

# LONE MOUNTAIN SENIOR LIVING

*Superior Lifestyle Development*



## Planned Unit Development

NEC Lone Mountain Road and 43<sup>rd</sup> Street

Z-28-A-14-2

First Submittal: September 14, 2016

Second Submittal: November 30, 2016

Third Submittal: July 7, 2017

Public Hearing Draft: November 15, 2017

CITY OF PHOENIX

NOV 15 2017

Planning & Development  
Department

A Planned Unit Development (PUD) is intended to be a stand-alone document of zoning regulations for a particular project. Provisions not specifically regulated by the PUD are governed by the zoning ordinance. A PUD may include substantial background information to help illustrate the intent of the development. The purpose and intent statements are not requirements that will be enforced by the City. The PUD only modifies zoning ordinance-regulations and does not modify other City Codes or requirements.

## **PRINCIPALS AND DEVELOPMENT TEAM**

### **PROPERTY OWNER/DEVELOPER**

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## PURPOSE AND INTENT

The purpose of this application is to amend the existing PUD for an approximate 5.00 acre parcel located at the northeast corner of 43<sup>rd</sup> Street and Lone Mountain Road (the “Site”), shown in the aerial below. The Site is currently vacant, but is zoned PUD for the development of a similar Assisted Living Facility. The current proposal seeks to amend the existing PUD, approved in 2015, for development standards that more appropriately address the specific Site characteristics and market need.



In summary, the core development goals of this amendment are as follows:

- Increase the building footprint from 27,421 to 57,034 square feet
- Add 13 parking spaces
- Increase the maximum density to 100 beds
- Improve the quality of the architecture and residential character of the design
- Incorporate roof mounted versus ground mounted mechanical equipment

Additionally, several overall project goals have been established to preserve land use compatibility:

- Preserve the residential Sonoran desert character and lifestyle of neighboring properties while serving a growing demographic.
- Maintain and enhance the existing landscape and the majority of natural vegetation to conserve and minimize disruption to the natural ecosystem of the area. Add landscaping elements that will reduce existing dust issues and make the area more aesthetically appealing.
- Establish a development that will be respectful of local conditions, consistent with the surrounding context and promote the achievement of long-term goals outlined in the General Plan.

## DESIGN CONCEPT

Responding to the Sonoran southwest character of the Site and surrounding existing context, the proposed Site design features purposeful walkways, a gazebo, abundant landscaping and contemporary Mission style architecture with residential detailing. The building has been centrally positioned, to maximize setbacks as well as the landscaping provided on all sides. The dense native landscape that wraps the Site provides both shade along the sidewalks for the neighbors, and aesthetic interest, breaking up the horizontal lines of the building when viewed from adjacent homes and structures. The site plan includes parking along the east side, primarily for staff and visitors, under the shade of native trees and a garden setting for residents along the north end of the building. The garden also assists in mitigating stormwater runoff from the site. Trash is located in proximity to the building, but away from neighboring properties. The vehicular entry remains in the same location and is complemented with a parallel pedestrian entry to make it easier for school children visiting from the school just southeast of the site.

An emergency access continues to wrap around to the northwest corner of the site, but a fence between the building and the roadway will no longer be necessary. The entirety of the building mass is designed as permitted in the existing development standards; only the use inside is requesting a change from the previous approval. This arrangement of the Site, allows for the efficient management of stormwater, which has historically been an issue in the area, while making sure the new uses blend seamlessly into the existing neighborhood.

Lone Mountain Senior Living will consist of a low, Spanish hacienda with two courtyards. The building is designed to minimize its height in the landscape as a one story (18' maximum) high structure, with a basement section along the south end. The landscaped courtyards and perimeter landscape are designed to accentuate the building and break up its visual scale. The building has a flat roof with the mechanical equipment mounted on the roof to minimize noise to the surrounding uses (a change from the existing development standards). The mechanical equipment is hidden behind decorative Mission parapets and clay tile mansards with residential detailing to the corbels, fascia, and rafter tails. The main entry is accented with a port-cochere also in Mission detailing.

The building is designed with a high ceilinged, central dining and multi-purpose room between the two courtyards with individual living quarters surrounding the courtyards. Staff offices are located by the main entry from the port-cochere and facilities are also offered on the lower level. Doors exit the main hallways on the north end of the building, connecting the internal courtyards to the garden. Vertical windows provide light to the interior rooms and elegant residential proportions to all of the elevations.

The overall design concept includes the principles of conservation, integration and sustainability. Conservation of the unique Sonoran Desert landscape, working with the existing topography and stormwater flows of the Site, is paramount to the design. The heavily landscaped areas around the building, in drought tolerant, desert vegetation provide shade, cooling the land and parking while also providing rich habitat for desert creatures. The building responds to its context as well. Designed to integrate into the Site and context by way of its height, residential architectural

elements, form, and screening and positioning of mechanical equipment. The landscape and architecture in these ways together work to preserve the desert views and character. Sustainability is included in the design reducing emphasis on the automobile, partially by use and partially by integrating indoor and outdoor pedestrian routes. The concept of sustainability incorporates an additional use into the overall neighborhood, caring for neighbors at the end of their lives. The ability to age in place, keeping one's social relationships intact has become a key element of the quality of life and health during that time of life. Surrounded by neighborhoods that do not have easy ways to care for those who grow older, the incorporation of this use, in a way that blends into the overall character of the neighborhood, makes it easier for people to transition housing times when needed, rather than being pushed out of the neighborhood because of the cost or availability of care.

## LAND USE PLAN

This proposal consists of an Assisted Living Facility with a memory care component that will consist of 100 beds. Individual bedrooms may contain kitchen units. Other features of the design include two interior courtyards, theater, activity room, library, multi-purpose and crafts rooms. Amenities will be centrally located to increase accessibility for all residents and are designed and intended for the use of the residents and their guests. The basement level may contain administrative uses as well as a theater and activity room.

Ingress occurs along Lone Mountain Road, to minimize vehicular traffic onto N 43<sup>rd</sup> Street. The circulation design has been configured to minimize paving width, to reduce runoff and minimize heat gain. By nature of the type of residency, assisted living generates a much lower traffic count than traditional residential uses and the parking provided can be significantly reduced without deleterious impacts on the neighborhood or residents. Vehicular access to the Site will incorporate indigenous landscape material and setbacks have been maximized to shield the use from adjacent properties.

A variety of active and passive recreational opportunities are provided to accommodate residents, primarily in the form of walking paths, courtyards and a covered lounging area. Inner courtyards provided a shaded refuge for residents and are easily accessible to the rooms.

A generous open space standard has been established by this PUD at a minimum of 20% of the net lot area. In comparison, aside from the setback requirements, there is no minimum open space requirement established by Section 603 of the Phoenix Zoning Ordinance for suburban residential developments. Preservation of the Sonoran Desert environment and residential character is paramount to the design theme for Lone Mountain Senior Living. The significant open space provided will mitigate any negative visual impact of the development from the surrounding uses. The open space includes dense desert landscaping, a garden, courtyards and walking trails and will enhance the naturally scenic setting of this community.

## **SITE CONDITIONS & LOCATION**

### **Acreage**

The Site is generally located at the northeast corner of Lone Mountain Road and 43rd Street. The gross lot area is represented as approximately 217,800 square feet or 5 acres, which includes dedications on the north half of Lone Mountain Road and the east half of 43<sup>rd</sup> Street.

### **Location in relation to major intersections or areas of regional significance**

Directly across the street is Desert Willow Elementary School. The Site is located in Lone Mountain Elementary School District. Given the fact that this is an Assisted Living Center for senior adults, it will have no deleterious impact on the school.

### **Topography and natural features**

The Site is generally flat with a minor slope from the northeast down to the southwest. There appears to be remnants of a historic wash onsite. The residential lots to the east have all installed perimeter fencing at the lot line, with a pipe providing flow onto the site. Stormwater historically leaves the site at a point just north of Lone Mountain and crosses at grade across 43<sup>rd</sup> Street as it heads east. The development of the surrounding properties in ways not in harmony with the existing conditions have left the area prone to some stormwater issues.

## GENERAL PLAN CONFORMANCE

The General Plan Land Use Map identifies the Site as Residential 0-2 du/acre. The proposal is consistent with the General Plan Land Use designation of Residential and will promote the achievement of many of the long-term goals outlined in the Phoenix General Plan.

***Certainty and Character:*** *Every neighborhood and community should have a level of certainty. Ensure that development, redevelopment and infrastructure supports and reinforces the character and identity of each unique community and neighborhood.*

***Design Principle #1:*** *Protect and enhance the character of each neighborhood and its various housing lifestyles through new development that is compatible in scale, design and appearance.*

***Design Principle #3:*** *Create new development that is sensitive to the scale and character of the surrounding neighborhoods and incorporates adequate development standards to prevent negative impact(s) on the residential properties.*

Response: The Lone Mountain Senior Living facility is a compatible development with the existing residential context. The improved architecture has been carefully designed to be residential in scale and appearance, which creates a welcoming environment for residents and supports consistency in neighborhood character. A generous open space requirement has been incorporated into the design to respect the surrounding residential developments, preserve their views and provide lush landscaping buffers to separate the use.

The proposal supports the neighborhood character and identity through incorporation of streetscape amenities (curbs/sidewalks) as well as internal walking paths for residents and visitors. It is anticipated that students from the school directly across the street will utilize the sidewalk to visit the Site as they participate in planned intergenerational programs that include mentoring.

***Design Principle #5:*** *Enhance the compatibility of residential infill projects by carefully designing the edges of the development to be sensitive to adjacent existing housing. Create landscape buffers and other amenities to link new and existing development.*

Response: Respecting that this development is surrounded by single-family residential, special consideration has been incorporated into the development in regards to edge treatment and landscaping. The result is a development that exceeds the open space requirements found in the surrounding neighborhoods, creating a pleasant environment that improves the community and will promote increased property values in the neighborhood.

***Design Principle #7:*** *Protect the neighborhood's views of open space, mountains, and man-made or natural landmarks.*

Response: Landscaped buffer areas of sufficient widths, combined with incorporation of open areas assist in preservation of adjacent rural lifestyles. The proposed height of

eighteen feet is consistent with the surrounding developments and will not hinder the enjoyment of the neighborhood's views of open space, mountains and other natural features.

***Design Principle #13:*** *Integrate into the development design natural features such as washes, canals, significant topography and existing vegetation, which are important in providing character to new subdivisions.*

Response: This development will retain and enhance the unique character of the Desert View Village by preserving the natural characteristics of the Site. The existing stormwater flow has been integrated into the development design, native plant materials are salvaged and reused to promote preservation areas and protect the flora and fauna of the property.

***Diverse Neighborhoods:*** *Encourage communities and neighbors to be a mix of ages, incomes and ethnicities and provide housing suitable to residents with special needs. A diverse range of housing choices, densities and prices in each village should be encouraged.*

***Land Use Principle #2:*** *Include a mix of housing types and densities where appropriate within each village that support a broad range of lifestyles.*

Response: This facility provides an option for area residents who can no longer function in their single-family residences or need assistance with the activities of daily living. The proposed facility meets the need for a broader range of housing types and price ranges within the Village. This includes opportunities for housing in various prices, types, densities, and sizes which provide greater opportunities for residents to remain in the Village and close to their families, friends and jobs. The facility will allow residents to remain in the immediate area and transition from their homes to a supported residential environment.

***Local and Small Business:*** *Promote the growth and prosperity of Phoenix locally owned and small businesses. Encourage the growth and expansion of locally owned and small businesses as a means of creating jobs.*

***Land Use Principle #1:*** *Facilitate adaptive reuse of older, underutilized properties to create mechanisms for new local and small businesses to operate, thrive and grow.*

Response: Lone Mountain Senior Living Community is an opportunity for local entrepreneurs, Laura and Jeffrey May, to utilize an underutilized parcel for the creation of new, good-wage jobs. The facility will provide an additional 100 beds to fulfill a current need for assisted living options, as is supported by a market study conducted by the applicant that demonstrates a growing senior demographic.

The creation of new jobs is a benefit of this PUD, which will provide 25 new employment opportunities to local residents. Equally important is the fact that this proposal will help to restore the housing/employment balance in this area that includes densely populated residential communities with few employment opportunities.

## ZONING AND LAND USE COMPATIBILITY

General Plan Land Use classifications, along with the existing zoning designations and uses for the adjacent parcels, are as follows:

<b>EXISTING LAND USE SUMMARY</b>			
<b>Direction</b>	<b>General Plan Land Use Classification</b>	<b>Existing Zoning</b>	<b>Existing Use</b>
Site	Residential 0-2 du/acre	PUD	Nursery/Greenhouse
North	Residential 0-2 du/acre	S-1	Residential
South	Public/Quasi Public	R1-6 PCD	Elementary School
South and SW	Residential 0-2 du/acre	R1-6 PCD	Residential
East	Residential 0-2 du/acre	S-1	Residential
West	Residential 0-2 du/acre	S-1	Residential

### Existing Zoning

The Site was annexed into the jurisdictional boundaries of the City of Phoenix in 1989 and was zoned S-1 (Ranch or Farm Residence District). On July 1, 2015, the Lone Mountain Senior Living PUD was adopted through Ordinance G-4077 for the development of a 60 bed Assisted Living Facility for seniors.

### Existing Land Use

The Site, as shown below, is currently in use as an active nursery and landscape company and consists of indigenous vegetation and includes the minor remnants of natural wash features.



Since the purchase by the current owner in 1996, the Site has been used as a greenhouse and nursery operation in support of their landscaping business. Since the owner's purchase of the Site, a school has been built directly across the street as well as a number of homes along 44<sup>th</sup> Street.

Surrounding uses consist of a school directly to the south, a large warehouse/garage to the immediate north, single family residences, and a large greenhouse/nursery operation to the immediate west.

### **Compatibility**

The Site, positioned among various uses that are currently experiencing a need for senior housing and supportive commercial developments, is an appropriate location for an Assisted Living Facility. Residential in nature, Lone Mountain Assisted Living has been thoughtfully designed to incorporate appropriate building heights and scale, appropriate architectural styles, sufficient buffer areas, and open spaces to ensure compatible built form. Additionally, this proposal includes a new site plan with carefully planned architecture that respects the neighborhood character through a design that appears residential in nature.

## **LIST OF USES**

The following uses shall be permitted:

Assisted Living Center

Residential Care Center

Adult Day Care Home

Adult Day Care Center

All uses permitted in Section 603 of the Phoenix Zoning Ordinance

Any property owner of the Site may request an interpretation of analogous uses to the defined list from the City of Phoenix Zoning Ordinance. The Zoning Administrator may administratively approve a use analogous to those uses listed above.

## DEVELOPMENT STANDARDS

### RESIDENTIAL STANDARDS

All residential development shall comply with Section 603 of the Phoenix Zoning Ordinance.

### LOT DEVELOPMENT STANDARDS

STANDARD	PROPOSED
Maximum Height	Maximum Eighteen (18) feet
Maximum Lot Coverage	Maximum Forty (40) percent
Maximum Number of Beds	Maximum 100 beds
Open Space	Minimum Twenty (20) percent of the Net Lot Area
<b>Building Setbacks</b>	
South	Minimum 35 feet
West	Minimum 28 feet
East	Minimum 35 feet
North	Minimum 35 feet

### LANDSCAPING STANDARDS

STANDARD	PROPOSED
<b>Plant Sizes</b>	
Trees	Minimum 70%: Two (2) inch caliper Minimum 30%: Three (3) inch caliper
Shrubs	Five (5) 5-gallon shrubs per tree
<b>Grading Slopes Ratios (Max)</b>	
Retention	4:1
Berm	As contoured
<b>Streetscape</b>	
Street Setback	Minimum 25 feet
Tree Spacing	20 feet on center or equivalent groupings
Shrubs	Minimum three (3) 5 gallon shrubs per tree
<b>Property Lines not Adjacent to Street</b>	
Trees (2-inch caliper)	70% of required
Trees (1-inch caliper)	30% of required
Landscape Setback	Minimum 10 feet

The property owner shall be responsible for the maintenance, landscaping, improvements and preservation of all common areas, open space areas, wash area, parking lot, landscape setbacks, and landscaping within the right of ways.

Retention basins shall be contoured to create a natural appearance. Slopes shall not exceed that which is permitted under the guidelines.

Berms shall be contoured to create a natural appearance. Berm slopes shall not exceed a 3:1 ratio.

All trees shall be planted and staked in accordance with the Arizona Nursery Association Standards.

All landscape areas shall have an automatic irrigation system. Trees, shrubs and groundcover shall be watered by a drip irrigation system and turf areas shall incorporate high efficiency spray heads.

Street trees, shrubs, accent plants, and ground covers planted in the right of way shall be selected from the Arizona Department of Water Resources Low Water Use/Drought Tolerant Plant List for the Phoenix Active Management Area.

## **PARKING**

Off-street parking and loading shall comply with Section 702 of the Zoning Ordinance.

## **AMENITIES**

Site amenities shall include walking paths, sitting areas, and a shade gazebo.

## **SHADE**

Pedestrian walkways shall be shaded (50% at maturity) by shade trees. Minimum one covered gazebo shall be provided.

## **LIGHTING**

Exterior lighting shall comply with Section 507 Tab A and 704 of the Phoenix Zoning Ordinance, and the City Code.

## **WALLS & FENCES**

Walls and Fences shall comply with Section 703 of the Phoenix Zoning Ordinance.

Fences along Lone Mountain Road and N 43<sup>rd</sup> Street shall consist of view fencing and may be comprised of decorative iron wrought fencing or a similar material.

## DESIGN GUIDELINES

Lone Mountain Senior Living conceptual building renderings are intended to provide the design framework to ensure that it flows within the built environment. The elevations provide for rooflines, proportion, façade articulation, appropriate detailing, colors and materials to promote design respecting the architectural character of the surrounding built form. The goal of these guidelines is not to dictate or direct architectural style, but to achieve harmony in the built environment.

### Architectural Design Elements

- The front entry of the building is clearly defined and identifiable.
- Windows/trim as well as accent detailing shall be incorporated and vary from the primary color and materials of the building.
- All driveways shall be constructed of asphalt, concrete, brick, decorative pavers or integral color concrete.
- Air conditioning, heating or environmental enhancement devices may be roof mounted or ground mounted.
- Design of accessory buildings shall be compatible with the design of the principal dwelling in materials, colors and architectural style. Roof tile color and shape shall match the tile on the dwelling units.



## **SIGNS**

All signage shall comply with Section 705 of the Phoenix Zoning Ordinance for nonresidential activity in a residential district, unless otherwise noted by this development narrative.

### **Design of Permanent Signs**

All permanent signs shall be compatible with the design of buildings, reflecting the architectural style, building materials, textures, colors, and landscape elements of the overall project.

### **Placement of Signs**

- Signs and landscaping shall be placed so that they are not in conflict when landscaping reaches full maturity.

### **Ground Sign / Entry Sign**

One single-sided ground sign shall be permitted along Lone Mountain Road, subject to the following conditions:

- Signs shall be no greater than 5 feet in height and 7 feet in width.
- Size shall not exceed 35 square feet in area.
- Signs shall be setback a minimum of 10 feet from the property line.
- Signs shall be architecturally compatible with other development components.

## **SUSTAINABILITY GUIDELINES**

At a minimum, consideration and implementation of at least five (5) of the following Design Review Presumptions or other sustainability principles as approved by the Planning and Development Department shall be incorporated into the development.

- A. Building designs should respond to the harsh southwest climate by incorporating materials and design methods suitable for the region.
- B. Orientation of buildings and fenestration design should maximize solar benefits while minimizing the negative impacts of heat gain.
- C. Incorporate solar collection technologies for providing and storing energy as well as heated water systems for individual buildings.
- D. Design for effective water usage and conservation methods in buildings by using low flow 'Water Sense' qualified plumbing fixtures using minimal amounts of potable water.
- F. Include energy efficient certified appliances in all dwelling units for reduction in power consumption.
- G. Incorporate HVAC systems with a minimum SEER rating of 14.
- H. Incorporate "Smart" irrigation control systems.
- I. Use roofing materials that specify a high Solar Reflectance Index for a minimum of 75% of the roof surface area.
- K. During construction on the building site, vegetation and soils shall be protected and reused.
- N. Carpets and carpet adhesives should be labeled with, or otherwise documented as meeting, the Carpet & Rug Institute (CRI) Green Label Plus or Green Label testing program criteria. Carpet cushion (i.e., padding) should similarly be certified to meet the CRI Green Label testing program criteria.
- Q. Incorporate solar powered, internal street lighting to reduce energy demand and consumption.
- R. Site hardscape areas, including vehicular access ways, should be minimized to the extent possible to reduce drainage runoff and minimize heat gain.
- S. A minimum of 50 percent of newly landscaped areas within common and buffer areas shall contain native species.

# **INFRASTRUCTURE**

## **Circulation Systems**

Direct vehicular ingress to the Lone Mountain Senior Living facility will occur from East Lone Mountain Road using the existing entrance. The one-way drive will exit onto N 43<sup>rd</sup> Street and will be a left-only turn. The traffic impact for Assisted Living Facilities is minimal as the average age of a resident is 80-85 years and, thus, it would be highly unusual that they would drive. There is also an emergency and refuse driveway proposed off of North 43<sup>rd</sup> Street at an existing mapped point of entry.

All roadways have been coordinated with adjacent circulation patterns and developments to ensure appropriate access and traffic control.

A 10-foot sidewalk easement shall be dedicated along the north side of Lone Mountain Road, as approved by the Planning and Development Department.

The developer shall construct all streets adjacent to the development with paving, curb, gutter, sidewalk, curb ramps, streetlights, landscaping and other incidentals as per plans approved by the Planning and Development Department. All improvements shall comply with all ADA accessibility standards.

## **Grading and Drainage**

All grading and drainage shall comply with City Code. A topographical survey and grading and drainage plan were completed to most appropriately design the Site to address the drainage. See Grading and Drainage Plan attached as Exhibit I.

## **Water and Wastewater Services**

The City of Phoenix shall be the potable water service provider, with major water mains providing water service connection to the site. The distribution system internal to the project and fire hydrant spacing shall be designed in accordance with City of Phoenix Water Services Design Manual. The City of Phoenix is the designated service provider for Lone Mountain Senior Living. This proposal includes an intent to aggregate from the existing North Cave Creek Road sewer line to the subject property.

## **PHASING**

No project phasing is proposed.

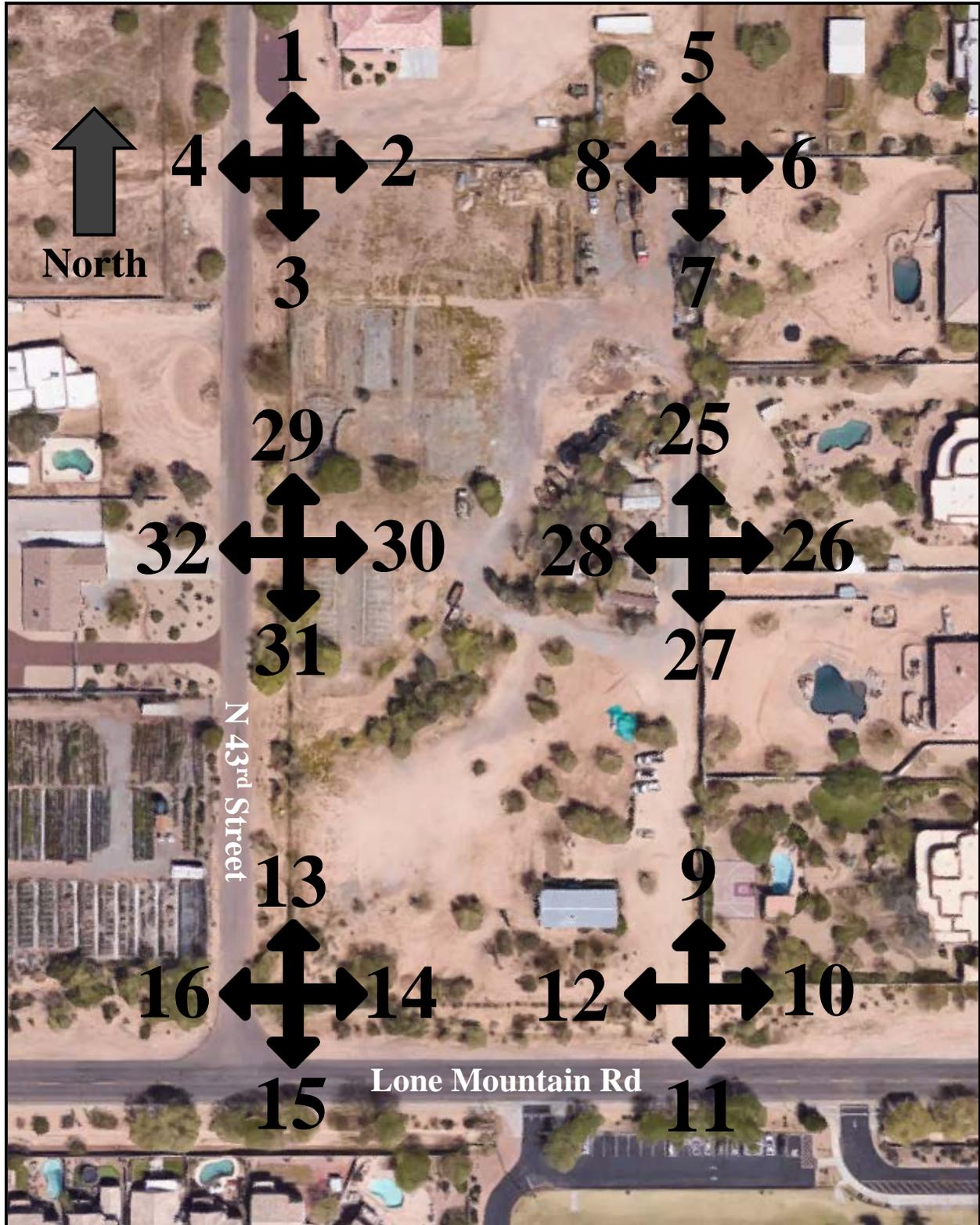
**EXHIBIT A**  
**Legal Description**

THE WEST HALF OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 18, TOWNSHIP 5 NORTH, RANGE 4 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA;

EXCEPT THE SOUTH 33 FEET;

AND EXCEPT THAT PORTION DESCRIBED IN DOCUMENT NO. 96-0583899, MARICOPA COUNTY RECORDER.

**EXHIBIT B**  
**Context Plan**



Lone Mountain Senior Living - Site Context Exhibit 1 (1-4)



North 43rd Street

East Lone Mountain Road

**Lone Mountain Senior Living - Site Context Exhibit 2 (5-8)**

**North 43rd Street**



**East Lone Mountain Road**

Lone Mountain Senior Living - Site Context Exhibit 3 (9-12)

North 43rd Street



East Lone Mountain Road

**Lone Mountain Senior Living - Site Context Exhibit 4 (13-16)**

**North 43rd Street**



**East Lone Mountain Road**

**Lone Mountain Senior Living - Site Context Exhibit 5 (25-28)**

**North 43rd Street**



**East Lone Mountain Road**

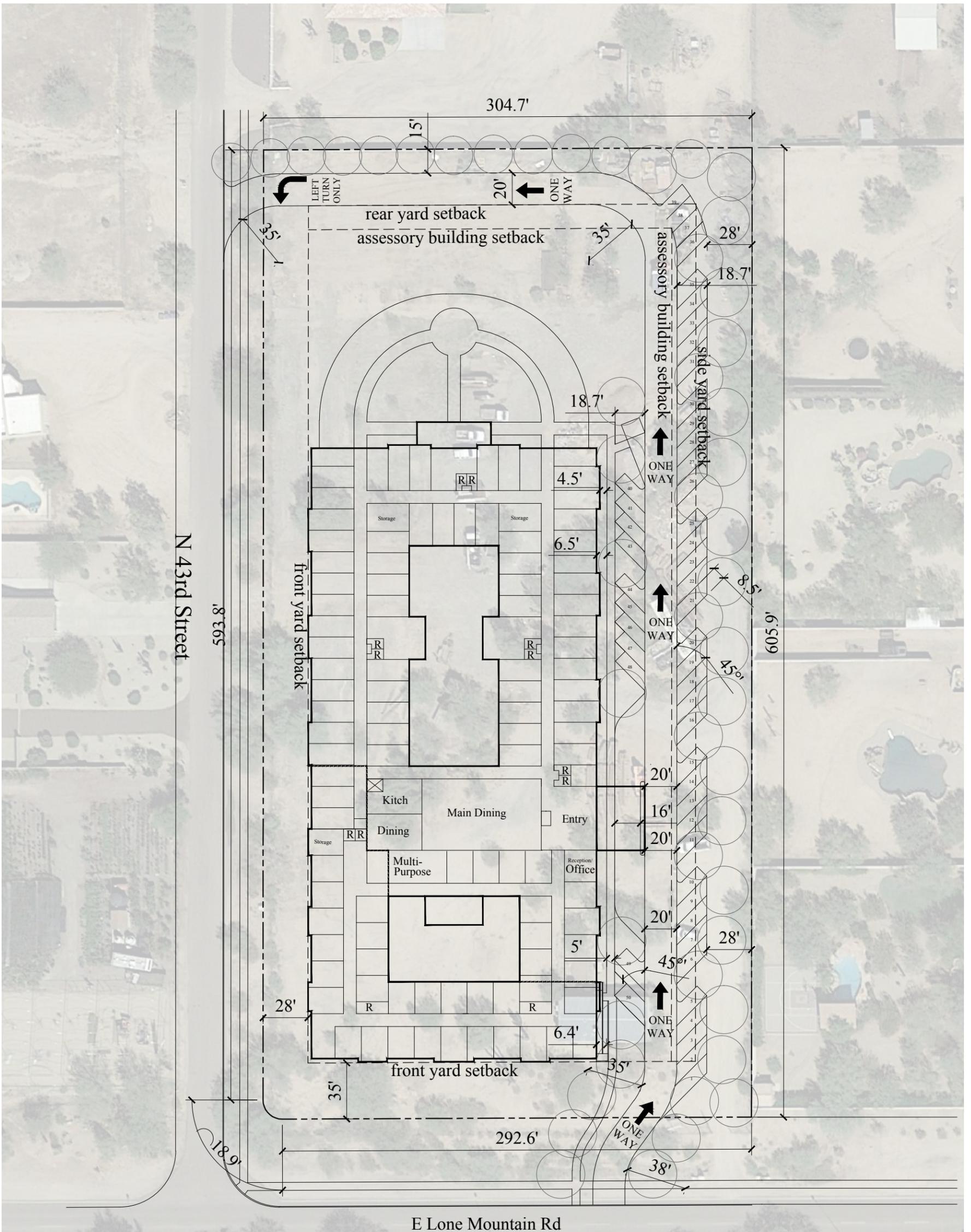
Lone Mountain Senior Living - Site Context Exhibit 6 (29-32)

North 43rd Street



East Lone Mountain Road

**EXHIBIT C**  
**Conceptual Site Plan**



Lot Development Standards:	
Standards	PUD
Number of Lots:	1
Maximum Height (Feet and Stories):	One Story and 18 Feet
Building Setbacks (Ft.):	
South	Minimum 35 Feet
West	Minimum 28 Feet
East	Minimum 35 Feet
North	Minimum 35 Feet
Maximum Lot Coverage (%):	40% Net of Lot Net Area
Open Space:	Minimum 20% of Net Lot Area
Maximum Number of Units:	Maximum 100 Units
Accessory Buildings:	Minimum 35 Feet from All Property Lines

**Total Number of Units: 100**

LONE MOUNTAIN  
Superior Lifestyle



Conceptual Site Plan  
Courtyard Structure

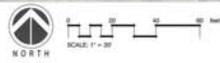
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**EXHIBIT D**  
**Landscaping Plan**

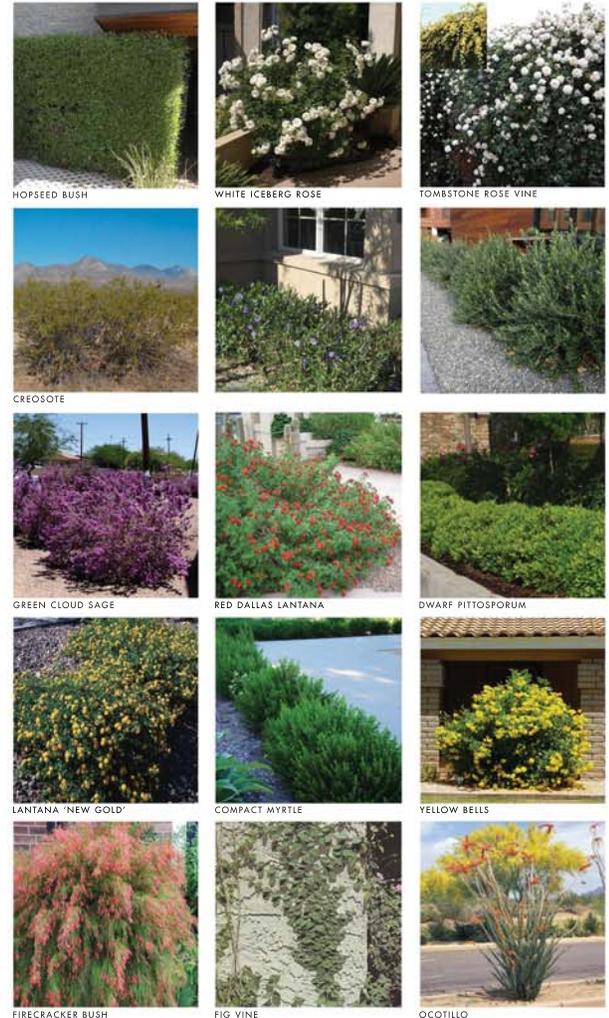
TREE



ARGENTINE MESQUITE    BAUHINIA LUNARIOIDES    BLUE PALO VERDE    RED PUSH PISTACHE    DESERT WILLOW 'DESERT DIVA'



SHRUBS



ACCENTS



DESIGN KEYNOTES

- 1 ENTRY COLUMN & SIGN WALL
- 2 DESERT TREES TO BUFFER/SCREEN ADJACENT LOTS
- 3 SECONDARY ENTRY COLUMNS TO COMPLIMENT PRIMARY ENTRY
- 4 EXISTING MASONRY WALL
- 5 DECORATIVE PAVING AT PORTE COCHÈRE AND DROP-OFF
- 6 SPECIMEN TREES TO ENHANCE PRIMARY ENTRY
- 7 GARDEN WITH LAWN, FORMAL TREES AND CLIPPED HEDGES
- 8 LOW WATER FEATURE WITH STABILIZED DECOMPOSED GRANITE, TABLES, CHAIRS ON AXIS OF PRIMARY VIEW
- 9 COMBINATION VIEW FENCE & SOLID WALL TO ENCLOSE GARDEN
- 10 PRIVATE COURTYARD WITH POTENTIAL TRELLIS FIREPLACE, FURNITURE RAISED PLANTER, OUTDOOR FURNITURE & LUSH PLANTING
- 11 DESERT TRANSITIONAL TREES AND SHRUB ALONG LONE MOUNTAIN & 43RD STREET
- 12 DETACHED WALK ALONG PERIMETER OF SITE
- 13 MULTI-FUNCTIONAL COURTYARD WITH ARTIFICIAL LAWN, PLANTING, TREES

**EXHIBIT E**  
**Conceptual Elevations**



CONCEPTUAL SOUTH ELEVATION FACING LONE MOUNTAIN ROAD  
NOT FOR CONSTRUCTION



CONCEPTUAL EAST ELEVATION SHOWING ENTRY  
NOT FOR CONSTRUCTION

LONE MOUNTAIN  
Superior Lifestyle



CONCEPTUAL BUILDING  
ELEVATIONS

South Facing Lone Mountain and East Entry

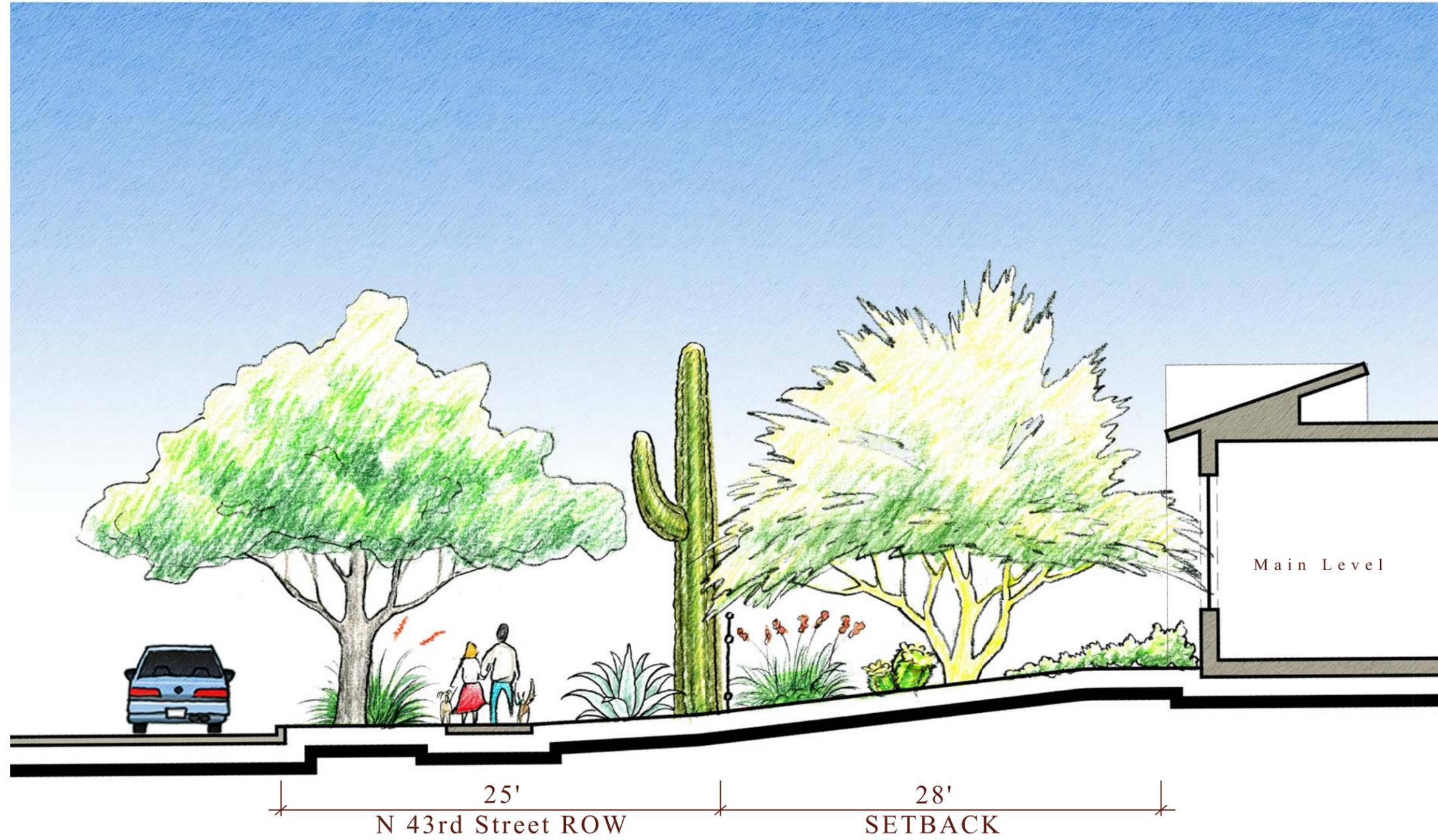


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**EXHIBIT F**  
**Cross Sections**



↑  
18'  
HEIGHT MAX.  
↓

25'  
N 43rd Street ROW

28'  
SETBACK

LONE MOUNTAIN  
Superior Lifestyle



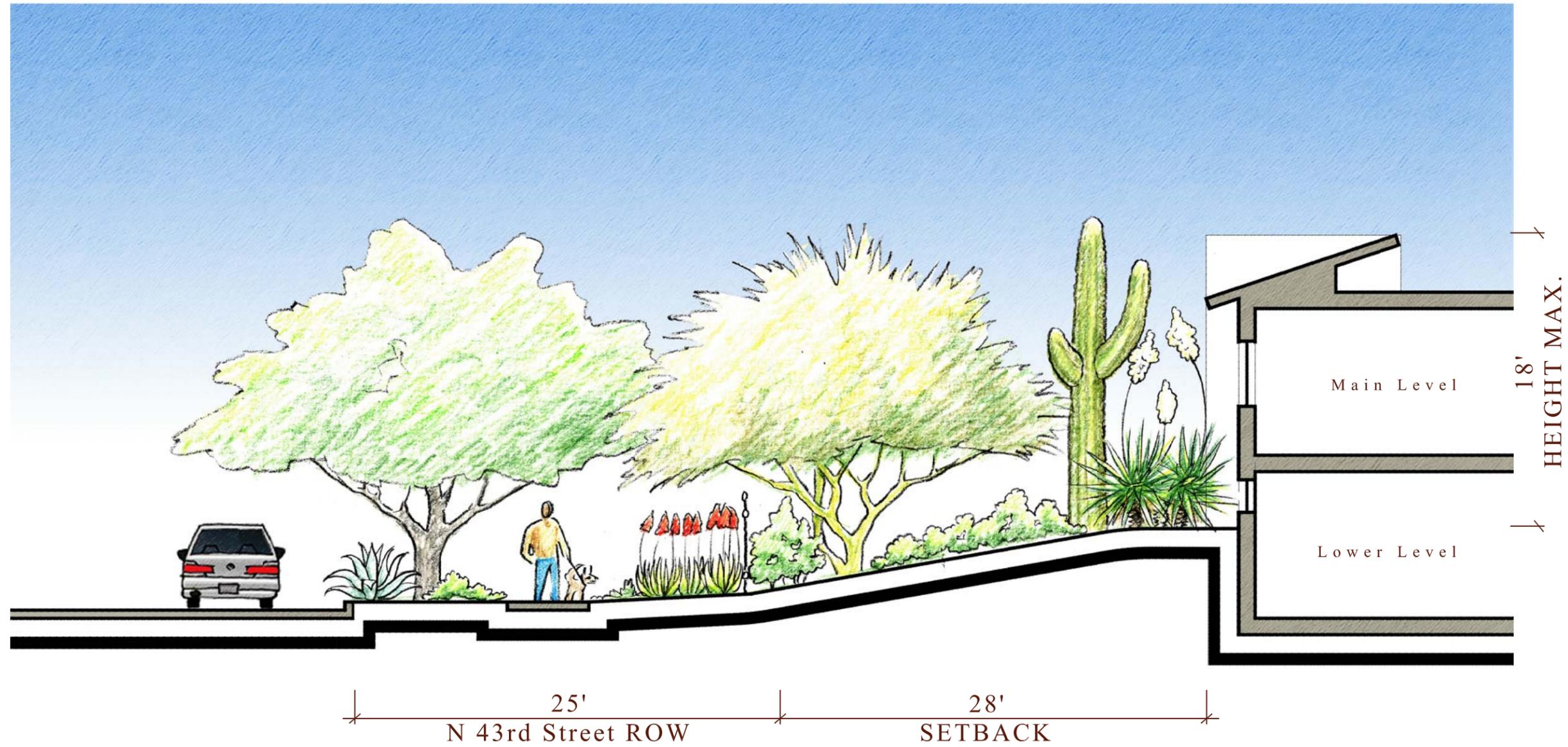
SECTION A1  
North 43rd Street, Single Level

05 April 2017

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LONE MOUNTAIN  
Superior Lifestyle



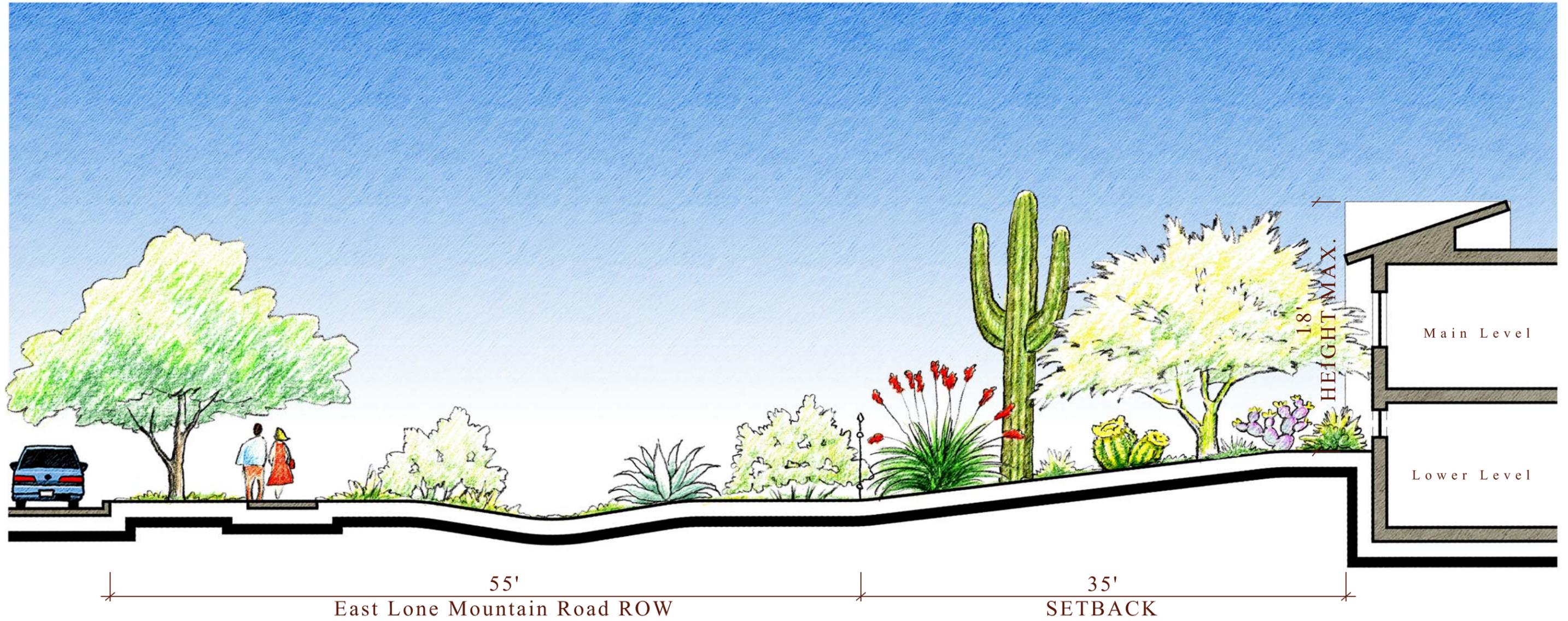
SECTION A2  
North 43rd Street, Single Level

05 April 2017

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LONE MOUNTAIN  
Superior Lifestyle



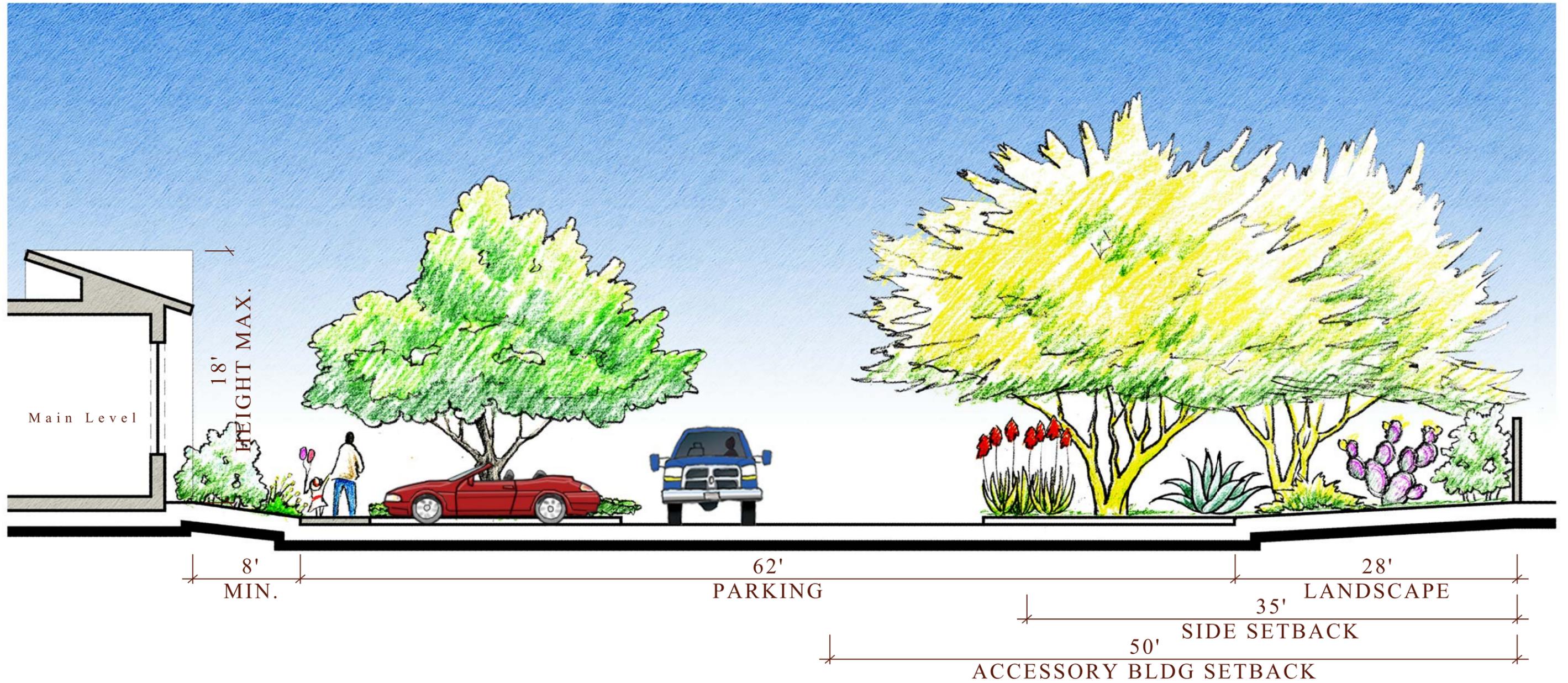
SECTION B  
East Lone Mountain, Lower Level

05 April 2017

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LONE MOUNTAIN  
Superior Lifestyle



SECTION C  
West Side through Parking

05 April 2017

**EXHIBIT G**  
**Traffic Impact Statement**



June 30, 2017

Ms. Laura May  
Green Thumb Nursery, LLC  
4302 East Lone Mountain Road  
Phoenix, AZ 85331

Re: Lone Mountain Senior Living - NEC Lone Mountain Road and 43<sup>rd</sup> Street  
Traffic Impact Statement Revision

Dear Ms. May:

The purpose of this letter is to address site specific issues for the proposed assisted living and memory care development located on the northeast corner of the intersection of Lone Mountain Road and 43<sup>rd</sup> Street in Phoenix, Arizona. This letter outlines our findings regarding the revised traffic generation of the proposed 100 unit assisted living and memory care development.

The development is proposed to consist of 100 assisted living units uses on approximately 4.23 acres. The site is currently utilized by the Green Thumb Nursery which includes nursery and greenhouse uses. Access to the proposed development will be provided by two driveways. One driveway will access the site from Lone Mountain Road. This driveway is a full access driveway located approximately 255 feet east of 43<sup>rd</sup> Street. The second driveway will access the site from 43<sup>rd</sup> Street. This driveway is a full access driveway located approximately 650 feet north of Lone Mountain Road. A preliminary site plan for the development is attached.

Trip generation rates published by the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 9<sup>th</sup> Edition were used to calculate the trip generation characteristics of the proposed land uses. The revised trip generation calculations for the proposed assisted living use was determined using ITE Code 254 for Assisted Living. Trip generation calculations are summarized in **Table 1**. Trip generation calculations are attached.

**Table 1. Proposed Trip Generation**

Land Use Description	ITE Code	Quantity	Units	Daily Trips	AM			PM		
					In	Out	Total	In	Out	Total
Assisted Living	254	100	Beds	266	9	5	14	10	12	22

The trip generation calculations indicate that on an average weekday the proposed development would be expected to generate 266 daily trips with 14 trips occurring in the AM peak hour and 22 trips occurring in the PM peak hour.

Based on the results of this analysis the proposed development's trip generation would not result in a significant change in traffic conditions or significant change in delay in the area surrounding the project.

If you have any further questions, please feel free to contact me at (602) 906-1333.

Very truly yours,

KIMLEY-HORN AND ASSOCIATES, INC.

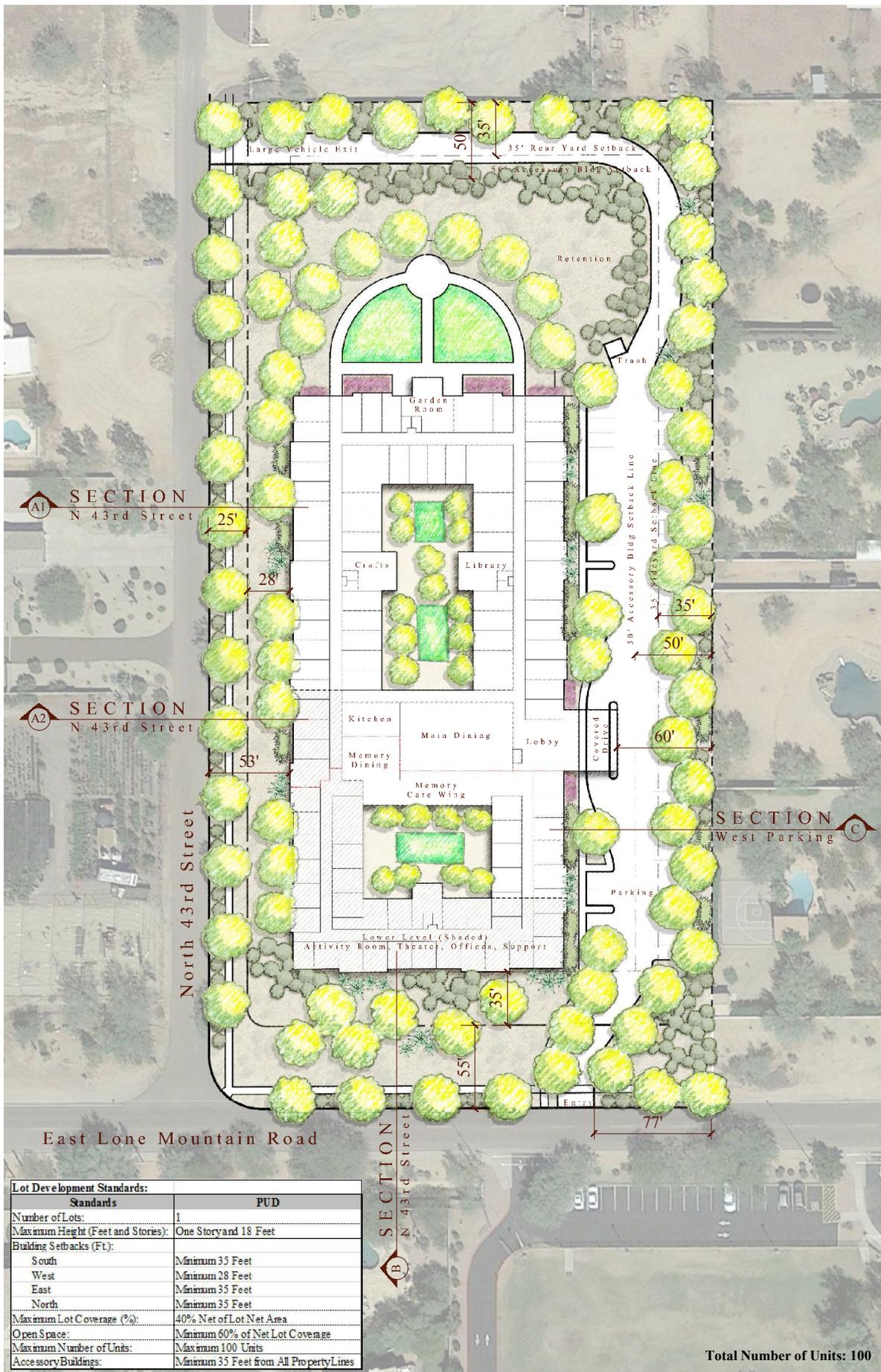


Charles R. Wright, P.E.

Attachments: Site plan, Trip Generation

K:\PHX\_Traffic\191860000 - NEC Lone Mountain & 43rd Street\Reports\trip gen\_06-30-17.doc





**SECTION A1**  
N 43rd Street

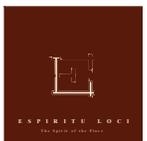
**SECTION A2**  
N 43rd Street

**SECTION C**  
West Parking

Lot Development Standards:	
Standards	PUD
Number of Lots:	1
Maximum Height (Feet and Stories):	One Story and 18 Feet
Building Setbacks (Ft.):	
South	Minimum 35 Feet
West	Minimum 28 Feet
East	Minimum 35 Feet
North	Minimum 35 Feet
Maximum Lot Coverage (%):	40% Net of Lot Net Area
Open Space:	Minimum 60% of Net Lot Coverage
Maximum Number of Units:	Maximum 100 Units
Accessory Buildings:	Minimum 35 Feet from All Property Lines

**Total Number of Units: 100**

**LONE MOUNTAIN**  
Superior Lifestyle



**Illustrated Site Plan**  
Courtyard Structure





**EXHIBIT H  
Zoning Map**



**EXHIBIT I**  
**Grading and Drainage Plan**

# GRADING and DRAINAGE PLAN

## LONE MOUNTAIN SENIOR LIVING FACILITY, MULTI-FAMILY RESIDENTIAL CONSTRUCTION

LOCATED IN THE NORTHEAST QUARTER OF SECTION 18, TOWNSHIP 5 NORTH, RANGE 4 EAST OF THE GILA AND SALT RIVER BASELINE AND MERIDIAN, MARICOPA COUNTY, ARIZONA

### Grading and Drainage Notes (City of Phoenix)

1. A GRADING PERMIT IS REQUIRED UNDER CHAPTER 32A OF THE PHOENIX CITY CODE.
2. WHEN HAUL PERMITS ARE REQUIRED, THEY MUST BE OBTAINED PRIOR TO OR CONCURRENTLY WITH THE GRADING AND DRAINAGE PERMIT.
3. EXCAVATING CONTRACTOR MUST GIVE LOCATION FOR WASTING EXCESS EXCAVATION AND A LETTER FROM OWNER GIVING PERMISSION FOR DUMPING PRIOR TO STARTING ON-SITE CONSTRUCTION. IF EXCESS EXCAVATION EXCEEDS 100 CUBIC YARDS, THE DISPOSAL SITE WILL ALSO REQUIRE A GRADING AND DRAINAGE PERMIT.
4. PLANNING & DEVELOPMENT DEPARTMENT FIELD INSPECTION GROUP SHALL BE NOTIFIED 48 HOURS BEFORE ANY ON-SITE AND/OR OFF-SITE CONSTRUCTION BEGINS, TELEPHONE (602) 262-7811.
5. STAKING FINISH FLOOR ELEVATIONS IS THE RESPONSIBILITY OF THE OWNER AND HIS ENGINEER. THE OWNER'S ENGINEER SHALL SUBMIT THREE SEALED COPIES OF THIS GRADING AND DRAINAGE PLAN DESIGNATED AS "RECORD DRAWING" (BEARING AN ORIGINAL SIGNATURE) PRIOR TO THE REQUEST FOR FINAL INSPECTION.
- 5a. (CERTIFICATION OF FINISH FLOOR ELEVATION IS MANDATORY IF STRUCTURE IS LOCATED IN A FLOODPLAIN OR OTHER CRITICAL DRAINAGE AREA.) USE THE AS-BUILT CERTIFICATION, PLUS A FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) "ELEVATION CERTIFICATE" MUST BE COMPLETED FOR EACH STRUCTURE CONSTRUCTED IN A SPECIAL FLOOD HAZARD AREA (SFHA) PRIOR TO AN ELECTRICAL CLEARANCE FOR THAT STRUCTURE. ONE COPY OF THE "ELEVATION CERTIFICATE" IS TO BE SUBMITTED TO THE GENERAL BUILDING SAFETY INSPECTOR ON SITE AND ONE COPY IS TO BE SUBMITTED TO THE CITY OF PHOENIX FLOOD PLAN MANAGER. IN ADDITION, SPECIFY THE NAME, ADDRESS, AND TELEPHONE NUMBER OF THE ARIZONA REGISTERED ENGINEER OR LAND SURVEYOR RESPONSIBLE FOR PROVIDING CERTIFICATION.
6. A SEPARATE PERMIT IS NECESSARY FOR ANY OFFSITE CONSTRUCTION.
7. AN APPROVED GRADING AND DRAINAGE PLAN SHALL BE ON THE JOB SITE AT ALL TIMES. DEVIATIONS FROM THE PLAN MUST BE PRECEDED BY AN APPROVED PLAN REVISION.
8. GRADING AND DRAINAGE PLAN APPROVAL INCLUDES THE CONSTRUCTION OF ALL SURFACE IMPROVEMENTS SHOWN ON THE APPROVED PLAN, INCLUDING, BUT NOT LIMITED TO, RETENTION AREAS, SEDIMENTATION BASINS, AND/OR OTHER DRAINAGE FACILITIES, DRAINAGE PATTERNS, WALLS, CURBS, ASPHALT PAVEMENT, AND BUILDING FLOOR ELEVATION.
9. GRADES SHOWN IN RETENTION BASINS ARE DESIGN FINISHED GRADES. SHOULD THE CONTRACTOR OR ANY SUBCONTRACTOR PLAN TO PLACE SPOIL DIRT FROM FOOTINGS, UTILITY TRENCHES, LANDSCAPING, SWIMMING POOLS, ETC. IN THE BASINS, THE BASINS SHOULD BE SUFFICIENTLY OVER-EXCAVATED TO ALLOW THE ROUGH GRADING OPERATION TO ALLOW FOR THE PLACEMENT OF THE FILL OR LANDSCAPING MATERIALS.
10. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL THE EXISTING UTILITY LINES WITHIN PROPOSED RETENTION BASIN AREAS. IF THE BASIN CANNOT BE CONSTRUCTED PER PLAN BECAUSE OF CONFLICTS, THE CONTRACTOR SHOULD DISCUSS MODIFICATION OF BASIN CONFIGURATION WITH THE CITY INSPECTOR TO DETERMINE IF A PLAN REVISION OR A FIELD CHANGE IS REQUIRED.
11. ALL DRAINAGE PROTECTIVE DEVICES SUCH AS SWALES, INTERCEPTOR DITCHES, PIPES, PROTECTIVE BERMS, BARRIER WALLS, CONCRETE CHANNELS, OR OTHER MEASURES DESIGNED TO PROTECT ADJACENT BUILDINGS OR PROPERTY FROM STORM RUNOFF MUST BE COMPLETED PRIOR TO BUILDING CONSTRUCTION.
12. PER SECTION 6.8.7 OF THE STORM WATER POLICIES AND STANDARDS, SIDE SLOPES OF STORM WATER STORAGE FACILITIES SHALL BE NO STEEPER THAN 5:1 FOR IRRIGATED GRASS AREAS AND 3:1 FOR LANDSCAPE AREAS. SLOPE STABILIZATION MEASURES ARE REQUIRED FOR ALL SLOPES GREATER THAN 5:1. THE SLOPE STABILIZATION MEASURES MUST BE READILY MAINTAINABLE USING COMMON MAINTENANCE EQUIPMENT AND BE DESIGNED WITH CONSIDERATION TO AESTHETICS. THE SLOPE STABILIZATION MEASURES SHALL BE CONSISTENT WITH COMMONLY USED ENGINEERING PRACTICES. UN-STABILIZED DECOMPOSED GRANITE IS NOT ALLOWED ON SLOPES GREATER THAN 5:1.
13. RETAINING WALLS 3"4" OR LESS MEASURED FROM THE TOP OF THE FOOTING TO THE TOP OF THE RETAINING WALL THAT SUPPORT A SURCHARGE ARE TO BE REVIEWED AND PERMITTED BY THE CIVIL PLAN REVIEW STAFF AND INSPECTED BY THE RESIDENTIAL INSPECTION STAFF. RETAINING WALLS OVER 3"4" ON NON-HILLSIDE RESIDENTIAL ZONING DISTRICTS REQUIRE A USE PERMIT. WALLS OVER 3"4" WILL BE REVIEWED, PERMITTED, AND INSPECTED BY THE RESIDENTIAL SECTION OF THE PLANNING & DEVELOPMENT DEPARTMENT UNDER SEPARATE SUBMITTAL BY THE APPLICANT.
14. ALL RAMPS MUST MEET 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN AND CITY OF PHOENIX SUPPLEMENT TO M.A.G. UNIFORM STANDARD SPECIFICATIONS AND DETAILS; 2% MAX CROSS SLOPES AND 12:1 MAX LONGITUDINAL SLOPES.
15. CERTIFICATE OF OCCUPANCY (C OF O) AND/OR FINAL ELECTRICAL CLEARANCE FOR ANY BUILDING IS DENIED UNTIL ALL GRADING AND DRAINAGE IMPROVEMENTS ARE COMPLETED.
16. EXISTING OR NEWLY DAMAGED AND/OR DISPLACED CONCRETE CURB, GUTTER, SIDEWALK, OR DRIVEWAY SLAB THAT IS WITHIN THE RIGHT-OF-WAY SHALL BE REPAIRED OR REPLACED, AS NOTED BY CITY INSPECTORS, BEFORE FINAL ACCEPTANCE OF THE WORK.
17. THE ENGINEERING DESIGN ON THESE PLANS IS ONLY APPROVED BY THE CITY IN SCOPE AND NOT IN DETAIL. CONSTRUCTION QUANTITIES ON THESE PLANS ARE NOT VERIFIED BY THE CITY. APPROVAL OF THESE PLANS ARE FOR PERMIT PURPOSES ONLY AND SHALL NOT PREVENT THE CITY FROM REQUIRING CORRECTION OF ERRORS IN THE PLANS WHERE SUCH ERRORS ARE SUBSEQUENTLY FOUND TO BE IN VIOLATION OF ANY LAW, ORDINANCE, HEALTH, SAFETY, OR OTHER DESIGN ISSUES.
18. THE CITY OF PHOENIX POLICE DEPARTMENT ENFORCES LAWS REGULATING THE OPERATION OF COMMERCIAL VEHICLES. THIS INCLUDES ENFORCEMENT OF FEDERAL, STATE, COUNTY AND LOCAL LAWS AND ORDINANCES. QUESTIONS REGARDING COMMERCIAL VEHICLE ENFORCEMENT MAY BE DIRECTED TO THE COMMERCIAL VEHICLE ENFORCEMENT SUPERVISOR AT (602) 495-7813 (TRAFFIC BUREAU SOUTH) OR (602) 495-6784 (TRAFFIC BUREAU NORTH).
19. PLAN APPROVAL IS VALID FOR 180 DAYS. PRIOR TO PLAN APPROVAL EXPIRATION, ALL ASSOCIATED PERMITS SHALL BE PURCHASED OR THE PLANS SHALL BE RE-EXTENDED FOR EXTENSION OF PLAN APPROVAL. THE EXPIRATION, EXTENSION, AND REINSTATEMENT OF CIVIL ENGINEERING PLANS AND PERMITS SHALL FOLLOW THE SAME GUIDELINES AS THOSE INDICATED IN THE PHOENIX BUILDING CONSTRUCTION CODE ADMINISTRATIVE PROVISIONS SECTION 105.3 FOR BUILDING PERMITS.

### SAFETY NOTE TO THE CONTRACTOR

IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL SOLELY AND COMPLETELY BE RESPONSIBLE FOR THE CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THEIR WORK. THE REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE DUTY OF THE ENGINEER TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES IN, ON, OR NEAR THE CONSTRUCTION SITE.

### ENGINEER'S NOTE TO CONTRACTOR

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS, ARE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS AND WE ASSUME NO RESPONSIBILITY AS TO THE ACCURACY OR THEIR DEPICTED LOCATION ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ALL OTHER LINES NOTE OF RECORD OR NOT SHOWN ON THESE PLANS BY VERIFICATION OF THEIR LOCATION IN THE FIELD PRIOR TO THE INVESTIGATION OF THE ACTUAL PORTION OF THEIR WORK ATTRIBUTED TO THEIR LOCATION.

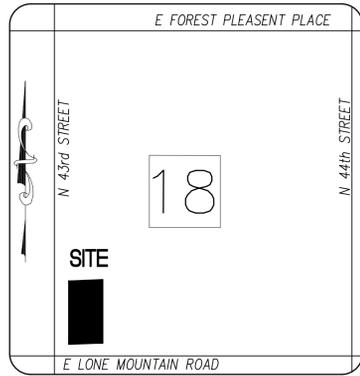
"Per City of Phoenix Ordinance G-4396, these plans are for official use only and may not be shown with others except as required for the construction of the public works facilities shown hereon. The Project Owner, and the Owner's Lenders, Consultants, Contractors and Subcontractors are prohibited from disclosing the plans and specifications to any persons other than those who have a need to know the information for the Project."

### AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE "RECORD DRAWING" MEASUREMENTS AS SHOWN HEREON WERE MADE UNDER MY SUPERVISION OR AS NOTED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED ENGINEER / LAND SURVEYOR \_\_\_\_\_ DATE \_\_\_\_\_

REGISTRATION NUMBER \_\_\_\_\_



T 5 N - R 4 E  
**VICINITY MAP**  
(NOT TO SCALE)

### LEGEND

- FOUND REBAR
- FOUND BRASS CAP
- (P) RECORD BEARING / DISTANCE
- (M) MEASURED BEARING / DISTANCE
- MCR MARICOPA COUNTY RECORDER
- SEWER CLEANOUT
- ⊙ SANITARY SEWER MANHOLE
- CABLE TV BOX
- ☎ TELEPHONE
- Ⓜ GAS METER
- ⚓ WATER METER
- ✉ MAIL BOX
- Ⓜ ELECTRIC BOX/METER
- FENCE (TYPE AS NOTED)
- X84.2 SPOT ELEVATION (ADD 1300)
- 🍊 CITRUS
- 🌴 PALM
- ☀️ ARBORVITAE
- 🌵 CACTUS

### FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

COMMUNITY NUMBER	PANEL #	SUFFIX	DATE OF FIRM	FIRM ZONE	BASE FLOOD ELEVATION (In AO Zone, Use Depth)
040129	0890	L	10/16/13	X	NA

A FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) ELEVATION CERTIFICATION BASED ON FINISHED CONSTRUCTION MUST BE REVIEWED AND APPROVED BY FLOOD MANAGEMENT FORE EACH NEW AND SUBSTANTIAL IMPROVEMENT STRUCTURE CONSTRUCTED IN A SPECIAL FLOOD HAZARD AREA (SFHA) PRIOR TO ISSUING A CERTIFICATE OF OCCUPANCY. A COPY OF THE ELEVATION CERTIFICATION MUST BE SUBMITTED TO THE GENERAL AND STRUCTURAL INSPECTOR.

SITE IS IN A SPECIAL FLOOD HAZARD AREA: NO  
 OFFSITE FLOWS AFFECT THIS SITE: NO  
 RETENTION PROVIDED FOR 100YR 2HR STORM EVENT: YES  
 EXTREME STORM OUTFALLS THE SITE AT THE ELEVATION OF 1872.00

### UTILITY COORDINATION

COMPANY	CONTACT
ELECTRIC (APS)	AL BAIZEL (602) 236-6203
CATV & FIBER OPTICS (COX COMMUNICATIONS)	GWENDALYN GARCIA (623) 328-3554
SEWER (CITY OF PHOENIX)	GARY GRIFFIN (602) 261-8363
WATER (CITY OF PHOENIX)	GARY GRIFFIN (602) 261-8363
COAXIAL & FIBER OPTICS (QWEST)	CONFLICT LIASON (602) 630-0492
NATURAL GAS (SOUTHWEST GAS)	LEITH HOHNS (602) 484-5017

### LEGAL DESCRIPTION

THE WEST HALF OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 18, TOWNSHIP 5 NORTH, RANGE 4 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA;

EXCEPT THE SOUTH 33 FEET;

AND EXCEPT THAT PORTION DESCRIBED IN DOCUMENT NO. 96-0583899, MARICOPA COUNTY RECORDER.

### PROJECT DATA

APN: 211-36-003B  
 ADDRESS: 4302 EAST LONE MOUNTAIN ROAD  
 CAVE CREEK, ARIZONA, 85331  
 LOT SIZE: 184,477 SqFt (4.23 ACRES)  
 ZONING: S-1 (CURRENT)  
 R-3 (PROPOSED)

LOT COVERAGE: 59,787/184,477 SqFt (32.4%)

EARTHWORK CALCS:  
 TOTAL CUT TBA  
 TOTAL FILL TBA  
 NET TBA Cu. Yd. (EXPORT)

\* APPROXIMATE TOTALS, NOT FOR BID  
 - GRADING CONTRACTOR TO VERIFY  
 - S.S.E. MAKES NO ASSURANCES AS TO THE FINAL EARTHWORK QUANTITIES

### ENGINEERING NOTES:

1. TOPOGRAPHIC/BOUNDARY SURVEY WAS DONE BY OTHERS, S S E MAKES NO ASSURANCES TO THE ACCURACY OF CONTOURS, BOUNDARY LOCATIONS, OR EASEMENT LOCATIONS WITHIN SAID SURVEY.
2. THE BUILDING SETBACKS, ENVELOPE AND LOT COVERAGE ARE SHOWN PER THE ZONING DISTRICT. SETBACKS AND OTHER RESTRICTIONS CREATED BY AMENDED STANDARDS OR COVENANTS MAY BE APPLICABLE. FINAL INTERPRETATION IS THE RESPONSIBILITY OF THE OWNER OF SAID PROPERTY AND THE CORRESPONDING GOVERNMENTAL AGENCY OVERSEEING SAID PROPERTY.
3. WATERMAIN AND SEWER LOCATIONS ARE BASED ON INFORMATION PROVIDED BY THE TOPOGRAPHIC/BOUNDARY AND MONUMENTS FOUND IN THE FIELD MAY NOT BE EXACT. CONTRACTOR TO VERIFY ACTUAL SIZES, LOCATIONS AND TYPES OF ALL UTILITIES PRIOR TO CONSTRUCTION.
4. CONTRACTOR TO ENSURE POSITIVE DRAINAGE FROM BUILDING FOUNDATION FOR A MINIMUM OF 5% SLOPE FOR 10 FEET, NOTIFY ENGINEER OF ANY DISCREPANCIES.
5. ALL COMPACTION, EXCAVATION AND BACK FILL SHALL BE DONE IN ACCORDANCE WITH GEOTECHNICAL REPORT OR AT MINIMUM A 95% COMPACTION RATE IS REQUIRES PER ASTM D698.

### PROPOSED SCOPE OF WORK

1. CONSTRUCTION OF 24,047 SqFt BUILDING PER BUILDING PLAN SET
2. CONSTRUCTION OF PAVED DRIVEWAY AND PARKING AREA PER BUILDING PLAN SET
3. CONSTRUCTION OF ON-SITE RETENTION BASIN PER GRADING & PLAN

### RETENTION CALCULATIONS

RETENTION VOLUME REQUIRED	PRE VS POST	RETENTION VOLUME REQUIRED	FIRST FLUSH
$V_r = C \cdot (P/12) \cdot A$	WHERE: V = VOLUME REQUIRED C = RUNOFF COEFFICIENT P = 100 YR-2HR INTENSITY OF RAINFALL, INCHES A = AREA IN SQFT	$V_r = C \cdot (P/12) \cdot A$	WHERE: V = VOLUME REQUIRED C = RUNOFF COEFFICIENT P = FIRST FLUSH OF RAINFALL, INCHES A = AREA IN SQFT
$V_r = (0.47)(2.60/12)(184,477)$		$V_r = (0.60)(0.50/12)(184,477)$	$V_r = 4,687$ CF
$V_r = 19,091$ CF (Pre-Agricultural Area)			
$V_r = (0.60)(2.60/12)(184,477)$			
$V_r = 24,372$ CF (Post-Multi-Family)			
TOTAL $V_r = 5,180$ CF			

TOTAL RETENTION VOLUME PROVIDED
$V_p = 9,736$ CF
AS-BUILT VOLUME $V =$ _____ CF

### ENGINEER

S S E  
 11826 NORTH WINCHESTER DRIVE  
 FOUNTAIN HILLS, ARIZONA 85268  
 SSEAZ@Cox.Net  
 PRINCIPLE: STEVE SEITZ  
 PROJECT MANAGER: CLINT SCHERF (480) 225-4920

### SURVEYOR

PEW LAND SURVEYING, LLC  
 P.O. BOX 18211  
 FOUNTAIN HILLS, AZ 85269  
 (480) 239-1807

SURVEY DATE: 4/26/14

### BENCHMARK (COP DATUM)

BRASS CAP IN A HAND HOLE AT THE INTERSECTION OF 44TH STREET AND LONE MOUNTAIN ROAD MARKING THE SOUTH QUARTER CORNER OF SECTION 18, T. 5 N., R. 4 E. HAVING AN ELEVATION OF 1881.01 FEET CITY OF PHOENIX DATUM '29 NGVD

### SHEET INDEX

1. COVER SHEET
2. GRADING AND DRAINAGE PLAN

### NOTICE TO CONTRACTORS:

THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "BLUE STAKE" AT 1-800-STAKE IT (1-800-782-5348) OR 602-263-1100 TWO WORKING DAYS PRIOR TO ANY EXCAVATION OR CONSTRUCTION. FIELD VERIFY UTILITY LOCATIONS.

### SETBACKS

FRONT: 0'  
 REAR: 0'  
 SIDE: 0'

### OWNERS

GREEN THUMB NURSERY, LLC  
 PRINCIPALS: JEFFERY & LAURA MAY  
 4302 EAST LONE MOUNTAIN ROAD  
 CAVE CREEK, ARIZONA 85331

DESCRIPTION	DATE
PRELIMINARY DRAFT	05/14/14
FIRST DRAFT - CITY OF PHOENIX SUBMITTAL	5/28/14
REVISED DRAFT - CITY OF PHOENIX SUBMITTAL	06/25/14
REVISED DRAFT - CITY OF PHOENIX SUBMITTAL	10/01/14
REVISED DRAFT - CITY OF PHOENIX SUBMITTAL	10/25/17

SSEAZ@COX.NET  
 (480) 225-4920

CIVIL - STRUCTURAL

RESIDENTIAL - COMMERCIAL

1826 NORTH WINCHESTER DRIVE  
 FOUNTAIN HILLS, ARIZONA 85268

PRELIMINARY COPY

NOT FOR CONSTRUCTION

PROJECT MANAGER: CLINT SCHERF (480) 225-4920

CALL TWO WORKING DAYS BEFORE YOU DIG  
 CALL FOR THE BLUESTAKES  
 263-1100  
 BLUE STAKE CENTER  
 CALL COLLECT

### APPROVAL STAMP

KIVA # .  
 CRPR # .  
 Q.S. .

SCALE: N.T.S.

PROJECT No. SSE-330-2014

SHEET: C 1 of 02

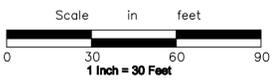
PARCEL A.P.N. 211-36-003B

GRADING PLAN  
 COVER SHEET  
 FOR  
 4302 EAST LONE MOUNTAIN ROAD  
 PHOENIX, ARIZONA

# GRADING and DRAINAGE PLAN

## LONE MOUNTAIN SENIOR LIVING FACILITY, MULTI-FAMILY RESIDENTIAL CONSTRUCTION

LOCATED IN THE NORTHEAST QUARTER OF SECTION 18, TOWNSHIP 5 NORTH, RANGE 4 EAST  
OF THE GILA AND SALT RIVER BASELINE AND MERIDIAN, MARICOPA COUNTY, ARIZONA



*This Preliminary Grading & Drainage Plan is a conceptual schematic of the calculated 100-yr storm event run-off and what proposed on-site accommodations will be implemented within the development plan.*

**\*\* Reference conceptual site plan for on-site landscape schematic \*\***

On-Site Retention			
Pre-Development			
Composite 'C' Factor		100-yr, 24Hr	
A =	187,477	Sq.Ft.	
	4.30	Ac.	
$C_w = \frac{\sum (C_i \cdot A)}{\sum A}$			
Description	Area	C <sub>i</sub>	C <sub>i</sub> * A
HardScape	8,000	0.95	7,600
Landscape	179,477	0.45	80,765
	187,477	C <sub>w</sub> =	0.47 88,365
Vol req = $A * D * (C \text{ post} - C \text{ pre})$		12	
Drainage Area	A =	187,477	Sq.Ft.
100-yr, 2-Hr Rainfall Depth	D =	2.6	in
Roughness Coefficient	C <sub>w</sub> =	0.47	0.471
Volume Required =		19,145.67 Cu.Ft.	
Post-Development			
Composite 'C' Factor		100-yr, 24Hr	
A =	187,477	Sq.Ft.	
	4.30	Ac.	
$C_w = \frac{\sum (C_i \cdot A)}{\sum A}$			
Description	Area	C <sub>i</sub>	C <sub>i</sub> * A
HardScape	95,466	0.95	90,693
Landscape	92,011	0.45	41,405
	187,477	C <sub>w</sub> =	0.70 132,098
Vol req = $A * D * (C \text{ post} - C \text{ pre})$		12	
Drainage Area	A =	187,477	Sq.Ft.
100-yr, 2-Hr Rainfall Depth	D =	2.6	in
Roughness Coefficient	C <sub>w</sub> =	0.70	0.705
(Post) Volume Required =		28,621.16 Cu.Ft.	
(Pre) Volume Required =		19,145.67 Cu.Ft.	
Volume Required =		9,475.48 Cu.Ft.	

RETENTION BASIN CALCULATION SUMMARY (100-YR, 2-HR)			
<b>RETENTION REQUIRED</b>			
City of Phoenix Drainage Standards - First Flush			
VOL <sub>REQ</sub>		12	
Per City Req'ts	Drainage Area	A =	187,477 Sq.Ft.
Per City Req'ts	100-yr, 1-hr Rainfall Depth	D =	0.50 in.
Per City Req'ts	Roughness Coefficient	C <sub>w</sub> =	0.70
<b>VOLUME RETENTION REQUIRED</b>		<b>5,504 Cu.Ft.</b>	
<b>RETENTION REQUIRED</b>			
City of Phoenix Drainage Standards - Pre vs Post			
VOL <sub>REQ</sub>		12	
<b>Pre</b>			
Per City Req'ts	Drainage Area	A =	187,477 Sq.Ft.
Per City Req'ts	100-yr, 1-hr Rainfall Depth	D =	2.60 in.
Per City Req'ts	Roughness Coefficient	C <sub>w</sub> =	0.47
<b>Post</b>			
Per City Req'ts	Drainage Area	A =	187,477 Sq.Ft.
Per City Req'ts	100-yr, 1-hr Rainfall Depth	D =	2.60 in.
Per City Req'ts	Roughness Coefficient	C <sub>w</sub> =	0.70
<b>VOLUME RETENTION REQUIRED</b>		<b>9,475 Cu.Ft.</b>	
<b>RETENTION PROVIDED</b>			
RE - A	Ft	Area (Sq.Ft.)	Ave Area/Depth
DEPTH =	0	57252	(Cu.Ft.) Vol/Depth
	0.25	42662	12489.25 (Cu.Ft.)
<b>VOLUME RETENTION PROVIDED</b>		<b>12,489 Cu.Ft.</b>	
<b>Summary of Individual Onsite Retention</b>			
Volume Provided			
Retention Bas in A		12,489 Cu.Ft.	
<b>TOTAL Provided:</b>		<b>12,489 Cu.Ft. Adequate Retention</b>	
<b>32% CONSERVITY</b>			

### CONSTRUCTION NOTES/QUANTITIES

NO.	DESCRIPTION	QNTY	UNITS
①	CONSTRUCT ADDITION TO RESIDENCE PER ARCHITECTURAL PLAN SET	59,787	SF
②	CONSTRUCT RETENTION BASIN W/ 10:1 SIDE SLOPES	12,489	CUFT
③	INSTALL PAVING,	29,967	SF
④	INSTALL CONCRETE SIDEWALK,	5,257	SF
⑤	INSTALL WALKING PATH PER ARCHITECTURAL PLAN SET	5,499	SF
⑥	SAWCUTT MIN 2" EXISTING PAVEMENT AND REPLACE WITH LIKE MATERIAL	976	LF
⑦	INSTALL CURB & GUTTER PER C.O.S. STD. DET.	976	LF
⑧	INSTALL CONCRETE SIDEWALK PER C.O.S. STD. DET.	976	LF
⑨	INSTALL CONCRETE DRIVEWAY PER C.O.S. STD. DET.	2	EA
⑩	INSTALL PED RAMP PER C.O.S. STD. DET.	2	EA
⑪	DRAINAGE OPENINGS	3	EA
⑫	MATCH EXISTING GRADE OR ELEVATION AS SHOWN		
EARTHWORK		CUT	TBA CuYd
		FILL	TBA CuYd

CALL TWO WORKING DAYS BEFORE YOU DIG  
CALL FOR THE BLUESTAKES  
263-1100  
BLUE STAKE CENTER  
CALL COLLECT

DSN	DESCRIPTION	DATE
CBS	PRELIMINARY DRAFT	05/14/14
CBS	FIRST DRAFT - CITY OF PHOENIX SUBMITTAL	05/28/14
CBS	REVISED DRAFT - CITY OF PHOENIX SUBMITTAL	06/25/14
CBS	REVISED DRAFT - CITY OF PHOENIX SUBMITTAL	10/01/14
CBS	REVISED DRAFT - CITY OF PHOENIX SUBMITTAL	10/25/17

**CIVIL - STRUCTURAL**

**SSS**

**RESIDENTIAL - COMMERCIAL**

1828 NORTH WINCHESTER DRIVE  
MOUNTAIN HILLS, ARIZONA 85269

PRELIMINARY COPY

**NOT FOR CONSTRUCTION**

PROJECT MANAGER: CLINT SCHERF (480) 225-4920

**GRADING PLAN**

FOR  
4302 EAST LONE MOUNTAIN ROAD  
PHOENIX, ARIZONA

SCALE: 1" = 10'

PROJECT No. SSE-330-2014

SHEET: C 2 of 02

PARCEL A.P.N. 211-36-003B

PROJECT INFO - PLEASE CONTACT PROJECT MANAGER CLINT SCHERF (480) 225-4920

CIVIL ENGINEER 55LAZ@COX.NET (480) 225-4920

PROJECT MANAGER: CLINT SCHERF (480) 225-4920

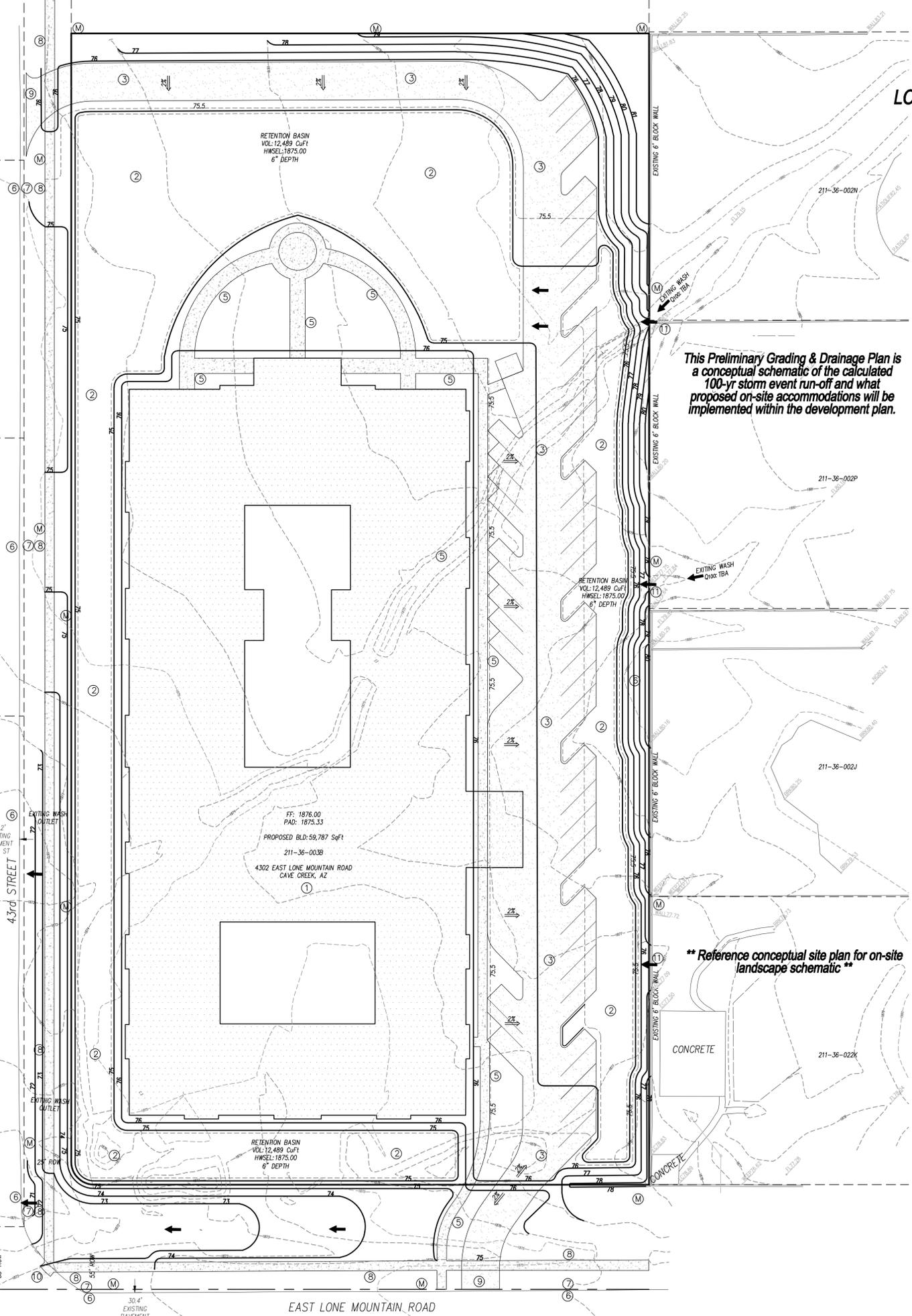
PROJECT MANAGER: CLINT SCHERF (480) 225-4920

211-36-005E

211-36-005K

211-36-005L

211-36-005M



23.2' EXISTING PAVEMENT 43rd ST

30' ROW

30' 4" EXISTING PAVEMENT

EAST LONE MOUNTAIN ROAD

CONCRETE

CONCRETE

RETENTION BASIN  
VOL: 12,489 CuFt  
HWSEL: 1875.00  
6" DEPTH

RETENTION BASIN  
VOL: 12,489 CuFt  
HWSEL: 1875.00  
6" DEPTH

FF: 1876.00  
PAD: 1875.33  
PROPOSED BLD: 59,787 SqFt  
211-36-003B  
4302 EAST LONE MOUNTAIN ROAD  
CAVE CREEK, AZ