Ramm Power Group LLC

Dr. Michael A. Werner PhD. Min. Met. Eng.
Managing Director
14575 S Avenida Cucana
Sahuarita AZ 85629

Mobile 509 280-7486

November 17, 2021

Kimberly D Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

Re: Preliminary Permit – Sacaton PSH Energy Storage Project

Dear Ms. Bose,

Please find attached the Preliminary Permit Application for the Sacaton Energy Storage Project.

If you have any questions or need additional information, please contact me at 509 280-7486 or e-mail at michaelawerner@comcast.net

Sincerely,

Michael Werner
Managing Director
RAMM Power Group, LLC

Preliminary Permit Application for the Sacaton Energy Storage Project

Prepared by:

RAMM Power Group, LLC
Dr. Michael A. Werner PhD. Min. Met. Eng.
Managing Director
Ramm Power Group
14575 S Avenida Cucana
Sahuarita AZ 85629
Mobile 509 280-7486

Preliminary Permit Application
for the
Sacaton PSH Energy Storage Project

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INITIAL STATEMENT

RAMM Power Group, LLC ("RPG" or "Applicant") applies to the Federal Energy Regulatory Commission ("FERC") for a preliminary permit for the proposed Sacaton Energy Storage ("Project"), as described in the attached exhibits. This application is made in order that the Applicant may secure and maintain priority of application for a license for this Project under Part I of the Federal Power Act while obtaining the data and performing the acts required to determine the feasibility of the Project and to support an application for a license.

(1) The location of the proposed project is:

State or Territory: Arizona
County: Pinal
Township or nearby town: Casa Grande
Stream or other body of water: No Stream – Closed Loop

(2) The exact name, business address, and telephone number of the Applicant is:

Michael A Werner
RAMM Power Group, LLC
14575 S Avenida Cucana
Sahuarita AZ 85629
Phone: (509) 280-7486

(3) The exact name and business address of each person authorized to act as an agent for the Applicants in this application are:

Michael A Werner
RAMM Power Group, LLC
14575 S Avenida Cucana
Sahuarita AZ 85629
Phone: (509) 280-7486
E-mail: michaelawerner@comcast.net

(4) RAMM Power Group, LLC is a domestic corporation and is not claiming preference under section 7(a) of the Federal Power Act.

(5) The proposed term of the requested permit is 36 months.

(6) There are no existing dams associated with the proposed Project.

ADDITIONAL INFORMATION

1. RAMM Power Group LLC has or intends to obtain and will maintain any proprietary rights necessary to construct, operate, or maintain the Project.

2. The name and address for the county in which any part of the Project and any Federal facilities that would be used by the Project would be located are listed below:

   Pinal County
   Pinal County Courthouse
   County Clerk/Recorder
   PO Box 1748
   Florence, Arizona 85132

3. The Project will not be located within any city, town, or similar subdivision.

4. The names and addresses of every city, town or similar local political subdivision with a population of at least 5,000 which is located within 15 miles of the project are listed below:

   City Clerk, Casa Grande
   510 E Florence Blvd
   Casa Grande, AZ 85122

   City Clerk, Coolidge
   130 West Central Ave
   Coolidge, Arizona 85128

   City Clerk, Eloy
   628 N Main St
   Eloy, AZ 85131

City Clerk, Maricopa
39700 W Civic Center Plaza
Maricopa, AZ 85139

5. The project is not located in any Irrigation district. However, it is adjacent the following irrigation districts:

   Maricopa Stanfield Irrigation & Drainage District
   41630 W Louis Johnson Dr
   Maricopa, AZ 85329
   520-424-3344

   San Carlos Irrigation & Drainage District
   PO Box 218
   Coolidge, AZ 85228
   520-723-5408

   Hohokam Irrigation District
   142 S Arizona Blvd
   Coolidge, AZ 85228
   520-723-7751

6. RAMM Power Group, LLC. Knows of no other political subdivision in the general area of the project that there is reason to believe would likely be interested in, or affected by the application.

7. Indian tribes that may have an interest in this Project:

   Secretary
   Gila River Indian Community
   PO Box 97
   Sacaton, AZ 85147
   (520 562-9841

   Secretary
   Ak-Chin Indian Community
   42507 W Peters & Nall Rd.
   Maricopa, AZ 85238
   (520) 568-4566

Secretary
Tohono O'Odham Nation
PO Box 837
Sells, AZ 85634
(520) 383-2028

VERIFICATION

This Preliminary permit application for the Sacaton PSH Energy Storage Project is executed in the state of Arizona, County of Pima, by:

Michael A Werner
RAMM Power Group, LLC
14575 S Avenida Cucana
Sahuarita AZ 85629
Phone: (509) 280-7486

Being duly sworn deposes and says that the contents of this application are true to the best of his knowledge or belief. The undersigned has signed the application this 17th day of November, 2021.

RAMM Power Group, LLC.

By: _____
Michael Werner

Subscribed and sworn to before me, a Notary Public of the State of Ariona, this 17 day of November, 2021.

STATE OF ARIZONA
COUNTY OF PIMA
Subscribed and sworn before me this 17 day of Nov, 2021, by Michael A Werner

Kathy Frances Rusick
Notary Public

OFFICIAL SEAL
KATHY FRANCES RUSICK
NOTARY PUBLIC-ARIZONA
PIMA COUNTY
My Comm. #: 569151
My Comm. Exp. Aug. 21, 2023

EXHIBIT 1: DESCRIPTION OF THE PROPOSED PROJECT

OVERVIEW

This project will consist of a 150 megawatt closed-loop pumped storage facility and a 100 megawatt solar plant. Both are to be located at an existing open pit mine with the pump storage plant utilizing an existing 1200' deep open pit mine for the lower reservoir and an adjacent waste-rock dump for the upper reservoir locations. The 100 megawatt solar-panel plant is to be built adjacent the upper reservoir; also located on top of the existing waste rock dump. Other existing features include 137KV power lines located adjacent the waste-rock dump, and access roads throughout the project area.

Impact to undisturbed land should be minimal as the entire project, except transmission lines, is located on land previously impacted by mining activities.

UPPER RESERVOIR & DAM

The upper reservoir dam will be 28' high with a total crest length of 6000'. The construction method and liner requirements to be determined. The reservoir will have a surface area of 50 acres with an impoundment of 1300 acre-feet. Maximum surface elevation of 1456 MSL.

LOWER RESERVIOR

The lower reservoir will not require a dam as it will be located in the bottom of an existing open pit mine. The pit bottom (or future reservoir bottom) is 242 MSL with a max reservoir surface elevation of 455' MSL and storage of 1500 acre-feet. Type and lining for the lower lake as yet to be determined.

PENSTOCK & TAILRACE

Penstocks connecting the upper reservoir with the lower reservoir shall consist of the following:

A single 200' long 12' diameter steel penstock with entrance transition will extend from the suction in the upper reservoir, through the upper reservoir dam and connect with the top of a 12 diameter vertical shaft. The shaft, extending from the surface some 1250' in depth, will connect to a horizontal tunnel w/bifurcation for water delivery to two 75 megawatt pump/turbines. The low pressure draft tube outlets from each turbine will connect to form a single 14' diameter low pressure draft tube. The connecting tube will extend a distance of approximately 2200' from the turbines (powerhouse) to the lower reservoir located in the bottom of the open pit.

POWERHOUSE

The tentative location of the powerhouse is to be underground, close to the high pressure shaft, with an approximate elevation of 200' MSL Located in the powerhouse will be (2) 75 megawatt pump/turbine units, associated switchgear, and controls. The final elevation and dimensions of the powerhouse will be based upon the turbine selection which is yet to be determined.

TRANSMISSION LINES

Located adjacent the upper reservoir will be a 200MVA substation for converting the 20KV generator/motor voltage to 137 KV for overland transmission. New 137 KV Transmission lines shall be installed extending some 2500' from the new substation to the existing 137 KV Transmission lines owned by Arizona Public Service.

WATER SOURCE

Initial fill water will come from the mine (the bottom presently is over 300' deep) and purchased from existing water rights holders. Negotiation with water right holders and Specific routing options will be identified during the course of the preliminary permit period.

PLANT CAPACITIES

1. The total plant installed capacity for the pumped storage plant is 150 megawatts
2. Estimated average annual energy production: 400,000 Megawatt Hours
3. The estimated plant capacity factor is: 30%

HOW THE PROJECT WILL SERVE IN THE PUBLIC INTEREST

The project will provide services for firm power for the proposed totally renewable energy 100 megawatt solar-panel plant to be located adjacent the pumped storage project, and to provide support for other renewable energy plants in the state. In addition, it will put to good use an abandoned mine.

PUBLIC LANDS AFFECTED BY THE PROJECT

There are ***no federal lands within*** the proposed project boundaries or within the public land survey ¼ sections encompassing the project. Listed on the following page are the public land survey township/range/sections for the proposed project location.

T5S R5E

Section 26

S 1/2

Section 35

All

T6S R5E

Section 3

N 1/2

EXHIBIT 2: DESCRIPTION OF STUDIES

(1) General

(i)Study Plan

The Applicant plans to engage in the following studies in order to design the technical aspects of the project and to confirm its economicviability:

- Consultation with agencies to determine studies required
- Environmental impact
- Archaeological
- Mine Pit Ground Water production and quality
- Plant possible Make-up water requirements
- Mine Pit water quality
- Initial and ongoing water acquisition
- Engineering studies, including soil studies, test pits and core holes
- Energy market for the project
- Transmission interconnection studies
- Determination of equipment configuration and sizing
- Study of existing Mine Waste Dump for engineering of upper reservoir dam
- Overall project cost study

Additional studies may be required.

(ii) New Roads

No new roads will be needed for the purpose of conducting the studies described in this exhibit.

(2) Work Plan for New Dam Construction

(i) Description of field studies, tests, and other land disturbing activities

Engineering of the upper reservoir dam will require that several test holes be dug in the existing Mine Waste Dump with a track mounted excavator. Access to the Mine Waste Dump will be on existing mine roads and any inspection holes to be backfilled leaving little or no evidence of earthmoving activities. This will enable a determination of the type of dam to be built and the liner requirements.

(ii) Studies Schedule

Work Item	Schedule	
	Month Beginning	Month Ending
Engineering		
Conceptual refinement	1	12
Water Quality studies	1	12
Engineering studies	12	24
Environmental studies	12	24
Archaeological studies	12	24
Geological investigations	12	24
Selection of equipment	12	24
Environmental		
Agency consultation	1	36
Environmental studies	12	24
Prepare draft application	12	24
Other		
Water rights studies	1	12
Transmission interconnection planning	6	24
Cost estimating, economic feasibility	6	24
Power sales marketing	1	24
Land ROW	12	24

This schedule may be adjusted and supplemented depending on need and contingencies that may develop as studies proceed.

(3) Request for Waiver

It is anticipated that preliminary field studies, tests, and other activities to be conducted under the permit would not adversely affect cultural resources or endangered species and would cause only minor alterations or disturbances of lands and waters, and that any land altered or disturbed would be adequately restored. This is particularly true since only an upper reservoir is required and virtually the entire project is located on land previously disturbed by mining activity. The Applicant therefore requests waiver of the full requirements of 18 CFR § 4.81 (c)(2).

Statement of Costs and

Financing Estimated cost of

studies

The estimated cost of carrying out and preparing the studies, investigations, tests, surveys, maps, plans and specifications described in this application is estimated to be between $1.5 and $2 million.

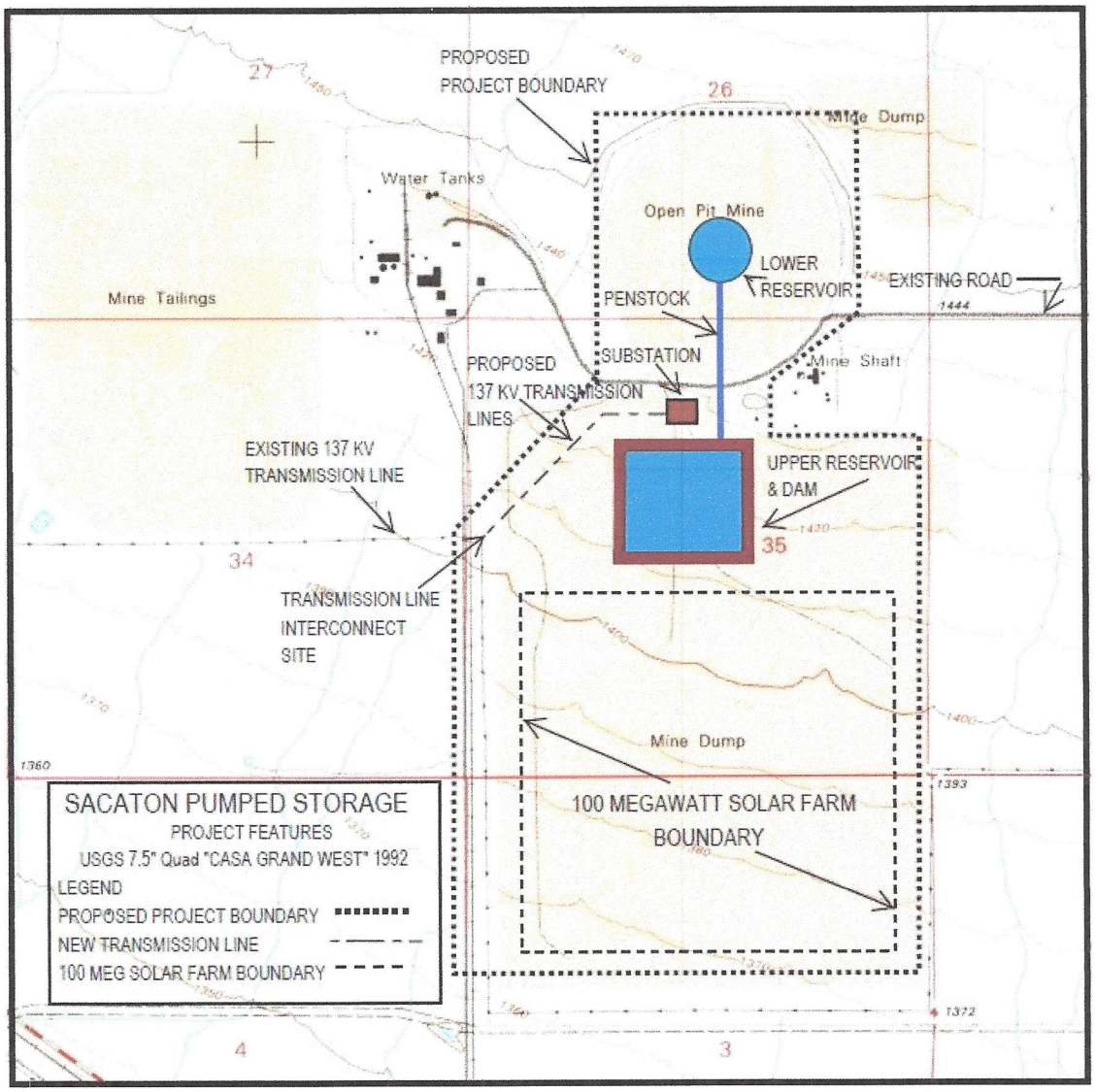
Expected sources of financing

The expected sources of financing to conduct the studies described in this application are private investors.

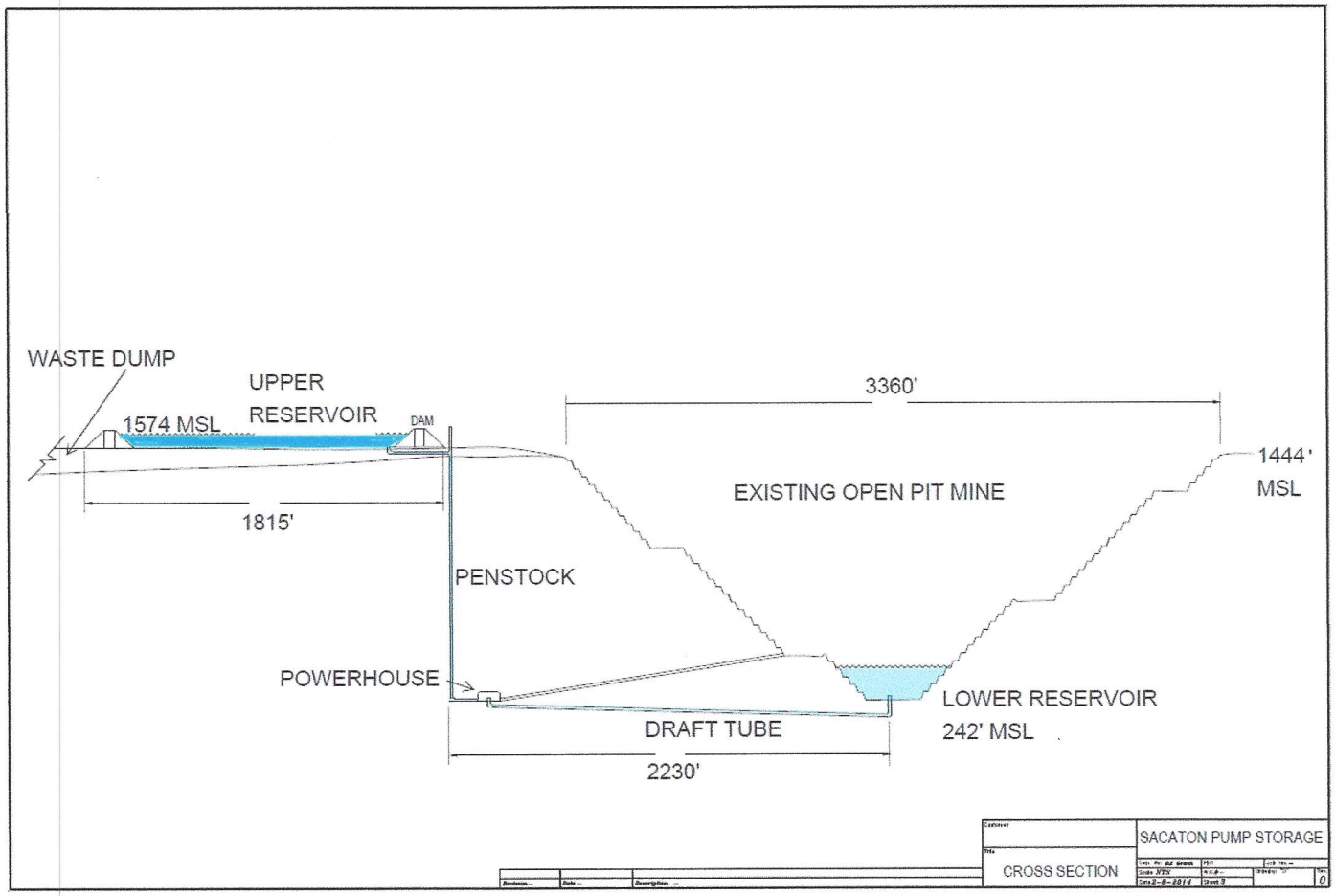
EXHIBIT 3: PROJECT MAPS & DRAWINGS

Notes:

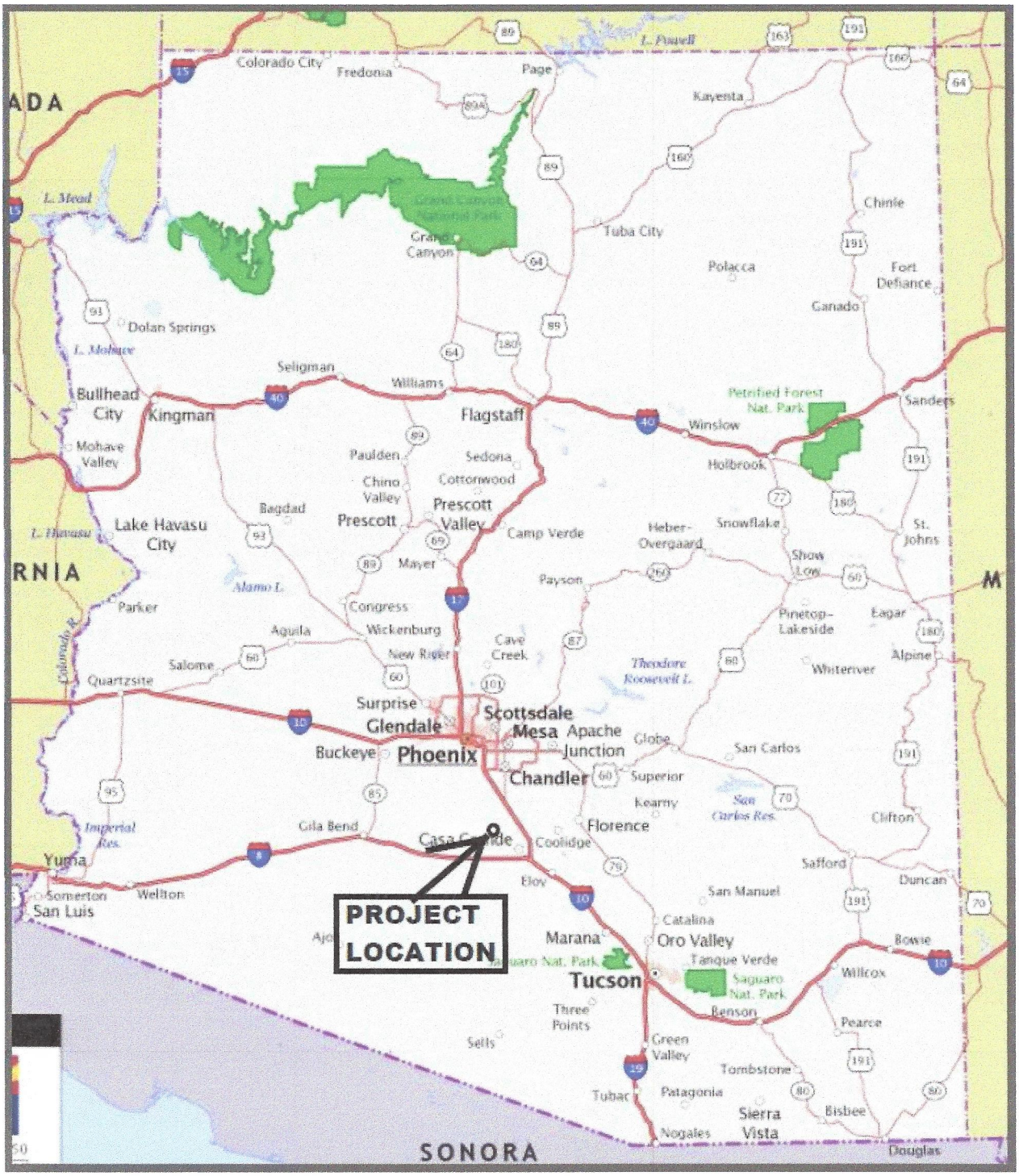
1. No areas within the study boundary are designated as wilderness area or wilderness study area, or recommended for designation as wilderness areas.
2. No areas within the study boundary are included in or have been designated for study for inclusion in the National Wild and Scenic Rivers System.



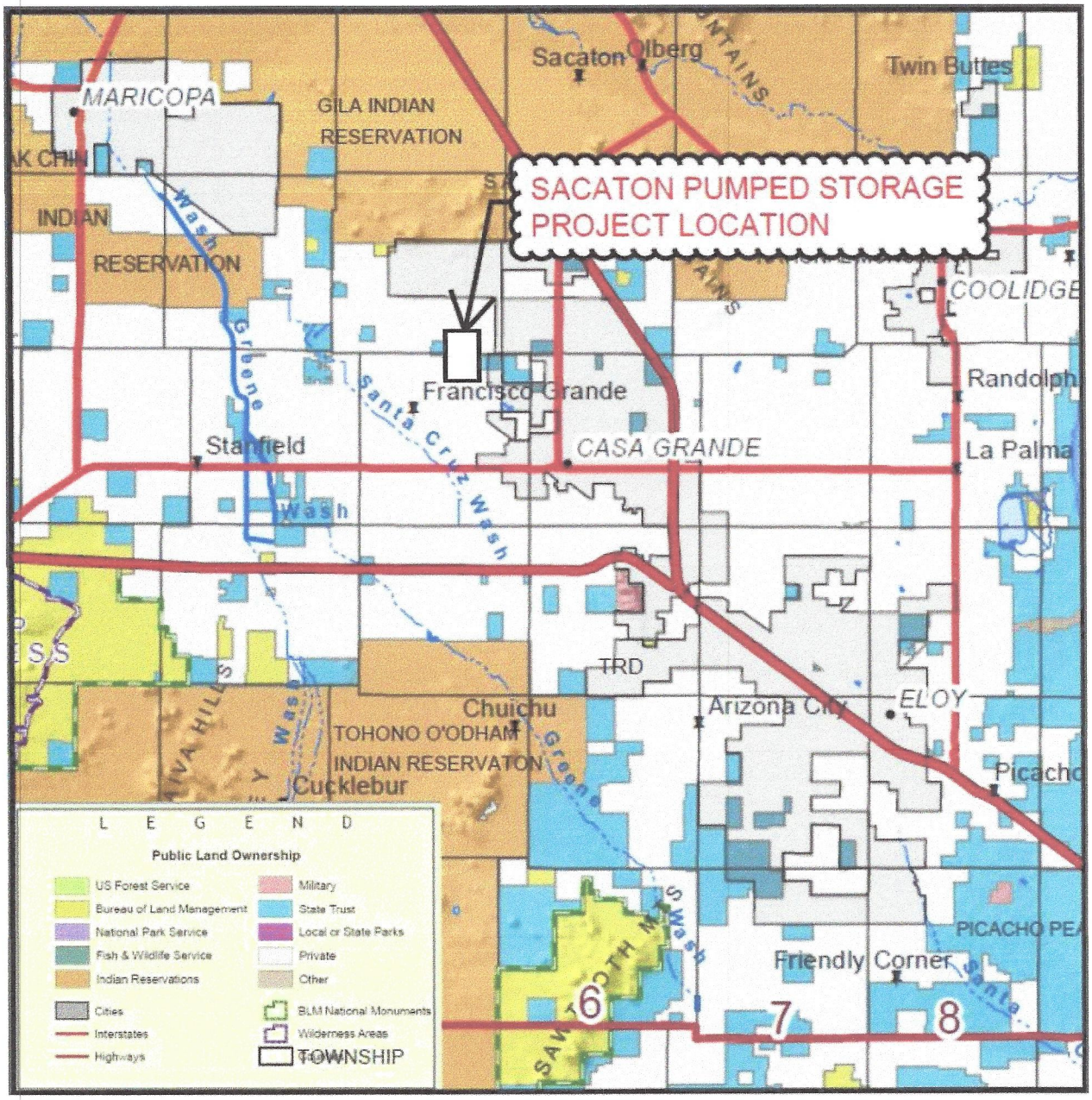
SACATON ENERGY STORAGE
PROJECT FEATURES



SACATON ENERGY STORAGE
CROSS SECTION



SACATON ENERGY STORAGE
PROJECT LOCATION



SACATON ENERGY STORAGE
PUBIC LAND OWNERSHIP