

PARKING DEMAND STUDY

ER2

South of the SWC of McDowell Road and Greenfield Road
Mesa, Arizona

PREPARED FOR
LGE Design Build
1200 North 52nd Street
Phoenix, Arizona 85008

PREPARED BY



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June 12, 2026

UCG Project Number: TR26049

PREPARED FOR
LGE Design Build
1200 North 52nd Street
Phoenix, Arizona 85008

PREPARED BY



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CONDUCTED BY

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INTRODUCTION

LGE Design Build retained United Civil Group to perform this Parking Analysis for the proposed ER2 Development. ER2 is a new warehouse office building of 155,597 square feet located south of the southwest corner of Greenfield Road and McDowell Road in Mesa, Arizona. This Parking Analysis is being performed to determine the adequate number of parking stalls for the facility.

This Parking Analysis has been performed per the City of Mesa Zoning Ordinance Title 11 Article 4 Chapter 32: On-Site Parking, Loading and Circulation Table 11-32-3 A: Required Parking Spaces by Use, Section 11-32-6 Parking Reductions, locally accepted standards, and industry practice. Because ER2 is a unique development that provides offices for over 37% of the indoor space within the warehouse and manufacturing site, the City of Mesa requested this Parking Demand Study to calculate the required parking stall needs for the development.

Providing an appropriately sized parking area is essential to optimizing the use of space and resources in a development. When parking areas are larger than necessary, it can lead to underutilized space that could otherwise be used for green areas, additional building capacity, or pedestrian-friendly designs. Excessive parking can also increase construction and maintenance costs, as well as contribute to environmental concerns, such as additional stormwater runoff and reduction in natural landscape. However, accurately determining parking needs ensures that space is used efficiently, lowering operational costs and fostering sustainable development.

SITE DESCRIPTION

When developed and occupied, ER2 will consist of:

- Office – 45,768 square feet
- Warehouse – 109,829 square feet
- Exterior Courtyards/Balconies/Recreation – 6,696 square feet (not part of total building gross)

Total – 155,597 gross square feet

Figures 1 and 2 illustrate the site's location within the context of the surrounding area. All figures are provided in **Appendix A**.

PARKING SUPPLY

Currently, the site is planned for a total of 238 parking stalls, with 230 for regular parking and 8 for ADA. **Figure 3** provides the proposed parking with the number of available parking stalls.

PARKING DEMAND

The City of Mesa Zoning Ordinance Title 11 Article 4 Chapter 32: On-Site Parking, Loading and Circulation Table 11-32-3 A: Required Parking Spaces by Use provides parking requirements for various land uses. The land uses that are found within the parking ordinance for ER2 are used for day-to-day activities. **Table 1** provides the parking requirements per the ordinance code for the ER2 development on a typical day.

Table 1: ER2 On Site Parking per Zoning Ordinance for a Typical Day

Use	Square Footage	Parking Code	Parking Required
General offices, retail, and services	45,768 sqft	1 space per 375 sqft	122 stalls
Warehousing and Storage	45,000 sqft	1 space per 900 sqft	50 stalls
Industrial (Manufacturing)	64,829 sqft	1 space per 600 sqft	108 stalls
TOTAL STALLS REQUIRED BY CODE			280 STALLS

On a typical day, if the ER2 facility is at full capacity, 280 parking stalls are required for the development by code.

PARKING REDUCTION

The City of Mesa allows for a parking reduction per Section 11-32-6 of the Zoning Ordinance when the following criteria are found to be true:

1. Special conditions—including but not limited to the nature of the proposed operation; proximity to frequent transit service; transportation characteristics of persons residing, working, or visiting the site—exist that will reduce parking demand at the site;
2. The use will adequately be served by the proposed parking; and
3. Parking demand generated by the project will not exceed the capacity of or have a detrimental impact on the supply of on-Street parking in the surrounding area.

Because the offices are within the industrial building, it is assumed that at least 25% of the employees that work in manufacturing and warehouse will also have an office. Therefore, a reduction in the number of stalls required is taken because of the interaction between the uses on site.

In addition, because the on site parking per the zoning ordinance represents measured parking demand at a single use site, the shared parking developed by the Urban Land Institute and National Parking Association was used as guidance on estimating the parking demand for this type of mixed use development.

Table 2 provides the parking demand for each land use on an hourly basis for the percentages of each land use as presented in the Institute of Transportation Engineers (ITE) Parking Generation Manual.

Table 2: Shared Parking by Time of Day

Time	Office		Manufacturing		Warehousing		Total Stalls
	Percentage	Stalls Required	Percentage	Stalls Required	Percentage	Stalls Required	
12:00–4:00 a.m.	0%	0	5%	4.1	1%	0.4	5
5:00 a.m.	0%	0	5%	4.1	3%	1.1	5
6:00 a.m.	0%	0	15%	12.2	8%	3	15
7:00 a.m.	13%	15.9	55%	44.6	27%	10.3	71
8:00 a.m.	47%	57.3	76%	61.6	57%	21.7	141
9:00 a.m.	87%	106.1	82%	66.4	79%	30	203
10:00 a.m.	99%	120.8	84%	68	83%	31.5	220
11:00 a.m.	100%	122	85%	68.9	87%	33.1	224
12:00 p.m.	86%	104.9	90%	72.9	91%	34.6	212
1:00 p.m.	84%	102.5	99%	80.2	91%	34.6	217
2:00 p.m.	93%	113.5	100%	81	97%	36.9	231
3:00 p.m.	93%	113.5	95%	77	100%	38	229
4:00 p.m.	85%	103.7	58%	47	91%	34.6	185
5:00 p.m.	57%	69.5	36%	29.2	74%	28.1	127
6:00 p.m.	21%	25.6	15%	12.2	47%	17.9	56
7:00 p.m.	0%	0	12%	9.7	26%	9.9	20
8:00 p.m.	0%	0	11%	8.9	20%	7.6	17
9:00 p.m.	0%	0	9%	7.3	17%	6.5	14
10:00 p.m.	0%	0	9%	7.3	1%	0.4	8
11:00 p.m.	0%	0	8%	6.5	1%	0.4	7

As shown, the peak parking demand for the development is estimated to be at 2:00 pm with 231 stalls occupied. This leaves seven available stalls within the parking area.

ADA REQUIREMENTS

According to the Americans with Disabilities Act, accessible parking stalls must be considered separately for parking lots. For this development the total number of parking stalls is 238. Therefore, the minimum number of accessible parking stalls permitted is seven for 201 to 300 provided parking stalls. The eight ADA stalls provided meet the ADA standards for accessible design. Of the eight ADA spaces, at least one in every six, or two 2 stalls, are required to be van accessible.

CONCLUSIONS

This parking study was conducted to determine the parking demand for ER2 during a normal day. The development team provided operations characteristics and employee information which was relied upon in the completion of this parking analysis.

As shown on the site plan, the proposed ER2 development will have 238 parking spaces. Based on typical operating conditions, parking demand is estimated to peak at approximately 231 occupied spaces during the 2:00 p.m. hour. This results in a surplus of seven parking spaces during the peak demand period.

In addition, the development is required to provide a minimum of seven ADA-accessible parking spaces and will provide eight ADA-accessible spaces, exceeding the minimum requirement.

Therefore, the proposed parking supply is adequate to accommodate the anticipated parking demand and satisfies ADA parking requirements.

This parking assessment is based on a variety of assumptions related to the site plan and land use of the proposed development. If alternate land uses, or changes are ultimately proposed, these parking calculations and criteria evaluation may not remain valid.

LIMITATIONS

Our professional services have been performed using that degree of skill ordinarily exercised, under similar circumstances, by reputable transportation engineering firms practicing in this locality. No other warranty, expressed or implied, is made.

The contents of this report are intended for the sole use of the addressee and his/her designees. In completing this report, data was obtained from a variety of sources which were assumed reliable and accurate (i.e., City, County, State and Federal sources). Should deviations from this report be noted, this firm should be contacted for review of the area of concern.

A reasonable attempt was made to acquire recent traffic impact studies, traffic projections and/or data that may be helpful in more accurately projecting traffic volumes. United Civil Group is not responsible for incorporating data made available after this document has been finalized.

This report is issued with the understanding that it is the responsibility of the owner to see that its findings are carried out or brought to the attention of those concerned. If any changes to the proposed project are made, the findings of this report shall be subject to review and may require modification or addendum.

SOURCES

ADA.gov, Americans with Disabilities Accessible Parking Spaces.
<https://www.ada.gov/topics/parking/> accessed, June 10, 2026.

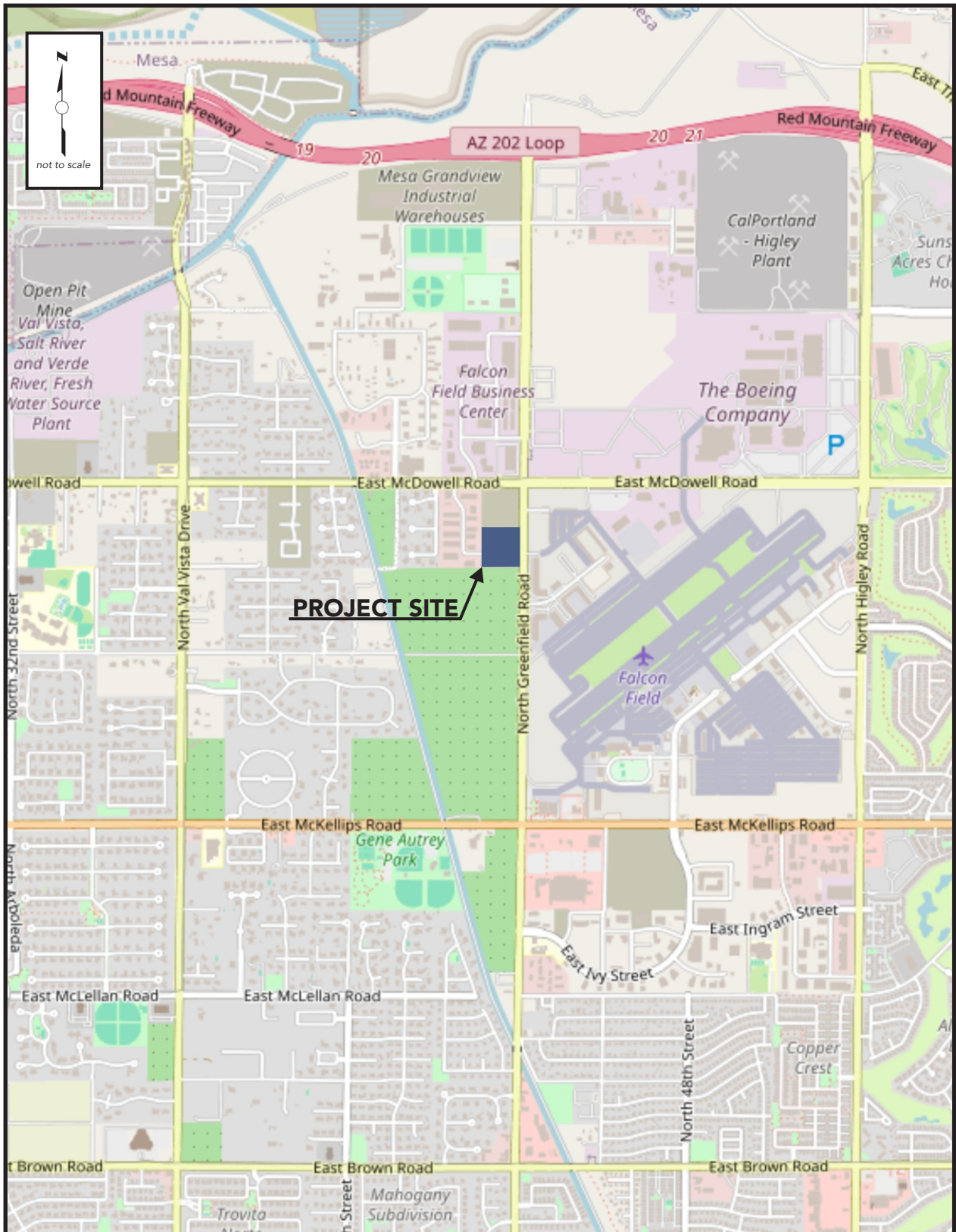
City of Mesa Zoning Ordinance Title 11 Article 4 Chapter 32: On-Site Parking, Loading and Circulation Table 11-32-3 A: Required Parking Spaces by Use.

City of Mesa Zoning Ordinance Title 11 Article 4 Chapter 32: Section 11-32-6 Parking Reductions.

Institute of Transportation Engineers Parking Generation Manual, 6th Edition.

Urban Land Institute. *Shared Parking*. 3rd ed. Washington, DC: Urban Land Institute, 2020.

Appendix A



ArcGIS 2024

Figure 1: Vicinity Map



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Figure 2: Aerial View

