To: Matthew Morgan
APS

Date: April 20, 2026

From: Marina Stender, PE, PTOE

Job Number: 26.5973

RE: Saguaro Power Plant Expansion
Traffic Impact Statement

Registered Professional Engineer (Civil)
CERTIFICATE NO.
39525
MARINA
STENDER
Date Signed: 04/20/26
ARIZONA, U.S.A.

APPROVED BY:

PINAL COUNTY ENGINEER
PINAL COUNTY, PUBLIC WORKS DEPARTMENT

DATE

INTRODUCTION

Lōkahi, LLC (Lōkahi) has prepared a Traffic Impact Statement for the proposed Saguaro Power Plant Expansion, located at 25044 Camino Adelante in Pinal County, Arizona. See **Figure 1** for the vicinity map.



Figure 1 - Vicinity Map

The proposed expansion consists of the addition of a new power generation unit within the existing Saguaro Power Plant facility and is expected to result in twelve (12) additional full-time employees. See **Attachment A** and **Figure 2** for the site plan.

The objective of this Traffic Impact Statement is to analyze the proposed development's traffic related impacts on the adjacent roadway network.

10555 N. 114th Street, Suite 105
Scottsdale, AZ 85259
480.536.7150
www.lokahigroup.com

collaboration unity harmony cooperation

EXISTING CONDITIONS

The proposed site is located on the following Assessor Parcel Numbers (APNs): 410-080-02A, 410-080-03B, 410-080-03C, and 410-080-03D. According to the Pinal County *Zoning Viewer*, the site is zoned General Rural Zone (GR), Light Industry and Warehouse Zone (CI-1), and Industrial Zone (CI-2). The site is currently partially developed with the existing Saguaro Power Plant.

The proposed site is bounded by undeveloped land to the north, south, and east. The Southern Pacific Railroad is located immediately to the west, with Camino Adelante situated just beyond the railroad tracks.

Camino Adelante is a northwest-southeast undivided roadway that provides one (1) lane in each direction of travel. The Arizona Department of Transportation (*ADOT) Functionally Classified Roads* tool classified Camino Adelante as a major collector. There is a posted speed limit of 55 miles per hour (mph).

PROPOSED EXPANSION

The proposed Saguaro Power Plant Expansion consists of the addition of a new power generation unit within the existing Saguaro Power Plant facility. The expansion is expected to result in approximately 12 additional full-time employees.

The proposed expansion will be accessible via one (1) existing full access driveway located along Camino Adelante, approximately 1.8 miles southeast of Red Rock Road (centerline to centerline).

No modifications to the existing access point is proposed.



Figure 2 – Site Plan

TRIP GENERATION

The trip generation for the proposed development was calculated utilizing the Institute of Transportation Engineers (ITE) publication entitled *Trip Generation Manual, 12th Edition*. The ITE rates are based on studies that measured the trip generation characteristics for various types of land uses. The rates are expressed in terms of trips per unit of land use type. This publication is considered to be the standard for the transportation engineering profession.

ITE Land Use 170 – Utility was used to calculate the trip generation for the Saguaro Power Plant Expansion.

Detailed trip generation calculations are provided in **Attachment B.** See **Table 1** for trip generation calculations below.

Table 1 – Trip Generation – Proposed Expansion

Land Use	ITE Code	Qty	Unit	Weekday	AM Peak Hour			PM Peak Hour		
				Total	Total	In	Out	Total	In	Out
Utility	170	12	Employees	46	11	10	1	10	1	9

The proposed Saguaro Power Plant Expansion is anticipated to generate 46 weekday trips, with 11 trips occurring during the AM peak hour and 10 trips occurring during the PM peak hour.

SUMMARY

The proposed Saguaro Power Plant Expansion is located at 25044 Camino Adelante in Pinal County, Arizona. The expansion consists of the addition of a new power generation unit within the existing Saguaro Power Plant facility and is expected to operate with 12 additional full-time employees.

Access

The proposed site will be accessible via one (1) existing full access driveway located along Camino Adelente.

Trip Generation

The proposed Saguaro Power Plant Expansion is anticipated to generate 46 weekday trips, with 11 trips occurring during the AM peak hour and 10 trips occurring during the PM peak hour.

Roadway Capacity

According to the Pinal County Small Area Transportation Study (August 2006), major collector roadways have a capacity of 7,500 vehicles per day (vpd), per lane. Accordingly, as a two-lane roadway, Camino Adelante has a capacity of 15,000 vpd.

Based on the site driveway location, access driveway, and the surrounding roadway network, it is anticipated that all 46 site-generated trips will utilize Camino Adelante. This additional volume represents approximately 0.31% of the roadway's daily capacity.

In conclusion, the additional traffic generated by the proposed expansion is anticipated to result in minimal traffic-related impacts on the existing roadway network and the surrounding area.

ATTACHMENT A – PROPOSED SITE PLAN



NOTES:

1. LAYOUT IS CONCEPTUAL AND INTENDED FOR DISCUSSION PURPOSES ONLY. NOT FOR CONSTRUCTION.
2. EXISTING FEATURES TAKEN FROM ALTA SURVEY DATED 4-17-2020.
3. EXISTING OH LINES SHOWN ARE APPROXIMATE.
4. ONLY AVAILABLE UNTIL, THE EARLIER OF, 09/01/2029 OR 14 WEEKS BEFORE THE EARLIEST BACKFEED COMPLETION DATE.
5. LOCATED UNDERNEATH POWER LINES. AREA FOR USE AT YOUR OWN RISK.

NORTH

SIMPLE CYCLE PLAN

SCALE: 1" = 300'-0"

300 150 0 300 600 900

ISSUE	DATE	DESCRIPTION
A	02/20/2020	FOR INFORMATION

PROJECT MANAGER	JOHN A. McCONNACHIE
ENGINEERED BY	CHRIS ZUELCH
DESIGNED BY	JERRY BRZYS
CHECKED BY	PATRICK LAUER
APPROVED BY	JOHN A. McCONNACHIE
PROJECT NUMBER	10436575

SAGUARO POWER PLANT EXPANSION
SIMPLE CYCLE BUILD-OUT ONLY PLAN

FILENAME	10436575-0GA-C2001
SCALE	1"=300'

SHEET 0GA-C2004

ATTACHMENT B –TRIP GENERATION

Saguaro Power Plan Expansion
APS

Trip Generation Calculations (12th Edition)

Land Use	ITE Code	Qty	Unit	Weekday			AM Peak Hour			PM Peak Hour			Weekday			AM Peak Hour			PM Peak Hour			
				Rate	% In	% Out	Rate	% In	% Out	Rate	% In	% Out	Total	In	Out	Total	In	Out	Total	In	Out	
Utility	170	12	Employees	3.85	50%	50%	0.71	87%	13%	0.69	13%	87%	46	23	23	9	8	1	8	1	7	Average
Utility	170	12	Employees	0.80	50%	50%	0.18	87%	13%	0.25	13%	87%	10	5	5	2	2	0	3	0	3	Minimum
Utility	170	12	Employees	22.00	50%	50%	2.00	87%	13%	3.00	13%	87%	264	132	132	24	21	3	36	5	31	Maximum
Land Use	ITE Code	Qty	Unit	Weekday			AM Peak Hour			PM Peak Hour			Weekday			AM Peak Hour			PM Peak Hour			
				Equation	% In	% Out	Equation	% In	% Out	Equation	% In	% Out	Total	In	Out	Total	In	Out	Total	In	Out	
Utility	**170**	**12**	**Employees**	**T = 3.87(X) - 0.92**	**50%**	**50%**	**Ln(T) = 0.81 Ln(X) + 0.37**	**87%**	**13%**	**Ln(T) = 0.83 Ln(X) + 0.19**	**13%**	**87%**	**46**	**23**	**23**	**11**	**10**	**1**	**10**	**1**	**9**	**Equation**

Utility	Standard Deviation	1.99	0.29	0.25
	Number of Studies	13	13	13
	Average Size	39	43	43
	R^2	0.82	0.91	0.89