification. In addition, this inventory is based on communication with governmental agencies as well as private consulting firms.

The study area includes a 4-mile-wide corridor (i.e., 2 miles around the switchyard and on each side of the reference centerline) for the proposed transmission line. In general, most of the land in the study corridor is undeveloped with the exception of some agricultural and limited residential uses.

The proposed transmission line will originate at the proposed GBPP Power Project, located within the Town of Gila Bend, Arizona approximately 6 miles northwest of the center of town (see Figure 1). The proposed line will parallel Watermelon Road going east from the proposed GBPP Power Project for approximately 7.5 miles, and terminate at the proposed Watermelon Switchyard to be located east of State Route (SR) 85, a total distance of approximately 9 miles.

LAND OWNERSHIP AND JURISDICTION

The proposed transmission line (Table B-1) route crosses two jurisdictions—Maricopa County and the Town of Gila Bend. Land ownership (Table B-2) crossed by the proposed line consists of private and state trust lands. The broader land ownership within the study area also includes federal (Bureau of Land Management [BLM]), additional state, and private entities as well as Tohono O'odham Nation land. Exhibits A-1 and A-2 illustrate jurisdiction and land ownership for the Project area.

TABLE B-1 JURISDICTIONS CROSSED BY PROPOSED TRANSMISSION LINE ROUTE	
Jurisdiction	**Miles (approximate)**
Maricopa County	5.2
Town of Gila Bend	3.8
Route Total	9.0

TABLE B-2 LAND OWNERSHIP CROSSED BY PROPOSED TRANSMISSION LINE ROUTE	
Ownership	**Miles (approximate)**
State Trust	0.8
Private	8.2
Route Total	9.0

EXISTING LAND USE

Existing land use in the general study area is illustrated on Exhibit A-3. In addition, detailed aerial photography (scale 1 inch = 1,000 feet) depicting the location is provided on Exhibits A-4.1 through A-4.4.

Residential – Residential land use includes primarily single-family dwelling units, in addition to mobile homes and recreation vehicle parks. The largest concentration of residential units is located in the center of the Town of Gila Bend. Single-family dwelling units are scattered throughout the study area. The closest residences (two) are located approximately 150 feet north of the proposed transmission line route and are located on Watermelon Road, 1½ miles west of 299th Avenue (Stout Road). A single residence is located ⅛ mile north of the transmission line approximately ½ mile west of 299th Avenue. Two mobile homes are located approximately 500 feet south of the proposed route ½ mile west of 299th Avenue. Fourteen additional residences are located approximately ¼ mile south of the transmission line in San Lucy Village and on the east side of 299th Avenue.

Commercial – The majority of commercial land uses within the study area occur along SR 85 and Pima Street in Gila Bend, approximately 1.4 miles south of the proposed route.

Industrial – Industrial uses in the study area occur primarily on the south side of Gila Bend. A small landfill, now closed, is located northeast of Gila Bend and west of Old U.S. Highway 80 approximately 1.3 miles north of the proposed route. Town of Gila Bend wastewater treatment ponds are located on the south side of Watermelon Road, 3 miles east of Citrus Valley Road, adjacent to the proposed route. An existing sand and gravel operation is located south of the proposed transmission line and east of Citrus Valley Road.

Public/Quasi-Public – Land uses in the study area include community services and facilities in Gila Bend and the Gila Bend Municipal Airport. Within Gila Bend, public/quasi-public land uses include state government, municipal, and educational facilities. In addition, local houses of worship are located in the study corridor, approximately ½ mile southwest of the proposed route, in San Lucy Village. The Gila Bend Municipal Airport is located adjacent to SR 85, approximately ½ mile south of the proposed route. The airport's runway lies northeast to southwest.

Parks/Open Space – The Sonoran Desert National Monument was designated on January 17, 2001. It is the jurisdiction of the BLM. This monument is just under 1 mile away from the proposed Project (east of the proposed Watermelon Switchyard).

Agriculture – Irrigated farmlands occur within a narrow strip along the Gila Bend Canal, adjacent to the Gila River. The most common crops are alfalfa, corn, cotton, and wheat. Cultivated lands are located primarily north of Watermelon Road, and include farm out-structures and wells (in use and abandoned).

Utilities –The Liberty-Gila Bend 230kV transmission line follows the proposed corridor on Watermelon Road for a distance of approximately 5 miles. In addition, a 69kV subtransmission line parallels Watermelon Road on the north side before following Old U.S. Highway 80 northward and another continues east past the proposed Watermelon Switchyard. Gas pipelines and fiber optic lines are located along the corridors on Watermelon Road and Old U.S. Highway 80.

Transportation – The proposed line will parallel Watermelon Road and cross Old U.S. Highway 80 and SR 85. The Union Pacific Railroad (UPRR) crosses the Town of Gila Bend to the south. Interstate 8 also is approximately 2 to 3 miles south of the proposed route.

Vacant Land/Undeveloped – The proposed route crosses a small area of state land near its eastern terminus at the proposed Watermelon Switchyard that is undeveloped. The route also crosses large areas of private land that are undeveloped or reverting from agricultural use as shown on Exhibits A-4.1 through A-4.4.

Flowage Easement – A portion of the transmission line route on the western side along Watermelon Road lies within the boundaries of the U.S. Army Corp of Engineers (COE) flowage easement. The flowage easement area parallels the path of the Gila River, much of which is subject to inundation during any period when the Painted Rock Dam operator causes the Gila River to rise to its maximum level of 661 feet. The easement was purchased by the federal government to gain the ability to restrict modification of the terrain within the easement area and to limit construction within the easement area that would serve to reduce the storage capacity or create a hazard if the facilities were to be inundated.

Discussions by GBPP with Ann Gamson, Office Chief of the Phoenix COE, indicate that areas above the flood level (greater than 661 feet mean sea level [MSL]), but within the flowage easement, could be used for permanent structures provided that they would not be subject to flooding or be damaged by high levels of soil saturation due to flood water in the immediate area. Areas below 661 feet MSL

could be used for permanent structures provided that they did not impact the capacity of the flowage easement and would not be damaged by flood water or high levels of soil saturation due to flood water.

Permission to place any structure or to modify the terrain within the flowage easement must be obtained from the COE operations in the Los Angeles District. The local office in Phoenix will likely process the paperwork, but approval must come from the Los Angeles District operations. It is estimated that permission to place structures in the easement could be obtained within 30 to 60 days of submission of a request that included all information necessary to assess the potential impacts of the structure on the easement.

FUTURE LAND USE

The proposed route crosses areas under the jurisdiction of the Town of Gila Bend and Maricopa County. Following is a description of the planned future land use(s) for those areas in the immediate vicinity of the transmission line as shown on Exhibit A-5.

Town of Gila Bend

The Town of Gila Bend has adopted a Master Plan Amendment (July 11, 2000) that addresses planned land uses on the north and east sides of the town that were incorporated by annexation in July 1998 as well as additional lands proposed for annexation. The approved Plan amends the 1996 Master Plan Update (Town of Gila Bend 2000). In addition, a proposed plan amendment including the proposed GBPP Power Project (Section 19), a utility corridor, and Sections 18, 25, 30, and portion of 20 and 29 is pending approval in late January, according to the Town of Gila Bend. The changes result in heavy industrial, light industrial, utility corridor, parks/open space, and unplanned designations.

Utilities and Industrial - In the Town of Gila Bend General Plan Amendment an open space and utility corridor was identified along portions of Watermelon Road "to accommodate extensive power transmission capacity. This corridor is meant to allow for expanded power generation operations in the area to enhance local economic development efforts and also serve as a transition between the transmission equipment and other land uses. The corridor is also wide enough to play host to numerous activity opportunities such as the trail system and parks and recreation venues" (Town of Gila Bend 2000). The proposed corridor includes the existing 230kV transmission line right-of-way (100 feet) south of Watermelon Road and the two planned 500kV transmission lines (500-foot right-of-way) north of Watermelon Road.

In addition, there are two large industrial areas (electrical generating facilities) proposed or planned for the study area–the proposed GBPP Power Project and the planned Panda Gila River, L.P. Project. The proposed GBPP Power Project would be located at the western terminus of the line west of Citrus Valley Road. The planned Panda Gila River, L.P. Project would be located northeast of the

Watermelon Road and 299th Avenue (Stout Road). The proposed route also crosses a small portion of designated light industrial use immediately east of the proposed GBPP Power Project site.

Residential – The Plan Amendment area along the proposed route also includes very low (one dwelling unit per acre) and low (up to five dwelling units per acre) density residential areas. Higher density residential areas and mobile home and recreational vehicle parks are also included in the Plan Amendment.

Parks/Open Space - The Plan Amendment identifies areas for regional, community, and neighborhood parks and open space. A large open space is planned east of SR 85, expanding the buffer for the airport. A trail system is planned utilizing utility corridors.

Historic/Tourism - A unique category was created for the proposed Gatlin Site Cultural Park located approximately ½ mile north of the proposed route though it is not funded at this time. Archaeological and historic sites are found in the park area. There are also plans to develop the Butterfield Stage Route as a tourist attraction.

Transportation - Changes are planned for the circulation system in the study area. The Arizona Department of Transportation (ADOT) has plans to modify all of SR 85. However, there are currently no specific plans for the portion in the study area, and ADOT has no timetable for modifications for this portion of SR 85. ADOT does not anticipate that construction and operation of the proposed transmission line would have an effect on future plans for SR 85 (Dimitropolis 2001). The Plan Amendment identifies an "addition of a proposed minor arterial roadway along the northern boundary of Sections 20 and 21. This roadway will provide access from Old Highway 80 west to the Gatlin Site" (Maricopa County 1997, p.11). A proposed extension from Watermelon Road will connect it to SR 85. In addition, the Town of Gila Bend intends to eventually modify the intersection of Watermelon Road and US 80 by adding turn lanes on both roads and accelerating lanes on US 80. To date, the Town of Gila Bend has been unable to secure the funds required for this Project (Dille 2001). The Town does not anticipate the construction and operation of the proposed transmission to have an effect on plans to modify this intersection (Dille 2001).

Public/quasi public - Although no runway expansions are proposed for the Gila Bend Municipal Airport, other improvements are planned. The airport improvements will end in 2015 and will include modifications such as parking areas, additional hangars, security lights, and taxi-lane construction.

Zoning - The Plan Amendment area was annexed in July 1998 and was initially zoned for agriculture (agricultural and rural residential uses similar to Maricopa County's previous Rural-43 zoning). Within the Town, the proposed transmission lines would be located within the area currently zoned as either industrial, agriculture, or open space (which allow for utilities). The Town will initiate a zoning change to implement the Plan Amendment according to the designated planned land uses once the planning process is complete.

Maricopa County

The future use of unincorporated private lands is under the jurisdiction of Maricopa County. Although there is no local area plan for the study area at this time, the county intends to conduct a land use study along SR 85 within the study area within a few months (Holm 2000). These lands are designated "Rural Development Area" in the county comprehensive plan. This classification covers areas that are not included in any other land use plan or regulatory program. The county zoning designation for these lands is Rural-43, which provides for agricultural use and residential development on minimum 43,560-square-foot lots (Maricopa County 1969 (revised 2000)).

Arizona State Trust Lands and BLM Lands

No specific future plans for state land within the study corridor were identified. The nearest BLM lands are approximately 1 mile away from the proposed route. The Resource Management Plan (RMP) (BLM 1985, 2000) is the primary guide for the Lower Gila South Planning Area, now administered out of the BLM Phoenix Field Office. Grazing and recreation, according to the RMP, are the two major planned uses for the general study area.

RESULTS

It is anticipated that the proposed transmission line will have minimal impacts on existing or planned land uses. The majority of the land is currently vacant. Portions of the proposed route are located within or adjacent to an existing utility right-of-way and utility corridor.

Watermelon Road will be used for access for the majority of the transmission line route. Combining the 230kV line with the proposed 500kV line on the same set of structures reduces right-of-way requirements. Mitigation measures that could minimize the impact of the transmission line are as follows:

- Restricted vehicle access - All construction vehicle movement outside of the right-of-way should be restricted to designated access, contractor acquired access, or public roads.
- Restoring and reclaiming land - Various methods should be used in the construction area to provide erosion control and revegetation.
- Selective structure placement – In key areas, structures should be specifically placed to avoid potential conflicts.
- Repairing/replacing fences - If fences or gates are damaged or destroyed because of Project construction activities, they will be repaired or replaced, as appropriate.

REFERENCES

Dille, Shane. 2001. Town of Gila Bend Town Manager in conversation with Mark Beckett. January 12, 2001.

Dimitropolis, Christ. 2001. ADOT Planner in conversation with Mark Beckett. January 9, 2001.

Gila Bend, Town of. 2000. Master Plan Amendment – 00-01 – July 2000.

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Holm, Matthew. April 2000. Personal communication. Maricopa County Planner to Liza Oz-Golden.

Maricopa County. April 2000. October 1997. Comprehensive Plan.

_____. 1969. (revised in February 2000). Zoning Ordinance.

U.S. Department of the Interior, Bureau of Land Management, Arizona. Phoenix Field Office. 2000. *Final Amendment and Environmental Assessment to the Lower Gila North Management Framework Plan and the Lower Gila South Resource Management Plan.* February 2000.

_____. 1985. Lower Gila South Resource Management Plan and Environmental Impact Statement. February 1985.

EXHIBIT C
AREAS OF BIOLOGICAL WEALTH

EXHIBIT C
AREAS OF BIOLOGICAL WEALTH

As stated in Arizona Corporation Commission Rules of Practice and Procedure R-14-3-219:

"Describe any areas in the vicinity of the proposed site or route which are unique because of biological wealth or because they are habitats for rare and endangered species. Describe the biological wealth or species involved and state effects, if any, the proposed facilities will have thereon."

BIOLOGICAL WEALTH

A list of federally threatened and endangered species of plants and animals known to occur in Maricopa County was obtained from the U.S. Fish and Wildlife Service (USFWS 2000a). Also, a list of species of State management concern was obtained from Arizona Game and Fish Department (AGFD) Heritage Data Management System (2000). Special status species that may be present in the Project area are listed in Table C-1. Two species, the lesser long-nosed bat and cactus ferruginous pygmy-owl, are federally listed as endangered. Several other species that may be found in the Project vicinity have State status as species of concern. Responses to requests for information regarding sensitive species that were sent to the AGFD and Arizona Department of Agriculture (ADA) are pending.

Results

Construction of the proposed Project will have minimal impact on plant and wildlife in the vicinity of the Project.

The lesser long-nosed bat (*Leptonycteris curasoae yerbabuenae*) roosts in caves and mine shafts and forages at columnar cactus and agave. Saguaro cacti in the Project vicinity provide potential foraging habitat for this species, but there are no known roost sites in the Project vicinity. The only potential impacts to this species would result from the removal of saguaros.

Xeroriparian vegetation may provide potential habitat for the cactus ferruginous pygmy-owl (*Glaucidium brasilianum cactorum*). The Project area is in Zone 3 of cactus ferruginous pygmy-owl habitat, as defined by USFWS (2000b). Zone 3 is within the historic range of the pygmy-owl with a low potential for occupancy. Although the likelihood of finding pygmy owls in Zone 3 is low, AGFD or USFWS may recommend surveys in any potential habitat.

The California leaf-nosed bat (*Macrotus californicus*) roosts in caves and mine shafts. Although scrub vegetation provides potential foraging habitat, there are no known roosting sites in the Project vicinity. Due to this lack of roosting sites, it is unlikely that this species occurs in the Project area.

Great egrets (*Ardea alba*) and snowy egrets (*Egretta thula*) are both common in wetland areas. The great egret prefers open habitats for foraging. Both species may be present along the Gila Bend Canal. The snowy egret may also forage in agricultural fields in the Project vicinity. Construction activities may temporarily disturb these birds. Breeding by these birds is restricted to areas along the Colorado River and will, therefore, not be affected by the Project.

Osprey (*Pandion haliaetus*) nest near water and are piscivorous. This species could utilize the Gila Bend Canal for foraging during migration or winter. Transmission lines that are near or cross the canal could pose a collision hazard for this species as it forages. However, towers that support transmission lines could provide perching locations.

Ferruginous hawks (*Buteo regalis*) and peregrine falcons (*Falco peregrinus*) inhabit dry, open country and may forage in the Project vicinity in winter. Although they do not breed in the Project area, they may be present during winter or migration. Peregrine falcons (*Falco peregrinus*) generally prefer areas with cliffs in the vicinity of water where prey species are common. Peregrines may occur in the Project area either during spring or fall migration or as occasional winter visitors. Construction of the transmission line is unlikely to affect these species adversely. The transmission line could be used for perching locations by these species.

Belted kingfishers (*Ceryle alcyon*) forage for fish from low perches. Kingfishers may forage along the Gila Bend Canal during the winter. Foraging behavior may be affected by construction activities. However, because this species is not expected to breed in the vicinity of the proposed route, breeding activities will not be affected.

The crested saguaro (*Carnegiea gigantea)* is listed as highly safeguarded in Arizona. Crested saguaros are a rare growth form caused by freezing or mechanical injury to the saguaro's apical meristem (Steenbergh and Lowe 1983). This growth form could be present wherever saguaros are found in the study area.

REFERENCES

Arizona Game and Fish Department, Heritage Data Management System. 2000. Special status species by county for Arizona. Arizona Game and Fish Department, Habitat Branch, Phoenix, Arizona.

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Monson, G. and A.R. Phillips. 1981. Annotated checklist of the birds of Arizona. University of Arizona Press. Tucson, Arizona. 240 pp.

Stebbins, R.C. 1985. Western reptiles and amphibians. Houghton Mifflin Company, New York, New York. 336 pp.

Steenbergh, W.F. and C.H. Lowe. 1983. Ecology of the Saguaro: III. Scientific Monograph Series, No. 17. U.S. Department of the Interior, National Park Service, Washington, D.C.

U.S. Fish and Wildlife Service (USFWS). 2000a. Internet site http://ifw2es.fws.gov/EndangeredSpecies/lists/ListSpecies.cfm accessed on 12-27-00.

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TABLE C-1
SPECIAL STATUS WILDLIFE AND PLANT SPECIES THAT COULD OCCUR WITHIN THE PROJECT VICINITY

Common Name	Scientific Name	Habitat	Federal Status	State Status
MAMMALS				
California leaf-nosed bat	*Macrotus californicus*	Primarily cave and mine dwellers, mostly in Sonoran desertscrub		SC
Lesser long-nosed bat	*Leptonycteris curasoae yerbabuenae*	Desertscrub with agave and columnar cacti present as food plants	E	SC
BIRDS				
Great egret	*Ardea alba*	Ponds, streams, and marshes		SC
Snowy egret	*Egretta thula*	Ponds, streams, and marshes		SC
Osprey	*Pandion haliaetus*	Near lakes and streams		SC
Ferruginous hawk	*Buteo regalis*	Dry open country, fields		SC
Peregrine falcon	*Falco peregrinus*	Cliffs along Salt River, generally distributed, at times on tall urban buildings		SC
Cactus ferruginous pygmy-owl	*Glaucidium brasilianum cactorum*	Mature cottonwood/willow, mesquite bosques, and Sonoran desertscrub	E	SC
Belted kingfisher	*Ceryle alcyon*	Ponds, streams, and canals		SC
PLANTS				
Crested or Fan-top saguaro	*Carnegiea gigantea*	Rocky hillsides and outwash slopes		HS

Key to Table:
Federal Status: E = Endangered T = Threatened C = Candidate
State Status: SC = Wildlife of Special Concern in Arizona HS = Highly Safeguarded
Sources: Arizona Game and Fish Department 1998, Hoffmeister 1986, Monson and Phillips 1981, Stebbins 1985, U.S. Fish and Wildlife Service 2000a, Witzeman et al. 1997

EXHIBIT D
BIOLOGICAL RESOURCES

EXHIBIT D
BIOLOGICAL RESOURCES

As stated in Arizona Corporation Commission Rules of Practice and Procedure R14-3-219:

"*List the fish, wildlife, plant life, and associated forms of life in the vicinity of the proposed site or route and describe the effects, if any, other proposed facilities will have thereon.*"

BIOLOGICAL RESOURCES

The area traversed by the proposed route is a broad flatland including agricultural land and native desert. Native vegetation is characteristic of the creosotebush bursage series within the Lower Colorado River Valley subdivision of Sonoran desertscrub (Turner and Brown 1994). Drainages that carry water during storm events bisect the flatlands. The proposed route also crosses the Gila Bend Canal, which offers a perennial source of water.

Dominant plant species in the area include creosote bush (*Larrea tridentata*), triangle-leaf bursage (*Ambrosia deltoidea*) and white bursage (*A. dumosa*). Drainages that bisect these areas support concentrations of large shrubs and trees, such as ironwood (*Olneya tesota*), foothill paloverde (*Cercidium microphyllum*), blue paloverde (*C. floridum*), and wolfberry (*Lycium* sp.). Saguaro (*Carnegiea gigantea*) are scattered throughout the Project area.

Vegetation communities present along the proposed route provide habitat for a variety of wildlife species. Plants, mammals, birds, reptiles, and amphibians that could occur in the vicinity of the Project are listed in Tables D-1 through D-4.

Results

Construction of the proposed Project will have minimal impact on plant and wildlife within the vicinity of the Project.

Native vegetation characteristic of the Lower Colorado River subdivision is extensive in southern Arizona. Therefore, removal of vegetation for the Project will have minimal impact on the vegetation community as a whole. Several native plant species, including ironwood and paloverde trees and all cacti, are protected under the Arizona Native Plant Law. If any of these plants will be removed, destroyed, or damaged during construction, the ADA should be notified 60 days before plants are destroyed.

In areas where native vegetation is cleared, there will be a permanent loss of potential habitat for small mammals, reptiles, and birds. Construction activities will result in temporary disturbance to wildlife due to the presence of construction equipment and human activity. Another construction-

related impact is the potential for incidental injury or mortality of small animals.

TABLE D-1
PLANT SPECIES LIKELY TO BE FOUND IN THE PROJECT AREA

Common Name	Scientific Name
Trees	
Velvet mesquite	*Prosopis velutina*
Western honey mesquite	*Prosopis glandulosa* var. *torreyana*
Ironwood	Olneya tesota
Blue paloverde	*Cercidium floridum*
Foothill paloverde	*Cercidium microphyllum*
Salt cedar	*Tamarix* sp.
Crucifixion thorn	*Castela emoryi*
Shrubs	
Creosote bush	*Larrea tridentata*
Jimmy weed	*Isocoma heterophylla*
Rayless encelia	*Encelia frutescens*
Canyon ragweed	*Ambrosia ambrosioides*
Triangle-leaf bursage	*Ambrosia deltoidea*
White bursage	*Ambrosia dumosa*
Burrobush	*Hymenoclea* sp.
Desert saltbush	*Atriplex polycarpa*
Desert thorn/wolfberry	*Lycium* sp.
Catclaw acacia	*Acacia greggii*
Grasses and Forbs	
Mediterranean grass	*Schismus barbatus*
Russian thistle	*Salsola iberica*
Tidestromia	*Tidestromia oblongifolia*
Sand pepper grass	*Lepidium lasiocarpum*
Wooly plantain	*Plantago insularis*
Rigid spiny herb	*Chorizanthe rigida*
Heron's bill	*Erodium cicutarium*
Spurge	*Euphorbia spp.*
Wild buckwheat	*Eriogonum* sp.
Black mustard	*Brassica nigra*
Rambling milkweed	*Sarcostemma hirtellum*
Salt heliotrope	*Heliotropium curassavicum*
Cacti	
Saguaro	*Carnegiea gigantea*
Cholla	*Opuntia* spp.
Fishhook barrel cactus	*Ferocactus wislizenii*

TABLE D-2 MAMMAL SPECIES THAT MAY OCCUR IN THE PROJECT VICINITY		
Common Name	**Scientific Name**	**Habitat**
Desert shrew	*Notiosorex crawfordi*	Any arid habitat with ample cover, in oak belt, among junipers, desertscrub, and riparian
California leaf-nosed bat	*Macrotus californicus*	Sonoran desertscrub, cave and mine dwellers
Yuma myotis	*Myotis yumanensis*	Where water is present - Colorado and Little Colorado rivers, irrigation canals, permanent ponds, streams
Cave myotis	*Myotis velifer*	Inhabit mine shafts, tunnels, caves, under bridges in desert areas, never far from water source - tanks, canal
California myotis	*Myotis californicus*	Mine tunnels, hollow trees, loose rocks, buildings, and bridges
Western pipistrelle	*Pipistrellus hesperus*	Inhabits caves, under loose rocks, crevices in cliffs, and buildings: arid conditions, but near watercourses
Big brown bat	*Eptesicus fuscus*	In wooded areas and desertscrub
Townsend's big-eared bat	*Plecotus townsendii*	Caves or mine tunnels, buildings in desertscrub
Pallid bat	*Antrozous pallidus*	Attics of houses, roofs of barns and sheds, old mine tunnels, crevices in cliffs, under bridges in desertscrub
American free-tailed bat	*Tadarida brasiliensis*	Caves and mines, old buildings or bridges in desertscrub and foothills of some higher mountains
Pocketed free-tailed bat	*Tadarida femorosacca*	Rocky cliffs and slopes of southern deserts, also use man-made shelters such as roofing tiles of buildings
Big free-tailed bat	*Tadarida macrotis*	Roosts in caves, crevices in cliffs, and buildings
Western mastiff bat	*Eumops perotis*	Roosts on or in buildings, crevices in cliffs, in trees, and in tunnels
Desert cottontail	*Sylvilagus audobonii*	Desertscrub, as high as junipers or oak belt
Black-tailed jack rabbit	*Lepus californicus*	Deserts to open scrub forests, grazed lands, croplands
Harris' antelope squirrel	*Ammospermophilus harrisii*	Low arid desert with sparse vegetation
Rock squirrel	*Spermophilus variegatus*	Rocky canyons and boulder-strewn slopes
Round-tailed ground squirrel	*Spermophilus tereticaudus*	Low desert, mesquite, creosote bush, cactus
Botta's pocket gopher	*Thomomys bottae*	Nearly every habitat with sufficient tuberous roots and plant material, and soil is suitable for digging tunnels
Little pocket mouse	*Perognathus longimembris*	Valleys and slopes where sandy soil is covered with desert pavement; sagebrush, creosote bush, cactus, and occasionally scattered piñon pines and junipers are present
Arizona pocket mouse	*Perognathus amplus*	Mohave and Sonoran desertscrub and parts of Great Basin desertscrub
Rock pocket mouse	*Perognathus intermedius*	Rocky slopes, old lava flows, sparse vegetation
Desert pocket mouse	*Perognathus penicillatus*	Prefers open, sandy desert with sparse vegetation
Bailey's pocket mouse	*Perognathus baileyi*	Rocky slopes with sparse vegetation
Merriam's kangaroo rat	*Dipodomys merriami*	Mostly found in low desert with scattered vegetation and sandy to rocky soils
Desert kangaroo rat	*Dipodomys deserti*	Low deserts in sandy areas with sparse vegetation

TABLE D-2 MAMMAL SPECIES THAT MAY OCCUR IN THE PROJECT VICINITY		
Common Name	**Scientific Name**	**Habitat**
Western harvest mouse	*Reithrodontomys megalotis*	Wide variety of habitats and elevations, along streams, bottomlands, fences, around irrigated areas
Cactus mouse	*Peromyscus eremicus*	Areas with sandy soil and scattered vegetation and in rocky outcrops in the low deserts
Southern grasshopper mouse	*Onychomys torridus*	Desertscrub, mesquite and cacti
Arizona cotton rat	*Sigmodon arizonae*	Desert areas or along canals and banks of small streams
White-throated wood rat	*Neotoma albigula*	Brushland and rocky cliffs with shallow caves
Desert wood rat	*Neotoma lepida*	Desert floors or rocky slopes with scattered cactus, yucca, or other low vegetation
Coyote	*Canis latrans*	Every habitat
Kit fox	*Vulpes macrotis*	Prefers open, level, sandy ground in low desert vegetation and among junipers
Gray fox	*Urocyon cinereoargenteus*	Chaparral, open forests, rimrock country
Raccoon	*Procyon lotor*	Along streams and lake borders near wooded areas or rock cliffs
Badger	*Taxidea taxus*	Open grasslands and deserts
Western spotted skunk	*Spilogale gracilis*	Along streams and among boulders
Bobcat	*Felis rufus*	Rimrock and chaparral areas
Javelina	*Tayassu tajacu*	Semidesert areas with cacti, oaks, chaparral, or mesquite
Mule deer	*Odocoileus hemionus*	Occupies several types of habitat including desert shrub areas
Source: Hoffmeister 1986		

TABLE D-3 BIRD SPECIES THAT MAY OCCUR IN THE PROJECT VICINITY		
Common Name	**Scientific Name**	**Habitat**
Great egret	*Ardea alba*	Ponds, streams, and marshes
Snowy egret	*Egretta thula*	Ponds, streams, and marshes
Turkey vulture	*Cathartes aura*	Generally distributed
Osprey	*Pandion haliaetus*	Lakes and streams
Bald eagle	*Haliaeetus leucocephalus*	Lakes and rivers
Northern harrier	*Circus cyaneus*	Wetlands and open fields
Sharp-shinned hawk	*Accipiter striatus*	Mixed woodlands
Cooper's hawk	*Accipiter cooperii*	Broken woodlands or streamside groves
Harris' hawk	*Parabuteo unicinctus*	Semi-arid woodland, brushland
Swainson's hawk	*Buteo swainsoni*	Open plains and prairie
Zone-tailed hawk	*Buteo albonotatus*	Mesa and mountain country, often near watercourses
Red-tailed hawk	*Buteo jamaicensis*	Generally distributed
Ferruginous hawk	*Buteo regalis*	Dry, open country
American kestrel	*Falco sparverius*	Generally distributed
Killdeer	*C. vociferus*	Ponds, streams, and fields
Gambel's quail	*Callipepla gambelii*	Desert scrublands and thickets
Rock dove	*Columba livia*	Suburban and agricultural areas
White-winged dove	*Zenaida asiatica*	Sonoran zones
Mourning dove	*Zenaida macroura*	Generally distributed, mainly in agricultural and suburban areas
Common ground-dove	*Columbina passerina*	Forages on brushy rangeland
Greater roadrunner	*Geococcyx californianus*	Scrub desert and mesquite groves
Barn owl	*Tyto alba*	Roosts and nests in dark cavities in city and farm buildings, cliffs, trees
Western screech owl	*Otus kennicottii*	Suburban and agricultural areas
Great-horned owl	*Bubo virginianus*	Sonoran zones
Ferruginous pygmy-owl	*Glaucidium brasilianum*	Saguaro deserts and low, open woodlands
Elf owl	*Micrathene whitneyi*	Desert lowlands, foothills, and canyons
Lesser nighthawk	*Chordeiles acutipennis*	Lower Sonoran desert
Black-chinned hummingbird	*Archilochus alexandri*	Suburban and riparian areas in Sonoran desert
Anna's hummingbird	*Calypte anna*	Suburban areas, riparian areas, and fields in Sonoran desert
Costa's hummingbird	*Calypte costae*	Desert washes, dry chaparral
Rufous hummingbird	*Selasphorus rufus*	Forests, woodland edges, thickets
Belted kingfisher	*Ceryle alcyon*	Ponds, streams, and canals
Gila woodpecker	*Melanerpes uropygialis*	Lower Sonoran zone
Ladder-backed woodpecker	*Picoides scalaris*	Riparian and desert areas in the Sonoran desert
Red-shafted flicker	*Colaptes cafer*	Transition zone forests, lowlands
Gilded flicker	*Colaptes chrysoides*	Desert and riparian areas in lower Sonoran desert
Say's phoebe	*Sayornis saya*	Dry, open areas, canyons, cliffs
Vermillion flycatcher	*Pyrocephalus rubinus*	Streamside shrubs, bottomlands
Ash-throated flycatcher	*Myiarchus cinerascens*	Wide variety of habitat, including deserts
Brown-crested flycatcher	*Myiarchus tyrannulus*	Saguaro desert, river groves, lower altitude mountain woodlands
Western kingbird	*Tyrannus verticalis*	Dry open country
Horned lark	*Eremophila alpestris*	Prefers dirt fields, gravel ridges, shores

TABLE D-3 BIRD SPECIES THAT MAY OCCUR IN THE PROJECT VICINITY		
Common Name	**Scientific Name**	**Habitat**
Tree swallow	*Tachycineta bicolor*	Wooded habitat near water
Northern rough-winged swallow	*Stelgidopteryx serripennis*	Riverbanks, cliffs, culverts, and under bridges
Cliff swallow	*Hirundo pyrrhonota*	Bridges, rural settlements, in open country on cliffs
Barn swallow	*Hirundo rustica*	Nests on or inside farm buildings, under bridges, and inside culverts
Common raven	*Corbus corax*	Mountains, deserts, rugged coastal areas
Verdin	*Auriparus flaviceps*	Mesquite and other dense thorny shrubs
Cactus wren	*Campylorhynchus brunneiccapillus*	Arid hillsides and valleys, where cactus is present
Rock wren	*Salpinctes obsoletus*	Arid and semiarid habitats, sunny talus slopes, scrublands, dry washes
Bewick's wren	*Thryomanes bewickii*	Brushland, hedgerows, stream edges, open woods
House wren	*Troglodytes aedon*	Brush and shrubs, orchards and farmyards
Black-tailed gnatcatcher	*Polioptila melanura*	Desert washes, arid brushlands
Western bluebird	*Sialia mexicana*	Open woodlands, farmlands, orchards, desert areas
American robin	*Turdus migratorius*	Parks, suburbs, swamps, woodlands
Northern mockingbird	*Mumus polyglottos*	Rural thickets, woodland edges, suburbs, towns
Bendire's thrasher	*Toxostoma bendirei*	Open farmlands, grasslands, brushy desert
Curve-billed thrasher	*Toxostoma curvirostre*	Semiarid brushlands, streamside brush, canyons
Cedar waxwing	*Bombycilla cedrorum*	Open habitats
Phainopepla	*Phainopepla nitens*	Mesquite brushlands
European starling	*Sturnus vulgaris*	Abundant in a variety of habitats
Bell's vireo	*Vireo bellii*	Mesquite, bottomlands, moist woodland
Warbling vireo	*Vireo gilvus*	Open deciduous woods
Orange-crowned warbler	*Vermivora celata*	Forest edges, thickets, and open, brushy woodlands
Lucy's warbler	*Vermivora luciae*	Mesquite and cottonwoods along watercourses
Northern cardinal	*Cardinalis cardinalis*	Streamside thickets, woodland edges, swamps, suburban gardens
Pyrrhuloxia	*Cardinalis sinuatus*	Thorny brush and mesquite thickets of dry creek beds, desert, woodland edges, and ranchlands
Black-headed grosbeak	*Pheucticus melanocephalus*	Open woodlands, forest edges
Blue grosbeak	*Guiraca caerulea*	Low, overgrown fields, streamsides, woodland edges, brushy roadsides
Green-tailed towhee	*Pipilo chlorurus*	Dense brush, chaparral, on mountainsides and high plateaus
Chipping sparrow	*Spizella passerina*	Lawns, grassy fields, woodland edges
Vesper sparrow	*Poecetes gramineus*	Dry, open grasslands, farmlands, forest clearings, sagebrush
Lark sparrow	*Chondestes grammacus*	Prairies, roadsides, farmlands, open woodlands, mesas
Black-throated sparrow	*Amphispiza bilineata*	Desert, especially on rocky slopes
Sage sparrow	*Amphispiza belli*	Alkaline flats in sagebrush and saltbush; open arid desert
Song sparrow	*Melospiza melodia*	Brushy areas
White-crowned sparrow	*Zonotrichia leucophrys*	Open woodlands, brushy grasslands, roadsides, parks
Dark-eyed junco	*Junco hyemalis*	Wide variety of habitats
Red-winged blackbird	*Agelaius phoeniceus*	Dry fields, sloughs, marshes, woodlands
Western meadowlark	*Sturnella neglecta*	Fields and meadows

TABLE D-3 BIRD SPECIES THAT MAY OCCUR IN THE PROJECT VICINITY		
Common Name	**Scientific Name**	**Habitat**
Brewer's blackbird	*Euphagus cyanocephalus*	Open habitats
Great-tailed grackle	*Quiscalus mexicanus*	Riparian areas, ponds, marshes, farmyards, and suburban areas
Bronzed cowbird	*Molothrus aeneus*	Open country, farmlands, brushy areas, wooded mountain canyons
Brown-headed cowbird	*Molothrus ater*	Generally distributed, feedlots and fields
Hooded oriole	*Icterus cucullatus*	Varied habitats, but especially around palms
House finch	*Carpodacus mexicanus*	Riparian and suburban areas, farmlands, and desert in Sonoran desert
Lesser goldfinch	*Carduelis psaltria*	Dry, brushy fields, woodland borders, gardens
House sparrow	*Passer domesticus*	Wherever humans live
Sources: National Geographic Society 1987, Witzeman et al. 1997		

TABLE D-4 REPTILE AND AMPHIBIAN SPECIES THAT MAY OCCUR IN THE PROJECT VICINITY		
Common name	**Scientific Name**	**Habitat**
Southern spadefoot	*Scaphiopus multiplicatus*	Sandy or gravelly soil in desert grassland, shortgrass plains, creosote bush and sagebrush desert, mixed grassland and chaparral, piñon-juniper and pine-oak woodlands, and open pine forests
Couch spadefoot	*Scaphiopus couchii*	Shortgrass plains, mesquite savannah, creosote bush desert, thornforest and tropical deciduous forest and other areas of low rainfall
Great plains toad	*Bufo cognatus*	Prairies or deserts, primarily a grassland species, breeds in shallow temporary pools or quiet water of streams, marshes, irrigation ditches, and flooded fields
Sonoran desert toad	*Bufo alvarius*	Prairies or deserts, primarily a grassland species, breeds in shallow temporary pools or quiet water of streams, marshes, irrigation ditches, and flooded fields
Red spotted toad	*Bufo punctatus*	Rocky regions, grasslands and desert near source of water
Western banded gecko	*Coleonyx variegatus*	Ranges from creosote bush flats and sagebrush desert to the piñon-juniper belt, often associated with rocks and crevices
Desert iguana	*Dipsosaurus dorsalis*	Creosote bush desert
Zebra-tailed lizard	*Callisaurus draconoides*	Washes, desert pavement, and hardpan where plant growth is scant
Long-nosed leopard lizard	*Gambelia weslizenii*	Arid or semiarid flats where vegetation occurs in clumps
Desert spiny lizard	*Sceloporus magister*	Arid and semiarid regions on plains and lower slopes of mountains
Tree lizard	*Urosaurus ornatus*	Trees, rocks, stone, or cinderblock walls
Long-tailed brush lizard	*Urosaurus graciosus*	Loose sand and scattered bushes and trees
Side-blotched lizard	*Uta stansburiana*	Sandy regions, desert flats and foothills
Desert horned lizard	*Phrynosoma platryhinos*	Arid lands–sandy flats, alluvial fans, along washes, at the edge of dunes
Western whiptail	*Cnemidophorus tigris*	Desert flats or sandy areas
Gila monster	*Heloderma suspectum*	Shrubby, grassy, and succulent desert
Western blind snake	*Leptotyphlops humilis*	Sandy and stony deserts, grassland-desert transition areas, and foothill canyons
Spotted leaf-nosed snake	*Phyllorhychus decurtatus*	Sandy or gravelly desert
Coachwhip	*Masticophis flagellum*	Sandy or rocky ground in desert, prairie, scrubland, juniper-grassland, woodland, thornforest, and farmland, avoids dense vegetation
Western patch-nosed snake	*Salvadora hexalepis*	Sandy and rocky lower slopes of mountains, low dry creosote bush plains, grasslands, chaparral, sagebrush plains, piñon-juniper woodland, and desertscrub
Gopher snake	*Pituophis melanoleucus*	Sand, loam, rock or hardpan soils in desert, prairie, brushland, woodland, open coniferous forest, and farmland
Glossy snake	*Arizona elegans*	Sandy or loamy open areas—light shrubby to barren desert, sagebrush flats, grassland, chaparral-covered slopes, and woodland
Common kingsnake	*Lampropeltis getulus*	Woodland, swampland, coastal marshes, river bottoms, farmland, prairie, chaparral, and desert

TABLE D-4 REPTILE AND AMPHIBIAN SPECIES THAT MAY OCCUR IN THE PROJECT VICINITY		
Common name	**Scientific Name**	**Habitat**
Long-nosed snake	*Rhinocheilus lecontei*	Deserts, prairies, and shrubland
Ground snake	*Sonora semiannulata*	Rocky, gravelly, or sandy soil in arid and semi-arid areas
Western shovel-nosed snake	*Chionactis occipitalis*	In the desert in washes, dunes, sandy flats, loose soil, and rocky hillsides with sandy gullies or pockets of sand among rocks, vegetation is sparse
Banded sand snake	*Chiomeniscus cinctus*	Arid lands; cactus, creosote bush, and mesquite
Night snake	*Hypsiglena torquata*	Rocky and sandy areas in grassland, chaparral, sagebrush flats, deserts, woodlands, moist mountain meadows, thornscrub, and thornforest
Western coral snake	*Micruroides euryxanthus*	Arid and semiarid regions in a variety of habitats
Western diamondback rattlesnake	*Crotalus atrox*	Sandy flats to rocky upland areas in desert, grassland, shrubland, woodland, pine forests, and rank growth of river bottoms
Sidewinder	*Crotalus cerastes*	In areas with desert plants; flats, barren dunes, hardpan, and rocky hillsides
Mojave rattlesnake	*Crotalus scutulatus*	Upland desert and lower mountain slopes
Source: Stebbins 1985		

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EXHIBIT E
SCENIC AREAS, HISTORIC SITES AND STRUCTURES, AND ARCHAEOLOGICAL SITES

EXHIBIT E
SCENIC AREAS, HISTORIC SITES AND STRUCTURES, AND ARCHAEOLOGICAL SITES

As stated in Arizona Corporation Commission Rules of Practice and Procedure R-14-3-219:

"Describe any existing scenic areas, historic sites and structures or archaeological sites in the vicinity of the proposed facilities and state the effects, if any, the proposed facilities will have thereon."

SCENIC AREAS - VISUAL RESOURCE STUDY

The purpose of the visual resource study was to identify potential visual impacts resulting from the construction and long-term presence of the Project on the character of the landscape's scenic quality and to views from sensitive locations identified as key observation points (KOPs). Following is a description of the methods used to determine potential visual impacts, results of the visual studies, and mitigation measures identified for the Project.

Methodology

The visual analysis was accomplished through the following steps :

- characterizing the aesthetic value of the landscape in the study area (scenic quality)
- identifying KOPs and recording the visibility of the proposed Project from these locations
- determining the effects of the Project on the landscape's scenic quality and viewer's KOPs
- identifying mitigation measures that may reduce potential visual impacts, if implemented

The visual study included an evaluation of existing and planned conditions within a 4-mile-wide corridor (2 miles on either side of the reference centerline for the 500kV transmission line). This study was conducted in conjunction with land use studies, including review of mapped information and field investigations.

Results

Visual impacts associated with the transmission line and switchyard are expected to be long term, remaining over the life of the Project. Construction and operation of the proposed facilities may

result in impacts that affect the scenic quality of an area and views from KOPs. However, because of the proposed location within or adjacent to an existing utility corridor, the proposed consolidation of facilities, and the proximity to other existing and planned modifications to the landscape, predicted visual impacts are expected to be moderate to low as a result of the Project. Following are the specific results of the evaluation of impacts to scenic quality and sensitive viewers.

Scenic Quality

The elements of scenic quality include the character and diversity of landform, vegetation, water, color, and cultural or man-made features. Landscapes with greater diversity of features are typically considered to have higher scenic quality, and modifications to the landscape, i.e., man-made elements may adversely affect scenic quality. Impacts to scenic quality indicate change in the value of the landscape (regardless of how it is viewed) resulting from (1) landform modifications that are necessary to construct the new transmission line and switchyard; (2) removal of vegetation to construct roads and maintain right-of-way and clearance zones associated with the conductors, towers sites, and switchyard; and (3) structural contrast with existing facilities.

Impacts to scenic quality are anticipated to be moderate to low. The existing general setting of the Project area is characterized by modified lands that have primarily been converted to or are reverting from agricultural use. Located immediately adjacent to Watermelon Road, the Project is partially located in a designated and existing utility corridor and will be consolidated with the existing 230kV APS line. In addition, the Town of Gila Bend General Plan allows for additional planned transmission and industrial development in the area (in association with the proposed GBPP and planned Gila River power plants).

Disturbance resulting from construction access will be limited and minimal vegetation clearing will be required for construction and maintenance of the transmission line and switchyard.

Sensitive Viewers

Visual sensitivity reflects the degree of public concern for change in the scenic quality of the landscape from KOPs including residential, recreational, and transportation viewers. Both the type of viewpoint and the distance from viewers were considered. KOPs were identified through field reconnaissance, previous studies, and aerial photograph interpretation.

Residential Views – Moderate to low visual impacts will occur to a majority of the residences inventoried within the 4-mile-wide study area because of the presence of existing transmission lines and consolidation with existing lines. Underbuilding of the 230kV line will result in the reduction of the number of existing 230kV structures by approximately 50 percent (existing 230kV towers are located approximately 330 feet apart, while the proposed 500/230kV structures will be placed approximately 700 to 900 feet apart).

Transportation Views - Visual impacts to travelers along SR 85 and Old U.S. Highway 80 are anticipated to be moderate to low due to intermittent screening and the presence of existing and planned transmission lines crossing these roads at the location of the proposed 500kV transmission line. Likewise, impacts along Watermelon Road are also anticipated to be minimal. Existing 230kV and 69kV lines occur in various locations along Watermelon Road (Exhibits A-4.1 through A-4.4) on both sides of the road.

Mitigation

Recommended mitigation that could be effective in reducing potential visual impacts to scenic quality and sensitive viewers include the following:

- use of non-specular conductors to reduce sun glare from conductors
- use of dulled or self-weathering steel structures
- selective tower placement (includes matching Panda Gila River transmission pole locations where possible)
- selective vegetation clearing and overland access
- for the switchyard - landscape screening and buffering, dulled structures and equipment, and controlled access

HISTORIC SITES AND STRUCTURES AND ARCHAEOLOGICAL SITES

Methods

A cultural resource study was conducted to assess the nature of cultural resources that may be potentially impacted by the construction of the proposed Project. This study was based on records reviewed at a number of agencies and research institutions, including the following:

- State Historic Preservation Office
- Arizona State Museum
- Museum of Northern Arizona
- Department of Anthropology at Arizona State University
- State Office and Phoenix Field Office of the BLM

The goal of the review was to identify any prior cultural resource surveys and recorded archaeological and historical sites within 1 mile of the Project area.

In addition, an intensive field inspection of approximately 400 acres encompassing the proposed Project area was conducted. The surveyed areas include:

- approximately 120 acres within the proposed switchyard area
- 240-foot-wide corridor along the southern edge of Watermelon Road from the proposed Gila Bend Power Project to the switchyard area.
- 240-foot-wide corridor along the northern edge of Watermelon Road extending 3 miles east from the proposed Gila Bend Power Project to just north of the Gila Bend water treatment ponds

This exhibit summarizes the results of the records search and field survey, which are being fully documented in a report being prepared to support the application for a CEC and ASLD's compliance with the Arizona State Historic Preservation Act of 1982.

Results

The records review identified 18 cultural resource studies conducted within 1 mile of the Project area (Table E-1).

The records review also identified a total of 32 archaeological and historical sites located within 1 mile of the Project area (Table E-2). Prehistoric site types range from simple lithic scatters to large habitation sites. Of the 32 previously recorded sites, only 4 will be directly crossed by the proposed route. These include one potentially important historic site, the Gila Bend Canal, and three prehistoric lithic procurement areas. The canal remains in use, and may have been modified through years of maintenance. There is the potential that this site may be regarded as locally significant and thus eligible for listing on the National Register under Criterion A (Bruder and Lonardo 2000, p. 77). The prehistoric sites, AZ Z:1:39 (ASM), AZ Z:1:41 (ASM), and AZ Z:1:48 (ASM) are either not eligible for the National Register or have been mitigated as part of previous development projects.

TABLE E-1 PRIOR CULTURAL RESOURCE STUDIES			
Project Name	**Acreage**	**Sites**	**Reference**
Panda Gila River Power Plant Survey	255	0	Rogge et al. 2000
Gila River Transmission Project	1,957	12	Bruder and Lonardo 2000
ADOT Materials Pit 8743 and Haul Road	80	4	Crownover and Rapp 1999
SR 85 Gila Bend to Buckeye Survey	2,643	73	Harmon and Beyer 1995
Gila Bend Landfill	1,280	4	Doyel et al. 1995
EPNG PacifiCorp Turbine Pipeline Survey	441	1	Rogge 1994; Rogge and Shepard 1994
Gila Bend Airport Extension Survey	12	0	Adams 1993
Gatlin Site Park Survey	110	1	Doyel 1993
Tohono O'odham Housing	150	0	Lascaux and Antone 1993
Material Source for Yuma-Casa Grande Highway	50	4	Wright 1993
Gila Bend Airport Extension Survey	15	0	Macnider 1990
Gila Bend-Mobile 69kV Transmission Line Survey	67	3	Hoffman and Effland 1988
Site Inventory at Painted Rocks Reservoir	~6,000	36	Bergin and Bruder 1988
Santa Rosa to Gila Bend 230kV Transmission Project	Sample survey of 53 linear miles	2	Wirth Associates 1982
ASLD Application #01-81186	1,440	0	Lange 1981
APS/SDG&E Transmission Line Alternative Survey	520	0	Wirth Associates 1980
Painted Rock Reservoir Survey	4,000	30)	Teague and Baldwin 1978
Summary of Sites in Maricopa County	Vehicular and pedestrian survey of known sites	352	Ayres 1965

TABLE E-2 PREVIOUSLY RECORDED CULTURAL RESOURCES					
Site Number	**Other Designations**	**Temporal Classification**	**Description**	**Eligibility**	**Reference**
AZ Z:1:5 (ASM)		historic	historic Papago artifact scatter	unevaluated	Schroeder and Ezell, 21 Dec 57, ASM Site Card, Tucson
AZ Z:1:6 (ASM)		prehistoric	Yuman artifact scatter	unevaluated	Schroeder and Ezell, 21 Dec 57, ASM Site Card, Tucson
AZ Z:1:7 (ASM)		prehistoric	village	unevaluated	Schroeder and Ezell, 21 Dec 57, ASM Site Card, Tucson
AZ Z:1:8 (ASM)		prehistoric	artifact scatter and roasting hearth	unevaluated	Schroder and Ezell, 21 Dec 57, ASM Site Card, Tucson
AZ Z:1:9 (ASM)		prehistoric	artifact scatter	unevaluated	W.W. Wasley 1960
AZ Z:1:17 (ASM)		prehistoric	lithic scatter and quarry	destroyed	Teague and Baldwin 1978; Bruder, 16 Feb 87, ASM Site Card, Tucson
AZ Z:1:25 (ASM)		prehistoric	ceramic and lithic scatter	eligible	Wright 1993
AZ Z:1:26 (ASM)		prehistoric	lithic scatter	eligible	Wright 1993
AZ Z:1:27 (ASM)		prehistoric	small artifact scatter,	eligible	Wright 1993
AZ Z:1:28 (ASM)		prehistoric	trail segment with a few lithic artifacts	eligible	Wright 1993
AZ Z:1:39 (ASM)		prehistoric	lithic procurement area	eligible	Doyel et al. 1995
AZ Z:1:40 (ASM)		historic	trash scatter	unevaluated	Doyel et al. 1995
AZ Z:1:41 (ASM)		prehistoric	lithic procurement area	eligible	Doyel et al. 1995
AZ Z:1:42 (ASM)		prehistoric	lithic procurement area	eligible	Doyel et al. 1995
AZ Z:1:47 (ASM)		prehistoric	lithic procurement area	not eligible	Crownover 1999
AZ Z:1:48 (ASM)		prehistoric	lithic procurement area	not eligible	Crownover 1999
AZ Z:1:49 (ASM)		prehistoric	lithic procurement area	not eligible	Crownover 1999
AZ Z:1:50 (ASM)		prehistoric	lithic procurement area	not eligible	Crownover 1999
AZ Z:2:1 (ASM)	Gatlin Site	prehistoric	village	National Historic Landmark	Ayres 1965, Doyel 1993
AZ Z:2:6 (ASM)	South Allentown	prehistoric	village	unevaluated	Wasley 1961

TABLE E-2 PREVIOUSLY RECORDED CULTURAL RESOURCES					
Site Number	**Other Designations**	**Temporal Classification**	**Description**	**Eligibility**	**Reference**
AZ Z:2:9 (ASM)	AZ Z:2:2 (MNA) NA 14624	prehistoric	trail with rock features and artifact scatter	eligible	Harmon and Beyer 1995
AZ Z:2:2 (ASM)		prehistoric and historic	historic and prehistoric artifact scatter	unevaluated	Schroeder and Ezell, 18 Dec 57, ASM Site Card, Tucson
AZ Z:2:7 (ASM)		prehistoric	Yuman lithic and ceramic scatter	unevaluated	Hammack, 22 Sep 79, ASM Site Card, Tucson
AZ Z:2:45 (ASM)		prehistoric	three trails, five to six roasting pits, lithic and ceramic scatter	eligible	Harmon and Beyer 1995
AZ Z:2:46 (ASM)		unknown	two possible trails, six to seven roasting pits, rock alignment, and cobble cluster	eligible	Harmon and Beyer 1995
AZ Z:2:47 (ASM)		prehistoric	five trail segments, two rock features,	eligible	Harmon and Beyer 1995
			lithic and ceramic scatter		
AZ Z:2:48 (ASM)		prehistoric	15 trails, 5 rock features, lithic and ceramic scatter	eligible	Harmon and Beyer 1995
AZ Z:2:49 (ASM)		prehistoric	two cleared circles in desert pavement, two trail segments, lithic and ceramic scatter	eligible	Harmon and Beyer 1995
AZ Z:2:50 (ASM)		prehistoric	two trails, rock ring, and lithic scatter	eligible	Harmon and Beyer 1995
AZ Z:2:51 (ASM)		prehistoric	six trails, four cobble cluster, ceramic scatter	eligible	Harmon and Beyer 1995
AZ Z:2:52 (ASM)		prehistoric	seven trails and one lithic artifact	potentially eligible	Harmon and Beyer 1995
Gila Bend Canal		historic	canal and well	potentially eligible	Bruder and Lonardo 2000

The field survey identified one additional site, AZ Z:2:68 (ASM), which will be crossed by the proposed route. This site is located on the south side of Watermelon Road, just west of 307th Avenue within Section 25, Township 5 South, Range 5 West. The site consists of a large scatter of prehistoric artifacts, including decorated and undecorated ceramics, chipped-stone artifacts, ground stone artifacts, shell, and fire-cracked rock. The site appears to be associated with the Hohokam cultural tradition. The significance of AZ Z:2:68 (ASM) is currently being evaluated; however, there appears to be potential for the site to contain buried features and is therefore eligible for listing on the National Register of Historic Places under Criterion D. This site may be avoided through structure placement. However, if the site cannot be avoided, mitigation within the area of potential effect will

be necessary.

A survey report will be prepared that will identify, specifically, those sites that may be affected by construction of the proposed transmission line, assess their historic significance, and develop strategies for either avoidance or mitigation. This report will be submitted to the Arizona State Historic Preservation Office.

References

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Doyel, David E., Bradley Ensor and Ruth Rubenstein. 1995. *An Archaeological Survey of A Proposed Land Fill Near Gila Bend, Maricopa County, Arizona.* Archaeological Consulting Services, Inc. Project Report 95-38, Tempe.

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Wright, Thomas. 1993. *A Cultural Resources Survey of Approximately 50 acres for a proposed Material Source Northwest of Gila Bend, Maricopa County, Arizona.* Project Report 93:83, Archaeological Research Services, Tempe.

EXHIBIT F
RECREATIONAL PURPOSES AND ASPECTS

EXHIBIT F
RECREATIONAL PURPOSES AND ASPECTS

As stipulated in the Arizona Corporation Commission Rules of Practice and Procedure, R14-3-219:

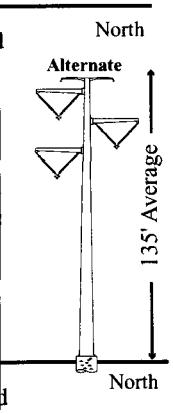
"State the extent, if any, the proposed site or route will be available to the public for recreational purposes, consistent with safety considerations and regulations and attach any plans the Applicant may have concerning the development of the recreational aspects of the proposed site or route."

No plans exist at present to develop recreational facilities within the proposed right-of-way; however, if specific recreational plans are developed at a later date, consistent with constructing, operating, and maintaining the facilities described herein would be considered.

The Draft General Plan Amendment states that diverse activity opportunities including a trail system, parks, and recreation may be included within and adjacent to the utility corridor along Watermelon Road.

EXHIBIT G
CONCEPTS OF TYPICAL FACILITIES

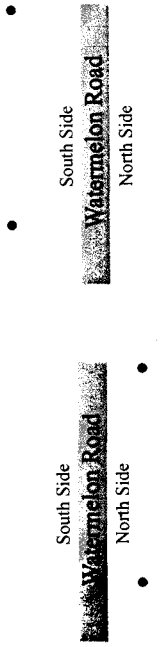
BPP
ion Line



n Figure A-4.2

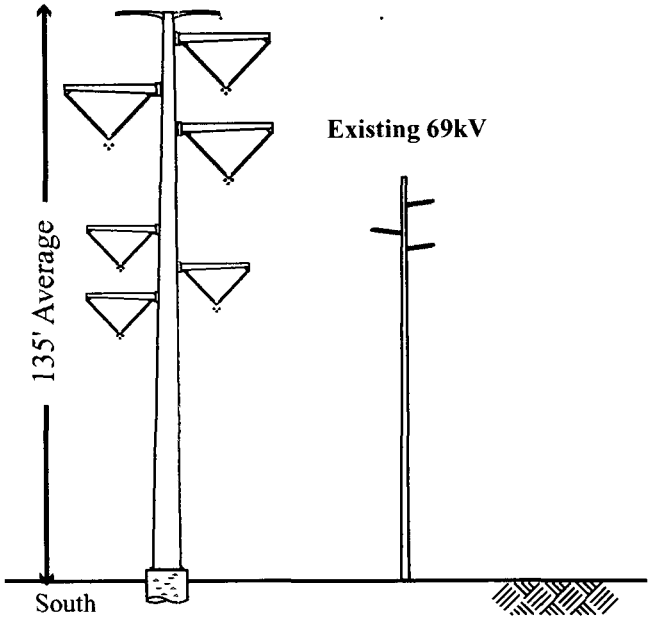
Spacing

●: 500kV(~700'-900' Spans)



Note: GBPP is considering siting on either the north or south side of Watermelon Road

Proposed GBPP 500kV Transmission Line with 230kV Underbuild



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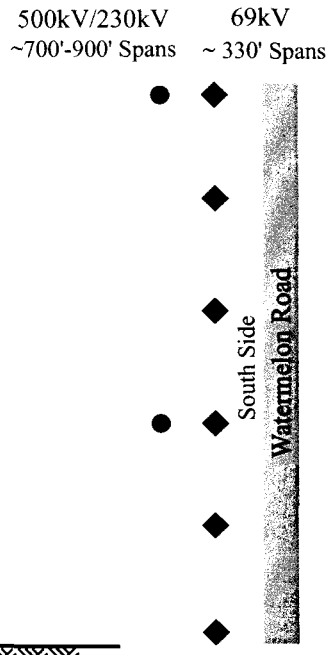
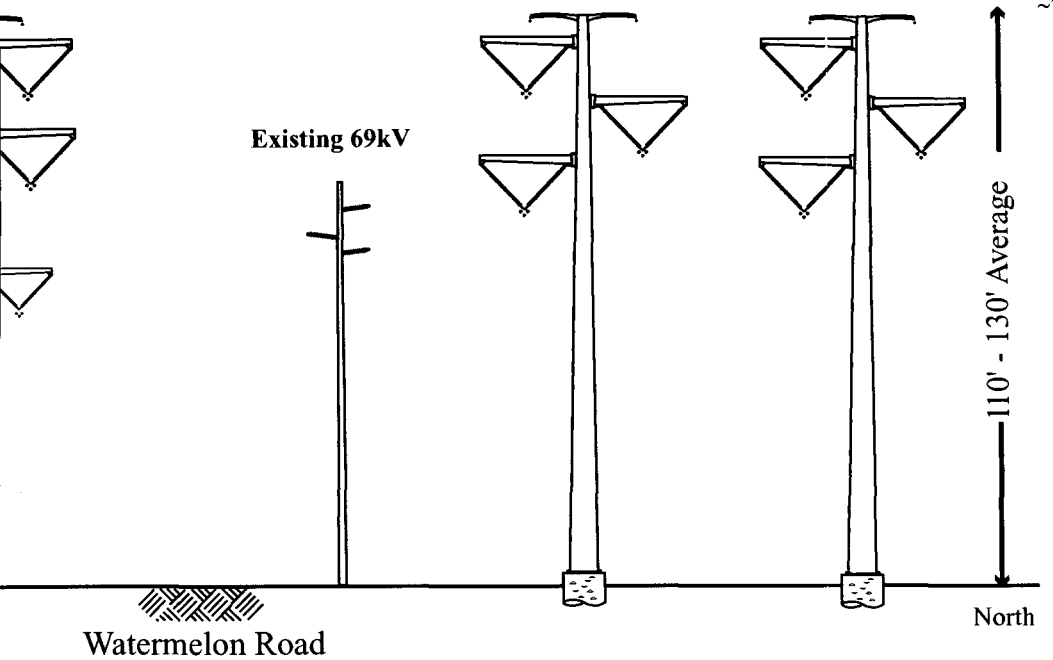


SCENARIO 3: Located on Figure A-4.2, A-4.3

0kV Transmission
V Underbuild

Planned Gila River
500kV Transmission Lines



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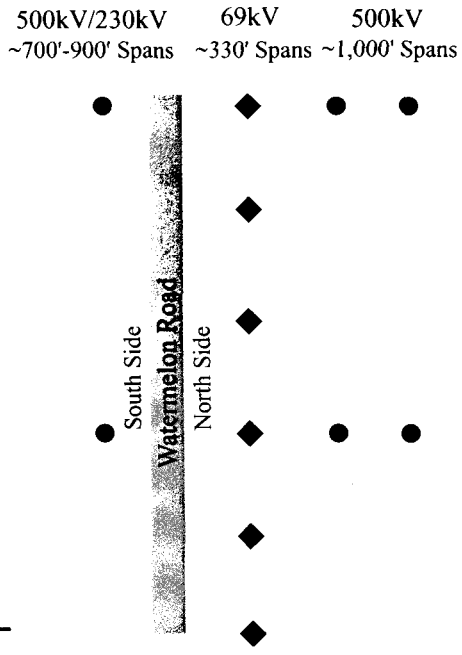


RIO 5: Located on Figure A-4.4

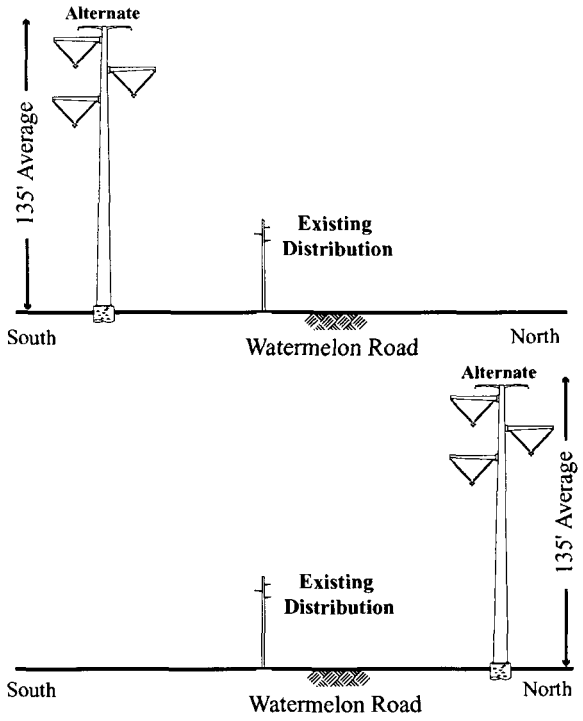
Proposed Structures and Location

Gila Bend Power Partners, L.L.C.

500kV Transmission Line and Switchyard Project

Figure G-1

Proposed GBPP 500kV Transmission Line



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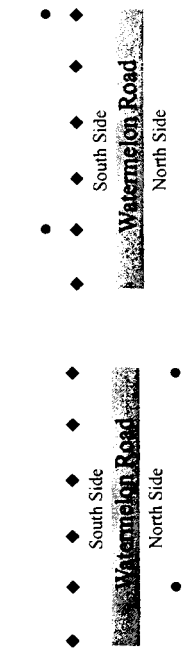
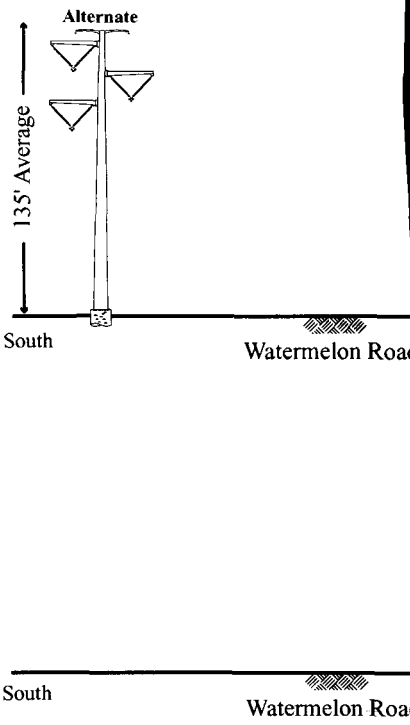


Note: GBPP is considering siting on either the north or south side of Watermelon Road

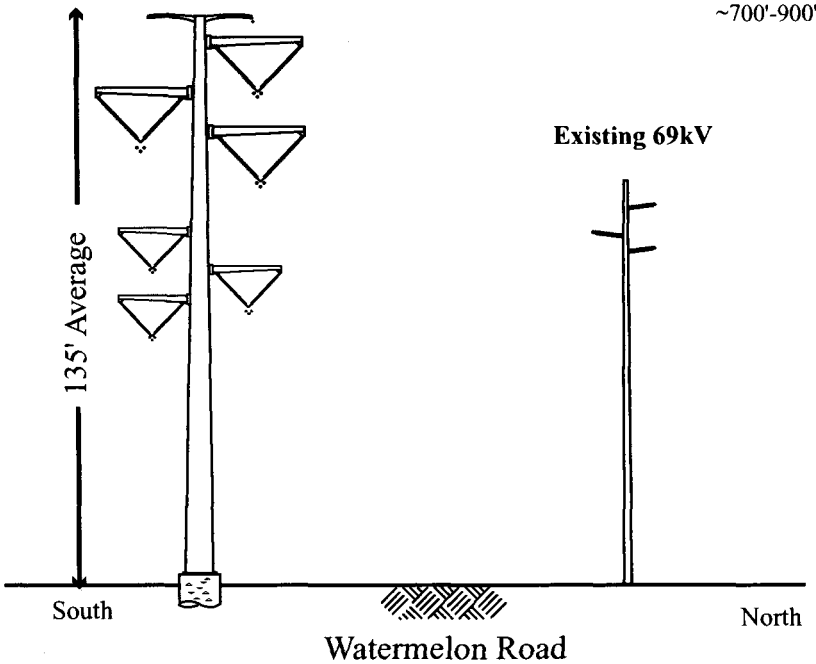
Proposed G 500kV Transmis



SCENARIO 1: Located on Figure A-4.1

SCENARIO 2: Located o

Proposed GBPP 500kV Transmission Line with 230kV Underbuild



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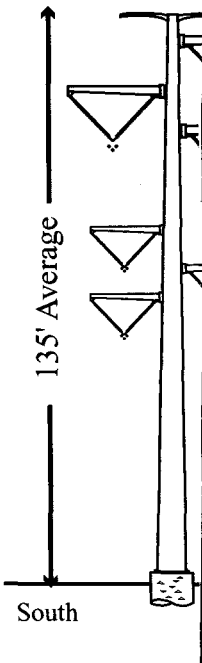
Proposed GBPP 50 Line with 230k



SCENARIO 4: Located on Figure A-4.3, A-4.4

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JANUARY 23, 2001
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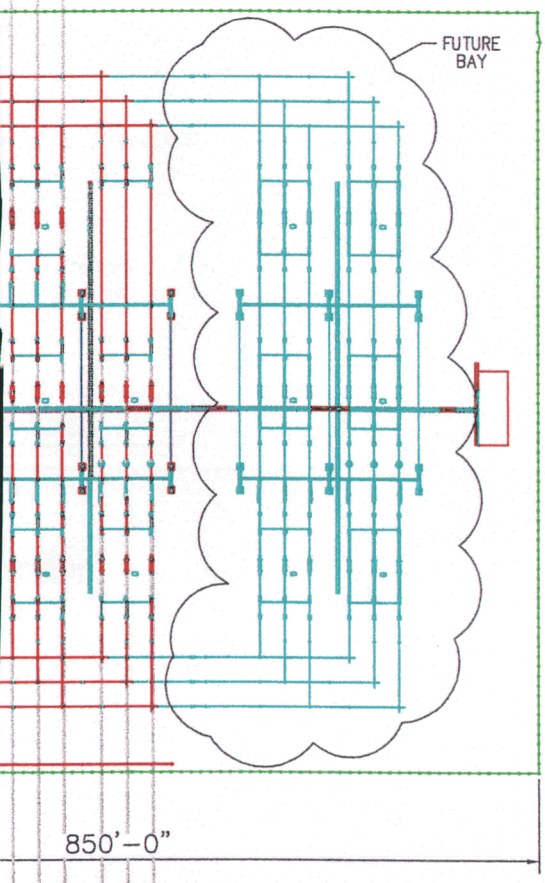

AL POWER TECHNOLOGY

ENGINEERING RECORD		DATE
DRAWN	TLV	1/02/01
DESIGNED		
CHECKED	GLP	1/02/01
APPROVED		
DWG SCALE: NONE	PLT SCALE: 1.000=1	

GILA BEND POWER PARTNERS, L.L.C.
500kV TRANSMISSION LINE AND SWITCHYARD PROJECT
EXHIBIT G-2

FILE NO : IPBM023	IP-B-M023	REVISION NO : 0

ELECTRICAL CONSULTANTS, INC.

NO	REVISION	DRAFTER	DESIGNED	APPROVED	DATE
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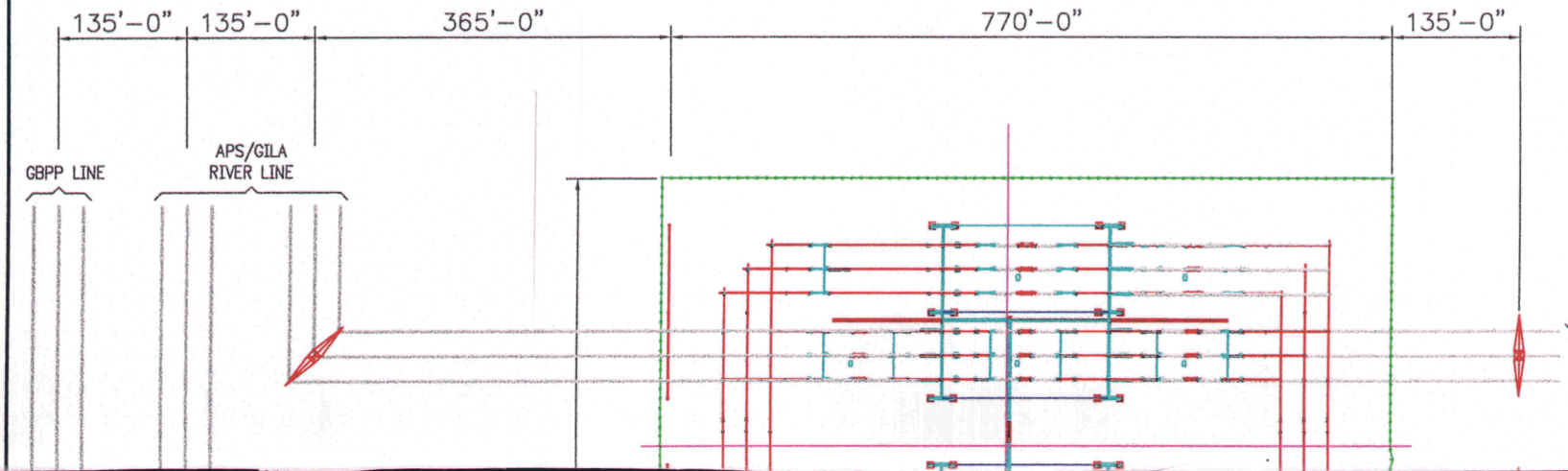

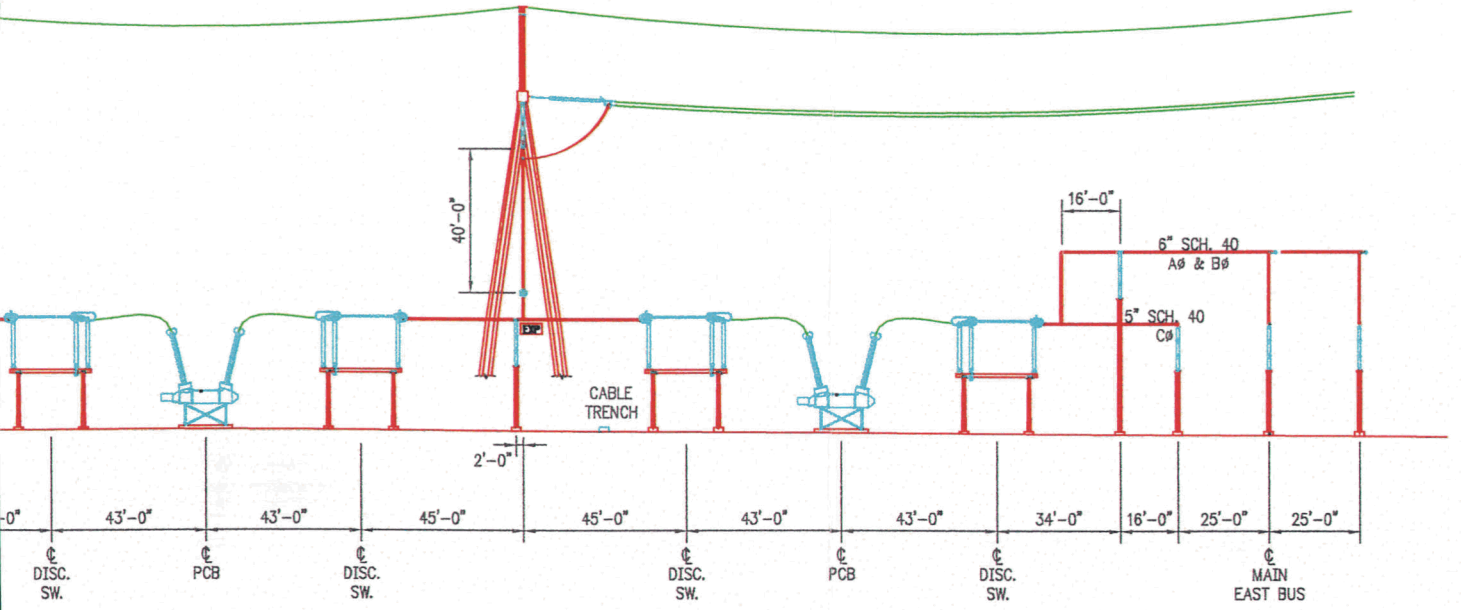

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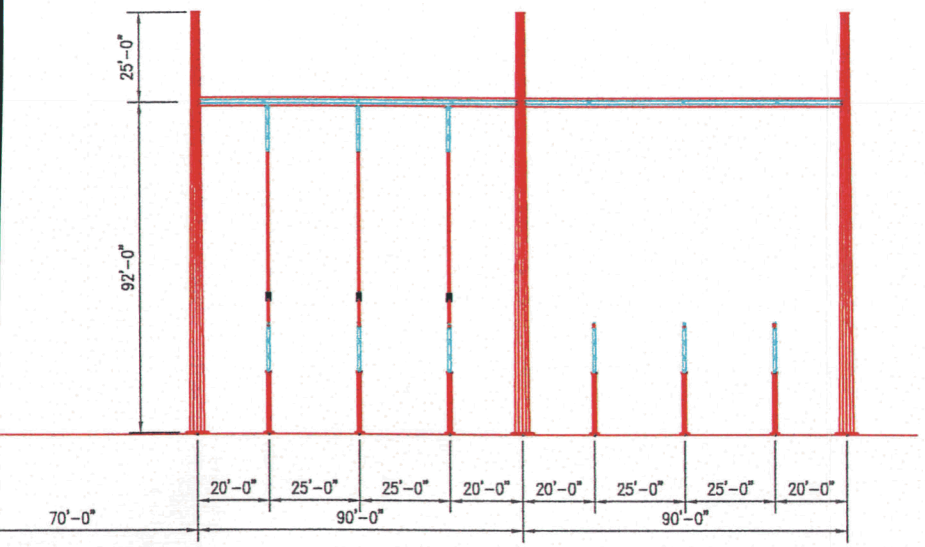

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B
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INDUSTRIAL POWER TECHNOLOGY

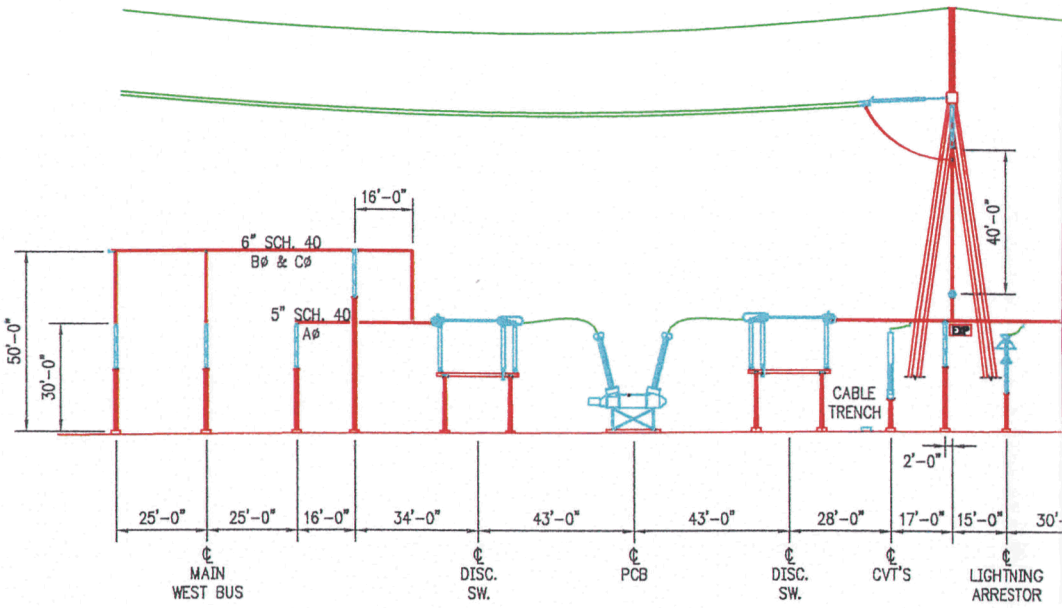
ENGINEERING RECORD		DATE
DRAWN	TLV	1/10/01
DESIGNED		
CHECKED	GLP	1/10/01
APPROVED		
DWG SCALE: 1"=50'	PLT SCALE:	1.000=1

GILA BEND POWER PARTNERS, L.L.C.

500kV TRANSMISSION LINE AND SWITCHYARD PROJECT

EXHIBIT G-3

FILE NO : IPTL010	IP-T-L010	REVISION NO : 0



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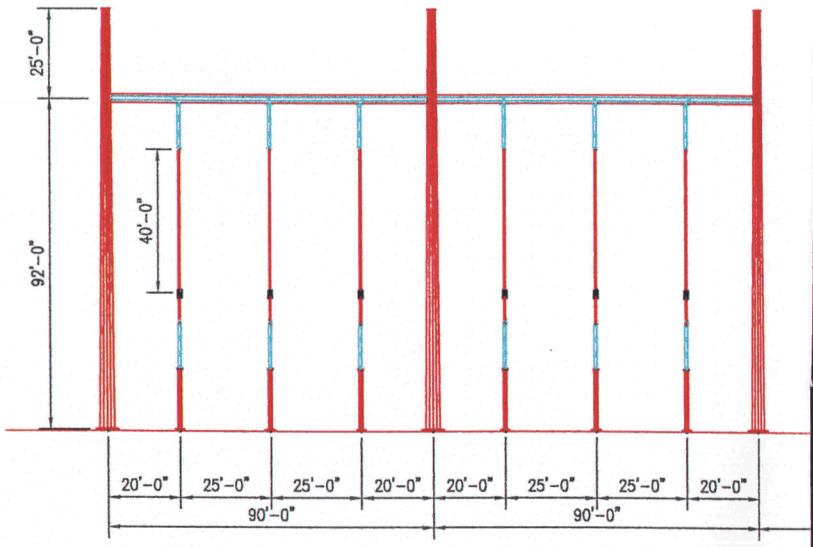

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"Engineering with Distinction"

ECI ELECTRICAL CONSULTANTS, INC.

BILLINGS, MT SALT LAKE CITY, UT SAN DIEGO, CA TUCSON, AZ

NO	REVISION	DRAFTER	DESIGNED	APPROVED	DATE
4					
3					
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EXHIBIT H
EXISTING PLANS

EXHIBIT H
EXISTING PLANS

As stated in Arizona Corporation Commission Rules of Practice R-14-3-219:

"To the extent Applicant is able to determine, state the existing plans of the state, local government, and private entities for other developments at or in the vicinity of the proposed site or route."

Letters were sent to state, local government, and private entities requesting information on other developments at or in the vicinity of the Project site (see list below). Exhibit H-1 is an example of this letter, and responses received to date are included in Exhibit H-2.

Other planned/future land uses are addressed in Exhibit B.

LIST OF RECIPIENTS

Gordon Taylor, Planner
Arizona State Land Department
1616 W. Adams
Phoenix, AZ 85007

Joy Rich, AICP, Director
Planning and Development Dept.
Maricopa County
301 W. Jefferson
Phoenix, AZ 85003

Shane Dille, Town Manager
Town of Gila Bend
644 West Pima Street
Gila Bend, AZ 85337-0019

J.B. Getzwiler, President
Chamber of Commerce
P.O. Drawer CC
Gila Bend, AZ 85337

Michael Ellegood, Chief Engineer
Flood Control District of Maricopa County
2801 W. Durango Street
Phoenix, AZ 85003

Michael Anable, Commissioner
Arizona State Land Department
1616 W. Adams Street
Phoenix, AZ 85007

Stephen Marshall, Superintendent
Gila Bend Unified School District #24
308 N. Martin Avenue
Gila Bend, AZ 85337

Mary Lynn Tischer, Director
Transportation Planning Division
Arizona Department of Transportation
206 S. 17th Avenue
Phoenix, AZ 85007

Dennis Smith, Assistant Director
Maricopa Association of Governments
302 N. 1st Avenue, Suite 300
Phoenix, AZ 85003

William Scalzo, Director
Maricopa County Parks and Rec. Dept.
3475 W. Durango Street
Phoenix, AZ 85009

Tom Buick, Director
Maricopa County Department
2901 W. Durango Street
Phoenix, AZ 85009

Ray Presnell, Lead Specialist
El Paso Natural Gas Company
7015 S. 48th Street
Phoenix, AZ 85044

James Garrison
State Historic Preservation Officer
Arizona State Parks
1300 W. Washington Street
Phoenix, AZ 85007

Richard DeBoer, Project Monitor
Arizona Department of Transportation
2801 West Durango Street
Phoenix, AZ 85003

Matt Holm, Planner
Planning and Development Dept.
Maricopa County
301 W. Jefferson
Phoenix, AZ 85003

Jason Lipsey of Southwest Agribusiness
Services, Inc. (SASI)
2845 E. Camelback Road
Phoenix, AZ 85018

EXHIBIT H-1
EXAMPLE LETTER

January 2, 2001

Address

RE: Gila Bend Power Partners 500kV Transmission Project

Dear ____:

Gila Bend Power Partners (GBPP) proposes to site and potentially construct a 500 kilovolt (kV) transmission line through the Town of Gila Bend in Maricopa County, Arizona. The proposed 500kV transmission line will originate at the proposed GBPP generating station, located on the far western edge of Gila Bend (see attached map). The line will follow Watermelon Road east for approximately 9 miles where it will terminate at a proposed switchyard (Township 5 South, Range 4 West, Section 22). The line will traverse both state and private lands. Project construction is scheduled to begin in March 2002 and will be complete in December 2002.

The purpose of this letter is to request information regarding development plans in the vicinity of the proposed transmission line site. Your response will be included in Exhibit H of the application for a certificate of environmental compatibility. Submittal of this application to the Arizona Power Plant and Transmission Line Siting Committee of the Arizona Corporation Commission is in compliance with Arizona Revised Statutes 40-360 (Article 6.2).

The Environmental Planning Group, Inc. (EPG) has been retained by GBPP to assist with environmental siting and permitting requirements for this project. We respectfully request your response in writing as to whether you are aware of any planned developments or activities in the vicinity of the proposed transmission line that should be brought to our attention.

We would appreciate your response by January 12, 2001 so that we can evaluate the information prior to the submittal of the application. Thank you in advance for your reply. Should you have any questions, please do not hesitate to call me at 602-956-4370.

Sincerely,

Lauren Weinstein
Project Manager

Enclosure

EXHIBIT H-2
RESPONSE LETTERS

TOWN OF GILA BEND

The Heart of Arizona

January 15, 2001

Mr. Robert C. Walther, P.E.
Gila Bend Power Partners, LLC
C/o Industrial Power Technology
2227 Capricorn Way, Suite 101
Santa Rosa, CA 95407

Mr. Walther;

This letter is to document the GBPP 500kV Transmission Project's consistency with future planning for the Town of Gila Bend and our support of the Project. The Town is anticipating that the GBPP generation station will bring growth and many new opportunities to our community. We understand that the power plant is useless without the necessary transmission lines to connect it to the transmission grid. Therefore we support and encourage your efforts, and those of the regulatory community, to make this project a reality for Gila Bend and the growing Southwest Valley.

As the Manager for the Town of Gila Bend, I am looking forward to continuing our cooperative working relationship with GBPP to see the successful completion of the Project.

If you have any questions, or if I can be of further help in ensuring the success of this very worthwhile project, please let me know.

Sincerely,

Shane D. Dille
Manager

Cc: Mayor

F:\all\Corr\supportletters\GBPP500KV.doc

P.O. Box A, 644 W. Pima St. Gila Bend, Arizona 85337-0019 (520) 683-2255

William C. Scalzo

Director

PARKS AND RECREATION DEPARTMENT

January 9, 2001

Ms. Lauren Weinstein
Environmental Planning Group
4350 E Camelback Rd, Ste G200
Phoenix, AZ 85018

RE: Gila Bend Power Partners 500kV Transmission Project

Dear Ms. Weinstein:

This department does not have any development plans in the vicinity of the proposed transmission line site.

Sincerely,

Kenneth W. Mouw, P.E.
Engineering Manager

F:\WINWORD\DOCS\OFFICE\gilabend500kv.DOC

3475 West Durango Street ■ Phoenix, Arizona 85009 ■ (602) 506-2930 ■ (FAX) 506-4692 ■ (TDD) 506-4123

Received 1/10/01

Jane Dee Hull
Governor

Michael E. Anable
State Land
Commissioner

Arizona
State Land Department

1616 West Adams Street Phoenix, AZ 85007 www.land.state.az.us

January 9, 2001

Lauren Weinstein
4350 East Camelback Road
Suite G-200
Phoenix, Arizona 85018

RE: Information regarding development plans within Gila Bend 500kv transmission line

Dear Ms. Weinstein

In response to your recent letter; there are no state development plans scheduled for the Town of Gila Bend. Although, the state lands that are affected by the transmission lines do have existing leases. If you have any further questions you can reach me at (602) 542-2677.

1. Section 22
   A. Grazing lease 640ac.
   B. APS-electric transmission 20ac. (ROW)
   C. SP Construction Service Communication lines .06 ac (ROW)

2. Section 21
   A. Grazing lease 320ac.
   B. APS-electric transmission 1.82ac. (ROW)
   C. SP Construction Service Communication lines 1.24 ac (ROW)

3. Section 28
   A. Grazing lease 8.41ac.
   B. APS-electric transmission 3.89ac. (ROW)
   C. ADOT 2.41ac. (ROW)

RECEIVED
JAN 10 2001

Sincerely,

Dwayne Williams

Dwayne Williams, Planner

EXHIBIT I
ANTICIPATED NOISE LEVELS AND INTERFERENCE WITH COMMUNICATION SIGNALS

EXHIBIT I
ANTICIPATED NOISE LEVELS AND INTERFERENCE WITH COMMUNICATION SIGNALS

As stated in Arizona Corporation Commission Rules of Practice and Procedure R14-3-219:

"Describe the anticipated noise emission levels and any interference with communication signals which will emanate from the proposed facilities."

Certain electromagnetic effects are inherently associated with overhead transmission of electrical power at extra high voltage. These effects are produced by the electric and magnetic fields of the transmission line with one of the primary effects being corona discharge. Corona effects are manifest as audible noise, radio interference, and television interference. These particular effects will be minimized by line location, line design, and construction practices.

CORONA

Corona is a luminous discharge due to ionization of the air surrounding a conductor and is caused by a voltage gradient, which exceeds the breakdown strength of air. Corona is a function of the voltage gradient at the conductor surface. This voltage gradient is controlled by engineering design and is a function of voltage, phase spacing, conductor diameter, conductor bundle, height of conductors above ground, phase geometry, and meteorological conditions. In particular, irregularities on the surface of the conductor such as nicks, scratches, contamination, insects, and water droplets increase the amount of corona discharge. Consequently, during periods of rain and foul weather, corona discharges increase. For the various transmission designs considered for this Project, the maximum calculated voltage gradient at the conductor surface is 14.6kVrms/cm. For comparison purposes, the breakdown strength of air is 21.1kVrms/cm at 25 °C and 76 millimeters (mm) barometric pressure.

Corona represents power loss on the transmission line and creates transmission line noise. Successful operation of 500kV lines with similar gradients indicates that this transmission line will not create adverse corona effects.

TRANSMISSION LINE AUDIBLE NOISE

Audible noise is created by corona discharge along the transmission line. As a result, the amount of audible noise is directly related to the amount of corona, which is in turn affected by meteorological conditions, most notably rain. Transmission line audible noise is categorized into broadband high frequency sounds, which can be described as hissing or sputtering, and low frequency tones, which are best described as humming sounds.

The highest calculated audible noise levels for the transmission line design during foul weather (rain) may reach 47 decibels (dB) measured on an "A" weighted scale (dBA) at the edge of the right-of-way. This noise level will occur during heavy rain, which will serve to mask the noise. During fair weather the audible noise at the edge of the right-of-way is significantly reduced (18.5 dBA).

Due to the expected low audible noise levels, the line noise will normally be inaudible at the edge of the right-of-way during fair weather. Considering the relatively few hours of audible noise producing weather, the location of the line with respect to neighboring land uses, and the calculated audible noise levels during foul weather, no serious audible noise problems are expected even during foul weather.

RADIO INTERFERENCE

Radio interference is the reception of spurious energy not generated by the transmitting station. This energy affects the amplitude modulated radio band, but not the frequency modulated radio band. Transmission line radio interference is caused by corona and by gap discharges. Gap discharges are electrical discharges across a small gap with the most common cause being loose hardware. Gap discharges comprise a large percentage of all interference problems and are easily remedied. Experience shows that gap discharges are not a problem with steel structures, but are more prevalent with wood structures due to the expansion and contraction of the wood causing hardware to loosen.

Corona caused radio interference impact is dependent on various factors including distance from the line to the receiver, radio signal strength, ambient radio noise level, receiving antenna orientation, and weather conditions. A common practice of determining the expected level of radio interference is to calculate and plot a lateral profile of the transmission line radio interference at a frequency of 1 megahertz (MHz). In addition, a frequency spectrum plot of radio interference can be used to see how the radio interference varies at a particular location through the frequency spectrum.

Comparison of the calculated radio noise levels for the transmission line design shows fair weather radio noise levels in the range of 37.5 dB (above 1 μV/meter) at a distance of 100 feet from the edge of the right-of-way. This compares favorably with the maximum recommended noise level of 40 dB, above 1 μV/meter (Tucson Electric Power and IEEE). During inclement weather, transmission line noise levels increase to levels between 40 and 54 dB, above 1 μV/meter 100 meters from the edge of the right-of-way. Even though radio reception quality is reduced during periods of rainy weather, the impact is expected to be minimal due to the low frequency of inclement weather. In addition to these comparisons of calculated and recommended interference values, transmission line experience for lines of similar design traversing similar terrain has shown radio interference to be insignificant. Should radio interference caused by the transmission line become unacceptable in a given situation, mitigating techniques can be applied on an as needed basis.

TELEVISION INTERFERENCE

Traditional television broadcasts occur in three ranges:

54 - 88 MHz (Channels 2 - 6)
174 - 216 MHz (Channels 7 - 13)
470 - 890 MHz (Channels 14 - 83)

Transmission line interference reduces with increasing frequency above 100 MHz. Consequently, television interference only affects the lower VHF band (Channels 2 through 6) and no interference will be experienced in the upper VHF (Channels 7 - 13) and UHF bands (Channels 14 - 83) even during foul weather. Television interference noise levels can potentially affect amplitude modulated signals; therefore, the picture quality, which is amplitude modulated, can be affected, but not the sound quality as these signals are frequency modulated.

Where transmission line generated television interference has been found to be a problem, it is generally the result of induced voltage on fences, conductors, and hardware, which are adjacent to the right-of-way. In these situations, the interference can be easily corrected by grounding the objects, or by realigning, relocating, or providing higher gain television antennas.

ELECTRIC AND MAGNETIC FIELD EFFECTS

Electric and magnetic field (EMF) effects are primarily electric and magnetic induction effects whereby voltages and currents are induced in nearby conductive objects by the voltage and current on the line.

Electrostatic induction is the capacitive coupling of a voltage onto insulated objects near the transmission line. The induced voltage is a function of electric field associated with the line, which is a function of the line voltage. Other factors, which affect the level of induced voltage include insulation, object orientation and dimensions, and line height. When a person reaches to touch a conducting object which has been charged by electrostatic induction, a spark discharge will occur similar to that experienced by a person reaching for a doorknob after walking on a nylon carpet with the difference that sparking will continue to occur as long as the person's hand remains close enough to the object for the sparks to occur. Based on computer modeling the electric fields associated with the proposed transmission lines will be consistent with the electric field values of other similarly configured 500kV transmission lines in the State. Based on this modeling, it is anticipated that any electrostatic induction problems that occur can be easily corrected by grounding the conductive objects.

The magnetic fields associated with transmission lines can also induce voltages and currents in conductive objects (e.g., fences, communication lines, railroads, pipelines, etc.), which are close to and run parallel to a transmission line. The magnetic field level is a function of the current level in a

transmission line, which in turn is a function of the line loading. The transmission line will be designed to limit the value of short-circuit current from a conductive object to 5 milliamperes or below, which is the maximum design limit permitted by the National Electrical Safety Code.

The actual EMFs generally associated with power lines will depend on the construction type, the amount of current in the lines, height of the conductors, and other nearby sources of fields. Based on computer modeling of various construction options and operating conditions, the EMFs associated with the Project's transmission lines is anticipated to be comparable to other already existing transmission lines of this voltage in the State.

In conclusion, potential EMF effects from the Project are insignificant. Any voltage or current induction effects can be mitigated appropriately through coordination and planning between the Applicants and those experiencing the problem. The fields expected from the Project's transmission lines will be similar to other transmission lines of this voltage, and there are currently no known adverse health effects associated with EMF exposures at levels typically found near such existing transmission lines.

SWITCHYARD EFFECTS

The audible noise produced by the switchyard equipment for this Project is expected to be lower than other 500kV projects since there will not be any transformer noise associated with the switchyard.

Radio and television interference produced by the switchyard are not expected to be any more severe than that indicated for the Project's transmission line. Appropriate corona rings will be used to reduce the amount of corona on the energized equipment and thus minimize any radio or television interference.

REFERENCES

Possible Health Effects of Exposure Residential Electric and Magnetic Fields. 1997. National Research Council.

EXHIBIT J
SPECIAL FACTORS

EXHIBIT J – SPECIAL FACTORS

As stated in the Arizona Corporation Commission Rules of Practice and Procedure R-14-3-219:

"Describe any special factors not previously covered herein, which applicant believes to be relevant to an informed decision on its application."

GBPP conducted public communications in late summer/early fall 2000 providing information about the proposed Power Project, associated facilities, and transmission lines. The fact sheet was mailed to the Town of Gila Bend residents in this time frame as shown in Exhibit J-1 and also addresses the proposed transmission line. In addition, information is available on the GBPP website (Exhibit J-2) at www.gilapower.com. GBPP also maintains an Arizona toll-free telephone line (1-866-279-4288) to respond to any questions or comments raised by the public.

During a town council work session (Tuesday, September 12, 2000) a general description of the proposed transmission line project was provided as part of an overall description of the power project and associated facilities. This work session was announced in the Gila Bend *Arizona Sun* on August 17, 2000 and also identified the proposed transmission line along Watermelon Road (Exhibit J-3). During this session the description of the proposed transmission project did not include underbuilding the APS 230kV line or the proposed Watermelon Switchyard. The public suggested that GBPP consider underbuilding the APS 230kV and using single poles, which GBPP has agreed to and is included in this application. A similar presentation was also made to the Gila Bend Chamber of Commerce (Thursday, September 14, 2000).

EXHIBIT J-1
FACT SHEET

Gila Bend Power Partners, L.L.C.

NEWSLETTER SUMMER 2000

GILA BEND POWER PARTNERS TO BUILD POWER PLANT NEAR GILA BEND

Gila Bend Power Partners, L.L.C., a joint venture comprised of Sammons Enterprises, Inc., Dallas, Texas, PowerDevelopment Enterprises, L.P., Dallas, Texas, and Industrial Power Technology, Santa Rosa, California, has committed to build an approximately 800 megawatt gas-fired electric power plant approximately 7 miles northwest of Gila Bend. Construction on this new "merchant" electric power plant will commence in the First Quarter of 2001 with operations scheduled for early 2003.

Merchant power plants such as the new Gila Bend facility are being made possible by the deregulation of the electric power business on a national and on a state-by-state basis. State deregulation will soon allow consumers, including Arizona consumers, freedom of choice at the residential level of consumption. Over the coming years deregulation should benefit all consumers by promoting competition and thereby lowering prices at the retail level. Additional benefits of this new facility to the Town of Gila Bend will include temporary construction and permanent plant operation jobs, more taxes for schools, emergency services, libraries, roads and other Town needs, as well as overall economic development of the area surrounding Gila Bend.

- *Who are the companies involved?*

  Sammons Enterprises, Inc., based in Dallas, Texas, has over $7.0 billion in assets and $1.7 billion in net worth and is ranked as the 76th largest privately-held company in the United States with interests in 11 operating subsidiaries, including businesses in such diverse areas insurance, travel, bottled water and mortgage banking.

  PowerDevelopment Enterprises, L.P.,. based in Dallas, Texas is a company recently formed to develop merchant power opportunities in the United States as a result of recent deregulation of the electric power industry. The principals of PDE, L.P. have extensive backgrounds in development and financing of electric power projects.

  Industrial Power Technology, based in Santa Rosa, California, is a global engineering firm with comprehensive experience in the design and construction of electric power plants.

- *How will the new Gila Bend Generation Station affect the natural environment?*

  There will be no aspect of the plant that will upset the environment including site specific areas of concern such as air, water, noise and local site conditions. Power transmission and gas transmission lines will be built along existing utility corridors north of the Town.

  Will the plant negatively impact the local air quality?

  No, the plant will utilize advanced pollution control equipment that will be approved by Maricopa County before an air permit is issued. This will result in emissions that are below Best Available Control Technology standards.

  Will the plant discharge any waste into the groundwater?

  No, the plant is technically known as a "Zero Discharge Facility" which means cooling water used at the plant will be collected into double lined evaporative ponds for evaporation. These

evaporation ponds will be approved by Maricopa County before receiving their permits for operation.

Will the plant be noisy?

No, studies show the noise level at the nearest residence to be below all federal noise guidelines.

Will groundwater pumping in this area hurt other local farmers?

No, the plant will be taking water form the Citrus Valley Aquifer, a naturally replenishing basin that has been in substantial disuse since the early 1980's. An independent hydrogeologist has determined that any nearby irrigation wells will not be affected by any draw downs from the plant.

- *What are the direct economic benefits to the local economy?*

  During construction of the new Station the peak workforce deployment will be approximately 300 to 400 jobs in the local area with an estimated $15 to $20 million workforce payroll during that period. Permanent employment will be approximately 30 jobs directly associated with the plant and approximately 75 to 100 related new jobs in the area. Local purchases associated with the Station should be an annual $2 to $3 million over the project's life estimated at 30 to 40 years.

  The Project will contribute to the local ISD through property tax contributions estimated currently at several millions of dollars per year average over the life of the project. At a state and federal level the facility will pay an estimated several hundred millions of dollars of taxes over its useful life.

- *When is all this supposed to happen?*

  Targeted commencement of construction is scheduled for First Quarter of 2001 with commercial operations of the Station targeted at first Quarter of 2003.

- *Contact:*

  PowerDevelopment Enterprises, L.P.
  5949 Sherry Lane, Suite 1880
  Dallas, Texas 75225
  (P) (214) 210-5080
  (F) (214) 210-5079

EXHIBIT J-2
COPY OF WEBSITE

GILA BEND
Power Partners, L.L.C.

GILA BEND POWER PROJECT

845 MegaWatts of Clean, Reliable Energy

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Commercial Operation Planned for 2003
in
Gila Bend, Arizona

A development of Gila Bend Power Partners, L.L.C.

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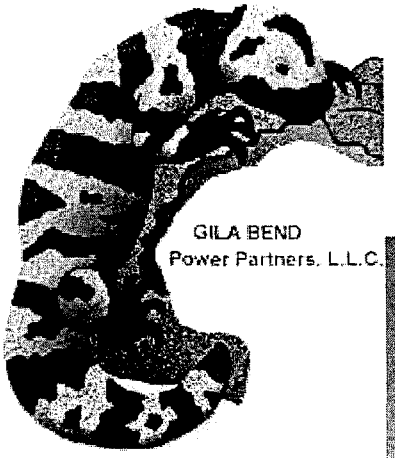
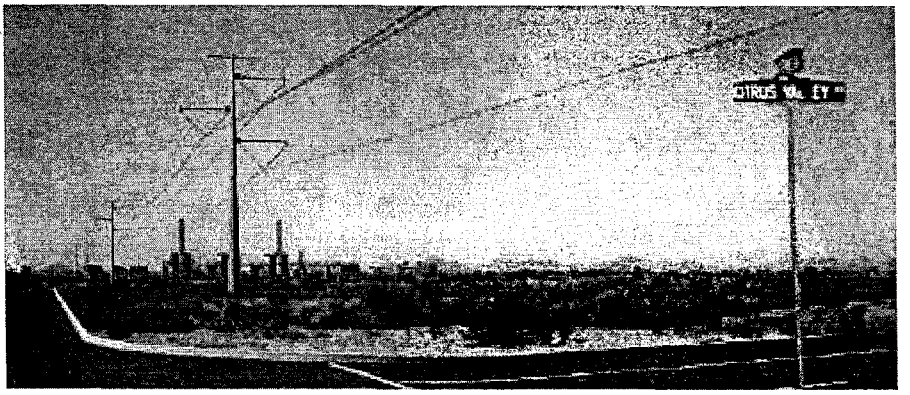


GILA BEND POWER PROJECT

Project Information



Gila Bend Power Project Photo Simulation
"Looking west from Citrus Valley Road"

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Where is the Project Located?

- The project is located in the Town of Gila Bend, Arizona, approximately 55 miles southwest of Phoenix

What is the size of the project?

- The project will generate approximately 845 megawatts of clean electrical power.

When will the project be generating electricity?

- The Gila Bend Power Project will begin delivering power to the Palo Verde Switchyard in time for the summer of 2003.

What is the expected life of the proposed plant?

- The plant has a projected life span of 30 years or longer.

How will the project generate electricity?

- The project consists of three "new technology" Combustion Gas Turbines (CTG), GE Frame 7(FA) or

equivalent, which will generate 170 mW each. Each CTGs is connected to a Heat Recovery Steam Generator (HRSG) which uses the waste exhaust heat from the CTG to generate steam. This steam is collected & used to drive a Steam Turbine Generator (STG) which produces another 335 mW of energy for a total output of 845 mW.

What fuel is the project using?

- The project will utilize clean burning Natural Gas delivered under a firm supply contract with El Paso Natural Gas Company, whose main interstate transmission lines are 26 miles from the project.

What benefits will the project produce for Arizona?

- The project will help meet Arizona's growing need for power & prevent some of the problems experienced in other areas of the country. Arizona has one of the highest growth rates in the U.S. & is predicted to need approximately 10,000 megawatts of additional electrical capacity by 2008.

What is the market for the power generated by the project & how will it be delivered to the end user?

- The power will be delivered to the new Hassayampa switchyard at the Palo Verde Nuclear Generating Station & sold to power purchasers at Palo Verde for distribution to their customers. The 500 kV transmission line will utilize existing transmission routes & utility corridors through the entire route. The facility construction will include the new Watermelon 500kV switchyard in eastern Gila Bend, built in conjunction with SRP & APS.

What benefits will the project produce in the Gila Bend area?

- The project is located within the Gila Bend town limits & will add a significant increase to the local tax base, bringing needed revenue for schools & services. Peak employment is expected to reach about 350 employees during construction. Approximately 35 full time employees for normal plant operations.

What steps will be taken to insure that the

environment will not be harmed?

- The project will meet or exceed all local & national environmental standards for air, water, noise, including:
  - Air Permit
    - Prevention Of Significant Deterioration EPA Permit administered by Maricopa County
    - Title V Permit EPA Permit administered by Maricopa County
  - Water Permit
    - Aquifer Protection Permit - Arizona Department of Environmental Quality
    - Wetlands Permit - U.S. Army Corp of Engineer's certification that no waters of the U.S. will be impacted by the project.
  - Wildlife Protection
    - U.S. Fish & Wildlife certify that no threatened or endangered species would be adversely affected by the project.
  - Conditional Use Permit - Town of Gila Bend
    - Demonstrates that the plant will comply with all zoning requirements & will not have any negative impacts upon the town or neighboring properties.

Will other agencies monitor the project to insure environmental compliance?

- In addition to the regulatory requirements listed above, the project must receive a Certificate of Environmental Compatibility from the Arizona Corporation Commission to insure that the plant has examined all potential environmental impacts & complies with all regulatory requirements as well as the concerns of the public.

Have a Question or Comment?

You May Call
Gila Bend Power Partners
Toll-Free in Arizona at:

1-866-279-4288

Please Visit Our

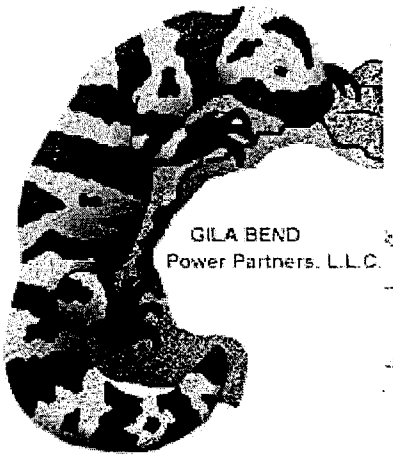
" Comments & Questions Page "

or, Email Us @:

Question@GilaPower.Com

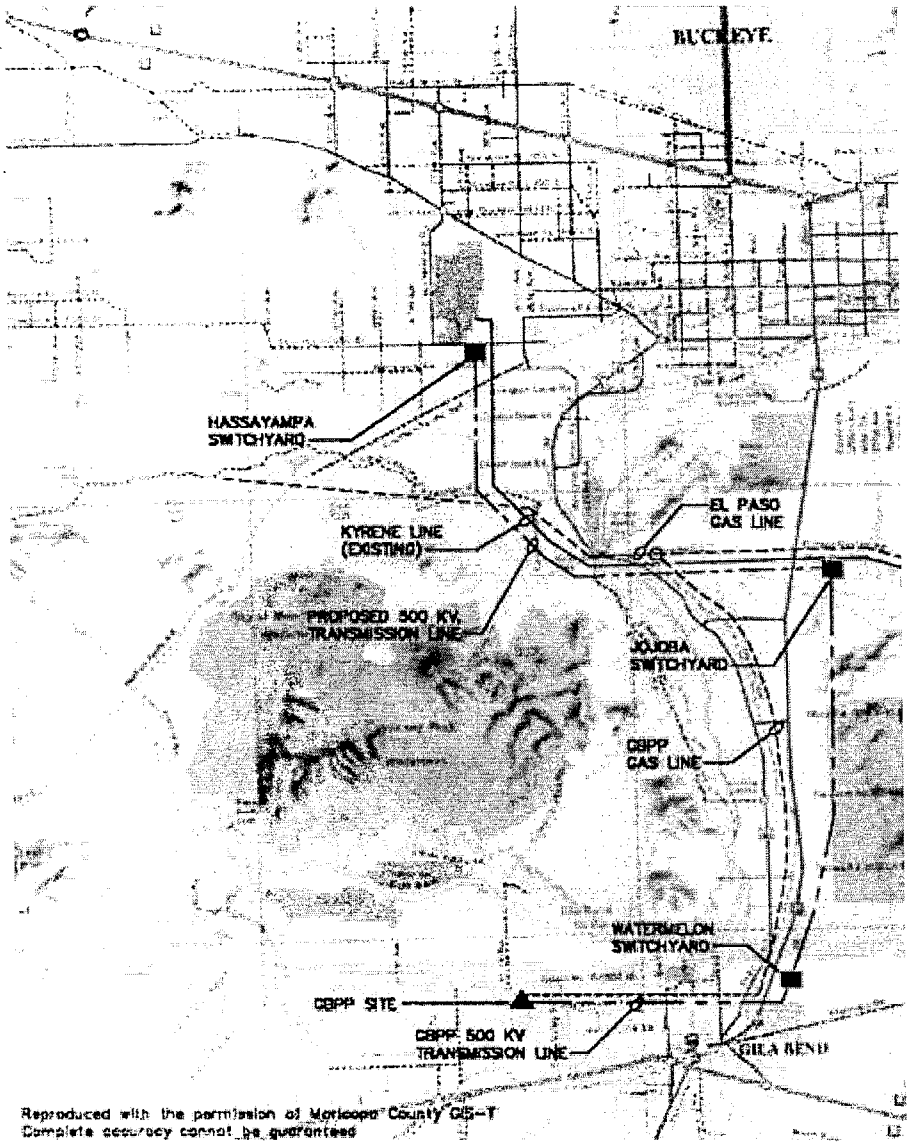
"Thanks for visiting our State-of-the-art Energy Project Website."

A Development of Gila Bend Power Partners, L.L.C.



GILA BEND POWER PROJECT

Location & Route Map



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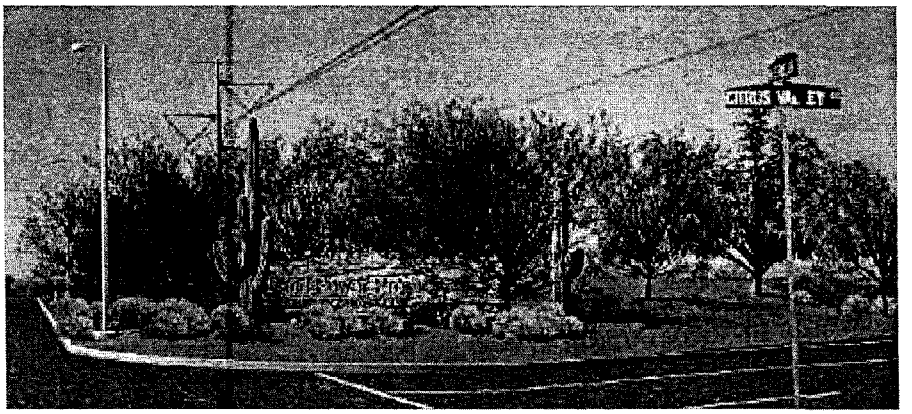
Proposed routes for the 500kV transmission line & the natural gas line for the Gila Bend Power Project.

A development of Gila Bend Power Partners, L.L.C.

GILA BEND
Power Partners, L.L.C.

GILA BEND POWER PROJECT

" Comments & Questions "



We try to answer your Questions within 3 working days.

Click Here to ASK a Question or ADD a Comment

Click Here to ASK a Question or ADD a Comment

Return to Gila Bend Power Partners Home Page

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EXHIBIT J-3
TOWN COUNCIL MEETING ANNOUNCEMENT
IN THE GILA BEND *ARIZONA SUN*

From The Town Hall

Town Manager
Carl Stephani

Power and Water

GILA BEND POWER PARTNERS

This is a power plant development group that is proposing the construction of a new power plant at the northwest quadrant of Citrus Valley Road and Watermelon Road. They had been planning to meet with the Town Council on Tuesday, August 22, 2000, at 7 PM the Town Council, but that meeting has been postponed until: DATE: Tuesday, September 12, 2000
TIME: 6PM
LOCATION: Town Hall

That meeting will include an open discussion of the construction of the power plant and its impact on the area. Please plan to attend. GB Power Partners will be providing refreshments and they want everyone to feel welcome.

This new power plant will generate 800 megawatts of energy which will be carried from the plant on power transmission lines along Watermelon Road to join the lines that will be installed to serve the other proposed power plant at Stout and Watermelon Roads.

The Town is pleased that Gila Bend Power Partners have selected Gila Bend for the location of their new project, and we look forward to hearing community comments about the proposal at the September 12th meeting.

WATER TREATMENT
REVERSE OSMOSIS

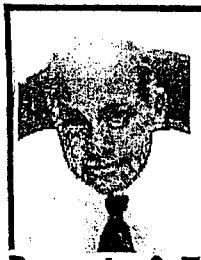
The good news here is that the Town recently received more than half a million dollars to build a new plant to remove the fluoride from our water. The bad news is that the operating costs for the new treatment plant are going to make our water more expensive. Just how expensive is a subject that will be discussed at the two next Council meetings with water treatment plain experts.

On Tuesday, August 22, at 7 PM, the Council will be meeting with Dr. Brent Cluff, of Clean Water Products, and with his engineer to discuss installing a reverse osmosis water system for treating the Town's water. These systems produce very high quality water, but they also throw off about 25% of the water they process as waste water. That waste water contains higher concentrations of minerals and other chemicals that are undesirable and can be a problem for the ground water. It need to be contained in a large evaporation pond, which would be cleaned every so often to remove the chemical residue, or it might possibly be put to some beneficial use. It appears that this type of process may be more costly than other alternatives, although it does have the benefit of providing cleaner water than just about any other process.

WAFER TREATMENT ACTIVATED ALUMINA

On Tuesday, August 29 at 7:00 pm, the Council will meet with Dr. Fred Rubel of Rubel Engineering. Mr. Rubel has an office in Tucson and he is the author of "Removal of Excess Fluoride from Drinking Water," a document published by the United Slates Environment at Protection Agency Office of Water Supply. Dr. Rubel is an expert in the field of activated alumina water treatment systems, and he designed the water treatment plant that the Town owns at the corner of Stout Street and St. Louis, where the two large water tanks are located. That system was built many years ago and was used to remove fluoride from the Town's water when Well #4, which is located next to the old plant, was used to provide the Town with drinking water. That well was replaced by Well #6 several years ago because Well #6 had cooler water with less fluoride. Well #4 is now only used for irrigation purposes. Dr. Rubel will speak about possibly relocating the old treatment plant, or at least some of its parts, to a new location near Wells #6 and #7 so that it could treat the water from those wells. The activated alumina (AA) system does a very good job removing fluoride and certain other minerals from water, but it does not produce water nearly as clean as a reverse osmosis system. AA systems also produce waste water but it is less than 5% of the water taken into the process.

The Town has been given more than half a million dollars by the USDA to build a new treatment plant. We appreciate the award of that grant very much. Whatever it costs to operate the plain, however, will be a cost that the citizens of Gila Bend will have to pay for the next twenty to thirty years. The Council recognizes the huge impact that the decision on what kind of plant to build will have on the future of Gila Bend, and they want your thoughts about this subject. Please join die Council and these water treatment experts as they discuss these two important alternatives to solving our high fluoride drinking water problem on the dates I have noted above - we need your questions, ideas, and suggestions to help us arrive at the best solution!



SUPER NEWS

by Superintendent
Mike Misner

Parents & Teachers Working Together

Several of my articles will discuss parents and teachers and how we can and must work together to achieve success for our schools. Together if we teach responsibility to our children it helps build the foundation for what we expect of them. How do we teach responsibility? With our actions, our expectations, and our very demeanor towards students. Some thoughts:

1. Don't do for children what they can do for themselves. We must find tasks, however small, at which children can succeed.

The product is not as important as the effort. Children can become discouraged and refuse to accept responsibility if adults are not accepting of their efforts. Give them plenty of opportunities to help.

3. Allow time for teaching. Don't teach a new skill or concept when there is a time limit. Do it during a quiet relaxed time, when there isn't any pressure, and there will be time to praise and encourage.
4. Ask rather than demand. It helps youngsters feel important when you ask for their help.
5. Use natural and logical consequences. When a child neglects responsibility nagging doesn't help. Let the child experience the consequences of his/her irresponsibility. When they see for themselves what their action leads to, they can understand what a better decision might have been.

The climate of our classrooms and homes make the dfference.

Together, let's:

SET STANDARDS AND GOALS OUR STUDENTS HAVE A GOOD CHANCE OF ATTAINING.
LET THEM MAKE AS MANY DECISIONS AS POSSIBLE
ENCOURAGE OUR YOUNGSTERS TO LEARN RESONSIRILITY BY BEING COUNTED ON TO DO CERTAIN JOBS
GIVE THEM OPPORUTNITIES TO TAKE LEADERSHIP ROLES
GIVE SPECIFIC RECOGNTION FOR A JOB WELL DONE.
ALLOW OUR CHILDREN TO EXPRESS OPINIONS.
FOCUS ON THEIR STRENGTHS RATHER THAN THEIR WEAKNESSES.
RECOGNIZE THAT, AS WITH ALL OF US, THERE WILL BE TIMES WHEN WE ACHIEVE MORE. AND TIMES WHEN WE ACHIEVE LESS
BE ACCEPTING.