

**AN APPRAISAL REPORT OF THE VACANT SINGLE TENANT OFFICE BUILDING  
LOCATED AT 4601 EAST MCDOWELL ROAD IN PHOENIX, MARICOPA COUNTY,  
ARIZONA**

**PROJECT: M697201X  
HIGHWAY: RED MOUNTAIN  
SECTION: EAST PAPAGO-HOHOKAM T.I.  
ADOT PARCEL: L-M-555  
CONTRACT: CTR054962  
OWNER: ARIZONA STATE OF DEPARTMENT OF  
TRANSPORTATION**

**PREPARED FOR**

**ARIZONA DEPARTMENT OF TRANSPORTATION  
205 S. 17<sup>TH</sup> AVENUE  
MD 612E RM331  
PHOENIX, ARIZONA 85007**

**ATTENTION**

**MR. TIMOTHY O'CONNELL  
APPRAISAL SECTION SUPERVISOR**

**A.T. I. FILE NO.: OEE789520**

**DATE OF REPORT**

**DECEMBER 29, 2022**

**EFFECTIVE DATE OF VALUE**

**NOVEMBER 16, 2022**

**DATE OF INSPECTION**

**NOVEMBER 16, 2022**

**PREPARED BY**

**ZACH SINAY, MAI, R/W-AC  
CERTIFIED GENERAL REAL ESTATE APPRAISER CERTIFICATE NO. 31199**



December 29, 2022

A.T.I. File No.: OEE789520

TO: Arizona Department of Transportation  
205 S. 17<sup>th</sup> Avenue  
MD 612E RM331  
Phoenix, Arizona 85007

ATTN: Mr. Timothy O'Connell  
Appraisal Section Supervisor

RE: An Appraisal Report of the vacant single tenant office building located at 4601 East McDowell Road in Phoenix, Maricopa County, Arizona.

Dear Mr. O'Connell:

As you requested, I have appraised the "As Is" Market Value of the aforementioned property. The value estimate is supported by market analysis which is communicated through an Appraisal Report format plus exhibits, which describes and identifies methods of approach and valuation.

The purpose of the appraisal is to estimate the "As Is" Market Value as of the effective date of value or November 16, 2022.

The subject of this appraisal report is a vacant single tenant office building totaling 4,646 square feet. The building was constructed in 1977 and is in poor/fair condition. The improvements currently sit on land area totaling 0.94 gross acres or 40,835 gross square feet; however, approximately 0.185 acres or 8,070 square feet of this land area is located within the existing State Route 143 (SR 143) right of way. Therefore, the net land area associated with the improvements totals 0.752 acres or 32,765 square feet.

It is noted that prior to the construction of the SR 143, the building was occupied by a vision field office. A portion of the property was located within the path of the new freeway and the property was ultimately acquired by ADOT. Following the total acquisition of the former vision office, the original parcels have not yet been recorded to show the 0.752 acre net site area remaining after the acquisition.

The intended users of this report are ADOT Right of Way Operations. The intended use of the appraisal report is to utilize a market value estimate to assist in decisions regarding disposition of the property. This report is not intended for any other use or any other users.

The subject is currently vacant with no leases in place and thus, the Fee Simple Estate will be considered in this report.

I have performed no services, as an appraiser, or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.

This report was prepared under the Appraisal Report option of Standards Rule 2-2(a) of the most recent edition of the Uniform Standards of Professional Appraisal Practice (“USPAP”). As USPAP gives appraisers the flexibility to vary the level of information in an Appraisal Report depending on the intended use and intended users of the appraisal, we adhere to the Appraisal Technology internal standards for an Appraisal Report - Standard Format.

This type of report has a moderate level of detail. It summarizes the information analyzed, the appraisal methods employed, and the reasoning that supports the analyses, opinion, and conclusions. It meets or exceeds the former Summary Appraisal Report requirements that were contained in the 2012-2013 edition of USPAP. For additional information, please refer to Addendum Comparison of Report Formats.

An environmental study has not been provided. However, the appraiser was provided a Supplemental Environmental Notice from May 22, 2018 by the State of Arizona in conformance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This notice is included in the addenda and states that a subsurface-to-indoor-air vapor intrusion investigation of the Motorola 52<sup>nd</sup> Street Superfund site, 2011, found elevated levels of the contaminant trichloroethene (TCE) above EPA’s action levels. A vapor intrusion pathway mitigation system is necessary on the subject property until multiple lines of evidence indicate there is no longer potential for vapor intrusion into the indoor air. The State entered into an agreement to install and maintain a mitigation system at the property to mitigate elevated concentrations of TCE in indoor air while preparing the property for eventual sale to the public. Documentation of the onsite activities discussed in the notice, maintenance requirements of the mitigation system, superfund remedial performance measures and additional information about the Motorola, Inc. (52<sup>nd</sup> Street Plant) superfund site shall be made available to a potential grantee prior to sale.

In addition to the Environmental Notice, the appraiser was also provided a Vapor Mitigation System Installation Report done by NXP USA, Inc. dated March 21, 2018. The report found that based on the initial system measurements, the sub-slab depressurization (SSD) system did not initially meet the EPA goal at all test hole locations, however, the initial indoor air sampling results from December 2017 were not detected which indicates that the system is performing as designed and preventing vapor intrusion. Based on initial testing, the expectation of the system is to continue to effectively control any potential vapor intrusion emanating from below the slab. A copy of this report is included in the addenda of the appraisal report. The appraiser has not been provided with any more recent tests indicating current measurements and the most recent data available was this report conducted in 2017. **It is an Extraordinary Assumption that the Vapor Mitigation System is operable and appropriately effective as of the effective date of value.**

This appraisal assignment was drafted to adhere to the standards and practices of the Appraisal Institute, plus the guidelines and recommendations set forth in the Uniform Standards of Professional Appraisal Practice (USPAP) by the Appraisal Foundation.

Based on the information found in this investigation, the appraiser is of the opinion that the "As Is" Market Value of the subject property, as of November 16, 2022, is:

**FIVE HUNDRED SIXTY THOUSAND DOLLARS**  
**(\$560,000.00)**

**It is an Extraordinary Assumption that the Vapor Mitigation System is operable and appropriately effective as of the effective date of value and there are no environmental issues associated with the subject's location within the Motorola 52<sup>nd</sup> Street Superfund site.**

**AUDITING BREAKDOWN**

Land:	\$460,000
Improvements:	\$100,000
Severance:	\$ 0
Special Benefits:	\$ 0
Cost to Cure:	<u>\$ 0</u>
<b>Total</b>	<b>\$560,000</b>

Respectfully submitted,



Zach Sinay, MAI, R/W-AC  
Certified General Real Estate Appraiser No. 31199  
480.285.3868  
zsinay@atiaz.com

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## ADDENDA

Engagement Letter .....	EXHIBIT 1
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Supplemental Environmental Notice .....	EXHIBIT 3
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USPAP Reporting Options .....	EXHIBIT 5
Contingent and Limiting Conditions .....	EXHIBIT 6

# FACTS AND CONCLUSIONS

**TYPE OF PROPERTY:**

Vacant single tenant office building

**LOCATION:**

The subject is located at 4601 East McDowell Road in Phoenix, Maricopa County, Arizona.

**REPORT PURPOSE:**

The purpose of this appraisal is to estimate the "As Is" Market Value of the subject as of the effective date of value.

**TAX PARCEL NUMBER (S):**

125-17-007L and an unparcelled portion. As indicated, the subject property has not yet been replatted to represent the net site area located outside of the existing SR 43 right of way. It is expected that a new parcel will be recorded prior to any disposition of the subject.

**SITE AREA:**

Currently, the parcel and unparcelled portion associated with the subject total 0.94 gross acres or 40,835 gross square feet.. The area associated with the building improvements was calculated as totaling 0.752 net acres or 32,765 net square feet. A map of the net subject site is shaded in yellow as shown next.



**ZONING:**

C-2, Intermediate Commercial (90%) and R-5, Multifamily Residence District (10%)

**FLOOD ZONE:**

The location is within an area denoted as being in an "X" Flood Hazard Area, as found on Federal Emergency Management Agency Flood Insurance Rate Map number 04013C2230M based on the September 18, 2020 flood data.

**IMPROVEMENTS:**

<b>Property Type:</b>	Vacant single tenant office building
<b>Property Use:</b>	Office
<b>Size:</b>	4,646 square feet
<b>Year Built:</b>	1977
<b>Condition:</b>	Poor to fair
<b>Property Rights:</b>	Fee Simple Estate
<b>Occupancy:</b>	0%

**PARKING:**

<b>Open Spaces:</b>	40 spaces
<b>Covered Spaces:</b>	0 spaces
<b>Total Spaces:</b>	40 spaces
<b>Parking Ratio:</b>	8.61/1,000 square feet of building area.

**HIGHEST & BEST USE:**

As Vacant: Commercial development  
As Improved: Current Use

**INSPECTION DATE:**

November 16, 2022

**EFFECTIVE DATE OF VALUE:**

November 16, 2022

**VALUE CONCLUSIONS:**

<b>Sales Comparison Approach</b>	\$560,000
<b>Income Approach</b>	\$510,000
<b>"As Is" Market Value</b>	\$560,000

# SCOPE OF WORK

The practice of appraisal can be considered to be less of a science dictated by strict rules and more of an art, in which rules guide the appraiser towards a trustworthy, responsible and credible valuation. The Uniform Standards of Professional Appraisal Practice (USPAP) provides guidelines for this process to be undertaken through the Scope of Work Rule, to which all appraisal professionals must adhere.

Due to the COVID pandemic, the 2020-2021 edition of USPAP is extended through 2023.

The USPAP 2020-2021 **SCOPE OF WORK RULE** states:

*For each appraisal and appraisal review assignment, an appraiser must:*

- *identify the problem to be solved;*
- *determine and perform the scope of work necessary to develop credible assignment results; and*
- *disclose the scope of work in the report.*

*An appraiser must properly identify the problem to be solved in order to determine the appropriate scope of work. The appraiser must be prepared to demonstrate that the scope of work is sufficient to produce credible assignment results. (The Appraisal Foundation, USPAP 2020-2021 edition, Page 13)*

Comment: Scope of work includes, but is not limited to:

- the extent to which the property is identified;
- the extent to which tangible property is inspected;
- the type and extent of data researched; and
- the type and extent of analyses applied to arrive at opinions or conclusions.

Appraisers have broad flexibility and significant responsibility in determining the appropriate scope of work for an appraisal and appraisal review assignment.

Credible assignment results require support by relevant evidence and logic. The credibility of assignment results is always measured in the context of the intended use.

For this individual assignment, the appraiser shall address the three aspects of the Scope of Work Rule; Problem Identification, Scope of Work Acceptability and Disclosure Obligations.

## **PROBLEM IDENTIFICATION (PURPOSE):**

*An appraiser must gather and analyze information about those assignment elements that are necessary to properly identify the appraisal or appraisal review problem to be solved. (The Appraisal Foundation, USPAP 2020-2021 edition, Pg. 13)*



The purpose of the appraisal is to estimate the "As Is" Market Value of subject property as of November 16, 2022.

**INTENDED USE/USERS:**

The intended use of the appraisal report is to utilize a market value estimate to assist in decisions regarding disposition of the property. This report is not intended for any other use or any other users. The intended users of this report are ADOT Right of Way Operations. This report is not intended for any other use or any other users.

The value reported is based upon cash or its equivalent. This appraisal assignment was drafted to adhere to the Code of Professional Ethics, Bylaws, Regulations and Standards of Professional Appraisal Practice of the Appraisal Institute, plus the Uniform Standards of Professional Appraisal Practice promulgated by the Appraisal Standards Board of the Appraisal Foundation.

**EFFECTIVE DATE OF VALUE:**

November 16, 2022

**DATE OF INSPECTION:**

November 16, 2022

**INTEREST VALUED:**

The subject property is currently vacant with no leases in place and thus, the Fee Simple Estate is considered in this report.

The Fee Simple Estate is defined as follows:

*“Absolute ownership unencumbered by any other interest or estate, subject only to the limitations imposed by the governmental powers of taxation, eminent domain, police power, and escheat.”*  
(The Dictionary of Real Estate Appraisal, 7th edition 2022)

In the estimate of value, typically four interdependent factors must be considered as follows:

- Utility - the ability of a product to satisfy a human want, need or desire.
- Scarcity - the present or anticipated supply of an item relative to the demand for it.
- Desire - a purchaser's wish for an item to satisfy human needs (e.g., shelter, clothing, food, companionship) or individual wants beyond the essentials to support life.
- Effective Purchasing Power - the ability of an individual or group to participate in a market, i.e., to acquire goods and services with cash or its equivalent.

## **MARKET VALUE DEFINITION:**

Following is the definition of *Market Value* as provided by the client.

*Market value as utilized in this report is defined as "the most probable price estimated in terms of cash in United States dollars or comparable market financial arrangements which the property would bring if exposed for sale in the open market, with reasonable time allowed in which to find a purchaser, buying with knowledge of all the uses and purposes to which it was adapted and for which it was capable."(Arizona Revised Statute 28-7091).*

## **VALUE "AS IS" DEFINITION:**

*The estimate of the market value of real property in its current physical condition, use, and zoning as of the appraisal date.* (The Dictionary of Real Estate Appraisal, 7<sup>th</sup> edition 2022)

## **EXTRAORDINARY ASSUMPTION:**

*An assignment-specific assumption, as of the effective date regarding uncertain information used in an analysis which, if found to be false, could alter the appraiser's opinions or conclusions.* (The Appraisal Foundation, USPAP 2020-2021 edition, Page 4)

Comment: Uncertain information might include physical, legal, or economic characteristics of the subject property, or conditions external to the property, such as market conditions or trends; or the integrity of data used in an analysis.

- It is noted that the use of an Extraordinary Assumption might have affected the assignment results.

**It is an Extraordinary Assumption that the Vapor Mitigation System is operable and appropriately effective as of the effective date of value and there are no environmental issues associated with the subject's location within the Motorola 52<sup>nd</sup> Street Superfund site.**

A Title Report was not provided. However, based upon a review of the available property information, there do not appear to be any easements, encroachments, or restrictions other than those that are typical for the property type. Thus, it is an extraordinary assumption of my valuation that there are no adverse impacts from easements, encroachments, or restrictions on the subject property and further assumes that the subject has a clear and marketable title.

## **HYPOTHETICAL CONDITION:**

*A condition, directly related to a specific assignment, which is contrary to what is known by the appraiser to exist on the effective date of the assignment results, but is used for the purpose of analysis.* (The Appraisal Foundation, USPAP 2020-2021 edition, Page 4)

Comment: Hypothetical conditions are contrary to known facts about physical, legal, or economic characteristics of the subject property; or about conditions external to the property, such as market conditions or trends; or about the integrity of data used in an analysis.

- It is noted that the use of a Hypothetical Condition might have affected the assignment results.

No hypothetical conditions are considered in this report.

### **SCOPE OF WORK ACCEPTABILITY:**

*The scope of work must include the research and analyses that are necessary to develop credible assignment results.*

*An appraiser must not allow assignment conditions to limit the scope of work to such a degree that the assignment results are not credible in the context of the intended use.*

*An appraiser must not allow the intended use of an assignment or a client's objectives to cause the assignment results to be biased.* (The Appraisal Foundation, USPAP 2020-2021 edition, Page 14)

The client has requested that the appraiser estimates the "As Is" Market Value of the subject property. In order to credibly perform this task, the appraiser has followed these general guidelines:

- determination of problem and applicable Hypothetical Conditions or Extraordinary Assumptions
- research on the subject property, including but not limited to: ownership history, applicable liens and easements, physical characteristics (i.e. size, topography), relevant subject data (i.e. leases and financial statements for income producing properties)
- selection of, research on and collection of market data for the subject neighborhood
- site inspection
- analysis and synthesis of Highest and Best Use of the subject property
- selection of valuation methodology, subsequent research as is applicable, including market participant and market expert research (i.e. Sales Comparison Approach, Cost Approach, Income Approach, sales or rent comparable properties)
- analysis and conclusion of valuation methodology(ies)
- reconciliation of valuation methodology results
- conclusion of probable estimated market value

### **DISCLOSURE OBLIGATIONS:**

*The report must contain sufficient information to allow the client and other intended users to understand the scope of work performed. The information disclosed must be appropriate for the intended use of the assignment results.* (The Appraisal Foundation, USPAP 2020-2021 edition, Page 14)

Comment: Proper disclosure is required because clients and other intended users rely on the assignment results. Sufficient information includes disclosure of research and analyses performed and might also include disclosure of research and analyses not performed.

The appraiser has broad flexibility and significant responsibility in the level of detail and manner of disclosing the scope of work in the appraisal report or appraisal review report. The appraiser may, but is not required to, consolidate the disclosure in a specific section or sections of the report, or use a particular label, heading or subheading. An appraiser may choose to disclose the scope of work as necessary throughout the report.

## AREA ANALYSIS DATA SOURCES:

As part of this appraisal assignment, the appraiser made a number of independent investigations and analyses. Data retained in office files, which are updated regularly, was relied on. Affidavits of Property Value were checked to verify information. Maps, aeriels and zoning obtained from Maricopa County and the City of Phoenix were checked and also information provided by the client.

The Arizona State and Phoenix Metro area data was taken from many sources including without limitation Arizona State University, Arizona State Department of Economic Security and the U.S. Census Bureau.

All market data was confirmed from one or more of the following sources as indicated on the individual sales: Maricopa County Assessor's Office ([www.maricopa.gov](http://www.maricopa.gov)), Affidavit of Property Value, Real Quest ([www.realquest.com](http://www.realquest.com)), CoStar ([www.costar.com](http://www.costar.com)), FLEXMLS Data Systems ([www.flexmls.com](http://www.flexmls.com)), owners or their representatives, and/or Real Estate Brokers and/or Agents.

## NEIGHBORHOOD AND ANALYSIS:

The neighborhood was observed and the contents of this report express my opinions of what was found and observed.

## IMPROVEMENT DESCRIPTION AND ANALYSIS:

The subject was personally inspected by Zach Sinay, MAI, R/W-AC and the conclusions are my own. The improvement description and analysis were based on my personal physical inspection, information obtained from the client, and from information obtained from the Maricopa County and/or the City of Phoenix, Engineering, Planning and Zoning Departments. It should be noted that Carson Windle provided significant real property appraisal assistance to the person signing this certification.

## DATA SOURCES:

### Site Data

Size	Client provided the gross site size while the net site size is estimated using the County Assessor
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### Improved Data

Building Area	Physical Measurement
No. of Buildings	Inspection
Parking Spaces	Inspection
Year Built	County Assessor

### Economic Data

Deferred Maintenance	N/A
Building Costs	N/A

Income Data	N/A
Expense Data	N/A

**Other**

Flood Zone	FEMA
Zoning	City/Town, County Assessor

**LEGAL DESCRIPTION:**

The legal description can be found within the Addenda of this report. The appraiser assumes the legal provided encompasses the subject property.

**OWNERSHIP:**

The owner of record as provided by Maricopa County is:

Arizona State of Department of Transportation

**HISTORY:**

The subject site was acquired by ADOT in 1989 in order to construct the SR 143. The subject of this appraisal report is a vacant single tenant office building totaling 4,646 square feet. The improvements currently sit on land area totaling 0.94 gross acres or 40,835 gross square feet; however, approximately 0.185 acres or 8,070 square feet of this land area is located within the existing SR 143 right of way. Therefore, the net land area associated with the improvements totals 0.752 acres or 32,765 square feet.

It is noted that prior to the construction of the SR 143, the building was occupied by a vision field office. A portion of the property was located within the path of the new freeway and the property was ultimately acquired by ADOT. Following the total acquisition of the former vision office, the original parcels have not yet been recorded to show the 0.752 acre net site area remaining after the acquisition.

The appraiser is unaware of any other transactions over the previous three years and the property has not been reported as being listed for sale previously.

**SCOPE OF VALUATION METHODOLOGY:**

The valuation process is an orderly program in which data used to estimate value of the subject property is acquired, classified, analyzed, and presented. The first step in the process is to define the appraisal problem, i.e., identify the real estate, the effective date of the value estimate, the property rights being appraised, and the type of value sought. Once this has been accomplished, the appraiser collects and analyzes the factors that affect the fair market value of the subject property. These factors are addressed in the area and neighborhood analysis, the site and improvement analysis, and the highest and best use analysis. They are then applied to the subject property in the discussion of the three approaches to value.

The Cost, Sales Comparison and Income Approaches are widely accepted methods of estimating value of an income producing property. Each approach is described briefly here and discussed in detail in the analysis of each.

To apply the Cost Approach, the depreciated replacement cost of the improvements is added to the value of the land as though vacant, derived through sales comparison, to arrive at a value estimate for the subject property. This approach is most reliable when the improvements are new or nearly new and represent the highest and best use of the site. Due to the age of the subject improvements and difficulty in estimating depreciation, as well as the fact that investors are currently placing little weight on this approach for improvements similar to the subject, the Cost Approach to Value is eliminated.

The Sales Comparison Approach is an approach through which an appraiser derives a value indication by comparing the property being appraised to similar properties that have been sold recently, applying appropriate units of comparison and making adjustments, based on the elements of comparison, to the sale prices of the comparable sales. The Sales Comparison Approach will be utilized in valuation of the subject property.

The Income Approach can be analyzed by one of two methods: 1) Direct Capitalization or 2) Discounted Cash Flow.

The property is currently vacant. However, it could potentially be leased and therefore the appraiser will utilize the Direct Capitalization Method within the Income Approach.

The Direct Capitalization method involves estimating the gross rental income that a property will produce in a year, then subtracting losses due to vacancy and collections and subtracting normal operating expenses for the year to arrive at the annual net operating income to the property. The net operating income is capitalized into a value by applying a rate similar to those found in sales of similar properties in the competing marketplace.

Capitalization is a simple process whereby NOI is divided by an expected rate of return to the investment to indicate the amount an investor would likely be willing to spend to receive that return. This method is generally utilized when a property is stabilized or close to stabilization.

Following the approaches to value, the indications of value are correlated into a single value estimate within the reconciliation section.

## **MARKETING TIME:**

*An opinion of the amount of time it might take to sell a real or personal property interest at the concluded market value level during the period immediately after the effect date of an appraisal. (USPAP AO-7)*

Based on market evidence, if the subject is placed on the market for sale at the appraised market value, with an intensive marketing program, the property should be sold and closed within nine to twelve months. If a property is priced considerably above market it will stay on the market for a considerably longer period of time than if it is priced at market levels. This can be shown within the market by examining the comparable sales' time on the market given their respective sale prices.

## **EXPOSURE TIME:**

*An opinion, based on supporting market data, of the length of time that the property interest being appraised would have been offered on the market prior to the hypothetical consummation of a sale at market value on the effective date of the appraisal. (The Appraisal Foundation, USPAP 2020-2021 edition, Page 4)*

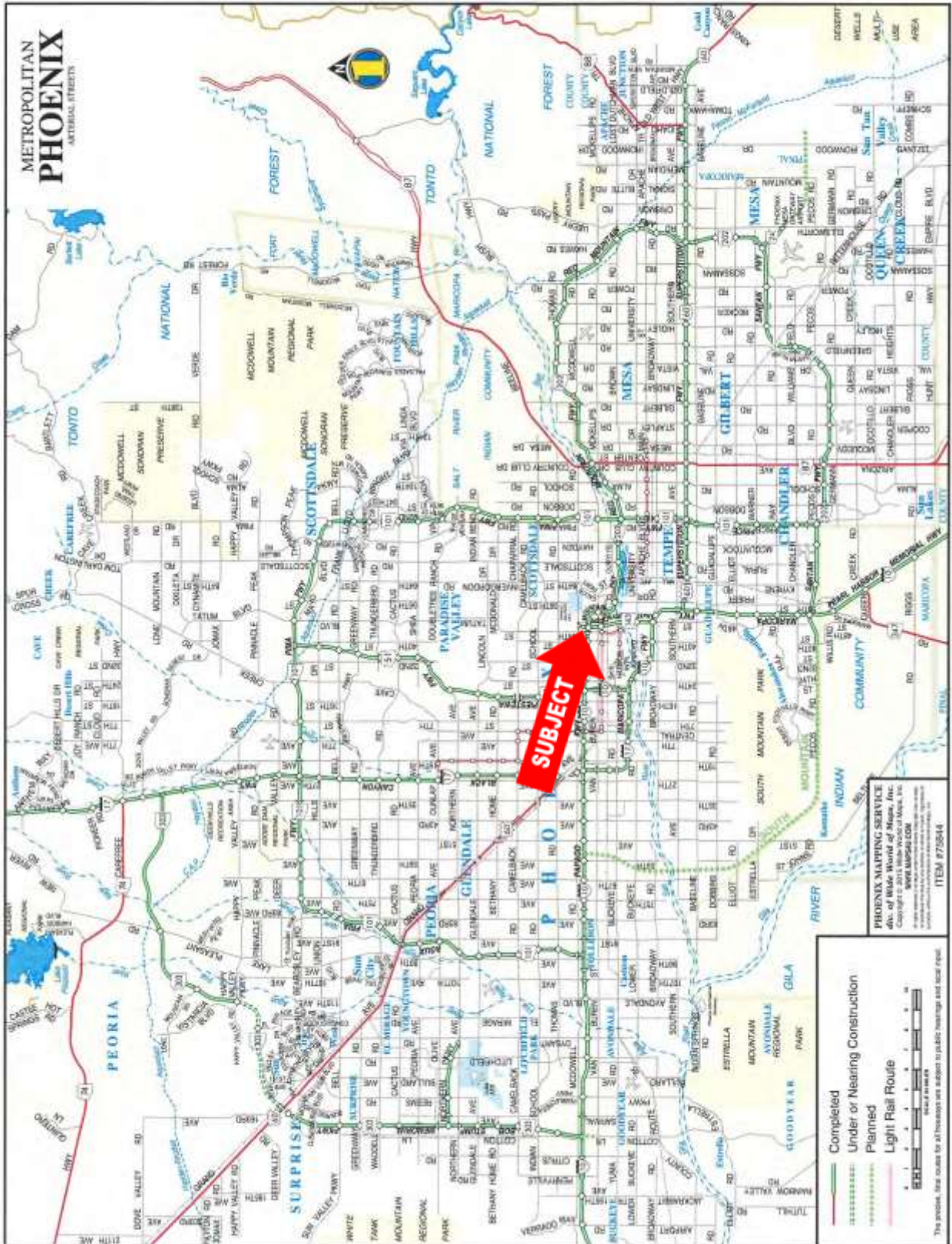
The appraiser researched the subject's market area for similar type properties that were exposed with an intense marketing program and considered to be marketed within a reasonable exposure time. Based on market evidence, properties similar to that of the subject and within the subject's neighborhood sold and closed within six to twelve months.

## **HAZARDOUS WASTES:**

An environmental study has not been provided. However, the appraiser was provided a Supplemental Environmental Notice from May 22, 2018 by the State of Arizona in conformance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This notice is included in the addenda and states that a subsurface-to-indoor-air vapor intrusion investigation of the Motorola 52<sup>nd</sup> Street Superfund site, 2011, found elevated levels of the contaminant trichloroethene (TCE) above EPA's action levels. A vapor intrusion pathway mitigation system is necessary on the subject property until multiple lines of evidence indicate there is no longer potential for vapor intrusion into the indoor air. The State entered into an agreement to install and maintain a mitigation system at the property to mitigate elevated concentrations of TCE in indoor air while preparing the property for eventual sale to the public. Documentation of the onsite activities discussed in the notice, maintenance requirements of the mitigation system, superfund remedial performance measures and additional information about the Motorola, Inc. (52<sup>nd</sup> Street Plant) superfund site shall be made available to a potential grantee prior to sale.

In addition to the Environmental Notice, the appraiser was also provided a Vapor Mitigation System Installation Report done by NXP USA, Inc. dated March 21, 2018. The report found that based on the initial system measurements, the sub-slab depressurization (SSD) system did not initially meet the EPA goal at all test hole locations, however, the initial indoor air sampling results from December 2017 were not detected which indicates that the system is performing as designed and preventing vapor intrusion. Based on initial testing, the expectation of the system is to continue to effectively control any potential vapor intrusion emanating from below the slab. A copy of this report is included in the addenda of the appraisal report. The appraiser has not been provided with any more recent tests indicating current measurements and the most recent data available was this report conducted in 2017. **It is an Extraordinary Assumption that the Vapor Mitigation System is operable and appropriately effective as of the effective date of value.**

# AREA MAP





# REGIONAL AND CITY DATA

## LOCATION:

The State of Arizona is located within the southwestern region of the United States. The July 2021 population estimate puts the population of Arizona at 7,285,370. Maricopa County is located in the south central part of the State of Arizona. Maricopa County consists of numerous cities, towns and communities that are inter-connected through transportation corridors, economic affiliations, and physical/location characteristics.

The cities, towns, and communities that make up the Phoenix Metropolitan area include: Apache Junction, Avondale, Buckeye, Carefree, Chandler, El Mirage, Fountain Hills, Gila Bend, Gilbert, Glendale, Goodyear, Guadalupe, Litchfield Park, Mesa, New River, Paradise Valley, Peoria, Phoenix, Scottsdale, Sun City/Sun City West, Surprise, Tempe, Tolleson, Wickenburg, and Youngtown.

The subject property is located in the central portion of the Metropolitan Phoenix area, Maricopa County, Arizona. The subject property is considered part of the greater Metropolitan Phoenix area and will be examined within the following regional data analysis.

The appraiser has identified basic regional factors that may have an impact on the value of the subject property which includes: location, population, employment, income characteristics, cost of living, education, quality of life, and real estate trends. This section will focus and analyze these recognized basic regional factors as they influence or affect real estate value.

## SOCIAL FORCES:

Social forces primarily have to do with population and demographic trends. The demographics of the population indicate the potential basic demand for real estate services. Arizona has experienced rapid population growth continuously for the last seven years, largely due to the extended period of strong economic growth. The state added over 124,814 residents last year which translated into a growth at 1.75%. Continued job and population growth have contributed to personal income gains of 5.8% in 2021.

Arizona Forecast*	2021	2022	2023	2024	2025
Personal Income (\$ mil)	396,083.6	406,779.2	430,067.2	457,428.6	485,582.0
% Chg from Year Ago	7.5%	2.7%	5.7%	6.4%	6.2%
Retail Sales (\$mil)	148,000.0	163,000.0	167,000.0	173,000.0	181,000.0
% Chg from Year Ago	21.3%	10.1%	2.5%	3.6%	4.6%
Total Nonfarm Employment (000s)	2,958.0	3,054.6	3,112.0	3,180.4	3,245.5
% Chg from Year Ago	3.7%	3.3%	1.9%	2.2%	2.0%
Population (000s), July 1st estimates	7,285.4	7,395.4	7,505.6	7,610.2	7,714.6
% Chg from Year Ago	1.5%	1.5%	1.5%	1.4%	1.4%
Residential Building Permits (units)	65,334.0	65,291.3	59,288.3	48,115.8	46,095.6
% Chg from Year Ago	8.3%	-0.1%	-9.2%	-18.8%	-4.2%

<b>POPULATION COUNTS OF THE CITIES WITHIN METROPOLITAN PHOENIX</b>					
	1-Jul-21	1-Jul-20	1-Jul-2010	Number	Percent
	Population Est.	Population Est.	Population est.	Change	Change
Apache Junction	39,009	42,110	35,840	3,169	8.84%
Avondale	90,755	85,108	76,238	14,517	19.04%
Buckeye	101,987	87,480	50,876	51,111	100.46%
Carefree	3,708	3,794	3,363	345	10.26%
Cave Creek	5,021	5,940	5,015	6	0.12%
Chandler	280,189	272,011	236,123	44,066	18.66%
El Mirage	36,101	34,857	31,797	4,304	13.54%
Fountain Hills	23,906	24,812	22,489	1,417	6.30%
Gila Bend	1,893	2,025	1,922	-29	-1.51%
Gilbert	273,796	263,461	208,453	65,343	31.35%
Glendale	250,585	244,733	226,721	23,864	10.53%
Goodyear	101,662	92,865	65,275	36,387	55.74%
Guadalupe	5,329	6,400	5,523	-194	-3.51%
Litchfield Park	6,957	6,942	5,476	1,481	27.05%
Mesa	510,792	504,410	439,041	71,751	16.34%
Paradise Valley	12,707	14,258	12,820	-113	-0.88%
Peoria	195,585	184,469	154,058	41,527	26.96%
Phoenix	1,630,195	1,634,061	1,449,242	180,953	12.49%
Queen Creek	56,321	61,727	25,998	30,323	116.64%
Scottsdale	243,528	250,903	217,365	26,163	12.04%
Surprise	149,710	141,486	117,688	32,022	27.21%
Tempe	181,548	192,008	161,974	19,574	12.08%
Tolleson	7,309	7,227	6,573	736	11.20%
Wickenburg	6,687	7,039	6,353	334	5.26%
Youngtown	7,060	6,615	6,154	906	14.72%
Unincorporated	323,689	315,764	284,016	39,673	13.97%
<b>METRO PHOENIX</b>	<b>4,546,029</b>	<b>4,492,505</b>	<b>3,856,393</b>	<b>689,636</b>	<b>17.88%</b>

Arizona Office of Economic Opportunity

### **ECONOMIC FORCES:**

The Metropolitan Phoenix Area (Maricopa County) represents 66% of the Arizona Labor Market. The Maricopa County MSA had a civilian labor force of 2,385.3 at the end of August 2022. The current unemployment rate in Arizona is 3.2% (August 2022). The unemployment rate is near pre-pandemic levels.

Maricopa County - Monthly Summary	Jun 2022	Jul 2022	Aug 2022
<i>Persons (000s, seasonally adjusted), Local Area Unemployment Statistics, BLS &amp; EBRC</i>			
Civilian Labor Force	2,354.1	2,357.5	2,385.3
% Chg from Year Ago	-1.8% ↓	-1.5% ↓	-0.3% ↓
Employment	2,313.8	2,306.2	2,303.2
% Chg from Year Ago	1.6%	1.1%	1.1%
Unemployment	63.2	65.1	76.5
% Chg from Year Ago	-50.5% ↓	-43.7% ↓	-27.6% ↓
Unemployment Rate	2.7	2.8	3.2

It is important to be aware that as of early March 2020, the World Health Organization declared the COVID-19 respiratory illness a pandemic. It is currently not yet clear to what extent, if any, market conditions may be impacted. There are complicating factors including volatility in the stock market and changes in mortgage interest rates. These factors have not yet resulted in measurable market condition changes for less liquid assets such as real estate.

The following is based on an article published by George W. Hammond, Ph.D., director and research professor, EBRC.

*As cross currents buffet the Arizona economy, it looks different depending on the lens used to view it. The labor market remains very tight, generating strong job gains, low unemployment rates, rapid wage increases, and a mountain of open jobs. At the same time, retail sales has begun to slow, inflation far exceeds income growth, housing affordability has plunged, and interest rates are rising.*

*The baseline forecast for Arizona calls for slowing growth in 2022 and 2023, as fiscal policy contracts and monetary policy hits the brakes. While the baseline forecast calls for continued state and national growth in the near term, the pessimistic scenario, which includes a national recession, is almost as likely.*

*In the long run, Arizona is projected to far outpace national growth, with the Phoenix MSA leading the way. Tucson grows as well, but at a slower pace. Downside risks appear elevated in the long run as well, particularly as drought raises concerns about the long-term availability and cost of water.*

#### Arizona Recent Developments

*While U.S. and Phoenix MSA consumer price inflation has accelerated significantly since early 2021, Phoenix prices are now rising at a much faster pace than nationally. In June 2022, the Phoenix all-items CPIU rose by 12.3% over the year, compared to 9.1% nationally. The pace of inflation in commodities (gas, food, apparel, home furnishings, etc.) in Phoenix has been similar to the national rate, but services inflation (housing, medical care, recreation, etc.) has been much faster.*

The main driving force for faster inflation in Phoenix, relative to the nation, is shelter. The shelter CPIU includes rent, owners-equivalent rent, shelter away from home (hotels, etc), and tenant and household insurance. In June the Phoenix shelter CPIU rose over the year at roughly triple the national rate (16.7% versus 5.6%, **Exhibit 1**).

Keep in mind that changes in the shelter CPIU tend to lag market prices because it takes time for existing leases to catch up to changes in market rates.

**Exhibit 1: Phoenix Shelter Inflation Far Exceeds the National Pace, Phoenix and U.S. Shelter CPIU, Over-the-Year Growth, Percent)**



Arizona added 22,900 jobs over the month in July, up from a revised 11,600 the prior month. The initial June estimate suggested the state added 15,000 jobs over the month. Growth in July was nearly quadruple the average monthly job gain during the five years before the pandemic began (6,300/month).

The state's seasonally-adjusted unemployment rate was stable at 3.3%, just below the national rate of 3.5%.

Arizona jobs are now 87,000 higher than their pre-pandemic level. That growth was driven by trade, transportation and utilities, financial activities, manufacturing, education and health services, construction, professional and business services, and information. Jobs in other services and natural resources and mining were roughly back to pre-pandemic levels, while leisure and hospitality and government remained well below their February 2020 level.

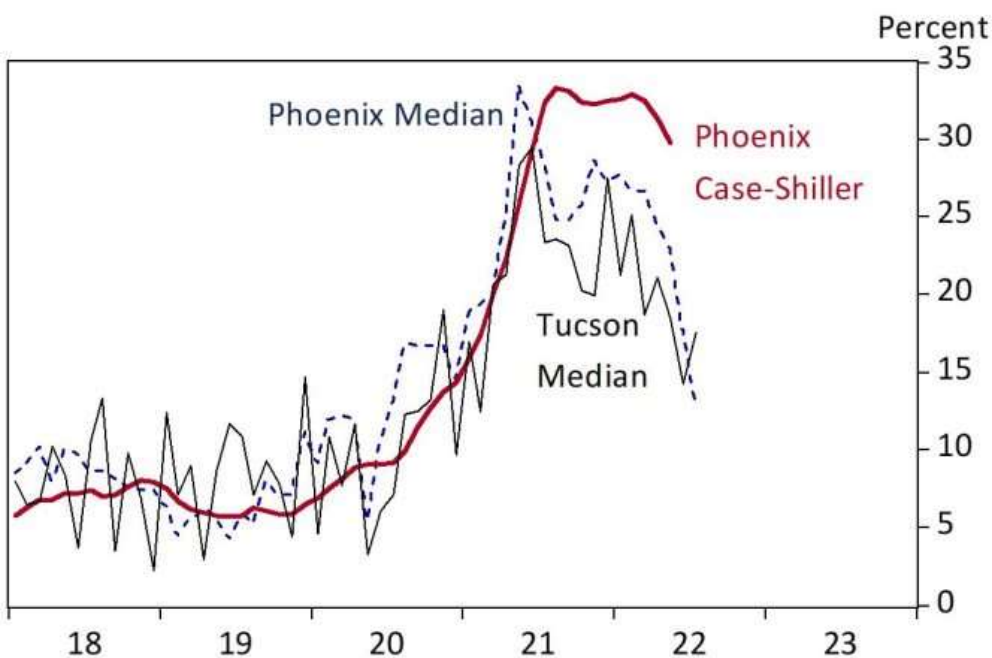
While leisure and hospitality jobs remained below their February 2020 level for the state, the same is not true in Phoenix or Tucson. Leisure and hospitality jobs in Phoenix were 1,600 above their pre-pandemic level in July and jobs in Tucson were 1,000 jobs above their February 2020 level.

Job recovery rates remained uneven across Arizona's metropolitan areas in July. There were three metropolitan areas that have yet to recover all of the jobs lost during the first two months of the pandemic. Through July, Sierra Vista-Douglas recovered 86.4% of the jobs lost during the February to April 2020 period, Flagstaff recovered 96.9%, and Tucson recovered 98.2%. In July, jobs in Tucson were just 800 below their pre-pandemic level. Tucson is on track to roughly follow the U.S. recovery timing (the U.S. reached 100% recovery in July, according to the preliminary data).

As inflation has accelerated, it has reduced the purchasing power of personal income. After adjustment for inflation Arizona's personal income has been drifting down recently. Even so, in the first quarter of 2022 it was still above its pre-pandemic level (first quarter of 2020) by 2.8%. Net earnings from work was up by 4.3% and transfers were up 8.8%. Real income from dividends, interest, and rent was down 8.1% from its pre-pandemic level.

Arizona home price increases began to soften in June with the median price in Phoenix dropping by 2.0% over the month to \$500,000 (nonseasonally adjusted) and then again in July to \$485,000. The median home price in Tucson was flat in July at \$370,000. Over the year, median sales prices in July were up 12.8% in Phoenix and 17.5% in Tucson (**Exhibit 2**). For Phoenix, that was the slowest growth since June 2020. The Phoenix MSA Case-Shiller index rose 29.7% over the year in May, the most recent month available. That was the slowest growth since June 2021.

**Exhibit 2: Phoenix and Tucson Home Price Growth Softens, Over-the-Year Growth Rates, Percent**



*Housing affordability continued its downward plunge in the second quarter of 2022. Nationally, 42.8% of homes sold were affordable to a family making the median income, down from 56.9% in the first quarter and down from 63.2% in the fourth quarter of 2021.*

*The drop in housing affordability in Phoenix has been even more dramatic, with the second quarter 2022 reading at 22.3%. That was down from 43.9% in the first quarter and down from 64.9% in the last quarter of 2019. It was also the lowest reading since 2000. Even so, housing affordability in Phoenix was better in the second quarter than Los Angeles (3.6%), San Francisco (7.5%), and San Jose (11.1%).*

*Housing affordability was much better in Tucson in the second quarter of 2022, at 40.6%. Even so, it was down from 66.0% in the first quarter, down from 71.2% in the last quarter of 2019, and below the national average.*

*Arizona housing permit activity was strong through the first seven months of 2022, driven by multi-family activity. Total permits through July were up 9.0% from the same period last year. Single-family permits were down 3.5% while multi-family activity was up 45.6%.*

*Through July 2022, permits were up 10.0% over the year in Phoenix, with single-family permits down 3.3% and multi-family permits up 44.4%. In Tucson, total permits were up 11.9%, driven by a 117.2% increase in multi-family activity. Single-family permits were down 8.9%.*

### Arizona Short-Run Outlook

*The outlook for Arizona, Phoenix, and Tucson depends in part on national and global economic events. The forecasts presented here are based on U.S. projections released by IHS Markit in July 2022. The baseline forecast (summarized here) is still assigned a 50% probability. The pessimistic scenario is now assigned 45% and the optimistic scenario is assigned the remaining 5%.*

*IHS Markit calls for real GDP growth in 2022 to hit 1.4%. Growth in 2023 is also slow at 1.3%. This reflects the end of pandemic-related fiscal support and continued tightening by the Federal Reserve.*

*The forecast calls for inflation to spike in 2022 to 7.8%. Inflation decelerates rapidly to 3.3% in 2023, as commodity and oil prices fall, supply-chain issues ease, and the unemployment rate rises. Nonfarm payroll jobs nationally dropped by 5.8% in 2020 but rebounded in 2021 with growth of 2.8%. The forecast calls for jobs to rise by 3.9% in 2022 and 0.9% in 2023.*

*The unemployment rate peaked at 8.1% for the year in 2020 but fell to 5.4% in 2021. It is forecast to decline to 3.7% in 2022 before rebounding to 4.3% in 2023 and 4.9% in 2024 as output growth slows and immigration and labor force participation rise.*

*Continued growth in the U.S. economy, under baseline assumptions, sets the stage for continued growth in Arizona, Phoenix, and Tucson. As **Exhibit 3** shows, the forecast calls for Arizona job growth to decelerate in 2022 and 2023, before a modestly accelerating in 2024. This pattern reflects a complicated mix of factors, including the shift to more normal gains as the pandemic eases and slowing national growth in 2023. The unemployment rate drifts up as job gains slow.*

*Personal income growth, before adjustment for inflation, slows significantly in 2022, reflecting the end of federal income support related to the pandemic. Growth in retail (plus remote) sales follows a similar pattern, but with a lag. Slowing sales of goods also reflects a renormalization of consumer spending, away from goods and toward travel and tourism related services.*

*Population gains remain solid in the near term but begin to slow in 2024 as demographic forces begin to take hold. Population gains, even in the short run, are driven primarily by net migration, as natural increase decelerates. Housing permits drop in the near term to a level more consistent with population gains.*

### **Exhibit 3: Arizona Short-Run Outlook**

	Actual 2021	Forecast		
		2022	2023	2024
<b>Growth Rate</b>				
Nonfarm Jobs	3.7	3.3	1.9	2.2
Personal Income	7.5	2.7	5.7	6.4
Retail Plus Remote Sales	19.9	6.9	2.1	4.4
Population	1.5	1.5	1.5	1.4
<b>Level</b>				
Unempl. Rate	4.9	3.4	4.4	4.9
Housing Permits	65,334	65,291	59,288	48,116

#### Arizona Long-Run Outlook

*The long-run forecast calls for Arizona to continue to outpace national growth, although those gains are expected to come at a much slower pace than during the prior 30-year period. Arizona is projected to add 1.4 million jobs from 2022 to 2052, which translates into an annual growth rate of 1.3% per year. That is faster than the national pace of 0.4% per year but much slower than the average annual growth rate of 2.3% per year during the prior 30 years.*

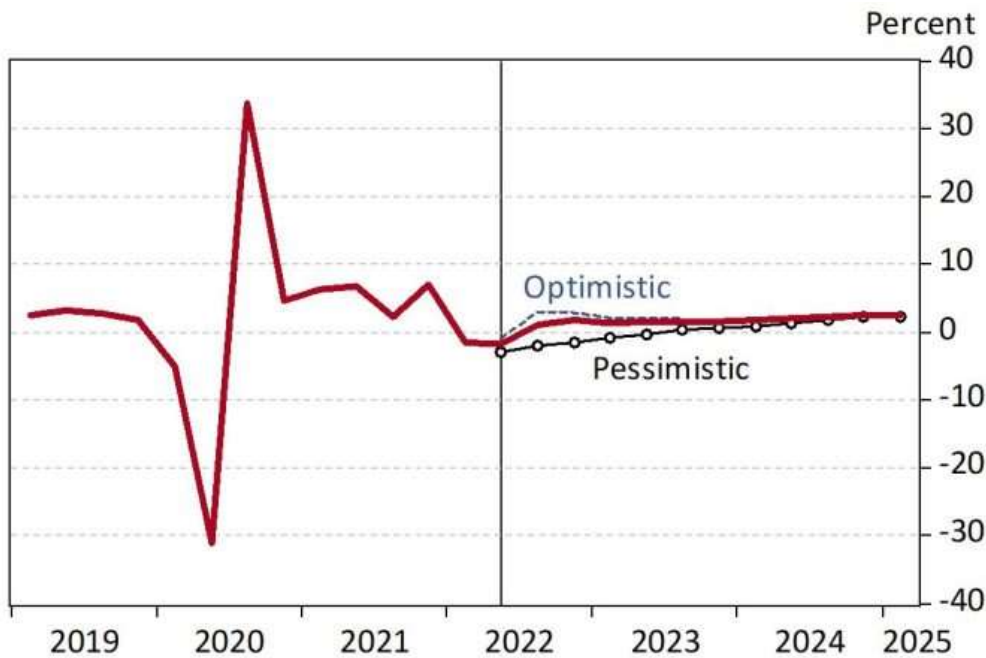
*The forecast calls for the Phoenix MSA to continue to drive state growth during the next 30 years, although Tucson contributes as well. While growth slows, Phoenix and Tucson population growth rates are forecast to far outpace the U.S.*

#### Risks to the Outlook

*Risks to the short-run baseline forecast are elevated. The baseline forecast is assigned a 50% probability. The pessimistic alternative is assigned 45% with the optimistic scenario assigned the remaining 5%.*

The U.S. pessimistic scenario assumes that the Russia-Ukraine conflict results in higher energy prices and lower global growth than the baseline. It also assumes that supply-chain issues continue for longer. This scenario includes a recession, with six consecutive quarters of negative real GDP growth (**Exhibit 4**). Even so, the pessimistic scenario does not include a downturn in real GDP as severe as the Great Recession, but it is projected to be similar in depth to the downturns in the early 1980s.

**Exhibit 4: U.S. Real GDP Growth Under Alternative Scenarios, IHS Markit July 2022**



The pessimistic scenario results in a significant slowdown in state growth with modest job losses in early 2023.

Risks to the long-run forecast revolve around the labor force, productivity, investment in private and public physical capital, and natural resources.

During the next 30 years, Arizona's population and labor force growth will increasingly depend on migration to the state. That elevates the importance of factors that potential migrants consider when moving across states, like the cost of living, as well as tax and regulatory policies.

Productivity is significantly influenced by the human capital present in states and regions. Educational attainment is one key element of human capital. During the past 30 years, states and metropolitan areas with higher concentrations of highly educated residents have generated stronger job, population, and income growth than areas with lower concentrations. Given existing trends toward automation, this pattern will likely continue and may even intensify. Keep in mind that the share of Arizona's working-age population with a bachelor's degree or more is well below the national average.



*Continued private and public investment in physical capital will matter as well, including commercial and industrial facilities and machinery as well as highways, roads, water, and sewer infrastructure, air transportation infrastructure, border ports, and telecommunications (broadband, etc.).*

*Natural resource availability will also matter, particularly for water. With impending large cuts to the state's Colorado River allocation, drought, and climate change, there is growing pressure to change current water use practices. Restricted water availability and/or rising water costs would raise the cost of living and doing business in the state, with possible negative impacts on growth.*

Shown next is a chart of the top 10 Phoenix Metropolitan major employers.

<b>Top Ten Employers of Arizona</b>	
Banner Health	41,435
Amazon	40,000
State of Arizona	39,172
Walmart, Inc.	38,309
Arizona State University	34,421
Fry's Food Stores	21,012
University of Arizona	19,823
Dignity Health Arizona	16,525
City of Phoenix	15,645
Wells Fargo & Co.	15,500

Phoenix Business Journal July 2022

### **GOVERNMENTAL FORCES:**

The State of Arizona has placed emphasis on economic development within the State through the Commerce Department. The regional government, through joint efforts of the communities within Maricopa County, has also taken a strong favorable stance toward continued economic development.

Phoenix and its surrounding city governments are considered progressive in their thinking, showing a commitment to strong neighborhood design concepts by improving the educational system, creating more parks and recreational facilities, building new freeway systems and developing major shopping areas for the individual neighborhoods that make up the Metro area. The entire government structure is described as well-run and dynamic.

### **TRANSPORTATION:**

The State, as well as Phoenix, has an excellent transportation system because of Metropolitan Phoenix's primary ideal central location, the area is a natural regional transportation axis for the rest of the southwest. Linkages within the Metropolitan area are also considered good. Accessibility to other locations in this area is very important as people have the option of living in

one city and working in another. The Arizona Department of Transportation has several major freeways in place and/or planned for the Metropolitan Phoenix area. (The following information is provided by the Arizona Department of Transportation).

The *Pima Freeway* system traverses east and west along the Beardsley Road alignment from I-17 (Black Canyon Freeway) to the Pima Road in North Scottsdale.

The *Agua Fria Freeway* (extension) runs east and west from the Black Canyon Freeway (I-17) westward to 83rd Avenue and north and south from Beardsley Road to the Papago Freeway (I-10). The *Piestewa Parkway* (extension) runs southward from the Pima Freeway at 32nd Street and feeds traffic from the northern portion of the Valley to Central Phoenix.

The *Superstition Freeway* is a major freeway that serves the East Valley, especially the cities of Mesa, Tempe, Chandler, Gilbert and Apache Junction. This freeway system runs east and west from the Hohokam Expressway through the entire length of the eastern portion of Metro Phoenix area.

The *SR 202* is a partial beltway looping around the eastern areas of the Phoenix metropolitan area in central Arizona. It connects the eastern end of the city of Phoenix, in addition to the towns of Tempe, Mesa, Chandler and Gilbert, and is a vital route in the metropolitan area freeway system. Loop 202 currently has two designated sections along its route; the *Red Mountain Freeway* and the *Santan Freeway*. A third section has recently been completed and is known as the *South Mountain Freeway*, which bypasses much of Central Phoenix and runs from the eastern Interstate 10 (I-10) near 59<sup>th</sup> Avenue to the western portion of Interstate 10 at Pecos Road.

The *Gateway Freeway* (SR 24) was completed and opened in May of 2014. The initial phase is a one-mile stretch beginning at Loop 202 (Santan Freeway) near the Phoenix-Mesa Gateway Airport and ending at Ellsworth Road. Additional phases of this project, east of Ellsworth Road, are suspended until the North-South Corridor Study in Pinal County advances.

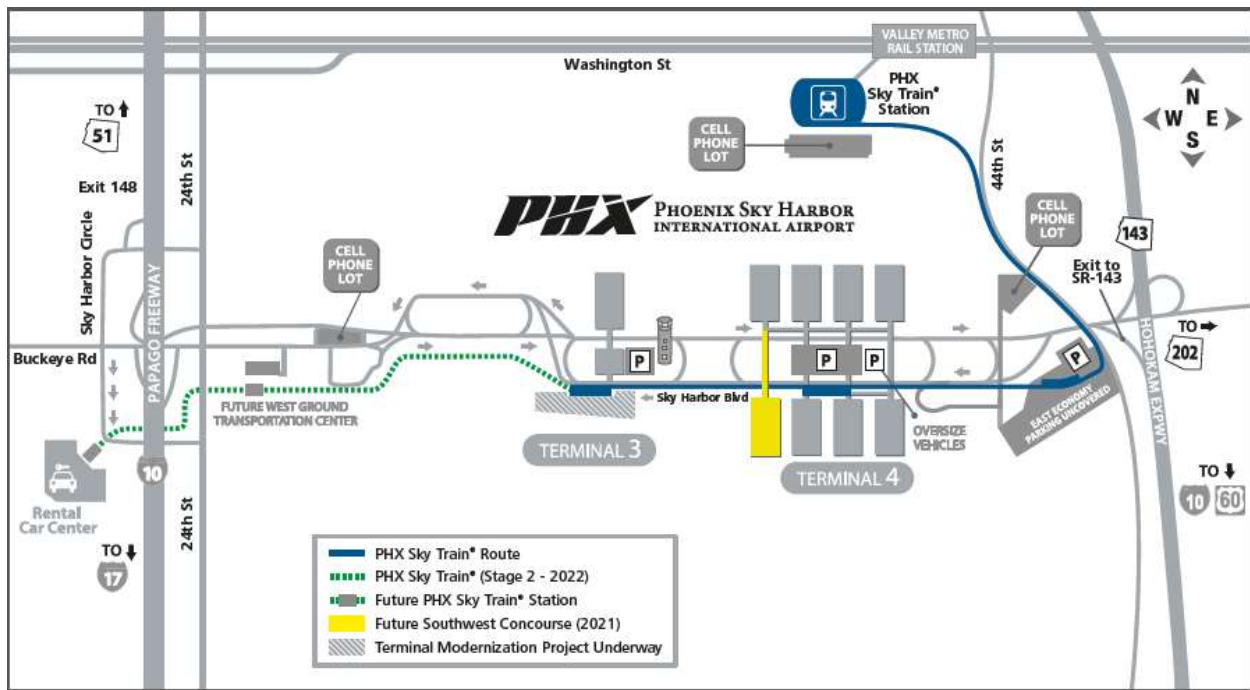
The *Price Freeway* (Loop 101) is currently completed from the Superstition Freeway north to Pima Freeway (Loop 101). In addition, recently completed is the portion which transverses from the Superstition Freeway southward to the Santan Freeway (Loop 202).

The *Bob Stump Memorial Parkway* (Loop 303) is the outer loop of the west side of Phoenix. The road begins at Interstate 10 in the far west valley then loops north to US- 60 (Grand Ave.) at Surprise, then east to Interstate 17. It's a six-lane highway between Interstate 10 and just south of Happy Valley Road and as a four lane freeway from Happy Valley Road to Interstate 17.

The Grand Avenue (US 60) freeway construction opened several new intersections from 43<sup>rd</sup> Avenue to the Loop 101.

Interstates 10 and 17, U.S. Highways 60, 70, 80 and 89 together with State Highways 51, 87 and 93, go through and connect in the City of Phoenix to all areas in the west and mid-western United States. In addition, construction of 249 miles of freeway has been planned for Metro Phoenix. This will further enhance transportation in the communities within the Valley area.





## Light Rail

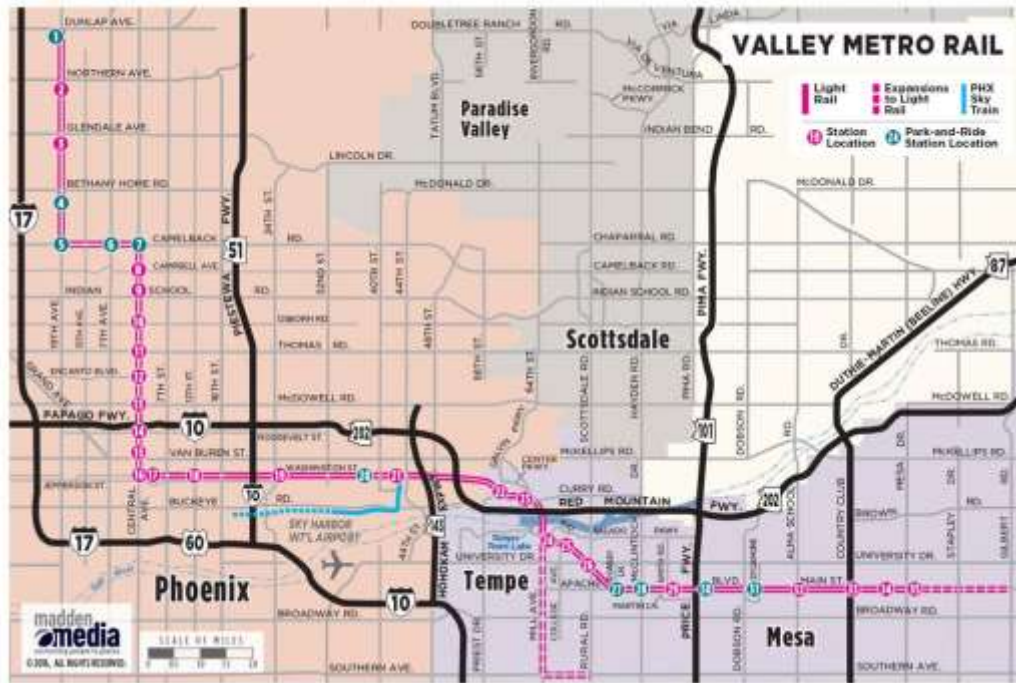
The Valley's light rail system offers riders a speedy 26-mile ride linking Phoenix to the neighboring communities of Tempe and Mesa, and includes stops at attractions such as Phoenix Art Museum, the Heard Museum, Chase Fields, Talking Stick Resort Arena and Tempe's Mill Avenue District. There are 28 stations along the line and they are adorned with 6.2 million worth of public art. The art work at each station reflects the character of the community where it is located. Station platforms can accommodate the boarding of 600 passengers onto a three-car train within 30 seconds between the cities of Phoenix, Tempe, Mesa and Glendale and is an integral part of a comprehensive Valley-wide transit system.

The South Central Extension/Downtown Hub will connect with the current light rail system in downtown Phoenix and operate south to Baseline Road. The project also includes a hub in downtown Phoenix along with new stations as well as public art.

Currently, more than 50,000 riders rely on light rail each day and has shown to generate economic prosperity for historically underserved communities in metro Phoenix.

Light rail makes the unique offerings of South Phoenix more accessible to others, attracting new customers, businesses and jobs to the area. In 2016, the Phoenix City Council approved advancing the opening date of the extension from 2034 to 2023. The advancement is funded through [Transportation 2050](#), a 35-year, multi-modal transportation plan approved by Phoenix voters, and is expected to open for operations in 2024.

## Light Rail



METRO opened for passenger operation in December 2008.

Freight rail transportation from transcontinental origins from and to the Metro area is provided by the Union Pacific Railway (Southern Arizona), Arizona Eastern (Claypool-Globe), Arizona & California (Parker, Arizona –westward), and the BNSF Railway Company (Northern Arizona). Greyhound and seven other charter bus services serve the city as well. Public transportation is provided by the Phoenix Transit System, and Dial-A-Ride. Other transportation is provided by interstate and intrastate truck lines, household good carriers, United Parcel Service, Purolator Courier Service and Air Couriers International.

In recent years the communities within the Metropolitan area have become more aware of the environment as has the nation as a whole. Enactment of environmental legislation with respect to new development is seriously being taken into consideration by creating new environmental zoning codes to protect the outlying mountainous areas of the Valley.

## RESIDENTIAL MARKET:

Active Listings	This Month			Year to Date		
	2022	2021	% Chg	2022	2021	% Chg
	0-29,999	22	28	-21.4	154	266
30,000-39,999	19	16	18.8	129	137	-5.8
40,000-49,999	30	23	30.4	147	166	-11.4
50,000-59,999	28	21	33.3	147	149	-1.3
60,000-69,999	33	20	65.0	200	169	18.3
70,000-79,999	33	26	26.9	191	212	-9.9
80,000-89,999	24	24	0.0	192	211	-9.0
90,000-99,999	33	20	65.0	206	229	-10.0
100,000-119,999	52	41	26.8	274	475	-42.3
120,000-139,999	69	80	-13.7	413	833	-50.4
140,000-159,999	93	92	1.1	575	1079	-46.7
160,000-179,999	111	102	8.8	747	1495	-50.0
180,000-199,999	164	153	7.2	980	2000	-51.0
200,000-249,999	527	411	28.2	3092	6891	-55.1
250,000-299,999	946	633	49.4	5573	11575	-51.9
300,000-399,999	4640	2168	114.0	21517	28064	-23.3
400,000-499,999	5540	1975	180.5	25602	18313	39.8
500,000-549,999	1654	563	193.8	7691	4807	60.0
550,000-749,999	4012	1651	143.0	18884	13113	44.0
750,000-999,999	2129	836	154.7	9178	6066	51.3
1,000,000-1,249,999	624	244	155.7	2616	1772	47.6
1,250,000-1,499,999	515	249	106.8	2055	1535	33.9
1,500,000-1,999,999	468	220	112.7	1878	1546	21.5
2,000,000-2,999,999	359	211	70.1	1380	1223	12.8
3,000,000+	394	307	28.3	1347	1103	22.1
Totals	22519	10114	122.7	105168	103429	1.7

Sold Listings	This Month			Year to Date		
	2022	2021	% Chg	2022	2021	% Chg
	0-29,999	9	17	-47.1	93	181
30,000-39,999	5	7	-28.6	87	103	-15.5
40,000-49,999	9	10	-10.0	91	130	-30.0
50,000-59,999	8	11	-27.3	100	118	-15.3
60,000-69,999	9	7	28.6	134	122	9.8
70,000-79,999	16	15	6.7	141	160	-11.9
80,000-89,999	11	17	-35.3	133	137	-2.9
90,000-99,999	6	13	-53.8	109	159	-31.4
100,000-119,999	25	42	-40.5	225	438	-48.6
120,000-139,999	33	57	-42.1	300	690	-56.5
140,000-159,999	38	74	-48.6	420	890	-52.8
160,000-179,999	56	95	-41.1	557	1221	-54.4
180,000-199,999	70	118	-40.7	619	1553	-60.1
200,000-249,999	204	499	-59.1	2350	6081	-61.4
250,000-299,999	361	776	-53.5	3893	9500	-59.0
300,000-399,999	1409	2618	-46.2	14308	23632	-39.5
400,000-499,999	1386	2183	-36.5	17747	15074	17.7
500,000-549,999	435	591	-26.4	5675	4237	33.9
550,000-749,999	991	1281	-22.6	12137	10107	20.1
750,000-999,999	412	491	-16.1	5541	4242	30.6
1,000,000-1,249,999	129	161	-19.9	1683	1409	19.4
1,250,000-1,499,999	83	110	-24.5	1102	1028	7.2
1,500,000-1,999,999	78	86	-9.3	994	1006	-1.2
2,000,000-2,999,999	40	70	-42.9	717	733	-2.2
3,000,000+	24	34	-29.4	564	499	13.0
Totals	5847	9383	-37.7	69720	83450	-16.5

The following housing statistics are provided by ARMLS as of September 2022.

Local Multiple Listing Service (ARMLS) had 105,168 active listings as of September 2022 across the Greater Phoenix area including listings under contract and seeking backup offers. This represents an increase of 1.7% compared to the previous year.

Active single-family home listings from \$180,000 to \$199,999 were down 51.0% compared to the previous year due to poor supply. The mid-range home listings from \$300,000 to \$399,999 were down 23.3% compared to the previous year.

ARMLS had 696,720 homes sold as of September 2022 across the Greater Phoenix area. This represents a decrease of 16.5% from the previous year.

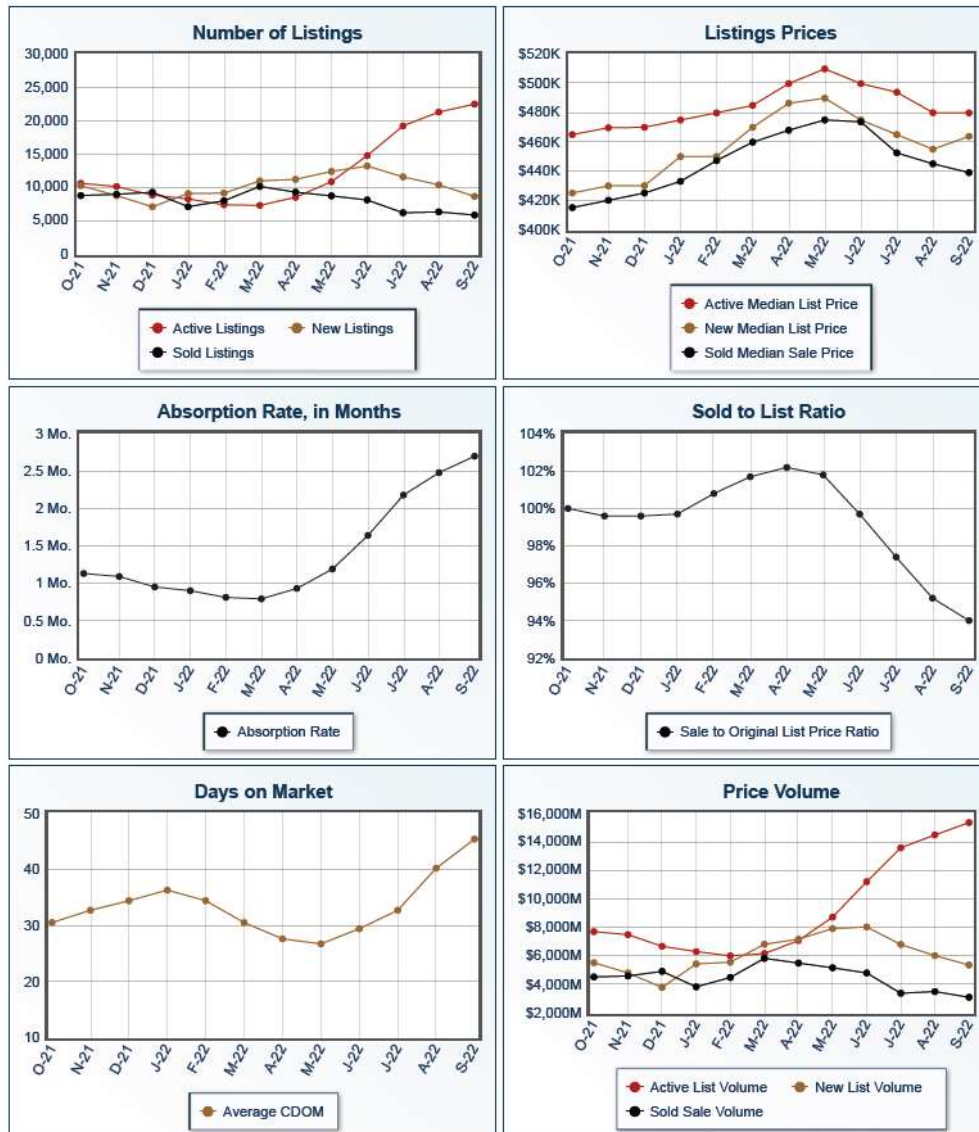
Sold single-family homes from \$180,000 to \$199,999 were down 60.1% compared to the previous year due to poor supply. The mid-range home sales from \$400,000 to \$499,999 had an increase of 17.7% compared to the previous year.

The median single-family home sale price for the Phoenix Metropolitan Area was \$455,000 year-to-date and increase of 18.84% compared to this time last year. The average sale price was \$568,173, an increase of 16.92% compared to the previous year. The average days on market was 33 days down 6.45% from the previous year.

Following are the summary statistics for single family residential sales activity within Maricopa County.

Summary Statistics	Sep-22	Sep-21	% Chg	2022 YTD	2021 YTD	% Chg
Absorption Rate	2.7	1.07	152.34	1.51	0.91	65.93
Average List Price	\$681,692	\$725,179	-6.00	\$624,460	\$535,646	16.58
Median List Price	\$479,900	\$455,000	5.47	\$469,900	\$395,000	18.96
Average Sale Price	\$530,796	\$488,888	8.57	\$568,173	\$485,951	16.92
Median Sale Price	\$439,000	\$410,000	7.07	\$455,000	\$382,857	18.84
Average CDOM	45	28	60.71	33	31	6.45
Median CDOM	40	0	N/A	24	21	14.29

Following are multiple charts relating to single family residential activity in the Phoenix Metropolitan Area.



## MULTI-FAMILY MARKET:

The existing multi-family inventory for Metropolitan Phoenix consists of 357,377 apartment units. The vacancy rate increased to 8.4% as of the 3<sup>rd</sup> Quarter 2022. The Metropolitan Phoenix Multi-Family Market had a year-to-date (YTD) absorption of 2,588 units. The average rental rate ranged from \$1,085 per month (1 & 2 Star Apartments) to \$1,836 per month (4 & 5 Star Apartments). The overall average rental rate was \$1,576 per month.

Shown next is a chart of the key indicators for the Metropolitan Phoenix Multi-Family Market as of the 3<sup>rd</sup> Quarter 2022 as compiled by CoStar Realty Information, Inc.

### KEY INDICATORS

Current Quarter	Units	Vacancy Rate	Asking Rent	Effective Rent	Absorption Units	Delivered Units	Under Constr Units
4 & 5 Star	163,575	9.9%	\$1,836	\$1,816	695	1,100	21,191
3 Star	134,034	7.3%	\$1,426	\$1,415	291	241	6,301
1 & 2 Star	59,768	6.5%	\$1,085	\$1,078	(38)	0	1,230
<b>Market</b>	<b>357,377</b>	<b>8.4%</b>	<b>\$1,576</b>	<b>\$1,561</b>	<b>948</b>	<b>1,341</b>	<b>28,722</b>

Annual Trends	12 Month	Historical Average	Forecast Average	Peak	When	Trough	When
Vacancy Change (YOY)	3.1%	8.6%	10.7%	12.8%	2009 Q4	5.0%	2021 Q3
Absorption Units	2,588	5,113	5,593	16,201	2021 Q2	(3,964)	2007 Q4
Delivered Units	14,452	5,761	8,525	13,860	2022 Q3	250	2011 Q3
Demolished Units	0	183	200	699	2016 Q2	0	2022 Q3
Asking Rent Growth (YOY)	1.6%	3.1%	1.3%	21.3%	2021 Q3	-7.2%	2009 Q4
Effective Rent Growth (YOY)	1.1%	3.1%	1.2%	22.2%	2021 Q3	-7.1%	2009 Q4
Sales Volume	\$16.8B	\$3.9B	N/A	\$18.5B	2022 Q2	\$340.5M	2009 Q1

The Metropolitan Phoenix Multi-Family Market vacancy rates have increased to 8.4% as the market received a record level of new supply. Robust demand for affordable housing, low single-family housing inventory, and fiscal stimulus have contributed to the impressive performance in this market.

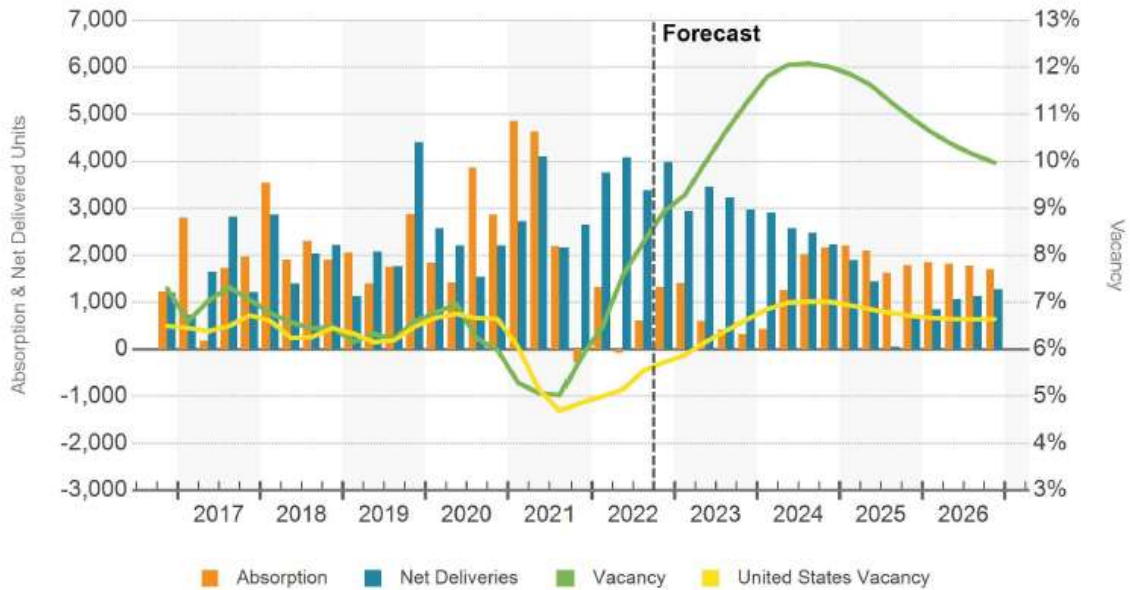
Vacancies are higher in supply-heavy urban areas of Phoenix, including Downtown Phoenix, Scottsdale, and Tempe. During the onset of the Covid-19 pandemic, there was an urban exodus and renters moved to the more affordable suburbs. As a result, areas in the West and East Valleys were outperforming submarkets such as Downtown Phoenix, Camelback, and Old Town Scottsdale.

The outlook for the Metropolitan Phoenix Multi-Family Market is favorable. Over the past five years, a healthy balance between supply and demand has kept market-wide vacancies in the mid-6% to low-8 range. Demand likely won't subside in the near term as evidenced by search activity for Phoenix rentals on Apartments.com. Search activity suggest that demand remains strong. Additionally, low single-family home inventory and rapid price appreciation have forced more people into the renter pool, which has kept apartment vacancies low.



Shown next are charts representing the absorption, net deliveries and vacancy for the Metropolitan Phoenix Multi-Family Market as compiled by CoStar Realty Information, Inc.

**ABSORPTION, NET DELIVERIES & VACANCY**



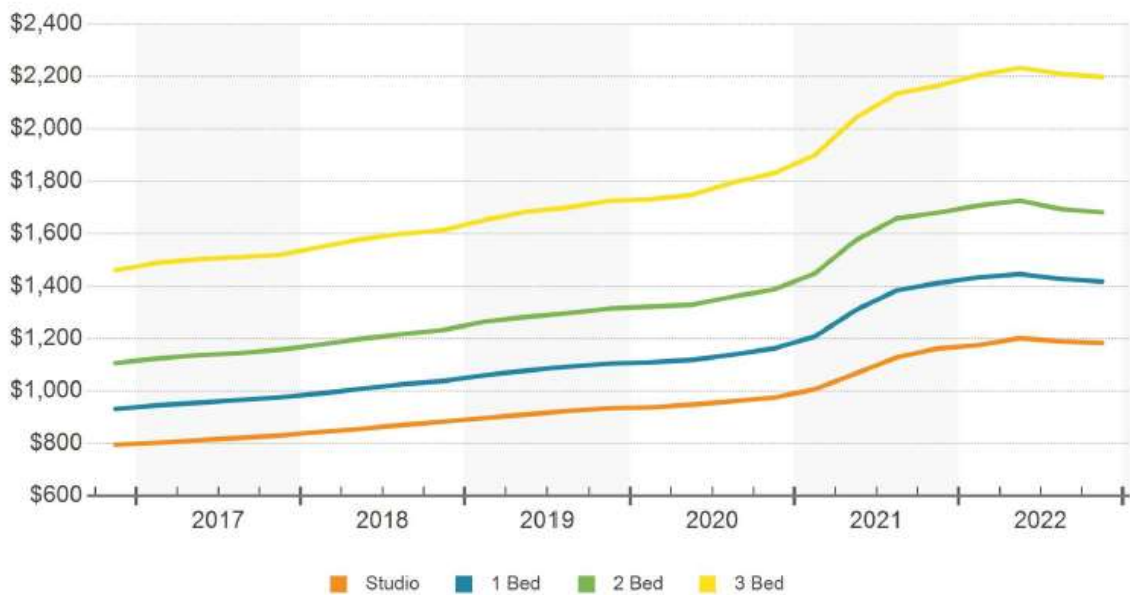
**VACANCY BY BEDROOM**



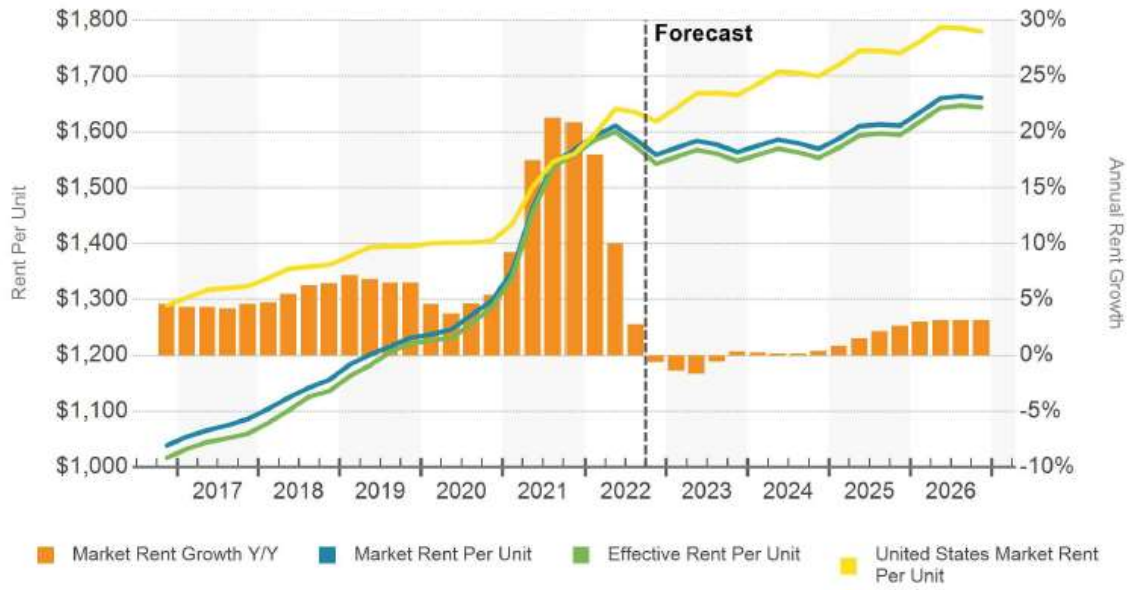
Rents in the Metropolitan Phoenix Multi-Family Market continue to rise as Phoenix remains one of the top markets in the country for rent growth. Rent gains have consistently outperformed the U.S. average over the past five years, but Phoenix maintains its place as an affordable market in the Western region. Phoenix rents are below the national average and account for about 25% of the metro’s median household income. That rent-to-income ratio is much more favorable than Los Angeles, San Francisco, San Jose, and Seattle — all of which are markets that recorded negative rent growth in 2020.

Shown next are charts representing the market rents within the Metropolitan Phoenix Multi-Family Market as of the 3<sup>rd</sup> Quarter 2022 as compiled by CoStar Realty Information, Inc.

**MARKET RENT PER UNIT BY BEDROOM**



**MARKET RENT PER UNIT & RENT GROWTH**



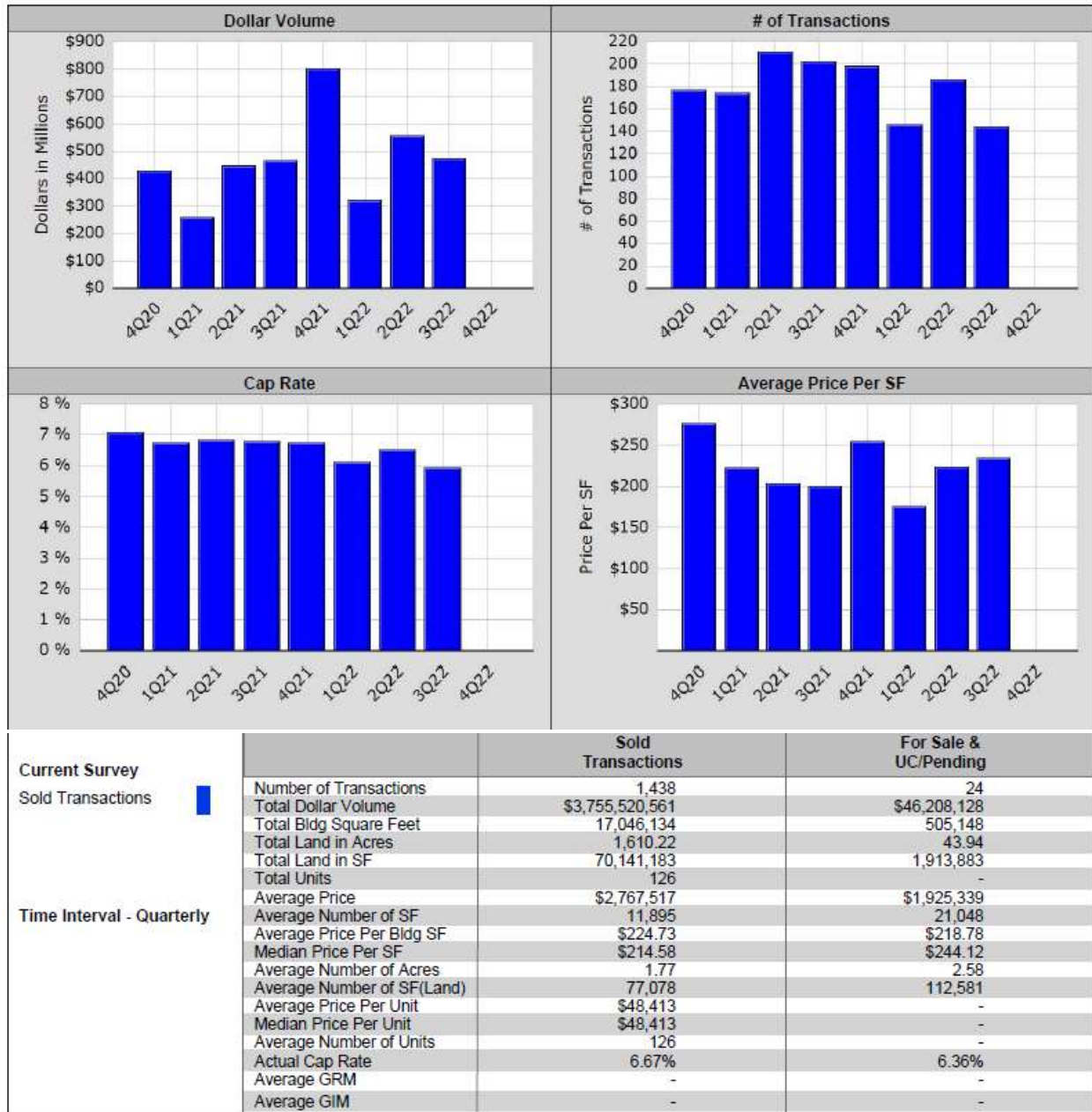
## OFFICE MARKET:

The existing office inventory for Metropolitan Phoenix consists of over 191 million square feet. The East Valley market area encompasses the largest submarket, consisting of just over 49 million square feet. The Metropolitan Phoenix Office Market showed a vacancy rate in the 3<sup>rd</sup> Quarter 2022 of 17.0%. The Phoenix Office Market had a year-to-date (YTD) absorption of (-805,398) square feet. The average rental rate ranged from \$25.47 per square foot (Paradise Valley) to \$29.18 per square foot (Scottsdale). The overall average rental rate was \$27.40 per square foot on a full service basis.

Shown next is a chart of the Office Market as of the 3<sup>rd</sup> Quarter 2022 as compiled by CoStar Realty Information, Inc.

Existing Inventory		Vacancy		12 Mo Net Absorp SF	12 Mo Delivered SF	Under Const SF	Market Rent/SF
Market	Inventory SF	Vac %					
Airport Area	5,561,650	20.6%	-371,653	0	0	\$26.82	
South Tempe/Ahwatukee	7,781,299	20.7%	-529,141	0	0	\$27.16	
<b>Airport Area</b>	<b>13,342,949</b>	<b>20.7%</b>	<b>(900,794)</b>	<b>0</b>	<b>0</b>	<b>\$26.99</b>	
Midtown	13,123,977	20.3%	-112,348	0	0	\$25.93	
Downtown	11,389,463	17.6%	401,524	0	0	\$31.75	
<b>Central Corridor</b>	<b>24,513,440</b>	<b>19.0%</b>	<b>289,176</b>	<b>0</b>	<b>0</b>	<b>\$28.84</b>	
44th Street Corridor	3,974,896	16.1%	-101,932	0	0	\$29.26	
Camelback Corridor	9,108,045	17.5%	365,878	181,494	70,000	\$34.68	
Midtown/Central Phoenix	5,989,240	7.1%	-73,390	0	90,000	\$22.58	
<b>East Phoenix</b>	<b>19,072,181</b>	<b>40.7%</b>	<b>190,556</b>	<b>181,494</b>	<b>160,000</b>	<b>\$28.84</b>	
Chandler	12,853,117	15.7%	-33,393	125,809	225,000	\$28.29	
Mesa Downtown	1,522,991	8.4%	-28,194	0	0	\$19.83	
Mesa East	4,882,842	9.9%	-101,883	0	36,000	\$24.46	
Superstition Corridor	6,954,511	9.9%	186,384	30,000	20,791	\$23.86	
Tempe	20,445,016	16.0%	-635,028	183,526	465,000	\$31.66	
Gateway Airport/Loop 202	2,888,323	6.4%	4,857	3,587	72,611	\$28.28	
<b>East Valley</b>	<b>49,546,800</b>	<b>11.1%</b>	<b>(607,257)</b>	<b>342,922</b>	<b>819,402</b>	<b>\$26.06</b>	
Arrowhead	4,761,808	8.5%	131,527	89,985	0	\$27.90	
North I-17	909,503	13.2%	7,157	0	0	\$26.29	
Deer Valley/Airport	12,296,175	20.1%	-265,232	0	175,000	\$27.55	
Northwest Phoenix	11,209,719	19.2%	-76,073	0	0	\$21.71	
<b>Northwest Phoenix</b>	<b>29,177,205</b>	<b>15.3%</b>	<b>(202,621)</b>	<b>89,985</b>	<b>175,000</b>	<b>\$25.86</b>	
N Phoenix/Cave Creek	154,835	0.9%	1,330	0	0	\$23.31	
Paradise Valley	5,396,045	11.3%	-88,020	0	0	\$28.33	
Piestewa Peak Corridor	3,452,733	9.9%	25,611	16,672	0	\$24.77	
<b>Paradise Valley</b>	<b>9,003,613</b>	<b>7.4%</b>	<b>(61,079)</b>	<b>16,672</b>	<b>0</b>	<b>\$25.47</b>	
Central Scottsdale	9,102,112	14.4%	25,185	71,739	0	\$29.49	
N Scottsdale/Carefree	1,902,764	12.0%	-35,248	10,832	0	\$25.29	
Scottsdale Airpark	14,012,535	14.4%	309,583	151,801	32,054	\$31.15	
Scottsdale South	7,952,807	17.3%	-79,955	244,094	0	\$30.80	
<b>Scottsdale</b>	<b>32,970,218</b>	<b>14.5%</b>	<b>219,565</b>	<b>478,466</b>	<b>32,054</b>	<b>\$29.18</b>	
Glendale	3,666,504	11.0%	80,335	0	0	\$27.69	
Loop 303/ Surprise	2,686,680	7.4%	-4,847	0	9,984	\$28.37	
Southwest Phoenix	4,982,396	3.4%	31,357	0	0	\$25.57	
West I-10	2,745,434	8.0%	160,211	231,628	130,014	\$30.28	
<b>West Phoenix</b>	<b>14,081,014</b>	<b>7.5%</b>	<b>267,056</b>	<b>231,628</b>	<b>139,998</b>	<b>\$27.98</b>	
<b>Totals</b>	<b>191,707,420</b>	<b>17.0%</b>	<b>(805,398)</b>	<b>1,341,167</b>	<b>1,326,454</b>	<b>\$27.40</b>	

Shown next is a historical sales activity of office buildings from 4Q 2020 through 3Q 2022 in the Metro Phoenix area.



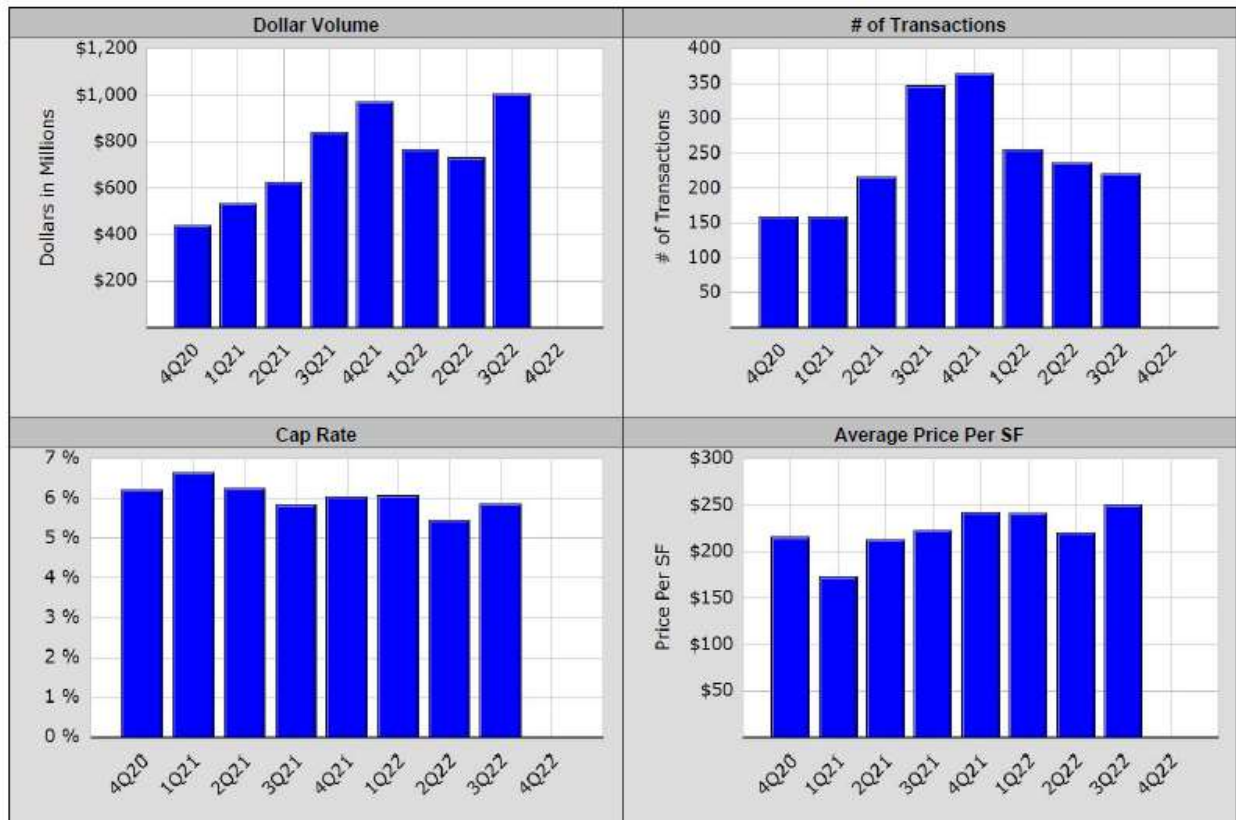
## RETAIL MARKET:

The existing retail inventory for Metropolitan Phoenix consists of over 235 million square feet. The East Valley market area encompasses the largest submarket, consisting of over 78 million square feet. The Metropolitan Phoenix Retail Market showed a vacancy rate in the 3<sup>rd</sup> Quarter 2022 of 4.7%. In the 3<sup>rd</sup> Quarter 2022, the Metropolitan Phoenix Retail Market had a year-to-date (YTD) absorption of 4,350,419 square feet. The average rental rate ranged from \$16.04 per square foot (Maricopa County retail) to \$27.08 per square foot (Northwest Phoenix Retail). The overall average rental rate was \$21.69 per square foot. All rents are based on a triple net lease basis.

Shown next is a chart of the Retail Market as of the 3<sup>rd</sup> Quarter 2022 as compiled by CoStar Realty Information, Inc.

Existing Inventory		Vacancy					
Market	Inventory SF	Vac %	12 Mo Net Absorb SF	12 Mo Delivered	Under Const SF	Quoted Rates	
Airport Area Retail	3,921,583	5.2%	13,945	5,700	0	\$18.90	
South Phoenix Retail	1,900,847	2.9%	49,134	3,000	0	\$19.12	
<b>Airport Area Ret</b>	<b>5,822,430</b>	<b>4.0%</b>	<b>63,079</b>	<b>8,700</b>	<b>0</b>	<b>\$19.01</b>	
Downtown Phoenix Retail	8,463,538	4.3%	57,605	0	6,965	\$21.17	
<b>Downtown Phoenix Retail</b>	<b>8,463,538</b>	<b>4.3%</b>	<b>57,605</b>	<b>0</b>	<b>6,965</b>	<b>\$21.17</b>	
Chandler Retail	17,004,923	5.6%	275,818	18,094	7,800	\$22.85	
Gilbert Retail	16,989,358	3.1%	407,628	247,665	117,837	\$23.83	
Queen Creek Retail	2,294,008	2.7%	187,685	118,650	398,787	\$23.12	
Red Mountain/Mesa Retail	31,256,738	6.7%	903,178	144,569	20,736	\$18.10	
Tempe Retail	8,258,241	6.0%	-67,977	6,071	19,750	\$21.43	
Gateway Airport Retail	2,942,635	4.1%	53,759	49,747	58,500	\$24.68	
<b>East Valley Retail</b>	<b>78,745,903</b>	<b>4.7%</b>	<b>1,760,091</b>	<b>584,796</b>	<b>623,410</b>	<b>\$22.34</b>	
W Outlying Maricopa Retail	834,636	0.7%	9,998	0	0	\$16.04	
<b>Maricopa County Retail</b>	<b>834,636</b>	<b>0.7%</b>	<b>9,998</b>	<b>0</b>	<b>0</b>	<b>\$16.04</b>	
East Phoenix Retail	8,956,804	5.8%	133,633	43,477	2,784	\$19.37	
Glendale Retail	11,556,966	5.5%	116,694	85,643	92,883	\$19.45	
N Phoenix/I-17 Corridor Retail	16,142,902	10.7%	719,592	63,977	5,428	\$16.40	
Sun City Retail	3,926,849	6.9%	59,862	6,768	2,432	\$17.59	
<b>North Phoenix Retail</b>	<b>40,583,521</b>	<b>7.2%</b>	<b>1,029,781</b>	<b>199,865</b>	<b>103,527</b>	<b>\$18.20</b>	
Carefree Retail	1,898,200	4.7%	46,483	1,500	0	\$24.95	
Fountain Hills Retail	767,361	4.2%	10,472	0	0	\$19.39	
N Scottsdale Retail	13,997,801	4.1%	234,381	0	0	\$27.08	
<b>North Scottsdale Retail</b>	<b>15,557,010</b>	<b>6.1%</b>	<b>-154,382</b>	<b>10,542</b>	<b>15,545</b>	<b>\$23.81</b>	
Anthem Retail	2,696,190	4.7%	36,285	50,442	0	\$24.82	
Central Peoria/Arrowhead Retail	10,547,328	4.8%	177,165	50,998	0	\$25.65	
Deer Valley Retail	2,228,309	1.3%	17,612	20,670	2,291	\$31.90	
Surprise/N Peoria Retail	5,628,108	2.5%	65,899	0	11,339	\$25.94	
<b>Northwest Phoenix Retail</b>	<b>21,099,935</b>	<b>3.3%</b>	<b>296,961</b>	<b>122,110</b>	<b>13,630</b>	<b>\$27.08</b>	
Central Scottsdale Retail	16,881,143	3.1%	337,626	35,008	6,500	\$32.59	
S Scottsdale Retail	3,300,502	6.7%	-10,216	8,053	39,356	\$19.71	
<b>Scottsdale Retail</b>	<b>20,181,645</b>	<b>4.9%</b>	<b>327,410</b>	<b>43,061</b>	<b>45,856</b>	<b>\$26.15</b>	
Ahwatukee Foothills Retail	3,265,671	5.0%	62,472	6,349	0	\$23.65	
Laveen Retail	1,696,228	2.1%	95,704	66,200	15,356	\$26.24	
S Mountain Retail	1,637,144	13.6%	-4,442	0	11,380	\$22.99	
<b>South Mountain Retail</b>	<b>6,599,043</b>	<b>6.9%</b>	<b>153,734</b>	<b>72,549</b>	<b>26,736</b>	<b>\$24.29</b>	
Goodyear Retail	4,217,221	2.0%	64,623	8,450	185,990	\$22.63	
Loop 101/I-10 Retail	3,149,347	3.5%	59,407	15,044	2,700	\$23.74	
N Goodyear/Litchfield Retail	6,177,063	2.1%	224,275	92,960	941,342	\$24.18	
N Buckeye Retail	257,699	2.2%	30,850	35,409	45,509	\$22.07	
S Buckeye Retail	1,626,174	1.8%	63,647	31,373	8,100	\$24.57	
Tolleson Retail	2,869,385	3.4%	48,352	5,827	42,786	\$21.27	
West Phoenix/Maryvale Retail	8,228,953	5.7%	5,697	33,611	2,400	\$18.13	
<b>West Phoenix Retail</b>	<b>26,525,842</b>	<b>3.0%</b>	<b>496,851</b>	<b>222,674</b>	<b>1,228,827</b>	<b>\$22.37</b>	
Apache Junction Retail	2,343,363	6.2%	59,760	75,400	26,979	\$18.02	
Outlying Pinal County Retail	9,102,655	8.0%	249,531	111,754	16,500	\$18.29	
<b>Pinal County Retail</b>	<b>11,446,018</b>	<b>7.1%</b>	<b>309,291</b>	<b>187,154</b>	<b>43,479</b>	<b>\$18.15</b>	
<b>Totals</b>	<b>235,859,521</b>	<b>4.7%</b>	<b>4,350,419</b>	<b>1,451,451</b>	<b>2,107,975</b>	<b>\$21.69</b>	

Shown next is a historical sales activity of retail buildings from 4Q 2020 through 3Q 2022 in the Metro Phoenix area.



		Sold Transactions	For Sale & UC/Pending
Current Survey	Sold Transactions		
Time Interval - Quarterly	Number of Transactions	1,959	33
	Total Dollar Volume	\$5,916,994,969	\$114,935,146
	Total Bldg Square Feet	31,135,849	691,535
	Total Land in Acres	4,698.08	112.48
	Total Land in SF	204,648,365	4,899,698
	Total Units	686	-
	Average Price	\$3,568,755	\$3,482,883
	Average Number of SF	15,975	20,956
	Average Price Per Bldg SF	\$224.53	\$242.26
	Median Price Per SF	\$254.88	\$247.29
	Average Number of Acres	2.56	3.88
	Average Number of SF(Land)	111,404	168,955
	Average Price Per Unit	\$48,413	-
	Median Price Per Unit	\$48,413	-
	Average Number of Units	86	-
Actual Cap Rate	6.02%	5.13%	
Average GRM	-	-	
Average GIM	-	-	

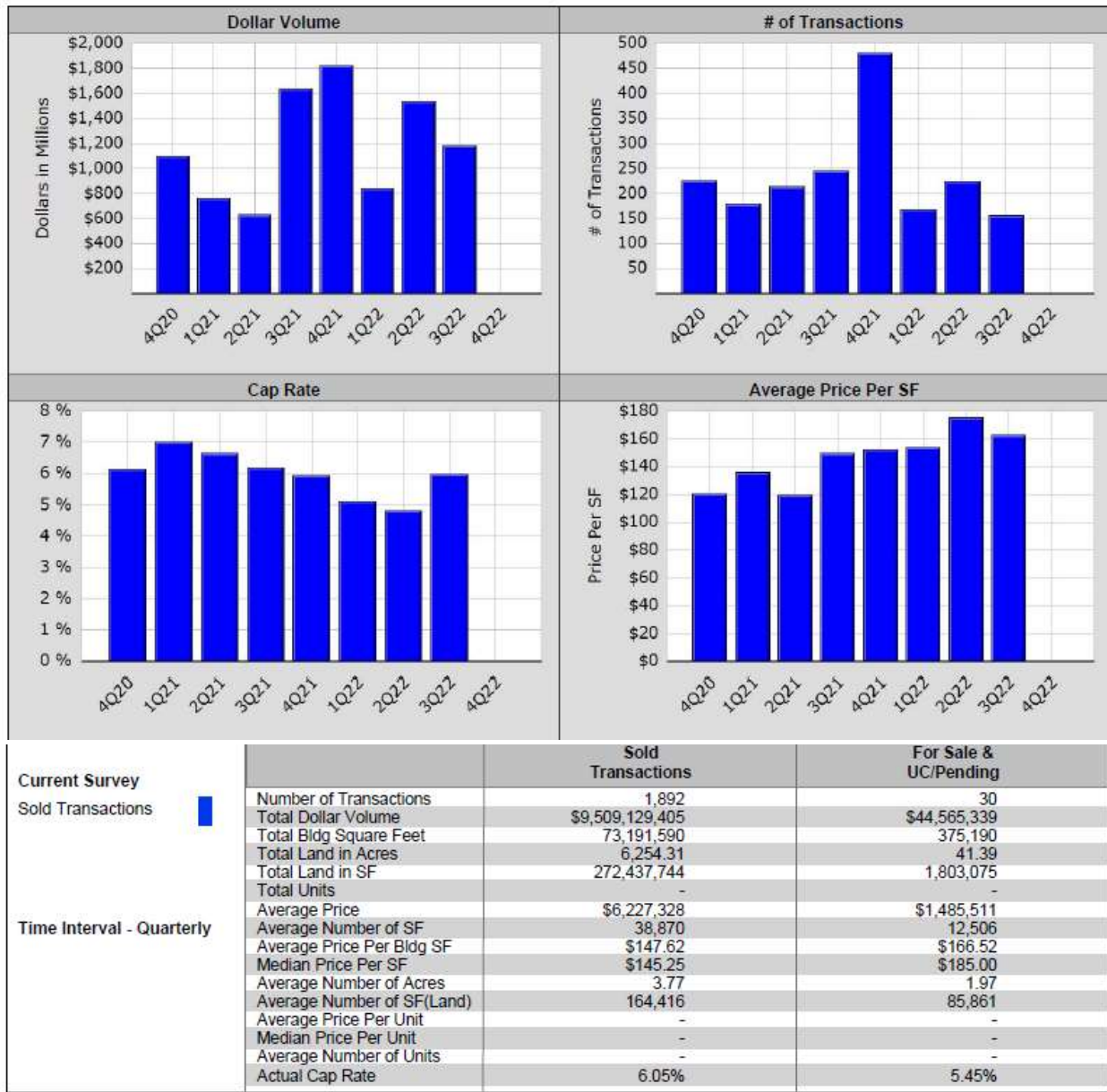
## INDUSTRIAL MARKET:

The existing industrial inventory for Metropolitan Phoenix consists of over 391 million square feet. The Southwest Market encompasses the largest Market, with a total of over 126 million square feet. The overall vacancy rate for Metro Phoenix is 3.04%. The Metropolitan Phoenix Industrial Market, as of the 3<sup>rd</sup> Quarter 2022 had a year-to-date (YTD) absorption of 23,884,890 square feet. The average rental rate ranged from \$8.77 per square foot (Southwest) to \$17.98 per square foot (Northeast Industrial). The overall average market rental rate was \$10.62 per square foot. All rents are typically Modified Gross. Shown next is a chart of the Industrial Market as of the 3<sup>rd</sup> Quarter 2022 as compiled by CoStar Realty Information, Inc.

Existing Inventory		Vacancy				
Market	Inventory SF	Vac %	12 Mo Net Absorp SF	12 Mo Delivered SF	Under Const SF	Market Rent/SF
North Airport	14,149,148	3.9%	-56,545	0	507,860	\$13.40
S Airport N of Roeser	16,064,601	5.1%	-371,790	0	0	\$12.68
S Airport S of Roeser	4,579,332	1.1%	-39,975	0	0	\$12.95
SC N of Salt River	16,283,148	3.5%	332,887	207,701	0	\$11.45
SC S of Salt River	2,669,221	0.7%	120,716	0	0	\$11.28
<b>Airport Area</b>	<b>53,745,450</b>	<b>2.9%</b>	<b>(14,707)</b>	<b>207,701</b>	<b>507,860</b>	<b>\$12.35</b>
Central Phoenix	4,452,135	4.9%	-57,376	0	0	\$16.24
Scottsdale Airpark	6,883,744	3.6%	85,205	0	0	\$18.88
Scottsdale/Salt River	5,572,891	3.0%	-78,661	0	23,460	\$18.81
<b>Northeast Industrial</b>	<b>16,908,770</b>	<b>3.8%</b>	<b>(50,832)</b>	<b>0</b>	<b>23,460</b>	<b>\$17.98</b>
Deer Valley/Pinnacle Pea	18,666,792	3.6%	23,844	217,762	2,796,069	\$14.88
Glendale	27,579,686	8.5%	6,774,570	7,247,620	16,127,756	\$9.83
Grand Avenue	14,176,252	2.5%	445,175	651,882	1,002,356	\$9.85
North Black Canyon	4,610,286	2.8%	-73,876	0	0	\$13.55
W Phx N of Thomas Rd	8,208,208	3.8%	-159,826	0	0	\$9.61
W Phx S of Thomas Rd	7,245,064	1.5%	91,952	0	0	\$9.67
<b>Northwest Phoenix</b>	<b>80,486,288</b>	<b>3.8%</b>	<b>7,101,839</b>	<b>8,117,264</b>	<b>19,926,181</b>	<b>\$11.23</b>
Chandler/Airport	7,385,891	6.3%	1,759,390	1,804,629	1,101,788	\$13.37
Chandler	24,662,004	3.7%	1,413,457	1,144,800	621,118	\$13.74
Chandler/N Gilbert	28,021,697	4.2%	3,686,435	3,418,943	11,613,106	\$13.30
Falcon Fld/Apache Jct	6,207,039	2.8%	316,721	369,093	108,000	\$14.95
Mesa	7,803,558	3.2%	-86,192	0	0	\$12.50
Tempe East	6,646,840	1.7%	-273,004	0	282,802	\$13.81
Tempe Northwest	11,162,514	2.8%	89,061	103,764	0	\$13.37
Tempe Southwest	21,845,445	3.9%	56,760	0	553,904	\$12.07
<b>Southeast Industrial</b>	<b>113,734,988</b>	<b>3.6%</b>	<b>6,962,628</b>	<b>6,841,229</b>	<b>14,280,718</b>	<b>\$13.39</b>
Goodyear	26,049,999	10.0%	5,334,031	3,453,254	9,494,183	\$8.55
SW N of Buckeye Rd	34,411,839	1.5%	181,619	83,720	6,267,025	\$8.50
SW S of Buckeye Rd	19,884,007	2.0%	942,972	545,534	661,328	\$9.36
Tolleson	46,153,281	3.1%	3,427,340	2,111,840	3,136,457	\$8.68
<b>Southwest Industrial</b>	<b>126,499,126</b>	<b>4.2%</b>	<b>9,885,962</b>	<b>6,194,348</b>	<b>19,558,993</b>	<b>\$8.77</b>
<b>Totals</b>	<b>391,374,622</b>	<b>3.04%</b>	<b>23,884,890</b>	<b>21,360,542</b>	<b>54,297,212</b>	<b>\$10.62</b>



Shown next is a historical sales activity of industrial buildings from 4Q 2020 through 3Q 2022 in the Metro Phoenix area.



## **SUMMARY AND CONCLUSION:**

As cross currents buffet the Arizona economy, it looks different depending on the lens used to view it. The labor market remains very tight, generating strong job gains, low unemployment rates, rapid wage increases, and a mountain of open jobs. At the same time, retail sales has begun to slow, inflation far exceeds income growth, housing affordability has plunged, and interest rates are rising.

The baseline forecast for Arizona calls for slowing growth in 2022 and 2023, as fiscal policy contracts and monetary policy hits the brakes. While the baseline forecast calls for continued state and national growth in the near term, the pessimistic scenario, which includes a national recession, is almost as likely. (Arizona Economic and Business Research Center)

The Phoenix Market is continuing to show signs of growth. As shown, single family detached and attached homes have started to increase. Building permits and sales activity continue to increase and values are on the rise. It is expected that the second half of 2022 will continue in a similar fashion. ARMLS had 69,720 homes sold as of September 2022 across the Greater Phoenix area.

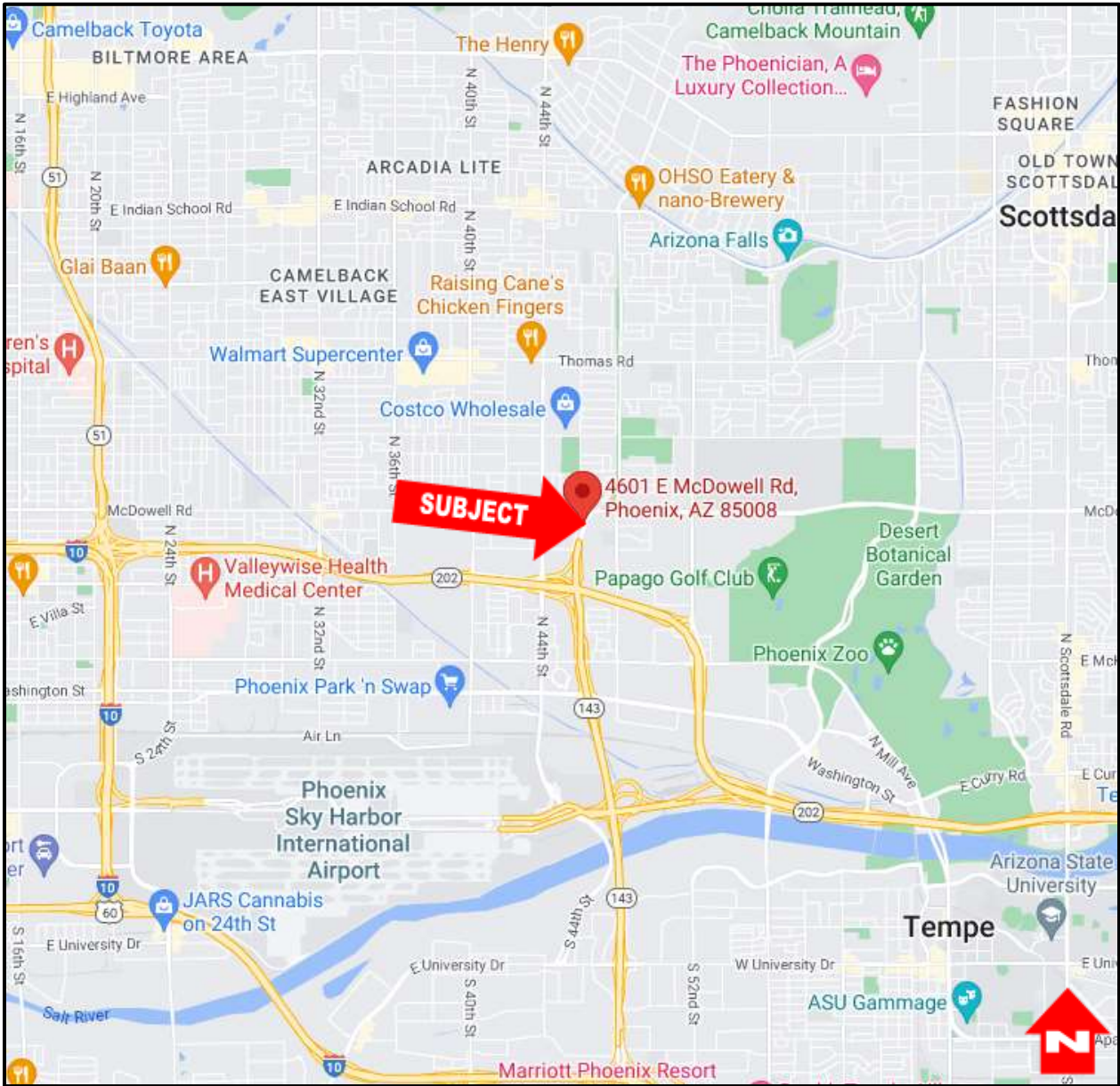
The office market vacancy for the 3<sup>rd</sup> Quarter 2022 has increased to 17.0% compared to the 2<sup>nd</sup> Quarter of 2022 at 16.2%. Quoted rental rates increased to \$27.40 compared to the previous quarter at \$26.97 per square foot in the 2<sup>nd</sup> Quarter 2022.

The retail market vacancy for the 3<sup>rd</sup> Quarter 2022 has decreased to 4.7% from the 2<sup>nd</sup> Quarter of 2022 at 5.2%. Rental rates have increased to \$21.69 per square foot in the 3<sup>rd</sup> Quarter 2022 from \$21.06 per square foot in the 2<sup>nd</sup> Quarter 2022.

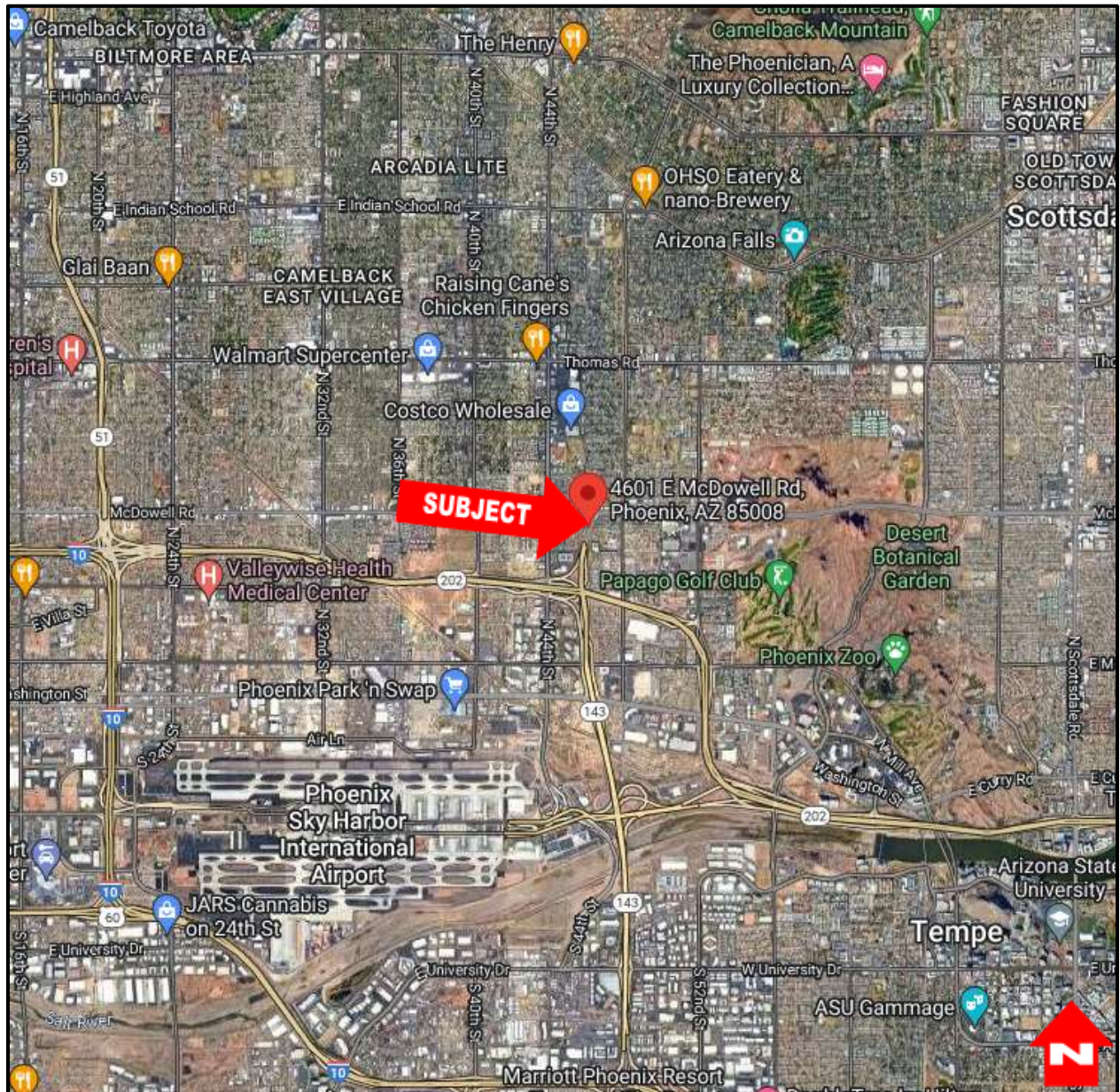
In the 3<sup>rd</sup> Quarter 2022 the industrial market vacancy has seen an increase in vacancy to 3.04% compared to 3.02% in the 2<sup>nd</sup> Quarter 2022. Quoted rental rates have increased to \$10.62 compared to the previous quarter at \$10.13 per square foot in the 2<sup>nd</sup> Quarter 2022.

The State of Arizona and regional governmental agencies have a forward looking, progressive attitude toward more mutual and joint efforts at economic development in the Metropolitan area. However, even in the midst of such economic turnaround the cost of living in Phoenix can still be viewed as a bright spot. Though Phoenix residents have seen an increase in the price of day-to-day expenses, the area remains one of the more affordable places to live and work in comparison to the rest of the United States. It is in part because of our cost of living that we continue to see individuals and businesses choose Phoenix as a relocation destination.

# NEIGHBORHOOD MAP



# AERIAL MAP



# NEIGHBORHOOD DATA ANALYSIS

This section involves an analysis of the environmental, economic, social and governmental forces within the subject neighborhood.

An area of influence is commonly called a "neighborhood", is defined as a group of complementary land uses; a congruous grouping of inhabitants, buildings, or business enterprises. (*The Dictionary of Real Estate Appraisal*, 7th edition 2022).

The neighborhood analysis is the objective analysis of observable and/or quantifiable data indicating discernible patterns of urban growth, structure, and change that may detract from or enhance property values; focuses on four sets of considerations that influence value: social, economic, governmental, and environmental factors. (*The Dictionary of Real Estate Appraisal*, 7th edition 2022).

Neighborhood boundaries identify the physical limits of a neighborhood, which may be delineated by natural, man-made, or geopolitical features. (*The Dictionary of Real Estate Appraisal*, 7th edition 2022).

The subject neighborhood is described as that area beyond which a change in land use would not affect the subject property site, is an area bounded on the North by Camelback Road, on the South by University Drive, on the West by State Route 51 and on the East by Scottsdale Road in Phoenix, Maricopa County, Arizona.

Refer to the Neighborhood Map on the preceding page illustrating the subject in relation to the boundaries of the neighborhood.

## **LAND USE:**

Overall, the subject is located in an area that consists mainly of residential uses along the secondary streets and commercial uses along the major roadways.

### Single Family Residential

The appraiser researched the subject zip code (85008) to determine single family residential supply and demand factors. According to Arizona Multiple Listing Service, the current single family median sales price is down 8.81% compared to the same time period last year. The median list price for homes in the subject's zip code is down 3.46% from the previous year's median list price. Absorption rates for single family homes are up 86.61%.

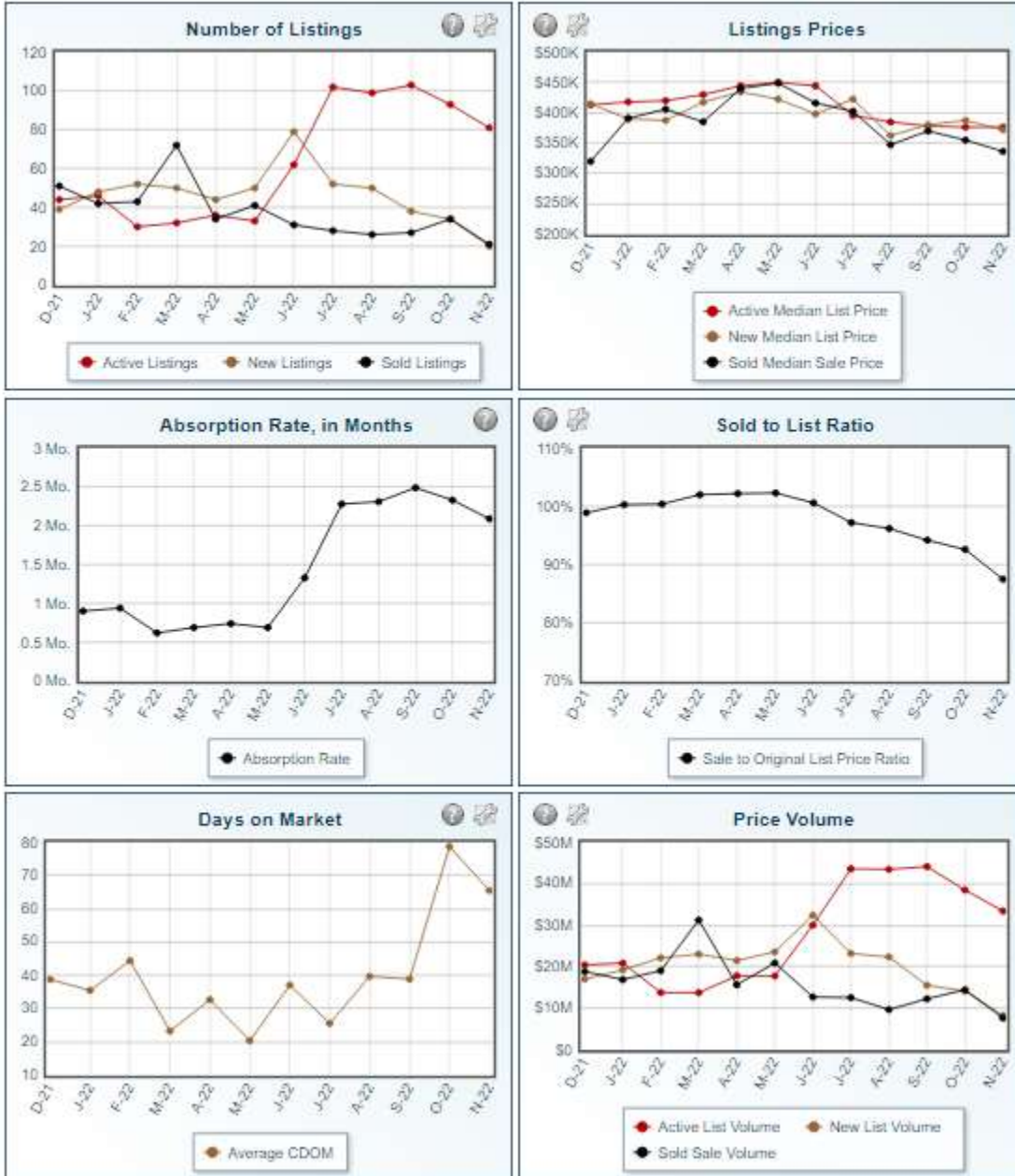
Following are the summary statistics for single family residential sales activity within the subject's zip code.

<b>Summary Statistics</b>			
	<b>Nov-22</b>	<b>Nov-21</b>	<b>% Chg</b>
Absorption Rate	2.09	1.12	88.61
Average List Price	\$412,695	\$418,400	-0.89
Median List Price	\$376,500	\$390,000	-3.46
Average Sale Price	\$384,588	\$410,681	-11.22
Median Sale Price	\$338,500	\$389,000	-8.81
Average CDOM	65	28	132.14
Median CDOM	59	28	126.92

Following are multiple charts relating to single family residential activity in the subject's zip code including:

- Number of listings
- Listing Prices
- Absorption Rate, in Months
- Sold to List Ratio
- Days on Market
- Price Volume

85008 Residential



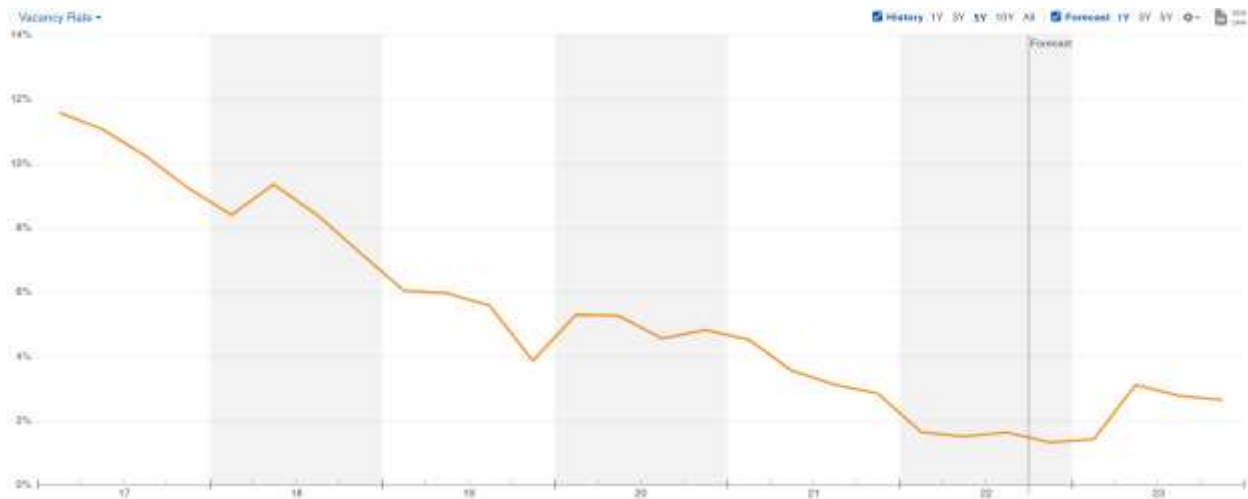
## Industrial

The following historical data from CoStar represents the industrial market including rental rates and vacancy rates.

INVENTORY SF	UNDER CONSTRUCTION SF	12 MO NET ABSORPTION SF	VACANCY RATE
10.5M <span>+0%</span>	361K <span>+22.3%</span>	176K <span>-19.2%</span>	1.2% <span>-1.7%</span>
Prior Period 10.5M	Prior Period 296K	Prior Period 218K	Prior Period 2.9%

Availability		Inventory	
Vacant SF	128K ↓	Existing Buildings	432 ↑
Sublet SF	0 ↓	Under Construction Avg SF	181K ↓
Availability Rate	1.2% ↓	12 Mo Demolished SF	0 ↓
Available SF	129K ↓	12 Mo Occupancy % at Delivery	100.0% ↓
Available Asking Rent/SF	\$14.39 ↑	12 Mo Construction Starts SF	68K ↓
Occupancy Rate	98.8% ↑	12 Mo Delivered SF	2.7K ↓
Percent Leased Rate	99.7% ↑	12 Mo Avg Delivered SF	20.5K ↓

The surrounding neighborhood of the subject had an industrial inventory of approximately 10.5 million square feet. Of this area, approximately 128,000 square feet was vacant equating to a vacancy rate of 1.2%. Over the past five years, vacancy rates ranged from 1.22% to 9.33%. Over the past year, vacancy rates have been trending downward.



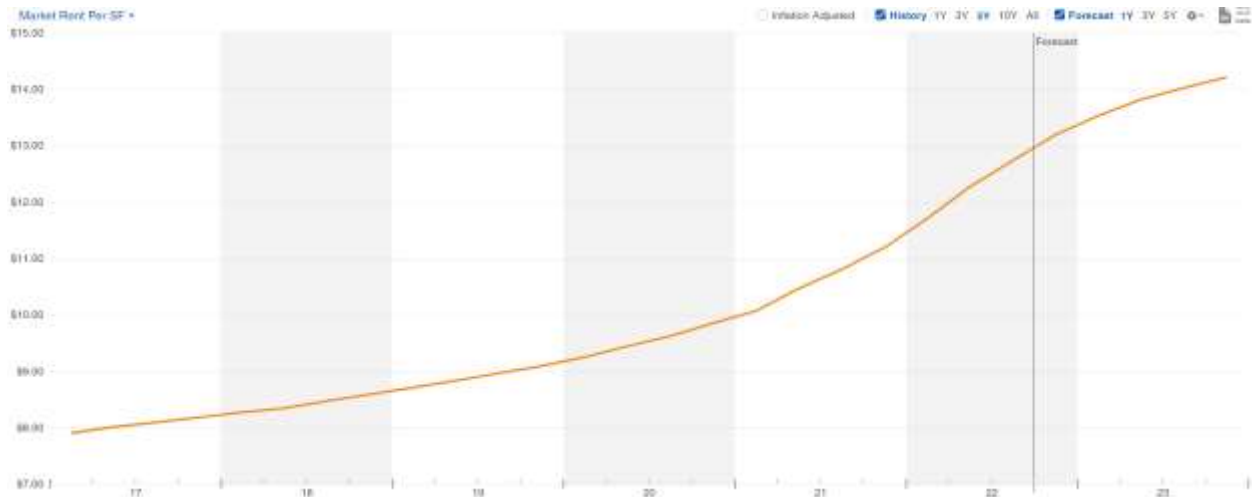


Market rents, sales prices and overall capitalization rates are reported as:

MARKET RENT/SF <b>\$13.07</b> <span style="background-color: #90EE90; padding: 2px;">+17.4%</span> Prior Period \$11.14	MARKET SALE PRICE/SF <b>\$177</b> <span style="background-color: #90EE90; padding: 2px;">+19.5%</span> Prior Period \$148	MARKET CAP RATE <b>5.8%</b> <span style="background-color: #FF0000; color: white; padding: 2px;">-0.2%</span> Prior Period 6.0%
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Sales Past Year		Demand	
Asking Price Per SF	\$118 ↓	12 Mo Net Absorp % of Inventory	1.7% ↓
Sale to Asking Price Differential	-5.8% ↓	12 Mo Leased SF	293K ↓
Sales Volume	\$155M ↓	Months on Market	3.6 ↑
Properties Sold	25 ↓	Months to Lease	1.7 ↓
Months to Sale	6.1 ↓	Months Vacant	2.4 ↓
For Sale Listings	6 ↑	24 Mo Lease Renewal Rate	82.3%
Total For Sale SF	43.5K ↓	Population Growth 5 Yrs	12.3%

The current quarter showed average market rental rates of \$13.07 per square foot. Over the past five years, average market rental rates ranged between \$8.18 per square foot to the current rate of \$13.07 per square foot. Average market rental rates have been trending upward over the past year.



## Retail

The following historical data from CoStar represents the retail market including rental rates and vacancy rates.

INVENTORY SF <b>5M</b> <span style="color: green;">+1.9%</span> Prior Period 5M	UNDER CONSTRUCTION SF <b>0</b> <span style="color: red;">-100.0%</span> Prior Period 89.9K	12 MO NET ABSORPTION SF <b>61.9K</b> <span style="color: green;">+155.9%</span> Prior Period (111K)	VACANCY RATE <b>5.2%</b> <span style="color: red;">+0.6%</span> Prior Period 4.6%
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Availability		Inventory	
Vacant SF	262K ↑	Existing Buildings	549 ↑
Sublet SF	0 ↓	Under Construction Avg SF	-
Availability Rate	5.4% ↑	12 Mo Demolished SF	1.6K ↓
Available SF	273K ↑	12 Mo Occupancy % at Delivery	90.5% ↓
Available Asking Rent/SF	\$22.86 ↓	12 Mo Construction Starts SF	5.8K ↓
Occupancy Rate	94.8% ↓	12 Mo Delivered SF	95.7K ↑
Percent Leased Rate	95.0% ↓	12 Mo Avg Delivered SF	19.1K ↑

The surrounding neighborhood of the subject had a retail inventory of approximately 5 million square feet. Of this area, approximately 262,000 square feet was vacant equating to a vacancy rate of 5.2%. Over the past five years, vacancy rates ranged from the current rate of 3.74% to 7.46%. Over the past year, vacancy rates have been trending downward.

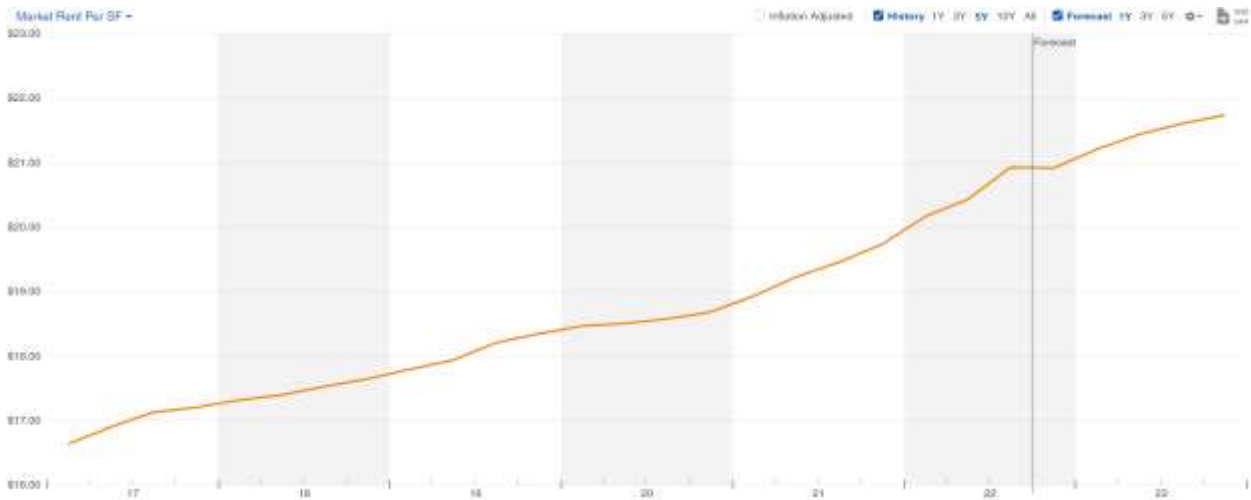


Market rents, sales prices and overall capitalization rates are reported as:

MARKET RENT/SF	MARKET SALE PRICE/SF	MARKET CAP RATE
<b>\$20.87</b> <span style="background-color: #90EE90; padding: 2px;">+6.0%</span>	<b>\$235</b> <span style="background-color: #90EE90; padding: 2px;">+8.6%</span>	<b>6.5%</b> <span style="background-color: #FF0000; color: white; padding: 2px;">-0.1%</span>
Prior Period \$19.69	Prior Period \$216	Prior Period 6.6%

Sales Past Year		Demand	
Asking Price Per SF	\$571 ↑	12 Mo Net Absorp % of Inventory	1.2% ↑
Sale to Asking Price Differential	-3.0% ↑	12 Mo Leased SF	108K ↑
Sales Volume	\$44.9M ↓	Months on Market	7.2 ↓
Properties Sold	25 ↓	Months to Lease	3.2 ↓
Months to Sale	9.0 ↓	Months Vacant	4.4 ↓
For Sale Listings	9 ↓	24 Mo Lease Renewal Rate	80.7%
Total For Sale SF	127K ↑	Population Growth 5 Yrs	12.2%

The current quarter showed average market rental rates of \$20.87 per square foot. Over the past five years, average market rental rates ranged between \$17.20 per square foot to \$20.92 per square foot. Average market rental rates have been trending upward over the past year.



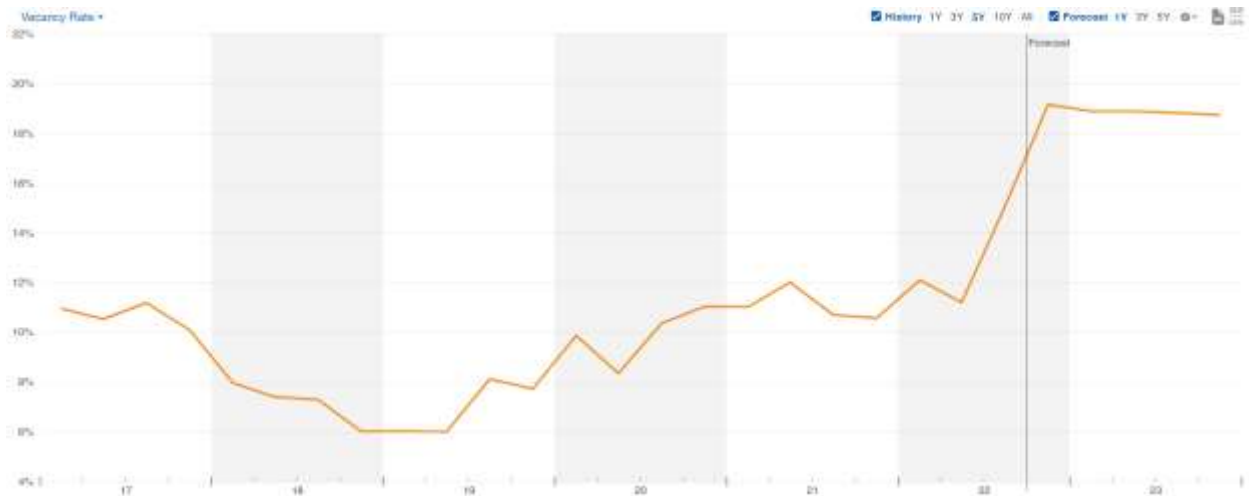
## Office

The following historical data from CoStar represents the office market including rental rates and vacancy rates.

INVENTORY SF <b>12.9M</b> <span style="color: green;">+1.9%</span> Prior Period 12.6M	UNDER CONSTRUCTION SF <b>0</b> <span style="color: red;">-100.0%</span> Prior Period 244K	12 MO NET ABSORPTION SF <b>(896K)</b> <span style="color: red;">-13,570.9%</span> Prior Period (6.6K)	VACANCY RATE <b>19.2%</b> <span style="color: red;">+8.6%</span> Prior Period 10.6%
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Availability		Inventory	
Vacant SF	2.5M ↑	Existing Buildings	487 ↑
Sublet SF	936K ↑	Under Construction Avg SF	-
Availability Rate	22.1% ↑	12 Mo Demolished SF	0 ↓
Available SF	2.8M ↑	12 Mo Occupancy % at Delivery	76.0%
Available Asking Rent/SF	\$30.81 ↑	12 Mo Construction Starts SF	0 ↓
Occupancy Rate	80.8% ↓	12 Mo Delivered SF	244K ↑
Percent Leased Rate	87.0% ↓	12 Mo Avg Delivered SF	244K

The surrounding neighborhood of the subject had an office inventory of approximately 12.9 million square feet. Of this area, approximately 2.5 million square feet was vacant equating to a vacancy rate of 19.2%. Over the past five years, vacancy rates ranged from 6.00% to 19.25%. Over the past year, vacancy rates have been trending upward.

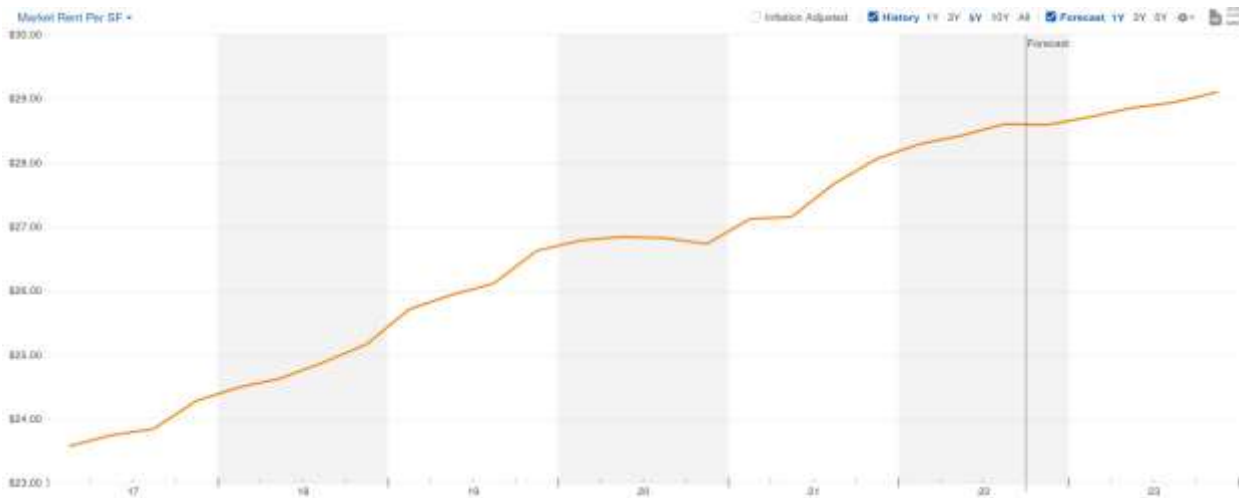


Market rents, sales prices and overall capitalization rates are reported as:

MARKET RENT/SF <b>\$28.58</b> <span style="background-color: #90EE90; padding: 2px;">+2.1%</span> Prior Period \$28.01	MARKET SALE PRICE/SF <b>\$237</b> <span style="background-color: #90EE90; padding: 2px;">+2.9%</span> Prior Period \$230	MARKET CAP RATE <b>7.0%</b> <span style="background-color: #808080; color: white; padding: 2px;">+0%</span> Prior Period 7.0%
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Sales Past Year		Demand	
Asking Price Per SF	\$190 <span style="color: green;">▲</span>	12 Mo Net Absorp % of Inventory	-7.0% <span style="color: red;">▼</span>
Sale to Asking Price Differential	-2.0% <span style="color: green;">▲</span>	12 Mo Leased SF	425K <span style="color: red;">▼</span>
Sales Volume	\$49.4M <span style="color: red;">▼</span>	Months on Market	10.8 <span style="color: red;">▼</span>
Properties Sold	45 <span style="color: red;">▼</span>	Months to Lease	9.9 <span style="color: red;">▼</span>
Months to Sale	12.2 <span style="color: green;">▲</span>	Months Vacant	10.6 <span style="color: green;">▲</span>
For Sale Listings	14 <span style="color: red;">▼</span>	24 Mo Lease Renewal Rate	37.3%
Total For Sale SF	153K <span style="color: red;">▼</span>	Population Growth 5 Yrs	12.4%

The current quarter showed gross market rental rates of \$28.58 per square foot. Over the past five years, gross market rental rates ranged between \$24.28 per square foot to \$28.60 per square foot. Gross market rental rates have been trending upward over the past year.



**DEMOGRAPHICS:**

Population

	1 mile	3 mile	5 mile
2010 Population	19,120	108,518	265,991
2022 Population	23,009	129,153	339,056
2027 Population Projection	25,823	144,765	382,506

Housing

	1 mile	3 mile	5 mile
Median Home Value	\$291,666	\$353,582	\$349,576

Income

	1 mile	3 mile	5 mile
Avg Household Income	\$60,387	\$79,060	\$83,025
Median Household Income	\$48,390	\$53,744	\$56,779

**Source: Costar**

**DIRECTION AND DISTANCE TO EMPLOYMENT CENTERS:**

Employment centers and other community support services, such as medical facilities, churches, schools and parks are available within the neighborhood or in the neighboring cities which surround the subject neighborhood.

**COMMUNITY SERVICES AND FACILITIES:**

Within the community there are adequate grade schools, middle schools and high schools, colleges/universities and trade schools that can provide public school education for the neighborhood. Additionally, there are adequate medical facilities nearby.

**UTILITIES:**

The subject neighborhood is located within the city limits of Phoenix. Water and sewer is provided by the City of Phoenix; Electricity is provided by Salt River Project (SRP); Natural gas is provided by Southwest Gas; Telephone service is provided by CenturyLink. These services are adequate and are available at reasonable rates. The cost of obtaining these services is similar to competing neighborhoods in the Phoenix metropolitan area.

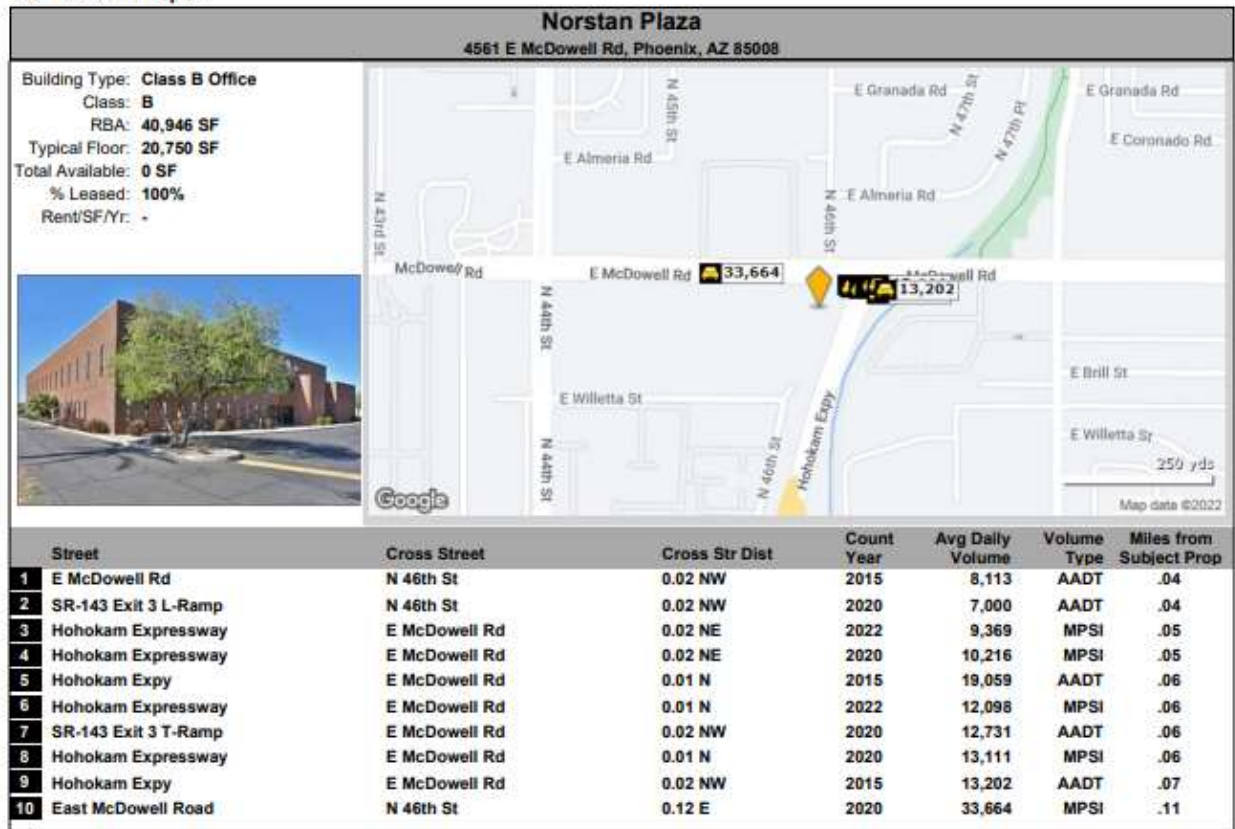
**GOVERNMENTAL FORCES:**

The governmental forces maintaining accord in the neighborhood and influencing development in the area have been Phoenix zoning regulations. Police and fire protection is provided by the City of Phoenix.

**TRANSPORTATION:**

The main arterials for the area are McDowell Road to the north, Loop 202 to the south, State Route 143 to the east and 44th Street to the west. Shown next is a traffic count map for the area.

**Traffic Count Report**



**CONCLUSION:**

The subject neighborhood is in a stable stage of development. The subject neighborhood is located within an area of Phoenix that contains an adequate amount of retail centers, schools, medical facilities, and other goods and services that will promote the marketability of the subject neighborhood.

# AERIAL VIEW



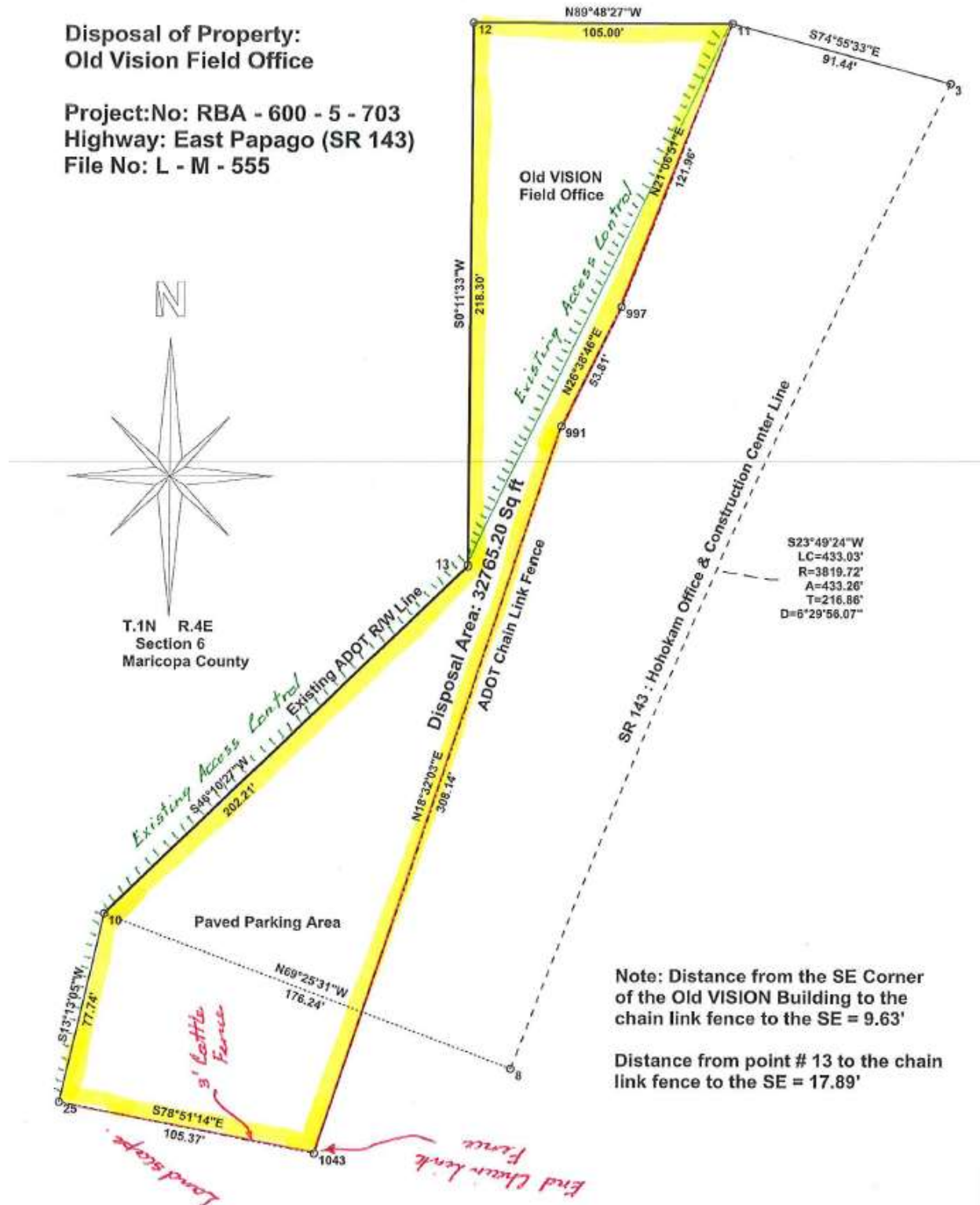


# SITE LAYOUT

## Sketch Plan

Disposal of Property:  
Old Vision Field Office

Project: No: RBA - 600 - 5 - 703  
Highway: East Papago (SR 143)  
File No: L - M - 555



# SITE DATA ANALYSIS

## LOCATION:

The subject property is located at 4601 East McDowell Road in Phoenix, Arizona.

## PARCEL NUMBERS:

125-17-007L. The southern portion of the subject property has not been assigned a parcel number.

## SITE DIMENSIONS AND SHAPE:

As indicated, the subject property has not yet been re-platted to represent the net site area located outside of the existing SR 143 right of way. However, the shape of the property was affected and now in an hourglass shape. It is expected that a new parcel will be recorded prior to any disposition of the subject.

The improvements currently sit on land area totaling 0.94 gross acres or 40,835 gross square feet; however, approximately 0.185 acres or 8,070 square feet of this land area is located within the existing SR 143 right of way. Therefore, the net land area associated with the improvements totals 0.752 acres or 32,765 square feet.

The net site area being valued has approximately 480 feet of frontage along State Route 143 and 180 feet of frontage along 46th Street.

## IMPROVEMENTS:

The subject is a vacant single tenant office building totaling 4,646 square feet. The building was constructed in 1977 and is in poor/fair condition. The property was acquired by ADOT for the construction of the adjacent SR 143, which caused no demolition to the building itself, however did create an hourglass shape for the site. The improvements will be described in more detail within the Improvement Data section of the appraisal.

## SURROUNDING USES:

North:	Commercial development, McDowell Road
South:	State Route 143, Residential development
East:	State Route 143, Residential development
West:	Commercial/Industrial development

## **NUISANCES OR HAZARDS:**

An environmental study has not been provided. However, the appraiser was provided a Supplemental Environmental Notice from May 22, 2018 by the State of Arizona in conformance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This notice is included in the addenda and states that a subsurface-to-indoor-air vapor intrusion investigation of the Motorola 52<sup>nd</sup> Street Superfund site, 2011, found elevated levels of the contaminant trichloroethene (TCE) above EPA's action levels. A vapor intrusion pathway mitigation system is necessary on the subject property until multiple lines of evidence indicate there is no longer potential for vapor intrusion into the indoor air. The State entered into an agreement to install and maintain a mitigation system at the property to mitigate elevated concentrations of TCE in indoor air while preparing the property for eventual sale to the public. Documentation of the onsite activities discussed in the notice, maintenance requirements of the mitigation system, superfund remedial performance measures and additional information about the Motorola, Inc. (52<sup>nd</sup> Street Plant) superfund site shall be made available to a potential grantee prior to sale.

In addition to the Environmental Notice, the appraiser was also provided a Vapor Mitigation System Installation Report done by NXP USA, Inc. dated March 21, 2018. The report found that based on the initial system measurements, the sub-slab depressurization (SSD) system did not initially meet the EPA goal at all test hole locations, however, the initial indoor air sampling results from December 2017 were not detected which indicates that the system is performing as designed and preventing vapor intrusion. Based on initial testing, the expectation of the system is to continue to effectively control any potential vapor intrusion emanating from below the slab. A copy of this report is included in the addenda of the appraisal report. The appraiser has not been provided with any more recent tests indicating current measurements and the most recent data available was this report conducted in 2017. **It is an Extraordinary Assumption that the Vapor Mitigation System is operable and appropriately effective as of the effective date of value and there are no environmental issues associated with the subject's location within the Motorola 52<sup>nd</sup> Street Superfund site.**

If a toxic waste and/or contaminant is detected, the value estimate appearing in this report is null and void. If a re-appraisal is required, it will be made at an additional charge and upon receipt of any additional information requested (i.e., what the toxic waste and/or contaminant is and the cost of removal) by the appraiser.

## **TRANSPORTATION IMPROVEMENTS:**

The subject property has visibility and access from a cul-de-sac connected by 46th Street and Willetta Street with visibility along the western side of State Route 143. Roadway improvements adjacent to the subject site are as follows:

Street:	State Route 143
Road Surface:	Paved
Lanes:	Six lanes
Curbs/Gutters:	Yes
Sidewalks:	No
Street Lights:	Yes
Speed Limit:	45 mph
Traffic Count:	12,098 vpd

Street: 46th Street  
Road Surface: Paved  
Lanes: Two lanes  
Curbs/Gutters: Yes  
Sidewalks: No  
Street Lights: Yes  
Speed Limit: 25 mph  
Traffic Count: N/Av

Street: Willetta Street  
Road Surface: Paved  
Lanes: Two lanes  
Curbs/Gutters: Yes  
Sidewalks: No  
Street Lights: No  
Speed Limit: 25 mph  
Traffic Count: N/Av

**TOPOGRAPHY, DRAINAGE AND SOIL CONDITIONS:**

Elevations are level and at grade with adjoining property. A soils study has not been provided. The load bearing capacity of the top soil and sub-soils is unknown, but is assumed to be sufficient to support existing improvements.

**FLOOD ZONE:**

The location is within an area denoted as being in an "X" Flood Hazard Area, as found on Federal Emergency Management Agency Flood Insurance Rate Map number 04013C2230M based on the September 18, 2020 flood data. The "X" designation indicates:

*Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas projected by levees from 100-year flood.*

**UTILITIES:**

All utilities including sewer, water, electrical, gas and telephone services are available to the site.

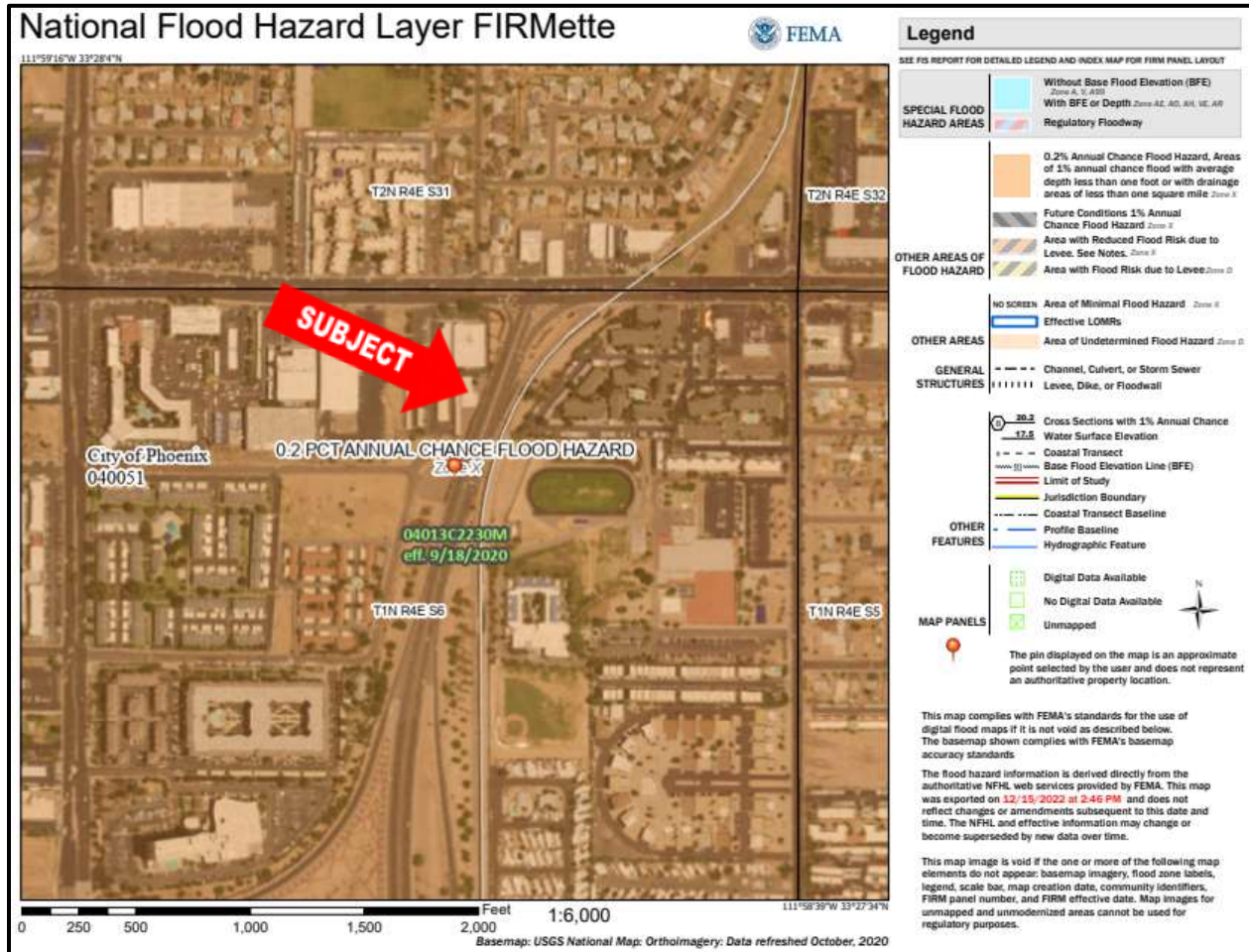
Sewer - City of Phoenix  
Water - City of Phoenix  
Electric - Salt River Project (SRP)  
Gas - Southwest Gas  
Telephone - CenturyLink

**EASEMENTS:**

Based on the legal description described as Parcel No. 2, which can be found in the addenda of this report, there appears to be an ingress and egress easement at the north half of the subject property, which allows the adjacent property to the north to have an additional point of access needed for what appears to be fire access only. Nonetheless, it appears that there is an ingress/egress easement on the site.

Although requested, a title search was not provided. However, based upon a review of the available property information, there do not appear to be any easements, encroachments, or restrictions other than those that are typical for the property type. My valuation assumes (see extraordinary assumptions) no adverse impacts from easements, encroachments, or restrictions, and further assumes that the subject has a clear and marketable title.

# FLOOD ZONE MAP



## **ZONING:**

The purpose of zoning is to provide for orderly growth and harmonious development. Zoning is intended to provide a common ground of understanding and a sound and equitable working relationship between public and private interests to the end that both independent and mutual objectives can be achieved.

The subject site is zoned C-2, Intermediate Commercial (90%) and R-5, Multifamily Residence District (10%) according to the Phoenix Planning and Zoning Department.

The C-2, Commercial Intermediate District, is a district of commercial uses of medium intensity designed to be compatible with each other and to provide for a wide range of types of commercial activity within the district.

The purpose of the multifamily residence districts is to provide for alternate living styles including rental, condominiums and single ownership of land with multiple units thereon or single or attached townhomes.

The subject improvements adhere to this zoning code and could be reconstructed if the site were vacant. It is unlikely that a zoning change would be approved by the City of Phoenix as the current zoning is typical of its surroundings.

The appraiser is not an expert in the interpretation of zoning ordinances. An appropriately qualified land use attorney should be engaged if a determination of compliance is required. The zoning ordinance is located within the addenda.

## **TAX AND ASSESSMENT DATA:**

Presently, the subject property is identified as assessor's tax parcel number: 125-17-007L and an unparcelled portion. The subject property is located in Maricopa County and valued by the county assessor for taxing purposes.

The Maricopa County Assessor's Office assesses the subject. Full cash value has no relationship to market value as defined in this report. Full cash value is set by State law and is for tax assessment purposes only. It does not consider the future potential use of the property and is not always current with market transactions. Limited value is established based on the preceding years limited value and is increased by the greater of 10% or 25% of the difference between full cash value of the current year and last year's limited value. Limited value is set by the State of Arizona and, by statute, cannot exceed full cash value.

The State of Arizona employs a dual (Primary, Secondary) structure for real estate taxation. The assessed value derived from "full cash value" is the basis for computing taxes for budget overrides, bond and sanitary, fire and other special districts (Secondary taxes), while the assessed value derived from "limited value" is the basis for computing taxes for the maintenance and operation of school districts, community college districts, cities, county and the state (Primary taxes).

- In the State of Arizona, a sale of the subject does not trigger a reassessment.

Proposition 117

Passed in 2012 by a majority of Arizona voters, Proposition 117 works as a mechanism to control the large valuation swings that did so much damage to, not only property owners, but to government budgets, during the recession.

Proposition 117 acts as a mandatory cap on valuation increases to the Limited Property Value (LPV), upon which both primary and secondary tax rates will now be based. So even though FCV may rise dramatically (as it is not limited and is based on market conditions), Proposition 117 caps increases in the LPV to 5% annually. It should be noted, this cap does not apply to new construction, additions, or deletions to your property.

Proposition 117 does not change statutory formulas used for calculating the amount of money which can be collected by taxing jurisdictions. Proposition 117 provides a stable and dependable value for LPVs, and, in theory, a stable tax base for taxing jurisdictions dependent on property taxes. Proposition 117 went into effect for Tax Year 2015.

Following is the available information concerning Full Cash Value, Limited Property Value and Real Estate Taxes for the subject property.

As indicated, the subject property has not yet been re-platted to represent the net site area located outside of the existing SR 143 right of way. It is expected that a new parcel will be recorded prior to any disposition of the subject.

The appraiser has researched comparable taxes for similar properties in the area in the following table:

<b>Address</b>	<b>APN</b>	<b>Size (SF)</b>	<b>Age</b>	<b>2022 Taxes</b>	<b>PSF</b>
4636 E McDowell Road, Phoenix, AZ	126-10-001G & 001H	6,824	1983	\$8,881.50	\$1.30
4045 E. McDonald Road, Phoenix, AZ	125-19-043A	9,700	1984	\$13,362.58	\$1.38
5130 E. Thomas Road, Phoenix, AZ	128-16-007E	3,300	1985	\$3,819.78	\$1.16
4317 E. McDowell Road, Phoenix, AZ	125-18-040 & 039	5,580	1954	\$7,845.50	\$1.41
4717 E. McDowell Road, Phoenix, AZ	125-14-006J & 006K	3,312	1983	\$7,743.66	\$2.34
1436 N. 44th Street, Phoenix, AZ	125-18-043C	3,286	1977	\$4,669.94	\$1.42

Based on the tax comparables found, the appraiser estimates taxes to be approximately \$1.40 per square foot which would equate to an estimated tax amount of:

$$4,646 \text{ SF} \times \$1.40/\text{SF} = \$6,504$$

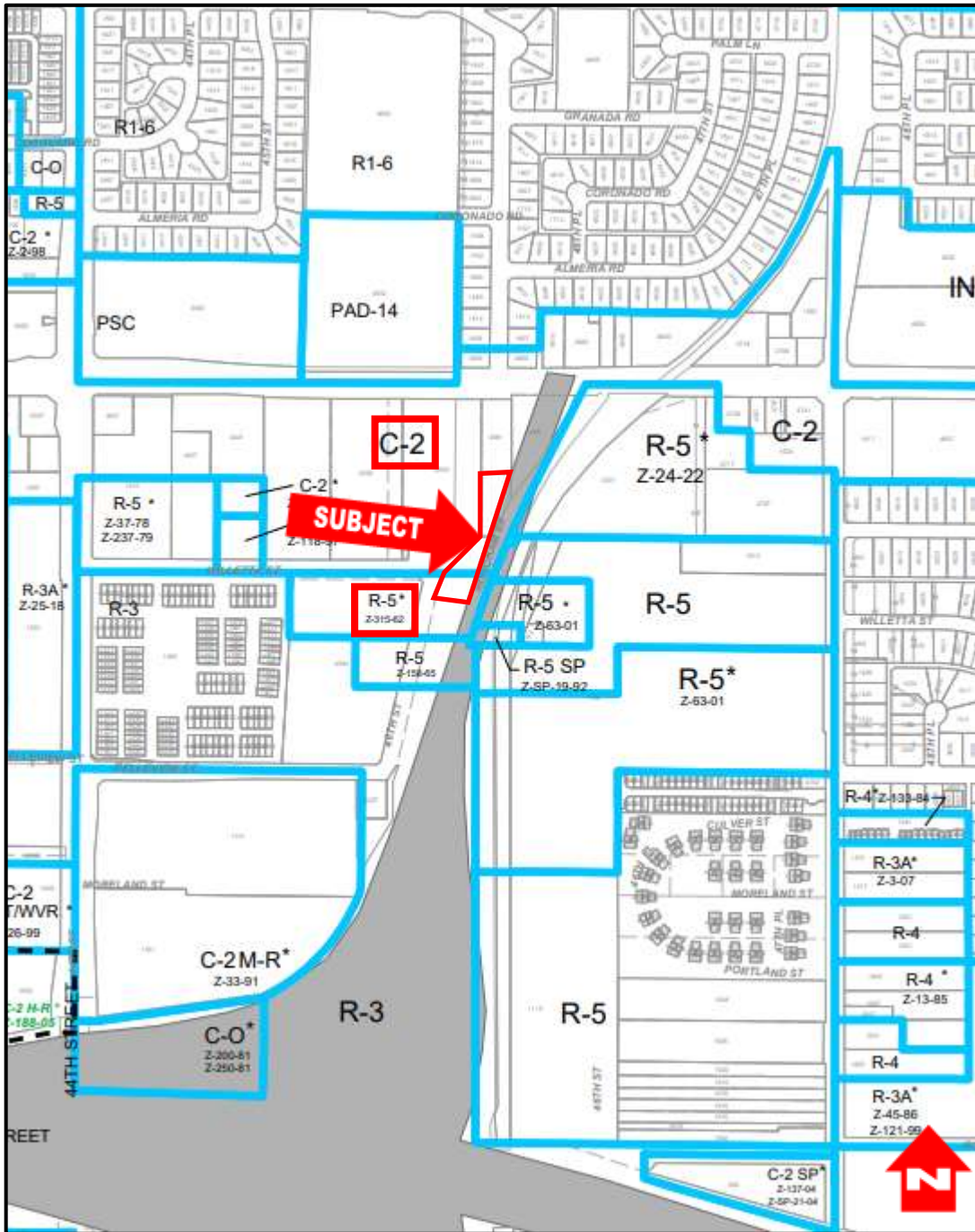
According to the Maricopa County Treasurer's Office, there are no delinquent taxes owed for the subject. The appraiser is unaware of any known special assessments which would affect the value of the property.



**CONCLUSION:**

In conclusion, the physical and functional characteristics of the site are considered to have adequate visibility and access. The site is located in an area predominantly made up of commercial and residential development with adequate access to the goods and services of Metropolitan Phoenix. The site is at grade with the adjoining properties with no evidence of drainage problems or soil contamination. All city utilities/services and electricity are available to the site.

# ZONING MAP



# SUBJECT PHOTOGRAPHS

Photos as of November 16, 2022



Looking north along 46<sup>th</sup> Street towards cul-de-sac, subject on the right



Subject gated entrance



Subject shared driveway



Looking southwest towards 46<sup>th</sup> Street and Willetta Street, Subject on the left



Looking south across south side of subject site



Looking south across subject site, SR 143 on the left



Looking north across subject site, SR 143 on the right



Subject exterior



Subject exterior



Looking north across ingress/egress easement at fire access gate for adjacent property to the north



Typical interior of the subject



Typical interior of the subject





Typical interior of the subject



Typical interior of the subject



Typical interior of the subject bathroom



Typical interior of the subject

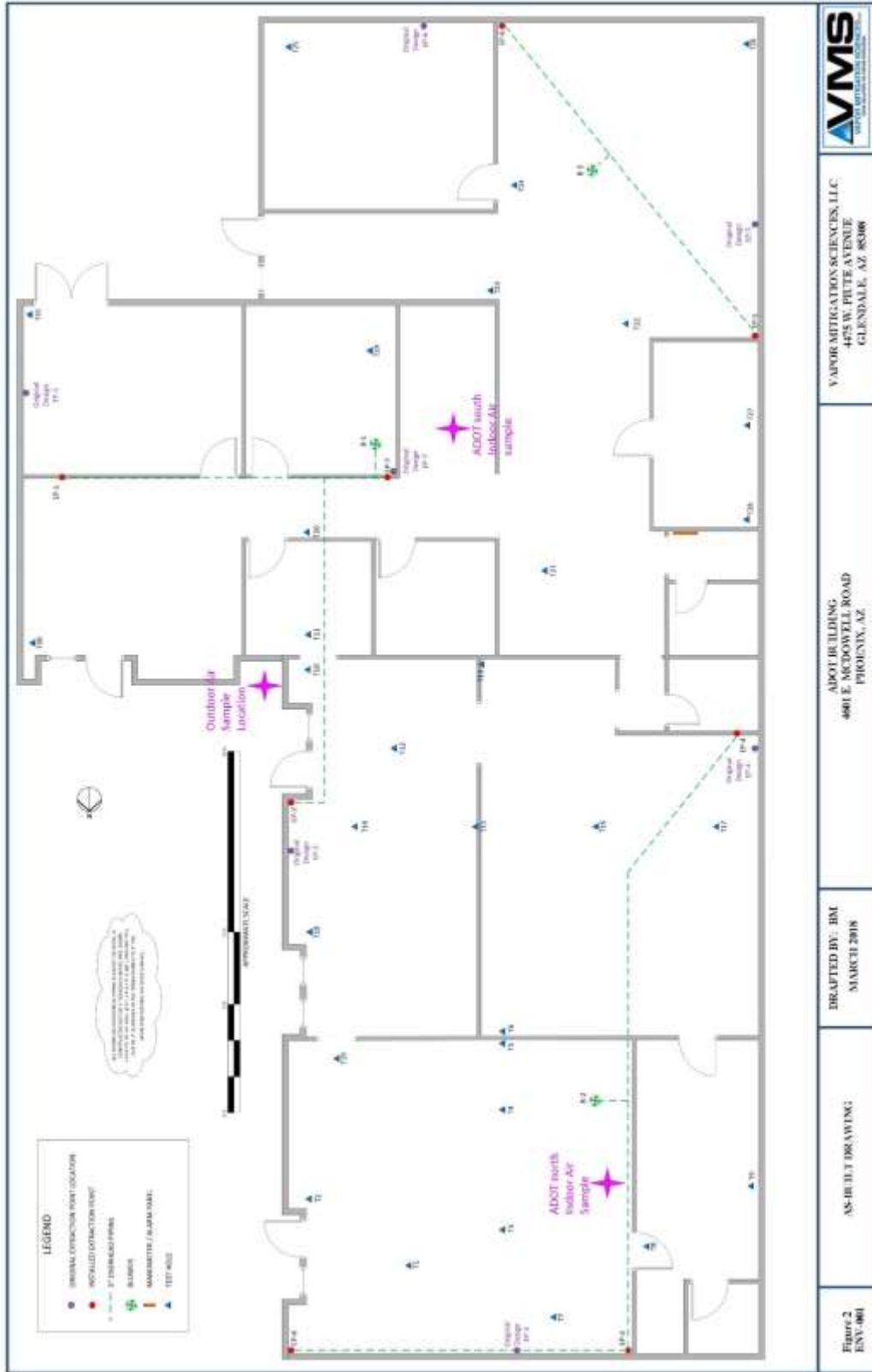


Typical interior of the subject



Typical interior of the subject

# BUILDING LAYOUT



# SKETCH



## IMPROVEMENT DESCRIPTION

<u>Property Type:</u>	Vacant single tenant office building
<u>Property Use:</u>	Office
<u>Size:</u>	4,646 square feet
<u>Year Built:</u>	1977
<u>Foundation:</u>	Reinforced concrete footings. Concrete Floor. Sub-grade is compacted ABC fill
<u>Exterior Walls:</u>	Block construction
<u>Ceiling Height:</u>	8 feet to 9 feet high
<u>Windows:</u>	Glass in anodized aluminum frames
<u>Roof Structure:</u>	Typical built-up flat roof with a spray foam membrane in average condition
<u>Floors:</u>	Concrete
<u>Floor Covering:</u>	Combination of carpet and tile
<u>Partitions:</u>	White Gypsum board
<u>Ceilings:</u>	A combination of drop acoustic ceiling with 2' x 2' and 2' x 4' panels
<u>Insulation:</u>	Standard fiberglass batt, as required
<u>Exterior Doors:</u>	Glass entry doors
<u>Plumbing:</u>	The plumbing appears to be adequate.
<u>Heating &amp; Cooling:</u>	The subject is air conditioned with packaged rooftop A/C units. The HVAC system appears to be adequate.
<u>Electrical:</u>	The building has an adequate amount of electrical supply.
<u>Lighting:</u>	Combination of fluorescent and incandescent lighting
<u>Fire Sprinklers:</u>	No
<u>Condition:</u>	Poor/Fair

Functional Utility: Fair

Economic Life: The subject improvements were completed in 1977. The actual age of the subject improvements is 45 years, while the effective age is estimated to be 35 years. The economic life for improvements such as the subject is approximately 50 years; therefore, the remaining economic life for the subject improvements is 15 years.

Parking:

Open Spaces:	40 spaces
Covered Spaces:	<u>0</u> spaces
Total Spaces:	40 spaces
Parking Ratio:	8.61/1,000 square feet of building area

Landscaping: Landscaping is minimal with one mature tree located at the perimeter of the building. It is noted that the subject site includes a chain link fence surrounding the entire property.

Environmental Discussion: It should be noted that the subject property is located on a superfund site. A mitigation system has been installed at the property and initial system measurements done in 2018 found that the system is performing as designed and preventing vapor intrusion. **It is an Extraordinary Assumption that the Vapor Mitigation System is operable and appropriately effective as of the effective date of value.**

Comments: As indicated, the subject property was a former vision field office that was ultimately acquired by ADOT for the existing SR 143 right of way. Although the office building was not affected, the properties current shape is not as desirable. However, the subject improvements do have adequate attributes that would be appropriate for many users needing office space as well as outdoor storage. Although the property is located on a superfund site, the correct measures are being taken to monitor the vapor intrusion.

# HIGHEST AND BEST USE

Highest and best use is a market driven concept that focuses on market forces as each relates to the subject site identifying the most profitable and competitive use to which the property can be put.

Following is the definition of highest and best use as used in this report:

1. The reasonably probable use of property that results in the highest value. The four criteria that the highest and best use must meet are legal permissibility, physical possibility, financial feasibility, and maximum productivity.
2. The use of an asset that maximizes its potential and that is possible, legally permissible, and financially feasible. The highest and best use may be for continuation of an asset's existing use or for some alternative use. This is determined by the use that a market participant would have in mind for the asset when formulating the price that is would be willing to bid. (IVS)
3. The highest and most profitable use for which the property is adaptable and needed or likely to be needed in the reasonably near future. (Uniform Appraisal Standards for Federal Land Acquisitions) (The Dictionary of Real Estate Appraisal, 7<sup>th</sup> edition 2022)

## Highest and Best Use as a Vacant Site

The purpose of determining the use of the site as vacant is to identify its potential. The goal of the analysis is to ascertain the optimum use of the land as vacant, and what variety or type of improvement, if any, is warranted given present market conditions.

In growth areas and neighborhoods in transition or where a change in the near term is expected, an interim use could be utilized. An interim use may be the existing use, a proposed development, an assemblage or to hold as a speculative investment.

Highest and best use implies contribution of that specific use (ideal improvements) to the community environment or to community development goals in addition to wealth maximization of individual property owners. Also implied, is that the determination of highest and best use results from the appraiser's judgment and analytical skill, i.e., the use determined from analysis represents an opinion, not fact to be found. In appraisal practice, the concept of highest and best use represents the premise upon which value is based.

The highest and best use conclusion may be identical to the one permitted by either zoning ordinances or private restrictions. In some instances land has a more valuable use than that permitted by law. When there is a strong possibility that a change in the legal use would be permitted, then it could properly be considered as a factor affecting value. Conversely, zoning could legally permit a use more intense than the site could reasonably be expected to perform. In such cases, if zoning will not permit a less intense use, then it is necessary to determine whether or not the zoning could be changed and the effect of this factor upon the ultimate utilization of the property.



Although homogenetic use and compatibility are general considerations for developers, city and county planners and the basis of more intense land use studies, they do not usually indicate the Highest and Best Use of a property.

The Highest and Best Use is considered after analyzing market conditions relating to the positive and negative attributes of the subject site, significant limitations to the future use and current relationship to other uses in the immediate neighborhood. Specifically, the use must be reasonable within the following areas:

- ***Legally Permissible:*** A property use that is either currently allowed or most probably allowable under zoning codes, building codes, environmental regulations, and other applicable laws and regulations that govern land use.
- ***Physically Possible:*** For a land use to be considered physically possible, the parcel of land must be able to accommodate the construction of any building that would be a candidate for the ideal improvement.
- ***Financially Feasible:*** The value of the land use must exceed its cost (economic feasibility is a condition that exists when prospective earning power is sufficient to pay a requisite rate of return on the completion cost (including indirect costs). In other words, the estimated value at completion equals or exceeds the estimated cost. In reference to a service or property where revenue is not a fundamental consideration, economic feasibility is based on a broad comparison of cost and benefits.)
- ***Maximally Productive:*** To achieve maximum productivity, a specific land use must yield the highest value of all the physically possible, legally permissible, and financially feasible possible uses.

Each of these areas will be discussed in more detail in the following section of my analysis of Highest and Best Use.

To test highest and best use for the land as vacant, the appraiser analyzes all logical, feasible alternatives with legal permissibility and physical possibilities considered first.

#### **LEGALLY PERMISSIBLE:**

Legal permissibility is indicated by land use regulations and current zoning code of the controlling governmental agency.

The purpose of zoning is to provide for orderly growth and harmonious development. Zoning is intended to provide a common ground of understanding and a sound and equitable working relationship between public and private interests to the end that both independent and mutual objectives can be achieved.

The subject site is zoned C-2, Intermediate Commercial (90%) and R-5, Multifamily Residence District (10%) according to the Phoenix Planning and Zoning Department.

The C-2, Commercial Intermediate District, is a district of commercial uses of medium intensity designed to be compatible with each other and to provide for a wide range of types of commercial activity within the district.

The purpose of the multifamily residence districts is to provide for alternate living styles including rental, condominiums and single ownership of land with multiple units thereon or single or attached townhomes.

In conclusion, the subject site has a legally permissible use for commercial development.

### **PHYSICALLY POSSIBLE:**

Physical possibility is shown by indicating the capabilities and adaptability of the site for the proposed improvement (project) together with the availability of utilities and community services, modifications that may be required and limitations caused by physical characteristics of the site.

The subject property has not yet been re-platted to represent the net site area located outside of the existing SR 143 right of way. It is expected that a new parcel will be recorded prior to any disposition of the subject. The improvements currently sit on land area totaling 0.94 gross acres or 40,835 gross square feet; however, approximately 0.185 acres or 8,070 square feet of this land area is located within the existing SR 143 right of way. Therefore, the net land area associated with the improvements totals 0.752 acres or 32,765 square feet.

The net site area being valued has approximately 480 feet of frontage along State Route 143 and 180 feet of frontage along 46th Street.

The appraiser relied on Maricopa County Assessor information for the appraisal and on the physical inspection of the subject property.

Based on the legal description described as Parcel No. 2, which can be found in the addenda of this report, there appears to be an ingress and egress easement at the north half of the subject property, which allows the adjacent property to the north to have an additional point of access needed for what appears to be fire access only. Nonetheless, it appears that there is an ingress/egress easement on the site.

An environmental study has not been provided. However, the appraiser was provided a Supplemental Environmental Notice from May 22, 2018 by the State of Arizona in conformance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This notice is included in the addenda and states that a subsurface-to-indoor-air vapor intrusion investigation of the Motorola 52<sup>nd</sup> Street Superfund site, 2011, found elevated levels of the contaminant trichloroethene (TCE) above EPA's action levels. A vapor intrusion pathway mitigation system is necessary on the subject property until multiple lines of evidence indicate there is no longer potential for vapor intrusion into the indoor air. The State entered into an agreement to install and maintain a mitigation system at the property to mitigate elevated concentrations of TCE in indoor air while preparing the property for eventual sale to the public. Documentation of the onsite activities discussed in the notice, maintenance requirements of the mitigation system, superfund remedial performance measures and additional information about the Motorola, Inc. (52<sup>nd</sup> Street Plant) superfund site shall be made available to a potential grantee prior to sale. Other than the location of the subject in the

Superfund Site as well as the irregular “hourglass” shape, there are no other indicated development limitations observed from my inspection with exception to development limitations imposed by the planning department and zoning code of the City of Phoenix with respect to lot/building ratios and property line set-backs.

In conclusion, commercial development is both legally permissible and physically possible on the subject site.

### **FINANCIAL FEASIBILITY:**

At this point of the Highest and Best Use analysis, the appraiser can conclude that the subject, from legal, physical and appropriate considerations, commercial development is both physical and possible on the site. This conclusion statement considers the type of uses that are deemed to be the most reasonable and prudent uses for the subject, as of the effective date of valuation. Now at this point, one must divert the analysis with regards to the economic feasibility that may affect the subject site.

To do this task, a market study was conducted. For the purposes of this appraisal report, Market Study is defined as follows: Market Study, an analysis of the market conditions of supply, demand, and pricing for a specific property type in a specific area. (The Dictionary of Real Estate Appraisal, 7<sup>th</sup> edition 2022)

As indicated, the subject is currently zoned for commercial development. Therefore, the appraiser has searched the market to determine if this type of development is currently feasible in the marketplace.

The following data is based off a survey from CoStar for a three mile radius surrounding the subject property.

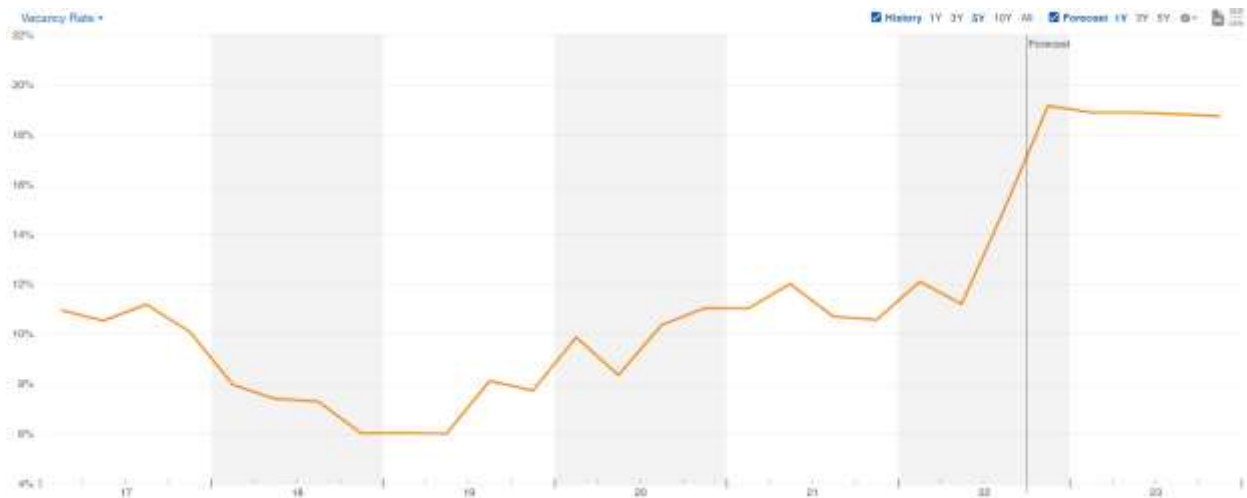
#### Office

The following historical data from CoStar represents the office market including rental rates and vacancy rates.

INVENTORY SF	UNDER CONSTRUCTION SF	12 MO NET ABSORPTION SF	VACANCY RATE
12.9M <span style="color: green;">+1.9%</span>	0 <span style="color: red;">-100.0%</span>	(896K) <span style="color: red;">-13,570.9%</span>	19.2% <span style="color: red;">+8.6%</span>
Prior Period 12.6M	Prior Period 244K	Prior Period (6.6K)	Prior Period 10.6%

Availability		Inventory	
Vacant SF	2.5M ↑	Existing Buildings	487 ↑
Sublet SF	936K ↑	Under Construction Avg SF	-
Availability Rate	22.1% ↑	12 Mo Demolished SF	0 ↓
Available SF	2.8M ↑	12 Mo Occupancy % at Delivery	76.0%
Available Asking Rent/SF	\$30.81 ↑	12 Mo Construction Starts SF	0 ↓
Occupancy Rate	80.8% ↓	12 Mo Delivered SF	244K ↑
Percent Leased Rate	87.0% ↓	12 Mo Avg Delivered SF	244K

The surrounding neighborhood of the subject had an office inventory of approximately 12.9 million square feet. Of this area, approximately 2.5 million square feet was vacant equating to a vacancy rate of 19.2%. Over the past five years, vacancy rates ranged from 6.00% to 19.25%. Over the past year, vacancy rates have been trending upward.

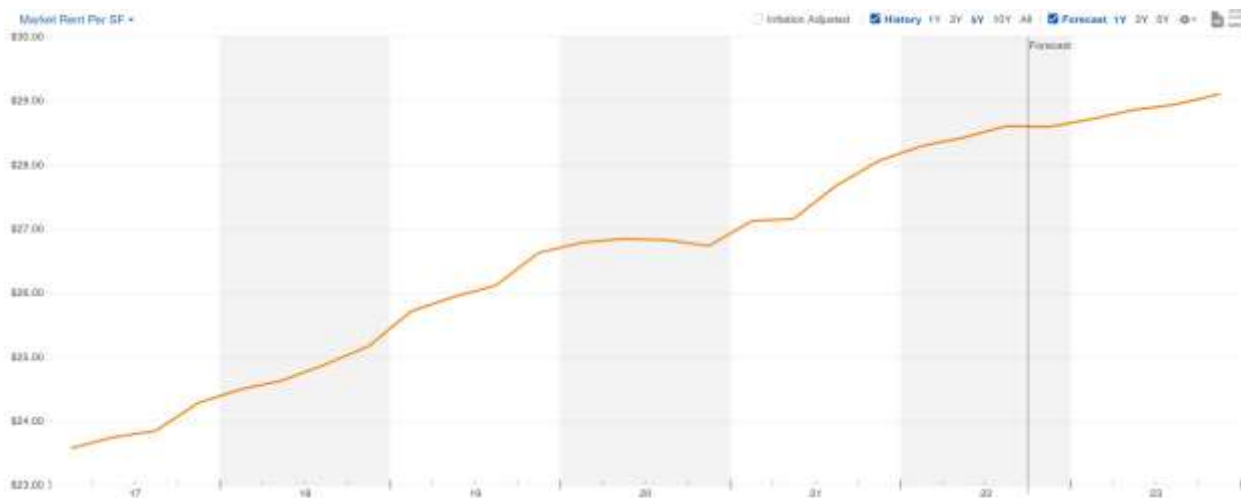


Market rents, sales prices and overall capitalization rates are reported as:

MARKET RENT/SF	MARKET SALE PRICE/SF	MARKET CAP RATE
<b>\$28.58</b> <span style="background-color: #28a745; color: white; padding: 2px;">+2.1%</span>	<b>\$237</b> <span style="background-color: #28a745; color: white; padding: 2px;">+2.9%</span>	<b>7.0%</b> <span style="background-color: #6c757d; color: white; padding: 2px;">+0%</span>
Prior Period \$28.01	Prior Period \$230	Prior Period 7.0%

Sales Past Year		Demand	
Asking Price Per SF	\$190 ↑	12 Mo Net Absorp % of Inventory	-7.0% ↓
Sale to Asking Price Differential	-2.0% ↑	12 Mo Leased SF	425K ↓
Sales Volume	\$49.4M ↓	Months on Market	10.8 ↓
Properties Sold	45 ↓	Months to Lease	9.9 ↓
Months to Sale	12.2 ↑	Months Vacant	10.6 ↑
For Sale Listings	14 ↓	24 Mo Lease Renewal Rate	37.3%
Total For Sale SF	153K ↓	Population Growth 5 Yrs	12.4%

The current quarter showed gross market rental rates of \$28.58 per square foot. Over the past five years, gross market rental rates ranged between \$24.28 per square foot to \$28.60 per square foot. Gross market rental rates have been trending upward over the past year.



Based on the preceding analysis, the appraiser believes that commercial development is considered financially feasible as demand appears to be outpacing supply as shown in the increasing rental rates and decreasing vacancy rates. These rates would support new construction.

From the preceding analysis, it is evident the commercial use that is physically possible and legally permissible is currently financially feasible.

**MAXIMALLY PRODUCTIVE:**

Of the uses that pass the test of financial feasibility, the use that yields the highest return, usually over the long term and consistent with the risk involved, is considered the highest and best use of the property. The ideal type and size improvement that would attain the highest possible rental income would be considered the most maximally productive use of the property.

From the preceding analysis, it is evident the commercial use that is physically possible and legally permissible is currently financially feasible and is maximally productive at this time.

**CONCLUSION:**

Based on an evaluation of the four criteria in determining a property's Highest and Best Use as Vacant, it has been concluded that the Highest and Best Use as Vacant of the subject would be for commercial development.

## **HIGHEST AND BEST USE AS IMPROVED:**

There are two reasons for analyzing the property as improved. The two reasons are (1) to identify the uses of the property that can be expected to produce the highest overall return for each dollar of invested capital, and (2) to estimate the highest and best use to help identify comparable properties.

The first reason is to consider whether or not the existing use will continue to provide maximum benefits and/or can the rate of return be increased by converting to a different use. Like a vacant site, the highest and best use of a site as improved must meet the four criteria, i.e.; is the use (1) Physically Possible, (2) Legally Permissible, (3) Financially Feasible, and (4) Maximally Productive.

As discussed in the Improvement Description section of this report, the subject is presently improved as a single tenant office building on an irregular shaped site, but with a somewhat large parking ration, which equates to a large land to building ratio for what is typical in the market.

The subject's existing use is legally permissible. Physically Possible concerns the size and design of the property improvements located on the site. The existing improvements are considered to be adequate in size and design, although the shape of the site and the location of the majority of the parking is somewhat undesirable. The appraiser was provided with a Vapor Mitigation System Installation Report done by NXP USA, Inc. dated March 21, 2018. The report found that based on the initial system measurements, the sub-slab depressurization (SSD) system did not initially meet the EPA goal at all test hole locations, however, the initial indoor air sampling results from December 2017 were not detected which indicates that the system is performing as designed and preventing vapor intrusion. Based on initial testing, the expectation of the system is to continue to effectively control any potential vapor intrusion emanating from below the slab. A copy of this report is included in the addenda of the appraisal report. The appraiser has not been provided with any more recent tests indicating current measurements and the most recent data available was this report conducted in 2017. **It is an Extraordinary Assumption that the Vapor Mitigation System is operable and appropriately effective as of the effective date of value.**

Additionally, based on the legal description described as Parcel No. 2, which can be found in the addenda of this report, there appears to be an ingress and egress easement at the north half of the subject property, which allows the adjacent property to the north to have an additional point of access needed for what appears to be fire access only. Nonetheless, it appears that there is an ingress/egress easement on the site; however, it is determined that this does not have a significant impact on the improvements.

In order to determine if the existing improvements are financially feasible and continue to add value to the land, the appraiser researched recent transactions of similar zoned property with a similar Highest and Best Use. This search resulted in seven transactions considered to be the most recent similar data to the subject. As shown in the following chart, recent comparable sale prices of commercial land in the area ranged between \$79.79 per square foot and \$283.58 per square foot with an average of \$170.61 per square foot.

Address	Parcel	Sale Date	Sale Price	Size (SF)	Price/SF	Zoning
SWC Loop 202 and 24 <sup>th</sup> Street, Phoenix	116-04-031E, Et Al.	9/1/2020	\$5,540,000	432,551	\$12.81	C-2
4220 E. McDowell Road, Phoenix, AZ	126-07-065H	12/13/21	\$875,000	36,242	\$24.14	C-2
SW of Washington Street and 24 <sup>th</sup> Street, Phoenix	115-08-048A, Et Al.	4/19/2021	\$1,400,000	106,697	\$13.12	C-3/A-1
2201 E. Thomas Road, Phoenix	117-01-034A	9/1/21	\$321,000	15,564	\$20.62	C-2

As indicated, the subject site is irregular in shape and although the property has a McDowell Road address, access to the subject site is not available via McDowell Road and the property has no McDowell Road visibility. The site is located within the 52<sup>nd</sup> Street Motorola Superfund site and the subject site hosts an ingress/egress easement that allows the property to the north to have fire access. Based on the comparables surveyed and the subject's site limitations associated with commercial zoning without direct major roadway access, irregular 'hourglass' shape, and the ingress/egress easement, the appraiser concludes that a value for the land would fall near the lower end of the range or \$14.00 per square foot.

This would equate to an approximate site value of:

$$32,765 \text{ SF} \times \$14.00/\text{SF} = \$458,710 \qquad \text{ROUNDED} = \$460,000$$

In order for the improvements to add no contributory value to the land, the land value would need to exceed the value of the subject improvement value, which will be shown later in this report to be estimated at \$560,000.

Due to the fact that the improved value exceeds the land value, demolition of the current improvements for new development is not considered reasonable and the existing use is considered to be the Highest and Best Use of the subject (As Improved). However, it is noted that the improvements are nearing the end of their economic life.

# VALUATION PROCESS

The principles and concepts of real estate appraisal are basic to the valuation process. The principles of real estate are based on anticipation, change, supply and demand, competition, substitution, opportunity cost, balance, contribution, conformity and externalities.

The valuation process is:

*A systematic set of procedures an appraiser follows to provide answers to a client's questions about real property value.* (The Dictionary of Real Estate Appraisal, 7<sup>th</sup> edition 2022)

The first step in the procedure is to define the appraisal problem: i.e., identify the real estate, the effective date of the value estimate, the property rights being appraised, and definition of value sought. The next step is an overview of the character and scope of the assignment. Once accomplished, factors that affect market value are collected and analyzed. These factors are addressed in the regional, city and neighborhood analysis, the site and improvement analysis, the highest and best use analysis, and in the application of the three approaches to value (the Sales Comparison, the Cost, and Income Capitalization Approaches) which follows.

**SALES COMPARISON APPROACH** - *The process of deriving a value indication for the subject property by comparing sales of similar properties to the property being appraised, identifying appropriate unites of comparison, and making adjustments to the sale prices (or unite prices, as appropriated) of the comparable properties based on relevant, market-derived elements of comparison. The sales comparison approach may be used to value improved properties, vacant land, or land being considered as through vacant when an adequate supply of comparable sales is available.* (The Dictionary of Real Estate Appraisal, 7<sup>th</sup> edition 2022)

A Comparative analysis is the process by which a value indication is derived in the sales comparison approach. Comparative analysis may employ quantitative or qualitative techniques, either separately or in combination. The process by which a rental value indication is derived in a rental comparison analysis. Comparative analysis may employ quantitative or qualitative techniques, either separately or in combination. (The Dictionary of Real Estate Appraisal, 7<sup>th</sup> edition 2022)

**COST APPROACH** - *A set of procedures through which a value indication is derived for the fee simple estate by estimating the current cost to construct a reproduction of (or replacement for) the existing structure, including an entrepreneurial incentive; deducting depreciations from the total cost; and adding the estimated land value. The contributory value of any site improvements that have not already been considered in the total cost can be added on a depreciated-cost basis. Adjustments may then be made to the indicated value of the fee simple estate in the subject property to reflect the value of the property interest being appraised.* (The Dictionary of Real Estate Appraisal, 7<sup>th</sup> edition 2022)



One of the approaches to value commonly applied in Market Value estimates and many other valuation situations. A comparative approach to the value of property or another asset that considers, as a substitute for the purchase of a given property, the possibility of constructing another property that is an equivalent to the original or one that could furnish equal utility with no undue cost resulting from delay. The Valuer's estimate is based on the reproduction or replacement cost of the subject property or asset, less total (accrued) depreciation. The Cost Approach establishes the value of a real property by estimating the cost of acquiring land and building a new property with equal utility or adapting an old property to the same use with no undue cost due to delay. An estimate of entrepreneurial incentive or developer's profit/loss is commonly added to land and construction costs. For older properties, the cost approach develops an estimate of depreciation including items of physical deterioration and functional obsolescence.

**INCOME CAPITALIZATION APPROACH** – *Specific appraisal techniques applied to develop a value indication for a property based on its earning capability and calculated by the capitalization of property income.* (The Dictionary of Real Estate Appraisal, 7<sup>th</sup> edition 2022)

A comparative approach to value that considers income and expense data relating to the property being valued and estimates value through a capitalization process. Capitalization relates income (usually net income) and a defined value type by converting an income amount into a value estimate. This process may consider direct relationships (whereby an overall capitalization rate or all risks yield is applied to a single year's income), yield or discount rates (reflecting measures of return on investment) applied to a series of incomes over a projected period, or both. The income approach reflects the principles of substitution and anticipation.

Typically, three approaches to value are considered, the Cost Approach, the Sales Comparison Approach and the Income Approach. Due to the fact that investors place little weight on the Cost Approach to Value, that approach will be eliminated. The Sales Comparison Approach to Value is presented, followed by the Income Approach to Value. The two values will then be reconciled into a final Market Value of the subject.

# SALES COMPARISON APPROACH

In the Sales Comparison Approach, market value is estimated by comparing the subject property to similar properties that have sold recently or for which offers to purchase have been made. A major premise of the Sales Comparison Approach is that the market value of a property is directly related to the prices of comparable, competitive properties.

There are five basic steps in the Sales Comparison Approach:

1. Research the market to locate sales of properties similar to the subject.
2. Confirm and verify the sales price, terms of sale, physical characteristics, income characteristics and that the sale represents an arms-length transaction.
3. Identify relevant elements of comparison and analyze each sale for each property.
4. Compare the subject property to the comparable sales and adjust each for relevant differences to establish comparability.
5. Reconcile the various indications of value into a market value estimate for the subject property.

Public records of Maricopa County, Arizona have been searched for recent sales of comparable properties in the market. Additionally, real estate brokers believed to be knowledgeable in the market have been consulted regarding their knowledge of market transactions. Sales have been confirmed with the seller, buyer, real estate broker or other persons knowledgeable about each transaction and verified by Affidavit of Property Value, which is a sworn statement as to the validity of the transaction.

The subject property can be classified as a vacant single tenant office building in Phoenix. The subject property can additionally be described as follows:

- Located at 4601 East McDowell Road in Phoenix, Maricopa County, Arizona.
- The subject is a vacant single tenant office building totaling 4,646 square feet. The building was constructed in 1977 and is in poor/fair condition.
- The subject site is irregular in shape and contains 0.752 acres or 32,765 square feet with a parking ratio of 8.61.

These characteristics that describe the subject property as of the date of valuation were also the criteria the appraiser utilized to search for similar properties. As a result of this market-wide search, the appraiser discovered similar properties that were sold and are considered indicators of value.

## SALE NO. 1



LOCATION 4636 East McDowell Road, Phoenix, AZ  
GRANTOR Roger J. Jusseume Family Trust  
GRANTEE CSE Properties LLC

RECORDING DATE 9/14/22  
DAYS ON MARKET N/Av  
PARCEL NO. 126-10-001G and 001H  
DOCUMENT NO. 2022-0711381

SALE PRICE \$1,150,000  
SALE PRICE/SF \$168.52  
TERMS Cash Equivalent  
PROPERTY RIGHTS Fee Simple  
CONDITION OF SALE Seller Carryback

CONFIRMED BY Repeated attempts to contact the buyer, seller, and/or broker were unsuccessful; the vital sales data was confirmed through a signed affidavit of property value and CoStar.

DATA SOURCES Sworn Affidavit of Property Value signed by grantor and grantee, and CoStar

SALES HISTORY None in the last three years

**SITE DATA**

Land Size/SF	22,521
Arterial Frontage	Major
Location/Access	Interior/Average
Surroundings	Average
Topography	Level
Utilities	Yes
Off-sites	Yes
Zoning	C-2
Present Use	Office
Highest and Best Use	As Improved

**IMPROVEMENT DATA**

Building Area/SF	6,824
Year Built	1983
Condition	Average
Parking Ratio/1,000 SF	5.42
Traffic Count (vpd)	42,639
Occupancy	0%
Capitalization Rate	N/Av

**COMMENTS**

The property was vacant at the time of sale. This sale was a seller carryback where the buyer put down 4.3%.

## SALE NO. 2



LOCATION	4045 East McDowell Road, Phoenix, AZ
GRANTOR	Castor Plaza LLC
GRANTEE	AES Property Development LLC
RECORDING DATE	4/12/22
DAYS ON MARKET	1721
PARCEL NO.	125-19-043A
DOCUMENT NO.	2022-0323373
SALE PRICE	\$1,200,000
SALE PRICE/SF	\$123.71
TERMS	Cash Equivalent
PROPERTY RIGHTS	Leased Fee
CONDITION OF SALE	Seller Carryback
CONFIRMED BY	Tom Kuffler, Broker (480) 264-0668
DATA SOURCES	Sworn Affidavit of Property Value signed by grantor and grantee, and CoStar
SALES HISTORY	None in the last three years

**SITE DATA**

Land Size/SF	24,907
Arterial Frontage	Major
Location/Access	Corner/Average
Surroundings	Average
Topography	Level
Utilities	Yes
Off-sites	Yes
Zoning	C-2
Present Use	Office
Highest and Best Use	As Improved

**IMPROVEMENT DATA**

Building Area/SF	9,700
Year Built	1984
Condition	Average
Parking Ratio/1,000 SF	2.27
Traffic Count (vpd)	33,729
Occupancy	67%
Capitalization Rate	N/Av

**COMMENTS**

The property was purchased as an investment and the buyer will continue to lease the property. This sale was a seller carryback where the buyer put down 75%.

### SALE NO. 3



LOCATION 1401 North 24th Street, Phoenix, AZ  
GRANTOR 1401 N 24th St LLC  
GRANTEE Sonoran Rising LLC

RECORDING DATE 2/02/22  
DAYS ON MARKET N/A  
PARCEL NO. 121-78-057A  
DOCUMENT NO. 2022-0101127

SALE PRICE \$1,358,000  
SALE PRICE/SF \$174.10  
TERMS Cash Equivalent  
PROPERTY RIGHTS Fee Simple  
CONDITION OF SALE Arm's Length

CONFIRMED BY Repeated attempts to contact the buyer, seller, and/or broker were unsuccessful; the vital sales data was confirmed through a signed affidavit of property value and CoStar.

DATA SOURCES Sworn Affidavit of Property Value signed by grantor and grantee, and CoStar

SALES HISTORY None in the last three years

#### SITE DATA

Land Size/SF	30,850
Arterial Frontage	Major
Location/Access	Corner/Average
Surroundings	Average
Topography	Level
Utilities	Yes
Off-sites	Yes
Zoning	R-5/P-1
Present Use	Office
Highest and Best Use	As Improved

#### IMPROVEMENT DATA

Building Area/SF	7,800
Year Built	1979
Condition	Average
Parking Ratio/1,000 SF	4.23
Traffic Count (vpd)	32,211
Occupancy	0%
Capitalization Rate	N/Av

#### COMMENTS

The property was purchased by an owner-user. The property features a gated parking lot with covered parking.



## SALE NO. 4



LOCATION	2222 North 24th Street, Phoenix, AZ
GRANTOR	Beacon Group SW Inc.
GRANTEE	2222 West Vel Ru LLC
RECORDING DATE	10/12/21
DAYS ON MARKET	82
PARCEL NO.	117-09-109 and 111
DOCUMENT NO.	2021-1062829
SALE PRICE	\$365,000
SALE PRICE/SF	\$169.29
TERMS	Cash
PROPERTY RIGHTS	Fee Simple
CONDITION OF SALE	Arm's Length
CONFIRMED BY	Matt Harper, Broker (602) 393-6604
DATA SOURCES	Sworn Affidavit of Property Value signed by grantor and grantee, and CoStar
SALES HISTORY	None in the last three years

**SITE DATA**

Land Size/SF	12,792
Arterial Frontage	Major
Location/Access	Interior/Average
Surroundings	Average
Topography	Level
Utilities	Yes
Off-sites	Yes
Zoning	C-2
Present Use	Office
Highest and Best Use	As Improved

**IMPROVEMENT DATA**

Building Area/SF	2,156
Year Built	1978
Condition	Average
Parking Ratio/1,000 SF	7.42
Traffic Count (vpd)	25,107
Occupancy	100%
Capitalization Rate	N/Av

**COMMENTS**

This property was purchased by an investor. According to the broker, the seller was occupying the space and was staying short term after the close of escrow. Once vacated, the buyer leased the property to a new tenant.

## SALE NO. 5



LOCATION	5130 East Thomas Road, Phoenix, AZ
GRANTOR	Lynda B. Ukemenam Living Trust
GRANTEE	Project Arcadia LLC
RECORDING DATE	9/14/21
DAYS ON MARKET	84
PARCEL NO.	128-16-007E
DOCUMENT NO.	2021-0990259
SALE PRICE	\$600,000
SALE PRICE/SF	\$181.82
TERMS	Cash Equivalent
PROPERTY RIGHTS	Fee Simple
CONDITION OF SALE	Arm's Length
CONFIRMED BY	Tom Bean, Broker (602) 393-6790
DATA SOURCES	Sworn Affidavit of Property Value signed by grantor and grantee, and CoStar
SALES HISTORY	Non-Arm's Length Sale in June 2021, price not disclosed

**SITE DATA**

Land Size/SF	13,564
Arterial Frontage	Major
Location/Access	Surrounds Corner/Average
Surroundings	Average
Topography	Level
Utilities	Yes
Off-sites	Yes
Zoning	R-5
Present Use	Office Live/Work Unit
Highest and Best Use	As Improved

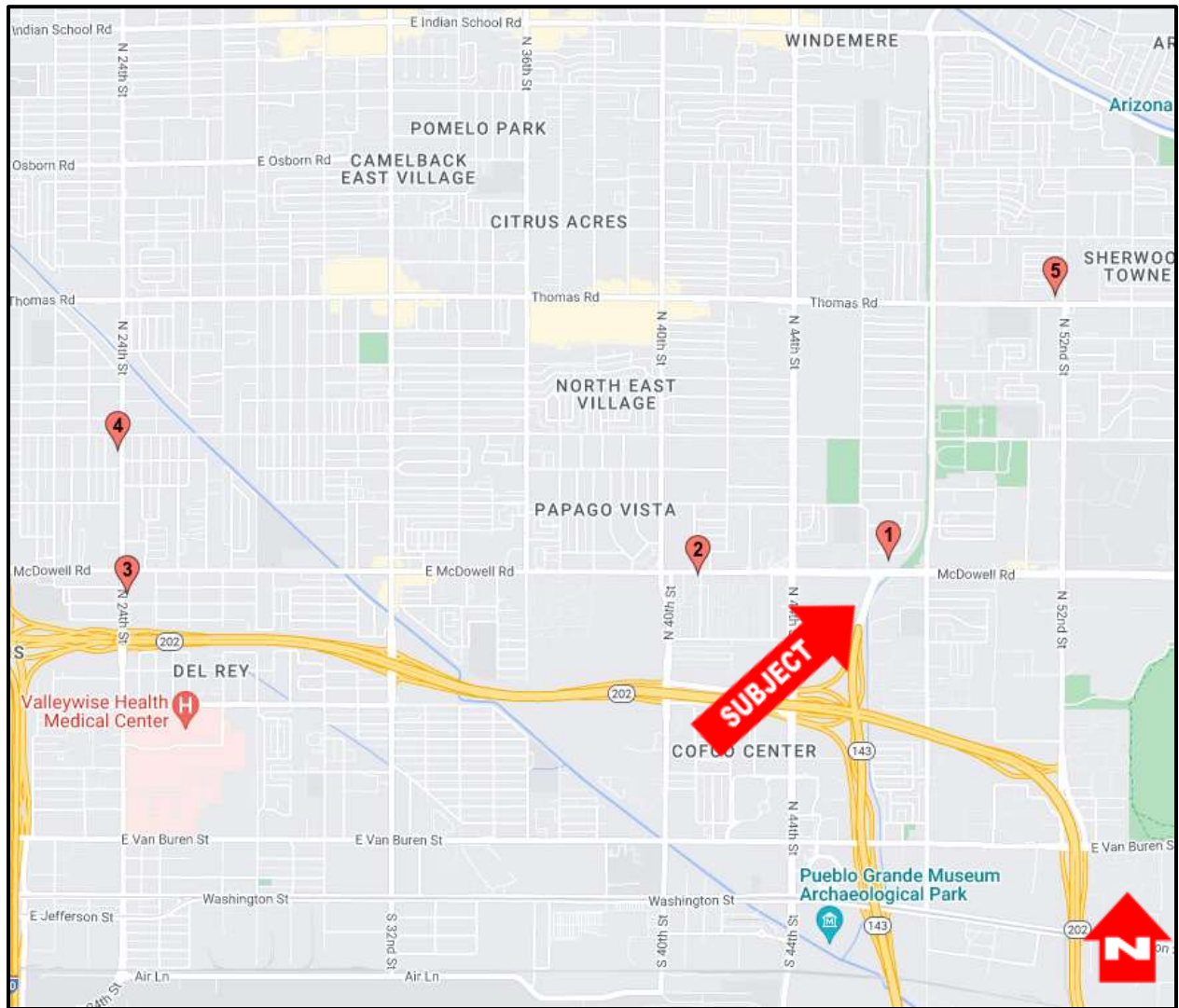
**IMPROVEMENT DATA**

Building Area/SF	3,300
Year Built	1985
Condition	Average
Parking Ratio/1,000 SF	3.64
Traffic Count (vpd)	26,733
Occupancy	0%
Capitalization Rate	N/Av

**COMMENTS**

The property was vacant at the time of sale and purchased by an owner-user. The property features a gated and secured parking lot. Although the property is not on the hard corner, it does have access from both Thomas Road and 52nd Street and visibility along Thomas Road.

# IMPROVED SALES MAP



### SUMMARY OF IMPROVED SALES

Sale Data	SUBJECT	SALE 1	SALE 2	SALE 3	SALE 4	SALE 5
Sales Price		\$1,150,000	\$1,200,000	\$1,358,000	\$365,000	\$600,000
Price/SF		\$168.52	\$123.71	\$174.10	\$169.29	\$181.82
Property Rights	Fee Simple	Fee Simple	Leased Fee	Fee Simple	Fee Simple	Fee Simple
Financing	Cash Equivalent	Cash Equivalent	Cash Equivalent	Cash Equivalent	Cash	Cash Equivalent
Sale Conditions	Arm's Length	Seller Carryback	Seller Carryback	Arm's Length	Arm's Length	Arm's Length
Market Conditions	Current	9/14/22	4/12/22	2/02/22	10/12/21	9/14/21
Land/SF	32,765	22,521	24,907	30,850	12,792	13,564
Arterial Frontage	Minor	Major	Major	Major	Major	Major
Location/Access	Interior/Average	Interior/Average	Corner/Average	Corner/Average	Interior/Average	Surrounds Corner/Average
Surroundings	Average	Average	Average	Average	Average	Average
Topography	Level	Level	Level	Level	Level	Level
Utilities	Yes	Yes	Yes	Yes	Yes	Yes
Off-Sites	Yes	Yes	Yes	Yes	Yes	Yes
Building Size	4,646	6,824	9,700	7,800	2,156	3,300
Year Built	1977	1983	1984	1979	1978	1985
Condition	Poor to Fair	Average	Average	Average	Average	Average
Parking Ratio/1,000 SF	8.61	5.42	2.27	4.23	7.42	3.64
Traffic Count (vpd)	12,098	42,639	33,729	32,211	25,107	26,733
Occupancy	0%	0%	67%	0%	100%	0%
OAR	N/Av	N/Av	N/Av	N/Av	N/Av	N/Av
Zoning	C-2(90%); R-5 (10%)	C-2	C-2	R-5/P-1	C-2	R-5

## **SALES DATA:**

A search was made to obtain comparable market data. Because no two properties are ever exactly the same, adjustments are considered to reflect the differences so that a valid estimate of value can be made. The unit of measure considered in this report is price per square foot of building area. This unit of measure is commonly used in the market and is accepted as a method of assisting in the determination value.

The appraiser is of the opinion that the accumulated sales data accurately reflects the present market and its interrelated economic forces. Unfortunately, there is disparity within the data in relation to the most likely common denominator, (price per square foot). This disparity can be attributed to:

- (1) Varying locations of the respective sale properties.
- (2) Inconsistencies relative to the overall plot size of the sale properties in relation to the subject.
- (3) Physical characteristics and fill requirements.
- (4) Real Estate reflects an imperfect market.

The comparative sales analysis focuses on the legal, physical, location and economic characteristics of similar properties as compared to the subject property. Other considerations are real property rights conveyed, financing terms, conditions of sale, date of sale, physical and income characteristics, all of which can account for variations in price.

Adjustments to a property may be made either in terms of a percentage or dollars per square foot. There is no “proper” method of adjustment to strictly adhere to since adjustments depend on how the relationship between the two properties is perceived by the market. A market value estimate is not determined by a set of precise calculations. Appraisal has an art aspect in that appraisers use their judgment to analyze and interpret quantitative data.

## **PROPERTY RIGHTS CONVEYED:**

The investigation revealed the Fee Simple Estate was the property rights conveyed in comparable sales one, three, four and five similar to the subject and will not be adjusted. Comparable sale two was partially leased, however the lease rate was considered to be at market and therefore the Leased Fee and Fee Simple are equivalent and no adjustment is made.

## **FINANCING:**

Comparables three, four, and five were sold for cash or the equivalence of cash and no adjustments are warranted. Comparable sale one was reported to be a seller carryback with a 4.3% down payment and will be adjusted downward. Comparable sale two was reported to be a seller carryback with a 75% down payment that was confirmed as transacting at a market price and no adjustment was made.

## **CONDITIONS OF SALE:**

Each of the transactions were considered to be arms-length market transactions and no adjustments are warranted.

## **MARKET CONDITIONS:**

All of the comparable sales were transacted from September 2021 to September 2022 and are considered to be generally representative of current market conditions, as of the effective date of value, and no adjustment is made.

## **LOCATION:**

Location adjustments typically reflect an increase or decrease in value attributable to accessibility, competitive environment, arterial exposure, freeway influence, and surrounding development. These location attributes may determine the degree of demand a property could have which in turn define occupancy levels and rental rate structures.

The subject has a good location with proximity to the Metropolitan Phoenix transportation network just north of the Loop 202 and west of State Route 143. The site runs adjacent to the State Route 143 has visibility to this freeway. However, the site does not have direct access to a major roadway.

Adjustments for the comparable sales based on their location characteristics including frontage, access, and surroundings follows.

### Arterial Frontage:

All comparable sales had superior major roadway frontage as compared to the subject and will be adjusted downward.

### Access:

Comparable sales two, three, and five had superior access as compared to the subject and therefore will be adjusted downward.

### Surroundings:

Comparable sale five had superior surrounding development as compared to the subject and will be adjusted downward.



<b>Location Factors</b>	<b>SUBJECT</b>	<b>SALE 1</b>	<b>SALE 2</b>	<b>SALE 3</b>	<b>SALE 4</b>	<b>SALE 5</b>
Arterial Frontage	Minor	Superior	Superior	Superior	Superior	Superior
Adjustment		-5%	-5%	-5%	-5%	-5%
Access	Interior/Average	Similar	Superior	Superior	Similar	Superior
Adjustment		0%	-5%	-5%	0%	-5%
Surroundings	Average	Similar	Similar	Similar	Similar	Superior
Adjustment		0%	0%	0%	0%	-5%
<b>Quantitative Adjustment</b>		<b>-5%</b>	<b>-15%</b>	<b>-15%</b>	<b>-5%</b>	<b>-15%</b>

### **PHYSICAL CHARACTERISTICS:**

Physical characteristics include building size, age and condition, parking ratio, and overall property utility and use.

#### Size:

Comparable sale two was larger than the subject and will be adjusted upward. Comparable sale four was smaller than the subject and will be adjusted downward.

#### Age & Condition:

All of the comparable sales were similar in respect to age and construction quality; however, each was superior with respect to condition as the subject would require additional cost to address deferred maintenance.

#### Parking Ratio:

Comparable sales two, three and five were inferior in respect to parking ratio and will be adjusted upward. Comparable sales one and four had similar parking ratios and will not be adjusted.

#### Utility and Use:

Due to the undesirable hourglass shape of the subject and difficult parking lot circulation, each of the comparable sales are superior to the subject and will be adjusted downward.

<b>Physical Characteristics</b>	<b>SUBJECT</b>	<b>SALE 1</b>	<b>SALE 2</b>	<b>SALE 3</b>	<b>SALE 4</b>	<b>SALE 5</b>
Size	4,646	Similar	Larger	Similar	Smaller	Similar
Adjustment		0%	+5%	0%	-5%	0%
Age & Condition	Poor/Fair	Superior	Superior	Superior	Superior	Superior
Adjustment		-10%	-10%	-10%	-10%	-10%
Parking Ratio/1,000 SF	8.61	Similar	Inferior	Inferior	Similar	Inferior
Adjustment		0%	+5%	+5%	0%	+5%
Utility and Use	Hourglass	Superior	Superior	Superior	Superior	Superior
Adjustment		-5%	-5%	-5%	-5%	-5%
<b>Quantitative Adjustment</b>		<b>-15%</b>	<b>-5%</b>	<b>-10%</b>	<b>-20%</b>	<b>-10%</b>

**ZONING:**

Zoning is similar for all comparable properties when compared with the subject. No directional adjustments are made for zoning.

In conclusion, the values indicated in the summary of improved properties show a range in price per square foot from \$123.71 per square foot to \$181.82 per square foot before adjustments. It is believed the indicated value range is reflective of the utility, wants, and needs of buyers in the marketplace.

**IMPROVED SALES ADJUSTMENT CHART:**

<b>Elements of Comparison</b>	<b>SALE 1</b>	<b>SALE 2</b>	<b>SALE 3</b>	<b>SALE 4</b>	<b>SALE 5</b>
Price/SF	<b>\$168.52</b>	<b>\$123.71</b>	<b>\$174.10</b>	<b>\$169.29</b>	<b>\$181.82</b>
Property Rights	0.00%	0.00%	0.00%	0.00%	0.00%
Adjusted Price	\$168.52	\$123.71	\$174.10	\$169.29	\$181.82
Financing	-10.00%	0.00%	0.00%	0.00%	0.00%
Adjusted Price	\$151.67	\$123.71	\$174.10	\$169.29	\$181.82
Condition of Sale	0.00%	0.00%	0.00%	0.00%	0.00%
Adjusted Price	\$151.67	\$123.71	\$174.10	\$169.29	\$181.82
Market Conditions	0.00%	0.00%	0.00%	0.00%	0.00%
Adjusted Price	\$151.67	\$123.71	\$174.10	\$169.29	\$181.82
Location Factors	-5%	-10%	-10%	-5%	-15%
Physical Characteristics	-15%	-5%	-10%	-20%	-10%
Zoning	0%	0%	0%	0%	0%
Overall Adjustment	-20%	-15%	-20%	-25%	-25%
<b>Final Indicated Value</b>	<b>\$121.34</b>	<b>\$105.15</b>	<b>\$139.28</b>	<b>\$126.97</b>	<b>\$136.36</b>

**CONCLUSION OF VALUE:**

After adjustments were made, the sales have a range of \$105.15 to \$139.28 per square foot with an indicated average of \$123.19 per square foot. The indicated unit sales prices of the comparable sales reflect market conditions for vacant single tenant office buildings within the area.

The appraiser has placed equal weight on all of the sales, thus, based on the subject's location, shape, age & condition, the appraiser will conclude to near the lower to middle end of the range or \$120.00/SF, which would equate as follows:

$$4,646 \text{ SF} \times \$120.00 \text{ per SF} = \$557,520$$

**ROUNDED = \$560,000**

# INCOME APPROACH

The Income Approach can be analyzed by one of two methods: 1) Direct Capitalization or 2) Discounted Cash Flow.

The Direct Capitalization method is - *A method used to convert an estimate of a single year's income expectancy into an indication of value in one direct step, either by dividing the net income estimate by an appropriate capitalization rate or by multiplying the income estimate by an appropriate factor. Direct capitalization employs capitalization rates and multipliers extracted or developed from market data. Only one year's income is used. Yield and value changes are implied, but not explicitly identified.* (The Dictionary of Real Estate Appraisal, 7<sup>th</sup> edition 2022)

The Discounted Cash Flow (DCF) Analysis is - *The procedure in which a discount rate is applied to a set of projected income streams and a reversion. The analyst specifies the quantity, variability, timing, and duration of the income streams and the quantity and timing of the reversion, and discounts each to its present value at a specified yield rate.* (The Dictionary of Real Estate Appraisal, 7<sup>th</sup> edition 2022)

As reported, the subject property is a single tenant office building. The subject is currently vacant and due to the fact that the subject has the potential to produce income, the appraiser will utilize the Direct Capitalization method in order to value the subject within the Income Approach.

In the subject's case, the income stream would be in the form of net operating income produced through the collection of rents, deducting the appropriate vacancy and credit loss, adding other income if any, then deducting appropriate expenses. The first step in the process is to estimate potential gross income. The process begins with the examination of the existing effective lease rates of similar properties located within the sub-market. Rental rates and terms from comparable properties were collected to support the estimate of market rent for the subject property.

Following is a rental survey indicating current contract and/or market rents of similar property located within the submarket. The rental survey was conducted by interviewing the leasing agents of comparable rental properties. This survey will be followed by an analysis and adjustments for the elements of comparison discussed previously. Then, operating expenses together with vacancy and credit losses are estimated from market experience to obtain the net operating income. The resulting net operating income is then capitalized to convert the future income stream into a present value indication.

On the following pages are brief descriptions or summaries of comparable rental properties followed by a synopsis of each rental comparable and location map.

## RENTAL NO. 1



<b>ADDRESS</b>	2935 West Clarendon Avenue, Phoenix, AZ
<b>BUILDING TYPE</b>	Multi-tenant office
<b>BUILDING SIZE (SF)</b>	3,400
<b>YEAR BUILT</b>	1971
<b>LEASING ACTIVITY</b>	
Suite Size (SF)	1,702
Lease Date	Jul-21
Lease Rate	\$6.50
<b>LEASE TYPE</b>	NNN* - adjusted from Modified Gross
<b>VACANCY</b>	50%
<b>TENANT</b>	Office
<b>CONDITION</b>	Average
<b>LEASING COMPANY</b>	Wolf Realty Inc. (602) 843-5200

## RENTAL NO. 2



<b>ADDRESS</b>	824 East Washington Street, Phoenix, AZ
<b>BUILDING TYPE</b>	Single tenant office
<b>BUILDING SIZE (SF)</b>	3,276
<b>YEAR BUILT</b>	1960
<b>LEASING ACTIVITY</b>	
Suite Size (SF)	3,276
Lease Date	Aug-21
Lease Rate	\$8.50
<b>LEASE TYPE</b>	NNN* - adjusted from Modified Gross
<b>VACANCY</b>	0%
<b>TENANT</b>	Office
<b>CONDITION</b>	Average
<b>LEASING COMPANY</b>	LRA Real Estate Group LLC (480) 734-7878

### RENTAL NO. 3



<b>ADDRESS</b>	317 North 19th Avenue, Phoenix, AZ
<b>BUILDING TYPE</b>	Single tenant office
<b>BUILDING SIZE (SF)</b>	2,648
<b>YEAR BUILT</b>	1984
<b>LEASING ACTIVITY</b>	
Suite Size (SF)	2,648
Lease Date	Jan-22
Lease Rate	\$13.00
<b>LEASE TYPE</b>	NNN
<b>VACANCY</b>	0%
<b>TENANT</b>	Office
<b>CONDITION</b>	Average
<b>LEASING COMPANY</b>	Perkinson Properties (480) 830-5695

## RENTAL NO. 4



<b>ADDRESS</b>	1433 East Thomas Road, Phoenix, AZ
<b>BUILDING TYPE</b>	Multi-tenant office
<b>BUILDING SIZE (SF)</b>	3,863
<b>YEAR BUILT</b>	1980
<b>LEASING ACTIVITY</b>	
Suite Size (SF)	2,087
Lease Date	Jan-22
Lease Rate	\$10.73
<b>LEASE TYPE</b>	NNN* - adjusted from Modified Gross
<b>VACANCY</b>	0%
<b>TENANT</b>	Office
<b>CONDITION</b>	Average
<b>LEASING COMPANY</b>	Century 21 Arizona Foothills (602) 943-7252



## RENTAL NO. 5



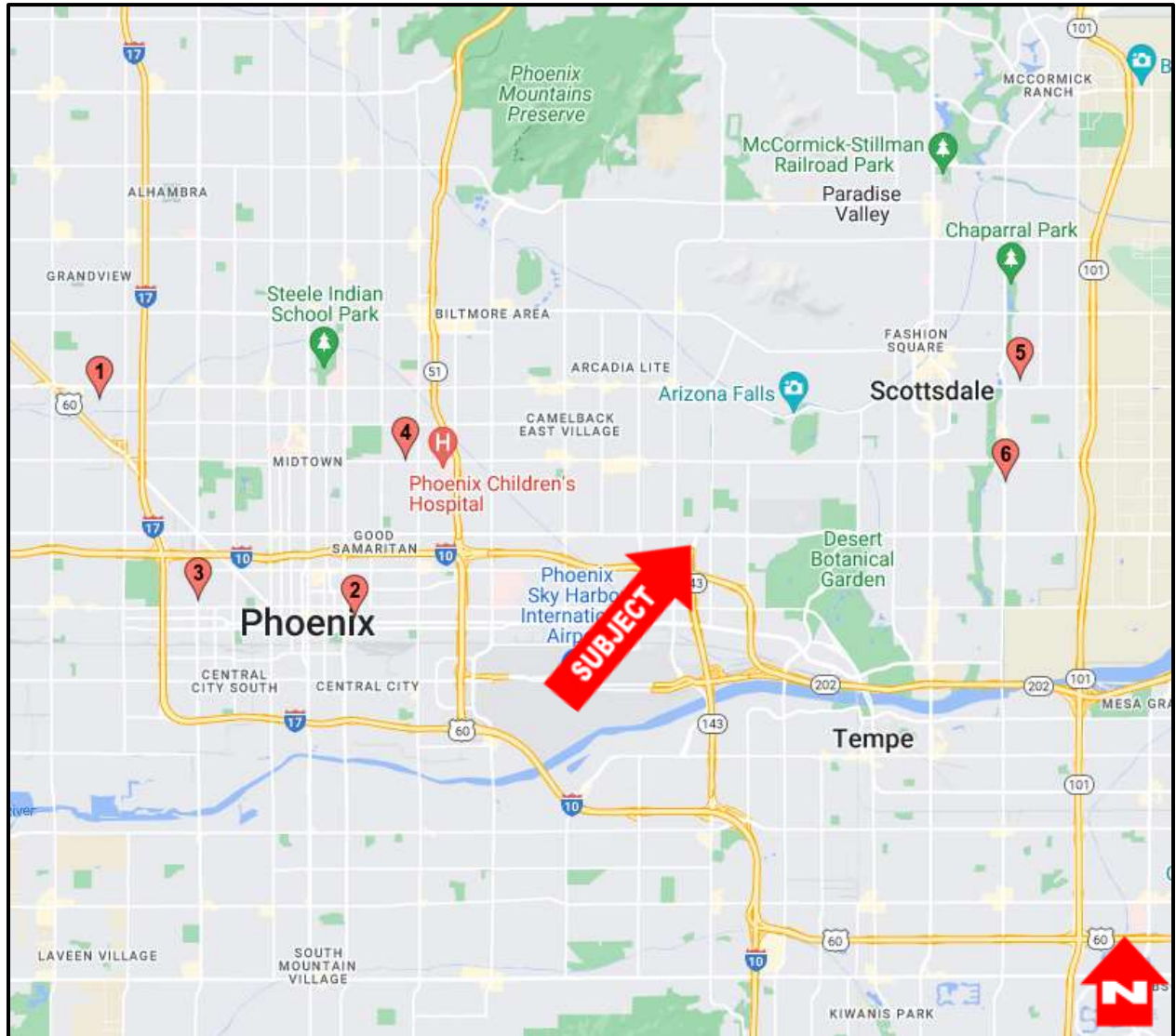
<b>ADDRESS</b>	4124-4126 North 82nd Street, Scottsdale, AZ
<b>BUILDING TYPE</b>	Multi-tenant office
<b>BUILDING SIZE (SF)</b>	3,000
<b>YEAR BUILT</b>	1961
<b>LEASING ACTIVITY</b>	
Suite Size (SF)	1,700
Lease Date	May-22
Lease Rate	\$9.88
<b>LEASE TYPE</b>	NNN
<b>VACANCY</b>	43%
<b>TENANT</b>	Office
<b>CONDITION</b>	Average
<b>LEASING COMPANY</b>	Boulder Realty Advisors (480) 792-9500

## RENTAL NO. 6



<b>ADDRESS</b>	2501 North Hayden Road, Scottsdale, AZ
<b>BUILDING TYPE</b>	Multi-tenant office
<b>BUILDING SIZE (SF)</b>	7,504
<b>YEAR BUILT</b>	1,971
<b>LEASING ACTIVITY</b>	
Suite Size (SF)	2,820
Lease Date	Aug-22
Lease Rate	\$13.75
<b>LEASE TYPE</b>	NNN
<b>VACANCY</b>	62%
<b>TENANT</b>	Office
<b>CONDITION</b>	Average
<b>LEASING COMPANY</b>	ZDI Realty Advisors LLC (480) 248-8717

# RENTAL MAP



## Rental Summary

Rent	Address	Suite Sizes	Rental Rates	Rent Type	Year Built	Vacancy
1	2935 West Clarendon Avenue, Phoenix, AZ	1,702	\$6.50	NNN*	1971	50%
2	824 East Washington Street, Phoenix, AZ	3,276	\$8.50	NNN*	1960	0%
3	317 North 19th Avenue, Phoenix, AZ	2,648	\$13.00	NNN	1984	0%
4	1433 East Thomas Road, Phoenix, AZ	2,087	\$10.73	NNN*	1980	0%
5	4124-4126 North 82nd Street, Scottsdale, AZ	1,700	\$9.88	NNN	1961	43%
6	2501 North Hayden Road, Scottsdale, AZ	2,820	\$13.75	NNN	1971	62%
	<b>Subject</b>	<b>4,646</b>		<b>NNN</b>	<b>1977</b>	<b>100%</b>

*\*Triple Net converted from Gross*

### RENT CONCLUSIONS:

The subject is currently vacant with no leases in place. In order to determine a market rental rate for the subject, the appraiser surveyed rents that were considered to be comparable to the subject. The comparable rents surveyed ranged from \$6.50 per square foot to \$13.75 per square foot on a triple net basis.

Due to the unique nature of the subject, the appraiser attempted to locate buildings with similar characteristics as the subject; however, there were inevitably differences that need to be accounted for. The appraiser made adjustments to each comparable property as follows.

Comparable	Rental Rates	Location	Physical	Total Adj.	Adj Rent
1	\$6.50	-5.00%	-5.00%	-10.00%	<b>\$5.85</b>
2	\$8.50	-5.00%	5.00%	0.00%	<b>\$8.50</b>
3	\$13.00	-5.00%	0.00%	-5.00%	<b>\$12.35</b>
4	\$10.73	-5.00%	-5.00%	-10.00%	<b>\$9.66</b>
5	\$9.88	-10.00%	Offset	-10.00%	<b>\$8.89</b>
6	\$13.75	-10.00%	-5.00%	-15.00%	<b>\$11.69</b>

All of the comparable rents were located in areas with superior surrounding development as compared to the subject and will be adjusted downward. Comparable rents one, four and six will be adjusted downward for their superior condition. Comparable rent two will be adjusted upward for its inferior age and condition.

After adjustments, the comparable rents ranged from \$5.85 per square foot to \$12.35 per square foot with a mean of \$9.49 per square foot. It is concluded that the a market rent for the subject would fall somewhere near the middle of the range and therefore the appraiser will conclude to \$9.50 per square foot. The potential gross income for the next fiscal year is calculated as follows.

\$9.50 per square foot x 4,646 square feet = \$44,137

## **VACANCY/CREDIT LOSS:**

In order to determine a stabilized vacancy rate for the subject, the appraiser researched the immediate area for vacancy rates of similar properties within the market.

The surrounding neighborhood of the subject had an office inventory of approximately 12.9 million square feet. Of this area, approximately 2.5 million square feet was vacant equating to a vacancy rate of 19.2%. Over the past five years, vacancy rates ranged from 6.00% to 19.25%. Over the past year, vacancy rates have been trending upward.

It is concluded that a market vacancy rate for the subject over a typical holding period would fall near 7%.

The subject would typically be leased on a NNN basis, whereas the tenant would be responsible for the operating expenses of the property such as, utilities, property taxes, insurance and repairs and maintenance. The landlord would be responsible for the off-site management and reserves for replacement, as well as expenses for any vacant period.

### Off-Site Management:

Management fees for properties like the subject typically cover off-site management expenses for managing the investment and are the paid for by the property owner. The appraiser interviewed local property management companies to get an indication of what property management firms would charge for the management and accounting of a property like the subject.

Property management/brokerage firms such as CB Commercial will manage property like the subject for 2% to 5% of gross collected revenues depending on the financial and physical condition of the property. The property manager is responsible for collecting the rent, lease management, municipality interfacing, and paying the operating expenses in a timely manner.

Considering the size, current condition, and single tenant nature of the subject property, I assume from the above discussions with local professional property management firms that a reasonable management fee would be roughly 3% of the effective gross rental income.

### Cost to Vacancy:

If the property had a vacancy, the landlord would incur the pro rata share of costs associated with taxes, insurance, and some minor maintenance to keep the property in a proper condition. Annual tax expenses on a property such as the subject are expected to be \$1.40 per square foot. Insurance is estimated at \$0.20 per square foot and repairs and maintenance is estimated at \$0.30 per square foot which equates to a total expense to the landlord of approximately \$1.90 per square foot. The landlord is responsible for vacancies and the pro rata share expenses associated with those vacancies. With a 7% stabilized vacancy, estimated cost to vacancy is expected to total \$618 [4,646 SF x \$1.90/SF x 7%].

## **REPLACEMENT OF SHORT-LIVED ITEMS:**

A replacement allowance provides for the periodic replacement of building components that wear out more rapidly than the building itself and must be replaced periodically during the building's economic life. These components may include roof covering, heating/cooling compressors, driveways, parking areas and exterior paint.

The annual allowance for each item is usually the anticipated cost of replacement prorated over the anticipated remaining economic life of that item provided it does not exceed the remaining economic life of the structure. Proration may be based on a simple average or provided for by the use of a sinking fund.

Items which can be expected to have a life equal to or exceeding the remaining economic life of the structure do not require an allowance for replacement.

The scope of items to be covered by the replacement allowance is a matter of appraisal judgment based on market evidence, but the extent of a replacement allowance is judged in relation to the annual repair and maintenance expense to avoid duplication.

A reserve for replacement account is normally not an expense recognized by most building operators in the local market. Usually, capital expenditures are expended as they occur. This can severely distort cash flow in the years of abnormally light or heavy capital expenditures.

For example, if an owner has to replace a roof at a cost of \$1.10 per square foot for a 20,000 square foot building. The capital expense for that year would have a \$22,000 deduction for repairs, which cannot be passed through to the tenants.

Generally, prudent investors and property management companies estimate between \$0.10 and \$0.20 per square foot. The appraiser will conclude at a reasonable amount for Reserves and Replacements at \$0.15 per square foot or \$697 annually.

Shown next is the Stabilized Operating Chart.

<b>Stabilized Operating Statement</b>			
Potential Gross Income		\$	44,137
Vacancy & Collection Loss	7.00%	\$	3,090
Effective Gross Income		\$	41,047
<b>Expenses</b>			
Management Fee	3.00%	\$	1,231
Cost of Vacancy		\$	618
Reserves for Replacement	\$0.15 /SF	\$	697
Total		\$	2,546
Net Operating Income		\$	38,501

#### **NET OPERATING INCOME:**

The Net Operating Income (NOI) is the anticipated net income remaining after all operating expenses are deducted from the Effective Gross Potential Rental Income, but before mortgage debt service and book depreciation are deducted. The estimated NOI is utilized in Direct Capitalization Approach to estimate a value for the subject property based on its projected ability to produce revenue.

In the conversion of Net Operating Income, before debt service, there are several methods of obtaining an over-all-rate (OAR) to be utilized in the capitalization process. The capitalization process involves a discounting process with the rate reflecting the purchaser's requirements in respect to yield and market rate interest on the debt while the property is being held.

#### **DIRECT CAPITALIZATION METHOD:**

The Direct Capitalization Method is the conversion of the Net Operating Income (NOI) into an indication of "Present Value" by dividing the NOI by the market derived Over-All-Rate (OAR). The OAR demonstrates the direct relationship of the NOI to the selling price of the comparable properties, which have been sold in the open market. The market derived OAR reflects the interest or dividend that the property will produce and the anticipated capital appreciation or depreciation over the investment holding period.

In essence, the OAR obtained from the market is a fraction of the total investment that must be collected each year, on an average to service the debt (principal and interest payments) yield and required benefits (cash flow and/or equity build-up) and compensate the depreciation or appreciation.

A good indicator for capitalization rates are sales of similar properties. Following is a summary of the sales within the marketplace and their estimated indicated overall rate.

<b>Address</b>	<b>Sale Date</b>	<b>Sale Price</b>	<b>Cap Rate</b>
2609 N. 24th Street, Phoenix, AZ	6/15/22	\$1,200,000	7.58%
1835 W. Missouri, Phoenix, AZ	5/23/22	\$1,772,000	6.00%
52 E. Monterey Way, Phoenix, AZ	3/16/22	\$1,055,000	6.00%
8936 N. Central Ave, Phoenix, AZ	9/29/21	\$1,470,000	7.90%
600 E. University Drive, Mesa, AZ	1/15/21	\$815,000	7.52%
2701 N. 7th Avenue, Phoenix, AZ	12/26/20	\$470,000	7.16%
1940 N. Alma School Road, Chandler, AZ	12/21/20	\$1,770,000	6.20%

The differences in overall capitalization rates may be attributed to variations in occupancy, age and condition of the property, economic upside, sales motivation, cash flow potential, and other factors which make each sale and/or property unique. It is believed that economic life of the comparable properties is similar to that of the subject. The majority of the sales of similar properties within the Metropolitan area indicated overall capitalization rates from 6.00% and 7.90%.

Data published by PwC Real Estate Investor Survey for the 4<sup>th</sup> quarter 2022 indicates the following ranges for comparable real estate product.

<b>Product</b>	<b>4<sup>th</sup> 2022</b>	<b>3<sup>rd</sup> 2022</b>	<b>4<sup>th</sup> 2021</b>
Phoenix Office	4.75-9.00%	4.75-9.00%	5.00-9.00%
	6.75% - Avg.	6.45 % - Avg.	6.61 % - Avg.

After due consideration is given to the subject size, location, and age and condition, the appraiser concludes to an overall capitalization rate of 7.50%.

Applying the overall rate of 0.0750 to the estimated NOI of \$38,501 leads to an indicated value via the Direct Capitalization Method (at a stabilized occupancy) as shown below.

NOI	\$38,501	=	\$513,347
OAR	0.0750		
<b>Rounded</b>			<b>\$510,000</b>



# RECONCILIATION

The Final Reconciliation is the process of coordinating and integrating related facts to form a unified conclusion. Final Reconciliation is defined as: *A phase of a valuation assignment in which two or more value indications are processed into a value opinion which may be a range of value, a single point estimate, or a reference to a bench-mark value.* (The Dictionary of Real Estate Appraisal, 7<sup>th</sup> edition 2022)

The orderly connection of interdependent elements is a prerequisite of proper reconciliation. This requires a re-examination of specific data, procedures, and techniques within the framework of approaches used to derive preliminary estimates. The approach utilized to conclude to a value estimate considered appraisal techniques which encompassed: (1) reviewed to make sure that the data is authentic and reflects pertinent market activity and (2) the analytical techniques used and the logic followed are valid, realistic, and consistent. In addition, all mathematical calculations have been checked by someone other than the appraiser in an attempt to eliminate errors.

Two approaches to value have been employed in the analysis. The data together with the line of reasoning followed for each approach is clearly set forth.

Sales Comparison Approach	\$560,000
Income Approach	\$510,000

The reconciliation considers and evaluates alternate value indication to arrive at a final value estimate. Each value indication is weighted according to relative significance, applicability, and defensibility and relies most heavily on the approach that is most appropriate to the purpose of the appraisal.

In an appraisal report, the final value estimate may be stated as a single figure or as a range of values. Or an appraiser may choose to show the range and then cite the final value as a single figure within the range. Traditionally, a **point estimate** is typically regarded as the most probable number, not the only possible number, and is often required for revenue and compensation purposes. A **point estimate** concept is utilized in this reconciliation. (The Dictionary of Real Estate, 5<sup>th</sup> ed., Online)

The Cost Approach to Value is not typically considered a reliable indication of value for this type of property due to the nature and time frame of construction of the subject improvements. More relevancy is placed on the Cost Approach when the cost of the new or proposed improvements are known and have taken place within a relatively stable period of market conditions whereas in older improved properties and drastically changing market conditions, the estimate of accrued depreciation becomes increasingly subjective. The Cost Approach was not utilized in the creation of this report.

The Sales Comparison Approach was based upon sales of similar buildings considered comparable to the subject. These sales, after adjustments for the various elements of comparison, were analyzed from which an indication of value was derived. Sales were selected that were considered the most representative properties that could be located in the market. This approach is considered a good indication of value and a reflection of the motivations of market participants and was utilized.

The Income Approach to Value is believed to be another good indication of value for this type of income producing property. All of the data used in the Income Approach to Value was derived from market trends and is believed to reflect market thinking. The Income Approach to Value included the estimate of economic rents taken from the market in which the subject is located as compared to contract rent. Deductions were then made for vacancy and expenses. The resulting net operating income (NOI) was capitalized by an appropriate method into an indication of value.

Due to the fact that the subject is currently vacant and the most likely use for the building would be as an owner/user, most weight was placed on the Sales Comparison Approach.

Based on the information found in this investigation, the appraiser is of the opinion that the "As Is" Market Value of the subject property, as of November 16, 2022, is:

<b>FIVE HUNDRED SIXTY THOUSAND DOLLARS</b> <b>(\$560,000.00)</b>
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**It is an Extraordinary Assumption that the Vapor Mitigation System is operable and appropriately effective as of the effective date of value and there are no environmental issues associated with the subject's location within the Motorola 52<sup>nd</sup> Street Superfund site.**

**AUDITING BREAKDOWN**

Land:	\$460,000
Improvements:	\$100,000
Severance:	\$ 0
Special Benefits:	\$ 0
Cost to Cure:	<u>\$ 0</u>
<b>Total</b>	<b>\$560,000</b>

# ADOT CERTIFICATION

Parcel No.: L-M-555

**I hereby certify:**

That I personally inspected the property herein appraised, and that I have afforded the property owner the opportunity to accompany me at the time of inspection. I also made a personal field inspection of each comparable sale relied upon in making said appraisal. The subject and the comparable sales relied upon in making the appraisal were as represented by the photographs contained in the appraisal.

That I have given consideration to the value of the property the damages and benefits to the remainder, if any; and accept no liability for matters of title or survey. That, to the best of my knowledge and belief, the statements contained in said appraisal are true and the opinions, as expressed therein, are based upon correct information; subject to the limiting conditions therein set forth.

That no hidden or unapparent conditions of the property, subsoil, or structures were found or assumed to exist which would render the subject property more or less valuable; and I assume no responsibility for such conditions, or for engineering which might be required to discover such factors. That, unless otherwise stated in this report, the existence of hazardous material, which may or may not be present in the property, was not observed by myself or acknowledged by the owner. The appraiser, however, is not qualified to detect such substances, the presence of which may affect the value of the property. No responsibility is assumed for any such conditions, or for any expertise or engineering knowledge required to discover them.

**It is an Extraordinary Assumption that the Vapor Mitigation System is operable and appropriately effective as of the effective date of value and there are no environmental issues associated with the subject's location within the Motorola 52<sup>nd</sup> Street Superfund site.**

That my analysis, opinions, and conclusions were developed, and this report has been prepared in conformity with the Uniform Standards of Professional Appraisal Practice (USPAP 2020-2021) guidelines, extended through 2023.

That this appraisal has further been made in conformity with the appropriate State and Federal laws, regulations, and policies and procedures applicable to appraisal of right-of-way for such purposes; and that, to the best of my knowledge, no portion of the value assigned to such property consists of items which are non-compensable under the established laws of said State.

That neither my employment nor my compensation for making the appraisal and report are in any way contingent upon the values reported herein.

That I have no direct or indirect present or contemplated future personal interest in the property that is the subject of this report, or any benefit from the acquisition of the property appraised herein.

That I have not revealed the findings and results of such appraisal to anyone other than the proper officials of the Arizona Department of Transportation, and I will not do so unless so authorized by proper State officials, or until I am required to do so by due process of law, or until I am released from this obligation by having publicly testified as to such findings.

That my opinion of the Market Value as of November 16, 2022 is \$560,000, based on my independent appraisal and the exercise of my professional judgment.

**Respectfully submitted,**



**Zach Sinay, MAI, R/W-AC**  
**Certified General Real Estate Appraiser No. 31199**

# USPAP CERTIFICATION

I certify that, to the best of my knowledge and belief:

The statements of fact contained in this report are true and correct. The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions and are my personal, impartial and unbiased professional analyses, opinions, and conclusions.

I have no present or prospective interest in the property that is the subject of this report and no personal interest with respect to the parties involved. I have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.

My engagement in this assignment was not contingent upon developing or reporting pre-determined results. My compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.

I have performed no services, as an appraiser, or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.

The reported analyses, opinions and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute. The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives. As of the date of this report, Zach Sinay, MAI has completed the continuing education program for Designed Members of the Appraisal Institute.

Zach Sinay has made a personal inspection of the property that is the subject of this report.. It should be noted that Carson Windle provided significant real property appraisal assistance to the person signing this certification. This included participation in the following:

- Inspection of the subject property
- Data collection and verification
- Report writing
- Value conclusions
- Packaging

Zach Sinay possess the knowledge and experience to thoroughly complete this appraisal assignment. Please refer to the Qualifications of the Appraiser(s) included in the following pages for additional information regarding professional education and pertinent experience of the aforementioned appraiser.

Under federal mandate, state licensing and/or certification of appraiser is required on or before August 15, 1991. Permission is hereby granted by the client for the appraiser to furnish the appropriate governmental authority or their authorized designated representative(s) any and all materials requested for oversight review.

My analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the *Uniform Standards of Professional Appraisal Practice*, the Code of Professional Ethics, Bylaws, Regulations and Standards of Professional Appraisal Practice of the Appraisal Institute.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read 'Zach Sinay', is written over a light blue rectangular background.

Zach Sinay, MAI, R/W-AC  
Certified General Real Estate Appraiser No. 31199

**QUALIFICATIONS OF ERIC ZACHARY SINAY**  
Certified General Real Estate Appraiser No. 31199

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**FORMAL EDUCATION:**

Graduated from Arizona State University, May 1998, Bachelor of Science.

**PROFESSIONAL EDUCATION:**

Arizona School of Real Estate, Real Estate Valuation 101, Scottsdale, AZ, 1999  
Arizona School of Real Estate, Real Estate Valuation 102, Scottsdale, AZ, 1999  
Arizona School of Real Estate, Real Estate Valuation 103, Scottsdale, AZ, 2001  
Arizona School of Real Estate, Real Estate Valuation 104, Part B, Scottsdale, AZ, 2001  
Arizona School of Real Estate, Real Estate Valuation 104, Part A, Scottsdale, AZ, 2002  
International Right of Way Association, Environmental Issues C-600, Tempe AZ, 2004  
International Right of Way Association, The Appraisal of Partial Acquisitions C-401, San Diego, CA, 2004  
International Right of Way Association, The Principles of Real Estate Law C-800, Las Vegas, NV, 2004  
International Right of Way Association, The Principles of Real Estate Engineering C-900, Las Vegas, NV, 2004  
McKissock, Construction Details & Trends, Continuing Online Education Course, 2008  
McKissock, Cost Approach, Continuing Online Education Course, 2008  
McKissock, Income Approach, Continuing Online Education Course, 2008  
International Right of Way Association, Introduction to the Income Capitalization Approach, C-402, 2009  
International Right of Way Association, Ethics and the Right of Way Profession C-103, 2009  
McKissock, How to Analyze and Value Income Properties, 2009  
McKissock, Land and Site Valuation, 2009  
McKissock, Introduction to Expert Witness Testimony, 2009  
International Right of Way Association, Easement Valuation C-403, 2009  
McKissock, Evolution of Finance & The Mortgage Market, 2011  
McKissock, Nuts and Bolts of Green Building, 2011  
McKissock, Foundations in Sustainability: Greening the Real Estate and Appraisal Industry, 2011  
Appraisal Institute, Business Practices and Ethics, 2013  
Appraisal Institute, Advanced Income Capitalization, 2013  
Appraisal Institute, General Appraiser Report Writing and Case Studies, 2013  
Appraisal Institute, Quantitative Analysis, 2013  
Appraisal Institute, Advanced Market Analysis and Highest and Best Use, 2013  
Appraisal Institute, Advanced Concepts & Case Studies, 2014  
McKissock, Appraisal of Self Storage Facilities 2018  
McKissock, Appraisal of Land Subject to Ground Lease, 2018  
McKissock, Essential Elements of Disclosures and Disclaimers, 2020  
International Right of Way Association, Ethics and the Right of Way Profession, 103, 2020  
International Right of Way Association, Easement Valuation, 403, 2020  
McKissock, Land and Site Valuation, 2021  
7-Hour Uniform Standards of Professional Appraisal Practice (USPAP) – Current

**PROFESSIONAL AFFILIATIONS:**

Appraisal Institute - MAI designated member. "The Appraisal Institute conducts a voluntary program of continuing education for its designated members. MAIs and SRAs who meet the minimum standards of this program are awarded periodic educational certification. I am certified under this program."

International Right of Way Association, "The Right of Way (R/W) Certification is granted to IRWA members who have achieved professional status through experience, education and examination in a single right of way discipline." I have been awarded the Right of Way Appraisal Certification (R/W-AC).

**EXPERIENCE:**

Independent Contract Appraiser, Appraisal Technology, Inc., April 1999-Present

**SCOPE OF WORK:**

Assignments have included the valuation of:

- |                      |  |
|----------------------|--|
| <b>Residential:</b>  | Single and multiple family properties.                               |
| <b>Commercial:</b>   | Retail shopping centers, offices, restaurants and hotels.            |
| <b>Industrial:</b>   | Warehouse, manufacturing, distribution, automotive and self-storage. |
| <b>Vacant Land:</b>  | All types.   |
| <b>Right-of-Way:</b> | Total & partial acquisition  |

**Department of Insurance and Financial Institutions**  
**State of Arizona**

**CGA - 31199**

This document is evidence that:  
ERIC ZACHARY SINAY has complied with the provisions of  
Arizona Revised Statutes, relating to the establishment and operation of a:

**Certified General Real Estate Appraiser**

and that the Superintendent of Financial Institutions of the State of Arizona has granted this license to transact the business of a:

**Certified General Real Estate Appraiser**

**ERIC ZACHARY SINAY**

This license is subject to the laws of Arizona and will remain in full force and effect until surrendered, revoked or suspended as provided by law.

Expiration Date : **January 31, 2024**



# ADDENDA

# EXHIBIT 1

## Engagement Letter

PHOENIX, on 11/15/2022

TO-23-008/ CTR054962/ M697201X/ L-M-555/ Appraisal due 40 days from approval-APPRAISAL TECHNOLOGY LLC

### SUPPLIER

**APPRAISAL TECHNOLOGY LLC**  
**Attn: Mr. Zach Sinay**  
**Address:** Legal Address  
 220 S RIVER DR  
 UNITED STATES  
 TEMPE, Arizona 85281  
**Phone:** 480-285-3868  
**E-mail:** zsinay@etiaz.com

### ORDER No. PO0000495326

*(please refer to this number on all documents)*  
**Amendment:**  
**Requestor:** ESTHER VALENCIA  
**Agency:** Department of Transportation  
**Division:** Infrastructure Delivery & Operations  
 Division Construction  
**Department:** Right Of Way  
**Site:** RIGHT OF WAY  
**Phone:** 6027128793  
**Email:** EVALENCIA@AZDOT.GOV

### DELIVER TO

*(unless specified differently per item)*  
**Address:** RIGHT OF WAY  
 205 S 17TH AVE  
 MD 612E RM 331  
 UNITED STATES  
 PHOENIX, Arizona 85007-3212  
**Deliver To:**  
**Requested Delivery Date:**  
*(Unless specified differently per item in section delivery details)*

### BILL TO

**Address:** RIGHT OF WAY  
 205 S 17TH AVE  
 MD 612E RM 331  
 UNITED STATES  
 PHOENIX, Arizona 85007-3212  
**Payment Terms:** Net 30

ITEM	CONTRACT ID	CODE/SKU	REFERENCE AND DESCRIPTION	QTY	UNIT	UNIT	TOTAL
						(USD)	(USD)
1	CTR054962-2	588653-1	TO-23-008/ CTR054962/ M697201X/ L-M-555/ Appraisal due 40 days from approval Commentaire : M697201X	1.0000	Total Cost	4,800.0000	4,800.0000

**PURCHASE ORDER TERMS AND CONDITIONS**

Revised January 10, 2011

- 1. Modification.** No modification of the purchase order shall bind Buyer unless Buyer agrees to the modification in writing.
- 2. Packing and Shipping.** Seller shall be responsible for industry standard packing which conform to requirements of carriers' tariffs and ICC regulations. Containers must be clearly marked as to lot number, destination address and purchase order number.
- 3. Title and Risk of Loss.** The title and risk of loss of the goods shall not pass to Buyer until Buyer actually received the goods at the point of delivery.
- 4. Invoice and Payment.** A separate invoice shall be issued for each shipment. No invoice shall be issued prior to shipment of goods and no payment will be made prior to receipt of goods and correct invoice. Payment due dates, including discount periods, will be computed from date of receipt of goods or date of receipt of correct invoice (whichever is later) to date Buyer's warrant is mailed. Unless freight and other charges are itemized, any discount provided will be taken on full amount of invoice. Payment shall be subject to the provisions of Title 35 of Arizona Revised Statutes. The Buyer's obligation is payable solely from funds appropriated for the purpose of acquiring the goods or services referred to in this Purchase Order.
- 5. Inspection.** All goods are subject to final inspection and acceptance by Buyer. Material failing to meet the requirements of this Purchase Order will be held at Seller's risk and may be returned to Seller. If so returned, the cost of transportation, unpacking, inspection, repacking, reshipping or other like expenses are the responsibility of the Seller.
- 6. No Replacement of Defective Tender.** Every tender of goods must fully comply with all provisions of Purchase Order as the time of delivery, quantity, quality and the like. If a tender is made which does not fully conform, it shall constitute a breach and Seller shall not have the right to substitute a conforming tender.
- 7. Force Majeure.** Neither party shall be held responsible for any losses resulting if the fulfillment of any terms or conditions of the Purchase Order are delayed or prevented by any cause not within the control of the party whose performance is interfered with and which, by the exercise of reasonable diligence, that party is unable to prevent.
- 8. Gratuities.** The Buyer may, by written notice to the Seller, cancel this Purchase Order if it is found by Buyer that gratuities, in the form of entertainment, gifts or otherwise, were offered or given by the Seller, or any agent or representative of the Seller, to any officer or employee of the State of Arizona with a view toward securing an order or securing favorable treatment with respect to the awarding or amending, or the making of any determinations with the respect to the performing, of such order. In the event this Purchase Order is cancelled by Buyer pursuant to this provision, Buyer shall be entitled in addition to any other rights and remedies to recover or withhold from the Seller the amount of the gratuity.
- 9. Warranties.** Seller warrants that all goods delivered under this Purchase Order will conform to the requirements of this Purchase Order (including all applicable descriptions, specifications, drawings and samples) will be free from defects in material and workmanship and will be free from defects in design and fit for the intended purposes. Any inspection or acceptance of the goods by Buyer shall not alter or affect the obligations of Seller or the right of Buyer under the foregoing warranties.
- 10. Assignment – Delegation.** No right or interest in this Purchase Order shall be assigned by Seller without the written permission of Buyer, and no delegation of any duty of Seller shall be made without permission of Buyer.
- 11. Interpretation – Parole Evidence.** This Purchase Order is intended by the parties as a final expression of their agreement and is intended also as a complete and exclusive statement of the terms of their agreement. No course of prior dealings between the parties and no usage of the trade shall be relevant to supplement or explain any term used in this Purchase Order. Acceptance or acquiescence in a course of performance rendered under this Purchase Order shall not be relevant to determine the meaning of this Purchase Order even though the accepting or acquiescing party has knowledge of the nature of the performance and opportunity for objection. Whenever a term defined by the Uniform Commercial Code is used in the Purchase Order the definition contained in the Code is to control.
- 12. Non-Discrimination.** Seller agrees not to discriminate against any employee or applicant for employment in violation of the terms of Federal Executive Order 11246, State Executive Order No. 2009-09 and A.R.S. Section 41-1461 et seq.

**13. Indemnity.** Seller agrees to indemnify and save the Buyer harmless from any loss, damage or expense whatsoever resulting to the Buyer from any and all claims and demands on account of infringement or alleged infringement of any patent in connection with the manufacture or use of any product included in this Purchase Order and upon written request Seller will defend at its own cost the expense any legal action or suit against the Buyer involving any such alleged patent infringement, and will pay and satisfy any and all judgments or decrees rendered in any against such legal actions or suits. Seller will indemnify Buyer against all claims for damages to person or property resulting from defects in materials or workmanship.

**14. Liens.** All goods delivered and labor performed under this Purchase Order shall be free of all liens, and if Buyer requests, a formal release of all liens will be delivered to Buyer.

**15. Contract Number.** If an Arizona contract number appears on the face of this Purchase Order, the terms of that contract are incorporated herein by this reference.

**16. Taxes.** The State of Arizona is exempt from Federal Excise Tax.

**17. Conflict of Interest.** Pursuant of A.R.S. Section 38-511 this Purchase Order is subject to cancellation by the Buyer if any person significantly involved in initiating, negotiating, securing, drafting or creating the contract on behalf of the state is, at any time while the contract is in effect, an employee of any other party to the contract in any capacity or a consultant to any other party of the contract with respect to the subject matter of the contract.

**18. Remedies and Applicable Law.** This Purchase Order shall be governed by, and Buyer and Seller shall have all remedies afforded each by, the Uniform Commercial Code as adopted in the State of Arizona except as otherwise provided in this Purchase Order or in statutes pertaining specifically to the State. This Purchase Order shall be governed by the law of the State of Arizona, and suits pertaining to this Purchase Order may be brought only in the courts of the State of Arizona.

**19. Arbitration.** The parties must use arbitration as required by A.R.S. Section 12-1518.

# EXHIBIT 2

## Zoning Ordinance

## Section 623. Commercial C-2 District—Intermediate Commercial.

A. **Purpose.** The C-2, Commercial Intermediate District, is a district of commercial uses of medium intensity designed to be compatible with each other and to provide for a wide range of types of commercial activity within the district.

B. **Reserved.**

C. **District Restrictions.**

1. Except as otherwise provided, all permitted uses and storing of materials or supplies shall be conducted entirely within a closed building.
2. The display of merchandise outdoors as an accessory use to the permitted uses set forth in Section [623.D](#) is prohibited unless a use permit is obtained and subject to the following standards for the outdoor display area:
  - a. A maximum 300 square feet of display area can be located anywhere along the building except as noted in Section [623.C.2.b](#);
  - b. No display or sale is permitted within ten linear feet of either side of the building entrance or exit;
  - c. The depth, measured from the front facade of the building, may not exceed ten feet unless otherwise approved by the Planning and Development Department upon a determination that a greater depth does not interfere with any pedestrian passage;
  - d. Payment for the products displayed must occur indoors;
  - e. Outdoor display or sales shall not be located within any required setbacks or in the parking lot;Large scale commercial retail uses shall meet the requirements set forth in section [623.E.5.f](#) and [623.E.5.g](#);
  - f. Outdoor display of second hand/used merchandise sales is prohibited.
3. Any lighting shall be placed so as to reflect the light away from adjacent residential districts. No noise, odor or vibration shall be emitted so that it exceeds the general level of noise, odor or vibration emitted by uses outside the site. Such comparison shall be made at the boundary of the site.
4. Promotional Events: The requirements for promotional events within this zoning district shall be the same as those set forth in the Planned Shopping Center District, Section [637.A.4](#), of this ordinance.
5. All commercial uses restricted to closed buildings except parking lots and liquid fuel pump services.
6. No use shall be considered an accessory use which is listed as a permitted use in any of the following districts: C-3, A-1, A-2, or S-2, unless otherwise specifically provided.

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7. No boats or other types of watercraft, motorcycles, tractors, or similar vehicles that are built to carry passengers or cargo can be sold or displayed for sale on-site except by a registered vehicle retail sales dealership.
8. A commercial property owner can display for sale vehicles, which for purposes of this provision includes trailers, watercraft or other types of transportation that are built to carry passengers or cargo, when the display is being done on behalf of or in conjunction with a registered vehicle retail sales dealership and a use permit has been obtained in compliance with Section [307](#). The actual sale of the vehicle displayed must be completed by the registered retail sales dealership at their vehicle sales dealership site.
9. With the exception of those instances listed above in 623.C.7. and C.8., no other types of vehicle built to carry passengers or cargo can be sold or displayed for sale on-site except by a registered vehicle retail sales dealership and upon obtaining a special permit pursuant to Section [647](#).

D. **Permitted Uses.** All uses permitted in R1-6 if zoned commercial prior to January 5, 1994, non-single-family residential, and single-family attached uses permitted in R-3, R-4, R-5, R-4A, and C-1 districts; and in addition the following:

1. Adult bookstore, adult novelty store, adult theatre, adult live entertainment establishment, erotic dance or performance studio, subject to the following conditions or limitations:
  - a. None of the above listed uses may be located within 1,000 feet of the same type of adult use or any of the other adult uses listed above. This distance shall be measured from the exterior walls of the buildings or portions thereof in which the businesses are conducted or proposed to be conducted.
  - b. None of the above listed uses may be located within 1,320 feet of a child care facility licensed by the State, private, public or charter school, a publicly owned playground, a publicly owned park recreation facility, or place of worship. This distance shall be measured from the nearest point on the property line of a parcel containing an adult oriented business to the nearest point on the property line of a parcel containing the specified use. In addition an adult use shall not locate within 1,320 feet of any of the following use districts: RE-43, RE-35, RE-24, R1-18, R1-14, R1-10, R1-8, R1-6, R-2, R-3, R-3A, R-4, R-4A, R-5, S-1, PAD-1 through PAD-15. This distance shall be measured from the nearest point on the property line of a parcel containing an adult oriented business to the nearest zoning district line.

An adult use lawfully operating in conformity with this section does not violate this section if the uses listed or zoning districts in this subsection subsequently locate within 1,320 feet of the adult use.

- c. Adult live entertainment, or erotic dance or performance studio, subject to a use permit.
- d. These provisions shall not be construed as permitting any use or act which is otherwise prohibited or made punishable by law.
- e. Notwithstanding any other provision of this ordinance, an adult bookstore, adult novelty store, adult theatre, adult live entertainment establishment, or erotic dance or performance studio which is a nonconforming use or which does not conform to the separation standards set forth in this section shall not be converted to another of the above listed adult uses. An adult bookstore, adult novelty store, adult

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theatre, adult live entertainment establishment, or erotic dance or performance studio which is a nonconforming use or which does not conform to the separation standards set forth in this section shall not be expanded beyond the floor area devoted to such adult use on the effective date of this ordinance.

2. Agricultural Implements, Distributions and Display, Retail Sales
3. Ambulance Service Office
4. Antiques, Wholesale
5. Architects' Supplies
6. Artificial Limbs, Braces, Sales
7. Artist's Materials and Supplies, Wholesale
8. Assayers (See "Laboratory")
9. Assembly Halls, Auditoriums and Banquet Halls, subject to the following conditions:
  - a. Any assembly hall or banquet hall of less than 25,000 square feet in gross floor area shall be permitted only upon securing a use permit pursuant to Section [307](#).
  - b. Outdoor uses shall be permitted only upon securing a use permit pursuant to Section [307](#).
10. Auctioneers' Auditorium, for Antiques, Fine Arts and Furniture, subject to a Use Permit.
11. Automobile Parts and Supplies, New Retail and Wholesale
12. Auto Seat Covers and Trim Shop
13. Automobile Rental excluding household moving centers, subject to the following regulations:
  - a. No on-site maintenance/washing allowed.
  - b. Maximum of 15 rental cars at any one location.
14. Awnings, Custom Fabrication and Sales
15. Bakers and Baked Goods, Manufacturing Wholesale and Storage
16. Balls and Bearings, Retail Sales
17. Bank Vault Storage
18. Barbers' Supplies, Retail and Wholesale
19. Bathroom Accessories, Display and Retail Sales Only
20. Baths, Public

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21. Beauty Shop
  - a. Massage Therapy, performed by a licensed massage therapist, is permitted as an accessory use.
22. Beauty Shop Equipment, Retail Sales
23. Beer, Ale and Wine Distributor, Wholesale and Storage (no bottling)
24. Beverages, Wholesale and Storage (no bottling)
25. Bingo
26. Biomedical and Medical Research Office and/or Laboratory
27. Blood Banks and Blood Plasma Centers as accessory to a hospital
28. Blueprinting
29. Boats, Retail Sale
30. Bookbinders, Commercial
31. Bowling Alleys
32. Brushes, Retail Sales
33. Building Materials, Retail Sales Only
34. Burglar Alarm Equipment Sales and Service
35. Burglar Alarm Watching Service
36. Bus Terminal, subject to the following conditions and/or limitations:
  - a. Shall not locate within 100 feet of a residentially zoned property.
  - b. Maintenance and fueling operations are prohibited.
  - c. All operations except passenger/cargo loading and unloading shall be conducted inside the building.
  - d. Buses shall not park for more than 12 hours.
37. Business Machines, Distribution and Retail Sales, Repair and Service, Storage and Wholesale
38. Butchers' Supplies, Retail and Wholesale
39. Candy, Wholesale Distribution
40. Carpet, Rug and Furniture Cleaners
  - a. All activity except loading and unloading restricted to a closed building.

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- b. All solvents, shampoos, detergents and other agents shall be non-combustible and non-explosive, and shall require approval of the City Fire Marshal, and same shall not emit odors beyond the zoned lot boundaries.
  - c. Only hand portable machinery shall be permitted.
- 41. Car Wash, May be in an open building subject to a use permit.
  - 42. Chemicals and Drugs, Storage and Distribution
  - 43. Cigarette Service
  - 44. Cigars Manufacturing, Custom Hand Rolled
  - 45. Cigars, Wholesale and Storage
  - 46. Cleaning and Dyeing Plants
  - 47. Clothing, Wholesale and Distribution
  - 48. Coffee, Wholesale and Storage, No Roasting
  - 49. Coin Machines, Rental and Service
  - 50. Community Residence Center
  - 51. Compressed Natural Gas (CNG) Retail Sales, as an accessory use to automobile service stations, subject to the following limitations:
    - a. A use permit shall be obtained in accordance with the standards and procedures of Section [307](#) when the equipment is located on a lot or parcel which is contiguous to a lot or parcel which is zoned for residential development.
    - b. Natural gas fueling equipment may be sheltered by an enclosure constructed of non-combustible or limited combustible materials that has at least one side predominantly open and a roof designed for ventilation and dispersal of escaped gas. This facility shall be considered outdoors for Zoning Ordinance purposes. If the fueling equipment is not sheltered by such a structure, the equipment shall be screened with a masonry block wall which is architecturally compatible with the buildings on the site; the wall shall be predominantly open on one side.
    - c. The equipment shall not be located closer than one hundred (100) feet to a residential property line or four hundred (400) feet to a school property line.
    - d. The use shall comply with all pertinent requirements of the Phoenix Fire, Building, and Electrical Codes.
    - e. Signage on shelter wall shall be limited to that required by the Fire Code.

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- f. No container shall exceed a size of three hundred (300) gallons water capacity; no more than six (6) containers shall be included at a CNG facility. The containers shall be mounted horizontally.
52. Confectioners, Wholesale
  53. Contractors Equipment and Supplies, Retail Sales
  54. Contractors' Office with Inside Storage of Materials Only
  55. Conveyors, Retail Sales
  56. Curios, Wholesale
  57. Dental Laboratories
  58. Dental Supplies, Retail and Wholesale
  59. Diaper Supply Service
  60. Dolls, Repairing
  61. Draperies, Manufacturing
  62. Drawing Materials, Retail Sales and Wholesale
  63. Drugs, Wholesale Storage
  64. Dry Goods, Wholesale and Storage
  65. Egg, Storage and Processing
  66. Electric Equipment, Retail Sales and Repair
  67. Engravers
  68. Exhibition Hall
  69. Family Game Center
  70. Farm Implements and Machinery, Retail Sales
  71. Feed, Retail and Sales Office
  72. Fire Protection Equipment and Supplies, Retail Sales and Service
  73. Floor Coverings, Retail and Wholesale
  74. Florist, Wholesale
  75. Frozen Foods, Wholesale Storage and Distribution
  76. Furniture, Repairing and Refinishing

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77. Furs, Custom Cleaning, Storage
78. Garage Equipment, Retail Sales
79. Garage, Repair, Not Body and Fender Shops
80. Garages, Public
81. Gas Regulating Equipment, Sales and Service
82. Glass Shops, Custom
83. Guns, Retail Sales and/or Repairs, subject to the following limitations:
  - a. Commercial loading of small arms ammunition for on-site retail sale shall be permitted as an accessory use upon compliance with the following conditions:
    - (1) A maximum of five thousand (5,000) cartridges loaded per day.
    - (2) Ammunition loading and component storage activity shall not occupy more than two hundred (200) square feet, or 10 percent (10%) of the gross building area, whichever is less.
  - b. Commercial loading of small arms ammunition for on-site retail sale in excess of the standards listed in subsection 1 above shall be permitted subject to the following limitations:
    - (1) A maximum of ten thousand (10,000) cartridges loaded per day.
    - (2) Ammunition loading and component storage activity shall not occupy more than five hundred (500) square feet, or 25 percent (25%) of the gross building area, whichever is less, and
    - (3) A use permit shall be obtained subject to the provisions of Section [307](#)
  - c. The quantities, arrangement, distance requirements for the storage of propellant powder, primers, and percussion caps shall be in accordance with the Fire Code.
  - d. A permit to load ammunition shall be obtained from the Fire Department.
  - e. In addition to applicable requirements listed in subsections 1-4 above, the loading of specialty or custom ammunition shall be subject to obtaining a use permit pursuant to the provisions of Section [307](#).
84. Gymnasiums, Private or Commercial
85. Hospice.
86. Hospital. The following shall be permitted as an accessory use to a hospital:
  - a. Recreational vehicle parking. Recreational vehicle parking stalls shall be located no less than 60 feet from the hospital perimeter boundary, and be delineated on a site plan. Recreational vehicle parking areas are subject to an approved parking plan for new facilities, or an amended parking plan for existing facilities.

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- b. Helistop, subject to the following regulations and conditions:
- (1) The hospital shall be licensed by the State of Arizona either as a "general hospital" or as a "specialty hospital—children's," and for a minimum of 50 beds.
  - (2) A letter from the Phoenix Aviation Department that articulates concurrence that the following items have been addressed:
    - (a) Compliance with the Federal Aviation Administration Advisory Circular No. 150/5390-2C "Helistop and Heliport Design," or subsequent revisions to this advisory circular.
    - (b) Submission of the "Notice of Landing Area Proposal" Federal Aviation Form 7480-1 and a letter of determination with no objection from the FAA.
  - (3) A helicopter sitting on the touchdown pad of a helistop or heliport shall emit a maximum noise level of no greater than 90 dB(A) at the boundaries of the lot or parcel containing the nearest residential use. Noise will be measured with an IEC (International Electrotechnical Commission) or ANSI S1.4-1971 (American National Standards Institute) Type 1 sound level meter with A-weighted impulse response.
87. Hotel Equipment, Supplies and Retail Sales
88. Hotel or Motel
89. Janitors' Supplies, Storage and Warehouse
90. Jewelers, Manufacturing
91. Jewelers, Wholesale
92. Kiddieland, subject to a use permit
93. Laboratories, Testing and Research
94. Laundries
95. Laundry Equipment and Supplies
96. Lawn Furniture, New, Sales
97. Lawn Mower Repair Shops
98. Leather Goods: Repairing, Sales, Custom or Handicraft Manufacturing
99. Linen Supply Laundry Service
100. Lithographers
101. Liquor, Storage and Wholesale

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102. Lockers, Food Storage
103. Locksmiths' Repair Shops
104. Machinery Dealers, Retail Sales and Showrooms
105. Machinery Rental
106. Medical Supplies, Retail Sales and Rentals
107. Milliners, Wholesale and Manufacturing
108. Millinery and Artificial Flower Making
109. Milling Equipment, Showrooms, Retail Sales
110. Mimeographing and Multigraphing, Commercial
111. Mineral Water Distillation and Bottling
112. Miniature Golf
113. Mirrors, Resilvering; Custom Work
114. Monuments, Retail Sales and Display
115. Mortuary
116. Motion Picture Equipment, Retail Sales and Display
117. Motion Picture Theatres
118. Motorcycles, Repairing and Sales
119. Musical Instruments, Repairing and Retail Sales
120. Music Studios
121. News Dealers
122. News Service
123. Newspaper Printing
124. Nonprofit medical marijuana dispensary facility, subject to the following conditions and limitations; failure to comply with the below regulations and requirements is subject to revocation per Section [307](#).
  - a. A use permit shall be obtained in accordance with standards and procedures of Section [307](#) and the following:
    - (1) Shall be reviewed every 365 calendar days.

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- (2) Provide name(s) and location(s) of the off-site cultivation location.
  - (3) Include a copy of the operating procedures adopted in compliance with Section [36-2804\(B\)\(1\)\(c\)](#), Arizona Revised Statutes.
  - (4) A survey sealed by a registrant of the State of Arizona shall be submitted to show compliance with the distance requirements listed below.
- b. Cultivation of medical marijuana is prohibited.
  - c. Shall be located in a closed building and may not be located in a trailer, cargo container, motor vehicle or similar structure or motorized or nonmotorized vehicle.
  - d. Shall not exceed 5,000 square feet of combined net floor area dedicated exclusively to the nonprofit medical marijuana dispensary and marijuana establishment; this shall include all storage areas, retail space and offices for the nonprofit medical marijuana dispensary and marijuana establishment.
  - e. Shall not be located within 5,280 feet of the same type of use or a medical marijuana cultivation or infusion facility. This distance shall be measured from the exterior wall of the building or portion thereof in which the business is conducted or proposed to be conducted to the nearest exterior wall or portion thereof of another medical marijuana dispensary, cultivation, or infusion facility.
  - f. Shall not be located within 500 feet of the following residentially zoned districts: S-1, S-2, RE-43, RE-35, R1-18, R1-14, R1-10, R1-8, R1-6, R-2, R-3, R3-A, R-4, R-4A, R-5, and PAD-1 through PAD-15. This distance shall be measured from the exterior walls of the building or portion thereof in which the dispensary business is conducted or proposed to be conducted to the zoning boundary line of the residentially zoned district.
  - g. Shall not be located within 1,320 feet of a preschool, kindergarten, elementary, secondary or high school, public park, public community center, dependent care facility, homeless shelter, or youth community center. This distance shall be measured from the exterior walls of the building or portion thereof in which the dispensary business is conducted or proposed to be conducted to the property line of the protected use.
  - h. Shall not be located within 1,320 feet of a place of worship. This distance shall be measured from the exterior walls of the building or portion thereof in which the dispensary business is conducted or proposed to be conducted to the property line of the place of worship.
  - i. Shall have operating hours not earlier than 8:00 a.m. and not later than 10:00 p.m.
  - j. Drive-through services are prohibited.
  - k. There shall be no emission of dust, fumes, vapors or odors into the environment from the premises.
  - l. The retail sale of marijuana and marijuana products to consumers in a marijuana establishment shall be permitted as accessory use only.

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125. Novelties, Wholesale
126. Nursing Home
127. Office Service: Stenographic Service, Letter Preparation, Addressing and Mailing, Duplicating, Multigraphing, Machine Tabulation, Research and Statistical
128. Oil Burners, Retail Sales and Repairs
129. Optical Goods, Manufacturing and Sales
130. Orthopedic Appliances, Manufacturing and Sales
131. Outside Retail Food Sales as an accessory use to a general retailer with a minimum of one hundred thousand (100,000) square feet of gross business area, including outside garden centers, subject to the following limitation:
  - a. A use permit shall be obtained in accordance with the standards and procedures of Section [307](#).
132. Painters' Equipment and Supplies Shops, Wholesale and Storage
133. Parking Lot, Commercial, Subject to Provisions of Section [702](#)
134. Pawn Shop. Subject to the following limitations:
  - a. A use permit shall be obtained subject to the standards and procedures of Section [307](#).
  - b. The exterior walls of the building in which the use is located shall be at least five hundred (500) feet from a residential district.
135. Reserved.
136. Photographic Developing and Printing
137. Photo-Engraving Company
138. Physical Therapy Equipment, Retail and Wholesale
139. Plastic and Plastic Products, Retail and Wholesale
140. Playground Equipment Sales
141. Plumbing Fixtures and Supplies, Display and Retail Sales
142. Pool and Billiard Halls
143. Poster Illustration, Studio
144. Pottery and Ceramics, Wholesale
145. Precision Instruments, Custom Repair

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146. Printers
147. Propane Retail Sales permitted as an accessory use to service stations.
148. Propane Retail Sales as an outside accessory use to a retail facility.
149. Public Storage Garages
150. Public Utility Service Yards subject to the following conditions:
  - a. Securing a use permit.
  - b. All outside storage or uses shall be enclosed by a minimum six (6) foot screen fence.
    - (1) Said fence shall be masonry construction when adjoining a residence district.
    - (2) A ten (10) foot wide landscaped area outside of the wall, with screen plantings maintained to a height of ten (10) feet shall be provided when adjoining a residence district.
  - c. No lighting standards over six (6) feet high shall be located within twenty-five (25) feet of a residence district.
151. Pumps, Retail Sales and Display
152. Radio Repair Shop
153. Radio and Television Broadcasting Stations
154. Radio and Television Studios
155. Reducing Salons
156. Refrigeration Equipment, Repairs and Sales
157. Restaurants, Bars and Cocktail Lounges, subject to the following conditions or limitations:
  - a. Music or entertainment shall be permitted subject to the following regulations:
    - (1) The stage or performance area shall be a maximum of 80 square feet unless a use permit is obtained.
    - (2) The noise level, measured at any point on the received property, shall not exceed 55 dBa unless a use permit is obtained. An occurrence where the sound level increases up to 60 dBa for five continuous seconds or less shall not be deemed a violation of this section as long as there are no more than five occurrences within an hour long interval.
    - (3) Nothing in this section shall be construed to include an adult use.
  - b. Patron dancing shall be permitted only upon securing a use permit.

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- c. Outdoor recreation uses, outdoor dining, and outdoor alcoholic beverage consumption shall be permitted as accessory uses only upon securing a use permit, if within 500 feet of a residential district zoning line. This distance shall be measured from the exterior wall of the building or portion thereof in which the business is conducted or proposed use is to be conducted closest to the residential district zoning line.
  - d. Drive-through facilities as an accessory use to a restaurant, subject to the following conditions:
    - (1) Access to the site is to be from an arterial or collector street as defined on the street classification map.
    - (2) Securing a use permit if the queuing lane for the drive-through facility is less than 300 feet from a residential district zoning line. This distance shall be measured from the point of the queuing lane closest to the residential district zoning line.
  - e. Any bar or cocktail lounge which exceeds 5,000 square feet in gross floor area and is located on a lot or parcel within 300 feet of a residential district shall be permitted only upon securing a use permit. This distance shall be measured from the exterior wall of the building or portion thereof in which the business is conducted or proposed use is to be conducted closest to the residential district zoning line.
  - f. Outdoor food preparation and cooking shall be permitted as an accessory use subject to the following conditions:
    - (1) Securing a use permit.
    - (2) The regularly used cooking area inside the establishment shall be of equal or greater size than the outdoor cooking area.
    - (3) The outdoor cooking area shall be located within 50 feet of a building entrance from where the restaurant is operated. This distance shall be measured from the appliance in the outdoor cooking area closest to the building entrance from where the restaurant is operated.
    - (4) The outdoor cooking area shall be set back a minimum of 300 feet from a residential district. This distance shall be measured from the appliance in the outdoor cooking area closest to the residential district zoning line.
158. Restaurant Equipment, Supplies and Retail Sales
159. Riding Equipment Sales
160. Road Building Equipment, Retail Sales
161. Rug Cleaning
162. Saddlery Shops, Custom, Handmade
163. Safes, Repairing and Sales

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164. Saw Sharpening Shop
165. Schools: Barber, Beauty, Business, Commercial, Correspondence, Data Processing, Dancing, Gymnastics, Health, Insurance, Martial Arts, Modeling, Private, Real Estate, and Stenographic
166. School Equipment and Supplies Wholesale
167. Second Hand/Used Merchandise, Sales
168. Service Station Equipment, Wholesale
169. Sewing Machines, Commercial and Industrial Type, Retail Sales and Repairing
170. Shoe Repairing Equipment and Supplies, Wholesale
171. Sightseeing Tours, Garages and Depot
172. Sign Painters' Shops, Not Neon Sign Fabrication
173. Skating Rinks, Indoor
174. Slip Covers, Custom Manufacturing
175. Soaps, Wholesale and Storage
176. Soda Fountain Supplies, Retail and Wholesale
177. Sound Systems and Equipment Sales
178. Sound Systems, Rentals and Repairs
179. Special School or Training Institution not offering curriculum of general instruction comparable to public schools
180. Spices, Wholesale and Storage
181. Sporting Goods, Wholesale
  - a. The sale of gunpowder and primers in excess of permitted retail quantities as regulated by the Fire Code shall be subject to the following conditions:
    - (1) Wholesale sales revenue shall constitute a minimum of seventy-five percent (75%) of sales revenue on the premises.
    - (2) The quantities, arrangement, and distance of such storage shall be in accordance with the Fire Code.
182. Steam Baths
183. Surgical Supplies, Wholesale

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184. Surplus Stores
185. Swimming Pool, Commercial, Outdoor
186. Tanning Salon
  - a. Massage therapy, performed by a licensed massage therapist, is permitted as an accessory use.
187. Tattoo Shops, subject to securing a use permit pursuant to Section [307](#).
188. Taxicab Garages
189. Taxidermists
190. Telegraph Companies, Facilities and Offices
191. Telephone Companies, Facilities and Offices
192. Theaters
193. Tire Repairing Equipment and Supplies
194. Tobacco Oriented Retailers, subject to the following limitations:
  - a. Shall not be located within 500 feet of the same type use. This distance shall be measured from the property line of the parcel in which the use is conducted to the nearest property line of the parcel of the same type of use.
  - b. Shall not be located within 1,320 feet of a public, private, or charter school providing primary or secondary education, a park or playground, dependent care facility, homeless shelter, youth community center, recreation center, or place of worship. This distance shall be measured from the property line of the parcel in which the use is conducted to the nearest property line of the protected use.
195. Tobacco, Wholesale and Storage
196. Tombstones, Sales and Display
197. Tools, Wholesale and Distribution
198. Tortillas, Manufacturing Wholesale
199. Towels, Supply Service
200. Tractors, Retail Sales, Display
201. Upholsterers, Custom, Retail Sales and Supplies
202. Venetian Blinds, Custom Manufacturing and Cleaning
203. Veterinarians' Supplies, Retail and Wholesale

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204. Veterinary offices subject to the following conditions:

- a. They shall be so constructed and operated as to prevent objectionable noise and odor outside the walls of the office.
- b. Keeping or boarding of animals shall not occupy more than twenty-five percent (25%) of the gross floor of the office.
  - (1) There shall be no outdoor kennels or runs.
  - (2) There shall be no direct outside exit from any room containing kennels.

205. Veterinary Hospitals subject to the following conditions:

- a. They shall be no closer than one hundred (100) feet to any residential district or to any residence, hotel, motel or restaurant in any district and shall have adequate controls to prevent offensive noise and odor.

206. Washing Machines, Retail Sales and Display, Custom Repairing

207. Water or Mineral, Drinking or Curative, Bottling and Distribution

208. Water Softening Equipment, Service and Repairs

209. Window Cleaners' Service

210. Window Display Installations, Studio and Shops

211. Window Glass Installation Shops

212. Wines, Storage and Wholesale

**E. Yard, Height and Area Requirements.** To protect surrounding neighborhoods and preserve the public welfare, standards are herein established for yard, height and area requirements to provide an appropriate transition between commercial uses and adjoining neighborhoods. In recognition of the goals contained in the General Plan for uses and intensities within core areas, greater heights and intensities are herein encouraged.

1. Any multiple family residential use shall conform to the yard, height, area and density requirements set forth in Section [615](#) except as otherwise provided herein:

- a. Where dwelling units do not occupy the ground floor, a front yard shall be maintained as provided in Section [701.D.3](#) for property defined in Section [623.E.3](#).
- b. A request to exceed the yard, height, area or density requirements of Section [615](#) up to, but not to exceed those of Section [618](#), may be granted by the City Council, after a recommendation is received from the Planning Commission and in accordance with Section [506](#) upon finding that such increase is not detrimental to adjacent property or the public welfare in general and that:

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- (1) The property is within an area of a village core designated on approved plans for such development, or
- (2) The property is adjacent to high density residential development of similar intensity and character.

Requests to amend a previously approved application shall follow the amendment procedure set forth in Section 500.

- c. A site plan approved in accordance with Section [507](#) of this ordinance is required for all uses approved pursuant to Section [623.E.1.b](#).
  - d. Any residential use within the downtown redevelopment area, as defined in City Council Resolution No. 15143, shall conform to the yard, height, area, and density requirements set forth in Section [618](#).
2. Any single-family residential use shall conform to the following requirements:
- a. Such development shall be permitted only if the property is designated as residential on the General Plan Map. If this standard is satisfied, the remainder of this section shall apply.
  - b. The applicant shall submit in writing to the Zoning Administrator a declaration of the development option (standard subdivision, average lot subdivision, conventional, or planned residential development) and density proposed for the residential use.
  - c. The Zoning Administrator shall determine the residential zoning district to which the proposed single-family development is equivalent, the use shall satisfy the development standards contained in Sections [609](#) through [613](#) for the development option and density of the equivalent zoning district.
  - d. Upon completion of development of a single-family residential use in accordance with this section, the Planning Commission shall initiate an application for rezoning the site to the residential zoning district appropriate for the site.
3. The following yard, height and area requirements shall apply to: 1) all structures located in a core area as defined in the General Plan except that for purposes of this provision, the Central City Village Core shall be defined as the area bounded by 7th Avenue, 7th Street, Roosevelt Street and Madison Street; 2) structures located on property which abuts Central Avenue between Camelback Road on the north and Harrison Street on the south; and 3) structures that have received rezoning prior to June 15, 1988, and are subject to a City Council stipulated site plan in accordance with Section [506.B](#) and with exceptions as provided for residential uses in Section [623.E.1](#).
- a. A front yard is required as provided in Section [701.D.3](#).
  - b. Side yards are required as provided in Section [701.D.3](#).
  - c. Pumps dispensing liquid fuel at automobile service stations shall maintain such setbacks as required in Section [622.E](#) (No. 140), Section [701.A.7](#), and as required by the City of Phoenix Fire Code.

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- d. A maximum building height of four (4) stories not to exceed fifty-six (56) feet shall be permitted.
4. For any other non-residential uses permitted in the district, except as provided in Sections [623.E.3](#) and [623.E.5](#), the following requirements shall apply:
- a. A maximum building height of two (2) stories not to exceed thirty (30) feet shall be permitted.
  - b. Request to exceed the above height limits may be granted by the City Council for developments up to four (4) stories not to exceed fifty-six (56) feet upon recommendation from the Planning Commission or the Zoning Hearing Officer finding that such additional height is not detrimental to adjacent property or the public welfare in general.
  - c. Canal Right-of-Way Setbacks: An average 20-foot setback shall be provided for sites containing structures not exceeding two stories or 30 feet in height with a minimum 15-foot setback permitted for up to 50 percent of the structure (including projections). An average 30-foot setback shall be provided for sites containing any structure exceeding two stories or 30 feet in height with a minimum 20-foot setback permitted for up to 50 percent of the structure (including projections). Landscaping equal to the required average setback times the canal frontage (exclusive of necessary driveways or canal right-of-way access ways) shall be provided adjacent to the canal right-of-way property line and shall not be less than 15 feet in depth.
  - d. Except as provided in Section 622.E.4.f., the following building setbacks (excluding canal right-of-way setbacks) shall apply:

<b>BUILDING SETBACKS</b>				
<b>Adjacent to Streets</b>				
For structures not exceeding two stories or 30'	Average 25'	Minimum 20' permitted for up to 50% of structure, including projections		
For structures exceeding two stories or 30'	Average 30'	[Same as above]		
<b>Not Adjacent to Streets</b>				
	When Adjacent Zoning is:			
Maximum building height	S-1, S-2, RE-43 to R-3(*)	R-3A, R-4, R-5, R-4A(*)	CP, Ind. Pk., PSC, RSC, MUA, DC, GC, RH, UR	C-1, C-2, C-3 A-1, A-2, CP, Ind. Pk., P-1, P-2
1 story (or 15')	25'	10'	10'	0'

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<b>BUILDING SETBACKS</b>				
2 story (or 30')	50'	15'	10'	0'
3 story (or 42')	100'	30'	10'	0'
4 story (or 56')	150'	45'	10'	0'

(\*) An additional one foot setback shall be provided for every one foot of height above 30 feet.

e. Landscaping requirements/materials, except as provided in 623.E.4.f below:

<b>Streetscape</b>	
<b>Landscaped Setback</b>	Average 25' for structures not exceeding two stories or 30', minimum 20' permitted for up to 50% of the frontage. Average 30' for structures exceeding two stories or 30', minimum 20' for up to 50% of the frontage.
<b>Plant Type</b>	<b>Minimum Planting Size</b>
Trees*	Min. 2-inch caliper (50% of required trees) Min. 3-inch caliper or multi-trunk tree (25% of required trees) Min. 4-inch caliper or multi-trunk tree (25% of required trees)
Shrubs	Min. five (5) 5-gallon shrubs per tree

<b>Parking Lot Area</b>	
Interior surface area (exclusive of perimeter landscaping and all required setbacks)	Min. 10%
Landscaped planters	At ends of each row of parking & approximately every 110'
Landscaped planters**, single row of parking	Min. 120 sq. ft.***
Landscaped planters**, double row of parking	Min. 240 sq. ft.***

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<b>Parking Lot Area</b>	
Additional parking lot landscaping	As needed to meet 10% minimum requirement, evenly distributed throughout the entire parking lot. Min. interior dimension 5' (length and width).
<b>Plant Type</b>	<b>Minimum Planting Size</b>
Trees	Min. 2-inch caliper (60% of required trees) Min. 1-inch caliper (40% of required trees)
Shrubs	Min. five (5) 5-gallon shrubs per tree

<b>Perimeter Property Lines (not adjacent to a street)</b>	
Property lines not adjacent to a street	Min. 10-foot landscaped setback
Property lines not adjacent to a street, but adjacent to property zoned C-1 C-2, C-3, A-1, A-2, Commerce Park	None
<b>Plant Type</b>	<b>Minimum Planting Size</b>
Trees*	Min. 2-inch caliper (60% of required trees) Min. 1-inch caliper (40% of required trees)
Shrubs	Min. five (5) 5-gallon shrubs per tree

<b>Adjacent to a Building</b>	
Building facades within 100' of the public right-of-way or adjacent to public entries to the building (excluding alleys)****	Min. 25% of the exterior wall length shall be treated with either a landscaped planter a min. five (5) feet in width or an arcade or equivalent feature.
<b>Plant Type</b>	<b>Minimum Planting Size</b>
Trees*	Min. 2-inch caliper (60% of required trees) Min. 1-inch caliper (40% of required trees)
Shrubs	Min. five (5) 5-gallon shrubs per tree

\* 20 feet on center or equivalent groupings.

\*\* Measured from inside face of curb to inside face of curb.

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\*\*\* Not to exceed the length of a standard City of Phoenix parking stall. Modifications to the square footage may be approved by Planning and Development Department if the overall intent of the standard is being met.

\*\*\*\* Or as approved by the Planning and Development Department.

f. For new commercial and office development on parcels of five acres or less which are not located in commercial developments with shared access and parking that adjacent to pre-existing structures that have less than a 25-foot front building setback:

(1) The twenty-five (25) foot minimum building and landscaped setback adjacent to a street for buildings less than two (2) stories or thirty (30) feet in height shall be reduced to the minimum setback established by the average frontage of existing buildings on a block not to exceed three hundred feet on any side of the subject property. The reduced building setback shall not conflict with visibility requirements.

(2) A minimum of five (5) feet landscaping, canopy/shade structure, or combination thereof shall be provided adjacent to the street frontage.

(3) At least one (1) identifiable public entrance directly accessible within fifty (50) feet adjacent to the street frontage shall be provided.

(4) A minimum of 50% of the area of the front building facade shall be composed of windows, shadow boxes, artwork or comparable architectural feature. The area to be counted toward the 50% shall begin no higher than 12 feet above finished floor. This computation will exclude entrances to parking and loading areas.

(5) A use permit in accordance with the provisions of Section [307](#) is required to modify:

(a) The requirements for structure setback and number or location of public entrances directly adjacent to the street frontage may be modified by up to fifty percent (50%) when:

(1) The modification furthers the intent of this section through the provision of alternative design features that enhance the urban character of the pre-existing structures on the subject block, or

(2) Due to a small or irregular lot size or configuration, reasonable compliance with the standards of this Section is precluded or impractical.

(b) The requirements involving the area of the building facade that must be composed of windows, shadow boxes, artwork, or other architectural features, and the location of said features, may be modified by up to twenty-five percent (25%) when:

(1) The modification furthers the intent of this Section through the provision of alternative design features that enhance the urban character of the pre-existing structures on the subject block, or

(2) Due to a small or irregular lot size or configuration, reasonable compliance with the standards of this Section is precluded or impractical.

g. Accessory Uses: No accessory uses except for site ingress and egress, and public transportation related pedestrian amenities shall be provided within any required perimeter landscaped setback.

Surface and above grade public utilities may be permitted within the required perimeter landscaped setback subject to a use permit as approved by the Zoning Administrator or Board of Adjustment.

h. Lot Coverage: Lot coverage shall not exceed 50 percent (50%) of the net lot area exclusive of the first six (6) feet of roof overhang, open carports, covered patios or covered walkways.

i. Site Access: Access to a site containing any structure exceeding two (2) stories or (30) feet in height shall only be from an arterial or collector street as defined on the street classification map.

j. Site Plans: A site plan approved in accordance with Section [507](#) is required for sites containing any structure exceeding two (2) stories or thirty (30) feet in height.

k. The lot coverage, landscape or structure setback requirements up to 25 percent of the established setback for one- and two-story structures may be modified only upon securing a use permit and when:

- (1) The proposed structure or use would occupy a lot which had been developed and used prior to June 15, 1988, and
- (2) Due to the lot size or configuration, reasonable compliance with the standards of this Section is precluded, and
- (3) It is demonstrated that the proposed structure and use furthers the intent of this Section through the provisions of alternative measures such as enhanced landscaping, screening walls, etc. which exceed the minimum standards as contained herein.

5. Any Large Scale Commercial Retail development shall conform to the following requirements:

a. Applicability: For all Large Scale Commercial Retail developments for which unexpired preliminary or final Planning and Development Department site plan approval has been obtained prior to February 19, 2003, these standards shall not apply.

<b>Building Setbacks</b>	
From all property lines	Minimum 60-feet
<b>Building Height</b>	
Within 60 feet of property lines	Max. 35 feet
Greater than 60 feet	See Section <a href="#">623.E.4.d</a>
<b>Landscape</b>	

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<b>Streetscape</b>	
Setback	Average 30-foot setback, minimum 25-foot setback permitted for up to 50% of the frontage.****
<b>Plant Type</b>	<b>Minimum Planting Size</b>
Trees*	Min. 2-inch caliper (50% of required trees) Min. 3-inch caliper or multi-trunk tree (25% of required trees) Min. 4-inch caliper or multi-trunk tree (25% of required trees)
Shrubs	Min. five (5) 5-gallon shrubs per tree
<b>Parking Lot Area</b>	
Interior surface area (exclusive of perimeter landscaping and all setbacks)	Min. 10%
Landscaped planters	At ends of each row of parking & approx. every 110'
Landscaped planters**, single row of parking	Min. 150 sq. ft.***
Landscaped planters**, double row of parking	Min. 300 sq. ft.***
Landscaping adjacent to pedestrian walkways	See b.(1) and b.(2) below
Additional parking lot landscaping*	As needed to meet 10% minimum requirement, addl. landscaping to be evenly distributed throughout the entire parking area. Min. interior dimension five (5) feet (length and width). Min. rate of one (1) for every six (6) parking spaces, evenly distributed throughout the entire parking area.
<b>Plant Type</b>	<b>Minimum Planting Size</b>
Trees	Min. one 2-inch caliper per planter****
Shrubs	Min. five (5) 5-gallon shrubs per planter
<b>Perimeter Property Lines (not adjacent to a street)</b>	

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Property lines adjacent to an existing residential use or residential zoning district	Min. 15-foot landscaped setback
All other perimeter property lines	Min. 10-foot landscaped setback
Property lines not adjacent to a street, but adjacent to property zoned C-2, C-3, A-1, A-2, Commerce Park	None
<b>Adjacent to a Building</b>	
Buildings that face a public street	See c.(1) and c.(2) below

- \* 20 feet on center or equivalent groupings.
  - \*\* Measured from inside face of curb to inside face of curb.
  - \*\*\* Not to exceed the length of a standard City of Phoenix parking stall. Modifications to the square footage may be approved by Development Service Department if the overall intent of the standard is being met.
  - \*\*\*\* Or as approved by the Planning and Development Department.
- b. For landscaping adjacent to pedestrian walkways in parking lot, provide either:
- (1) Minimum 15-foot wide combination sidewalk/landscaped planter along the walkway as approved by Planning and Development Department. Where planters are adjacent to head-in parking, they shall be a minimum 7.5 feet wide. At installation, the landscape palette shall contain a mixed maturity consisting of 60% trees with minimum 2-inch caliper, 40% with minimum 1 inch caliper, or
  - (2) An equivalent shade structure as approved by the Planning and Development Department.
- c. Buildings that face a public street shall provide either:
- (1) A minimum 15-foot combination sidewalk/landscaped planter at grade level adjacent to the building. The sum total of the landscaping shall be a minimum one-third (1/3) the length of the building facade and a minimum five (5) foot wide. Landscaping shall include minimum 2-inch caliper size trees placed 20 feet on center or in equivalent groupings with 5-gallon shrubs per tree, or
  - (2) An arcade or equivalent feature, as approved by the Planning and Development Department.
- d. Access:
- (1) The development shall have direct site access as follows:
    - (a) To a freeway frontage road, or
    - (b) To one arterial road, or

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- (c) To a collector road:
  - (2) Except in a Village Core, access from a minor collector street where single-family residential zoning or uses are located within one-quarter ¼ mile of the subject property shall be subject to a use permit in accordance with the provisions of Section [307](#).
  - (3) No access is permitted from a local street.
- e. Loading standards:
  - (1) Hours of operation for developments within 300 feet of a residential district:
    - (a) Loading permitted between the hours of 6:00 a.m. and 10:00 p.m. Any expansion of the above mentioned hours are subject to obtaining a use permit in accordance with Section [307](#).
  - (2) Provide designated tractor-trailer stacking area that is not any closer than 60 feet to a residentially zoned property.
  - (3) Loading areas/docks shall not be closer than 60 feet to a residentially zoned district.
  - (4) Loading docks closer than 100 feet to a residential zoning district shall be screened with a solid masonry wall at a height determined by the Planning and Development Department to completely screen loading areas and delivery vehicles.
- f. Standards for permanent outdoor garden sales (garden/outdoor living center):
  - (1) Permanent outdoor sales areas are limited to a maximum of 35,000 gross square feet.
  - (2) The outdoor sales area may be increased from 35,000 gross square feet to a maximum area of 50,000 gross square feet only upon securing a use permit and when:
    - (A) It is demonstrated that the proposed modification is not detrimental to adjacent property or the public welfare in general, or
    - (B) Due to a small or irregular lot size or configuration, reasonable compliance with the standards of this section is precluded or impractical.
  - (3) Products sold outdoors shall be screened by a minimum eight (8) foot high solid masonry wall or screened so as not to be visible from property line or street. Wall shall have a decorative finish that is complimentary to the primary building walls for all required screening.
  - (4) Decorative screen material(s) may be used only in garden centers but shall not exceed 50% of the screened area. Decorative screening may include one or more of the following: wire, fabric, screen material, landscaping and/or alternative materials, as approved by the Planning and Development Department.
  - (5) Chain link fencing is not permitted.
- g. Temporary outdoor display and sales:

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- (1) Designate the area reserved for outdoor display and sales at front of building on site plan and delineate decoratively on the property.
  - (2) Temporary outside display and sales areas are subject to the following standards:
    - (A) Maximum 500 square feet of display area;
    - (B) No display and/or sales is permitted within 25 linear feet of either side of the building entrance(s)/exit(s);
    - (C) The allowable square footage and/or proximity of the display area to the building entrances/exits may be modified by 50 percent only upon securing a use permit when it is clearly demonstrated that the proposed modification is not detrimental to adjacent property and the public welfare in general.
- h. Temporary outdoor storage containers:
- (1) Designate an area for screened temporary storage containers at rear or sides of property, if provided.
  - (2) Temporary storage container area shall be screened by a minimum eight (8) foot high solid masonry wall or screened so as not to be visible from property line or street.
  - (3) A use permit must be obtained in accordance with the provisions of Section [307](#) in order to install/place temporary storage container(s).

**F. Outdoor Storage, Push Carts.**

1. Push carts made available for use by the public may be stored in temporary cart corrals located within the parking area of the retail center during normal business hours. Push carts must be stored inside the building or in an outdoor enclosure that is fully screened so as not to be visible from the property line or street after normal business hours or when not being used on a long term basis. (Ord. No. G-3447, 1991; Ord. No. G-3461, 1991; Ord. No. G-3483, 1991; Ord. No. G-3489, 1992; Ord. No. G-3494, 1992; Ord. No. G-3498, 1992; Ord. No. G-3504, 1992; Ord. No. G-3503, 1992; Ord. No. G-3525, 1992; Ord. No. G-3562, 1992; Ord. No. G-3604, 1992; Ord. No. G-3621, 1993; Ord. No. G-3720, 1994; Ord. No. G-3721, 1994; Ord. No. G-3731, 1994; Ord. No. G-3737, 1994; Ord. No. G-3787, 1994; Ord. No. G-3908, 1996; Ord. No. G-3916, 1996; Ord. No. G-4005, 1997; Ord. No. G-4040, 1997; Ord. No. G-4041, 1997; Ord. No. G-4058, 1997; Ord. No. G-4109, 1998; Ord. No. G-4366, 2001; Ord. No. G-4498, 2003; Ord. No. G-4515, 2003; Ord. No. G-4532, 2003; Ord. No. G-4566, 2003; Ord. No. G-4678, 2005; Ord. No. G-4937, 2007; Ord. No. G-5084, 2008; Ord. No. G-5242, 2008; Ord. No. G-5268, 2008; Ord. No. G-5440, 2009; Ord. No. G-5561, 2010; Ord. No. G-5544, 2010; Ord. No. G-5573, 2010; Ord. No. G-5620, 2011; Ord. No. G-5632, 2011; Ord. No. G-5633, 2011; Ord. No. G-5716, 2012; Ord. No. G-5742, 2012; Ord. No. G-5745, 2012; Ord. No. G-5746, 2012; Ord. No. G-5743, 2012; Ord. No. G-5874, 2013; Ord. No. G-5951, 2014; Ord. No. G-5959, 2014; Ord. No. G-6150, 2016; Ord. No. G-6151, 2016; Ord. No. G-6279, 2017; Ord. No. G-6331, 2017; Ord. No. G-6451, 2018; Ord. No. G-6529, 2018; Ord. No. G-6746, § 1, 2020; Ord. No. G-6810, § 2, 2021)

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Disclaimer: The City Clerk's Office has the official version of the Phoenix Zoning Ordinance. Users should contact the City Clerk's Office for ordinances passed subsequent to the ordinance cited above.

[City Website: www.phoenix.gov](http://www.phoenix.gov)

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## Section 618. R-5 Multifamily Residence District.

A. **Purpose.** The purpose of the multifamily residence districts is to provide for alternate living styles including rental, condominiums and single ownership of land with multiple units thereon or single or attached townhomes.

The density ranges offered are intended to allow for a greater interaction of residents with at least the opportunity for less individual maintenance, unit cost, and size as compared with a conventional single-family residence.

The design options of average lot subdivision, planned residential, and single-family attached development are intended to provide flexibility as to unit placement, variable yard requirements, more reasonable and practical use of open spaces, staggered height limits up to three and four stories and more standardized parking and street improvement requirements. Bonus provisions are intended to facilitate and enhance the utilization of smaller infill parcels as well as unusual and irregular parcels throughout the City.

Along with the freedom that the multifamily district offers are certain responsibilities which must be met for project residents, but more importantly for the overall adjacent neighborhood. These are expressed in terms of standards and performance criteria. The standards internal to a project are intended to increase livability with amenities including landscaping, recreational facilities and project design. On the other hand the exterior standards provide a better fit, [and] better the project and the neighborhood environs. Criteria relating to setbacks, screening and landscaping are intended to reduce noise, maintain privacy and minimize psychological feelings to a change in development character and avoid any adverse effect on property values.

### B. District Regulations.

1. **Development Standards for Residential Uses.** The following tables establish standards to be used in the R-5 District. The definitions of terms used in these standards are found in Section [608.I](#). The single-family attached development option must meet Section [608.F.8](#) requirements.

**Table A. Single-Family, Detached Development (Subdivided on or after May 1, 1998)**

<i>Standards</i>	<i>R-5 Development Option</i>	
	<i>Conventional</i>	<i>Planned Residential Development</i>
Minimum lot width (in the event of horizontal property regimes, "lot" shall refer to the width of the structure and exclusive use area)	55' minimum	45' minimum (unless approved by either the design advisor or the Single-Family Architectural Appeals Board for demonstrating enhanced architecture that minimizes the impact of the garage (see Section <a href="#">507 Tab A.II.C.8(8.3)</a> ))

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**Table A. Single-Family, Detached Development (Subdivided on or after May 1, 1998)**

<b>Standards</b>	<b>R-5 Development Option</b>	
	<b>Conventional</b>	<b>Planned Residential Development</b>
Minimum lot depth	None, except 110' adjacent to freeway or arterial	None, except 110' adjacent to freeway or arterial
Dwelling unit density (units/gross acre)	5.0	6.5; 12 with bonus
Minimum perimeter building setbacks	Front: 15'; Rear: 15' (1-story), 20' (2-story); Side: 10' (1-story), 15' (2-story)	Street (front, rear or side): 15' (in addition to landscape setback); Property line (rear): 15' (1-story), 20' (2-story); Property line (side): 10' (1-story), 15' (2-story)
Common landscaped setback adjacent to perimeter streets (2)	None	15' average, 10' minimum (does not apply to lots fronting onto perimeter streets)
Minimum interior building setbacks	Front: 10'; rear: 10'; combined front and rear: 35'; street side: 10'; sides: 13' total (3' minimum, unless 0')	Front: 10'; rear: none (established by Building Code); street side: 10'; sides: none (established by Building Code)
Minimum building separation	10'	None
Minimum garage setback	18' from back of sidewalk for front-loaded garages, 10' from property line for side-loaded garages	18' from back of sidewalk for front-loaded garages, 10' from property line for side-loaded garages
Maximum garage width	For lots <60': 2 car widths, for lots ≥60' to 70': 3 car widths, for lots >70': no maximum	For lots <60': 2 car widths, for lots ≥60' to 70': 3 car widths, for lots >70': no maximum
Maximum height	2 stories and 30'	2 stories and 30' (except that 3 stories not exceeding 30' are permitted when approved by the design advisor for demonstrating enhanced architecture)

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**Table A. Single-Family, Detached Development (Subdivided on or after May 1, 1998)**

<i>Standards</i>	<i>R-5 Development Option</i>	
	<i>Conventional</i>	<i>Planned Residential Development</i>
Lot coverage	Primary structure, not including attached shade structures: 40% Total: 50%	Primary structure, not including attached shade structures: 40% Total: 50%
Common areas	None	Minimum 5% of gross area
Required review	Development review per Section <a href="#">507</a> , and subdivision to create 4 or more lots	Development review per Section <a href="#">507</a> , and subdivision to create 4 or more lots
Street standards	Public street, or private street built to City standards with a homeowners' association established for maintenance	Public street or private accessway <sup>(1)</sup>
On-lot and common retention	Common retention required for lots less than 8,000 sq. ft. per grading and drainage ordinance requirements	Common retention required for lots less than 8,000 sq. ft. per grading and drainage ordinance requirements
Landscape standards		Perimeter common: trees spaced a maximum of 20 to 30 feet on center (based on species) or in equivalent groupings, and 5 shrubs per tree.

**(1)** Public streets may be required as a part of subdivision or development review for extensions of street patterns, for circulation within neighborhoods, or to continue partial dedications.

**(2)** For the purposes of this section, canal rights-of-way shall be treated the same as public street rights-of-way.

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**Table B. Single-Family (Subdivided Prior to May 1, 1998), Single-Family Attached and Multifamily Development**

<b>Standards</b>	<b>R-5 Development Option</b>			
	<b>(a) Subdivision</b>	<b>(b) Average Lot</b>	<b>(c) Planned Residential Development</b>	<b>(d) Single-Family Attached<sup>(4)</sup></b>
Minimum lot dimensions (width and depth)	60' width, 94' depth	40' width, 50' depth	None	Individual unit lot: 20' width, no minimum depth
Dwelling unit density (units/ gross acre)	43.5	43.5	45.68; 52.20 with bonus	45.68; 52.20 with bonus
Perimeter standards	None	20' front, 15' rear, 10' side	20' adjacent to a public street; this area is to be in common ownership unless lots front on the perimeter public street; 10' adjacent to property line	10' for units fronting street rights-of-way; 15' for units siding street rights-of-way. This area is to be in common ownership or management. 10' adjacent to property line
Building setbacks	20' front, 15' rear, 10' and 3' side	10' front, 30' front plus rear	10' front	Individual unit lot: none
Maximum height	4 stories or 48' <sup>(1)</sup> (2)	4 stories or 48' <sup>(1)</sup> (2)	4 stories or 48' <sup>(1)</sup> (2)	4 stories or 48' <sup>(1)</sup>
Lot coverage	50%	50%	50%	100%
Common areas	None	None	Minimum 5% of gross area <sup>(3)</sup>	Minimum 5% of gross area

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**Table B. Single-Family (Subdivided Prior to May 1, 1998), Single-Family Attached and Multifamily Development**

<i>Standards</i>	<i>R-5 Development Option</i>			
	<i>(a) Subdivision</i>	<i>(b) Average Lot</i>	<i>(c) Planned Residential Development</i>	<i>(d) Single-Family Attached<sup>(4)</sup></i>
Required review	Subdivision to create 4 or more lots	Subdivision with building setbacks	Development review per Section <a href="#">507</a>	Development review per Section <a href="#">507</a>
Street standards	Public street required	Public street	Public street or private accessway	Development site: Public street or private accessway. Individual unit lot: Private accessway, alley right-of-way or driveway.

(1) There shall be a 15-foot maximum height within ten feet of a single-family zoned district, which height may be increased one foot for each additional one foot of building setback to the maximum permitted height.

(2) The height limitation of four stories or 48 feet applies to residential uses.

(3) For purposes of this section, canal rights-of-way shall be treated the same as public street rights-of-way.

(4) The single-family attached development option must meet Section [608.F.8](#) requirements.

2. Development standards for commercial and mixed uses (including hotels and motels) shall be in accordance with Section [622.E.3](#) and E.4.

**C. Special Regulations.**

1. A site plan in accordance with Section [507](#) is required for all development in the R-2, R-3, R-3A, R-4, R-4A and R-5 districts except when the development consists of single-family dwellings on individual lots.

**D. Permitted Uses.**

1. Adult day care center, subject to a use permit; and provided, that:

a. Outdoor recreation areas shall be screened from adjacent properties by a six-foot-high landscape hedge, solid fence, or solid wall.

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The Phoenix Zoning Ordinance is current through Ordinance G-6993, passed July 1, 2022.

2. Bed and breakfast establishment.
3. Biomedical and Medical Research Offices. A biomedical or medical research laboratory shall be permitted as an accessory use to a biomedical and medical research office, subject to the following limitations:
  - a. The use shall be subject to obtaining a use permit in accordance with the procedures and standards of Section [307](#).
  - b. Entrance to the laboratory shall only be from within the building and shall not be through doors which open to the outside of the building.
  - c. No sign or display for the laboratory shall be visible from adjacent public rights-of-way.
  - d. Access to a property containing a laboratory shall only be from a major arterial or arterial, as designated on the street classification map.
4. Birthing center:
5. Boarding house, subject to a use permit and the following conditions:
  - a. Such home shall be registered with, and administratively verified by, the Planning and Development Department Director's designee, as to compliance with the standards of this section as provided in Section [701](#).
  - b. No boarding house shall be located on a lot with a property line within 1,320 feet, measured in a straight line in any direction, of the lot line of another boarding house, group home, or community residence home or center within a residential zoning district.
  - c. A maximum lot coverage of 25 percent.
  - d. A minimum of 50 square feet of usable outdoor open space per bed shall be provided.
6. Branch offices of the following uses are permitted subject to a use permit: banks, building and loan associations, brokerage houses, savings and loan associations, finance companies, title insurance companies, and trust companies.
7. Community residence center, subject to a use permit and the following conditions:
  - a. Such center shall be registered with, and administratively verified by, the Planning and Development Department Director's designee, as to compliance with the standards of this section as provided in Section [701](#).
  - b. No community residence center shall be located on a lot with a property line within 1,320 feet, measured in a straight line in any direction, of the lot line of another community residence home or center within a residential zoning district.
  - c. Disability accommodation from the spacing requirement may be requested by an applicant per Section [701.E.3](#).

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The Phoenix Zoning Ordinance is current through Ordinance G-6993, passed July 1, 2022.

- d. A maximum lot coverage of 25 percent.
- e. A minimum of 50 square feet of usable outdoor open space per bed shall be provided.
8. Copy and reproduction center, subject to a use permit.
9. Dependent care facility for 13 or more dependents and schools for the mentally or physically handicapped subject to securing a use permit pursuant to Section [307](#).
10. Group foster home.
11. Group home, subject to a use permit and the following conditions:
  - a. Such home shall be registered with, and administratively verified by, the Planning and Development Department Director's designee, as to compliance with the standards of this section as provided in Section [701](#).
  - b. No group home shall be located on a lot with a property line within 1,320 feet, measured in a straight line in any direction, of the lot line of another group home, boarding house, or community residence home or center within a residential zoning district.
  - c. A maximum lot coverage of 25 percent.
  - d. A minimum of 50 square feet of usable outdoor open space per bed shall be provided.
12. Dormitories and convents shall be permitted as accessory uses to churches or similar places of worship.
13. Hospice, subject to a use permit.
14. Hotel or Motel. The following accessory uses are permitted; provided, that the entrance to said accessory uses shall be from within the building only and that no sign or display for the accessory uses shall be located so as to be visible from a public thoroughfare or adjacent property:
  - a. Auto rental agency; provided, that there are no more than three vehicles stored on the hotel property.
  - b. Child care, for hotel/motel guests only.
  - c. Cocktail lounges with recorded music or one musician.
  - d. Convention or private group activities.
  - e. Gift shop.
  - f. News stand.
  - g. Restaurants with recorded music or one musician.
  - h. Other services customarily accessory thereto.

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The Phoenix Zoning Ordinance is current through Ordinance G-6993, passed July 1, 2022.



15. Office for Administrative, Clerical, or Sales Services. No commodity or tangible personal property, either by way of inventory or sample, shall be stored, kept, or exhibited for purposes of sale in any said office or on the premises wherein the said office is located. Seminars shall be permitted as an accessory use; provided, that they are clearly accessory to the office use.
16. Office for professional use, including medical center, wellness center, and counseling services (provided that services are administered or overseen by a State licensed professional).
- a. The following accessory uses are permitted; provided, that the entrance to said accessory uses shall be from within the building only, that no sign or display for the accessory uses shall be located so as to be visible from a public thoroughfare or adjacent property, and that no more than 25 percent of the floor area can be used for the accessory uses:
- (1) Fitness center.
  - (2) Massage therapy, administered by a State licensed massage therapist.
  - (3) Ophthalmic materials dispensing.
  - (4) Pharmacy.
  - (5) Sleep disorder testing with less than a 24-hour stay duration.
  - (6) Snack bar.
  - (7) Surgical center, provided there are no overnight stays.
- b. The following accessory uses are permitted, subject to a use permit and provided that the entrance to said accessory uses shall be from within the building only, that no sign or display for the accessory uses shall be located so as to be visible from a public thoroughfare or adjacent property:
- (1) Medical and dental laboratories.
  - (2) Orthotics and prosthetic laboratories.
17. Nursing home, subject to a use permit and the following conditions:
- a. A maximum lot coverage of 25 percent.
  - b. A minimum of 50 square feet of usable outdoor open space per bed shall be provided.
18. Private clubs and lodges qualifying by law as a nonprofit entity, subject to a use permit. The use permit is not required if a special permit, according to Section [647](#), is obtained. Bingo may be operated as an accessory use on the premises of the club no more than two days per week.
19. Residential convenience market is permitted as an accessory use to a multiple-family development, subject to the following conditions:

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The Phoenix Zoning Ordinance is current through Ordinance G-6993, passed July 1, 2022.

- a. Signage shall be allowed only as part of a comprehensive sign plan pursuant to Section 705. The Zoning Administrator may approve wall-mounted signage up to a maximum height of 30 feet as part of an approved comprehensive sign plan.
  - b. The development shall contain a minimum of 400 dwelling units.
  - c. The market shall not exceed 1,000 square feet in total floor area (display and storage) if the development contains less than 850 dwelling units. The market shall not exceed 3,000 square feet in total floor area (display and storage) if the development contains 850 or more dwelling units.
  - d. No parking spaces shall be required or permitted for the market except for spaces designated for deliveries or handicapped individuals.
20. Teaching of the fine arts, subject to use permit.
21. Volunteer community blood centers qualifying by law as a nonprofit entity, subject to a use permit. (Ord. No. G-3465, 1991; Ord. No. G-3480, 1991; Ord. No. G-3483, 1991; Ord. No. G-3498, 1992; Ord. No. G-3529, 1992; Ord. No. G-3553, 1992; Ord. No. G-3562, 1992; Ord. No. G-3629, 1993; Ord. No. G-3630, 1993; Ord. No. G-4039, 1997; Ord. No. G-4041, 1997; Ord. No. G-4078, 1998; Ord. No. G-4111, 1998; Ord. No. G-4188, 1999; Ord. No. G-4857, 2007; Ord. No. G-5329, 2009; Ord. No. G-5380, 2009; Ord. No. G-5561, 2010; Ord. No. G-5582, 2011; Ord. No. G-5643, 2011; Ord. No. G-5743, 2012; Ord. No. G-5874, 2013; Ord. No. G-6331, 2017; Ord. No. G-6451, 2018)

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**The Phoenix Zoning Ordinance is current through Ordinance G-6993, passed July 1, 2022.**

Disclaimer: The City Clerk's Office has the official version of the Phoenix Zoning Ordinance. Users should contact the City Clerk's Office for ordinances passed subsequent to the ordinance cited above.

City Website: [www.phoenix.gov](http://www.phoenix.gov)  
Code Publishing Company

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The Phoenix Zoning Ordinance is current through Ordinance G-6993, passed July 1, 2022.

# EXHIBIT 3

## Supplemental Environmental Notice

WHEN RECORDED RETURN  
TO ARIZONA DEPARTMENT  
OF TRANSPORTATION,  
R/W PROPERTY MANAGEMENT  
205 S. 17<sup>TH</sup> AVE., MD 612E  
PHOENIX, AZ 85007-3212

OFFICIAL RECORDS OF  
MARICOPA COUNTY RECORDER  
20180391560.05/22/2018 02:45.705590LM555-3-1-1--N  
ELECTRONIC RECORDING

## SUPPLEMENTAL ENVIRONMENTAL NOTICE

This Supplemental Environmental Notice is made the 22<sup>nd</sup> of May, 2018, by the State of Arizona (hereinafter "the State"), acting by and through its Department of Transportation, and is made in conformance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This notice does not create any interest in real estate, nor does it create a lien against the property described in Exhibit "A"; it is merely intended to provide notice of certain conditions and restrictions that may exist, and to reflect the regulatory and statutory obligations described in 42 U.S. Code § 9601-9628 and in Arizona Revised Statutes, Title 49. Any restrictions described herein are extrinsic to this document and enforceable solely by the United States Environmental Protection Agency (hereinafter "EPA") and the Arizona Department of Environmental Quality (hereinafter "ADEQ"), under the aforementioned rules of law.

This notice shall replace the Environmental Notice recorded on December 5, 2017, in the Official Records of the Maricopa County Recorder, as Document 2017-0898091, pertaining to that property described in Exhibit "A".

**WHEREAS**, as part of subsurface-to-indoor-air vapor intrusion investigation at Operable Unit 1 of the Motorola 52<sup>nd</sup> Street Superfund site, in 2011, elevated levels of the contaminant trichloroethene (TCE) were found in the indoor air at the property above EPA's action levels.

**WHEREAS**, until multiple lines of evidence indicate that there is no longer potential for vapor intrusion into indoor air at the property, a vapor intrusion pathway mitigation system (hereinafter, "Mitigation System") is necessary in any building on the property to mitigate potential vapor intrusion of TCE from the subsurface.

**WHEREAS**, the State entered into an agreement with NXP USA, Inc. (hereinafter "NXP"), acting as "Potentially Responsible Party" under the oversight of the EPA, to install and maintain a "Mitigation System" at the property in general conformance with a Vapor Intrusion Mitigation System Design Report and Installation Work Plan that was submitted by NXP to the EPA on September 28, 2017, to mitigate elevated concentrations of TCE in indoor air.

**WHEREAS**, said Mitigation System was installed and preliminary testing, conducted in December 2017, indicated that the Mitigation System functions as intended to mitigate vapor intrusion pathways at the property.

**WHEREAS**, said Mitigation System, or a replacement system, must be operated, maintained, and monitored in order to prevent TCE from entering the indoor air of overlying buildings.

**WHEREAS**, the State seeks to support the EPA's Superfund Redevelopment Initiative and onsite cleanup/remediation efforts, and believes it beneficial to continue working in cooperation with the EPA and NXP while preparing the property for eventual sale to the public in accordance with ARS § 28-7095.

**NOW, THEREFORE**, the State provides notice that:

- I. Documentation of the onsite activities discussed above shall be made available to grantee prior to sale, including preliminary system design information that has been made available to the State by NXP and its contractor(s).

PROJECT 143 MA 000 H0867 01R  
M5194 01X

LOCATION: E. Papago – Hohokam T.I.

Parcel 7-5590  
Excess Land # L-M-555

2. Grantee will be instructed to contact EPA, the State, and NXP (or its agent(s)) prior to sale, for additional information about operation, monitoring, and maintenance requirements of the Mitigation System, as well as relevant Superfund Remedial Performance Measures.
3. Grantee will be instructed to obtain additional information about the Motoroia, Inc. (52nd Street Plant) superfund site prior to sale, from all appropriate sources, and should review any record of active and pending Institutional Controls or Land Use Controls for the subject superfund site, together with site-wide Cleanup Progress.

It is the responsibility of a prospective purchaser or other party with a potential interest in the Property to conduct due diligence. This includes the discovery of information related to the superfund site, any other environmental conditions that may impact the Property, and any additional mitigation options that exist or may be made available to prospective purchasers. Additional information about the Motorola, Inc. (52nd Street Plant) site can be found at the following public information repositories in Arizona:

Arizona Dept. of Environmental Quality,  
Remedial Projects Unit  
1110 W. Washington St.  
Phoenix, AZ 85007-2935  
(602) 771-4154

Phoenix Public Library,  
Saguaro Branch  
2802 North 46th Street  
Phoenix, AZ  
(602) 262-6801

Phoenix Public Library,  
Central Branch  
1221 N. Central Avenue  
Phoenix, AZ 85004  
(602) 262-4636

The most complete collection of documents is the official EPA site file, maintained at the following location:

Superfund Records Center  
Mail Stop SFD-7C  
95 Hawthorne Street, Room 403  
San Francisco, CA 94105  
(415) 820-4700

Signed,  
  
Michael Craig, Manager  
Right of Way Property Management

NOTARY CERTIFICATION

STATE OF ARIZONA     )  
                                  ) ss.  
County of Maricopa    )

The foregoing instrument was acknowledged before me this 22<sup>nd</sup> day of May, 2018, by Michael Craig, Manager, Right of Way Property Management, of the Arizona Department of Transportation, who acknowledged that he executed this instrument for the purpose therein contained.

IN WITNESS WHEREOF, I have set my hand and official seal.

  
Signature



My commission expires: 6/30/19

Document Type: Notice

PROJECT 143 MA 000 H0867 01R  
M5194 01X

LOCATION: E. Papago – Hohokam T.I.

Parcel 7-5590  
Excess Land # L-M-555

## EXHIBIT "A"

### PARCEL No. 1

That part of the North half of Lot 1, Section 6, Township 1 North, Range 4 East of the Gila and Salt River Base and Meridian, Maricopa County, Arizona, described as follows:

Beginning at a point on the North line of said Section 6, from which the North quarter corner thereof bears West (assumed bearing) a distance of 1507.50 feet; thence South 40 feet to the TRUE POINT OF BEGINNING; thence West parallel to the North line of said Section 6, and distant 40 feet South therefrom a distance of 105 feet; thence South 540 feet more or less to a point on the North line of property described in instrument recorded in Docket 3121, page 42, records of Maricopa County, Arizona; thence North 87° 23' East parallel to and 0.5 feet South of an existing fence line to an intersection with an existing irregular fence line approximately paralleling Lateral 6 and the Northeast corner of said property described in said Docket 3121, Page 42; thence northeasterly to a point which is 362.5 feet South of the TRUE POINT OF BEGINNING, said point being identical with the most southwesterly corner of the parcel of land described in instrument recorded in Docket 2770, page 309, records of Maricopa County, Arizona; thence North 362.50 feet along the West line of said parcel of land to the TRUE POINT OF BEGINNING;

EXCEPT beginning at a point on the North line of said Section 6, from which the North quarter corner thereof bears West (assumed bearing) a distance of 1507.50 feet; thence South 40 feet to the TRUE POINT OF BEGINNING; thence West parallel to the North line of said Section 6 and distant 40 feet South therefrom a distance of 105 feet; thence South 272 feet; thence East parallel to the North line of said Section a distance of 105 feet, more or less, to a point on the East line of the property described in Deed recorded in Docket 7396, page 109, records of Maricopa County, Arizona; thence North along the East line of the property described in said Deed 272 feet to the point of beginning; and

EXCEPT those portions Quit Claimed to the City of Phoenix by Deeds recorded in Docket 14824, page 333 and Document No. 83-004450, records of Maricopa County, Arizona, and

EXCEPT that part Quit Claimed to Maricopa County by Deed recorded in Docket 1166, page 79, records of Maricopa County, Arizona.

### PARCEL No. 2

An Easement for ingress and egress as created by instrument recorded in Docket 9566, page 570, records of Maricopa County, Arizona, described as follows:

The East 20 feet of that part of the North half of Lot 1, Section 6, Township 1 North, Range 4 East of the Gila and Salt River Base and Meridian, Maricopa County, Arizona, described as follows:

Beginning at a point on the North line of said Section 6, from which the North quarter corner thereof bears West (assumed bearing) a distance of 1507.50 feet; thence South 40 feet to the TRUE POINT OF BEGINNING; thence West parallel to the North line of said Section 6 and distant 40 feet South therefrom a distance of 105 feet; thence South 272 feet; thence East parallel to the North line of said section a distance of 105 feet, more or less, to a point on the East line of the property described in Deed recorded in Docket 7396, page 109, records of Maricopa County, Arizona; thence North along the East line of the property described in said Deed 272 feet to the point of beginning.

PROJECT 143 MA 000 H0867 01R  
M5194 01X

LOCATION: E. Papago – Hohokam T.I.

Parcel 7-5590  
Excess Land # L-M-555

# EXHIBIT 4

## Vapor Mitigation System Installation Report



## Vapor Mitigation System Installation Report

ADOT Building  
4601 E. McDowell Road  
Phoenix, Arizona

*Prepared by:*

Vapor Mitigation Sciences, LLC  
Glendale, Arizona

*Prepared for:*

NXP USA, Inc.  
March 2018





March 21, 2018

Rachel Loftin  
Remedial Project Manager  
US EPA – Region 9  
75 Hawthorne Street  
Superfund Division, SFD-8-1, 10th Floor  
San Francisco, CA 94105

RE: Vapor Mitigation System Installation Report, ADOT Building, 4601 E. McDowell Road,  
Phoenix, Arizona, prepared by Vapor Mitigation Sciences, LLC for NXP USA, Inc., March 2018

Dear Ms. Loftin:

NXP USA, Inc. (NXP) hereby submits the Vapor Mitigation System Installation Report, ADOT Building, 4601 E. McDowell Road, Phoenix, Arizona, prepared for NXP by Vapor Mitigation Sciences, LLC. The report was revised to address the comments provided by EPA in its letter dated February 20, 2018. NXP's response to that letter is provided to EPA under separate cover.

Copies of the report have been distributed as per the list provided at the end of this letter.

Please contact me if you have questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jenn McCall'.

Jenn McCall  
Strategic Programs Manager  
NXP USA, Inc.

Report Distribution:

Karin Harker, Arizona Department of Environmental Quality (ADEQ)  
Sue Kraemer, APTIM (including copies for the library repositories)  
Patrick Brennan, Arizona Department of Transportation (ADOT)  
Bill Morris, Vapor Mitigation Sciences, LLC (VMS)  
Sharen Meade, Clear Creek Associates, LLC



## Vapor Mitigation System Installation Report

ADOT Building  
4601 E. McDowell Road  
Phoenix, Arizona

*Prepared by:*

Vapor Mitigation Sciences, LLC  
Glendale, Arizona

*Prepared for:*

NXP USA, Inc.

March 2018

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Figure 1	Site Plan, ADOT Building
Figure 2	As-Built Drawing, ADOT Building

**APPENDICES**

Appendix A	Photographs
Appendix B	Warranty Information
Appendix C	Inspection Sheets (Installation and Baseline)
Appendix D	System Information Sheet

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## 1.0 INTRODUCTION

This Vapor Mitigation System Installation Report (Installation Report) has been prepared by Vapor Mitigation Sciences, LLC (VMS) on behalf of NXP USA, Inc. (NXP). The building being mitigated is a single-story commercial office building located at 4601 E McDowell Road in Phoenix, Arizona owned by the Arizona Department of Transportation (ADOT) (Figure 1). The building is currently vacant and lies over the groundwater plume in the Operable Unit 1 (OU1) area of the Motorola 52nd Street Superfund Site. The plume is primarily chlorinated volatile organic compounds (VOCs) and previous vapor intrusion sampling at the building indicated potential vapor intrusion. NXP has requested that vapor intrusion mitigation be done by conducting building-specific diagnostic testing and designing and installing a mitigation system based on those test results. VMS was retained to conduct diagnostic tests, and design and install a sub-slab depressurization (SSD) system.

The design of the system followed the basic principles of typical SSD systems used in vapor intrusion mitigation. Diagnostic testing was done to determine how much negative pressure field extension coverage is obtained at various applied vacuum levels from temporary suction points installed in the slab of the building. Based on the diagnostic testing and VMS experience, the number of extraction points, locations of extraction points and blowers was determined. VMS designed a system that would provide sub-slab coverage over the building footprint.

Based on this type of building structure (e.g., relatively intact concrete floor slab over the occupied portion of the building's footprint, typical building air exchange rates, etc.) and the presence of unsaturated and semi-permeable soils below the slab, SSD systems are the best method of mitigating structures of this type. SSD is generally the most common approach for radon and volatile organic compound (VOC) vapor intrusion mitigation and, typically, is highly effective (e.g., EPA 1994<sup>1</sup>, ITRC 2007<sup>2</sup>).

A SSD system uses a fan/blower (hereinafter "blower") to apply vacuum to the slab, pull vapor from the space below the floor slab where the soil begins at one or more "extraction points", with the goal of creating negative pressures below the slab. These negative pressures remove vapors from below the slab, and in areas where there are any cracks or openings in the slab, indoor air will flow down from the building into the sub-slab, rather than allowing vapors to flow up from the ground into the building, thus eliminating or minimizing the potential for vapor intrusion.

The blower, which is located outside of the occupied area of the building (e.g., on an exterior wall, or on the roof of a building), pulls the vapors from the extraction point(s). The vapors are then exhausted above the roof line of the building, away from potential human exposure, where

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<sup>1</sup> USEPA 1994. Radon Mitigation Standards (EPA 402-R-93-078)

<sup>2</sup> ITRC 2007, Vapor Intrusion Pathway: A Practical Guideline

they immediately dilute to acceptable concentrations in the atmosphere (exhaust points are located a suitable distance) from windows, doors, or ventilation and air conditioning (HVAC) intake vents, to prevent entry of the vapors into the building).

It should be noted that SSD should be designed to achieve measurable negative pressures (compared to typical indoor air pressures) over the area of the slab under typical heating, HVAC operation and meteorological conditions. It is important to note that the current HVAC systems on the building are not operational and have not been operational for a number of years. Code requires certain ventilation rates for commercial space and brings outdoor air into the HVAC systems during operation which provides the additional ventilation. If the HVAC systems for this building are turned on and operated according to current American National Standards Institute/American Society of Heating, Refrigerating and Air-Conditioning Engineers Standards 62.1-62.2, it should increase the efficiency of the operating SSD system.

This Installation Report has been prepared to:

- Describe the building characteristics and the diagnostic testing used for the design (see Section 2.0);
- Describe the performance objective (see Section 3.0),
- Describe the mitigation system installation including the blowers and system performance, and installation procedures (see Section 4.0),
- Provide photo examples of the system installation (see Section 5.0) and warranty information (see Section 6.0),
- Describe the baseline monitoring event for the system (see Section 7.0),
- Describe the operation and maintenance for the system (see Section 8.0), and
- State the overall conclusions of the system installation (see Section 9.0).

This Installation Report is consistent with general requirements for VOC mitigation installations and incorporates professional experience and general industry recommendations for installation and performance testing of such systems.

## 2.0 DESIGN ACTIVITIES

This section of the Installation Report describes the building, the initial diagnostic testing, and the design of the mitigation system. The mitigation system was designed to provide vacuum coverage over the entire footprint of the building being mitigated. The construction style of the building is slab-on-grade with exterior and potentially interior poured foundation elements, cinder block exterior walls, traditional wood framed interior walls, and a low slope flat roof. As observed in the field, the floor slab is poured concrete and approximately 4-5 inches thick and sub-slab materials were primarily compacted engineered fill, with a mix of gravel, sand, and fines. The

building does appear to have had at least one addition over the years, as the interior construction and sub slab materials were different for the southeast portion of the building.

Diagnostic testing was done in May 2017 prior to the system installation to collect data for a conceptual design. Diagnostic testing was done by installing four 3.5 inch (") test suction points and 31 smaller 1/4" test holes through the slab at various distances from each suction point. Based on diagnostic testing results, the vacuum field extension was determined and the overall flow from each area of the building was estimated. Using these results, the total number and spacing of the extraction points were determined to provide coverage over the entire footprint of the slab. The diagnostic testing and system design were presented to EPA and ADOT for review and approval. The approved design is described in the Vapor Intrusion Mitigation System Design Report and Installation Work Plan, ADOT Building (VMS, September 2017). There were alterations to the extraction point locations during the walk-through with the building owners. With the minor changes in extraction point locations, one additional extraction point was added to the plan during installation (Section 4.1).

### 3.0 PERFORMANCE OBJECTIVE

The performance objective of the mitigation system design is to control the intrusion of soil vapors into the building, such that the TCE concentration in the indoor air of the building remains below the EPA commercial/industrial indoor air regional screening level for TCE of  $3.0 \mu\text{g}/\text{m}^3$ . To accomplish this objective, the performance goal is as follows:

- Goal to create a negative pressure field below the floor slab in the ADOT building with a minimum negative pressure field of  $-0.016$  inches of water column (" wc)<sup>3</sup>, at the edges of the slab, compared to the contemporaneous indoor air pressure.

The pressure differentials should be based on the average of several differential pressure measurements made over a period of time at discrete test points that generally span the slab footprint, under typical HVAC operating and meteorological conditions (extreme weather events and/or atypical HVAC operation can impact building pressures and, therefore, the differential pressure across the slab). The Operation and Maintenance (O&M) section (Section 8.0) addresses future performance monitoring, equipment maintenance, and sampling as necessary. Meeting a minimum vacuum field performance criterion across the slab will be considered presumptive evidence that the mitigation system is meeting performance objectives. As discussed in Section 7.0, indoor air sampling will be used to confirm the system is operating as designed.

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<sup>3</sup> VMS inadvertently used  $-0.015$  inches of water column for the performance objective in both the final work plan and design report for the SSD system. This was an error in converting pascals to inches of water column. The correct number is  $-0.016$  inches of water column as used in this report.

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## 4.0 MITIGATION SYSTEM INSTALLATION

VMS installed the SSD system in October 2017 in accordance with the Design Report and Installation Work Plan. Operation of the system started on October 20, 2017. As discussed in detail below, during the system installation each permanent extraction point was retested to determine the vacuum/airflow the extraction point required/exhibited. The information taken during installation was used to ensure the appropriate blower was selected and to verify what was seen during the diagnostic testing phase. As the installation progressed, it was determined that the specified AMG Force blower on the roof could provide ample vacuum and handle the airflow provided by three to four extraction points. Since the roof is relatively flat, the combination of extraction points connected or manifolded together was determined by their roof penetration location. The number and location of blowers, and which extraction points were connected together was determined based on the existing location of HVAC units on the roof, the locations of each extraction point roof penetration, and the requirement to keep a minimum 25-foot distance from the HVAC units.

### 4.1 INSTALLATION PROCEDURES

Mitigation system components were installed to facilitate servicing, maintenance, and repair or replacement of other equipment components in or outside the building. The building owner's representative was contacted regarding component locations prior to any work commencing. Systems, materials, and equipment were installed level, plumb, parallel, or perpendicular to other building systems and components to provide the most aesthetic installation.

Extraction point locations were chosen based on where they could be located (i.e., next to a wall, column, etc.), based on diagnostic testing, where the extraction point was allowed by the owner of the building, and where it will provide the most sub-slab coverage. In the design, there was one extraction point (EP7) to be located within a wall cavity. The remainder of the extraction points were to be located along the exterior walls of the building. The extraction points were originally located based on a theoretical coverage radius and not necessarily what would look best inside the building. Upon discussing the location of EP7 with the building owner and making minor changes to extraction point locations to make the riser pipes easier to conceal if remodeling was done to the building, it was determined that several (EP2, EP3, & EP6) of the other extraction points would be shifted from the centers of exterior walls to inside corners. Two other extraction points were also moved to inside a wall cavity (EP1 & EP4). With the movement of EP3 to an inside corner, one additional extraction point (EP8) was added to provide more coverage to the northeast corner of the building. The final installed extraction point locations as well as the proposed locations from the design can be seen on the as-built drawing (Figure 2).

Once the extraction point location was determined, the extraction points were made by coring a 3-1/2-inch diameter hole through the slab next to the wall or in the wall cavity. Approximately



three to four gallons of sub-slab soil were removed from each extraction point to make a pit below the cored hole that is approximately 12 inches deep and 12-16 inches wide, at the top right below the slab. An examination of the sub-slab soils was also done to ensure the selection of the appropriate equipment to use for the soils encountered. The sub-slab fill material was observed to be typical engineered compactible fill, which is a mixture of gravel, sand, and fines.

A vertical section of schedule 40 polyvinyl chloride (PVC) pipe was installed and sealed in the cored hole and braced to prevent any vertical or horizontal movement. Once this riser pipe was installed a quick test was done, with an in-line blower on the riser, to determine the flow rate at a specified vacuum level determined during diagnostic testing. The quick testing was done to determine the air flow volume from each riser, to determine how and which extraction points would be connected together and provide the necessary vacuum to extend an adequate negative pressure field under the slab. Diagnostic testing indicated that 3.5 to 4.0" wc vacuum applied at each extraction point should provide adequate vacuum coverage across the slab to prevent vapor intrusion. Each extraction point performance test was done with an in-line blower capable of producing at least 3.5" wc vacuum.

The extraction point riser pipes were sealed with polyurethane caulk in the cored concrete hole. Riser pipes next to the wall were constructed out of 3" schedule 40 PVC pipe and risers in the wall cavity were constructed out of 2" schedule 40 PVC pipe. Two-inch pipe was used in the wall cavity due to the walls being constructed out of 2" x 4" studs and the fact that 3" PVC fittings will not fit into the cavity. Based on the performance testing and the initial start-up readings, there were no airflow readings that warranted larger diameter pipe. Once the riser pipes exited the building, they were connected to 3" PVC manifold pipe. No pipes or conduit were placed in any area that would inhibit intended use of the area.

Three box style blowers were installed on the various overhead manifold pipe runs and the exhaust for each blower was directed away from the HVAC units on the roof. Each blower exhaust is more than 25 feet from an entry point into the building space that is > 2 feet above the entry point into the building. Each exhaust is fitted with an approved varmint guard on the terminus. The overall exhaust height above the roof is approximately 2 feet above the roof, and is more than the minimum 10 feet away from any possible air intakes that the applicable Building Officials & Code Administrators (BOCA) code requires.

PVC piping was installed in general accordance with the BOCA International Plumbing Code. Pipe was not supported by other building piping or ducts. Appropriate pipe clamps and hardware were used during the installation. All piping was labeled "Active Soil Depressurization System, Do Not Alter". Labels were installed on all riser pipes, even the risers located within the wall cavities. Labels were installed at locations where the pipes made changes in direction inside the building, above the dropped ceiling tiles and below the roof as well as every 20 feet above the

roof. Permanent engraved plastic labels were used to identify each monitoring point location and each blower.

During the system installation, a slab to foundation joint (crack) was evident due to a whistling sound from vacuum leakage near at least one of the extraction points located along the exterior wall. The sound was coming from under the drywall on the wood furred wall on the exterior block wall. This typical slab foundation joint was evident from the sound, but not visible. Expanding spray foam was applied to the space between the drywall and the slab where the carpet was removed near the extraction point. This remedy silenced the whistling sound, but there may be additional areas that become apparent if the carpet and vinyl base is removed during future tenant or owner improvements. These areas may require sealing, if they are identified in the future. This type of joint should be expected around the perimeter of the building, but leaks large enough to be noticeable may be relatively small or few.

## 4.2 BLOWER AND SYSTEM PERFORMANCE TESTING

Performance testing was done during installation to confirm the blowers selected would be adequate to meet performance objectives. The initial design was based on limited diagnostic testing. Initially, testing was done from four suction points located along the exterior walls at various points around the building. At least one of the original suction point test hole locations exhibited a fair amount of airflow (> 100 cfm) which could potentially alter how the permanent extraction points could be manifolded together or how many blowers would be necessary to maintain the applied vacuum necessary for the system to provide coverage across the slab.

VMS had determined during diagnostic testing which blower type was to be used for the mitigation, and each extraction point was performance tested once it was cored and the suction pit was cleaned out, thereby ensuring the correct blower selection and a successful installation. During the first couple of performance tests on the permanent extraction points, a number of the temporary test holes (installed during diagnostic testing) were measured to ensure sub-slab vacuum coverage was similar to that experienced during diagnostic testing. After all of the extraction points were completed and all three blowers were installed, the sub-slab coverage was measured again using the previously installed test holes. Extraction point and test hole locations are shown on the as-built drawing, (ENV-001) (Figure 2). During installation in October, static pressure differential measurements were made at a number of test hole locations, prior to vacuum being applied, to evaluate applied vacuum to static conditions. Static readings were similar to the static readings taken in May during diagnostic testing. The blower was turned on to apply vacuum to the extraction points. A hot wire anemometer was used to measure air velocity in each extraction point pipe run (with the exception of EP3) and the volumetric airflow was calculated for each extraction point. Since there is very little pipe on the roof at EP3, the airflow monitoring point is located closer to the blower and is the combined air flow of EP3 and EP8. To obtain the

airflow for EP3, the air velocity measurement from the EP8 monitoring point is subtracted from the combined air velocity measurement from the EP3 and EP8 monitoring point.

Vacuum and pressure differential readings were taken with a digital micromanometer. The pressure differential readings for the test holes are derived from measuring the pressure difference between the indoor air space above the slab and the sub-slab space at each test hole measured. The micromanometer used to measure pressure differential has two ports on it to obtain the differential pressure. One port is the reference location (indoor air space right above the slab at the test hole) and the second port measures the pressure in the sub-slab space versus the reference location (via a piece of tubing connected to a 1/4" hole through the slab, or sub-slab space). The micromanometer provides the differential between the two locations.

Data from the initial performance test was tabulated (Table 1) to show pressure differential readings. The goal of the mitigation system is to provide as much negative pressure under the slab as possible and have a minimum negative pressure of -0.016" we at all test points. It should be noted that initial test readings taken represent the lowest potential for coverage, as over time the sub-slab coverage expands and the values reach farther distance due the continued removal of soil moisture directly below the slab.

## **5.0 PHOTO DOCUMENTATION**

Photos from the project are located in Appendix A and represent examples of extraction point installation, riser pipe installation, performance testing, blower, monitoring device and labeling.

## **6.0 EQUIPMENT WARRANTIES**

All mitigation system components are warranted by the manufacturers for one year against manufacturer flaws, workmanship and overall operation of the system. The box style blowers carry an additional 3-year warranty supplied by the manufacturer. Warranty information is located in Appendix B.

## **7.0 BASELINE PERFORMANCE TESTING**

The system checks listed in Section 8.1 were performed during the baseline performance testing conducted by VMS on December 7, 2017. Vacuum and airflow measurements were taken and are provided in Table 2 along with a comparison to the initial measurements from Table 1. Test hole measurements were also taken and are shown on Table 3 with a comparison to the static measurements taken during the design phase on May 22, 2017 and the initial start-up measurements taken on October 20, 2017. Results of the baseline monitoring event are similar to the results of the initial start-up monitoring. There may be fluctuations in these measurements from time to time and this is considered normal. Various factors inside and outside the building

(i.e. windows and doors opening and closing, vent fans, wind on building, etc.) can influence the overall measurements as well as some of the measurements are extremely low.

For the system design, radius of influence (ROI) estimates were made and shown on the proposed design figures. Each of the ROIs was a theoretical and mathematical representation of what the diagnostic data from a single suction point could look like. During diagnostic testing, each suction point was tested independently (and compiled all together for the design) to allow the ROI circles to be placed on the design drawing. These circles do not consider any influence from another suction point. However, when the system is actually started up, all the suction points have a vacuum applied simultaneously and it is impossible to differentiate when reviewing the start-up data which suction point provides coverage to any distal test hole. Accordingly, once the system is operational, the ROI for a given suction point cannot be shown. As indicated in the pressure differential data in Table 3, the suction points are providing negative vacuum coverage over the entire footprint of the building; however, there are several test holes that show pressure differentials less than the design goal of  $-0.016''$  wc or the design level of  $-0.004''$  wc.

It is common for test holes along the perimeter of the building to show lower than expected vacuum (pressure differentials) coverage when there is a leaky perimeter crack that can short circuit the vacuum. Several leaky perimeter cracks were identified near the suction points during the initial start-up of the system. However, if perimeter cracks are affecting the test holes along the edge that showed lower coverage than expected (e.g., T9 and T26), air flow through the perimeter crack would generally be in a downward direction preventing the occurrence of vapor intrusion.

The system inspection sheets for both the initial system start-up monitoring and the baseline event as well as a blank sample sheet are included in Appendix C.

System discharge sampling and indoor/outdoor air sampling were also conducted by NXP on December 7, 2017 to obtain baseline values as further described in subsections 7.1 and 7.2. All baseline values will be used to evaluate future system performance.

## 7.1 SYSTEM DISCHARGE SAMPLING

VMS collected a system discharge sample from each of the three discharge points for analysis at the baseline event and the results are shown in Table 4. NXP engaged Trinity Consultants to conduct air dispersion modeling to determine ambient air TCE concentrations resulting from the SSD system operation to allow NXP and EPA to determine whether any system modifications are needed. The modeling showed that the annual average TCE emissions from all 3 discharge points combined was  $0.05 \mu\text{g}/\text{m}^3$  which is well below both the commercial/industrial and residential EPA regional screening levels. NXP provided the modeling results to EPA via email

dated January 17, 2018. System discharge samples will be collected in February 2019 after the system has been operating for about a year to determine if any changes have occurred since the baseline sample that warrant evaluation of the system. Unless those samples indicate otherwise, after that event, system discharge samples will be taken for closure of the system at such time as EPA and NXP determine closure is appropriate. All data will be provided to EPA, and to the building owner after review and approval by EPA.

## **7.2 BASELINE INDOOR/OUTDOOR AIR SAMPLING**

During the baseline event, NXP conducted indoor air sampling near the two locations sampled previously during the initial vapor intrusion to indoor air investigation. A sample identified as ADOT North was taken in the conference room in the northern part of the building. A sample identified as ADOT South and a duplicate sample were taken in the former library in the south central part of the building. An outdoor air sample was also collected at the same time near the main entrance to the building on the northeast side. Since the building is a commercial building, 8-hour sampling was conducted. Analysis was performed by Eurofins/Calscience Environmental Laboratories for the five constituents sampled for at the other mitigation system locations. The lab results were provided to EPA and to the building owner after EPA review and data validation. The results are shown in Table 5.

Indoor air sampling will be conducted again at the six-month O&M event in the summer of 2018 and then NXP will evaluate future sampling requirements with EPA based on the results. If post-mitigation indoor air sampling indicates concentrations below the EPA industrial/commercial regional screening level (RSL) for TCE of  $3.0 \mu\text{g}/\text{m}^3$ , the system will be assumed to be controlling vapor intrusion, regardless of pressure differentials measured. If sampling indicates concentrations above the EPA TCE industrial/commercial RSL, NXP will propose to EPA modifications to the system to reduce TCE concentrations below the RSL. The modifications will depend on the findings of the post-installation testing.

## **8.0 OPERATION AND MAINTENANCE**

All maintenance on the installed SSD system will be performed by VMS or other qualified maintenance personnel. The routine O&M will consist of annual system checks as described in subsection 8.1 and indoor air sampling at the frequency described in subsection 8.2. These two components will be used to evaluate whether the system is operating as designed or whether modifications are needed.

### **8.1 SYSTEM CHECKS**

The following system checks will be performed at six months in the summer 2018 and then annually thereafter by VMS or other qualified maintenance personnel:

**Vacuum and air flow:** For the continued evaluation of the system, performance metrics of measureable parameters must be established. To do this, vacuum and flow measurements from the riser pipes will be used to determine on going system effectiveness. Performance ranges will be calculated by taking the measured vacuum and flow, then multiplying that number by 1.25 and .75, which is + 25% of the original value. Flow measurements may be subject to wider variability, therefore, measurements that were originally less than 5 cubic feet per minute will use a + 50% point of departure in regards to system evaluation. The performance measurement ranges for the system are shown in Table 6.

**Suction Blowers:** Visual inspection of the blowers to ensure operation and verify systems labels are still in place. Consult with the property owner to determine if any noise or vibrations have been an issue since the last visit. Check the amperage draw of the blowers to ensure they are operating within their specified range.

**Riser Pipes:** Visual inspection of the piping to ensure there has been no damage to the piping since the previous visit.

**Sealing:** There was only one area that required sealing, during the installation, near extraction point EP3 and this should be periodically inspected and maintained in good condition. If and when any future remodeling takes place, an inspection of the floor and potentially the slab to foundation joint should be done and all cracks should be sealed to minimize air leakage and potential noise issues. If any existing floor caulking is damaged or missing or if new cracks in the slab appear, the system performance may be compromised.

**Blowers:** Routine monitoring after the baseline should include vacuum, airflow and flow's amperage readings. If routine monitoring measurements indicate more than a twenty percent change from the values that were measured for the baseline, then floor slab pressure differential measurements should be re-measured. If pressure differentials are below the criteria provided earlier, the system should be evaluated by a properly trained and certified mitigation professional and adjusted, repaired, or modified as necessary to achieve pressure differential criteria under typical HVAC and meteorological conditions

**Exhaust Pipe:** Visual inspection of the system exhaust piping to ensure the varmint guard is not plugged or damaged and that system labeling is intact. While examining the exhaust pipe, the roof penetration and roof flashing will be inspected to ensure and continue to prevent a leakage into livable space.

**Manometers and Alarms:** The system is equipped with 3 dial-face manometers (i.e. magnahelic gauges) and 3 system alarms, one for each blower. They are located on a wall near the existing women's restroom in the central part of the building. If there is a blower failure, the manometer should display a zero reading (no vacuum) and the alarm should be sounding and have a red light

illuminated. If this condition is present, then qualified personnel should be notified immediately so the system can be inspected and repaired if needed.

After the six-month system check and indoor air sampling event, routine monitoring of the manometers should be done monthly by a contractor or maintenance staff, which includes a visual inspection of the manometer gauges and recording the vacuum levels on an inspection log of the type included in Appendix C.

**Information/Notification:** Confirm that owner/occupant has correct and current operations information and emergency notification procedures and contacts;

**Changed Conditions:** Discuss with the property owner/occupant whether any changes have been made to the property that might alter or reduce effective operation of the SSD system including the following:

- changes or damage to the flooring or slab due to renovations, repairs, installation of new utility lines or services, or other activity in the building;
- change in operation of the HVAC system, including breakdowns or repair or replacement;
- accidents, lightning strikes, fires, floods or earth movement that may affect the SSD system operation;
- change in ownership or occupancy of the property. In the first year of the SSD system operation, sampling and system checks will be conducted frequently enough that any change in ownership or occupancy will be discovered relatively quickly and NXP will contact the new owner or occupant and inform them about the system and its operation. If the property is sold, it is highly unlikely that the buyer or buyer's agent will not notice the system (especially if an inspection is conducted) and want more information. Moreover, ADOT has recorded an "Environmental Notice" at the Maricopa County Recorder's Office so notice of the mitigation is in the public record. As a backup measure, NXP will also mail out in January/February of each year the one-page instruction and contact information sheet for the system (Appendix D) to the "current owner/occupant" of the building. In that way, if ownership or occupancy has changed, the receipt of this document would hopefully prompt the recipient to contact NXP or VMS for more information. In January of each year, NXP will also conduct an internet search on the property to see if either the Maricopa County Assessor's website or the Maricopa County Recorder's website indicates a change in ownership.

## 8.2 INDOOR AIR SAMPLING

NXP will conduct indoor air sampling (including an outdoor air sample) in the summer of 2018, and then will evaluate future sampling requirements with EPA based on the results. If substantial

changes are made to the building or HVAC operations, after the SSD system is installed, pressure tests should be conducted by VMS or an experienced vapor intrusion mitigation professional to ensure that negative pressures are still being maintained below the slab under the new conditions.

## 9.0 CONCLUSIONS

Based on the initial system measurements, the negative pressure field provided by the SSD systems does not initially meet the EPA goal of  $-0.016''$  wc, at all the test hole locations. However, the baseline indoor air sampling results in December 2017 were non-detect for the VOCs analyzed which indicates the system is performing as designed and preventing vapor intrusion.

The negative pressure field may change over time but based on experience at other vapor intrusion sites, the EPA goal is much higher than what is actually necessary to prevent vapor intrusion. VMS has installed numerous systems using a minimum criterion of  $-0.004''$  wc to determine system success and this lower level has proven to be protective and successful. It should be noted that sub-slab vacuum coverage is only needed where subsurface vapors can enter the building and not necessarily across the entire slab; however, since we do not generally know where vapors can enter the building, we attempt to obtain 100% coverage. Many systems without complete coverage are successful at controlling vapor intrusion.

Vapor intrusion mitigation is often an iterative process, requiring installation and operation of a reasonable system, followed by some adjustments based on post-mitigation testing, such as installation of additional suction points, change in blower size, or sealing of openings in the floor that are limiting suction field extension. There were only two test holes that did not meet the  $-0.004''$  wc criteria. Generally, SSD system coverage will slowly expand further under the slab and become more robust over time due to some minor drying of the sub-slab soils. VMS expects the coverage to increase 10-20% during the lifespan of the system. Based on the initial start-up measurements and the expectations of the system to continue to increase coverage below the slab, the system should be effectively controlling any potential vapor intrusion emanating from below the slab. Future indoor air sampling results will also be used to evaluate system operation over time.



## **TABLES**

**Table 1**  
**Initial Performance Measurements**  
**(October 20, 2017)**

**INITIAL START-UP MEASUREMENTS**

EXTRACTION POINT	VACUUM ("WC)	VELOCITY (FPM)	FLOW (CFM)
EP1	-4.34	76	3.7
EP2	-4.33	570	28
EP3	-3.51	1254	62
EP4	-3.75	203	10
EP5	-3.98	470	23
EP6	-3.97	701	34
EP7	-4.36	54	2.7
EP8	-3.56	358	18

BLOWER	AMPERAGE	TOTAL FLOW (CFM)
B1	1.7	34
B2	1.9	90
B3	2	57

EP = Extraction Point  
 fpm = feet per minute

"wc = inches of water column  
 cfm = cubic feet per minute

TEST HOLE		INITIAL PRESSURE DIFFERENTIAL ("WC)
T	1	-0.159
T	2	-0.0274
T	3	-0.137
T	4	-0.0577
T	5	-0.011
T	6	-0.0145
T	7	-0.328
T	8	-0.252
T	9	-0.0029
T	10	-0.0536
T	11	-0.0752
T	12	-0.0584
T	13	-0.0431
T	14	-0.245
T	15	-0.0869
T	16	-0.104
T	17	-0.146
T	18	-0.0723
T	19	-0.0193
T	20	-0.135
T	21	-0.0368
T	22	-0.0998
T	23	-0.0159
T	24	-0.11
T	25	-0.0128
T	26	-0.0013
T	27	-0.2818
T	28	-0.0375
T	29	-0.112
T	30	-0.0119
T	31	-0.0047

vacuum less than -0.016" wc  
 vacuum less than -0.004" wc

**Table 2**  
**Baseline Measurements**  
**Compared to**  
**Initial Measurements**

**Initial Start-up Measurements**  
**(October 20, 2017)**

EXTRACTION POINT	VACUUM ("WC)	VELOCITY (FPM)	FLOW (CFM)
EP1	-4.34	76	3.7
EP2	-4.33	570	28
EP3	-3.51	1254	62
EP4	-3.75	203	10
EP5	-3.98	470	23
EP6	-3.97	701	34
EP7	-4.36	54	2.7
EP8	-3.56	358	18

**45-60 Day Baseline Measurements**  
**(December 7, 2017)**

EXTRACTION POINT	VACUUM ("WC)	VELOCITY (FPM)	FLOW (CFM)
EP1	-4.59	82	4
EP2	-4.61	623	30.6
EP3	-3.63	1510	74.1
EP4	-3.87	227	11.1
EP5	-3.98	577	28.3
EP6	-4.02	992	48.7
EP7	-4.61	42	2.1
EP8	-3.64	382	18.7

BLOWER	AMPERAGE	TOTAL FLOW (CFM)
B1	1.7	34
B2	1.9	90
B3	2	57

BLOWER	AMPERAGE	TOTAL FLOW (CFM)
B1	1.8	37
B2	2	104
B3	1.9	77

EP = Extraction Point  
 fpm = feet per minute

"wc = inches of water column  
 cfm = cubic feet per minute

**Table 3**  
**Test Hole Pressure Differential Measurements**  
 Static (pre-operation) Compared to Initial and Baseline (operational)

TEST HOLE	STATIC PRESSURE DIFFERENTIAL ("WC) (May 22, 2017)	INITIAL PRESSURE DIFFERENTIAL ("WC) (October 20, 2017)	BASELINE PRESSURE DIFFERENTIAL ("WC) (December 7, 2017)
T 1	-0.0002	-0.159	-0.171
T 2	+0.0003	-0.0274	-0.0237
T 3	+0.0006	-0.137	-0.156
T 4	+0.0008	-0.0577	-0.0696
T 5	0.0000	-0.011	-0.0091
T 6	+0.0002	-0.0145	-0.0092
T 7	+0.0002	-0.328	-0.308
T 8	-0.0007	-0.252	-0.274
T 9	+0.0001	-0.0029	-0.0032
T 10	+0.0013	-0.0536	-0.0479
T 11	+0.0033	-0.0752	-0.0775
T 12	+0.0031	-0.0584	-0.0528
T 13	+0.0011	-0.0431	-0.0366
T 14	+0.0006	-0.245	-0.218
T 15	+0.0002	-0.0869	-0.0832
T 16	+0.0024	-0.104	-0.108
T 17	+0.0006	-0.146	-0.162
T 18	+0.0009	-0.0723	-0.0661
T 19	+0.0011	-0.0193	-0.0174
T 20	-0.0018	-0.135	-0.153
T 21	-0.0006	-0.0368	-0.0324
T 22	+0.0020	-0.0998	-0.0862
T 23	+0.0009	-0.0159	-0.0175
T 24	+0.0026	-0.11	-0.119
T 25	+0.0006	-0.0128	-0.0132
T 26	+0.0009	-0.0013	-0.0019
T 27	+0.0012	-0.2818	-0.23
T 28	+0.0008	-0.0375	-0.0364
T 29	+0.0029	-0.112	-0.118
T 30	-0.0013	-0.0119	-0.0086
T 31	-0.0012	-0.0047	-0.0028

vacuum less than -0.016" wc

vacuum less than -0.004" wc

"wc = inches of water column

**Table 4**  
**Baseline System Discharge Sampling**

Compounds	Date	Blower B1 ( $\mu\text{g}/\text{m}^3$ )	Blower B2 ( $\mu\text{g}/\text{m}^3$ )	Blower B3 ( $\mu\text{g}/\text{m}^3$ )	Reporting Limit ( $\mu\text{g}/\text{m}^3$ )
1,1-Dichloroethene	12/7/2017	ND	ND	ND	500
cis-1,2-Dichloroethene	12/7/2017	ND	ND	ND	500
1,1,1-Trichloroethane	12/7/2017	ND	ND	ND	500
Trichloroethene	12/7/2017	840	250	260	100
Tetrachloroethene	12/7/2017	ND	ND	ND	100

$\mu\text{g}/\text{m}^3$  = micrograms per cubic meter

**Table 5**  
**Baseline Post-Mitigation**  
**Indoor/Outdoor Air Sampling**

Address 4601 E McDowell Road	Type of Sample	Date	TCE ( $\mu\text{g}/\text{m}^3$ )	PCE ( $\mu\text{g}/\text{m}^3$ )	1,1-DCE ( $\mu\text{g}/\text{m}^3$ )	c-1,2-DCE ( $\mu\text{g}/\text{m}^3$ )	1,1,1-TCA ( $\mu\text{g}/\text{m}^3$ )
ADOT-South	Indoor Air	12/7/2017	ND	ND	ND	ND	ND
ADOT-South	Indoor Air-dup	12/7/2017	ND	ND	ND	ND	ND
ADOT North	Indoor Air	12/7/2017	ND	ND	ND	ND	ND
ADOT OA	Outdoor Air	12/7/2017	ND	ND	ND	ND	ND
EPA Commercial/Industrial Regional Screening Level			3	47	880	260	22000
Laboratory Reporting Limit			1.8	2.3	1.3	1.3	1.8

$\mu\text{g}/\text{m}^3$  = micrograms per cubic meter

**Table 6**  
**Operation and Maintenance**  
**Performance Parameters**

Extraction Point	Initial Vacuum ("wc)	Vacuum Performance Range ("wc)	Initial Flow (cfm)	Flow Performance Range (cfm)
EP 1	-4.59	-5.74 to -3.44	4.0	6.0 to 2.0
EP 2	-4.61	-5.76 to -3.46	30.6	38.3 to 23.0
EP 3	-3.63	-4.54 to -2.72	74.1	92.6 to 55.6
EP 4	-3.87	-4.84 to -2.90	11.1	13.9 to 8.3
EP 5	-3.98	-4.98 to -2.99	28.3	35.4 to 21.2
EP 6	-4.02	-5.03 to -3.02	48.7	60.9 to 36.5
EP 7	-4.61	-5.76 to -3.46	2.1	3.2 to 1.1
EP 8	-3.64	-4.55 to -2.73	18.7	23.4 to 14.0

EP = Extraction Point

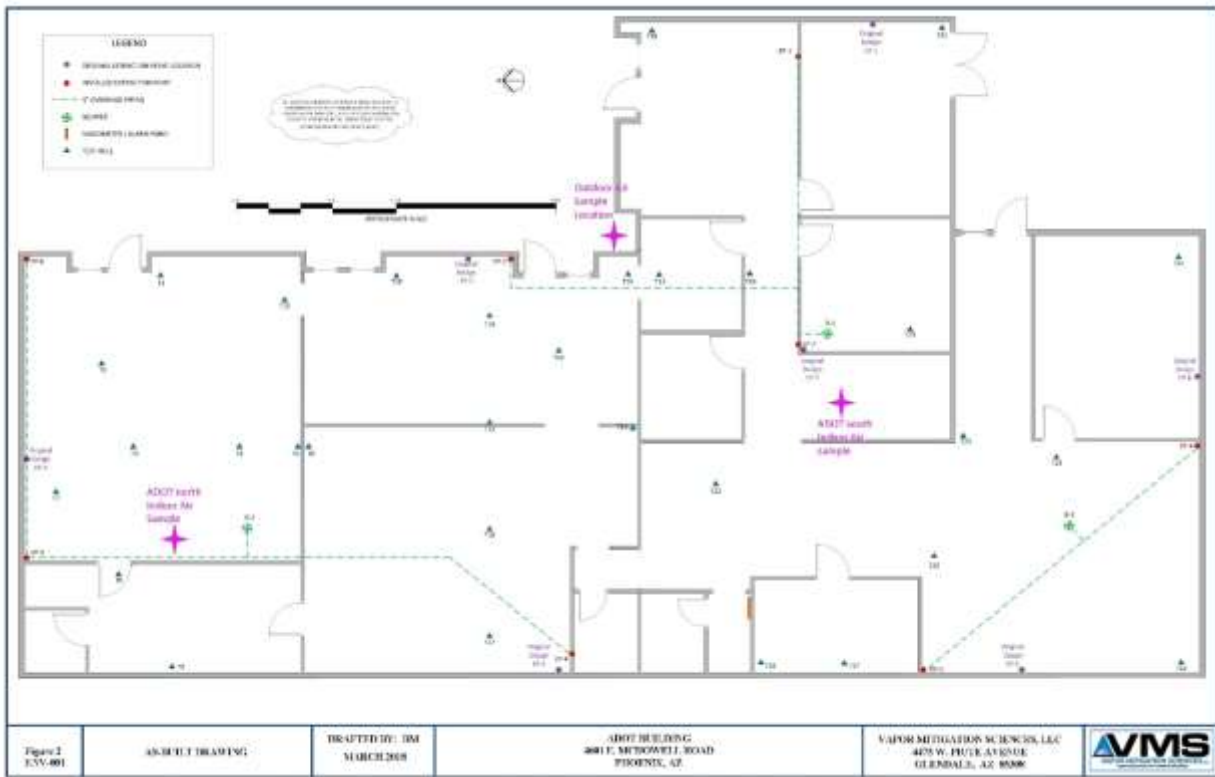
"wc = inches of water column

cfm = cubic feet per minute

## **FIGURES**










**APPENDIX A**  
**Photographs**

<p><b>Photographer:</b> Bill Morris</p>	<div> </div> <div> <p>3.5" diameter</p> </div> <div> </div> <div> <p>Power auger used to remove soil and get suction point to around 12" deep</p> </div> <div> </div> <div> <p>Small hand tools used with shop vacuum to get suction point 12-14" directly below slab</p> </div>
<p><b>Photographer:</b> Bill Morris</p>	<div> </div> <div> </div>
<p><b>Date:</b> 10/20/17</p>	
<p><b>Comments:</b> Sheetrock removed for one of the extraction points that is located in the wall cavity. Riser pipe is constructed out of 2" schedule 40 PVC due to the interior dimensions of the wall cavity. (EP4)</p>	



<p><b>Photographer:</b> Bill Morris</p>	 <p>Self leveling polyurethane caulk seal</p>
<p><b>Date:</b> 10/20/17</p>	
<p><b>Comments:</b> Seal at slab / riser pipe connection. 2-3" PVC bushing is located in slab and sealed with self leveling polyurethane caulk.</p>	
<p><b>Photographer:</b> Bill Morris</p>	
<p><b>Date:</b> 10/20/17</p>	
<p><b>Comments:</b> Labeling and pipe support bracket shown for extraction point piping in wall cavity.</p>	



<b>Photographer:</b> Bill Morris	
<b>Date:</b> 10/20/17	
<b>Comments:</b> EP 2 shown in corner.	

<b>Photographer:</b> Bill Morris	
<b>Date:</b> 10/20/17	
<b>Comments:</b> Close up of pipe support bracket, label and test port on EP3	




<p><b>Photographer:</b> Bill Morris</p>	
<p><b>Date:</b> 10/20/17</p>	
<p><b>Comments:</b> EP 4 Piping inside the wall exiting the wall (below the roof, due to framing), with horizontal and vertical piping shown going through the roof. Photo taken prior to labeling being done. Each section of pipe above the dropped ceiling was also labeled.</p>	
<p><b>Photographer:</b> Bill Morris</p>	
<p><b>Date:</b> 10/20/17</p>	
<p><b>Comments:</b> EP 8 overhead piping (below the roof and above the dropped ceiling). Horizontal and vertical piping necessary to miss electrical junction box and to get away from parapet wall on roof. Photo taken prior to labeling being done. Each section of pipe above the dropped ceiling was also labeled.</p>	





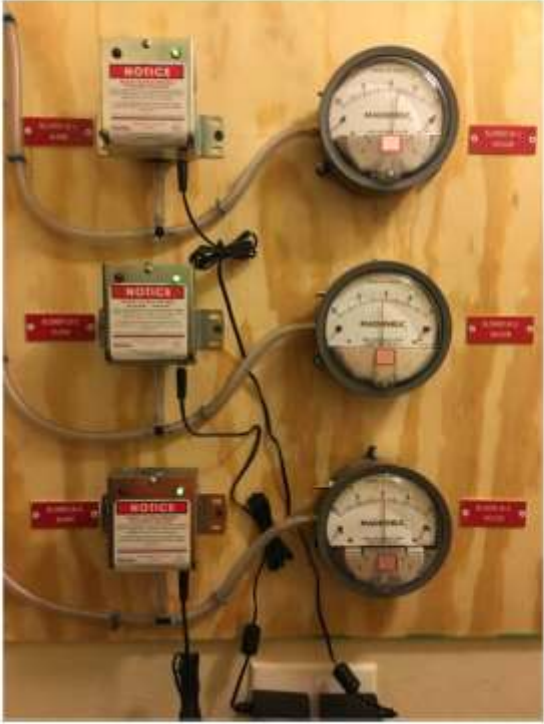

<p><b>Photographer:</b> Bill Morris</p>	
<p><b>Date:</b> 10/20/17</p>	
<p><b>Comments:</b> Blower B1 with extraction points EP1 and EP7 shown in photo with piping for EP2.</p>	

<p><b>Photographer:</b> Bill Morris</p>	
<p><b>Date:</b> 10/20/17</p>	
<p><b>Comments:</b> Blower B2 with extraction points EP3, EP4 and EP8 shown in photo.</p>	



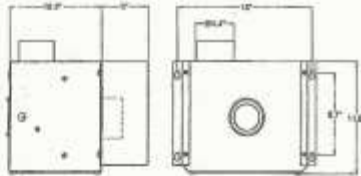
<p><b>Photographer:</b> Bill Morris</p>	
<p><b>Date:</b> 10/20/17</p>	
<p><b>Comments:</b> Blower B3 with extraction points EP5 and EP6 shown in photo.</p>	
<p><b>Photographer:</b> Bill Morris</p>	
<p><b>Date:</b> 10/20/17</p>	
<p><b>Comments:</b> Blowers B1, B2 and B3 shown with engraved labels. Blowers are all identical AMG Force box style blowers.</p>	



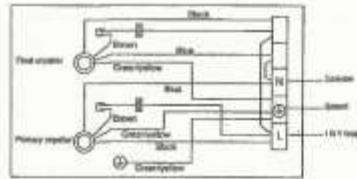
<p><b>Photographer:</b> Bill Morris</p>	
<p><b>Date:</b> 10/20/17</p>	
<p><b>Comments:</b> Test port locations for extraction points with permanent engraved labels.</p>	
<p><b>Photographer:</b> Bill Morris</p>	
<p><b>Date:</b> 10/20/17</p>	
<p><b>Comments:</b> Mitigation system monitoring panel with magnahelic gauges for each blower and an local alarm for each blower.</p>	

**APPENDIX B**  
**Warranty Information**

### Dimensions



### Electrical Connections



Ensure that the mains supply voltage, frequency, number of phases and power rating comply with the details on the unit rating label (situated externally on the plastic casing terminal box cover). All wiring must be in accordance with local and / or national electrical codes as applicable, or the appropriate standard in your country. The fan must be supplied through a double pole isolating switch having a contact separation of not less than 1/8" (3mm). Wiring to the terminal box should be made in liquid tight flexible conduit to facilitate easy maintenance.

#### Operational Checks.

Check all connections are tight and leak free.

Check the system vacuum pressure with a manometer, ensure that the vacuum pressure is less than the maximum recommended operating pressure.

Check and verify Radon levels by testing to EPA protocol.

#### Cleaning and Maintenance.

We would recommend that the fan be periodically checked against the listed operational checks to ensure trouble free long lasting operation.

### FIVE (5) YEAR WARRANTY

#### Conditions of Warranty

Festa Radon Technologies Co. ("FRT") warrants that the FRT FORCE ("the Product") shall be free from defects in material and workmanship for a period of (5) years from the date of purchase by the customer. If within the applicable warranty period the Product prove to be defective by reason of faulty workmanship or materials, FRT will undertake to have the defective Product (or any part thereof) replaced at no cost to the customer subject to the following conditions:

1. The Product has been purchased and used solely in accordance with all Environmental Protection Agency ("EPA") standard practices and state and local codes of practice.
2. The Product is returned promptly on being found defective, together with this warranty and proof of date of installation at the customer's risk and expense to Festa Radon Technologies Co. ("FRT") from whom the Product was purchased. All enquiry's must be through FRT.
3. This warranty shall not apply to any Product failure or defect due to any cause beyond the reasonable control of FRT including damage caused through fire, flood, explosion, accident, misuse, wear and tear, neglect, incorrect adjustment or repair, damage caused through installation, adaptation, modification or use in an improper manner or inconsistent with the technical and/or safety standards required where the Product is used, or to damage occurring during transit to or from the customer.
4. If at any time during the Warranty Period any part or parts of the Product are replaced with a part or parts not supplied or approved by FRT, or the Product has been dismantled or repaired by any person not authorized by FRT, FRT shall have the right to terminate this warranty in whole or in part immediately without further notice.
5. FRT's decision on all matters relating to complaints and Products defects and failure (alleged or actual) shall be final. Any Product or defective part, which has been replaced, shall be FRT's.
6. AMG will offer to customers a Warranty of a full Five Years, from date of purchase, in accordance with the terms listed above.

Festa Radon Technologies Co. 47A Progress Avenue, Cranberry Twp., PA 16066  
Tel. Toll Free 1(800) 806-7866 or (724) 772-9060 Fax 1(724) 772-9062



FRT FORCE Issue A

Fan B3  
Chapel Hill Commons  
Strip Mall North and South

0108

**APPENDIX C**  
**System O&M Inspection Sheets**





Client: NXP Clear Creek  
 Description: 4601 E. McDowell ADOT Bldg.  
 Date: 10/20/17 Sheet          of         

Post Mitigation Performance Data

AS START - VPK

Suction (Extraction) Point DATA

	VAC (inHg)	VEL (FPM)	FLOW (CFM)
EP1	-4.34	76	3.7
EP2	-4.33	570	28
EP3	-3.51	1254	62
EP4	-3.75	203	10
EP5	-3.98	470	23
EP6	-3.97	701	34
EP7	-4.36	54	2.7
EP8	-3.56	358	18

$$3 \times R \text{ VEL} = \frac{76 + 570 + 1254}{3} = 613$$

	S/N	AMPS	VEL
BLOWER 1	FR Ø28138	1.66	4.3
BLOWER 2	FR Ø28133	1.92	3.6
BLOWER 3	FR Ø28Ø74	2.03	4.0

TEST HOLE DATA (inHg)

	Pressure Diff.		
T1	-0.1587	T21	-0.0368
T2	-0.0274	T22	-0.0998
T3	-0.1374	T23	-0.0159
T4	-0.0577	T24	-0.1103
T5	-0.0110	T25	-0.0128
T6	-0.0145	T26	-0.0013
T7	-0.3288	T27	-0.2818
T8	-0.2517	T28	-0.0375
T9	-0.0029	T29	-0.1123
T10	-0.0536	T30	-0.0119
T11	-0.0752	T31	0.0047
T12	-0.0584		
T13	-0.0431		
T14	-0.2454		
T15	-0.0869		
T16	-0.1040		
T17	-0.1463		
T18	-0.0723		
T19	-0.0193		
T20	-0.1352		

ALL VAC. (VACUUM) readings in inches of water (inHg)  
 ALL VEL. (Velocity) readings in feet per minute (FPM)  
 ALL FLOW readings in cubic feet per minute (CFM)

SITE: NXP - 4601 E. McDowell Rd (ADOT Bldg)  
 DATE: Dec. 7, 2017  
 BLOWER: 3 - AMG Force blowers  
 TECH: Bill Morris

extraction point	vacuum	velocity	flow	test hole	pressure differential
EP1	-4.593	82	4.0	T1	-0.1710
EP2	-4.605	623	30.6	T2	-0.0237
EP3	-3.626	1510	24.1	T3	-0.1561
EP4	-3.874	227	11.1	T4	-0.0696
EP5	-3.977	577	28.3	T5	-0.0091
EP6	-4.015	992	48.7	T6	-0.0092
EP7	-4.607	42	2.1	T7	-0.308
EP8	-3.638	382	18.7	T8	-0.274
				T9	-0.0032
EP3 + EP8	—	1892		T10	-0.0479
				T11	-0.0775
				T12	-0.0528
				T13	-0.0366
				T14	-0.218

Exhaust  
 B40 up  
 250  
 260

BLOWER	Total Flow	Magnahelic	Amperage	T17	pressure differential
B1	36.7	4.5	1.8	T17	-0.1622
B2	104	3.6	2.0	T18	-0.0661
B3	77.0	3.9	1.9	T19	-0.0174
				T20	-0.1533
				T21	-0.0324
				T22	-0.0862
				T23	-0.0175
				T24	-0.1188
				T25	-0.0132
				T26	-0.0019
				T27	-0.230
				T28	-0.0364
				T29	-0.1181
				T30	-0.0086
				T31	-0.0028

Cross Sectional Pipe Surface Area (multiply with velocity to obtain flow)  
 3" - 0.0491 square feet

VERY WINDY OUTSIDE

Vacuum leak at Base of

EP3, EP2, + EP5



Blower B1 - 1.0 pounds/yr  
 B2 - 0.85 " / "  
 B3 - 0.65 " / "

vacuum & pressure differential = inches of water column ("wc)  
 velocity = feet per minute (fpm)  
 flow = cubic feet per minute (cfm)



SITE: ADOT Bldg DATE: 12-7-17  
 CLIENT: NXP / Clear Creek TECHNICIAN: Bill Moran's  
 ADDRESS: 4601 E. McDowell Rd. CONSULTANT: VMS

	good	fair	poor	comments
Blower B1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Blower B2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Blower B3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
EP1 Riser	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
EP2 Riser	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Leak at base of extraction point at ext. wall.
EP3 Riser	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	" " " " " " " "
EP4 Riser	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
EP5 Riser	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Leak at base of extraction point at ext. wall.
EP6 Riser	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
EP7 Riser	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
EP8 Riser	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Varmint Guard B1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Varmint Guard B2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Varmint Guard B3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Manometer B1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Manometer B2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Manometer B3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Audible alarm B1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Audible alarm B2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Audible alarm B3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
System Labelling	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Roof Seals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Notes (anomalies): The vacuum leaks at the base of EP's 2-3-5 are whistling - via slab to foundation joint/crack is the cause. No way to seal crack/seam due to crack is under sheetrock wall on the inside of the exterior block wall. VMS attempted to seal at the base of EP3 - but was unsuccessful - Adds air flow to system - need to seal during future remedialing if possible

Consultant's Signature: 

SITE: Motorola 52nd St. Superfund site OU1  
 CLIENT: NXP / Clear Creek  
 ADDRESS: ADOT Bldg., 4601 E. McDowell Rd.

DATE: \_\_\_\_\_  
 TECHNICIAN: \_\_\_\_\_  
 CONSULTANT: VMS

	good	fair	poor	comments
Blower B1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Blower B2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Blower B3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
EP1 Riser	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
EP2 Riser	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
EP3 Riser	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
EP4 Riser	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
EP5 Riser	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
EP6 Riser	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
EP7 Riser	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
EP8 Riser	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Varmint Guard B1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Varmint Guard B2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Varmint Guard B3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Manometer B1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Manometer B2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Manometer B3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Audible alarm B1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Audible alarm B2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Audible alarm B3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
System Labeling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Roof Seals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

Notes (anomalies): \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Consultant's Signature: \_\_\_\_\_

SITE: NXP - 4601 E. McDowell Rd (ADOT Bldg)

DATE: \_\_\_\_\_

BLOWERS: 3 - AMG Force blowers

TECH: \_\_\_\_\_

extraction point	vacuum*	velocity**	flow***
EP1			
EP2			
EP3			
EP4			
EP5			
EP6			
EP7			
EP8			

EP3 + EP8 Velocity

To obtain the velocity / flow for EP3, you take the velocities from the EP8 sample port, then from the EP3 & EP8 sample port. Subtract EP8 from the combined to get the EP3 velocity

BLOWER	Total Flow***	Magnahelic*	Amperage
B1			
B2			
B3			

colors indicate which extraction points are connected to which blower

Cross Sectional Pipe Surface Area (multiply with velocity to obtain flow)

3" - 0.0491 square feet

\* readings are in inches of water column ("wc)

\*\* readings are in feet per minute (fpm)

\*\*\* readings are in cubic feet per minute (cfm)

test hole	pressure differential*
T1	
T2	
T3	
T4	
T5	
T6	
T7	
T8	
T9	
T10	
T11	
T12	
T13	
T14	
T15	
T16	
T17	
T18	
T19	
T20	
T21	
T22	
T23	
T24	
T25	
T26	
T27	
T28	
T29	
T30	
T31	

**APPENDIX D**  
**System Information Sheet**

## Description & Instructions for Sub-Slab Depressurization System

4601 E. McDowell Rd.

A sub-slab depressurization (SSD) system was recently installed in the building to prevent chemical vapors in the soils below the building from entering the occupied spaces. SSD systems require very little maintenance and are very effective at reducing indoor air levels of the chemicals that may enter from the sub-surface. These types of systems have been installed in buildings for radon control for many years.

For your building, the SSD system consists of 8 suction / extraction points and they are located in;

- Five extraction points are located on the exterior wall around the perimeter of the building
- Three extraction points have been installed inside wall cavities in the interior of the building

For the points located around the perimeter, you may see standard vertical PVC piping used for the mitigation system. This exposed piping should be clearly labeled. The pipes that are located inside the wall cavities are not visible, but are labeled as well. Most of the system piping is located on the roof and labeled to prevent unintended uses and possible disruption of system operation and performance.

The system blowers for the mitigation system are located on the roof and run continuously (24 hours/day, 365 days/year) to ensure indoor air quality requirements. The blowers are connected to your main breaker panel, on an isolated breaker.



In the hall near the women's restroom, there are several devices to warn of a system failure. The first device is a manometer (graphic shown above) and indicates the proper operation of the fan. When the needle is at zero, the fan is not operational. When the needle is not on zero, it represents the amount of vacuum being exerted by the blower and indicates the fan is working properly.

The second device is an audible alarm, which has both a green and a red light. A lit green light indicates that the system is operating properly. The red light will illuminate if there is a fan failure and will be accompanied by a loud buzzing sound.



In the event of a fan failure, you should notify NXP USA, Inc. as soon as possible to have a service technician dispatched to check on the system. The number for Jenn McCall at NXP is (480) 814-4587. The number for the system installation contractor, Vapor Mitigation Sciences, is (480) 442-5688.

It is important to note that having the blowers off for several days for service or during power outages will have little impact on the overall indoor air quality as it takes some time for vapors from the soils below the building to get into the structure at significant levels.

There will be routine operational monitoring of the system installed on the building at no cost to you. A qualified service technician will make at least annual visits to inspect and verify the system is operating as designed. These visits will be coordinated with you.

# EXHIBIT 5

## USPAP Reporting Options

## **USPAP Reporting Options**

The most recent edition of USPAP requires that all written appraisal reports be prepared under one of the following options: Appraisal Report or Restricted Appraisal Report.

An Appraisal Report summarizes the information analyzed, the appraisal methods employed, and the reasoning that supports the analyses, opinions, and conclusions. The requirements for an Appraisal Report are set forth in Standards Rule 2-2 (a) of US PAP.

A Restricted Appraisal Report states the appraisal methods employed and the conclusions reached but is not required to include the data and reasoning that supports the analyses, opinions, and conclusions. Because the supporting information may not be included, the use of the report is restricted to the client, and further, the appraiser must maintain a work file that contains sufficient information for the appraiser to produce an Appraisal Report if required. The requirements for a Restricted Appraisal Report are set forth in Standards Rule 2-2 (b).

### **ATI Reporting Formats under the Appraisal Report Option**

USPAP gives appraisers the flexibility to vary the level of information in an Appraisal Report depending on the intended use and intended users of the appraisal. Accordingly, Appraisal Technology, Inc. has established internal standards for three alternative reporting formats that differ in depth and detail yet comply with the USPAP requirements for an Appraisal Report. The three ATI formats are:

- Appraisal Report - Comprehensive Format
- Appraisal Report- Standard Format
- Appraisal Report - Concise Summary Format

An Appraisal Report - Comprehensive Format has the greatest depth and detail of the three report types. It describes and explains the information analyzed, the appraisal methods employed, and the reasoning that supports the analyses, opinions, and conclusions. This format meets or exceeds the former Self-Contained Appraisal Report requirements that were contained in the 2012-2013 edition of USPAP.

An Appraisal Report - Standard Format has a moderate level of detail. It summarizes the information analyzed, the appraisal methods employed, and the reasoning that supports the analyses, opinions, and conclusions. This format meets or exceeds the former Summary Appraisal Report requirements that were contained in the 2012-2013 edition of USPAP.

An Appraisal Report - Concise Summary Format has less depth and detail than the Appraisal Report - Standard Format. It briefly summarizes the data, reasoning, and analyses used in the appraisal process while additional supporting documentation is retained in the work file. This format meets the minimum requirements of the former Summary Appraisal Report that were contained in the 2012-2013 edition of USPAP.

On occasion, clients will request, and ATI will agree to provide, a report that is labeled a Self-Contained Appraisal Report. Other than the label, there is no difference between a Self-Contained Appraisal Report and an Appraisal Report - Comprehensive Format. Both types of reports meet or

exceed the former Self-Contained Appraisal Report requirements set forth in the 2012-2013 edition of USPAP.

### **ATI Reporting Format under Restricted Appraisal Report Option**

ATI provides a Restricted Appraisal Report format under the USPAP Restricted Appraisal Report option. This format meets the requirements of the former Restricted Use Appraisal Report that were contained in the 2012-2013 edition of USPAP.



# EXHIBIT 6

## Contingent and Limiting Conditions

## CONTINGENT AND LIMITING CONDITIONS

**1. LIMITS OF LIABILITY: The liability of Appraisal Technology, LLC, and/or Independent Contractor(s) is limited to the client only and to the fee actually received by them.** Further, there is no accountability, obligation, or liability to any third party. If this report is placed in the hands of anyone other than the client, the client shall make such party aware of all limiting conditions and assumptions of the assignment and related discussions. The appraiser is in no way to be responsible for any costs incurred to discover or correct **any** deficiencies of **any** type present in the property; physically, financially, and/or legally. In the case of limited partnerships or syndication offering or stock offerings in real estate, the client agrees that in case of lawsuit (brought by lender, partner or part-owner in any form of ownership, tenant, or any other party), any and all awards, settlements of any type in such suit, regardless of outcome, the client will hold the appraiser completely harmless in any such action.

**2. COPIES, PUBLICATION, DISTRIBUTION, USE OF REPORT:** Possession of this report or any copy thereof does not carry with it the right of publication. It is a privileged communication. It may not be used for other than its intended use; the physical report(s) remain the property of the appraiser for the use of the client, the fee being for the analytical services only.

All valuations in the report are applicable only under the stated program of Highest and Best Use and are not necessarily applicable under other programs of use. The valuation of a component part of the property is applicable only as a part of the whole property. The distribution of the total valuation in this report between land and improvements applies only under the existing or proposed program of utilization. The separate valuations for land and building must not be used in conjunction with any other appraisal and are invalid if so used.

The Bylaws and Regulations of the Appraisal Institute requires each Member and Candidate to control the use and distribution of each appraisal report signed by such Member or Candidate; except as here-in-after provided, the client may distribute copies of this appraisal report in its entirety to such third parties as he may select; however, selected portions of this appraisal report shall not be given to third parties without the prior written consent of the signatories of the report. Neither all nor any part of this appraisal report shall be disseminated to the general public by the use of advertising media, public relations, news, sales or other media for public communication without the prior written consent of the appraiser(s), particularly as to valuation conclusions, the identity of the appraiser(s), the firm, or any reference to the Appraisal Institute, the M.A.I., or SRA designations. (See last item in following list for client agreement/consent).

**3. CONFIDENTIALITY AND TRADE SECRETS:** This appraisal is to be used only in its entirety and no part is to be used without the whole report. All conclusions and opinions concerning the analysis as set forth in the report were prepared by the Appraiser(s) whose signature(s) appear on the appraisal report, unless indicated as "Review Appraiser". No change of any item in the report shall be made by anyone other than the appraiser. The appraiser and firm shall have no responsibility if any such unauthorized change is made. The appraiser may not divulge the material (evaluation) contents of the report, analytical findings or conclusions, or give a copy of the report to anyone other than the client or his designee as specified in writing except as may be required by the Appraisal Institute as they may request in confidence for ethics enforcement, or by a court of law or body with the power of subpoena.

This appraisal was prepared by the appraisers signing this report and/or related independent contractor(s) and consists of "trade secrets and commercial or financial information" which is privileged and confidential and exempted from disclosure under 5 U.S.C. 552 (b) (4). Notify the appraiser(s) signing this report, Appraisal Technology, LLC of any request to reproduce this appraisal in whole or in part.

**4. INDEPENDENT CONTRACTORS:** Be advised that the people associated with Appraisal Technology, LLC are independent contractors.

**5. INFORMATION AND DATA:** The comparable data relied upon in this report has been confirmed with one or more parties familiar with the transaction or from affidavit or other source thought reliable; all are considered appropriate for inclusion to the best of our factual judgment and knowledge. An impractical and uneconomic expenditure of time would be required in attempting to furnish unimpeachable verification in all instances, particularly as to engineering and market-related information. It is suggested that the client consider independent verification as a prerequisite to any transaction involving sale, lease, or other significant commitment of funds or property.

**6. TESTIMONY, CONSULTATION, COMPLETION OF INVOICE FOR APPRAISAL SERVICES:** **When the invoice for appraisal, consultation or analytical service is fulfilled, the total fee is payable upon completion.** The appraiser(s) or those assisting in preparation of the report will not be asked or required to give testimony in court or hearing because of having made the appraisal (unless arrangements have previously been made). Any post appraisal consultation with the client or third parties will be at an additional fee. If testimony or deposition is required because of any subpoena, the client shall be responsible for any additional time, fees, and charges regardless of issuing party.

**7. STATEMENT OF POLICY:** The following statement represents official policy of Appraisal Institute with respect to neighborhood analysis and the appraisal of residential real estate:

- a. It is improper to base a conclusion or opinion of value upon the premise that the racial, ethnic or religious homogeneity of the inhabitants of an area or of a property is necessary for maximum value.
- b. Racial, religious and ethnic factors are deemed unreliable predictors of value trends or price variance.
- c. It is improper to base a conclusion or opinion of value, or a conclusion with respect to neighborhood trends, upon stereotyped or biased presumptions relating to race, color, religion, sex or national origin or upon unsupported presumptions relating to the effective age or remaining life of the property or the life expectancy of the neighborhood in which it is located.

**8. MANAGEMENT OF THE PROPERTY:** The appraisers have no control over management; however, the appraisers consider the management of this investment of prime importance. Reasonable and prudent (not exceptional) management practices and expertise is assumed (anticipated) in the appraisal.

Should the present/prospective owner be unable and/or unwilling to take those actions required by reasonable and prudent management practices (see appraiser's observations at time of inspection

following the purpose of appraisal) to meet financial goals and/or reasonable expectations, we recommend a careful reconsideration of the investment risk.

**9. APPRAISAL IS NOT A LEGAL OPINION:** No responsibility is assumed for matters of legal nature affecting title to the property nor is an opinion of title rendered. The title is assumed to be good and marketable. The value estimated is given without regard to any questions of title, boundaries, encumbrances, or encroachments.

It is assumed that there is full compliance with all applicable federal, state, and local environmental regulations and laws unless noncompliance is stated, defined, and considered in the appraisal report. It is assumed that all applicable zoning and use of regulations and restrictions have been complied with, unless a non-conformity has been stated, defined, and considered in the appraisal report.

It is assumed that all required licenses, consents, or other legislative or administrative authority from any local, state, or national government or private entity or organization have been or can be obtained or renewed for any use on which the value estimate contained in this report is based.

If the Appraiser has not been supplied with a termite inspection, survey or occupancy permit(s), no responsibility or representation is assumed or made for any costs associated with obtaining same or for any deficiencies discovered before or after they are obtained. No representation or warranties are made concerning obtaining the above mentioned items.

It is assumed that adequate municipal services including disposal are available and will continue to be.

Virtually all land in Arizona is affected by pending or potential litigation by Indian Tribes claiming superior water rights for their reservations. The amounts claimed and the effects on other water users are largely undetermined; but the claims could result in some curtailment of water usage or ground water pumping on private land. The State's New Ground Water 99Management Act may also restrict future ground water pumping in various parts of Arizona. Given this uncertainty, neither the appraiser(s) nor any of his representatives can make warranties concerning rights to or adequacy of the water supply with respect to the property being appraised, although, the sale of premises include such water rights as are appurtenant thereto.

**10. FEDERAL AND STATE REGULATIONS:** Further, the value reported is based upon cash, or its equivalent, and was drafted to adhere to the standards and practices of the Appraisal Institute, plus the guidelines and recommendations set forth in the Uniform Standards of Professional Appraisal Practice (USPAP) by the Appraisal Foundation and the Office of the Comptroller of the Currency (OCC).

Under federal mandate, state licensing and/or certification of appraiser is required on or before August 1, 1991. Permission is hereby granted by the client for the appraiser to furnish the appropriate governmental authority or their authorized designated representative(s) any and all materials requested for oversight review.

**11. CHANGES, MODIFICATIONS, FEE:** The appraiser(s) reserves the right to alter statements, analysis, conclusion or value estimate contained in the appraisal if a fact(s) pertinent to the appraisal process unknown prior to the completion of the appraisal is/are discovered.

The fee for this appraisal or study is for the service rendered and not for the time spent on the physical report or the physical report itself.

Compensation is not contingent upon the reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value estimate, the attainment of a stipulated result, or the occurrence of a subsequent event.

The writing of this report to meet the requirements of the Competitive Equality Banking Act of 1987 ("CEBA") and in adherence with the standards and practices of the Appraisal Institute, plus the guidelines and recommendations set forth in the Uniform Standards of Professional Appraisal Practice (USPAP) by the Appraisal Foundation involves an interpretation of the phrase "totally self-contained".

Because no report regardless of length or the extent of documentation is "totally self-contained", the appraiser has tried to furnish sufficient documentation, analysis and detail to meet a "reasonableness criteria". Should the client reviewing this report require additional information, analysis, documentation, etc., it will be supplied in an expeditious manner at no charge to the client, following receipt of a written critique (within 2 months of the date of this letter), in the form of a new report.

**12. APPRAISAL IS NOT A SURVEY:** It is assumed that the utilization of the land and improvements is within the boundaries of the property lines of the property described and that there is no encroachment or trespass unless noted with the report.

The legal description is assumed to be correct as used in this report as furnished by the client, his designee, or when not supplied, as derived by the appraiser. The appraiser(s) assume no responsibility for such a survey, or for encroachments or overlapping that might be revealed thereby.

The sketches and maps in this report are included to assist the reader in visualizing the property and are not necessarily to scale. Photos, if any, are included for the same purpose. Site plans are not surveys unless shown from a separate surveyor.

**13. APPRAISAL IS NOT AN ENGINEERING REPORT:** This appraisal should not be considered a report on the physical items that are a part of this property. Although the appraisal may contain information about the physical items being appraised (including their adequacy and/or condition), it should be clearly understood that this information is only to be used as a general guide for property valuation and not as a complete or detailed physical report. The appraisers are not construction, engineering, or legal experts, and any opinion given on these matters in this report should be considered preliminary in nature.

The observed condition of the foundation, roof, exterior walls, interior walls, floors, heating and/or cooling system, plumbing, insulation, electrical service, and all mechanical and construction is based on a casual inspection only and no detailed inspection was made. For instance, we are not experts on heating and/or cooling systems and no attempt was made to inspect the interior of the heating and/or cooling equipment. The structures were not checked for building code violations and it is assumed that all buildings meet the building codes unless so stated in the report.

Items such as conditions behind walls, above ceiling, behind locked doors, or under the ground are not exposed to casual view and, therefore, were not inspected. The existence of insulation (if any is mentioned) was found by conversation with others and/or circumstantial evidence.

Since it is not exposed to view, the accuracy of any statements about insulation cannot be guaranteed.

It is assumed that there are no hidden or unapparent conditions of the property, sub-soil, or structures which would render it more or less valuable. No responsibility is assumed for such conditions or the engineering which may be required to discover such factors. Since no engineering or percolation tests were made, no liability is assumed for soil conditions. Sub-surface rights (mineral and/or energy related) were not considered in making this appraisal.

Because no detailed inspection was made, and because such knowledge goes beyond the scope of this appraisal, any observed condition comments given in this appraisal report should not be taken as a guarantee that a problem does not exist. Specifically, no guarantee is made as to the adequacy or condition of the foundation, roof, exterior walls, interior walls, floors, heating system, air-conditioning system, plumbing, electrical service, insulation, or any other detailed construction matters. If any interested party is concerned about the existence, condition, or adequacy of any particular item, we strongly suggest that a construction expert be hired for a detailed investigation. Although a walk-through inspection has been performed, an appraiser is not an expert in the field of building inspection and/or engineering. An expert in the field of engineering/seismic hazards detection should be consulted if an analysis of seismic safety and seismic structural integrity is desired.

The appraisers are not seismologists. The appraisal should not be relied upon as to whether a seismic problem exists, or does not actually exist on the property. The appraisers assume no responsibility for the possible effect on the subject property of seismic activity and/or earthquakes.

**14. PROPOSED IMPROVEMENT, CONDITIONED VALUE:** Improvements proposed, if any, on or off-site, as well as any repairs required are considered, for purposes of this appraisal, to be completed in a good and workmanlike manner according to information submitted and/or considered by the appraiser(s). In cases of proposed construction, the appraisal is subject to change upon inspection of the property after construction is completed. This estimate of value is as of the date shown, as proposed, as if completed and operating at levels shown and projected unless otherwise set forth.

**15. INSULATION AND TOXIC MATERIALS:** The existence of potentially hazardous materials used in the construction or maintenance of the structure, such as urea formaldehyde foam insulation, and/or the existence of toxic waste on or in the ground, which may or may not be present has not been considered (unless otherwise set forth). The appraiser(s) is not qualified to detect such substances. The client should retain an expert in this field. If such is present, the value of the property may be adversely affected; therefore, if a toxic waste and/or contaminant is detected, the value indicated in this report is Null and Void. A re-appraisal at an additional cost may be necessary to estimate the effects of hazardous materials.

**16. AUXILIARY AND RELATED STUDIES:** No environmental or impact studies, special market study or analysis, highest and best use analysis study or feasibility study has been requested or made unless otherwise specified in an invoice for services or in the report.

**17. APPRAISAL IS MADE UNDER CONDITIONS OF UNCERTAINTY:** Information (including projections of income and expenses) provided by informed local sources, such as government agencies, financial institutions, Realtors, buyers, sellers, property owners, bookkeepers, accountants, attorneys, and others is assumed to be true, correct, and reliable. No responsibility for the accuracy of such information is assumed by the appraiser.

The comparable sales data relied upon in the appraisal is believed to be from reliable sources. Though all the comparable sales were examined, it was not possible to inspect them all in detail. The value conclusions are subject to the accuracy of said data.

Engineering analyses of the subject property were neither provided or used nor made as a part of this appraisal contract. Any representation as to the suitability of the property for uses suggested in this analysis is therefore based only on a rudimentary investigation by the appraiser and the value conclusions are subject to said limitations.

All values shown in the appraisal report are projections based on our analysis as of the date of the appraisal. These values may not be valid in other time periods or as conditions change. Since the projected mathematical models are based on estimates and assumptions which are inherently subject to uncertainty and variation depending upon evolving events, we do not represent them as results that will actually be achieved.

This appraisal is an estimate of value based on an analysis of information known to us at the time the appraisal was made. The appraisers do not assume any responsibility for incorrect analysis because of incorrect or incomplete information. If new information of significance comes to light and/or becomes known, the value given in this report is subject to change without notice.

**18. AMERICANS WITH DISABILITIES ACT:** The Americans with Disabilities Act ("ADA") became effective January 26, 1992. The appraiser(s) have not made an analysis of this property to determine whether or not it is in conformity with the ADA requirements. It is possible that a compliance survey of the property, together with a detailed analysis of the ADA requirements could reveal that the property is not in compliance for one or all requirements. If so, this fact could have a negative effect upon the value of the property. The appraiser(s) have no direct evidence relating to this issue and did not consider possible non-compliance with the requirement of the ADA in estimating the value of the property.

**19. INSURABLE VALUE:** At the Client's request (if applicable), the appraiser(s) have provided an insurable value estimate. The estimate is based on figures derived from a national cost estimating service and is developed consistent with industry practices. However, actual local and regional construction costs may vary significantly from our estimate and individual insurance policies and underwriters have varied specifications, exclusions, and non-insurable items. As such, we strongly recommend that the Client obtain estimates from professionals experienced in establishing insurance coverage for replacing any structure. The appraiser(s) make no warranties regarding the accuracy of this estimate. Insurable Value is directly related to the portion of the real estate that is covered under the asset's insurance policy. The appraiser(s) have based this opinion on the building's replacement cost new (RCN) which has no direct correlation with its actual market value. The appraiser(s) developed an opinion of RCN using the Calculator Cost Method developed by Marshall & Swift. The RCN is the total construction cost of a new building with the same specifications and utility as

the building being appraised, but built using modern technology, materials, standards and design. For insurance purposes, RCN includes all direct costs necessary to construct the building improvements. Items that are not considered include land value, individual site improvements or accrued depreciation. To develop an opinion of insurable value, exclusions for below-grade improvements, some site work/improvements, foundations and architectural fees must be deducted from RCN.

**20. ACCEPTANCE OF, AND/OR USE OF, THIS APPRAISAL REPORT BY CLIENT OR ANY THIRD PARTY CONSTITUTES ACCEPTANCE OF THE FOREGOING CONDITIONS. APPRAISER(S) LIABILITY EXTENDS ONLY TO STATED CLIENT, NOT SUBSEQUENT PARTIES OR USERS AND IS LIMITED TO THE AMOUNT OF THE FEE RECEIVED BY THE APPRAISER(S).**