

AVALLEA

CITY OF MARICOPA, ARIZONA

MASTER PLANNED DEVELOPMENT





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MASTER PLANNED DEVELOPMENT

REVISED: JUNE 5, 2006
REVISED: MARCH 6, 2006
NOVEMBER 30, 2005



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COMMUNITY

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EXECUTIVE SUMMARY

A. EXECUTIVE SUMMARY

Avalea is an approximately 2,179 acre proposed Master Planned Development (MPD) currently located in unincorporated Pinal County. Although currently within the County, it is the intent of the property owner(s) to request annexation into the City of Maricopa prior to approval of this MPD document. The subject property falls within the City of Maricopa General Planning Area with designated land uses of Commercial and Master Planned Community, respectively. The proposed MPD will provide the flexibility necessary for the development to mature according to changing demographic and market trends expected over the life of the project. This application would effectively replace the equivalent zoning previously entitled through Pinal County under Planned Area Development (PAD) cases PZ-PD-042-98 (Ak-Chin) and PZ-PD-012-03 (Scott Farms).

Avalea constitutes the interaction of four separate land use philosophies, active adult residential, progressive neighborhood residential, commercial/retail and transitional uses, designed to produce a combined Master Planned Development greater than the sum of its parts. Avalea also represents the evolution of an extensive project visioning and community theming process conducted by the master development team. Three separate homebuilders, each possessing their own unique culture and design philosophy, with a common objective in creating a strong sense of community. This shared focus commences with the design of a comprehensive trail system, linking each neighborhood to community-wide open spaces, schools, recreation centers, public facilities and ultimately dining and retail venues. The overall vision of the MPD is to create a community wholly unique to the area, incorporate the

various goals and objectives of the City of Maricopa General Plan and serve as a guide for the balanced, sustainable development of Avalea.

As discussed earlier, a major, community-wide, and ultimately regional trail system will connect many of the major amenities throughout the development. Improvements proposed to the existing infrastructure relating to transportation and overall circulation is also needed to support the continued development of the surrounding area. Ingress and egress into Avalea will initially be oriented from SR 347 (West). Additional major access points will be provided at the Steen and Porter Road intersection (East) as well as the Farrell and Smith Road intersection (North). Careful consideration of the Ak-Chin Indian Community has resulted in several adjustments to the master plan including the minor connection proposed at Peters and Nall (South) in an effort to de-emphasize its usage. Connectivity is also proposed into adjacent development to the Southeast in order to promote unrestricted access from that community to school facilities located in Avalea. Lastly, a series of collector roads are intended to provide access to the individual neighborhoods throughout the MPD.

This comprehensive document is organized into four major sections with supporting appendices. These sections include a review of the site's location, regional context and the physical characteristics of the site (site analysis), the proposed master plan elements and the community development standards and design guidelines. This PAD will be the governing document in case of conflict between newly adopted City ordinances and the guidelines established in this PAD.



B. MASTER DEVELOPERS

This Master Planned Development (MPD) is a proposed master planned community by Shea Homes, Fulton Homes, and Standard Pacific Homes and Shea Trilogy, the active adult division of Shea Homes, acting as Managing Partner for this Development

Shea Homes has been building homes for over 40 years and has recently been named “America’s Best Builder” for 2005. Shea Homes has a predominant place in the Phoenix metropolitan market with their successful master planned communities such as Seville, located in Gilbert, and their Active Adult Communities like Trilogy at Power Ranch and Trilogy at Vistancia in Peoria. Shea Homes is the master developer of Vistancia which is a 7,200 acre master planned community. Shea Homes unique community design that consisted of a three and a half mile trail system that interlinks the entire community, a family water park with three pools, quality housing product, and two championship golf courses, all led to Vistancia being named the “Best Master Planned Community” in 2005 by the National Association of Homebuilders.

Fulton Homes has been building quality homes in the Phoenix metropolitan area for over 30 years. They are one of Arizona’s largest builders. Fulton Homes is a locally owned builder that builds family-oriented communities with an emphasis on family and community. Where many home builders aim for the minimum standards, Fulton Homes designs their neighborhoods with a predominant community theme, including more amenities and open space than is typically found in residential subdivisions. On February 25, 2005, Fulton Homes unveiled their 520-acre lake-based, “lifestyle village” at Fulton Ranch in Chandler that combines residential

and cleverly selected retail/commercial properties with pedestrian access, lush landscaping and distinctive architecture. Neighborhood amenities include shopping, entertainment, dining, parks, recreations, and lakes. Beyond the traditional “cookie-cutter” subdivision, Fulton Homes creates a community “you’re proud to own.”

In 1965 Standard Pacific Homes started building the companies first subdivisions in Southern California. Since the beginning, the Company appreciated the importance of community and embraced the significance of our craft. Today, with divisions in 31 metro markets in California, Florida, Arizona, the Carolinas, Texas, Colorado and Nevada, Standard Pacific is one of the nation’s largest and most succesful homebuilding companies with shares traded on the New York Stock Exchange. As the Company has grown and matured through the years, we are proud of the strong brand and solid reputation for excellence in homebuilding that our customers and peers associate with the name Standard Pacific.

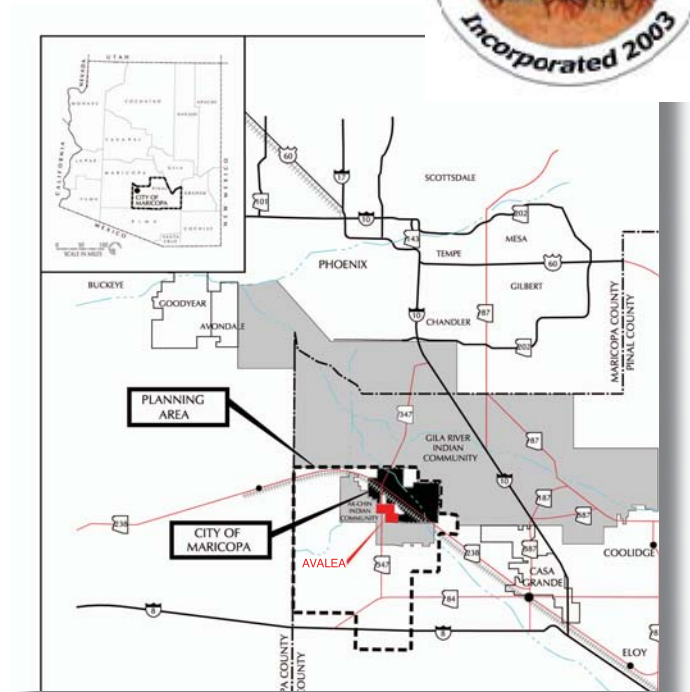
The 200 acres located at the northwest corner of the project is owned by Pantano. Pantano is not a developer, it is a real estate investment group that is joint ventured with Vestar Development in a collaborative effort on the 120 acre commercial portion. In addition, they are currently working with other potential end users for the balance of the Transitional area.

Together these homebuilders represent the Master Development Team, promising a diverse, highly amenitized, master planned community that will reflect these same high standards within the City of Maricopa and establish a new standard for quality community development.



SECTION
1.0

REGIONAL CONTEXT



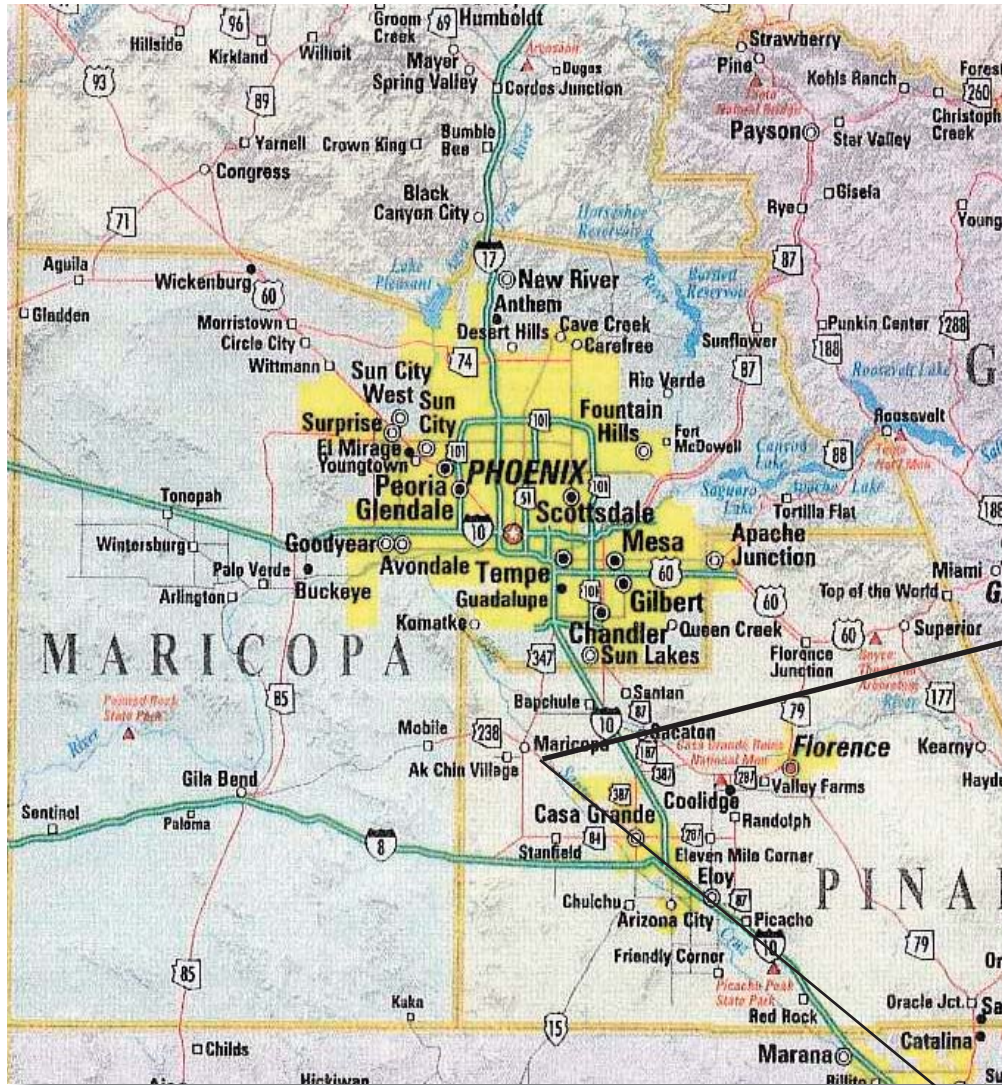
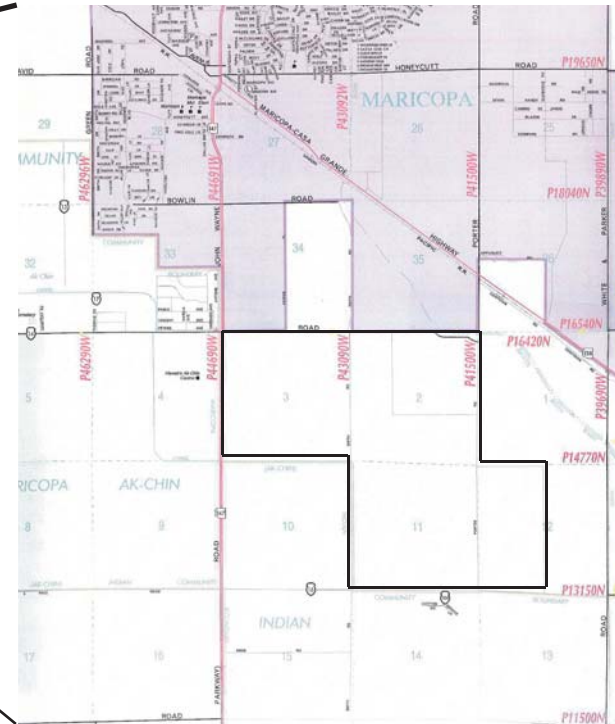


FIGURE 1: VICINITY MAP

A. SITE LOCATION & REGIONAL VICINITY

Avalea is located two miles south of the City of Maricopa along the John Wayne Parkway (SR347). In the last few years, the City of Maricopa has seen an incredible amount of growth because of its close proximity to the Phoenix metropolitan area as well as nearby Casa Grande. The land surrounding the project site is vacant or agricultural land. The Ak-Chin Indian Community is located West and South of the project site. There are several new subdivisions and master planned communities near Avalea, both planned and under construction as shown in Figure 1: Vicinity Map. This site is generally bounded by John Wayne Parkway on the West, Peters & Nall Road on the South, Porter Road along the Northeast half, White and Parker Road one-half mile to the east and Farrell Road on the North and combined contains approximately 2,179 gross acres.

Regional transportation to the project site is provided in the North-South direction by John Wayne Parkway (SR347) located adjacent to the West boundary of the project and connects with Interstate 10 approximately 16 miles to the North, Interstate 8 to the south and the Casa Grande-Maricopa Highway to the northeast.



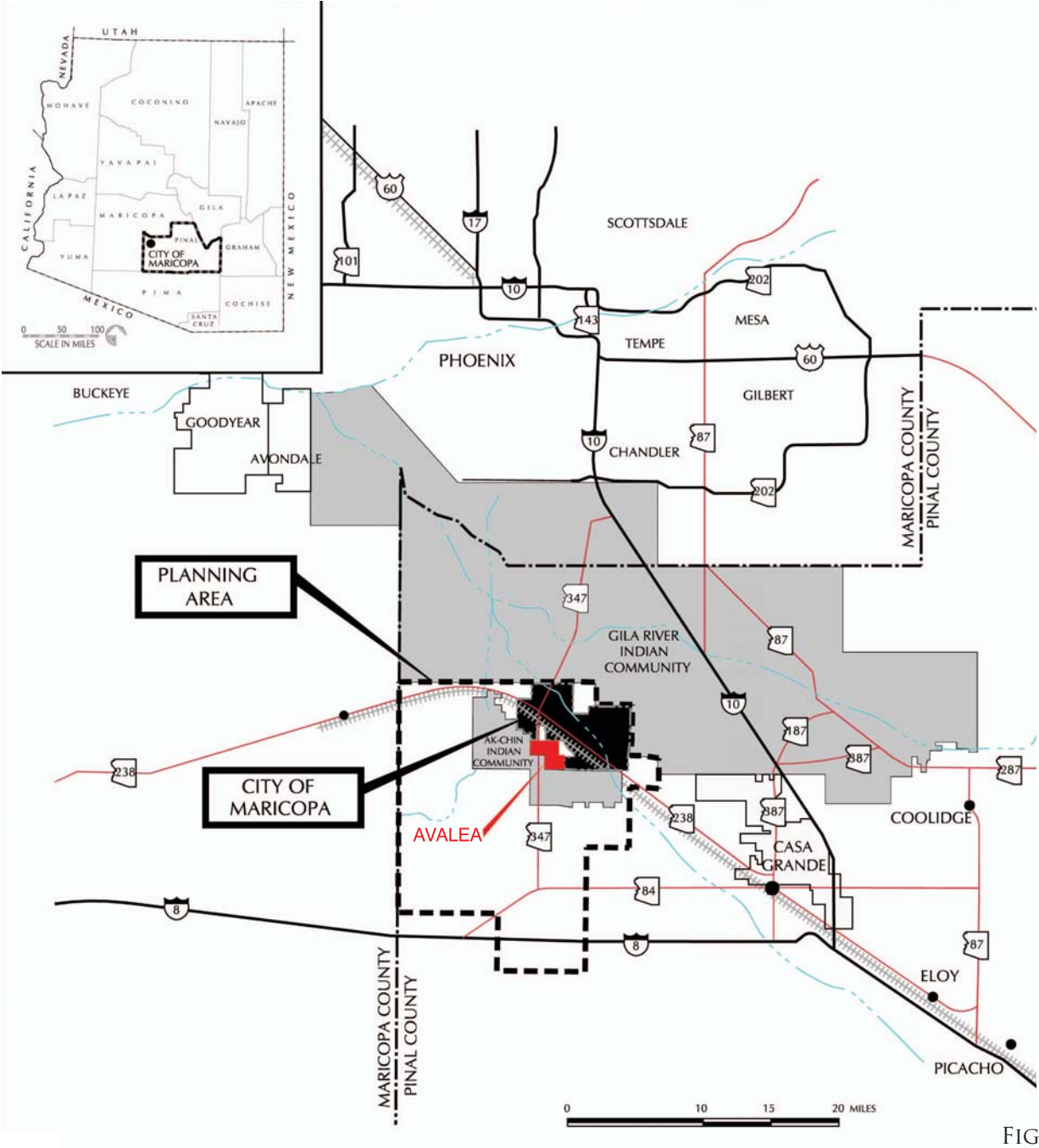
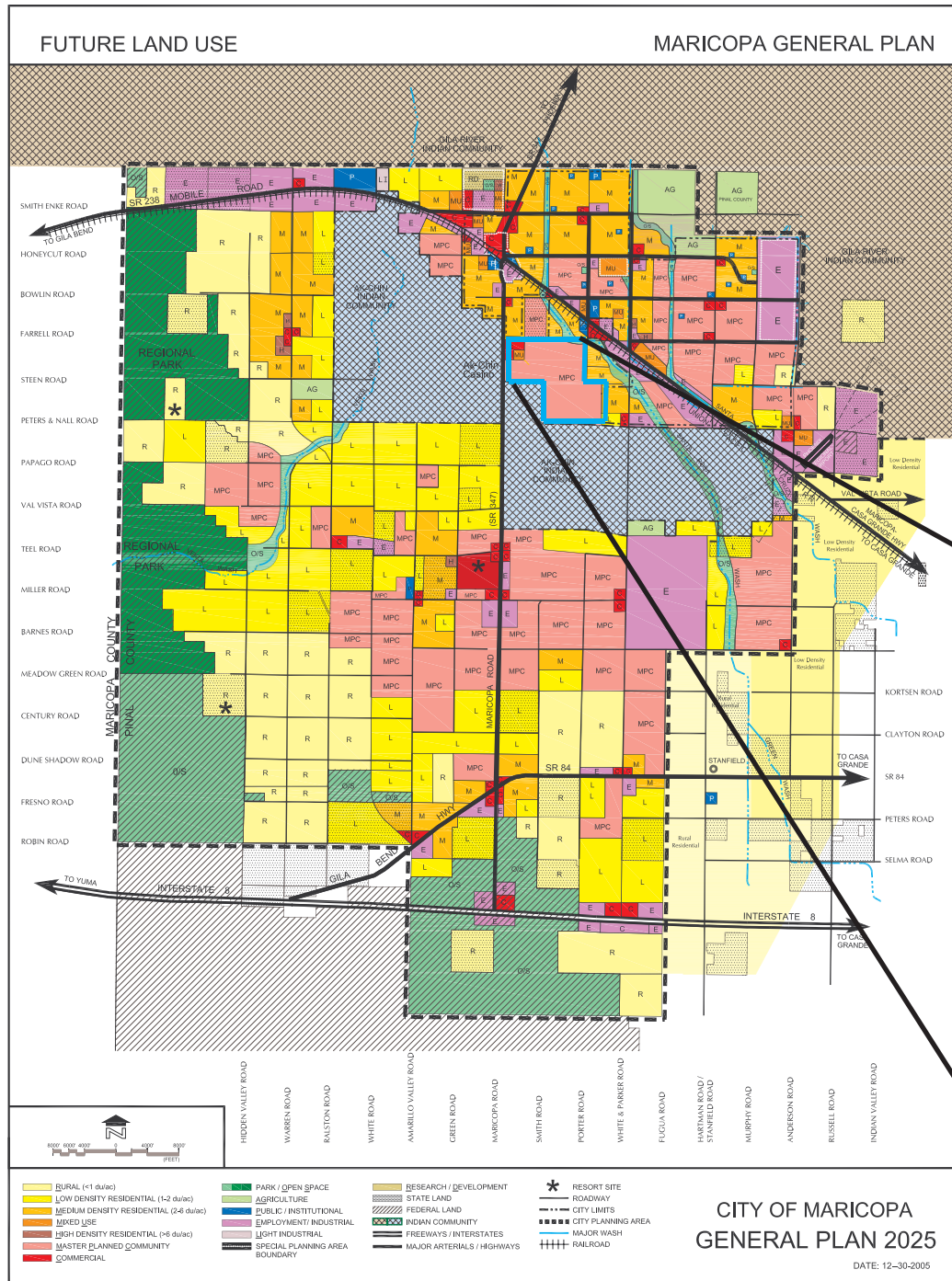


FIGURE 2: REGIONAL VICINITY MAP

B. MUNICIPAL BOUNDARIES

The Avalea property is approximately two miles south of the City of Maricopa. A companion application to annex the property will be processed concurrently the MPD. Figure 2: Regional Vicinity Map shows the location of Avalea in relation to the various existing local and county jurisdictions. With the continued growth trends within the City of Maricopa, Avalea will provide numerous benefits to the City in the form of major improvements to the City’s infrastructure such as: transportation corridors, school sites, water and sewer improvements, community parks and in integrated trail system, and commercial areas. With over 2,000 acres of developable land, this is a truly unique and compelling opportunity to create a master planned community that will compliment the current City growth and development objectives.



C. CITY OF MARICOPA GENERAL PLAN

The City of Maricopa adopted their first General Plan on January 17, 2006 (Figure 3). Although the subject property lies outside of the current City limits of Maricopa, Avalea falls within the City of Maricopa General Planning Area with designated land uses of Commercial and Master Planned Community. The overall proposed maximum density of 3.9 dwelling units per net acre, with a maximum of 7,452 units, is within the allowed density range of 3-4 dwelling units per acre and the land use polices of the City of Maricopa General Plan. Upon approval by the City Council, Avalea will be developed in conformance with the standards as outlined in this MPD.

The Maricopa General Plan

MPC - Master Planned Community
 Purpose: The Master Planned Community designation provides for large-scale (500 acres or more) master planned developments that include a mix variety of residential products, including larger lots and smaller, attached housing, along with supporting commercial and employment land uses. Residential areas are to include adequate open space, schools, churches and neighborhood facilities. Overlay zoning in conjunction with comprehensive site planning provide for supporting infrastructure. MPC developments are expected to provide off-site infrastructure enhancements as necessary to offset development impacts including needed roadway, bridge and sewerage capacity. Single-family densities should be 3.0 to 4.0 dwelling per acre. Overall densities for all residential dwellings in MPCs can range from 3.0 to 10.0 dwelling units per acre.

C - Commercial
 Purpose: Individual shopping, of which most architecture supported in this district.

L - Light Industrial
 Purpose: for the development of office space, transportation, existing adjacent.

R&D - Research and Development
 Purpose: variety of a include that Research and creating a wo

E - Employment
 Purpose: accommodate commercial, warehousing, expanded, or Employment manufacture

The Maricopa General Plan

City of Maricopa General Plan 2006
 Adopted January 17, 2006

D. General Plan Purpose

Our Vision for the Year 2025:
 The City of Maricopa is known as "a community with a heart" and a commitment for taking care of its people, its land, and all our resources. Maricopa offers educational excellence, is family-oriented with safe neighborhoods and many recreational and cultural opportunities. A strong business community is anchored by a diverse employment base that provides a balance between housing and jobs. Our City has a unique, small-town feel, reflective of its agricultural roots and western heritage.

The Maricopa General Plan



FIGURE 3: CITY OF MARICOPA FUTURE LAND USE PLAN



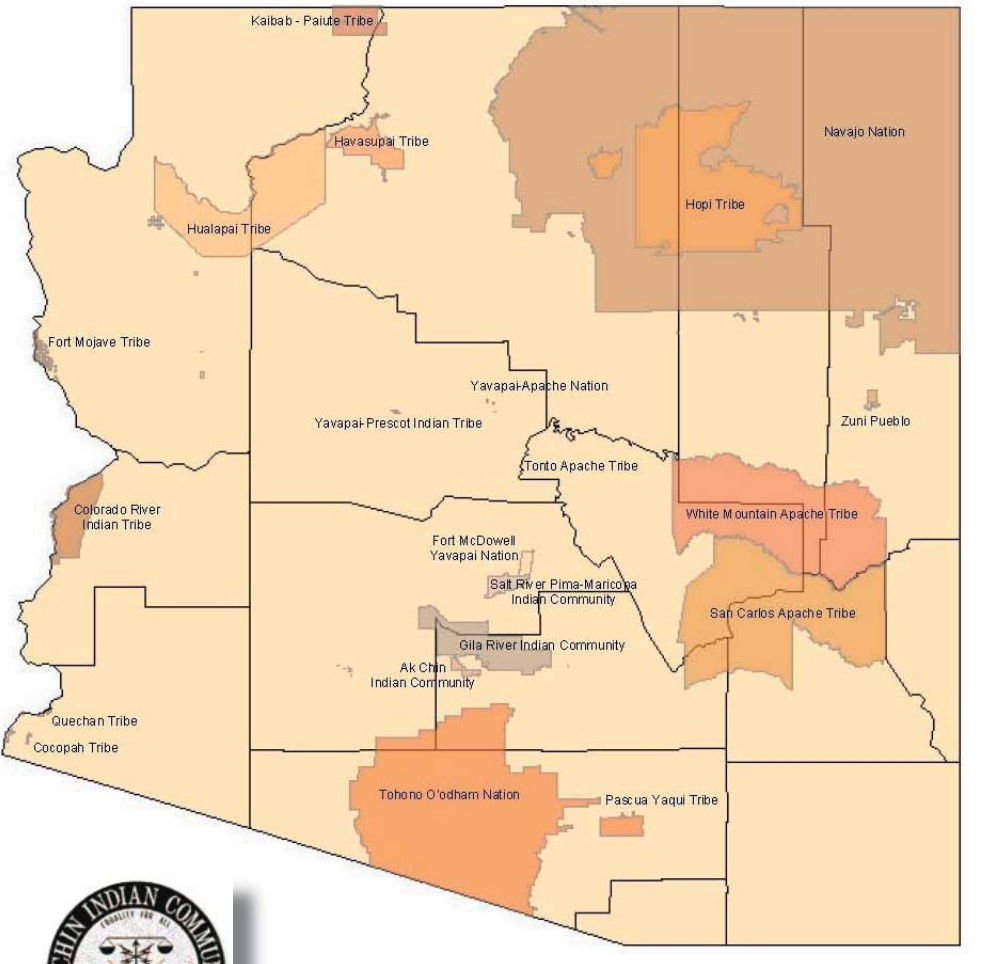


FIGURE 4: AK-CHIN INDIAN COMMUNITY

D. OTHER REGIONAL LAND USE IMPACTS

AK-CHIN INDIAN COMMUNITY

The Ak-Chin Indian Community lies adjacent to the southern and western borders of the Avalea community. The Development Team has met with the Ak-Chin Indian Community to discuss regional land use impacts such as traffic and drainage issues. The Ak-Chin community has indicated their preference for Peters and Nall Road to remain a minor roadway and that they prefer that the main entrances to the Avalea community not be placed along this road. The Development team will continue working with the Ak-Chin Community to address this issue. In addition, there are significant flows that will impact the Avalea community from the south. An existing drainage channel that borders the site could possibly overtop the channel during a 100-year storm event. The Development Team will work closely with the Ak-Chin Indian Community and the City of Maricopa to redesign the channel, which will benefit both the Avalea community and the Ak-Chin Indian Community.

A Brief History of the Ak-Chin Indian Community:

The Ak-Chin Indian Community was created in May of 1912 and formally recognized under the Indian Reorganization Act of 1934. The community is comprised of two different tribes, Tohono O’odham (Papago) and Pima. Tucked away into the Santa Cruz Valley of Southern Arizona, the Community resides 58 miles south of Phoenix, and 43 miles northwest of the Casa Grande Ruins National Monument. It is in the Northwestern part of Pinal County and sits on almost 22,000 acres of land.

After 20 years of negotiations, the United States Government approved water rights in 1984 to provide for the delivery of 75,000 acre feet of permanent water. This allows for the Community to become more self efficient in employing within the tribe and providing food such as corn, beans and squash from their crops.

The Ak-Chin Community is quickly increasing in population, nearly doubling in size since 1990. For this reason the Community has fully employed a Fire and Law enforcement agency, Elementary, Middle and High School, a bank, and fully equipped health clinic.

OTHER PLANNED COMMUNITIES

There are several other existing and planned communities within five miles of Avalea. Immediately adjacent to the east is the proposed community of Daltessa and adjacent to the north are the proposed communities of Santa Rosa Springs, El Rancho Santa Rosa and Palo Brea. Other communities include Eagle Shadow, San Travasa, Alterra, Dunn Ranch, Homestead, and many more.

Santa Cruz Water Company and Palo Verde Utilities Company
Water and Wastewater CC&N with 387 Water and Wastewater Improvement
District Acquisition Area filed with the Arizona Corporation Commission June 2005

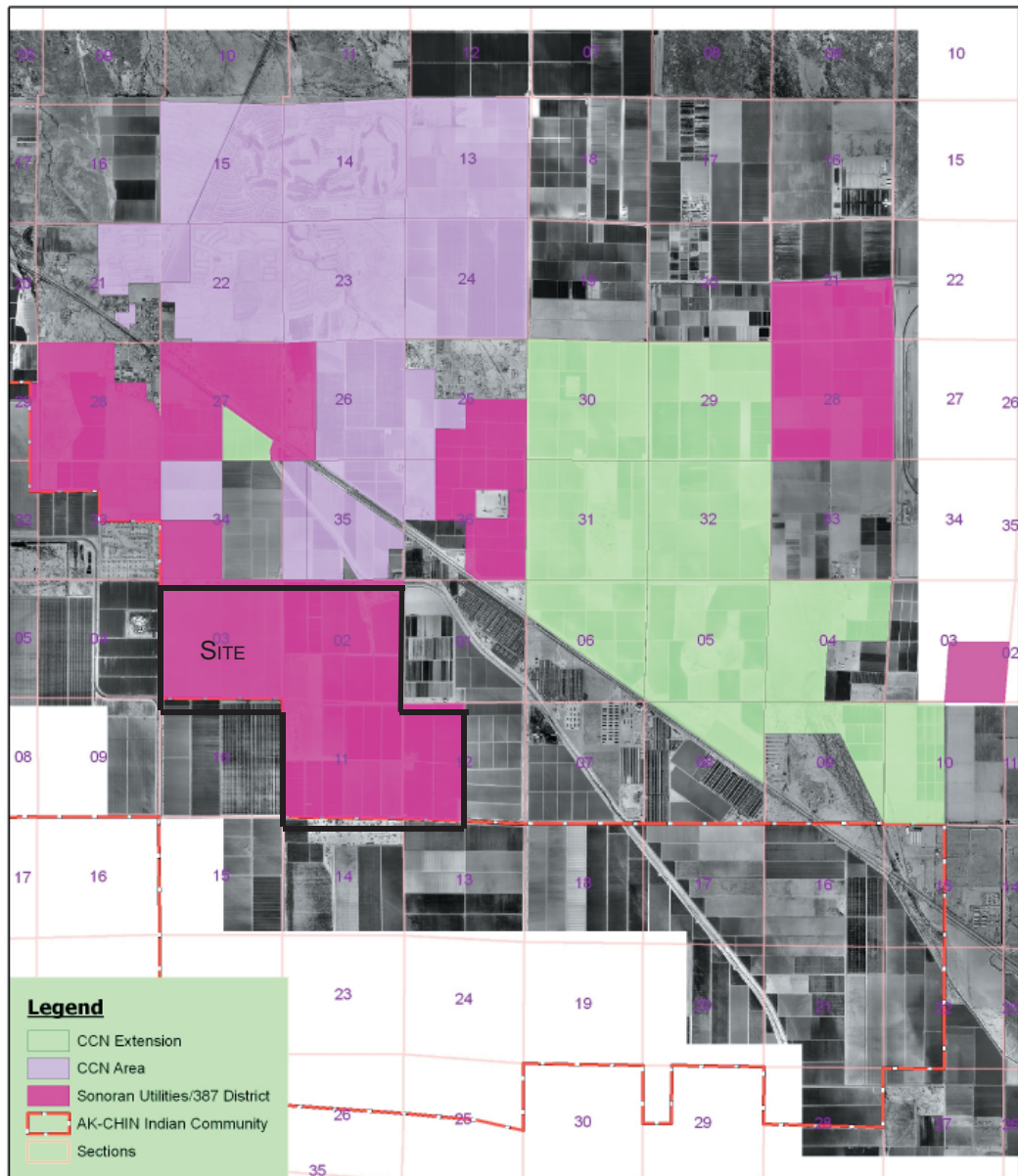


FIGURE 5: GLOBAL UTILITIES CCN MAP

E. PUBLIC UTILITIES AND SERVICES

Utilities and services will be provided for Avalea as shown below:

WATER, SEWER, AND RECLAIMED WATER:

A CC&N expansion was filed in June 2005, by Global Water that included acquisition of the Sonoran Utilities/387 District where this project lies. This process takes approximately nine months to complete. Global Water will be the provider for water and sewer services for this community as well as providing reclaimed water for the landscape irrigation in several open space areas and the golf course.

GAS:

Gas service for Avalea would be provided by Southwest Gas.

ELECTRICAL SERVICE:

Avalea is within the Electrical District 3 (ED3) service area.

TELEPHONE & CABLE:

Telephone service could be provided by Qwest Communications. Cable services could be provided by Orbital Communications or other local providers.

FIRE & POLICE PROTECTION:

Currently, the City of Maricopa contracts with the Pinal County Sheriff's Department for police protection. Fire protection is furnished by the Maricopa Fire District.

SOLID WASTE HANDLING:

Solid waste would be contracted by a private hauler. Waste Management is one of the providers for this area that could provide service for this project.

SCHOOLS:

Avalea is entirely within the Maricopa Unified School District. The Development Team understands that the development of Avalea will place additional demands on school enrollment. To ensure that those additional demands are met, the land plan for Avalea includes two 18-acre school sites that can be donated to the Maricopa Unified School District.



SECTION
2.0

EXISTING CONDITIONS



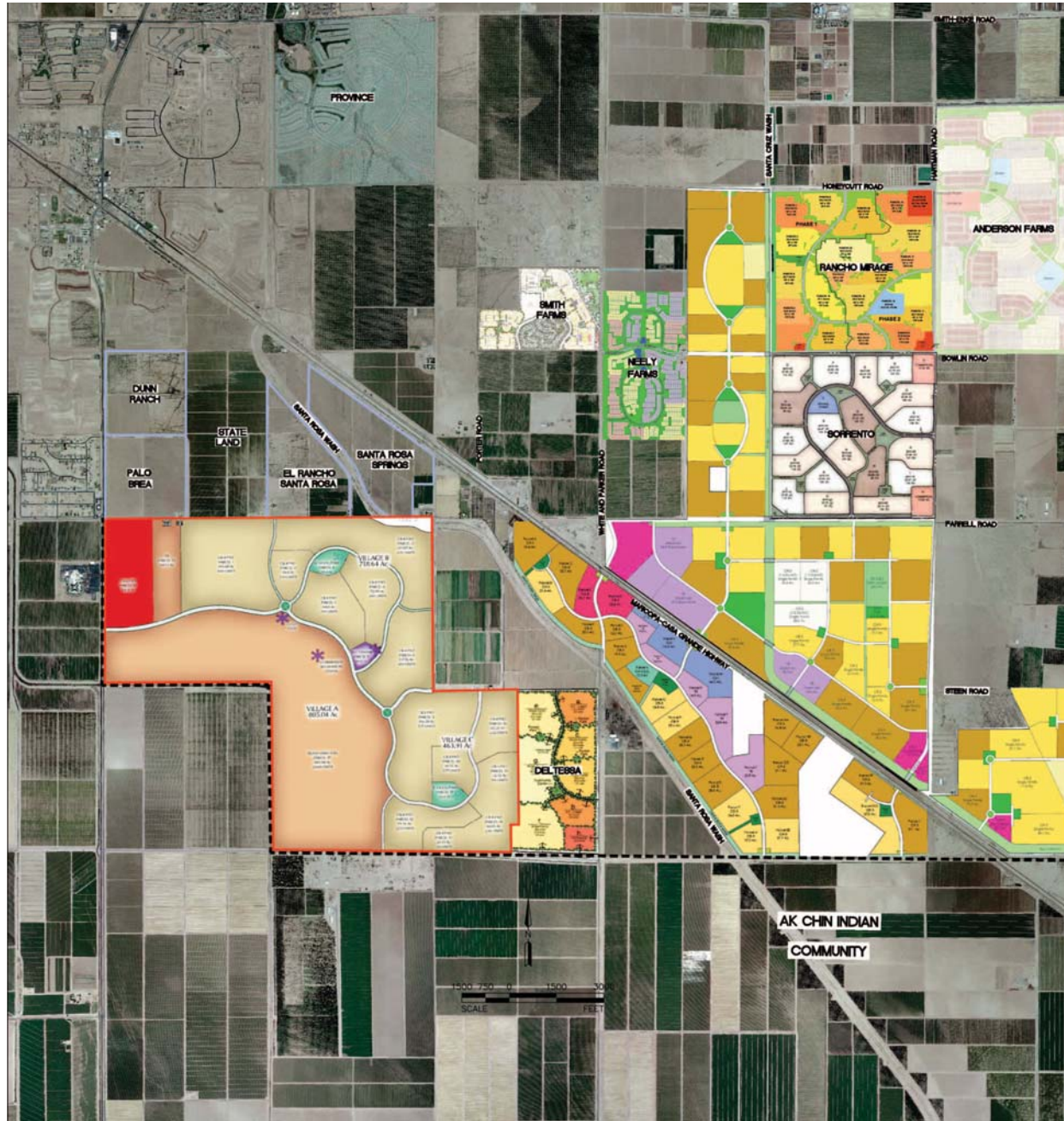


FIGURE 7: AREA MAP

A. PROPERTY LEGAL DESCRIPTION

The project is located in Township 5 South, Range 3 East, Sections 2, 3, 11, and a portion of Section 12. The project is an irregularly shaped property, generally bounded by John Wayne Parkway (SR 347) on the West, Peters and Nall Road on the South, Porter Road along the Northeast half, one-half mile east of White and Parker Road and Farrell Road to the North. A metes and bounds legal description can be found in Appendix A.

B. SURROUNDING PROPERTY OWNERSHIP

The property immediately adjacent to the south and western border of the property is part of the Ak-Chin Indian Community. Immediately adjacent to the north are the future Santa Rosa Springs, El Rancho Santa Rosa and Palo Brea proposed communities. Immediately adjacent the east along Porter Road is a sod farm owned by the Smith family and adjacent to the southeastern border is the future Daltessa community.

C. EXISTING LAND USE / ENTITLEMENT

Currently, the property is agricultural land and is zoned under two separate cases in Pinal County. The Ak-Chin Project is an existing Planned Area Development (PAD) that was zoned under Case Nos. PZ-042-98 and PZ-PD-042-98 and approved on November 4, 1998 along with a development agreement. Adjacent and immediately to the east of The Ak-Chin Project is the existing Planned Area Development for Scott Farms that was zoned under Case Nos. PZ-012-03 and PZ-PD-012-03 and approved on September 8, 2003. The combined zoning of these projects is PAD with CR-1, CR-2, CR-3, CR-4, SR, CB-1 and CB-2 overlay.





D. VEGETATION AND WILDLIFE

A Biological Evaluation of the site was performed by SWCA Environmental Consultants in October, 2005. Objectives of this BE are to: 1) describe vegetation communities in the project area, and 2) evaluate habitat suitability for both federally listed and special status species. The project area consists of agricultural fields, and disturbed and undisturbed native desert. No natural caves, adits, or mine features are depicted on the United States Geological Survey map, and none were observed during field reconnaissance.

Habitat suitability and impact determinations for special species were based on a qualitative comparison between the habitat requirements of each species and habitats found in the project area. Based on the evaluation by SWCA, at this time there are no endangered, threatened, proposed threatened plants or animals are known to occur regularly within the project area. It is not likely that the proposed project will have an effect on any federally listed species or their habitat. However, the lead permitting agency has the authority and final decision on whether or not to require species-specific surveys for any protected species. Complete details of the Biological Evaluation can be found in the report prepared by SWCA Environmental Consultants: Biological Evaluation of the 2,202-acre Maricopa Parcel Near Maricopa, Pinal County, Arizona Project No. 10299-123 Task BE, dated October 7, 2005.



Figure 1. General location of the project area.

E. CULTURAL RESOURCES

A Cultural Resources Survey of the site was performed by SWCA Environmental Consultants on January 2006. Two archaeological sites and 38 isolated artifact occurrences were identified within the project area; however, based on the findings, SWCA has recommended that no further archaeological work is proposed for this project area unless previously undocumented cultural resources are exposed during development of the project area. Complete details of the survey and findings can be found the report prepared by SWCA Environmental Consultants: A Cultral Resources Survey 2002 Acres Near Maricopa, Pinal County, Arizona, Project No. 10304-017, dated January 2006.

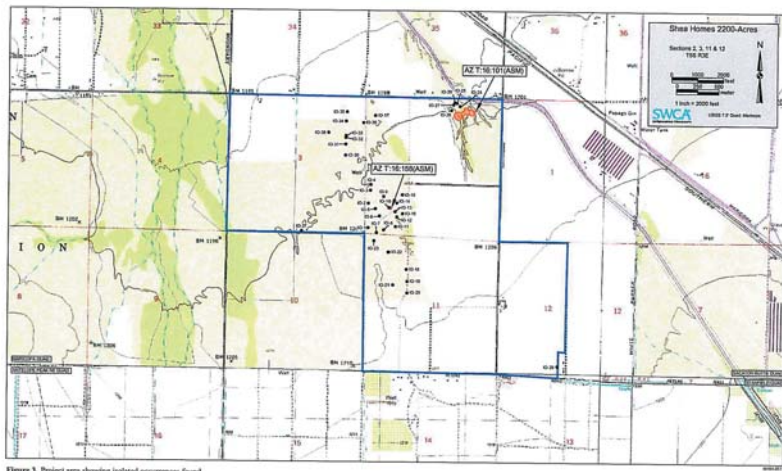


Figure 2. Project area showing isolated occurrences found.

FIGURE 8: MAPS FROM CULTURAL RESOURCES STUDY

F. TOPOGRAPHY AND DRAINAGE

The existing topography of Avalea is relatively flat farmland that drains to the north and northwest. There are two washes that impact the project. Santa Rosa Wash traverses through the project site at the northeast corner of Section 2 located at the intersection of Farrell Road and Porter Road. This wash conveys runoff in a northwesterly direction through a dip section across Porter Road.

The second wash (Smith Wash) traverses northerly along the west side of Section 11 and then turns westerly along the south side of Section 3. This wash aligns with Smith Road along the west side of Section 11, and thus will be known as Smith Wash. Smith Wash conveys runoff from south of the project through the Ak-Chin Indian Community and outlets to the west side of SR 347 through existing box culverts.

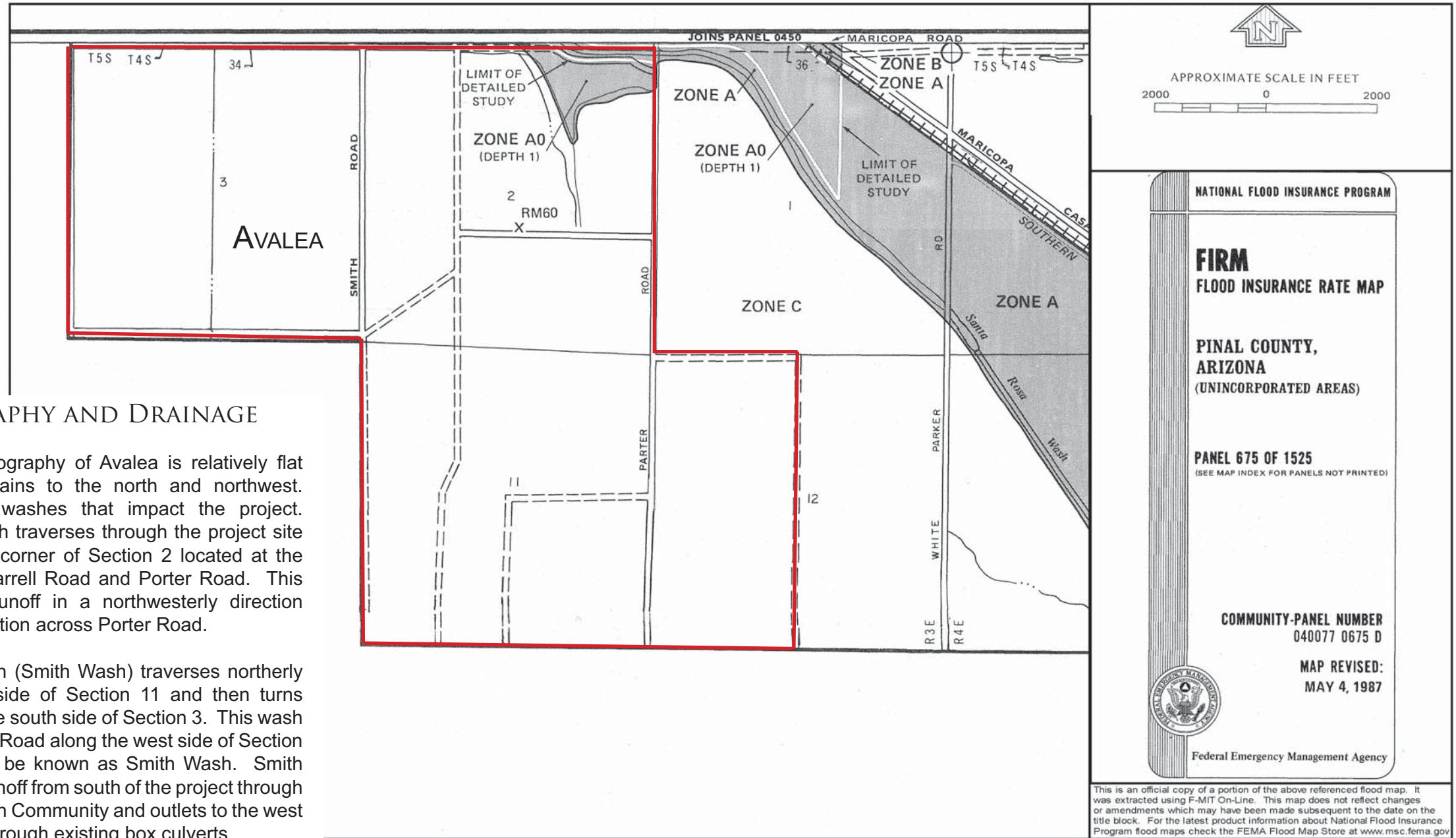
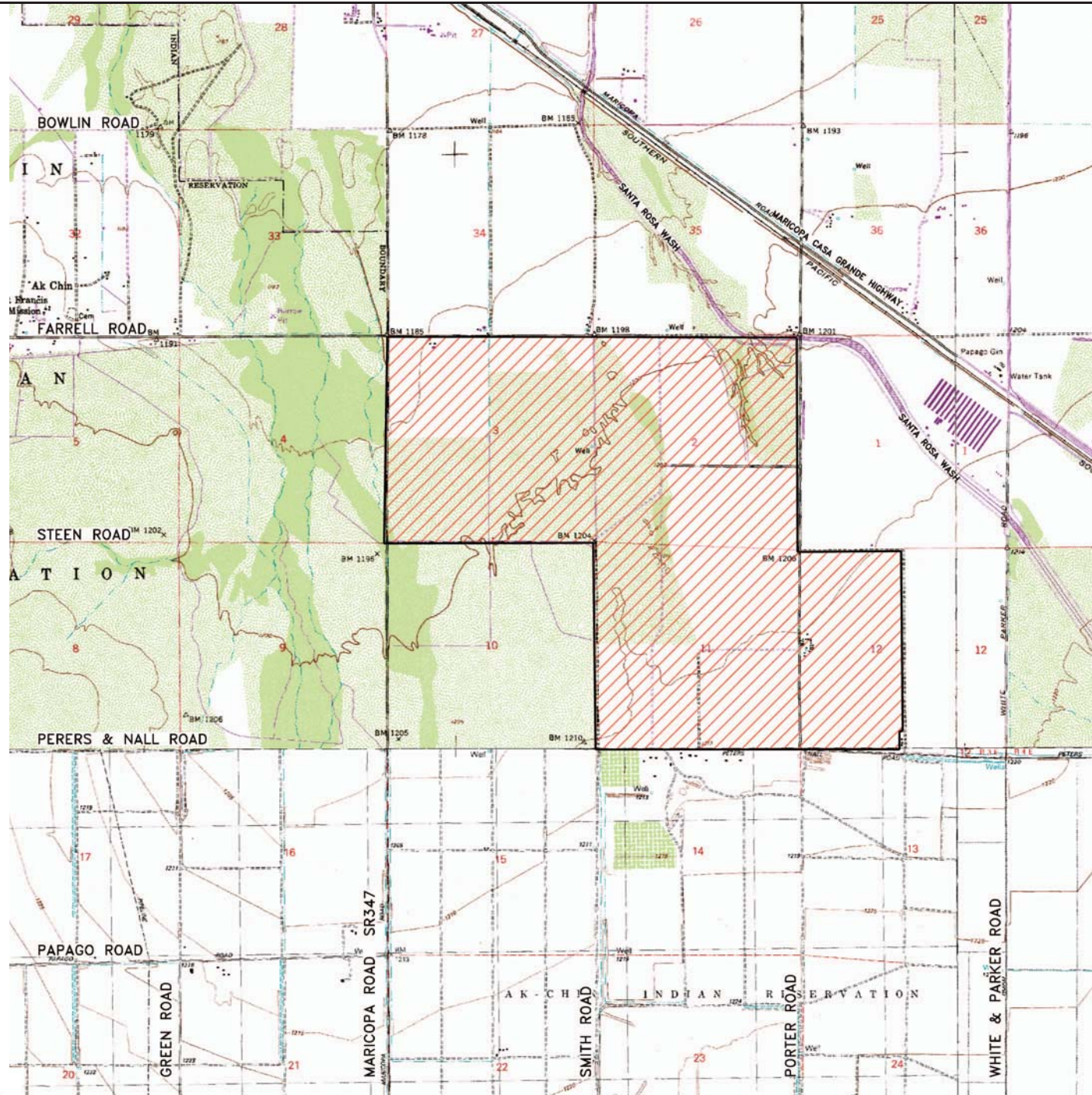


FIGURE 9: FEMA FIRM MAP



A portion of the northeast corner of Section 2 currently lies within FEMA flood zone AO. This area is in a flood zone AO, mainly because of the elevated irrigation canal along Farrell Road. Excess storm water runoff generated by the project site are conveyed northerly via sheet flow and eventually become “trapped” behind the irrigation canal creating a ponding condition. Flood zone AO is defined by FEMA as areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined. Because this area of the project is within a floodplain, a LOMR will be required to remove the flood plain.

FIGURE 10: USGS MAP

SECTION
3.0

COMMUNITY DEVELOPMENT



Master Planned Community (MPC)
City of Maricopa General Plan

“The Master Planned community designation provides for large-scale (160-acres or more) master planned developments that include a true variety of residential products, including larger lots and smaller, attached housing, along with supporting commercial and employment land uses. Residential areas are to include adequate open space, schools, churches, and neighborhood facilities. Overlay zoning in combination with comprehensive site planning provide for supporting infrastructure. MPC developments are expected to provide off-site infrastructure enhancements as necessary to offset development impacts including needed roadway, bridge and overpass capacity. Single-family densities should be 3.0 to 5.0 dwellings per acre. Overall densities for all residential dwellings in MPCs can range from 3.0 to 10.0 dwelling units per acre.”



A. COMMUNITY CHARACTER

The Avalea Master Planned Development will be composed of a mixture of residential housing styles, supporting retail and/or employment, and commercial uses along with active and passive amenity areas. The master plan for Avalea implements an innovative approach to land planning that encourages land use diversification and flexibility in site design by proposing a variation in the lot development standards and densities. This will ensure diversity in housing opportunities and create a remarkable community for the City of Maricopa and future residents of Avalea. The intent is to create a highly amenitized, mixed-use, mixed-density master planned community by promoting sustainability through the addition of business and/or retail opportunities. The development of Avalea will provide a pedestrian friendly community that provides accessibility to services, recreational amenities, commercial opportunities and offer a range of housing types and neighborhoods.

To create a well-planned development that supports the community goals for a more diverse and livable community, Avalea will focus on several defining elements to ensure overall design compatibility to the area. In particular, the following elements will be utilized to establish the Community's character:

- Locate land uses to create transitions from less intensive to more intensive uses in a logical and complementary manner.
- Each individual builder has multiple development areas that are integrated with each of the other builder's development areas throughout the entire project, creating greater diversity in housing.
- Use of shape, colors, material selections, craftsmanship, and decorative details for commercial building design and architectural themes.
- Maximize opportunities for exposure to community open spaces and amenities.
- Thoughtfully planned to encourage pedestrian and non-motorized vehicular use while fully integrating the overall community.
- Beautifully landscaped areas master-planned with careful consideration to location, species, design, and placement.
- Well thought out open space amenity areas using location, variety, and design concepts.
- Community signage and entry monumentation implementing location, design concepts, colors, and materials to create a unique sense of place within the community.
- Streetscapes that include perimeter walls, view fences, and landscaping thoughtfully placed to maximize exposure of open space and common areas and to minimize impeding neighborhood integration.

Through these design elements, the theme of Avalea will be integrated with the unique characteristics of the area, providing a place for residents to enjoy.

COMMUNITY DEVELOPMENT



GREY|PICKETT
MARCH 2, 2006

FIGURE 11: CONCEPTUAL ILLUSTRATIVE MASTER LAND USE PLAN



B. PROJECT OVERVIEW / COMMUNITY MASTER PLAN

The master planned community of Avalea will be comprised of four distinct components; Active Adult Residential, Progressive Neighborhood Residential, Commercial/Retail, and a Transitional area that could include multi-family residential, retail, or business opportunities. Each of these four distinguished land use philosophies are briefly outlined in the Executive Summary and further characterized below. The Conceptual Master Plan (Figure 11 left) identifies the location of these four land use categories.

ACTIVE ADULT RESIDENTIAL

A dynamic element of this community that separates itself from other, more traditional, developments is the presence of Trilogy, an exclusive, highly amenitized active adult, resort-style golf community designed to attract and accommodate the needs of an expanding baby boomer population.

PROGRESSIVE NEIGHBORHOOD RESIDENTIAL

The Progressive Neighborhood Development is intended to categorize/separate the family builder portion of the community from the active adult (Trilogy) segment as opposed to using the “traditional” term. For the community as a whole to be considered progressive as opposed to multi-generational, Progressive also relates to the land use at Avalea, ranging from high intensity residential to medium and low density usage. An paralleling this land use definition, Avalea offers a progression of economic housing choices with first-time, move-up and executive products available within the same community.

COMMERCIAL/RETAIL

A regional commercial center is located at the Northwest corner of Avalea along SR 347 which will bring a needed retail presence and provide employment opportunities to the rapidly developing area.

TRANSITIONAL

Transitional uses are proposed adjacent to the commercial element in an effort to buffer and transition the intensity of development into residential neighborhoods. This category has the potential for higher density uses, which not only provide the necessary buffer between the commercial and residential areas but provides the intensity that drives commercial/retail. Uses within the transitional areas could include; single-family detached, single-family attached, townhomes, cluster, z-lots, courtyard homes, as well as retail and employment opportunities, hospital/medical facilities, restaurant/lounge and resort facilities.

C. PROPOSED LAND USE PLAN

Avalea is envisioned to be a mixed-use development that offers both residential and commercial areas. The Development Team is committed to providing a cohesive, integrated design suitable for this area. The proposed land use plan strives to provide an appropriate balance of land uses within the community by placing employment/commercial use at the southeast corner of John Wayne Parkway (SR347) and Farrell Road transitioning to the surrounding residential development. Residents will benefit from the variety of home types that fit a diverse range of lifestyles, infrastructure that is efficiently utilized and close proximity to retail services and recreation. Additionally, the community is designed to be visually appealing through the use of curvilinear streetscapes, centrally located amenity areas, appropriately placed open space and tot lots, view corridors into open space areas, landscaped medians, and pedestrian pathways.

Avalea plans to integrate a wide variety of residential products both attached and detached into smaller areas to avoid the typical production subdivision appearance widely seen in suburban Arizona today. The Avalea MPD offers a blended mix of residential housing types which may include executive homes, courtyard style homes, cluster homes, alley loaded homes, twin homes, townhomes, condominiums, and apartments. Flexibility is the key component to the successful integration of these housing products and to achieve a density balance in order to create a sustainable great community.

The Avalea MPD proposes a maximum number of residential units for each specific development area identified on the Land Use Summary Table, page 31. Within each development area specific zoning categories have been established by parcel with development standards and density ranges. As each parcel is developed the unit count will be determined through the platting process, but the maximum number of units and density will not be exceeded within each development area. This will allow the flexibility to blend housing products and create well designed sustainable neighborhoods to meet the future needs of the Avalea residents.

In order to accomplish the diversity sought by the City, the Avalea Master Planned Development proposes a deviation from the City’s development standards. These standards have been created to accommodate the special nature of the active adult community and in response to the market conditions by the residential home builders. The minor deviations to the current development standards are outlined in Table 1 and Table 2 on the following pages. The Conceptual Land Use Plan (Figure 11, left) is consistent with the City of Maricopa General Plan and proposes 7,452 residential units.



C.1 RESIDENTIAL LAND USES

Avalea is “above and beyond” the normal residential community, providing a unique community with consistent design standards that includes the element of the Shea Trilogy Adult Community and the regional commercial development. Avalea contains distinct architecture, upgraded landscaping, clubhouses, tour centers and restaurants contained in the residential portions of the project. The Avalea Master Planned Development proposes the following Residential Land Uses; CR-2, CR-3, CR-4, CR-5, TR, which are described more fully below.

SINGLE-RESIDENCE ZONE (CR-2):

The CR-2 District is intended to provide for large lots that range in size from 11,000 sf and larger and typically include luxury and executive homes.

SINGLE RESIDENCE ZONE (CR-3):

The CR-3 District is intended to provide for lots that range in size from 5,500 sf and up. Within this land use are three lot standards, each with individual minimum development criteria intended to provide variety and diversity throughout the community. Each Developer will have the option to develop their parcels within this designation with lots of varying widths. This land use category allows for more traditional single-family detached homes.

SINGLE & MULTIPLE RESIDENCE ZONE - TRILOGY (CR-4 & CR-5):

The CR-3 and CR-4 Districts for Trilogy has been developed specifically for the Trilogy community where densities and setbacks are designed with no standard fencing throughout the residential neighborhoods. Traditional residential lots for Trilogy will range in size from 5,000 sf up and a higher intensity product from 3,000 sf and up. Within the CR-3 category are three lot sizes, each with separate minimum development criteria intended to provide variety and diversity throughout the community with lots of varying widths. This land use category allows for more traditional single-family detached homes. Higher intensity uses are allowed within the TR category that allows for a mixture of traditional single-family detached homes as well as duplex, alley-loaded, cluster homes, and z-lots.

MULTIPLE RESIDENCE ZONE (CR-4):

The CR-4 District is intended to provide for lots that range in size from 4,000 sf and up. This land use category allows for a mixture of traditional single-family detached homes as well as duplex, alley-loaded, cluster homes, courtyard homes, and z-lots. The product targeted for this category provides more options for a growing segment of the market, that of the empty nesters, single-parents, and career oriented singles and couples that are looking for a more traditional detached home with the maintenance free convenience of a townhome or condo.

MULTIPLE RESIDENCE ZONE (CR-5):

The CR-5 District is intended to provide for lots that are less than 4,000 sf. This land use category allows for a mixture of traditional single-family detached homes as well as duplex, alley-loaded, cluster homes, courtyard homes, and z-lots providing more housing options for a growing segment of the market. Preliminary information indicated that smaller homes that offer reduced yard maintenance and a strong neighborhood character would be appealing to young professionals, married couples and young families as well as move-down buyers such as empty nesters and retirees.



TABLE 1: PROGRESSIVE NEIGHBORHOOD RESIDENTIAL DISTRICT STANDARDS

Zoning District	MIN. LOT AREA (SF)		MINIMUM LOT WIDTH		MAX. BLDG. HEIGHT		MINIMUM YARD SETBACKS							MAXIMUM LOT COVERAGE		PROPOSED NET DENSITY RANGE (DU/AC)
							FRONT FACE OF GARAGE TO BACK OF CURB	SIDE ENTRY GARAGE, PORCH OR LIVABLE SPACE ⁽¹⁰⁾	SIDE		REAR					
	CITY REQUIRED	PAD PROPOSED	CITY REQUIRED	PAD PROPOSED	CITY REQUIRED	PAD PROPOSED			PAD PROPOSED	CITY REQUIRED	PAD PROPOSED	CITY REQUIRED	PAD PROPOSED	CITY REQUIRED	PAD PROPOSED	
CR-2 ⁽²⁾⁽³⁾⁽⁶⁾	12,000	11,000	60'	80'	30'	35'	25'	20'	15'	10' / 10'	5' / 10'	25'	25'	--	45%	1.5 - 3.0
CR-3 ⁽²⁾⁽⁴⁾⁽⁶⁾	7,000	9,500	60'	70'	30'	35'	20'	20'	15'	8' / 8'	5' / 10'	25'	20'	40%	45%	3.0 - 5.0
CR-3 ⁽²⁾⁽⁴⁾⁽⁶⁾	7,000	7,500	60'	60'	30'	35'	20'	20'	15'	8' / 8'	5' / 8'	25'	20'	40%	48%	3.0 - 5.0
CR-3 ⁽²⁾⁽⁴⁾⁽⁶⁾	7,000	5,500	60'	48'	30'	35'	20'	18'	12'	8' / 8'	5' / 8'	25'	15'	40%	50%	3.0 - 5.0
CR-4 ⁽⁷⁾⁽⁹⁾	7,000	4,000	60'	NA	30'	40'	25'	13'	10'	8' / 8'	0' / 5'	25'	10'	--	60%	5.0 - 8.0
CR-5 ⁽⁷⁾⁽⁹⁾	7,000	2,300	60'	NA	30'	40'	25'	13'	8'	7' / 7'	0' / 3'	25'	5'	--	65%	5.0 - 10.0

Notes:

- For all lot sizes: Front setbacks are measured from the back of sidewalk to face of structure or garage door.
- The minimum lot width for corner lots shall meet one of the following:
 - Add 5' to side setback at corner lots, or;
 - A minimum 8' landscape tract on the street side adjacent to the corner lot (maintained by HOA)
- Architectural features such as, but not limited to, fireplaces, bay windows, entertainment centers, shadow boxes, pot shelves, and other pop-outs, can encroach up to 3' into front, side or rear setbacks.
- Architectural features such as, but not limited to, fireplaces, bay windows, entertainment centers, shadow boxes, pot shelves, and other pop-outs, can encroach up to 2' into front, side or rear setbacks.
- For all lot sizes: Rear building setbacks shall be measured from the property line to the rear of structure.
- Covered patios may encroach up to 5' into the rear setback.
- Covered patios may encroach up to 2' into the rear setback.
- On all lot sizes: Building height is measured from the finished floor to the top of the parapet or highest point of the building.
- Z-lots and 0'-lot line housing products, plans and elevations shall be submitted to the City for review prior to the preliminary plat submittal.
- Livable space is defines as: Den, casitas, bonus room or extension of home structure, excluding front facing garages.

TABLE 2: ACTIVE ADULT RESIDENTIAL DISTRICT STANDARDS (SHEA TRILOGY)

Zoning District	LOT AREA STANDARDS				MAX. BLDG. HEIGHT	MINIMUM YARD SETBACKS								MAXIMUM LOT COVERAGE		PROPOSED NET DENSITY RANGE (DU/AC)
	MIN. AREA (SF)		MIN. LOT WIDTH			FRONT		SIDE ENTRY GARAGE, PORCH OR LIVABLE SPACE ⁽⁹⁾	SIDE		REAR					
	CITY REQUIRED	PAD PROPOSED	CITY REQUIRED	PAD PROPOSED		CITY REQUIRED	PAD PROPOSED	CITY REQUIRED	PAD PROPOSED	PAD PROPOSED	CITY REQUIRED	PAD PROPOSED	CITY REQUIRED	PAD PROPOSED	CITY REQUIRED	
CR-3 T	7,000	6,000	60'	65'	30'	35'	20'	18'	10'	8' / 8'	5' / 5'	25'	15'	40%	55%	3.0 - 5.0
CR-3 T	7,000	5,500	60'	60'	30'	35'	20'	18'	10'	8' / 8'	5' / 5'	25'	15'	40%	55%	3.0 - 5.0
CR-3 T	7,000	5,000	60'	50'	30'	35'	20'	18'	10'	8' / 8'	5' / 5'	25'	15'	40%	55%	3.0 - 5.0
TR -T (8)	7,000	3,000	60'	NA	30'	40'	25'	13'	10'	8' / 8'	0' / 5'	25'	10'	--	65%	---
CR-4 T	7,000	4,000	60'	50'	30'	35'	20'	18'	10'	8' / 8'	5' / 5'	25'	15'	40%	60%	5.0 - 10.0
CR-5 T	7,000	3,000	60'	NA	30'	35'	20'	13'	10'	8' / 8'	0' / 5'	25'	15'	--	65%	5.0 - 10.0

Notes:

1. Front building setback shall be measured from the back of sidewalk to the face of the structure or garage door.
2. The minimum lot width for corner lots shall be 55'.
3. Architectural features such as, but not limited to, fireplaces, bay windows, entertainment centers, shadow boxes, pot shelves, and other pop-outs, can encroach up to 2' into front, side or rear setbacks.
4. Rear building setbacks shall be measured from the property line to the face of structure.
5. Covered patios may encroach up to 2' into the rear setback.
6. Building height is measured from the finished floor to the top of the parapet or highest point of the building.
7. Air conditioners can be located within the side setbacks and shall be screened from view with a screen wall (see below).
8. Z-lots and 0'-lot line housing products, plans and elevations shall be submitted to the City for review prior to the preliminary plat submittal.
9. Livable space is defines as: Den, casitas, bonus room or extension of home structure, excluding front facing garages.

C.2 TRANSITIONAL (TR)

The intended uses for this land use category, which include 64 acres, are designed primarily for intense residential uses adjacent to the commercial parcel along John Wayne Parkway (SR347) such as apartments and townhomes; however, cluster homes, z-lots, cottages, and courtyard homes may also be included. This area of the development could also include a mixture of employment or possibly hospital/medical facilities as allowed within the Transitional Zoning (TR) district. This higher density area provides a natural transition between the commercial and traditional single-family residential areas of Avalea while providing more housing options for a mixture of economic classes.

In addition to the areas adjacent to the commercial site, the Trilogy gated community has also included parcels within this land use category. Two of the parcels, the Golf Club and Resort Club at Trilogy, would provide resort style amenities for the Trilogy residents that include, but are not limited to, fitness and spa facilities, cafe, restaurant and lounge facilities. The Trilogy community has also include two additional parcels that have been set aside for possible higher intensity residential uses or resort facilities. Actual uses for these parcels will be determined by the market at the time of development

C.3 COMMERCIAL (CB-2)

With the high growth and future influx of residents to the area, the demand for commercial and retail facilities will increase. To meet the growing demand, the land plan for Avalea proposes 120 acres for mixed commercial uses that may include employment and retail. Commercial uses have been located at the major transportation corridors of John Wayne Parkway (SR 347) and Farrell Road.

While located adjacent to a major transportation corridor, the commercial area is not isolated from the residential areas. Rather, the commercial area is planned and designed to provide connectivity to the proposed integrated open space, pedestrian and trails system throughout the community. Thematic elements established within the residential areas will be “carried-over” to the commercial component ensuring that the community character threads throughout all areas of the community.

The active adult community has also incorporated a commercial component within their land plan that includes the Trilogy Golf Club and Resort Club. This will be a private facility for the Trilogy residents that include, but are not limited to: day spa, alcohol beverage services, restaurant and lounge facilities.



FIGURE 12: CONCEPTUAL COMMERCIAL



GREY PICKETT
 ARCHITECTS
 MARCH 2, 2006

FIGURE 13: CONCEPTUAL DEVELOPMENT MASTER PLAN



TABLE 3: LAND USE SUMMARY

DESCRIPTION	PARCEL	ZONING	GROSS ACREAGE	DESCRIPTION	PARCEL	ZONING	GROSS ACREAGE	
Fulton Homes				Standard Pacific Homes				
	1.1	CR-4 PAD	51.5 Ac.		1.7	CR-3 PAD	52.8 Ac.	
Development Area 'A'	1.2	CR-5 PAD	24.8 Ac.		1.8	CR-3 PAD	54.8 Ac.	
	1.3	CR-3 PAD	52.2 Ac.	Development Area 'A'	1.9	CR-5 PAD	41.1 Ac.	
	1.4	CR-5 PAD	19.6 Ac.		1.10	CR-5 PAD	28.3 Ac.	
	1.4	CR-3 PAD	47.7 Ac.		1.14	CR-3 PAD	62.5 Ac.	
			1.15		CR-5 PAD	21.5 Ac.		
<i>Total for Area</i>			195.8 Ac.	<i>Total for Area</i>			261.0 Ac.	
<i>Target Unit Count</i>			685 units	<i>Target Unit Count</i>			914 units	
<i>Maximum Area Unit Count</i>			788 units	<i>Maximum Area Unit Count</i>			1,051 units	
Development Area 'B'	1.12	CR-5 PAD	17.4 Ac.	Development Area 'B'	1.35	CR-3 PAD	47.4 Ac.	
	1.11	CR-4 PAD	30.3 Ac.		1.33	CR-4 PAD	24.1 Ac.	
	1.16	CR-3 PAD	25.3 Ac.					
<i>Total for Area</i>			73.0 Ac.	<i>Total for Area</i>			71.5 Ac.	
<i>Target Unit Count</i>			256 units	<i>Target Unit Count</i>			250 units	
<i>Maximum Area Unit Count</i>			294 units	<i>Maximum Area Unit Count</i>			288 units	
Development Area 'C'	1.20	CR-3 PAD	51.9 Ac.	Development Area 'C'	1.34	CR-3 PAD	23.1 Ac.	
	1.21	CR-5 PAD	22.1 Ac.					
	1.23	CR-4 PAD	30.7 Ac.					
	1.26	CR-5 PAD	20.9 Ac.	<i>Total for Area</i>			23.1 Ac.	
	1.27	CR-4 PAD	30.9 Ac.	<i>Target Unit Count</i>			81 units	
	1.28	CR-4 PAD	35.6 Ac.	<i>Maximum Area Unit Count</i>			93 units	
	1.29	CR-3 PAD	29.7 Ac.	Total Acres:			355.6 Ac.	
<i>Total for Area</i>			221.8 Ac.	Maximum Units Proposed:			1,245.0 units.	
<i>Target Unit Count</i>			776 units					
<i>Maximum Area Unit Count</i>			893 units					
Development Area 'D'	1.30	CR-3	32.5 Ac.					
<i>Total for Area</i>			32.5 Ac.					
<i>Target Unit Count</i>			114 units					
<i>Maximum Area Unit Count</i>			131 units					
Total Acres:			523.1 Ac.					
Maximum Units Proposed:			1,831.0 units.					
Shea Homes				Pantano				
	1.5	CR-3 PAD	39.0 Ac.	Development Area 'A'	Transitional	TR PAD	64.0 Ac.	
Shea Homes (Family) Development Area 'A'	1.16	CR-2 PAD	62.3 Ac.					
	1.17	CR-2 PAD	55.5 Ac.	Total Acres:			64.0 Ac.	
	1.21	CR-3 PAD	38.6 Ac.	Maximum Units Proposed:			644.0 units.	
<i>Total for Area</i>			195.4 Ac.	Development Area 'B'	Commercial	CB-1	120.0 Ac.	
<i>Target Unit Count</i>			684 units	Schools, Parks Recreation Center		CR-3 PAD TR PAD	36.0 Ac. 14.0 Ac.	
<i>Maximum Area Unit Count</i>			787 units					
Shea Homes (Trilogy) Development Area 'B'	2.1-2.15	CR-3/CR-5/TR/CB-2 PAD	805.0 Ac.	Total Gross Project Area			2,179.2 Ac	
				Maximum Project Units Proposed:			7,452 units	
<i>Total for Area</i>			805.0 Ac.					
<i>Target Unit Count</i>			2,817 units					
<i>Maximum Area Unit Count</i>			3,240 units					
Development Area 'C'	1.31	CR-3 PAD	34.1 Ac.					
	1.32	CR-3 PAD	32.0 Ac.					
<i>Total for Area</i>			66.1 Ac.					
<i>Target Unit Count</i>			231 units					
<i>Maximum Area Unit Count</i>			266 units					
Total Acres:			1,066.5 Ac.					
Maximum Units Proposed:			3,732.0 units.					

D. DEVELOPMENT MASTER PLAN

The Avalea Master Plan is divided into development areas for each member of the Development Team. The Development Master Plan (Figure 13 left) in conjunction with Table 4 below, identifies these development areas owned by each of the developers of Avalea. Each of the builders within the Development Team brings their own unique housing product, each distinctly different from the other, that will add variety to the streetscapes within Avalea. Avalea will provide a total maximum of 7,452 lots, or 3.9 du/ac calculated on net density, as established in Table 3: Land Use Summary. Net density has been calculated using net acres based on the following formula:

$$\text{Gross Acres} - \text{R/W} - \text{School Sites} - \text{Commercial/Industrial Sites} = \text{Net Acres}$$

(R/W = Arterial and Collector Roadways)

DEVELOPER	CR-2	CR-3	CR-4	CR-5
Fulton Homes	--	45.7%	34.2%	20.0%
Shea Homes	45.0%	55.0%		
Standard Pacific Homes	--	67.7%	6.8%	25.6%

Gross Area	2179.2
Commercial (net ac)	115.64
Schools (net ac)	33.68
Arterial/Collector R/W	116.43
TOTAL	1913.38 Ac
Max Project Units	7452
Net Density	3.9 du/ac

DEVELOPER	PARCEL OWNERSHIP
SHEA TROLOGY	2.1 through 2.15
SHEA FAMILY	1.5, 1.16, 1.17, 1.21, 1.31, 1.32
FULTON HOMES	1.1, 1.2, 1.3, 1.4, 1.11, 1.12, 1.16, 1.20, 1.21, 1.23, 1.26, 1.27, 1.28, 1.29, 1.30
STANDARD PACIFIC HOMES	1.7, 1.8, 1.14, 1.15, 1.9, 1.10, 1.33, 1.34, 1.35
PANTANO	1.26, 1.27, 1.28, 1.29



FIGURE 14: CONCEPTUAL MASTER PLAN, SHEA FAMILY / SHEA TRILOGY



TABLE 5: SHEA FAMILY AND SHEA TRILOGY LAND USE SUMMARY

<i>Shea Homes</i>				
	1.5	CR-3 PAD	39.0 Ac.	
Shea Homes (Family) Development Area 'A'	1.16	CR-2 PAD	62.3 Ac.	
	1.17	CR-2 PAD	55.5 Ac.	
	1.21	CR-3 PAD	38.6 Ac.	
<i>Total for Area</i>			195.4 Ac.	
<i>Target Unit Count</i>			684 units	
<i>Maximum Area Unit Count</i>			787 units	
Shea Homes (Trilogy) Development Area 'B'	2.1-2.15	CR-3/CR-5/TR/CB-2 PAD	805.0 Ac.	
	<i>Total for Area</i>			805.0 Ac.
	<i>Target Unit Count</i>			2,817 units
<i>Maximum Area Unit Count</i>			3,240 units	
Development Area 'C'	1.31	CR-3 PAD	34.1 Ac.	
	1.32	CR-3 PAD	32.0 Ac.	
<i>Total for Area</i>			66.1 Ac.	
<i>Target Unit Count</i>			231 units	
<i>Maximum Area Unit Count</i>			266 units	
Total Acres:			1,066.5 Ac.	
Maximum Units Proposed:			3,732.0 units.	

D.1 SHEA HOMES RESIDENTIAL

SHEA FAMILY RESIDENTIAL

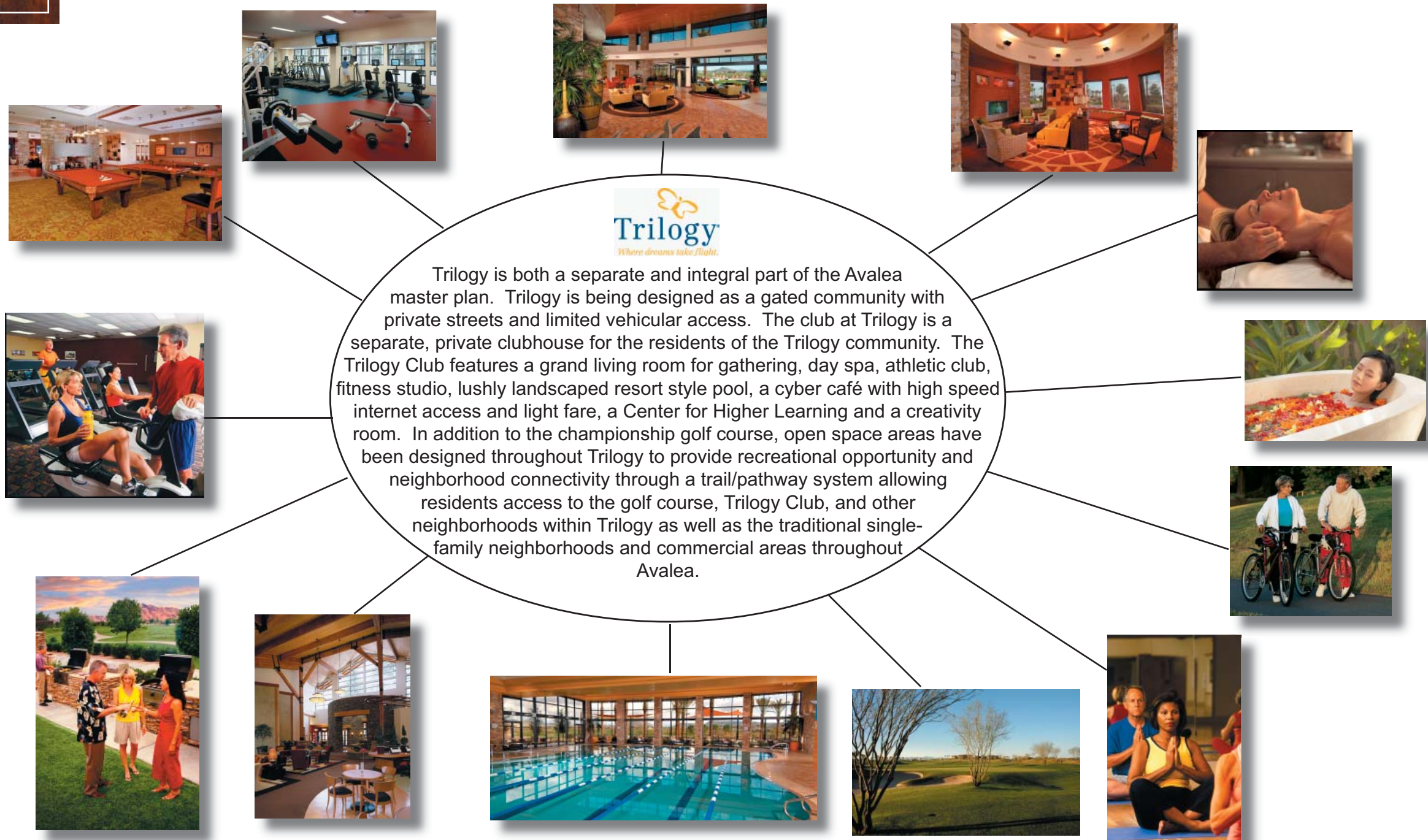
Shea Homes is one of the builders on the Development Team for Avalea. With several years of experience and many successful communities, Shea Homes will provide a high quality housing product and land planning that will compliment the City's land use goals. A mix of housing types will be offered that will provide for families with diverse economic needs. Shea Family is proposing two parcels with CR-2 designation and lots with a minimum 80' width. In addition, Shea Family is also proposing two parcels with the CR-3 designation. Figure 14, left identifies the location of the Shea Family development areas within Avalea.

SHEA TRILOGY RESIDENTIAL

Shea Trilogy is another division of the Shea Homes company, providing a very different community that caters primarily to the active adult population. While very different in nature from the "Progressive Neighborhood Residential", Trilogy at Avalea is designed to add more dimension and diversity to the community. Trilogy's unique approach, offering several lot sizes with homes that can be built on any of the lot sizes, provides future residents with a wide range of options. This creates a varied street scene on every street within the Trilogy community. A complete description of this active adult community can be found on the following two pages. Figure 14, left identifies the location of the Trilogy development area within Avalea.



FIGURE 15: CONCEPTUAL REPRESENTATION OF SHEA HOMES HOUSING PRODUCT & AMENITIES



D.2 SHEA TRILOGY / ACTIVE ADULT RESIDENTIAL

Trilogy offers yet another dimension to this development, creating more diversity and a more visually open community by incorporating no standard fencing for side and rear yards throughout the residential portion of the community. Homeowners will have the option to install a view fence or view walls after close of escrow; however, Trilogy will be developed as an open community with unobstructed views and access to the open spaces, trails, and lakes. Homeowners will be responsible for landscaping front, back, corner and side yards. Minimum standards for landscaping will be established in the Conditions, Covenants & Restrictions (CC&R's) for Trilogy. A typical Trilogy street scene will include a range of lot sizes that will vary from 50' to 65' wide lots. All of the homes offered at Trilogy can be built on any of the lot sizes offered. Each of the Trilogy homes will provide a variety of entrances, combinations of front and side-loaded garages, varied architectural elements, and casitas, all of which will enhance the diversity on all streets within the community (See typical Trilogy Street Scene Figure 18).

The residential portion of Trilogy will include single family residential parcels with lot sizes ranging from 3,000 square feet up to 6,825 square feet. Other uses within the Trilogy community include a multi-family or casita component and resort facility.

TRIOLOGY GOLF (SR)



An 18-hole championship golf course designed by Tripp Davis and Associates is proposed for the Trilogy Community. the golf course is anticipated to be approximately 180 to 200 acres (See Figure 14: Conceptual Master Plan). During the design phase the golf course routing will require several changes so exact acreage and routing are conceptual in this early stage of development. This will become more refined as the project continues through pre-plat and final plat.

Included within the Trilogy community is a Golf Clubhouse with resort style amenities, a Recreation Facility, Sport Courts, dining, bar or cocktail lounge and HOA Club House. The HOA Club facilities within the Trilogy community are private facilities for the residents of Trilogy and separate from the Avalea Community and Recreation center located in the Avalea Community Park.



FIGURE 17: TRILOGY BETWEEN LOTS DETAIL

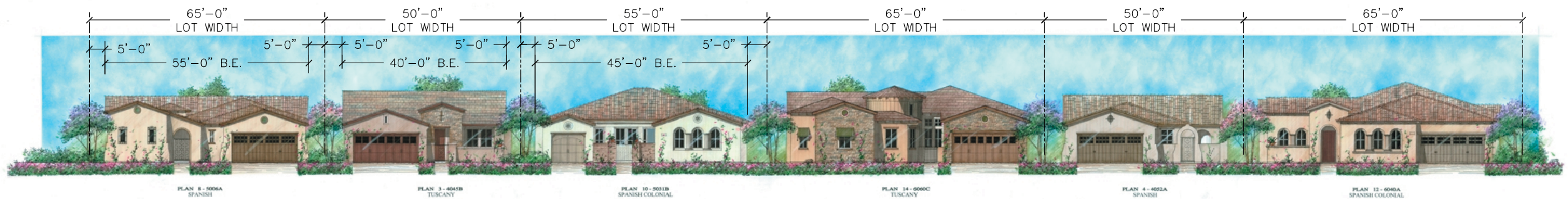
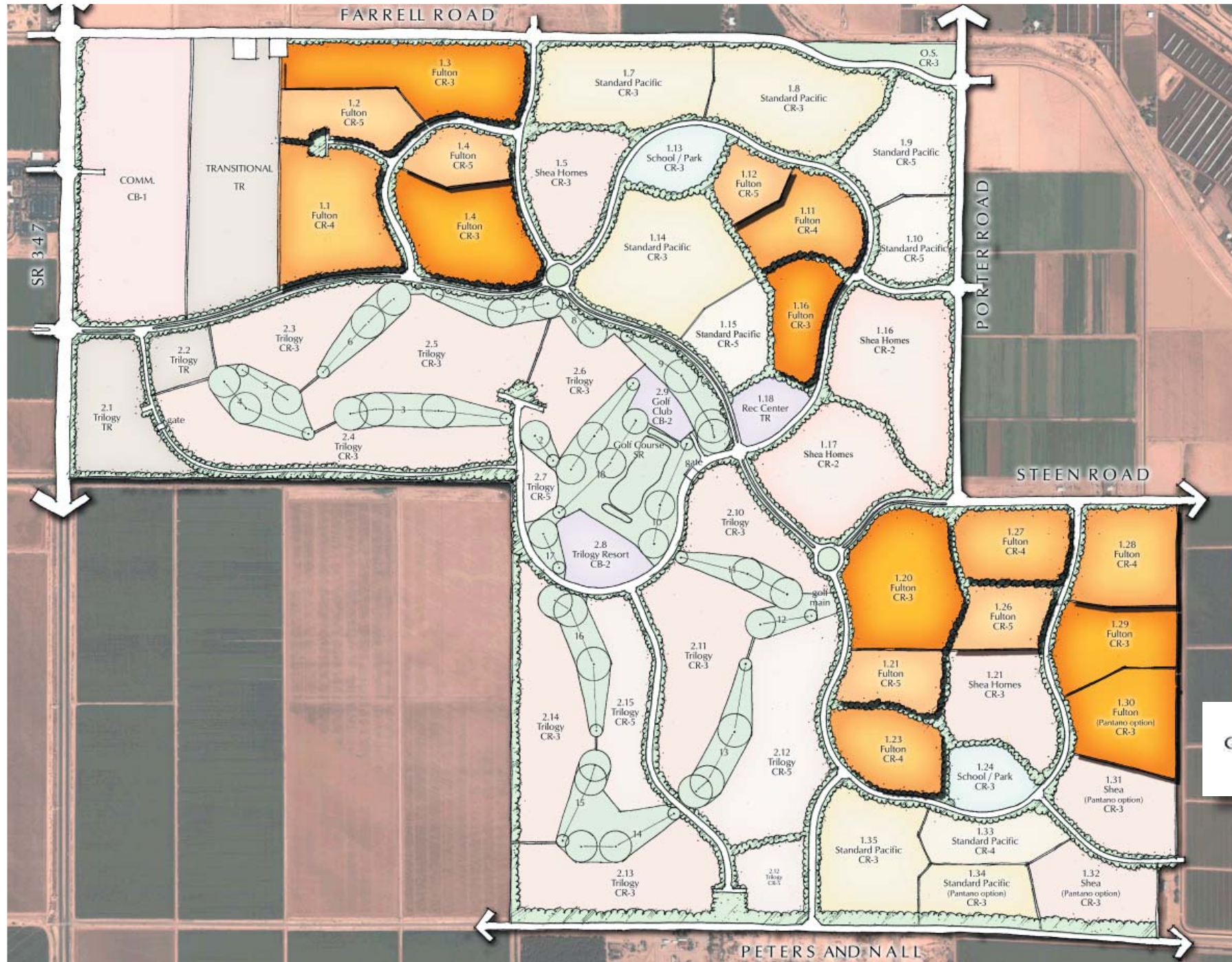


FIGURE 18: TYPICAL TRILOGY STREET SCENE



GREEY PICKETT
 ARCHITECTS
 MARCH 2, 2006



FIGURE 19: CONCEPTUAL MASTER PLAN, PLAN FULTON HOMES



TABLE 6: FULTON HOMES LAND USE SUMMARY

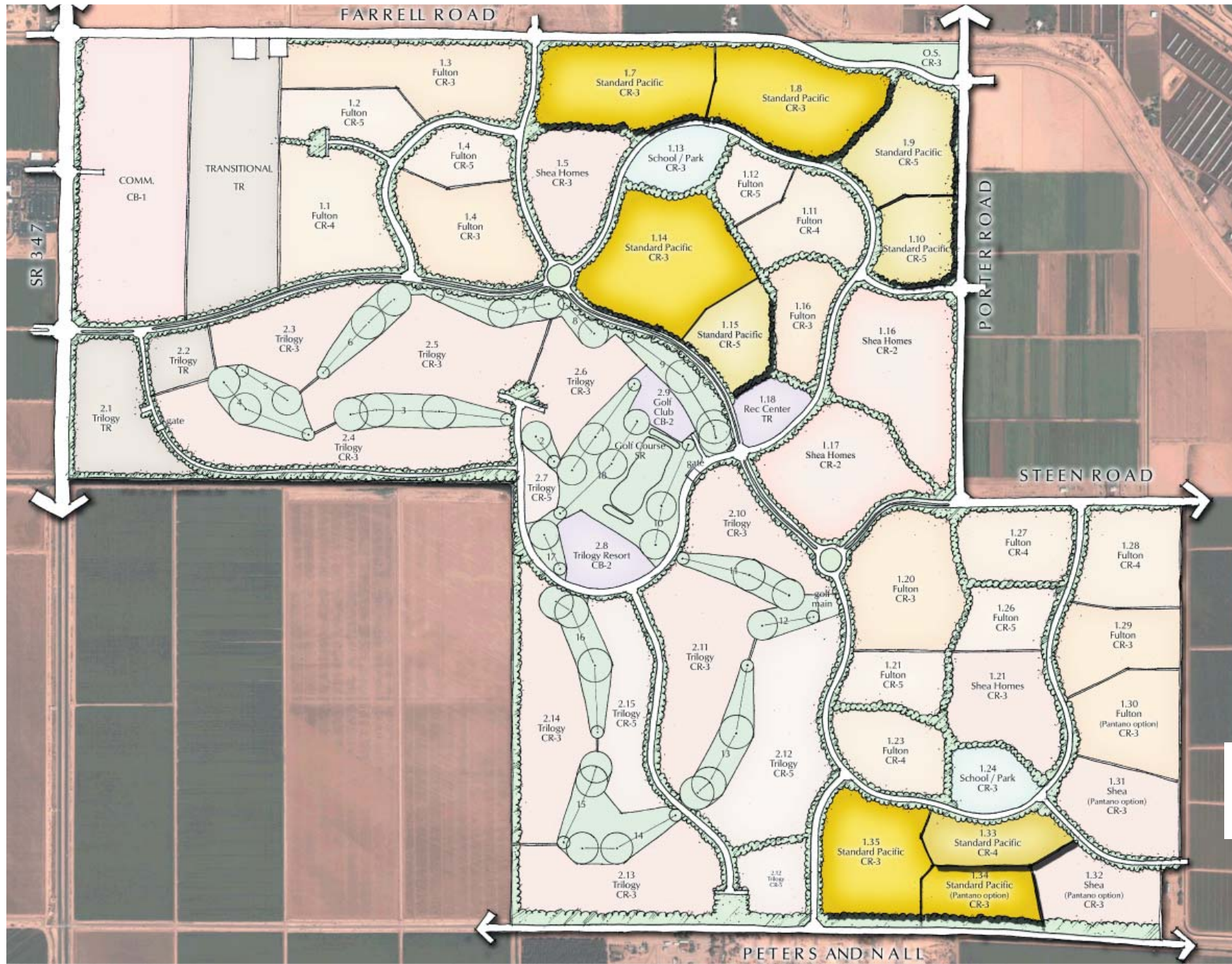
DESCRIPTION	PARCEL	ZONING	GROSS ACREAGE
Fulton Homes			
Development Area 'A'	1.1	CR-4 PAD	51.5 Ac.
	1.2	CR-5 PAD	24.8 Ac.
	1.3	CR-3 PAD	52.2 Ac.
	1.4	CR-5 PAD	19.6 Ac.
	1.4	CR-3 PAD	47.7 Ac.
<i>Total for Area</i>			195.8 Ac.
<i>Target Unit Count</i>			685 units
<i>Maximum Area Unit Count</i>			788 units
Development Area 'B'	1.12	CR-5 PAD	17.4 Ac.
	1.11	CR-4 PAD	30.3 Ac.
	1.16	CR-3 PAD	25.3 Ac.
<i>Total for Area</i>			73.0 Ac.
<i>Target Unit Count</i>			256 units
<i>Maximum Area Unit Count</i>			294 units
Development Area 'C'	1.20	CR-3 PAD	51.9 Ac.
	1.21	CR-5 PAD	22.1 Ac.
	1.23	CR-4 PAD	30.7 Ac.
	1.26	CR-5 PAD	20.9 Ac.
	1.27	CR-4 PAD	30.9 Ac.
	1.28	CR-4 PAD	35.6 Ac.
	1.29	CR-3 PAD	29.7 Ac.
<i>Total for Area</i>			221.8 Ac.
<i>Target Unit Count</i>			776 units
<i>Maximum Area Unit Count</i>			893 units
Development Area 'D'	1.30	CR-3	32.5 Ac.
<i>Total for Area</i>			32.5 Ac.
<i>Target Unit Count</i>			114 units
<i>Maximum Area Unit Count</i>			131 units
Total Acres:			523.1 Ac.
Maximum Units Proposed:			1,831.0 units.

D.3. FULTON HOMES RESIDENTIAL

With many successful communities throughout the Phoenix metropolitan area as well as within the City of Maricopa, Fulton Homes will provide a high quality housing product and land planning that will compliment the City's land use goals. Fulton Homes will provide a mixture of housing products designed to meet the needs of the diverse population within the City. Housing could range from the smaller lots with higher intensity to larger, executive lots. The CR-4 parcels provide the opportunity to create a blended neighborhood with housing products that could include courtyard homes, cluster homes, z-lots, and others based on market demand. Figure 19, left identifies the location of the Fulton Homes development areas within Avalea.



FIGURE 20: CONCEPTUAL REPRESENTATION OF FULTON HOMES HOUSING PRODUCT & AMENITIES



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 ARCHITECTS
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FIGURE 21: CONCEPTUAL MASTER PLAN, STANDARD PACIFIC HOMES



TABLE 7: STANDARD PACIFIC HOMES LAND USE SUMMARY

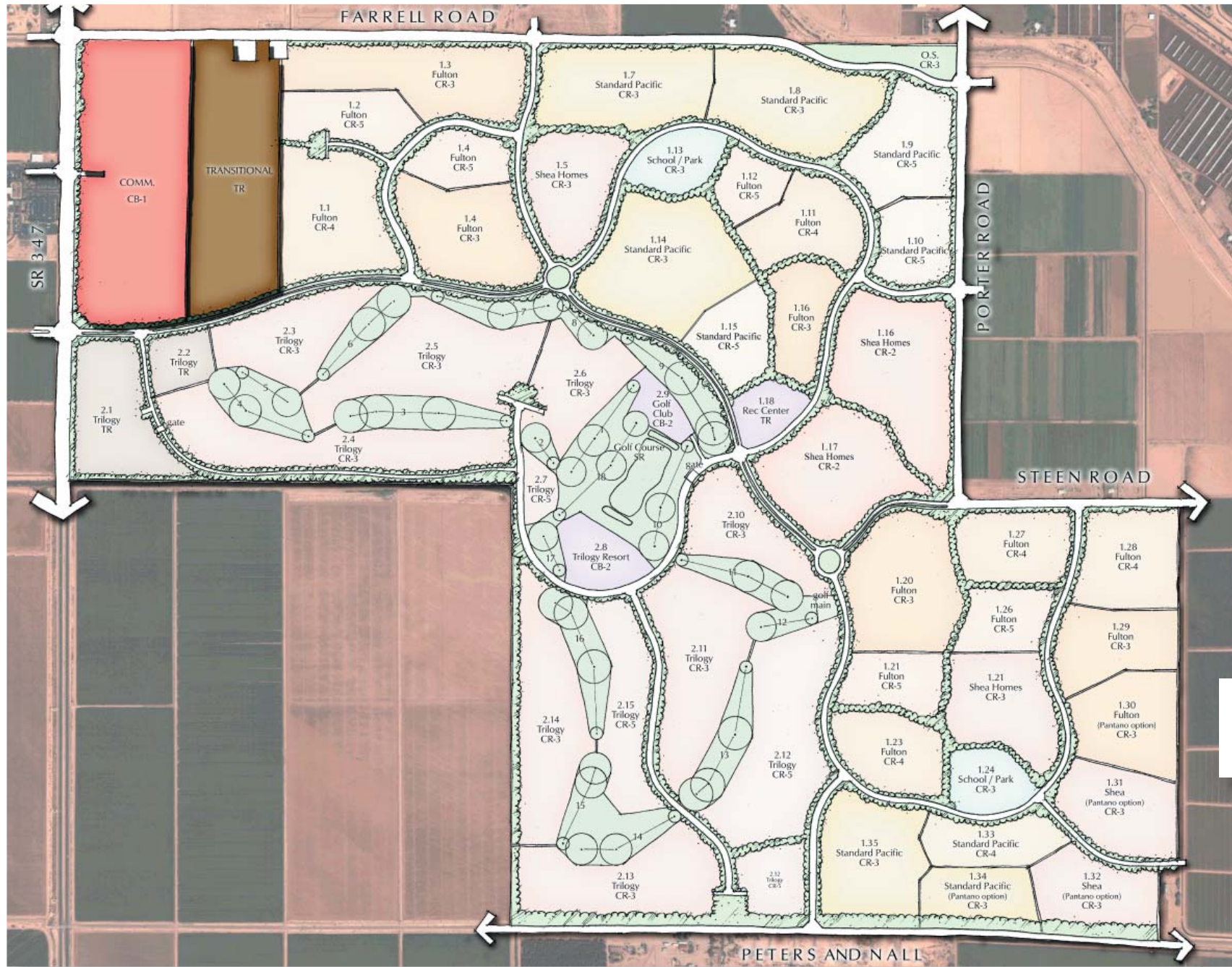
DESCRIPTION	PARCEL	ZONING	GROSS ACREAGE
Standard Pacific Homes			
Development Area 'A'	1.7	CR-3 PAD	52.8 Ac.
	1.8	CR-3 PAD	54.8 Ac.
	1.9	CR-5 PAD	41.1 Ac.
	1.10	CR-5 PAD	28.3 Ac.
	1.14	CR-3 PAD	62.5 Ac.
	1.15	CR-5 PAD	21.5 Ac.
<i>Total for Area</i>			261.0 Ac.
<i>Target Unit Count</i>			914 units
<i>Maximum Area Unit Count</i>			1,051 units
Development Area 'B'	1.35	CR-3 PAD	47.4 Ac.
	1.33	CR-4 PAD	24.1 Ac.
<i>Total for Area</i>			71.5 Ac.
<i>Target Unit Count</i>			250 units
<i>Maximum Area Unit Count</i>			288 units
Development Area 'C'	1.34	CR-3 PAD	23.1 Ac.
<i>Total for Area</i>			23.1 Ac.
<i>Target Unit Count</i>			81 units
<i>Maximum Area Unit Count</i>			93 units
Total Acres:			355.6 Ac.
Maximum Units Proposed:			1,245.0 units.

D.4. STANDARD PACIFIC HOMES RESIDENTIAL

Another member of the Development Team is Standard Pacific Homes, a widely recognized developer throughout the Phoenix metropolitan area. Providing a quality housing product and careful land planning, Standard Pacific Homes will integrate and compliment the Avalea community. A mix of lot sizes and housing styles will be offered, rounding out the community's goal of providing a range of housing opportunities for all lifestyles and economic needs. Standard Pacific Homes is providing a variety of housing options for future residents by incorporating CR-3 and CR-4 districts scattered throughout the land plan. This will provide the higher density housing that is currently in demand along with the more traditional single-family residential with lot sizes ranging from 48' to 80'. Figure 21 left identifies the location of the Standard Pacific Homes development areas within Avalea.



FIGURE 22: CONCEPTUAL REPRESENTATION OF STANDARD PACIFIC PRODUCT



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FIGURE 23: CONCEPTUAL MASTER PLAN, PANTANO



D.5. PANTANO TRANSITIONAL

Also included within the community of Avalea is an area recognized as the Pantano Transitional development area. Located at the northwestern corner of the project, a range of lot sizes will be offered that will compliment the Avalea community. Pantano is not a Developer, it is a real estate investment group and they are currently working with other potential end users for the development of this Transitiona area. Potential uses could include single-family and multi-family residential, as well as a mixture of employment or possibly hospital/medical facilities. Figure 23 identifies the location of the Pantano development areas within Avalea.

TABLE 8: PANTANO LAND USE SUMMARY

DESCRIPTION	PARCEL	ZONING	GROSS ACREAGE
Pantano			
Development Area 'A'	Transitional	TR PAD	64.0 Ac.
Total Acres:			64.0 Ac.
Maximum Units Proposed:			644.0 units.
Development Area 'B'	Commercial	CB-1	120.0 Ac.
Schools, Parks Recreation Center		CR-3 PAD	36.0 Ac.
		TR PAD	14.0 Ac.
Total Gross Project Area			2,179.2 Ac
Maximum Project Units Proposed:			7,452 units

E. CIRCULATION AND ROADWAYS

Winding through the community of Avalea is the spine road that will serve as a central element of connectivity for the community. The unique design approach implements the use of traffic circles located at key intersections to slow traffic and promote free flowing vehicular movement. This tree-lined spine road is designed with wide landscaped setbacks and meandering walkways for pedestrians, incorporating views of the community park and open spaces. The wide median as well as the decorative traffic circles along this spine road provides an additional opportunity to incorporate rich landscaping with a variety of plantings that are layered with texture and color creating a lush boulevard that becomes a frame for the community. Residential streets will be designed to enhance the neighborhood’s visual image through a blend of unique housing products and open space corridors.

The community theme will be carried throughout the community, including the signage for the internal local and collector roadways. The internal local roads and minor collector streets within Avalea will likely be public streets. One exception would be the Trilogy community. Trilogy will be a gated community with private streets that will be maintained by the HOA. Other parcels may have private gated areas maintained by the HOA. Local roads and minor collector streets have been designed to effectively convey local traffic to the adjacent arterial streets.





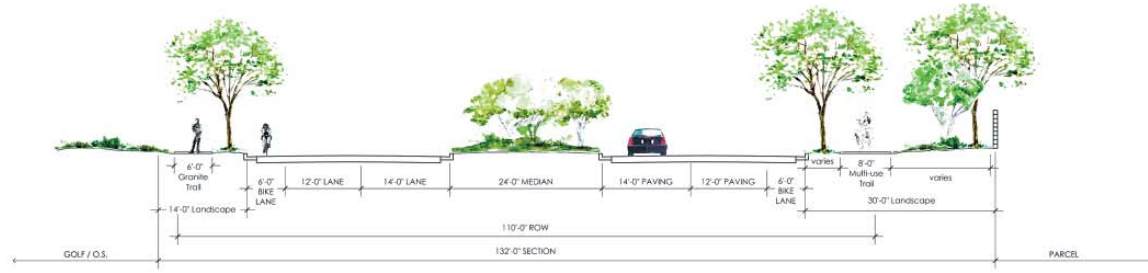
GREY PICKETT

MARCH 2, 2006

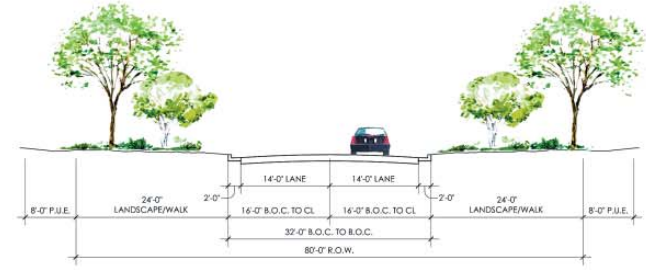


FIGURE 24: CONCEPTUAL STREET CIRCULATION PLAN

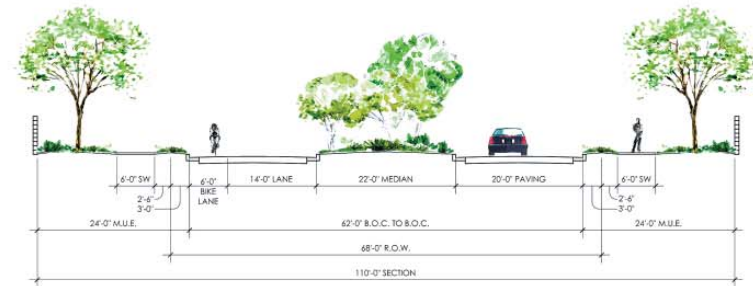




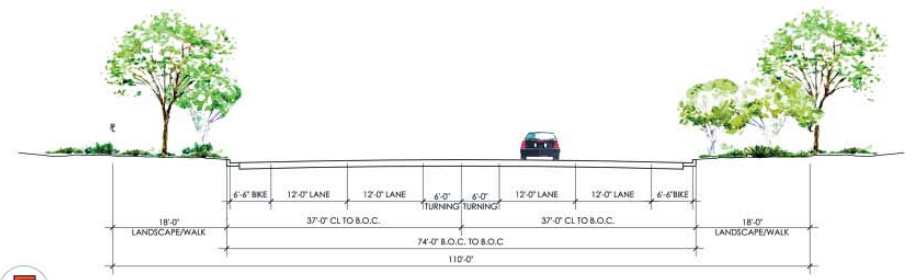
A ULTIMATE BLVD SECTION



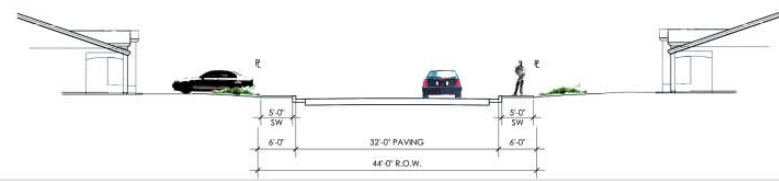
E INTERIOR COLLECTOR (STANDARD SECTION)



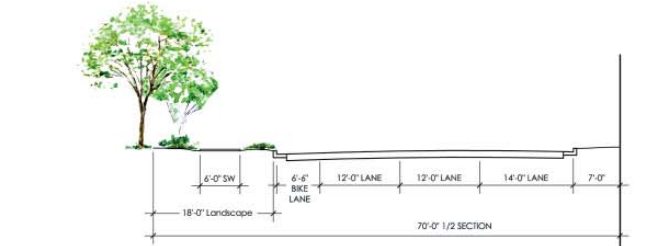
B VILLAGE LOOP SECTION



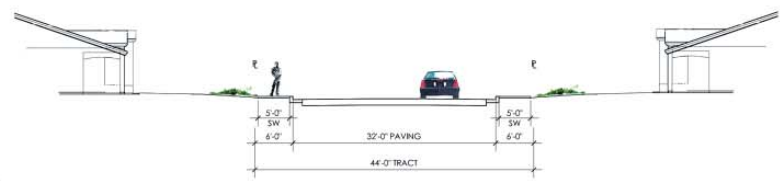
F ARTERIAL STREET (TYP. SECTION)



C LOCAL - FAMILY



G SURROUNDING ARTERIAL (70' HALF SECTION)



D TRILOGY/PRIVATE

FIGURE 25: CONCEPTUAL STREET CROSS SECTIONS

F. MASTER OPEN SPACE AND AMENITY PLAN

Open space within the Avalea Master Planned Development has been calculated based on the City of Maricopa's Open Space Ordinance 05-07. The calculations on Table 9 show a total of 21% of total net project area or 380.23 total acres of open space required for this community based on the assumptions listed. The table further distributes, pro-rata among the developers, the break down of the open space required for each of the developers. These calculations use 50% of the open space is attributed to golf course as well as the school and recreation sites within the community, with the remainder of the open space requirement distributed among the individual builders based on their percentage of area owned within the community. The golf course will be recorded in the CC&R's that it will always remain a golf course or open space and being is designed for golf, outdoor concerts, etc with the trail system connecting to the golf course in a couple of locations. The golf course will not be developed for homes sites. All open space calculations exclude the 184-acre parcel in the northwest corner of the project (CB-2 & TR).

Open space areas include parks tot lots and amenity areas within the individual residential areas, interconnecting trails, schools, community recreation facilities, landscaped buffers and landscaped retention basins, and the golf course within Trilogy as defined in Ordinance 05-07, Section 219: "Open Space, Usable".

The Conceptual Master Open Space and Amenity Plan, Figure 26, left includes two community recreation centers and two school/park sites along with the neighborhood parks that will be scattered throughout the community. The location of these neighborhood parks will be identified on the preliminary plat. The recreation center located within the Trilogy community will be a private facility for the Trilogy residents.

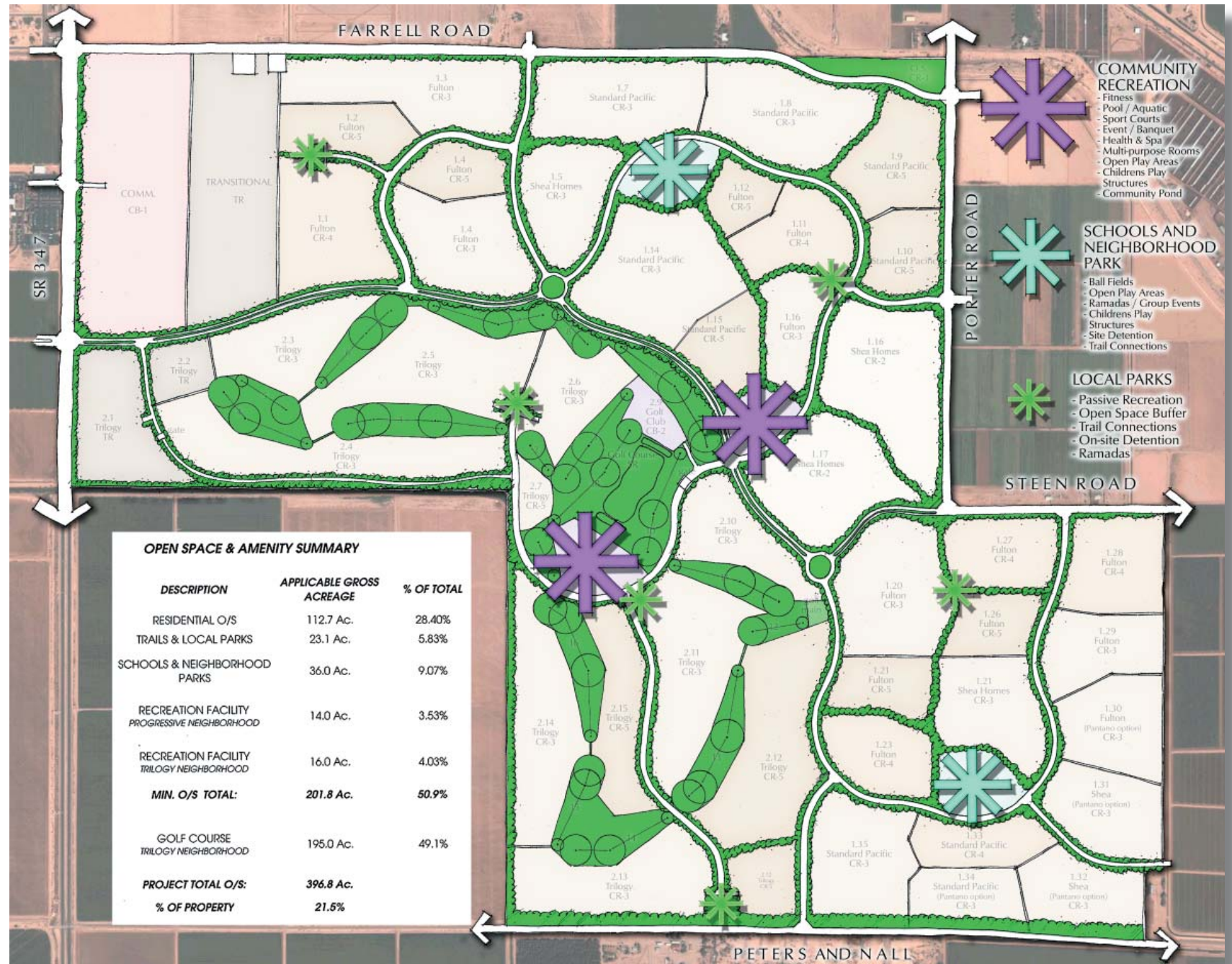


FIGURE 26: CONCEPTUAL MASTER OPEN SPACE & AMENITY PLAN

Table 9: Required Open Space Calculations

Density (^{du}/_{ac})= 3.5
Open Space percentage= 20%

Ref: Pinal County Drainage Design
City of Maricopa Ordinance No. 05-07

Development Area	Builder ⁽²⁾	Gross Area (ac)	Net Area ⁽¹⁾ (ac)	Total Net Area (ac)	Target Unit Count ⁽⁶⁾	Parks Area Req ⁽⁵⁾ (ac)	Total Open Space Req ⁽³⁾ (ac)	Total Open Space to be Required ^(7,8,9) (ac)
A	FH	195.84	184.39		685	14.76		
B	FH	72.99	69.72		255	5.50		
C	FH	221.60	209.26		776	16.71		
D	FH (option)	32.52	32.01	495.38	114	2.45	-----	61.84
A	SH	195.29	178.96		684	14.72		
C	SH (option)	66.11	60.69	239.65	231	4.98	-----	28.32
A	SP	177.07	156.49		620	13.35		
A	SP	84.00	79.43		294	6.33		
B	SP	71.51	66.12		250	5.39		
C	SP (option)	23.13	20.85	322.89	81	1.74	-----	39.23
B	SH-Trilogy	805.04	781.20	781.20	2818	60.69	-----	182.94
TR ⁽¹⁰⁾		64.03	62.03	62.03	644	13.87	-----	12.41
Commercial		120.00	115.64	115.64	-----	-----	-----	
Rec Facility	RC	14.00	12.23	12.23	-----	-----	-----	12.23
School	SC	18.00	16.99		-----	-----	-----	16.99
School	SC	18.00	16.69	33.68	-----	-----	-----	16.69
Santa Rosa Regional Trail ⁽¹¹⁾		13.62	9.59					9.59
Total Area ⁽⁴⁾ =		2179.13	1913.38	1913.38	7452	160.50	380.23	380.23

- Notes: (1) Excludes ROW of adjacent arterial and collector streets.
 (2) FH = Fulton Homes, SH = Shea Single Family, SP = Standard Pacific Homes, TR=Transitional
 (3) 20% open space required, based on net acreage of FH, SH, SP, including option Parcels & Transitional only as defined in Ordinance 05-07.
 (4) Total Net Area = Gross Area-(Arterial & collector ROW + Commerical + School sites).
 (5) 7 ac per 325 lots for neighborhood parks, based on ordinance 05-07. It is part of Total Open Space Required.
 (6) Based on 3.5 du/ac of the gross area.
 (7) 50% of Total Open Space Required is attributed to golf course.
 (8) Remaining balance of Open Space after adding Rec Center, Schools & Santa Rosa Reg. Trail is distributed between FH, SP, SH & Trilogy.
 Total area to be provided and distributed among builders is based on pro-rata share.
 (9) Gross Area of Rec Center and School Sites are dedicated.
 (10) TR Parcel adjacent to commercial at NWC will be required to provide 20% open space and required Park Area.
 (11) Santa Rosa Regional Trail net acreage is distributed pro-rata among FH, SH, SP and Trilogy for open space.

Open space for Avalea has been calculated based on the Cit of Maricopa’s Open Space Ordinance 05-07. This table shows the open space requirements by the City that include:

1. 20% open space calculated on net acreage
2. 7 acres per 325 lots for neighborhood parks
3. 50% of golf course attributed to open space
4. Open space calculated on net acreage

Table 9 shows the total open space required and further breaks down this open space that will be provided by each of the Developers. Each Developers open space was calculated based on the percentage of total acreage each Developer owns.

To summarize:

380.23 = Total Open Space Required (20%)
 160.50 = Total Parks area Required

396.8 = Total Open Space Provided by Avalea (21.5%)





FIGURE 27: CONCEPTUAL COMMUNITY PARK & RECREATION CENTER



F.1 PARKS, RECREATION, AND OPEN SPACE

Creating both passive and active open space and recreation areas is an integral part of the land planning for this master planned community. Avalea is being designed with a centrally located community park site and club (see Figure 27), that will provide a common gathering place for residents. The park may include multi-use turf areas with picnic tables and barbecues, sport courts, and a community pool. A lake amenity is also located within this park and may be used for catch-and-release fishing. This community park and club will be open to all residents of Avalea.

The Trilogy active adult community will offer a private club that will provide a common gathering places for its residents, offering several resort style amenities that include, but are not limited to, a day spa, athletic club, fitness studio, pool, and cyber cafe.



Avalea

FIGURE 28: CONCEPTUAL TRAIL PLAN

In addition, the comprehensive open space plan includes smaller neighborhood parks, tot lots, ramadas & picnic areas, basketball courts, multi-use turf areas for gatherings and an extensive trail system that provides continuous connectivity throughout the community. This integrated trail system connects the neighborhood parks with the community park, schools and Trilogy. Grade separated crossings will be provided at each roundabout to provide for safe pedestrian crossings at the collector roads. This regional trail system is an important component in the proposed City of Maricopa Land Use Plan.

A minimum of 20% of the acreage of Avalea will be open space. Open space will include landscaped tracts, stormwater retention areas, lakes, community and neighborhood parks, trails and multi-use turf areas for passive and active recreation. It is intended that all of these open space areas will be constructed by the Development Team and maintained by the homeowners association.

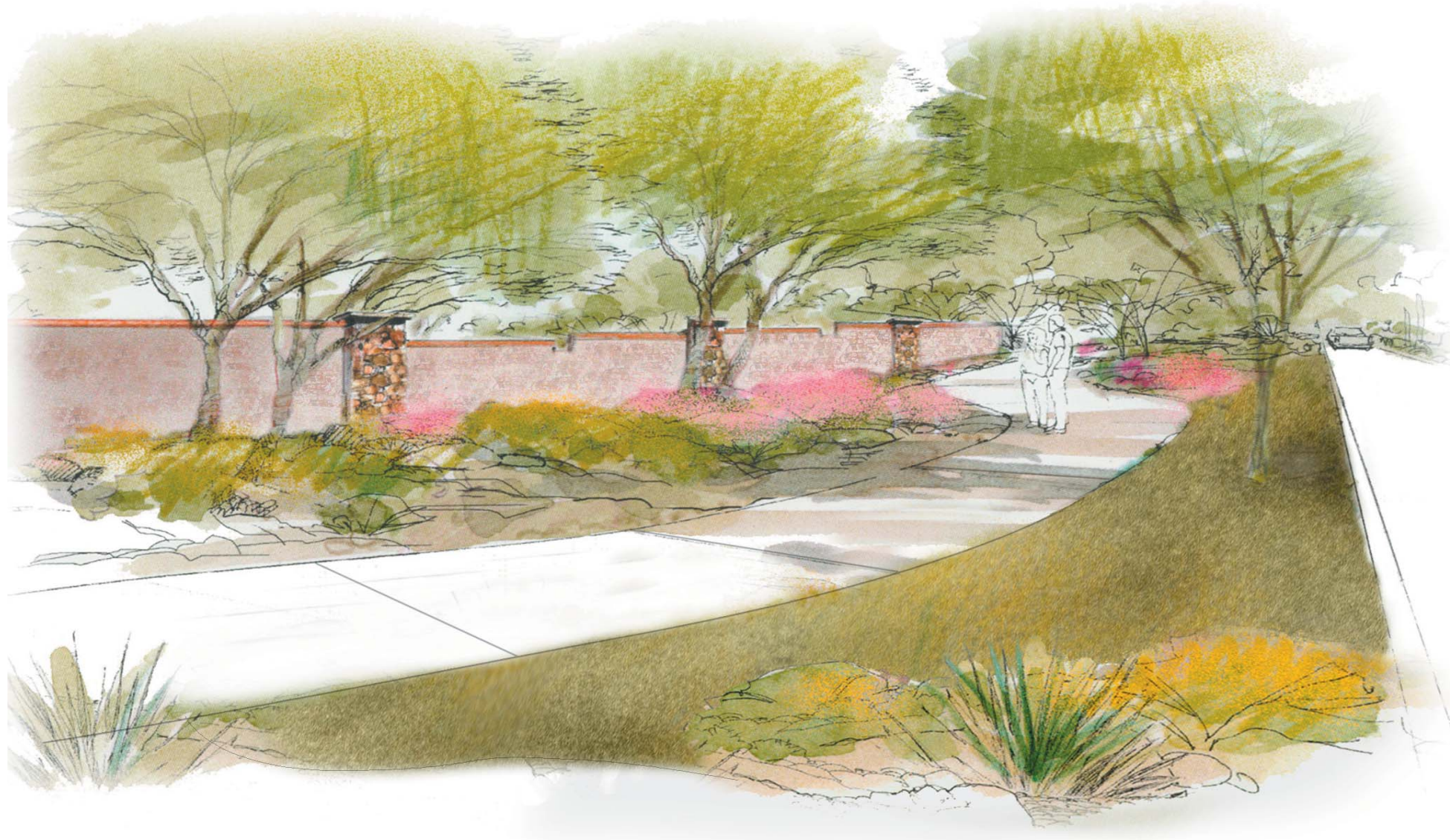


FIGURE 29: CONCEPTUAL ROADWAY TRAIL



Avalea's open space corridors will be linked by a parkway that serves as the spine road of the community. On both sides of the parkway, large setbacks will create expanded trail corridors that will provide access to a network of integrated trails and paseos. This design element provides both pedestrian and bicycle access to the integrated neighboring trails and open space system and contributes to the overall aesthetic quality of the community. Motorized vehicles will be restricted from use along these trail corridors. Branching out from this expanded trail corridor is an integrated trail system of varied widths that weaves through the residential areas, providing both passive and active opportunities for residents and their guests to enjoy. In some instances, rest nodes will be located along the trails to provide shade and seating areas.

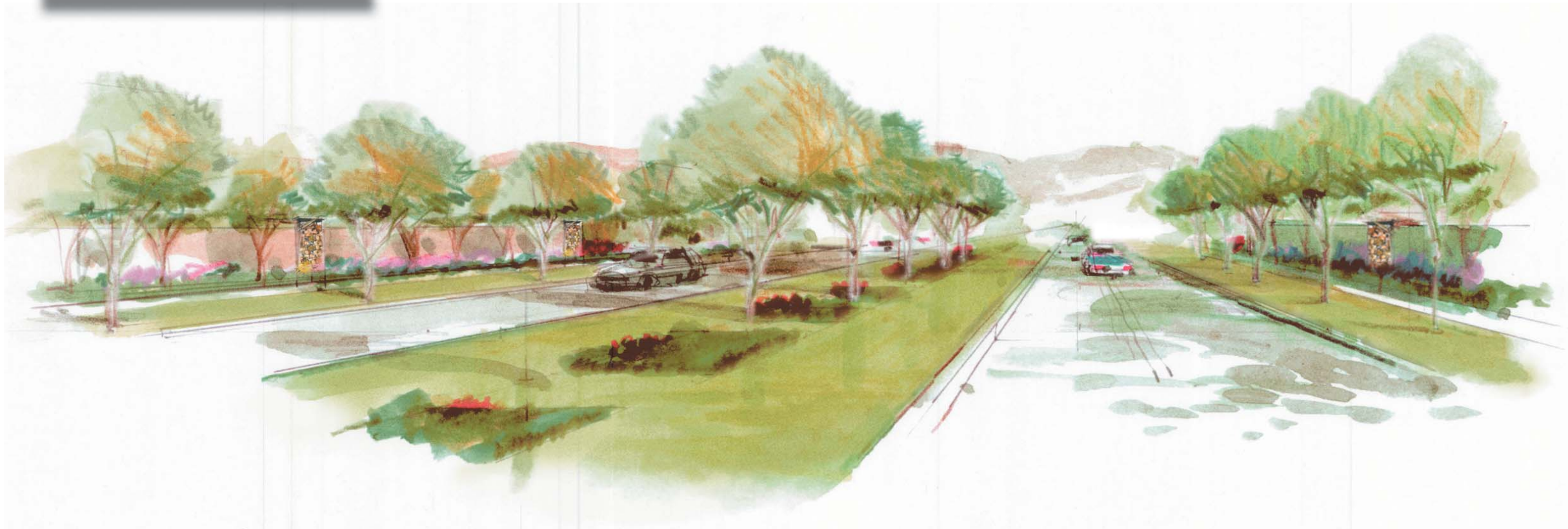


FIGURE 30: CONCEPTUAL COLLECTOR ROADWAY

G. WALLS, VIEW FENCES AND MONUMENTATION

Open space corridors act as windows into a community. The entryways represent the doorways that first welcome residents and their guests. Because entryways establish the initial impression of the community, emphasis is placed on both the residential and commercial gateways into Avalea. One major and two minor entryways will provide access to the residential area with one located on John Wayne Parkway, the other two located on Farrell Road and Porter Road,

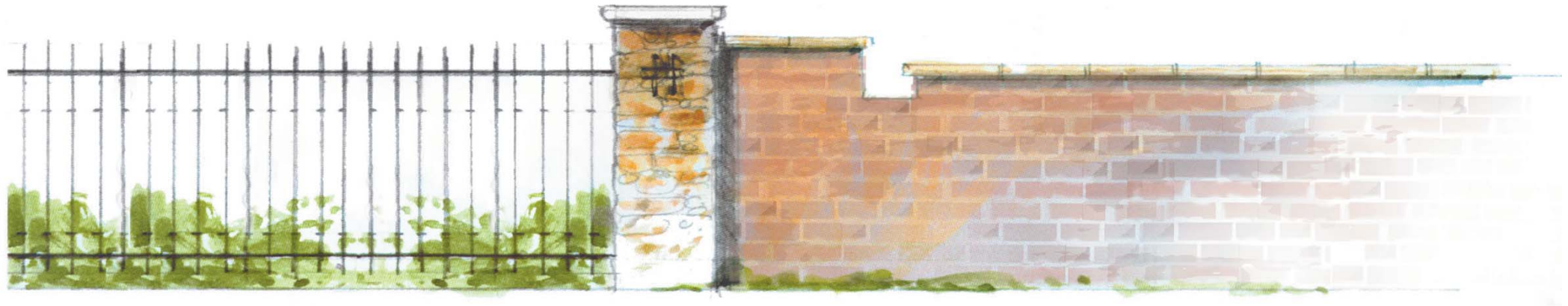


FIGURE 31: CONCEPTUAL NEIGHBORHOOD ENTRY



FIGURE 32: CONCEPTUAL TRILOGY ENTRY

respectively. Enhanced landscaping and monumentation along these entryways will welcome residents. Each of the individual neighborhoods, as well as the Trilogy gated community, will feature entry monumentation that will provide a sense of neighborhood arrival while maintaining a connectivity with the community as a whole.



Theme walls, combined with a landscape buffer, are utilized to facilitate the transition between the residential and commercial area. In addition, theme walls act as a barrier within the residential areas and to minimize light and noise pollution from vehicles. Proposed theme walls will stagger or meander as appropriate, providing visual movement and interest, and contain an adequate number of breaks for pedestrian connections between the residential and commercial area. Since the placement of theme walls restricts the connectivity and visibility of open space, the Development Team anticipates that theme wall placement will be minimized to the extent possible. View walls are encouraged where appropriate, especially at lots backing open space and common areas. Both the conceptual theme walls and view fences are six-foot in height with concrete masonry block with buttressed columns that may be accented with stacked stone or decorative caps. The view walls have four foot tall panels of wrought iron between the columns above two feet of masonry.

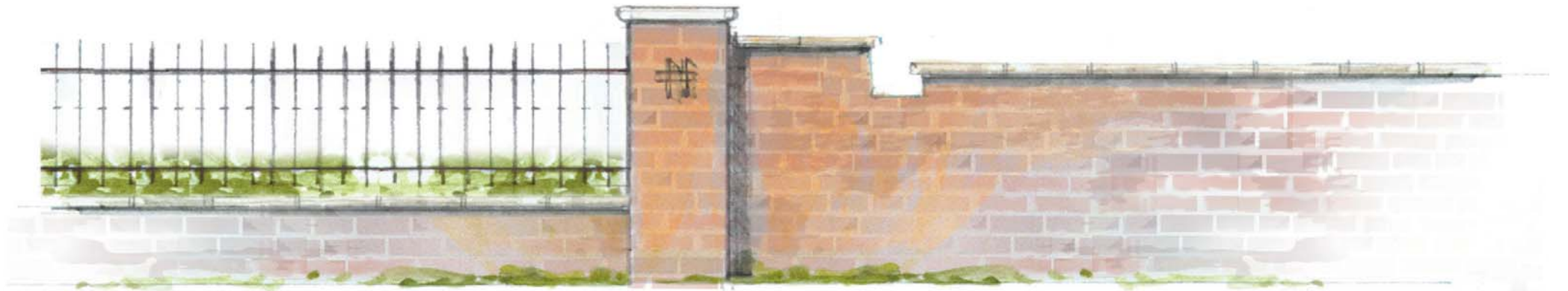




FIGURE 34: CONCEPTUAL COMMUNITY MAILBOX

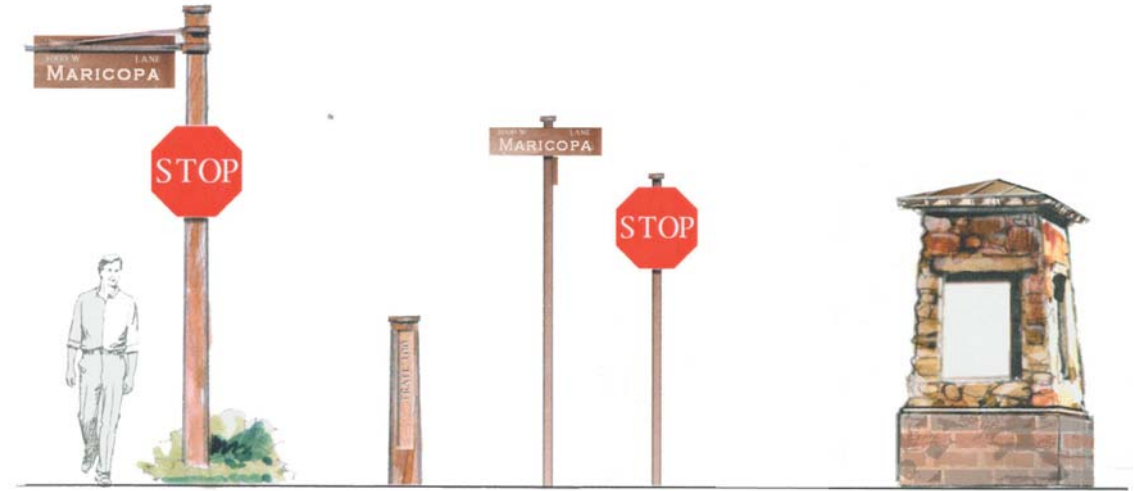
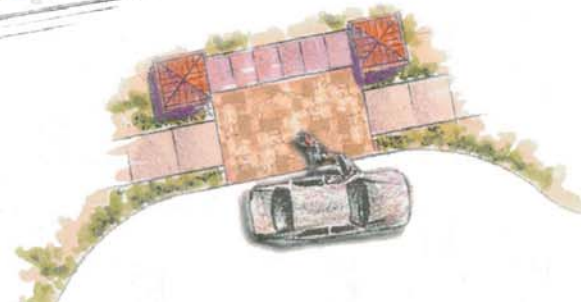


FIGURE 35: CONCEPTUAL COMMUNITY SIGNAGE

H. SIGNAGE

The architectural theme established for Avalea will be carried throughout all aspects of the community as well as the commercial areas. Community mailboxes will be located throughout the neighborhoods. Materials for these community mailboxes may be constructed of concrete masonry block with buttressed columns that may be accented with stacked stone or decorative caps. This same architectural theme will also be incorporated into the signage for the community as shown on Figure 35 above.

I. AMENDMENTS

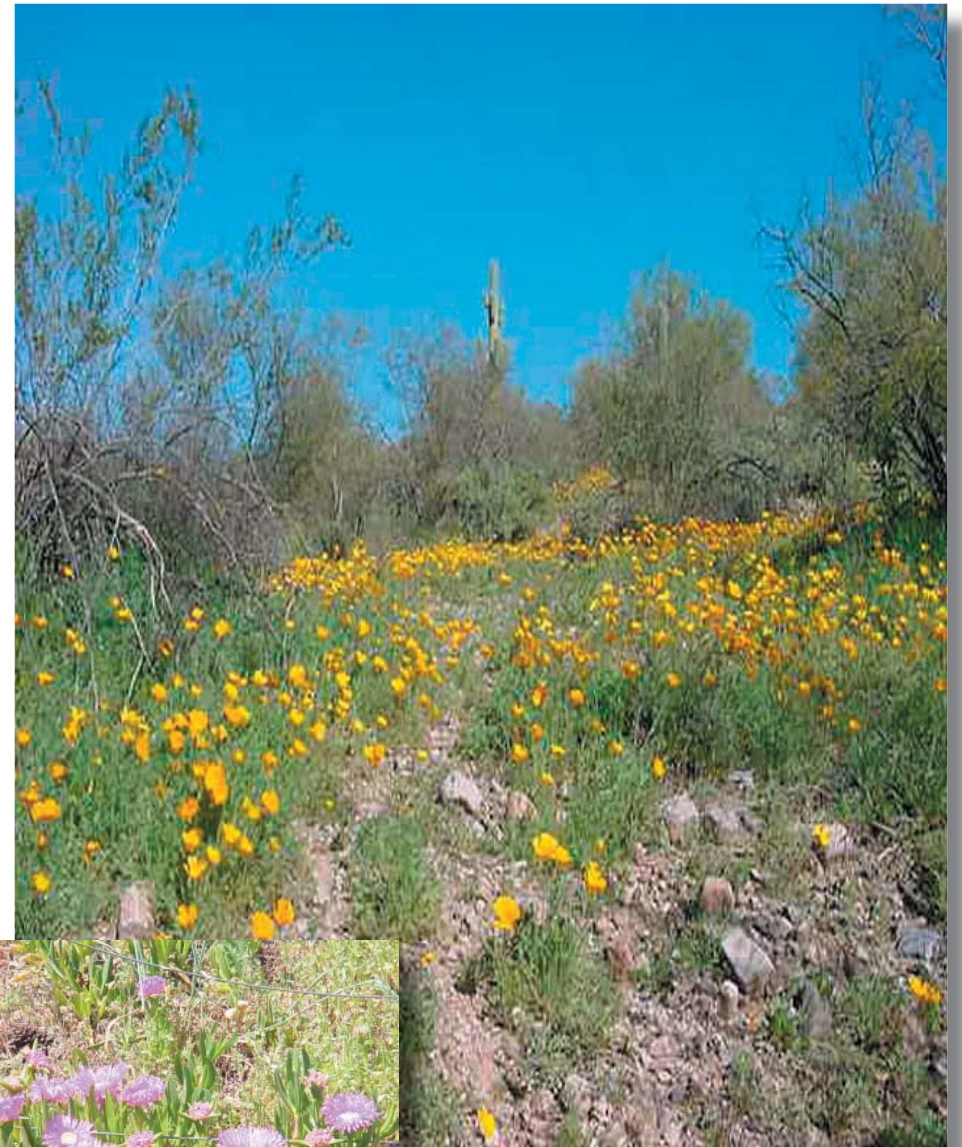
Where a conflict or inconsistency occurs between the provisions of the PAD and otherwise applicable ordinances, such as but not limited to the City's Zoning Ordinance, the provisions of the PAD shall prevail. Amendments to this PAD may be occasionally necessary. For instance, adjustments may be needed for natural constraints, such as drainage way delineation, or to reflect changes in market conditions and development financing and/or to meet new requirements of one or more of the potential users or builders of any part of the property.

When revisions or adjustments are necessary or appropriate, those revisions shall, unless otherwise required by applicable law, be effectuated as a minor revision to this PAD through the administrative approval of the City Manager or designee. A minor revision shall not require prior notice or hearing, and after approval, such minor revision shall be attached to the Avalea PAD as an addendum and become a part hereof. Any adjustments to the CR-3, CR-4, and CR-5 land use acreages within a specific development area may require a minor amendment that would be approved administratively at the time of the preliminary plat.

J. MAINTENANCE OF STREETS AND COMMON AREAS

John Wayne Parkway (SR347) is a state highway under the jurisdiction of ADOT. All public roadways including arterial, collector and local roadways within Avalea will be maintained by the City upon approval and acceptance by the City. All private streets will be maintained by the Homeowners Association.

Covenants, Conditions and Restrictions (CC&R's) will provide for the formation of a Homeowner's Association that will manage and maintain open space and common areas.



SECTION
4.0

ARCHITECTURAL DESIGN



ARCHITECTURAL DESIGN

A. ARCHITECTURAL DESIGN GUIDELINES - RESIDENTIAL

The residential product for Avalea will include a diverse mix of builders and housing type. The intent of the Avalea residential architecture guidelines is to promote diversity and provide flexibility by offering a variety of architectural styles, materials, and color palettes. In keeping with the character of the Community, the residential architecture will be of a high caliber that enhances the quality of life for residents and surrounding neighbors. As envisioned, the residential theme offers a variety of options that ultimately will give residents their own unique space while maintaining consistency with the overall theme of the community. The architectural styles selected for the Community will be reviewed by the Design Review Committee (DRC) that will be set up for Avalea. The DRC does not assume responsibility for plan review of, or conformance to, applicable local codes or ordinances. The DRC's purpose in plan review is to meet the intent of the Design Guidelines and supporting documents. To achieve architectural diversity while promoting continuity and harmony with the desired character, the Avalea PAD proposes the following residential design principals:

RESIDENTIAL DESIGN CRITERIA

1. Neighborhoods should enjoy distinct streetscapes that foster social interaction of the street and neighborhood.
2. Neighborhoods should enjoy a sense of unity with the community while reflecting their own neighborhood identity.
3. Homes should be designed with varying building forms, massing, roof styles, setbacks, and building orientation.
4. Residential design should complement rather than overpower the overall streetscape.
5. Garage doors should be de-emphasized in the streetscapes of the community.
6. Residential architecture should incorporate appropriate design elements that offer shade.
7. Buildings should be diverse in style and size, offering a range of choices while creating a sustainable streetscape.



8. Special architectural details that are consistent with the style should be utilized when appropriate.
9. Windows and doors should be aligned and sized in a manner that brings order to the building façade.
10. Chimneys and other roof protrusions should utilize the same color and materials to match the main adjacent surface, unless being used specifically as a trim or an accent element.
11. Building facades should utilize a number of methods to break up long continuous walls and create shadow lines when appropriate. These methods may include, but are not limited to using recess entryways and windows, groupings of windows, and horizontal and vertical offsets and reveals.
12. A variety of architectural design features, techniques, patterns, materials and color should be used to create variety and visual interest in the façade of homes when such features are appropriate to the architectural style. These features should be utilized in a coordinated manner, resulting in a unified design of the structure.
13. Building facades should not only reflect the design intent of the community, they should provide a building presence that contributes to the neighborhood, as well as overall community character.
14. Exterior building design, including architectural details related to color, type and application of materials, and building form should be coordinated in a manner that promotes harmony and continuity but also diversity of design.
15. Design of enclosures for accessory elements, such as mailboxes and refuse enclosures should utilize colors and materials that are compatible with the adjacent structures, and complementary to the overall character of the community.
16. A variety of home roofing colors, shapes and/or textures will be offered. A variation of ridge-lines and designs will be provided. Concrete tile shall be utilized for most of the sloped roofs; however, architectural style will ultimately dictate roofing material.



STANDARD PACIFIC HOME

ARCHITECTURAL DESIGN



FULTON HOMES



ARCHITECTURE

In order to achieve the diversity desired and to address the needs and lifestyles of the residents, the following architectural themes may be considered, but not limited to:

- Spanish Colonial
- Santa Barbara
- Monterey
- Arizona Ranch
- Mediterranean
- Tuscan
- Bungalow
- Prairie

Specifically excluded from the architectural themes within Avalea are:

- Alpine
- Tudor
- Victorian
- Farm
- Log
- American Colonial

One architectural style will not be dominant in the Community. Simple forms and well-detailed elements will contribute to the compatibility and success of each of the architectural themes. Building forms and floor plans will relate to an architectural theme for complete integration rather than a “tacked-on” application. Any detached living structures, such as casitas, will be designed to match the style, massing and detailing of the primary structure.

BUILDING FORMS

Avalea will be unified by specific criteria that relate to building massing, front massing and articulation, form and roof architecture, garage options, balconies and projections, rear massing and articulation, porches, courtyards and window treatment, colors and materials, accent materials, doors, roofing and roofing materials, mechanical equipment, meters, gutters and downspouts, and accessory structures.

BUILDING MASSING

Building massing criteria are intended to create neighborhoods and street scenes that have a variety of building forms. Exterior massing of the home should reflect the general uses that occur in the home and should be organized to create a positive living environment. General design objectives for building massing include the following:

- Minimize the visual impact of garages.
- Incorporate single story elements in two-story buildings.
- Vary setbacks at various areas of the home, including porches, living and garage areas.
- Use appropriate transition of scale.
- Encourage four-sided design.

FRONT MASSING AND ARTICULATION



- At minimum, three floor plans will be offered in each series.
- A rhythm or pattern for the street will be created by regulating the ratio of one-story and two-story houses.
- Plans utilizing all garage positions are encouraged.
- Each plan offered will have three distinctly different elevations.
- Each elevation will use a unique color palette.
- Rear and side elevations will be enhanced in those locations where they are highly visible from community spaces.
- Stone and brick veneer, decorative stucco, and wrought iron will be integral exterior materials offered in the elevations where appropriate to the architectural style.
- Door and window detailing will vary among the building elevations and relate to the building architecture. Maximum garage door height will be 8'-0" and recessing will be encouraged.
- Window trim and recessing will be encouraged.
- Basements may be offered in a series of product lines in order to create more livable space allowing for more open space on the lot.
- Architectural projections in certain product lines will be allowed into the side yard setbacks with appropriate roof structures to create visual interest.
- Variable front yard setbacks will be encouraged.



SHEA HOMES

FORM AND ROOF ARCHITECTURE

Home design will reflect the character of the community and will encourage four-sided architecture as a primary feature to stimulate visual interest.

- The rear and sides of homes will be aesthetically enhanced.
- Where three or more houses abut an arterial street in the rear, the rear elevations will be varied, resulting in no more than two adjacent houses or structures having the same roof line.
- To avoid the sameness in roof styles, design features will include unique gable and hip massing, clip gables, Dutch gables, and flat roof accent areas hidden behind parapets.
- A variety of roof forms along arterial and community collector streets will create a positive visual edge to these public ways.
- The use of standing seam metal roofs will be allowed on appropriate architectural styles in neutral, non-reflective colors.
- Chimneys, roof flashing, rain gutters, downspouts and other roof protrusions will be painted and finished to match the color of the adjacent surface, unless used as a trim or accent element.
- Conventional skylights will not be allowed on sloped roofs facing public streets.



GARAGE OPTIONS

In order to achieve diversity with the front elevations a variety of garage options will be encouraged.

ARCHITECTURAL DESIGN



STANDARD PACIFIC HOMES

- The following alternative garage configurations are encouraged:
 - o Deep-recessed garage
 - o Mid-recessed garage
 - o Shallow recessed garage
 - o Offset garage (three car garage, forward facing 55' lot and larger)
 - o Garage with casita
 - o Split garage
 - o Motor court garage
 - o Swing-in garage
 - o Side-loaded garage
 - o Tandem garage
 - o Street side-loaded garage
 - o Alley-loaded garage
- A minimum of 2' offset is encouraged where garages are adjacent on common property lines.
- For lots 55' or wider with 3-car garages, an offset street facing garage, tandem or swing-in garage configuration will be required.
- Garage configurations may protrude greater than 8'-0" provided architectural elements are incorporated (i.e., courtyards, windows, decorative precast elements, wrought iron, etc.)

BALCONIES AND PROJECTIONS

Balconies and architectural projections will be encouraged as appropriate to the architectural style in order to provide visual relief and variety for the elevations. Additionally, these balconies or projections create outdoor rooms for the enjoyment of residents. Criteria for balconies and projections include:

- Projections will be proportionately massed so that they integrate into the overall massing of the homes.
- Balconies will include railings that enhance the architectural style of the dwelling.
- Architectural projections, including entertainment centers, fireplaces and bay windows are encouraged to include roof elements to add visual interest.
- Living area cantilevers and covered balconies are encouraged to be appropriate to the architectural style.

REAR MASSING AND ARTICULATION

Where dwellings are adjacent to or in close proximity to major community roadways, open spaces or entry features, particular attention will be given to their design. Repetitious elements such as continuous gable ends or continuous building silhouettes will be avoided.

PORCHES, COURTYARDS AND WINDOW TREATMENT



In order to de-emphasize the garage and to increase the visual interest created in neighborhoods, the following criteria relate to porches, courtyards and window treatments:

- Architectural projections, porches, courtyards, box windows, and bay windows may be offered to de-emphasize the garage as well as to enhance the integration of residences into the neighborhood.
- Rear covered patios will integrate into the design of the home.
- Windows should be proportioned and aligned to be appropriate to the style of the dwelling.
- Grates, shutters and tile surrounds are encouraged and appropriate to the style of the home.
- Window trim and recessing will be encouraged on all elevations (front, sides and rear).

COLORS AND MATERIALS

Colors and materials will unify the community and will help define the overall architectural character of dwellings.

- Colors and materials will be chosen appropriately to support the unified community character and the use of bright and primary colors will be moderated to prevent a visually jarring streetscape.
- Colors and materials will be chosen so that they enhance the street scene and are appropriate in relation to adjacent homes.
- Color variations will be compatible with the environment and combinations will be used to reduce reflected heat and glare into the surrounding area.
- Architectural color boards will be developed to create a dynamic blend of complementary colors that enhance a variety of architectural elements.
- Avalea will offer eight color choices per housing type.

ACCENT MATERIALS

In Avalea, accent materials will reinforce the architectural theme of the dwelling while ensuring diversity in character within the neighborhood.

- The use of the following materials is encouraged: natural stone, approved manufactured or cured stone, brick, precast concrete, ceramic tile, wrought iron, slump block, and horizontal or vertical wood siding.
- Accent materials that complement the overall color and style of the home are encouraged.
- Architectural trim applied to all elevations should be consistent with front elevation and architectural style.

DOORS

Doors create the point of hospitality for a home and should reflect the architectural quality of the neighborhood and community.



SHEA HOMES



FULTON HOMES

ARCHITECTURAL DESIGN



SHEA TRILOGY

- The design of doors must be consistent with the architectural style of the home.
- Entry and garage doors may express a level of detail that is appropriate to the style of the home.
- Maximum garage door height shall be 8'-0".
- Garage door windows shall be consistent with the architectural style of the homes.

ROOFING AND ROOFING MATERIALS

- Roof tile materials will be concrete or clay, flat or S-tiles, depending on the architectural style.
- Conventional skylights are not allowed on sloped roofs facing public streets.
- Standing seam metal roofs in non-reflective neutral colors are allowed in appropriate architectural styles.
- Roof tile colors, shapes and textures shall be consistent with the architectural themes.
- Flat Roof elements are allowed only if appropriate to style and screened behind a parapet wall.
- No asphalt shingles will be allowed within Avalea.

MECHANICAL EQUIPMENT

- In order to preserve the streetscape character and the architectural quality of the community, mechanical equipment must be screened from public view.
- Rooftop equipment (including meters, backflow preventers, and irrigation equipment, air condition/heating equipment, and pool, spa, and water treatment equipment) must be screened from street and neighboring view.



- Air conditioning/heating equipment shall be screened from the street and neighboring views.
- Pool, spa, and water softening equipment shall be screened from the street, open spaces and neighboring views.

METERS

To the extent possible, meters shall be screened from public view.

GUTTERS AND DOWNSPOUTS

- Exposed gutters shall match roof fascia or wall color.
- Faux copper patina is acceptable.

ACCESSORY STRUCTURES

Any detached living structure, such as casitas associated with a single-family lot, shall be designed to match the style, massing and detail criteria of the primary building.

ADDITIONS AND MODIFICATIONS

- All additions to homes shall be constructed of the same building materials as the principle residence and painted to complement the homes.
- Garages may be partially converted to livable space, but automobile parking for at least two vehicles needs to be maintained within the garage. Any addition or conversion shall be constructed of the same building materials as the principle residence and painted to complement the home and must be approved by the HOA and DRC. Approval by the HOA and DRC does not preclude approval by the City or conformance with building and fire codes. Converted garage plans will need to be submitted and approved by the Planning and Development Department as well as the Fire and Building Departments of the City of Maricopa.

DESIGN REVIEW COMMITTEE

A Design Review Committee will be established for the project by the development team to review compliance with the planning guidelines, objectives and development standards set forth by this PAD. The Design Review Committee will be enabled through a comprehensive governance structure to be established by the developer and embodied in Covenants, Conditions, and Restrictions (CC&R's) recorded against the property.

B. COMMERCIAL DESIGN GUIDELINES

The Commercial Design Guidelines proposed in this PAD pertain only to the 120 acres being zoned CB-2 and located at the northwest corner of the site as shown on the Master Plan. The commercial site will be developed separately from the Avalea community and under different ownership. The purpose of establishing architectural design guidelines within commercial areas is to ensure quality development that reinforces a consistency throughout the PAD. All architecture is intended to appear as an integrated part of the overall site design concept. Buildings will compliment the architectural style of the Avalea community (see architectural styles on page 58), employing appropriate massing, scale and proportion for design implementation. Designs for individual projects will be submitted as part of the site plan review in the City of Maricopa.

The architectural elements selected will provide the highest probability of economic success, aesthetic satisfaction and flexibility in design through build-out. Quality and design elements for commercial buildings include:

- Richness of surface and texture
- Light Play (shapes and shadows)
- Equal void to solid building wall ratios
- Multi-planed roofs
- High degree of varying wall articulation

Contemporary commercial architecture can be characterized by simple multi-story, geometric floor plate-type structures typically faced with materials as listed below. These relatively low profile simple shapes can comprise a strong element of continuity throughout the area, and it is the materials, variations and fenestration details which provide the necessary variety.

- Wall surfaces, textures, patterns
- Openings (windows, balconies, pedestrian entrances)
- Graphics (colors, letter styles, clarity)

The diversity of architectural products available for use in the commercial development include:

BUILDING MATERIALS

- | | |
|--------------------------------------|----------|
| • Masonry (concrete, glass or brick) | • Stucco |
| • Textured or exposed aggregate | • Stone |
| • Pre-cast or built-up concrete | • Wood |

BUILDING FACADE TREATMENTS

- Openings
- Recessed or projected entries
- Windows
- Arcades

COLOR

- Subtle, warm tones
- White
- Graphics

The following design elements should be consulted when reviewing architecture for the commercial design:

LAYOUT

Exterior components of plumbing, processing, heating, cooling, and ventilating systems (including but not limited to piping, tanks, stacks, collectors, heating, cooling and ventilating equipment fans, blowers, duct-work, vents, louvers, meters, compressors, motors, incinerators, ovens, etc.) shall not be visible to an individual standing on the ground or ground-floor elevation from a distance of 500 feet.

Exterior junction receptacles for electrical or irrigation purposes use should be located in shrub bed areas and landscaped to screen from view.

Conceal all service areas and storage areas within the building, or screen those exterior areas with solid masonry or stucco stud walls of single color or with architecturally-coordinating trim.

Walls and/or landscaping are encouraged to screen parking areas from street side views. (See parking screening and landscape exhibits).

Buildings should be sited in a manner that will complement the adjacent building and landscape within Avalea. Building sites should be developed in a coordinated manner to provide order and diversity and avoid a confused street scene.

DESIGN

Buildings with varying front setbacks and rear setbacks where visible to public view or neighboring homes are strongly encouraged to create four-sided architecture.

Commercial developments should incorporate street furniture and pedestrian spaces where appropriate. Pedestrian amenities incorporate the overall commercial design scheme and are compatible in scale, form, materials and color with architectural elements. Street furnishing should be simple in design and functional, and be placed so as not to obstruct entrances, exits, or pedestrian paths.

MATERIALS

The use of prefab, all-metal steel for sheathing of buildings is prohibited. This is not to preclude the use of finished metal details within architecturally designed structures including roofs.

Service utilities will be located underground within the PAD area, except for major power sources and connections with possible future substation facilities.

Building materials and landscaping should be consistent with adjacent, non-residential buildings to create a sense of unity of overall design.

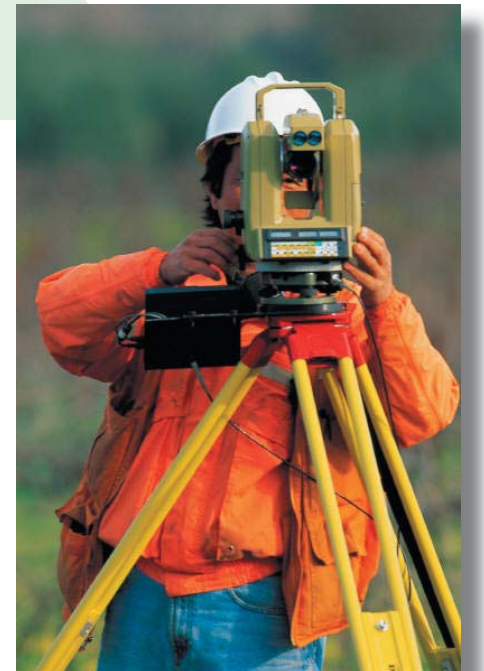
SIGNS

Signs shall comply with the City of Maricopa Zoning Ordinance.

LIGHTING

Lighting shall comply with the City of Maricopa Zoning Ordinance.

APPENDIX A: LEGAL DESCRIPTION



APPENDIX A: LEGAL DESCRIPTIONS

PARCEL DESCRIPTION PETRA NORTH PARCEL

A PORTION OF THE WEST HALF OF SECTION 3, TOWNSHIP 5 SOUTH, RANGE 3 EAST OF THE GILA AND SALT RIVER MERIDIAN, PINAL COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 3, FROM WHICH THE WEST QUARTER CORNER OF SAID SECTION BEARS SOUTH 00°38'08" WEST, A DISTANCE OF 2611.61 FEET;

THENCE SOUTH 89°51'30" EAST ALONG THE NORTH LINE OF SAID SECTION, A DISTANCE OF 149.97 FEET TO THE **POINT OF BEGINNING**;

THENCE CONTINUING SOUTH 89°51'30" EAST ALONG SAID NORTH LINE, A DISTANCE OF 1836.84 FEET;

THENCE DEPARTING SAID NORTH LINE, SOUTH 00°06'49" WEST, A DISTANCE OF 220.00 FEET;

THENCE SOUTH 89°51'30" EAST, PARALLEL WITH AND 220.00 FEET SOUTH OF SAID NORTH LINE, A DISTANCE OF 264.00 FEET;

THENCE DEPARTING SAID PARALLEL LINE, NORTH 00°06'49" EAST, A DISTANCE OF 220.00 FEET TO SAID NORTH LINE;

THENCE SOUTH 89°51'30" EAST ALONG SAID NORTH LINE, A DISTANCE OF 162.00 FEET;

THENCE DEPARTING SAID NORTH LINE, SOUTH 00°06'49" WEST, A DISTANCE OF 210.00 FEET;

THENCE SOUTH 89°51'30" EAST, PARALLEL WITH AND 210.00 FEET SOUTH OF SAID NORTH LINE, A DISTANCE OF 131.00 FEET;

THENCE DEPARTING SAID PARALLEL LINE, SOUTH 00°06'49" WEST, A DISTANCE OF 2833.73 FEET;

THENCE SOUTH 67°48'02" WEST, A DISTANCE OF 175.49 FEET TO THE BEGINNING OF A 5000.00 FOOT RADIUS CURVE, CONCAVE NORTHERLY;

THENCE SOUTHWESTERLY ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 22°48'30", AN ARC LENGTH OF 1990.40 FEET;

THENCE NORTH 89°23'28" WEST, A DISTANCE OF 321.67 FEET;

THENCE NORTH 00°31'22" EAST, A DISTANCE OF 878.48 FEET;

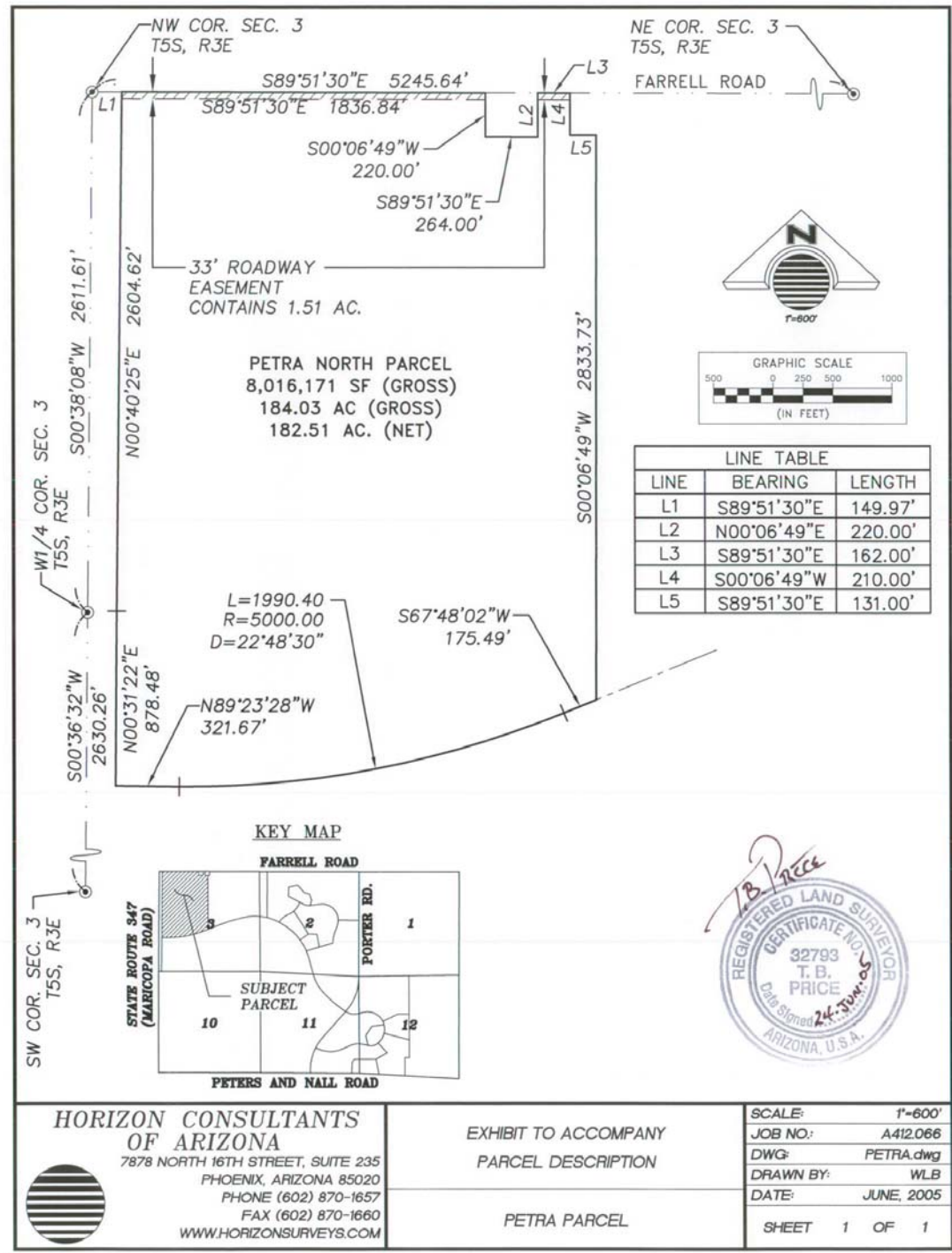
THENCE NORTH 00°40'25" EAST, A DISTANCE OF 2604.62 FEET TO THE **POINT OF BEGINNING**.

SUBJECT PARCEL GROSS AREA CONTAINS 8,016,171 SQUARE FEET OR 184.03 ACRES, MORE OR LESS.

THE NORTH 33.00 FEET OF SECTION 3 WITHIN THE SUBJECT PARCEL IS A ROADWAY EASEMENT WHICH CONTAINS 65,967 SQUARE FEET OR 1.51 ACRES, MORE OR LESS.

SUBJECT PARCEL NET AREA CONTAINS 7,950,204 SQUARE FEET OR 182.51 ACRES, MORE OR LESS.





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EXHIBIT TO ACCOMPANY
 PARCEL DESCRIPTION
 PETRA PARCEL

SCALE: 1"-600'
 JOB NO.: A412.066
 DWG: PETRA.dwg
 DRAWN BY: WLB
 DATE: JUNE, 2005
 SHEET 1 OF 1

APPENDIX A: LEGAL DESCRIPTIONS

PARCEL DESCRIPTION PETRA SOUTH PARCEL

A PORTION OF THE SOUTHWEST QUARTER OF SECTION 3, TOWNSHIP 5 SOUTH, RANGE 3 EAST OF THE GILA AND SALT RIVER MERIDIAN, PINAL COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF SAID SECTION 3, FROM WHICH THE SOUTHEAST CORNER OF SECTION 3 BEARS SOUTH 89°44'59" EAST, A DISTANCE OF 5338.69 FEET;

THENCE SOUTH 89°44'59" EAST, ALONG THE SOUTH LINE OF SAID SECTION, A DISTANCE OF 150.26 FEET TO THE **POINT OF BEGINNING**;

THENCE DEPARTING SAID SOUTH LINE, NORTH 00°40'25" EAST, A DISTANCE OF 737.85 FEET;

THENCE NORTH 00°31'22" EAST, A DISTANCE OF 1,021.21 FEET;

THENCE SOUTH 89°23'28" EAST, A DISTANCE OF 321.67 FEET TO THE BEGINNING OF A 5,000.00 FOOT RADIUS CURVE, CONCAVE NORTHERLY;

THENCE EASTERLY ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 22°48'30", AN ARC LENGTH OF 1,990.40 FEET;

THENCE NORTH 67°48'02" EAST, A DISTANCE OF 175.49 FEET TO THE WEST LINE OF PROPOSED FULTON 320 PARCEL;

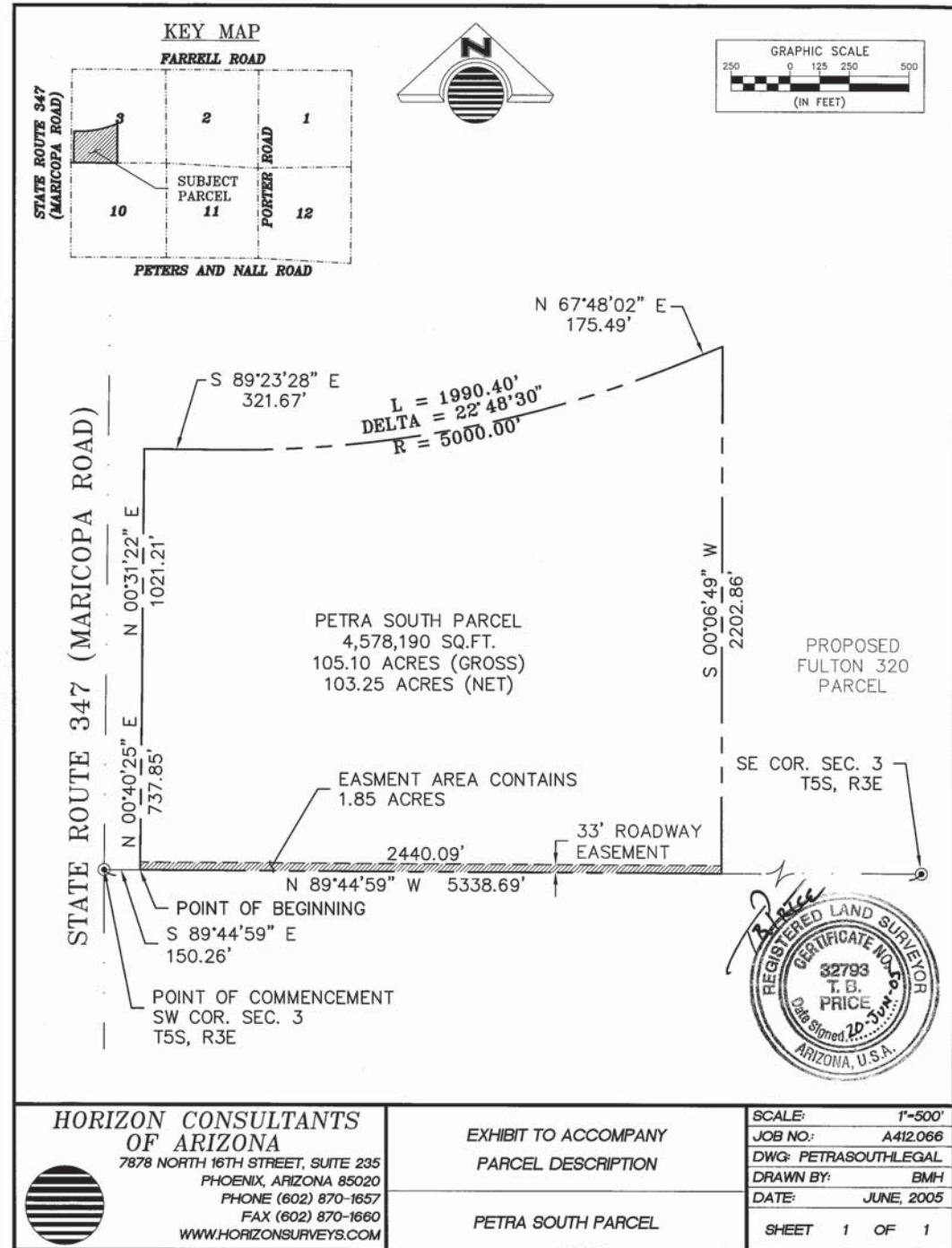
THENCE SOUTH 00°06'49" WEST, ALONG SAID WEST LINE, A DISTANCE OF 2,202.86 FEET TO SAID SOUTH LINE OF SECTION 3;

THENCE DEPARTING SAID WEST LINE, NORTH 89°44'59" WEST ALONG SAID SOUTH LINE, A DISTANCE OF 2,440.09 FEET TO THE **POINT OF BEGINNING**.

SUBJECT PARCEL GROSS AREA CONTAINS 4,578,190 SQUARE FEET OR 105.10 ACRES, MORE OR LESS.

THE SOUTH 33 FEET OF THE SUBJECT PARCEL IS A ROADWAY EASEMENT WHICH CONTAINS 80,518 SQUARE FEET OR 1.85 ACRES, MORE OR LESS.

SUBJECT PARCEL NET AREA CONTAINS 4,497,672 SQUARE FEET OR 103.25 ACRES, MORE OR LESS.



PARCEL DESCRIPTION
FULTON 320 PARCEL

A PORTION OF SECTION 3, TOWNSHIP 5 SOUTH, RANGE 3 EAST OF THE GILA AND SALT RIVER MERIDIAN, PINAL COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF SAID SECTION 3;

THENCE SOUTH 00°23'38" EAST, ALONG THE EAST LINE OF SAID SECTION, A DISTANCE OF 5,252.02 FEET TO THE SOUTHEAST CORNER OF SAID SECTION 3;

THENCE DEPARTING SAID EAST LINE, NORTH 89°44'59" WEST, ALONG THE SOUTH LINE OF SAID SECTION, A DISTANCE OF 2,748.35 FEET TO THE EAST LINE OF PROPOSED PETRA SOUTH PARCEL;

THENCE DEPARTING SAID SOUTH LINE, NORTH 00°06'49" EAST, ALONG SAID EAST LINE, A DISTANCE OF 5,036.59 FEET;

THENCE DEPARTING SAID EAST LINE, SOUTH 89°51'30" EAST, A DISTANCE OF 79.00 FEET TO THE NORTH-SOUTH MID-SECTION LINE OF SAID SECTION 3;

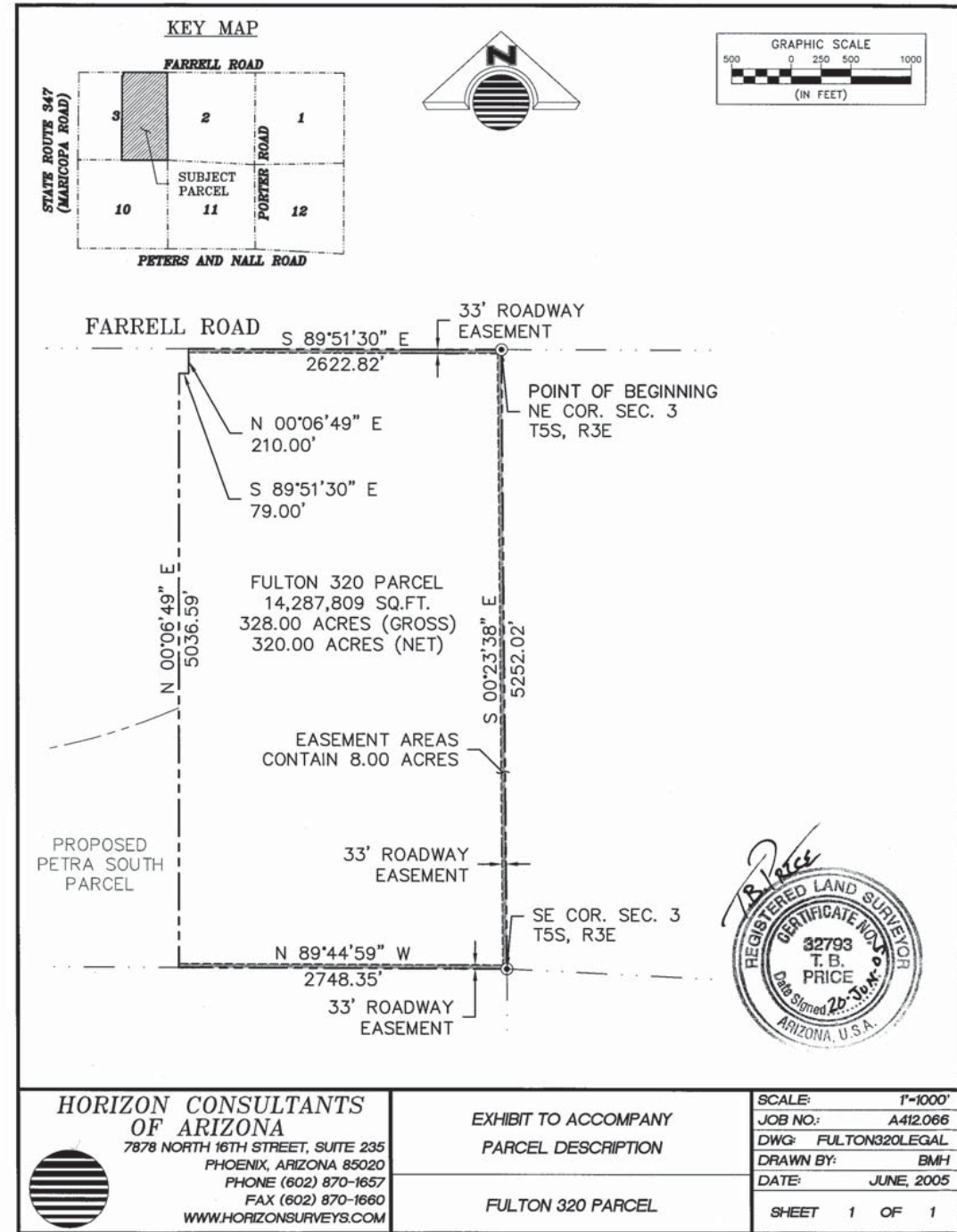
THENCE NORTH 00°06'49" EAST, ALONG SAID NORTH-SOUTH MID-SECTION LINE, A DISTANCE OF 210.00 FEET TO THE NORTH LINE OF SAID SECTION 3;

THENCE DEPARTING SAID NORTH-SOUTH MID-SECTION LINE, SOUTH 89°51'30" EAST, ALONG SAID NORTH LINE, A DISTANCE OF 2,622.82 FEET TO THE **POINT OF BEGINNING**.

SUBJECT PARCEL GROSS AREA CONTAINS 14,287,809 SQUARE FEET OR 328.00 ACRES, MORE OR LESS.

THE SOUTH, EAST AND NORTH 33 FEET OF THE SUBJECT PARCEL ARE ROADWAY EASEMENTS WHICH CONTAIN 348,386 SQUARE FEET OR 8.00 ACRES, MORE OR LESS.

SUBJECT PARCEL NET AREA CONTAINS 13,939,423 SQUARE FEET OR 320.00 ACRES, MORE OR LESS.



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EXHIBIT TO ACCOMPANY
PARCEL DESCRIPTION

FULTON 320 PARCEL

SCALE:	1"=1000'
JOB NO.:	A412.066
DWG:	FULTON320LEGAL
DRAWN BY:	BMH
DATE:	JUNE, 2005
SHEET 1 OF 1	

APPENDIX A: LEGAL DESCRIPTIONS

PARCEL DESCRIPTION PURCHASE BALANCE PARCEL

PORTIONS OF SECTION 2, SECTION 11 AND THE WEST HALF OF SECTION 12, TOWNSHIP 5 SOUTH, RANGE 3 EAST OF THE GILA AND SALT RIVER MERIDIAN, PINAL COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER OF SAID SECTION 2;

THENCE SOUTH 89°49'42" EAST, ALONG THE NORTH LINE OF SAID SECTION, A DISTANCE OF 5,246.55 FEET TO THE NORTHEAST CORNER OF SECTION 2;

THENCE DEPARTING SAID NORTH LINE, SOUTH 00°27'03" WEST ALONG THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION, A DISTANCE OF 2,746.26 FEET TO THE EAST QUARTER CORNER OF SAID SECTION 2;

THENCE SOUTH 00°26'48" WEST, ALONG THE EAST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION, A DISTANCE OF 2,746.63 FEET TO THE SOUTHEAST CORNER OF SECTION 2, ALSO BEING THE NORTHWEST CORNER OF SECTION 12;

THENCE DEPARTING SAID EAST LINE, NORTH 89°06'57" EAST ALONG THE NORTH LINE OF THE NORTHWEST QUARTER OF SECTION 12, A DISTANCE OF 2,647.95 FEET TO THE NORTH QUARTER CORNER OF SAID SECTION;

THENCE SOUTH 00°02'59" EAST, ALONG THE NORTH-SOUTH MID-SECTION LINE OF SAID SECTION 12, A DISTANCE OF 4,274.45 FEET;

THENCE DEPARTING SAID NORTH-SOUTH MID-SECTION LINE, NORTH 87°01'39" WEST, A DISTANCE OF 229.58 FEET;

THENCE SOUTH 00°02'59" EAST, A DISTANCE OF 951.32 FEET TO THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 12;

THENCE NORTH 87°01'39" WEST, ALONG SAID SOUTH LINE, A DISTANCE OF 2,394.69 FEET TO THE SOUTHWEST CORNER OF SECTION 12, ALSO BEING THE SOUTHEAST CORNER OF SECTION 11;

THENCE NORTH 89°41'54" WEST, ALONG THE SOUTH LINE OF SAID SECTION 11, A DISTANCE OF 5,196.39 FEET TO THE SOUTHWEST CORNER OF SECTION 11;

THENCE DEPARTING SAID SOUTH LINE, NORTH 00°01'39" WEST, ALONG THE WEST LINE OF SAID SECTION 11, A DISTANCE OF 5,278.00 FEET TO THE NORTHWEST CORNER OF SECTION 11, ALSO BEING THE SOUTHWEST CORNER OF SECTION 2;

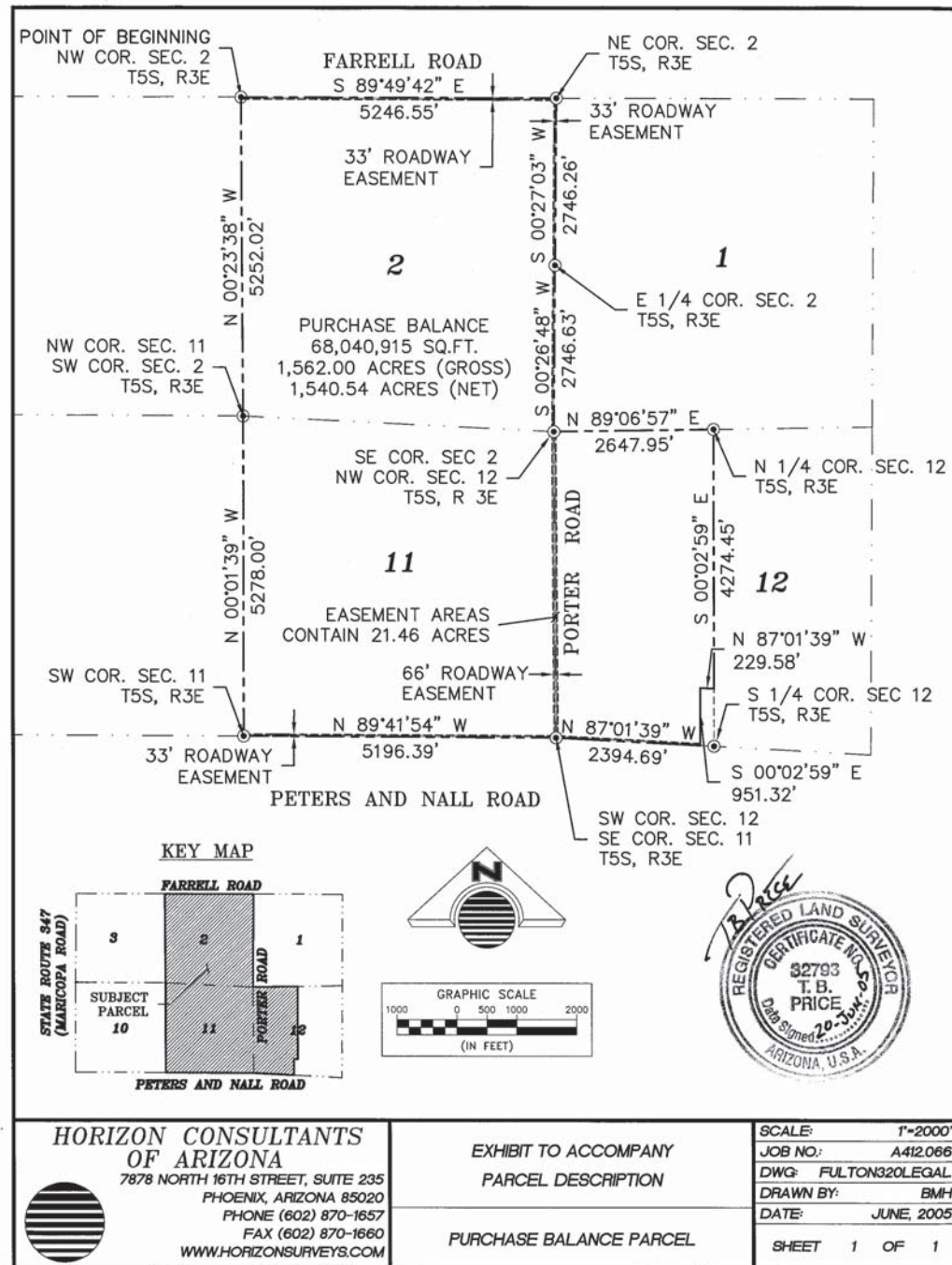
THENCE NORTH 00°23'38" WEST, ALONG THE WEST LINE OF SAID SECTION 2, A DISTANCE OF 5,252.02 FEET TO THE **POINT OF BEGINNING**.

SUBJECT PARCEL GROSS AREA CONTAINS 68,040,915 SQUARE FEET OR 1,562.00 ACRES, MORE OR LESS.

THE NORTH AND EAST 33 FEET OF SECTION 2; THE EAST AND SOUTH 33 FEET OF SECTION 11; THE WEST 33 FEET OF SECTION 12; AND THE SOUTH 33 FEET OF A PORTION OF THE WEST HALF OF SECTION 12 ARE ROADWAY EASEMENTS WHICH CONTAIN 934,925 SQUARE FEET OR 21.46 ACRES MORE OR LESS.

SUBJECT PARCEL NET AREA CONTAINS 67,105,990 SQUARE FEET OR 1540.54 ACRES, MORE OR LESS.





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EXHIBIT TO ACCOMPANY
PARCEL DESCRIPTION

PURCHASE BALANCE PARCEL

SCALE: 1"=2000'
JOB NO.: A412.066
DWG: FULTON320LEGAL
DRAWN BY: BMH
DATE: JUNE, 2005
SHEET 1 OF 1

APPENDIX B: CONCEPTUAL MASTER WATER PLAN



I. INTRODUCTION

This report presents the Conceptual Master Water Plan for the infrastructure of Avalea. Avalea is a proposed Master Planned Community approximately 2,179 acres with a proposed 7,452 dwelling units located in north central Pinal County, Maricopa, Arizona in Township 5 South, Range 3 East, Sections 2, 3, 11 and the west half of 12, of the Gila and Salt River Meridian.

The purpose of this Conceptual Master Water Report is to provide a description of the proposed overall water distribution system and conceptual water main pipe sizes and layout for the infrastructure of Avalea.

Farrell Road and the Santa Rosa Wash generally bound the property on the north, Porter Road on the east, Peters and Nall Road on the south and SR 347 (John Wayne Parkway) on the west. The site is proposed to consist of a mix of primarily single-family residential land uses, recreational facilities, commercial area, recreational facility, two school sites, a park area, a golf course and various open space areas. Water services is anticipated to be provided to the site by Santa Cruz Water Company, a subsidiary of Global Water, L.L.C.

The site is located on land that is currently used for agricultural activities. The properties to the immediate north of the site include three residential developments and State land. The three residential developments are known as Palo Brea, El Rancho Santa Rosa and Santa Rosa Springs. On the east side exists a Sod Farm and a proposed residential development known as Deltessa. And along the west and south is the Ak-Chin Indian Community.

II. OFFSITE WATER SUPPLY SYSTEM

There is currently a 16-inch water distribution line under construction along Farrell Road from SR 347 (John Wayne Parkway) to Porter Road by Global Water. Based on correspondence with Global Water, they intend on extending the 16-inch water line southerly along Porter Road and easterly along Steen Road to serve the Deltessa development. See Conceptual Master Water Exhibit

Since the 16-inch water line is currently under construction at the time this report was written, Global Water did not have pressure or flow test results to analysis the onsite infrastructure water distribution system.

III. WATER DEMAND PROJECTIONS

The demand requirements that may be used in the analysis of the water distribution system will be based on Pinal County and ADWR Standard Specifications for Construction. A water system model for Avalea will be prepared at steady state using the WaterCAD computer program by Haestad Methods, Inc. All lines will be modeled as PVC pipes. A Hazen Williams “C” factor of 150 will be used to represent the friction factor for all PVC pipes.

The following is the criteria for water demand projections that may be used in the water model:

- Single Family dwelling unit consumption = 250 gal/day
- Commercial Consumption = 0.2 gal/sf/day
- Elementary School = 35 gal/student/day (800 students)
- Parks = 750 gal/day
- Average Day Demand = Total Consumption + 10% in losses, in gallons.
- Max. Day Demand = Average Day x 1.80
- Peak Hour Demand = Max. Day x 1.70

IV. ONSITE WATER SYSTEM

The onsite infrastructure water distribution system shown in the Conceptual Master Water Exhibit are pipe sizes and locations anticipated to serve the Avalea development. The proposed 12-inch and 16-inch water lines will be connected to the offsite waterlines in order to complete loops. All individual parcels may have a minimum of an 8-inch waterline to serve each individual parcel.

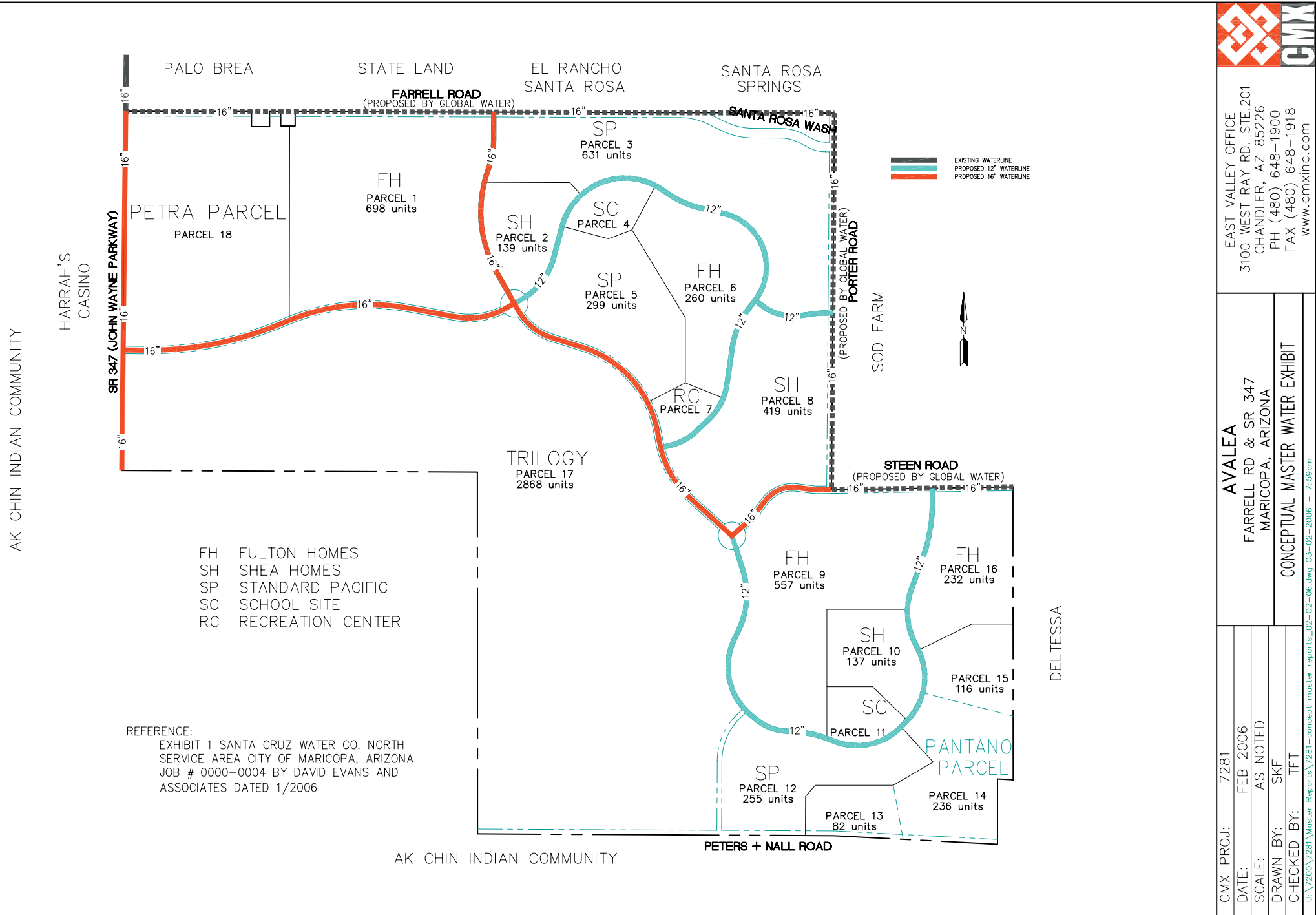
A final water model and report should be prepared for each parcel to accompany the final improvement plans.

V. CONCLUSIONS

The pipe sizes shown in the exhibit are anticipated and do not necessarily reflect the final water distribution system. The final water distribution design will require coordination with Santa Cruz Water Company and the City of Maricopa for design criteria and specifications.



APPENDIX B: CONCEPTUAL MASTER WATER PLAN

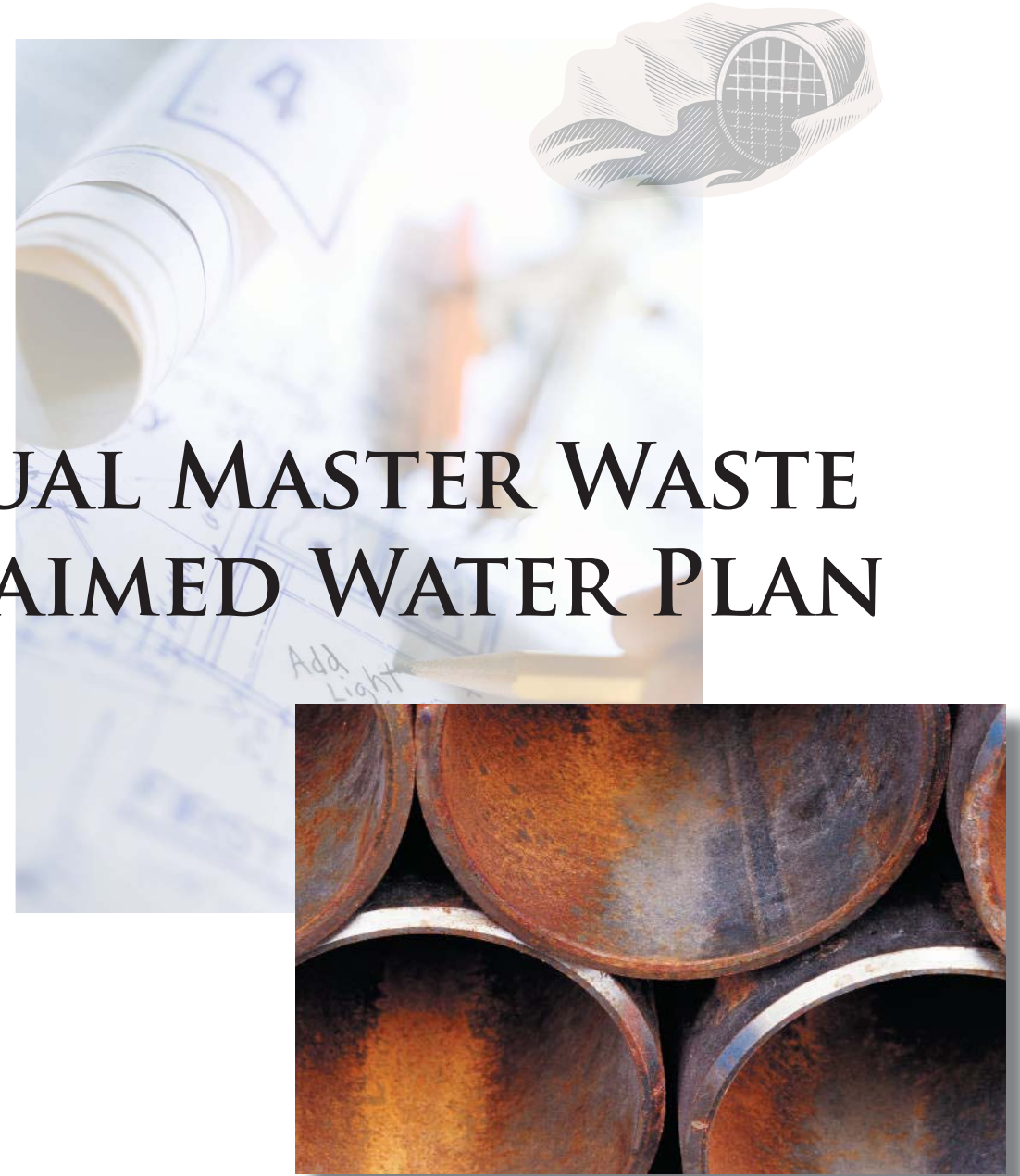


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AVALEA
 FARRELL RD & SR 347
 MARICOPA, ARIZONA
 CONCEPTUAL MASTER WATER EXHIBIT

CMX PROJ:	7281
DATE:	FEB 2006
SCALE:	AS NOTED
DRAWN BY:	SKF
CHECKED BY:	TFT
U:\7200\7281\Master_Reports\7281-concept_master_reports_02-02-06.dwg 03-02-2006 - 7:59pm	

APPENDIX C: CONCEPTUAL MASTER WASTE WATER PLAN AND RECLAIMED WATER PLAN



I. INTRODUCTION

This report presents the Conceptual Wastewater Master Plan for the infrastructure of Avalea. Avalea is a proposed Master Planned Community approximately 2,179 acres with a proposed 7,452 dwelling units located in north central Pinal County, Maricopa, Arizona in Township 5 South, Range 3 East, Sections 2, 3, 11 and the west half of 12, of the Gila and Salt River Meridian.

The purpose of this Conceptual Wastewater Report is to present the design criteria and conceptual sewer main pipe sizes and layout for the infrastructure of Avalea. This report includes a conceptual analysis of the gravity sewer network for the infrastructure to serve the development.

Farrell Road and the Santa Rosa Wash generally bound the property on the north, Porter Road on the east, Peters and Nall Road on the south and State Route 347 (John Wayne Parkway) on the west. The site is proposed to consist of a mix of primarily single-family residential land uses, recreational facilities, commercial area, two school sites, a park area, a golf course and various open space areas. Wastewater services, including reclaimed water, is anticipated to be provided to the site by Palo Verde Utilities Company, a subsidiary of Global Water, L.L.C.

The site is located on land that is currently used for agricultural activities. The properties to the immediate north of the site include three residential developments and State land. The three residential developments are known as Palo Brea, El Rancho Santa Rosa and Santa Rosa Springs. On the east side exists a Sod Farm and a proposed residential development known as Deltessa. And along the west and south is the Ak-Chin Indian Community.

II. OFFSITE WASTEWATER SYSTEM

There are currently two 30-inch sewer mains stubbed along the north portion of the site. One of the sewer main stubs is located at the intersection of Farrell Road and SR 347 (John Wayne Parkway) and the other is located in the vicinity of Santa Rosa Wash within the Santa Rosa Springs development. Based on correspondence with Global Water, they intend on extending the two sewer mains into Avalea to serve the site. All wastewater from Avalea is anticipated to flow into these existing sewer mains. Ultimately both existing sewer mains drain into the Palo Verde Utilities Wastewater Treatment Plant.

III. DESIGN CRITERIA

A. PALO VERDE UTILITIES COMPANY

The flow requirements used in this report are based on information made available by Palo Verde Utility Company.

Following is a summary of the design criteria utilized.

1. The average wastewater flow generated per single-family residential unit, per Palo Verde Utility Company data, is 240 gpd, based on 80 gpd/person times 3 people per unit.
2. The average wastewater flows assigned (per Palo Verde Utilities Company.) for the nonresidential land uses in Avalea are:
 Commercial 1,200 gpd/acre
 School Sites 25 gpd/student
 Park Site 200 gpd/toilet
3. Per Reference 1, ADEQ Bulletin No.11 "Minimum Requirements for Design, Submission of Plans and Specifications of Sewage Works", chapter IV, page 8, wastewater lines shall be designed to provide mean velocities, when flowing full, of not less than 2.0 feet per second (fps), nor greater than 10.0 fps. The following table indicates the minimum slopes generally considered necessary to maintain a minimum 2.0 fps velocity based upon Manning's formula with an "n" value of 0.013 for all sewers.

Size	Minimum Design Slope (with n = 0.013)	Preferred	Minimum
8"	0.0033	0.0035	
10"	0.0024	0.0026	
12"	0.0019	0.0021	
15"	0.0014	0.0016	
18"	0.0011	0.0013	

B. ADDITIONAL DESIGN REQUIREMENTS

In addition to the design criteria used above, the following additional requirements

will be utilized in designing and constructing the wastewater system for Avalea. These requirements are based on data from Palo Verde Utilities Company as mentioned above and Arizona Department of Environmental Quality, Aquifer Protection Permit Rules, effective January 1, 2001, as set forth in Title 18. Environmental Quality, Chapter 9. Department of Environmental Quality Water Pollution Control, Article 3. Aquifer Protection Permits — General Permits, Part E. type 4 General Permits, 4.01 General Permit: Sewage Collection Systems (R-18-9-E301.4.01).

1. The peaking factors used to calculate peak flows rates for Avalea are shown in Table 1.
2. All wastewater collector lines shall be a minimum of 8-inch in diameter.
3. Manholes shall be installed at all grade changes, all size changes, all alignment changes, all sewer intersections (except with service connections), and at any location necessary to comply with the 400 feet maximum manhole spacing requirement. Cleanouts may be used in place of manholes at the end of laterals less than 200 feet in length.
4. The pipe material used shall be to the standard established by the American Society for Testing Materials (ASTM) and to that recommended by the manufacturer. All sewer lines shall be polyvinyl chloride (PVC) SDR 35 unless ductile iron pipe is required to satisfy the separation requirements of ADEQ.
5. Wastewater lines will generally be located in the center of the driving lane, on the south and west sides of the roadway centerline, and on the opposite side of the street from any potable water line. Manholes will typically be located 6 feet off the centerline to the south and west.
6. Easement widths provided for wastewater lines shall be a minimum of twelve (12) feet. The minimum horizontal separation from a wastewater line to another underground utility shall be six (6) feet.
7. When a sewer crosses two (2) feet or more below a water line, no extra protection is required. When sewer crosses less than two (2) feet below a water line, the sewer shall be constructed of cast iron pipe with mechanical joints, or other approved pipe, for at least six (6) feet in both directions from the crossing, or

the sewer shall be encased in concrete 6-inch minimum thickness for the same distance. When a water line must cross under a sewer, a vertical separation of at least 18 inches between the bottom of the sewer and the top of the water line shall be maintained with support provided for the sewer to prevent settling. The sewer shall be constructed of cast iron pipe with mechanical joints, or other approved pipe at least six (6) feet in both directions from the crossing, or the sewer shall be encased in concrete of 6-inch minimum thickness for the same distance.

8. All collectors, trunk, and interceptor lines shall have sufficient depth to serve the ultimate collection area with a minimum cover of six and one half (6.5) feet measured from finished grade to the top of the pipe.
9. If necessary, special construction will be required for all manholes and wastewater lines under wash crossings to minimize infiltration flow.
10. On wastewater lines 6 to 12 inches in diameter, manholes shall be four (4) foot diameter with standard 24-inch frames and covers. On lines 15 inches in diameter and larger, manholes shall be five (5) foot diameter with standard 30-inch frames and covers. Five (5) foot diameter manholes shall be provided on all wastewater lines, regardless of size, where the depth of the line from the finished grade to the pipe invert is greater than twelve (12) feet.
11. All developments within Avalea will be required to connect to the wastewater system. No on-site disposal systems will be allowed.

IV. ONSITE WASTEWATER SYSTEM

The existing topography of the site generally slopes to the north and west at approximately 0.2%. It is anticipated that the infrastructure sewer mains will collect all of the wastewater generated by the Avalea residential and commercial parcels, via gravity flow, generally in the same direction. In the event that lift stations are required, the wastewater would be pumped to the nearest gravity sewer main within the infrastructure.

The site has been divided into eighteen parcel areas. See Conceptual Wastewater Exhibit.

The conceptual onsite sewer mains may require a network of 18", 15", 10", 12" and 8" pipes to carry the estimated flows through the infrastructure. Tables 1 and 2 were prepared to estimate the peak flows and pipe sizes using the design criteria mentioned in section III.

V. ON AND OFFSITE RECLAIMED WATER SYSTEM

There is currently a 24-inch reclaimed water pipe stubbed at the intersection of Farrell Road and SR 347 (John Wayne Parkway). Avalea is proposed to have a lake system to be used as a public amenity and irrigation of all landscape. Based on correspondence with Global Water, they intend on extending the 24-inch reclaimed water line through the site to provide water for the proposed lakes. See Conceptual Reclaimed Master Exhibit. Final length, size and location of pipes will be determined during final design and coordination with Global Water.

V. CONCLUSIONS

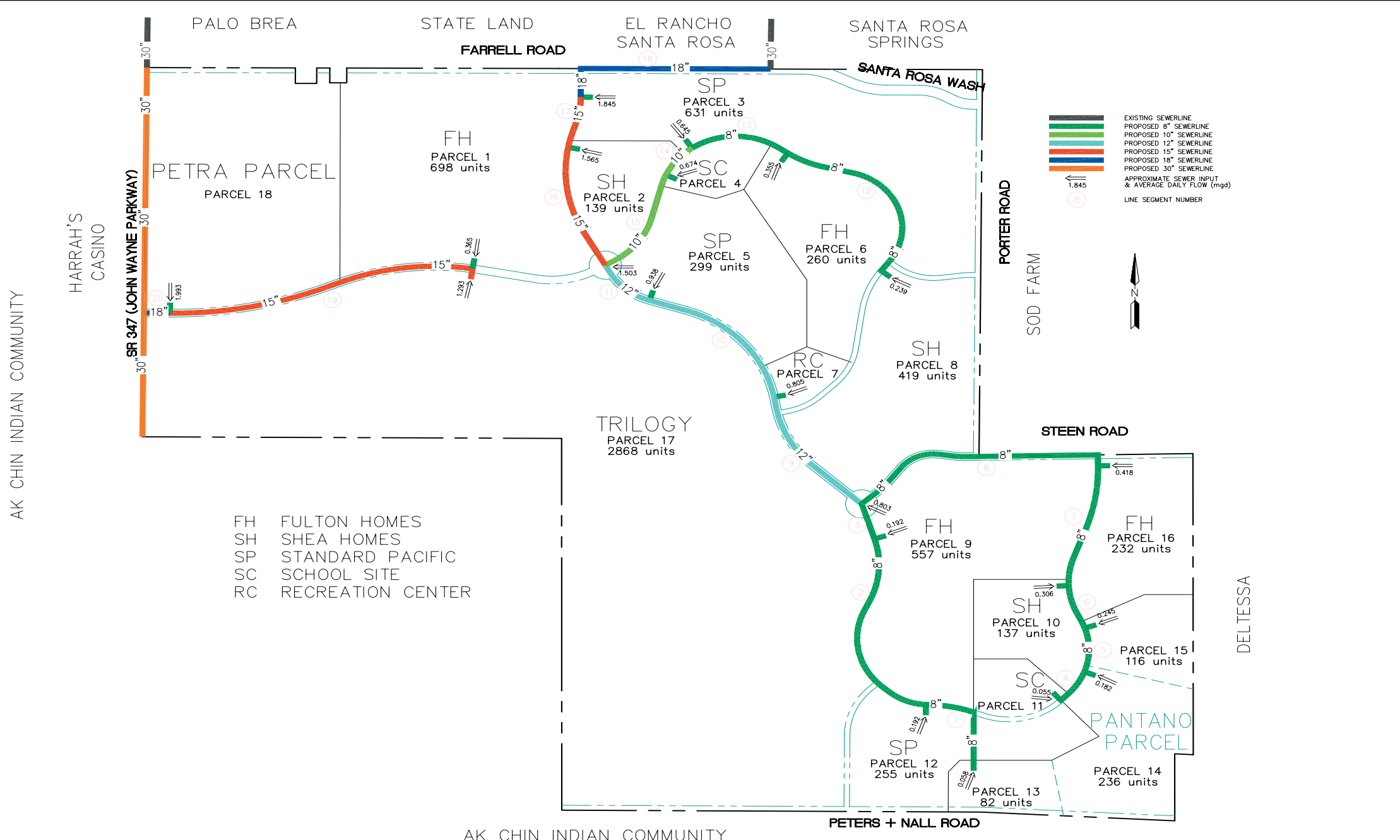
This Conceptual Master Wastewater Report has been prepared in accordance with ADEQ standards and those of the anticipated service provider, Palo Verde Utilities Company.

Based upon this study, the following can be concluded:

- Wastewater collection systems will be available to convey wastewater generated by Avalea ultimately into the Honeycutt main and onward to the Palo Verde Utilities Company Wastewater Treatment Plant.
- The actual sizes and locations of the wastewater collection system may vary upon final determination of subdivision layouts, pipe slopes, and wastewater flows generated by Avalea.
- Sewer mains within the development will be sized and sloped to provide a minimum design velocity of 2.0 fps assuming the pipe is flowing full.



APPENDIX C: CONCEPTUAL MASTER WASTE WATER PLAN



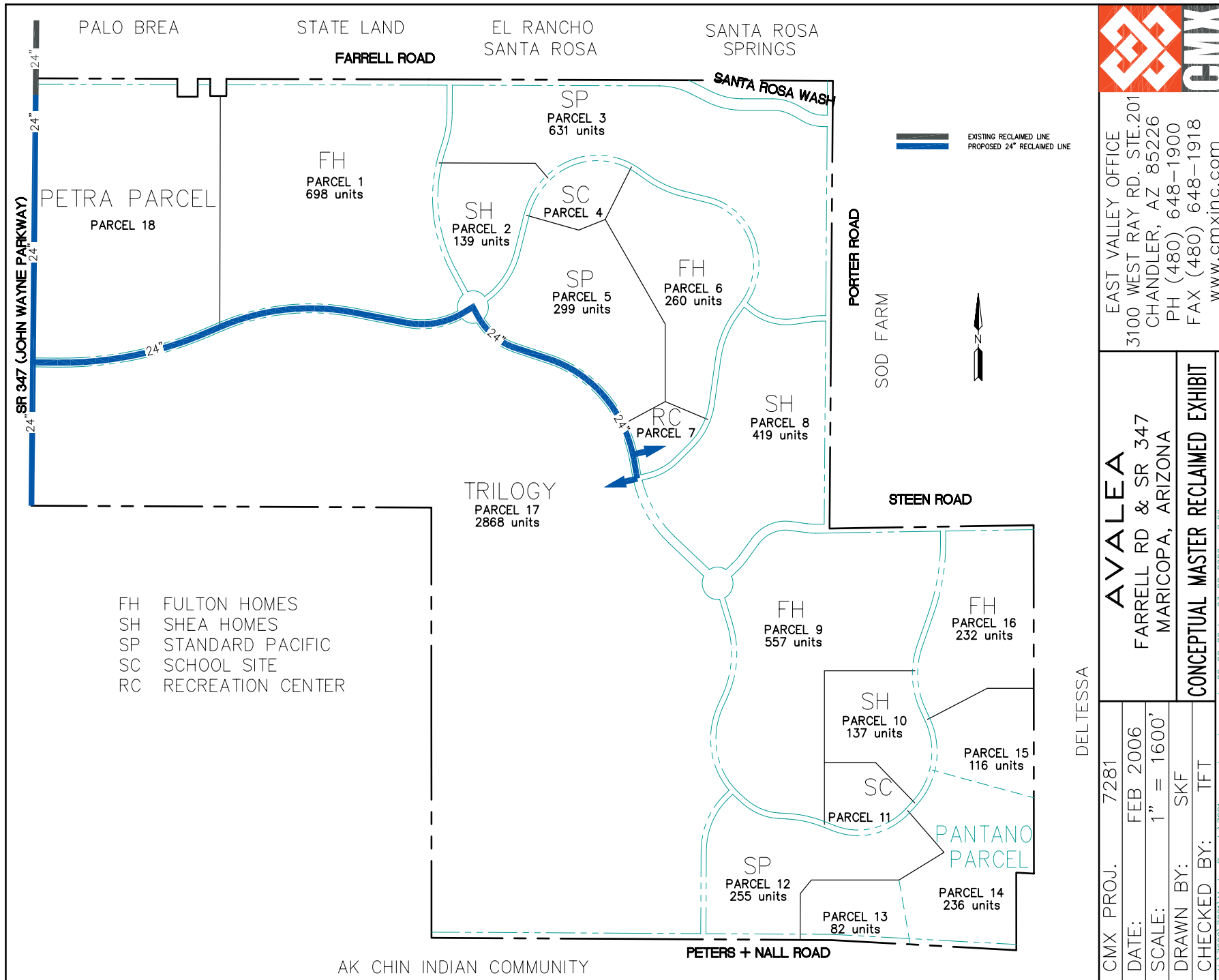
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 3100 WEST RAY RD. STE.201
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 FAX (480) 648-1918
 www.cmxinc.com

AVALEA
 FARRELL ROAD & SR 347
 MARICOPA, ARIZONA
 CONCEPTUAL MASTER WASTEWATER EXHIBIT

CMX PROJ:	7281
DATE:	FEB 2006
SCALE:	N.T.S.
DRAWN BY:	SKF
CHECKED BY:	TFT
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APPENDIX C: CONCEPTUAL MASTER WASTE WATER PLAN



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AVALEA
 FARRELL RD & SR 347
 MARICOPA, ARIZONA

CONCEPTUAL MASTER RECLAIMED EXHIBIT

CMX PROJ.	7281
DATE:	FEB 2006
SCALE:	1" = 1600'
DRAWN BY:	SKF
CHECKED BY:	TFT

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Upstream Population (p)	Peaking Factor
1	3.28
Up to 100	3.28
Up to 200	2.96
Up to 300	2.79
Up to 400	2.68
Up to 500	2.60
Up to 600	2.54
Up to 700	2.49
Up to 800	2.45
Up to 900	2.41
Up to 1,000	2.38
Up to 1,500	2.25
Up to 2,000	2.18
Up to 2,500	2.13
Up to 3,000	2.08
Up to 3,500	2.05
Up to 4,000	2.02
Up to 4,500	2.00
Up to 5,000	1.98
Up to 5,500	1.96
Up to 6,000	1.94
Up to 6,500	1.93
Up to 7,000	1.91
Up to 7,500	1.90
Up to 8,000	1.89

Upstream Population (p)	Peaking Factor
Up to 8,500	1.88
Up to 9,000	1.87
Up to 9,500	1.86
Up to 10,000	1.85
Up to 100,000	$PF = (4.500 * p^{-0.174}) + 0.944$

	$PF = (6.330 * p^{-0.231}) + 1.094$
1001 to 10,000	$PF = (6.177 * p^{-0.233}) + 1.128$
10,001 to 100,000	$PF = (4.500 * p^{-0.174}) + 0.945$
More than 100,000	

APPENDIX C: CONCEPTUAL MASTER WASTE WATER PLAN

**TABLE 2: CONCEPTUAL SEWER FLOW TABLE
AVALEA**

ASSUMED DESIGN CRITERIA:		RESIDENTIAL		SCHOOL (S)		COMMERCIAL (C)		PARK (P)	
AVERAGE DEMAND =		80	gpcd	20 & 15	gpd/faculty & gpd/student	1200	gpd/acre	4	public toilets
PERSONS PER DWELLING UNIT =		3.0		126 & 1080	faculty & students	184.03	acres	200	gpd/toilet
GALLONS PER DAY (GDP) =		240		18720	gpd	220836	gpd	800	gpd

PIPE SEGMENT ⁽¹⁾	PARCELS	TOTAL DWELLING UNITS	EFFECTIVE POPULATION	AVERAGE DEMAND (gpd)	PEAKING FACTOR	PEAK FLOW (mgd) ⁽³⁾	LINE CAPACITY (mgd)	ASSUMED SLOPE (ft/ft)	PIPE DIAMETER (in) ⁽⁴⁾
1	13	82	246	19680	2.79	0.055	0.497	0.0035	8
2	12-13	337	1011	80880	2.38	0.192	0.497	0.0035	8
3	12-13, 9	894	2682	214560	2.13	0.456	0.497	0.0035	8
4 (S) ⁽²⁾	11	78	234	18720	2.79	0.052	0.497	0.0035	8
5	11, 14	314	942	75360	2.38	0.179	0.497	0.0035	8
6	11, 14-15	430	1290	103200	2.38	0.245	0.497	0.0035	8
7	10-11, 14-15	567	1701	136080	2.25	0.306	0.497	0.0035	8
8	10-11, 14-16	799	2397	191760	2.18	0.418	0.497	0.0035	8
9	9-16	1693	5079	406320	1.98	0.803	1.134	0.0021	12
10 (P) ⁽²⁾	7, 9-16	1697	5091	407280	1.98	0.805	1.134	0.0021	12
11	5, 7, 9-16	1996	5988	479040	1.94	0.930	1.134	0.0021	12
12	8	419	1257	100560	2.38	0.239	0.497	0.0035	8
13	6,8	679	2037	162960	2.18	0.355	0.497	0.0035	8
14	3, 6, 8	1310	3930	314400	2.02	0.636	0.776	0.0026	10
15 (S) ⁽²⁾	3-4, 6, 8	1388	4164	333120	2.02	0.674	0.776	0.0026	10
16	3-16	3384	10152	812160	1.85	1.503	1.795	0.0016	15
17	2-16	3523	10569	845520	1.85	1.565	1.795	0.0016	15
18	2-16	4154	12462	996960	1.85	1.845	2.630	0.0013	18
19	1, 17	3566	10698	855840	1.85	1.584	1.795	0.0016	15
20 (C) ⁽²⁾	1, 17-18	4487	13461	1076880	1.85	1.993	2.630	0.0013	18

TOTAL RESIDENTIAL DWELLING UNITS SERVED IS 6929 & TOTAL NON-RESIDENTIAL DWELLING UNITS SERVED IS 1081.

NOTES: (1) SEE CONCEPTUAL WASTEWATER EXHIBIT FOR PIPE SEGMENTS.

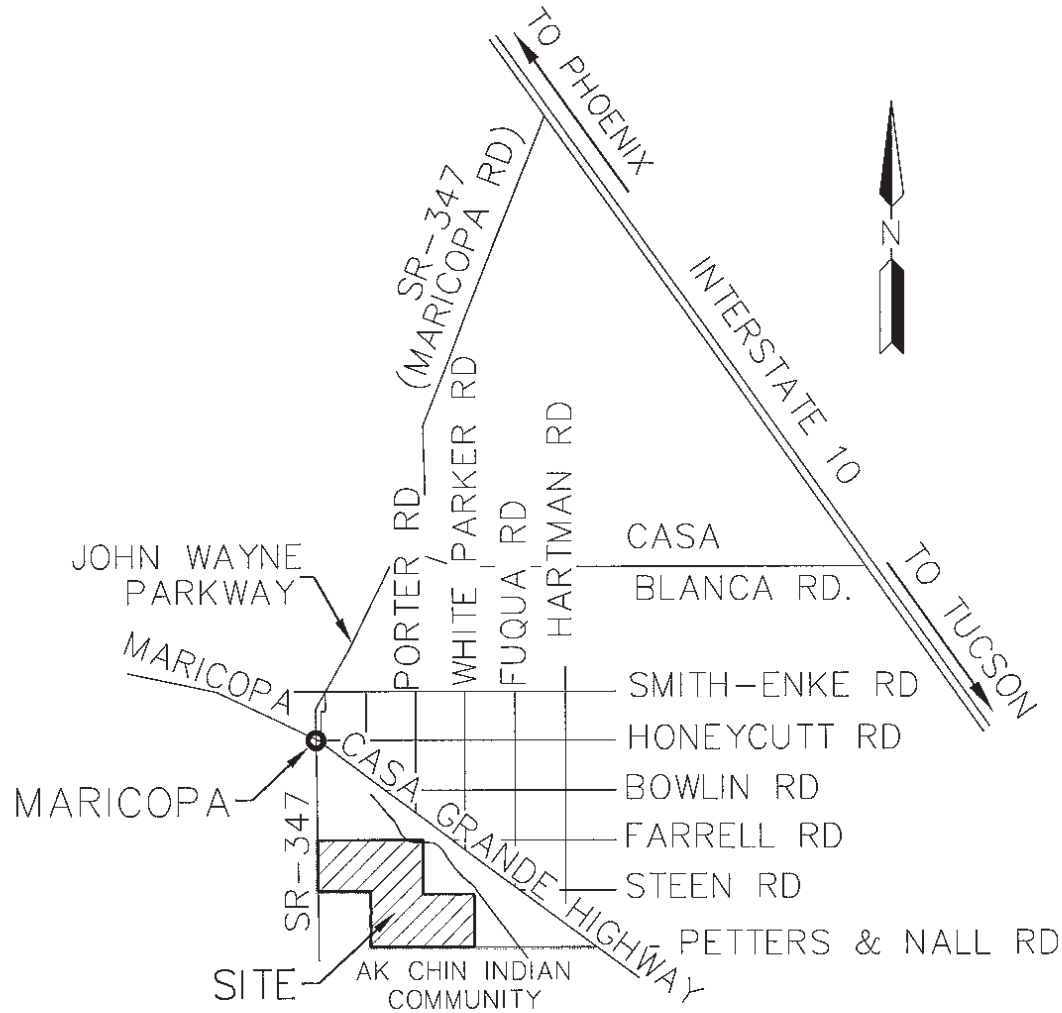
(2) THE EFFECTIVE POPULATION FOR COMMERCIAL, SCHOOL AND PARK AREAS IS DETERMINED BY THE GDP / 80 GPCD. THE TOTAL DWELLING UNITS FOR COMMERCIAL, SCHOOL AND PARK AREAS IS DETERMINED BY THE EFF. POP. / 3 PERSONS PER DWELLING UNIT

(3) SEE TABLE 1 FOR PEAKING FACTORS

(4) ESTIMATED PIPE DIAMETER WAS BASED ON MANNINGS FORMULA. FINAL PIPE SIZE TO BE DETERMINED WITH FINAL DESIGN

APPENDIX D: CONCEPTUAL MASTER DRAINAGE PLAN





1.0 INTRODUCTION

1.1 Project Location

Avalea is a proposed multi-use development located on the east side of SR347 (John Wayne Parkway) and south side of Farrell Road, within sections 2, 3, 11 and 12, Township 5 South, Range 3 East, in Pinal County, Arizona. Detailed location is shown on Figure 1.

1.2 General Description

Avalea is a master planned community, approximately 2179 acres in size. The conceptual master plan (Fig. 11, Section 3) shows the different proposed components of the project, which includes residential, recreational, golf course, school and commercial areas. The property is currently an active agricultural field that generally slopes in a northerly and northwesterly direction at approximately 0.2%. Two significant drainage elements relevant to the project site are Santa Rosa Wash and Smith Wash (Fig. 2). Santa Rosa Wash crosses the very northeast corner of the site and continues in a northwesterly direction. Smith wash, which is a man made drainage channel with banks elevated above natural ground, runs northerly along the west side of section 11 and then westerly along the south side of section 3 and crosses SR347 through an existing box culvert.

There are two FEMA flood zones, A and AO (Fig 9, Section 2), that impact the northeast corner of the site. Zone A falls within the limits of Santa Rosa wash. Zone AO covers an area behind an elevated irrigation canal located on the south side of the wash.

1.3 Scope of Work

This drainage report has been prepared in support of the PAD application. This report will focus on evaluating the offsite flows that impact the site and addressing the conceptual proposed drainage management plan. Additionally, this report will set forth the general guidelines for the ultimate drainage management plan for the project, which will include methods for estimating design peak flows, street drainage, drainage structures and storm water storage requirements, all in accordance with Pinal County criteria (Ref.1), and other references acceptable to the City of Maricopa.

2.0 OFFSITE DRAINAGE, EXISTING CONDITIONS AND PROPOSED MANAGEMENT PLAN.



FIGURE 1: VICINITY MAP



2.1 General

Two drainage elements relevant to the project site are Santa Rosa Wash and Smith Wash. Additionally offsite flows from the watershed south of Peters and Nall Road may sheet flow across this road toward the project site. The following sections discuss each of these elements.

2.2 Santa Rosa Wash

Santa Rosa Wash (Fig. 3) crosses the very northeast corner of the project site, flowing in a northwesterly direction. The watershed for this wash is extensively long collecting runoff from areas south and east of the site. The hydrologic analysis along the wash has been established in the flood insurance study (FIS) for Pinal County (Ref. 2). This report indicates that the 100-year flow in the wash in the vicinity of the site is approximately 14,800 cfs.

Santa Rosa Springs, a new development currently under construction, is located north of the project site, on the north side of Santa Rosa Wash. A drainage report for Santa Rosa Springs has been prepared by Erie & Associates (Ref. 3) in support of a Conditional Letter of Map Revision (CLOMR) along a reach of Santa Rosa Wash that extends easterly to Porter Road. The Hydraulic analysis in that report was based on the 100-year peak flow of 14,800 cfs established in Pinal County FIS (Ref.1). The improvement plans for Santa Rosa Springs involves modifications and improvements along Santa Rosa Wash, including a trail. These improvements have been incorporated in the hydraulic analysis along the wash.

2.3 Smith Wash

Smith Wash, in the vicinity of the site, is a man made drainage channel (Fig. 2) that runs in a northerly direction on the west side of section 11, along Smith Road alignment, and then westerly along the south side of sections 3 to cross SR347 (John Wayne Parkway) through an existing 6-10'x6' box culvert. A drainage report titled "Final Drainage Report For Maricopa Road-segment III, South Boundary of GRIC to Papago Road" was prepared by Baker Engineers for Pinal County Highway Department in 1991. This report indicates that the 25-year flow in Smith wash, at its intersection with SR347, is 2600 cfs. The current topography of the site indicates that the elevated berms along the west and south side of the wash

are lower than their opposite sides. If the wash capacity is exceeded, the excess flow would overtop the lower west and south berms away from the site and into Section 10.

Improvements may be proposed for the Smith Wash in conjunction with Avalea that will need to be coordinated with the Ak-Chin Indian Community, the property owner of the adjacent land.

2.4 Offsite Flows East of Smith Wash

The southern boundary of the project, east of Smith Wash, is subject to potential sheet flow across Peters and Nall Road. The magnitude of the contributing watershed and peak flows are still under evaluation.

A multipurpose drainage corridor is proposed along the north side of Peters and Nall Road, extending along Smith Wash and SR347 to Farrell Road (Fig. 3). This drainage corridor is proposed to collect the estimated offsite sheet flow from the south and convey it toward an existing culvert at Farrell Road, which is the current outfall point for the site. This flow continues in a northerly direction, along the east side of SR347 toward the Bowlin Road Outfall Channel, located approximately one mile north of Farrell Road.

Since Smith Wash has berms extending above natural ground, this drainage corridor will serve as an additional safety barrier to any potential breach of the adjacent berm.

3.0 FLOOD ZONES

There are two FEMA flood zones, A and AO, which impact the northeast corner of the site. Zone A falls within the limits of Santa Rosa wash. Zone AO covers an area behind an elevated irrigation canal located on the south side of the wash. Excerpts from the corresponding Flood Insurance Rate Maps (FIRM), map number 0400770675 D (Fig 4A) and map number 040070450 D (Fig. 4B), both with a revision date of May 4, 1987 show the limits of the flood zones over the site. As reflected on these maps, the flood zones are described by FEMA as:

Zone A: Areas of 100 year flood; base flood elevations and flood hazard factors not determined.

Zone AO: Areas of 100 year shallow flooding where depths are between one and

three feet, average depths of inundation are shown, but not flood hazard factors are determined.

A CLOMR application will be processed through FEMA to remove the impacted area of the site out of flood zone AO.

4.0 JURISDICTIONAL WASHES

No improvements are currently proposed along Santa Rosa Wash in conjunction with the project site. Accordingly, there will be no encroachment into the corresponding jurisdictional delineation of the wash. If modifications to the project developments plans are revised to include any disturbance to the jurisdictional area, then the appropriate permitting process should be followed.

5.0 ONSITE DRAINAGE

5.1 General Approach

Onsite storm water runoff is proposed to be collected in local streets and conveyed via inlet structures, such as catch basins and scuppers, into onsite retention basins and lakes that will be sized to accommodate the 100-year, 2-hour storm event.

5.2 Onsite Design Peak Flows

Onsite peak flows shall be estimated using the Rational Method. The time of concentration parameters, rainfall intensities, and weighted runoff coefficients will be in accordance with Pinal County criteria (Ref. 1).

5.3 Street Drainage

Local and perimeter streets will be designed with either 4-inch roll curb or 6-inch vertical curb to convey onsite runoff to designated retention basins via inlet structures, such as catch basins and scuppers. Street grades and allowable capacities shall be in accordance with the Pinal County criteria and other stipulations, when applicable. These criteria include the following:

- Minimum longitudinal street grade to be 0.2% and the maximum grade not to exceed 10%
- The 10-year runoff shall be carried below the top of curbs
- The 100-year runoff may be carried within the right of way, with the flow depth not to exceed six inches above the centerline
- Dry lanes should be considered for major collectors and for arterial streets.



When street capacities are exceeded, a transition from 4-inch curbs to 6-inch curbs or ultimately the use of storm drains may be needed to convey the excess runoff into the designated retention basins or lakes. The hydraulic grade line at storm drain junctions should be a minimum of six inches below the inlet elevation for the design storm.

Flood Insurance Study

3. Erie and Associates (Revised June 21, 2005). Santa Rosa Springs, Final Drainage Study
4. Baker Engineers (June, 1991). Final Drainage Report for Maricopa Road – Segment III, south Boundary of GRIC to Papago Road, Volume I of II.

5.4 Retention Requirements

Retention basins and lakes will be provided throughout the project site to accommodate the storm runoff volume of the 100-year, 2-hour storm, estimated to be 2.74 inches (Casa Grande listed value in Pinal County Manual).

The retention basin will be drained through surface percolation, dry wells (if needed), or when practical, will be drained to adjacent drainage corridors or to Santa Rosa Wash through bleed off pipe systems. The retention volume should be drained within a time not to exceed 36 hours.

Preliminary calculations for the retention volume requirements and corresponding conceptual basin sizes are included in Appendix B. The proposed basins are shown on Figure 2.

5.5 Ultimate Outfalls and Finished Floors

An ultimate outfall will be provided for each drainage basin to allow flow in excess of the design retention storm to leave the basins without inundating finished floors of structures within the basin. Finished floors should be set a minimum of 12 inches above the highest applicable ultimate outfall of the lot, basin, or project. Additionally the finished floors should be set a minimum of 12 inches above adjacent waterways or the ponding depth in the storm water storage basins during the 100-year flow.

6.0 REFERENCES

1. Pinal County Drainage Manual-Draft August 2004
2. Pinal County, Arizona, Unincorporated Areas (Revised March 5, 1990).

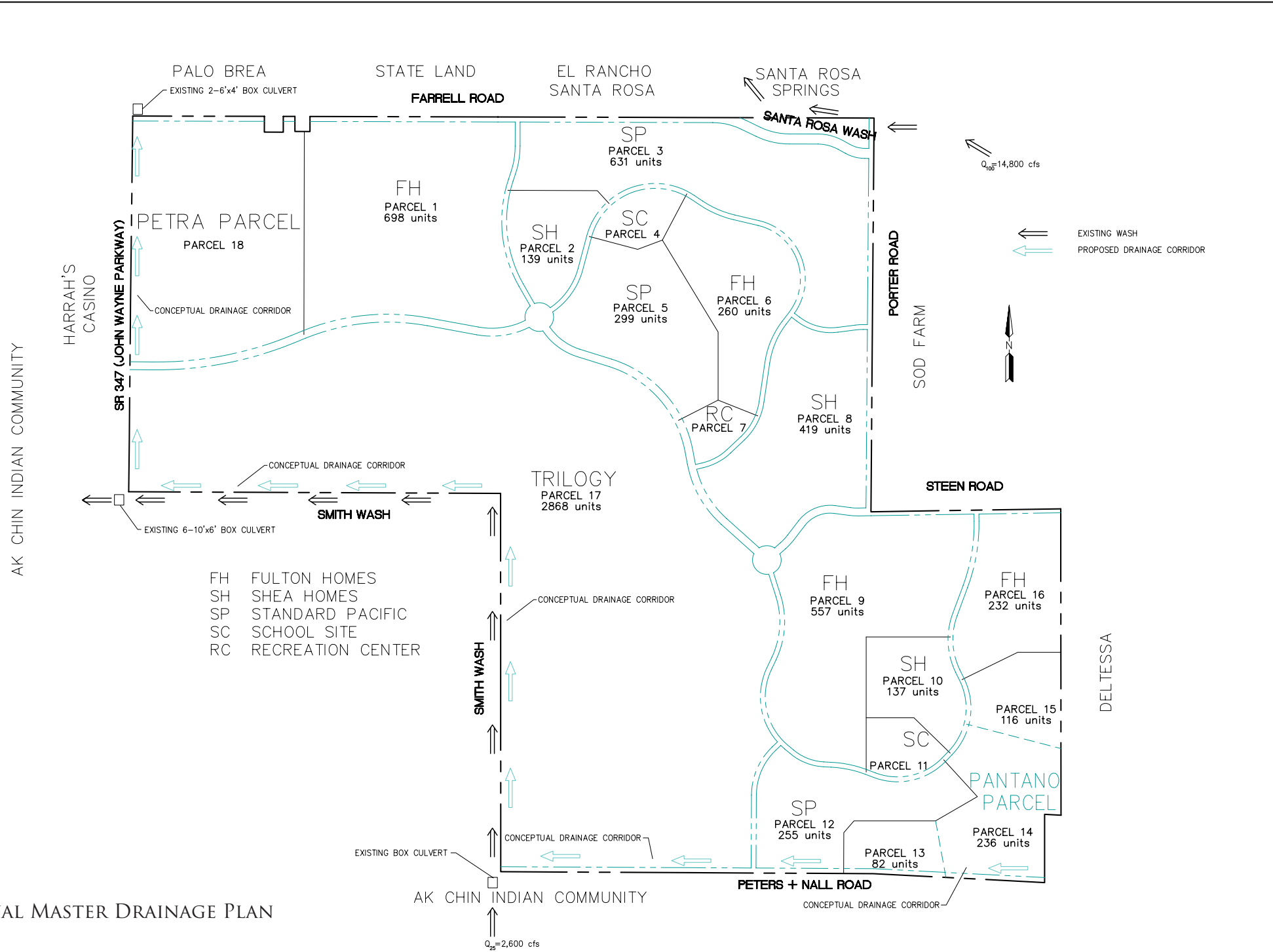


FIGURE 3: CONCEPTUAL MASTER DRAINAGE PLAN



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AVALEA
 FARRELL RD & SR 347
 MARICOPA, ARIZONA
 CONCEPTUAL MASTER DRAINAGE EXHIBIT

CMX PROJ: 7281
 DATE: FEB 2006
 SCALE: AS NOTED
 DRAWN BY: SKF
 CHECKED BY: TFT

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Avalea

1st Submittal

Traffic Impact Analysis

June 6, 2006 Civtech

Project No. 05-0830

APPENDIX E: TRAFFIC SUMMARY

Prepared for:

Shea Homes
1347 N. Alma School Rd. Suite 200
Chandler, AZ 85224
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By:



CivTech

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Scottsdale, AZ 85251
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EXECUTIVE SUMMARY

This report documents a traffic impact analysis performed for the Avalea development. The site is located south of Farrell Road, east of SR 347, west of Porter Road, and north of the Ak-Chin Reservation located in Pinal County, Arizona.

The development contains several land owners. Civtech Inc. has been retained by Shea Homes, Standard Pacific Homes and Fulton Homes to perform the traffic impact analysis for the proposed Avalea development. Additionally, the commercial portion of the development studied within this report has a separate owner.

The purpose of this study is to address traffic and transportation impacts of the proposed development on the surrounding streets and intersections. This traffic impact study was prepared based on criteria set forth by the Arizona Department of Transportation and the Pinal County Transportation Plan 2000. The specific objectives of the study are:

1. To compare the impacts of the proposed development on the existing intersections.
2. To evaluate lane requirements on all existing roadways and at all existing intersections within the study area.
3. To determine future level of service for all proposed major intersections within the study area and recommend any capacity related improvements.
4. To determine necessary lane configurations at all site driveways and new intersections.
5. To evaluate the need for future traffic control changes within the proposed study area.
6. To evaluate entry spacing in relation to required queue lengths.
7. To evaluate the need for auxiliary lanes at stop and signal controlled intersections and site driveways.

This study compares the impact of the existing conditions at the site with the proposed development. The proposed development is expected to generate 70,128 daily external trips at build out with 3,413 occurring in the AM peak hour, and 5,820 occurring in the PM peak hour.

Street classification of the surrounding street network adjacent to the study area was determined according to the City of Maricopa Small Area Transportation Study. Farrell Road is classified as a principal arterial 2. Steen Road is classified as a minor arterial and Peters and Nall Road as a principal arterial 1. State Route 347 is classified as a principal arterial 1, Smith Road is classified as a minor arterial while Porter Road is classified as a minor arterial from Peters and Nall Road to Steen Road. North of Steen Road, Porter Road is classified as a principal arterial 2.

The proposed development will provide one primary entrance from SR 347 and five minor entrances at the perimeter of the development via the arterial street network. Additional access points from the development will be determined during the preliminary plat process. Additional studies should be completed with each phase of development to determine the need for phased improvements and auxiliary lanes at the future intersections.

The following recommendations have been documented in this study:

- Access management should be provided along all arterial roadways. State Route 347 is controlled by the Arizona Department of Transportation east of the centerline and should meet their guidelines for access and spacing.
- Right turn deceleration lanes should be constructed at all major site entrances from SR 347, Peters and Nall Road, Farrell Road, and Porter Road as shown on the current site plan.
- Dual right turn auxiliary lanes are recommended at the following intersections by the 2023 horizon year studied herein:
SR 347 & Farrell Road – (NB), (SB), (WB), and (EB)
Porter Road and Farrell Road – (SB)
SR 347 and Peters & Nall Road – (NB), (EB) and (WB)
SR 347 & Steen Road – (NB) and (WB)
Minor Road & Farrell Road – (NB) and (EB)
Porter Road & Maricopa Casa Grande Hwy – (EB)
- Dual left turn lanes are recommended at the following intersections by the 2023 horizon year studied herein:
SR 347 & Farrell Road – (NB), (SB), (EB) and (WB)
Porter Road & Farrell Road – (EB)
SR 347 & Peters and Nall Road – (SB), (EB), and (WB)
SR 347 & Steen Road – (SB) and (WB)
Minor Road & Farrell Road – (NB) and (WB)
Porter Road & Steen Road – (SB)
Minor Road & Peters and Nall Road – (EB)
Porter Road & Maricopa Casa Grande Hwy – (NB) and (SB)
- The existing study intersections will continue to operate at a level of service D or better in the 15 year horizon evaluated for this memorandum. Some improvements are required to ensure an acceptable range of operation. These improvements include widening to provide separate left turn lanes at all site access points and major intersections within

the study area.

- Farrell Road should be constructed as a principal arterial 2 street with 140 feet of right-of-way.
- State Route 347 should be constructed as a principal arterial 1 street with a 140 foot right-of-way using a high level of access management.
- Steen Road and Peters and Nall Road will operate acceptably as minor arterial roadways with 110 feet of right-of-way.
- Peters and Nall Road will operate acceptably as principal arterial 1 roadway with 140 feet of right-of-way.
- Porter Road should be constructed as an arterial 2 street with 140 feet of right-of-way.
- Steen Road may be constructed to the minor arterial right-of-way classification as documented in the City of Maricopa Small Area Transportation Study. These roadways should include 110 feet of right-of-way. However, the current PAD typical section for Steen includes more than 130 feet of right-of-way with a modified pavement section. This section will work acceptably for the operation of Steen Road in the opening year with one lane in each direction of travel. Upon buildout of the development, Steen Road will require two lanes in each direction of travel.
- The roundabouts shown along Steen Road within the Avalea development should meet the guidelines and standards of the FHWA. The intersections should be designed with large internal radii and meet the sight distance and speed factors to provide a safe movement through the intersection without delay to traffic.
- The Farrell Road Bridge (“the bridge”) is included in the City of Maricopa Small Area Transportation Study. Therefore, the City will be fully responsible for the design and construction of the bridge using fees collected by the City from future developments in the area. If the developer’s timetable is in advance of the City’s design and construction schedule for the said bridge, the developer shall be fully responsible for the design and construction. In such case, prior to final plat approval, the developer shall provide all prerequisite documents to this effect for staff review and approval. If designed and constructed by the developer, the City will negotiate a reimbursement agreement for the expenditures incurred in designing and constructing the bridge

from fees collected by the City from future developments.

- The signals at SR347/SteenRd, Farrell Rd/Minor Rd, Farrell Rd/Porter Rd, and Steen Rd/Porter Rd will be warranted due to the Avalea development. The developer should be fully responsible for his or her impact on the system. This shall be verified with the City of Maricopa.
- The Porter Road/Maricopa-Casa Grande Highway intersection will be covered by the City’s transportation impact fee. Therefore, specific funding from the developer is not warranted.
- No reimbursement will take place for the future signalization of SR347/Peters and Nall Road or SR347/Farrell Road. Signalization at these locations was not included in the impact fee study and should be provided by the developer based on their impact to the system. This shall be verified with the City of Maricopa.
- The location of the new signalized intersection along SR 247 will be determined through a joint meeting with ADOT. A letter from ADOT will be provided prior to the final location of this intersection.
- Additional traffic impact studies should be prepared for each phase of development to determine required interim improvements and to adjust the study recommendations for unforeseen traffic volume changes not anticipated by this traffic impact analysis.
- The future commercial area should provide a traffic impact analysis for development once the final site plan, building uses and access points have been determined.

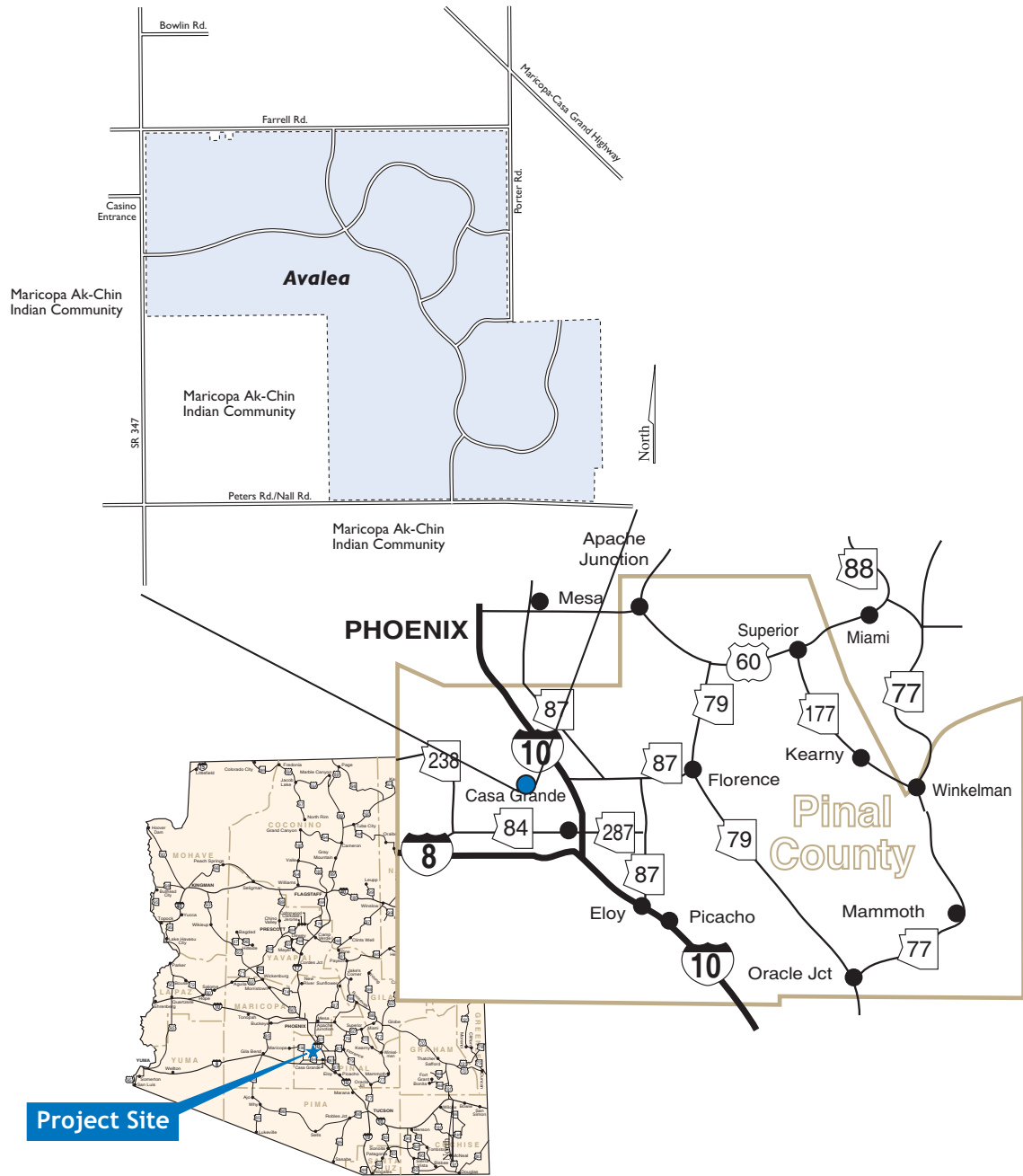


Figure 1:
Location Map

Avalea

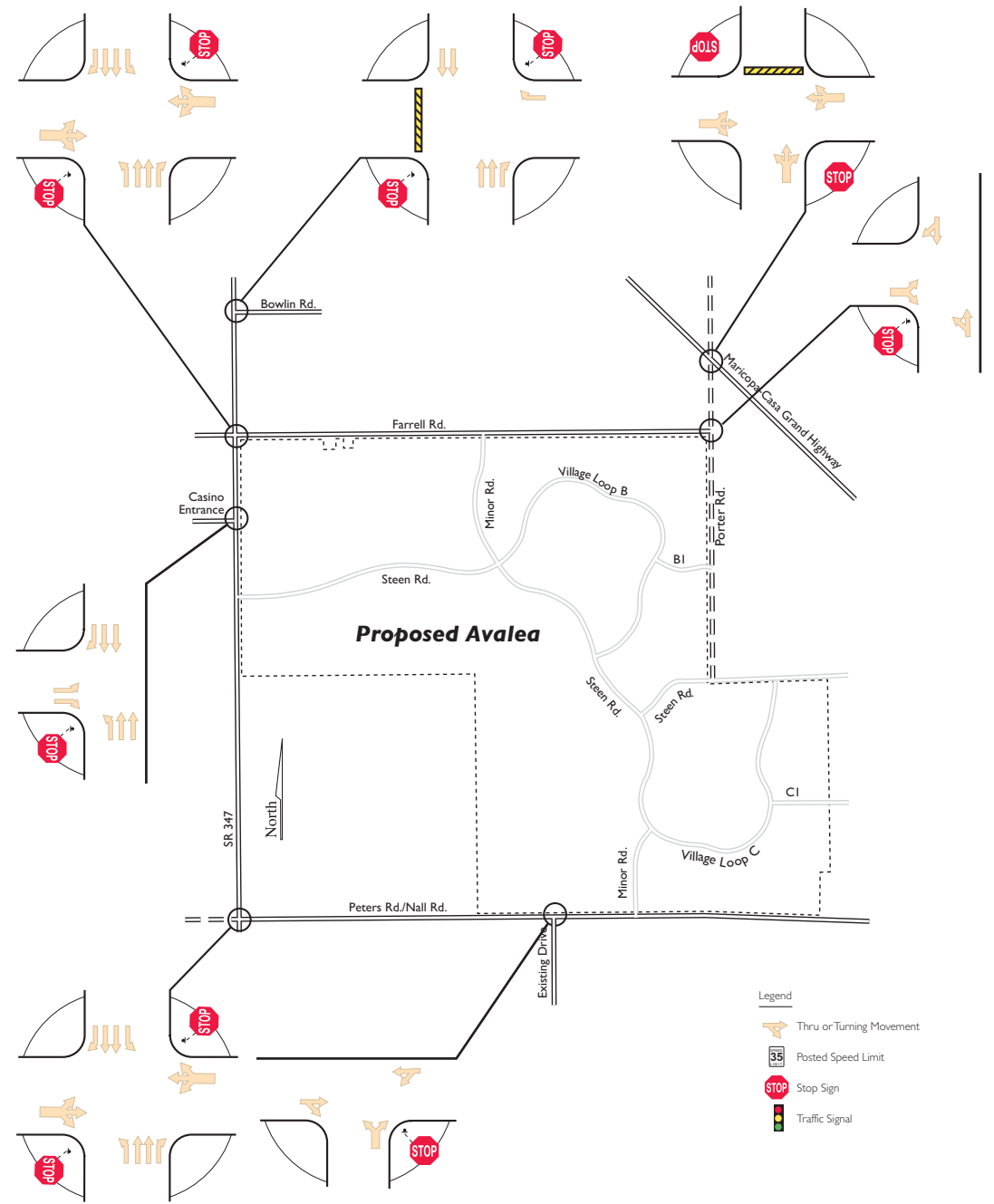


Figure 2:
Existing Lane Configuration
and Stop Control

Avalea



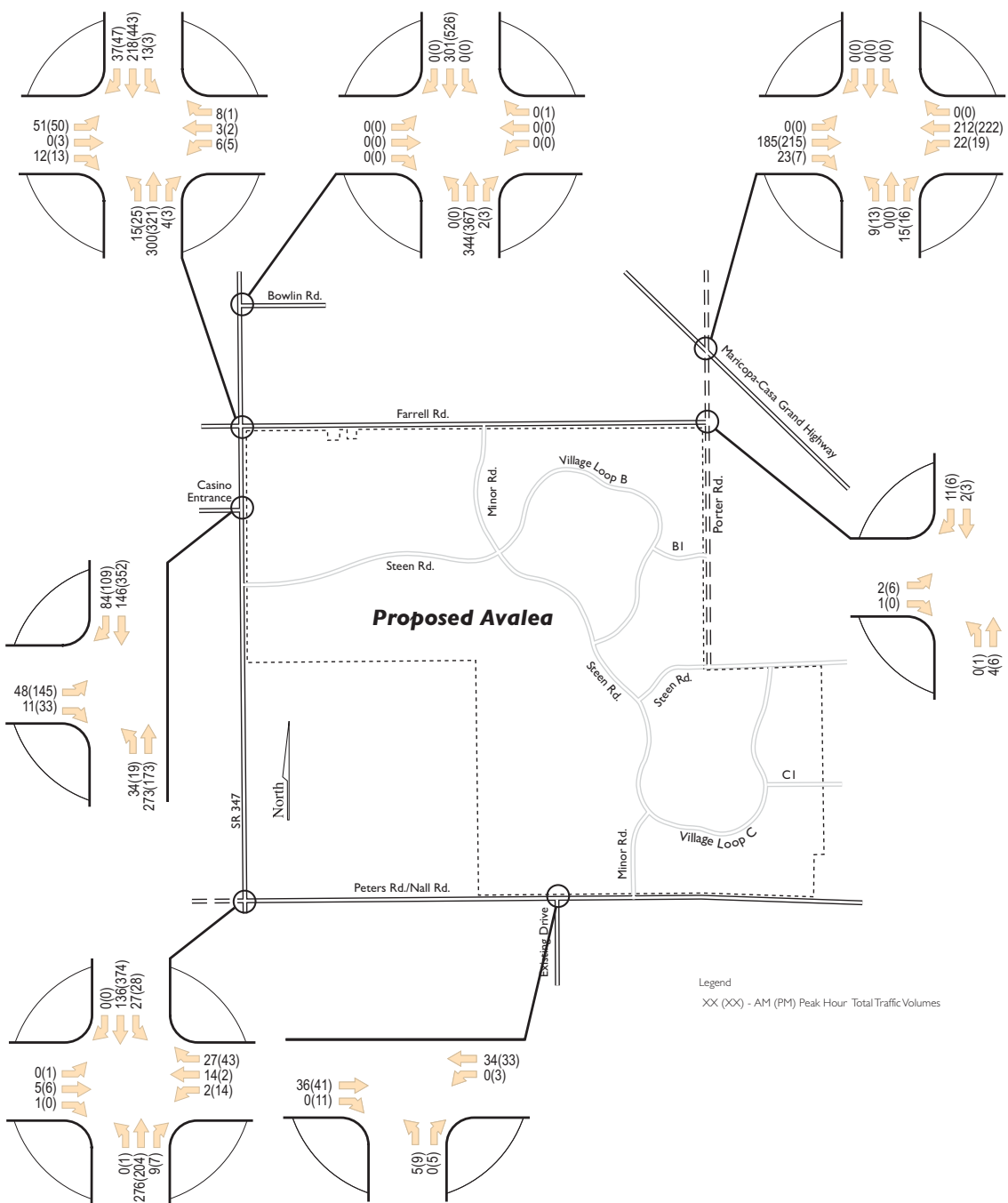


Figure 3:
2006 Existing Traffic Volumes

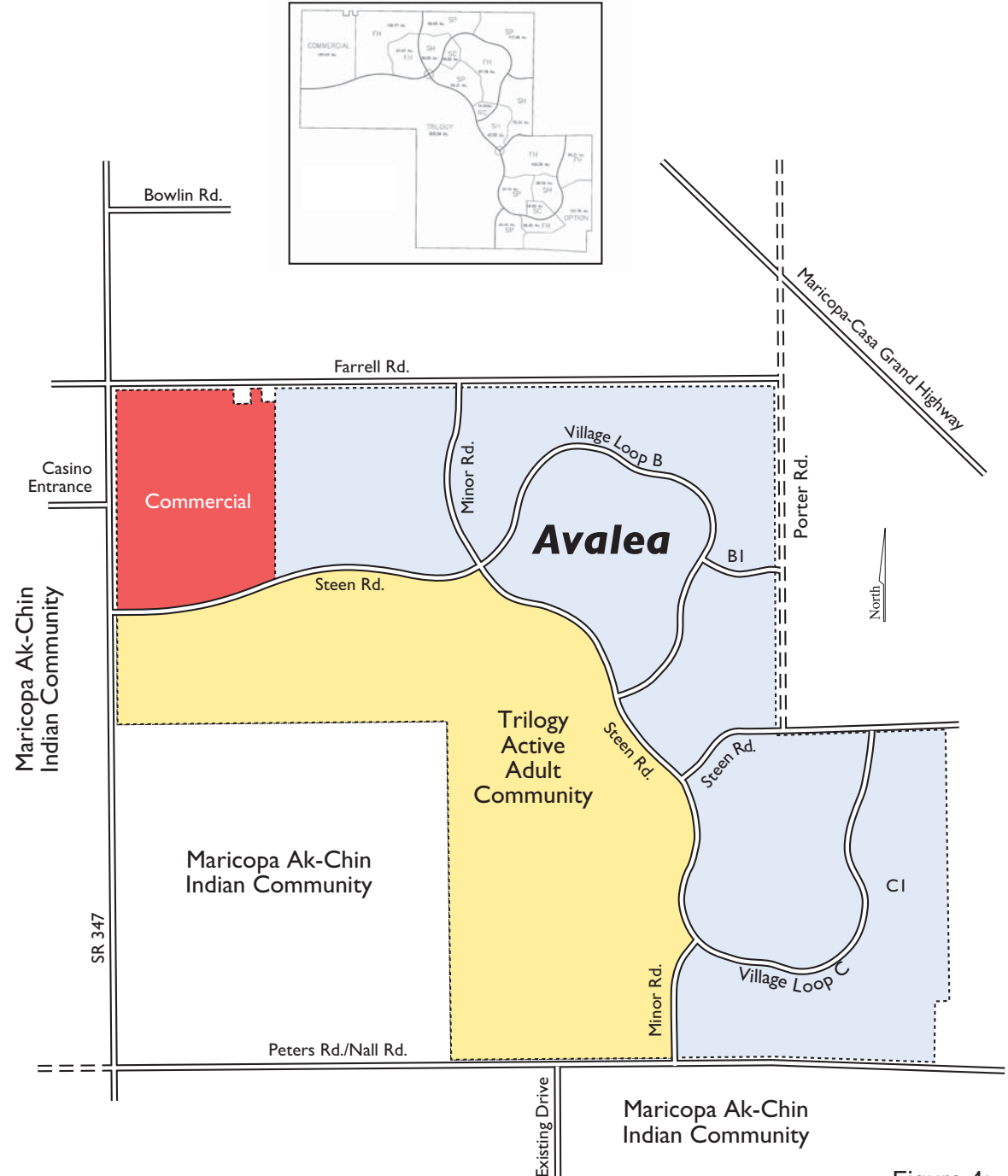


Figure 4:
Site Plan

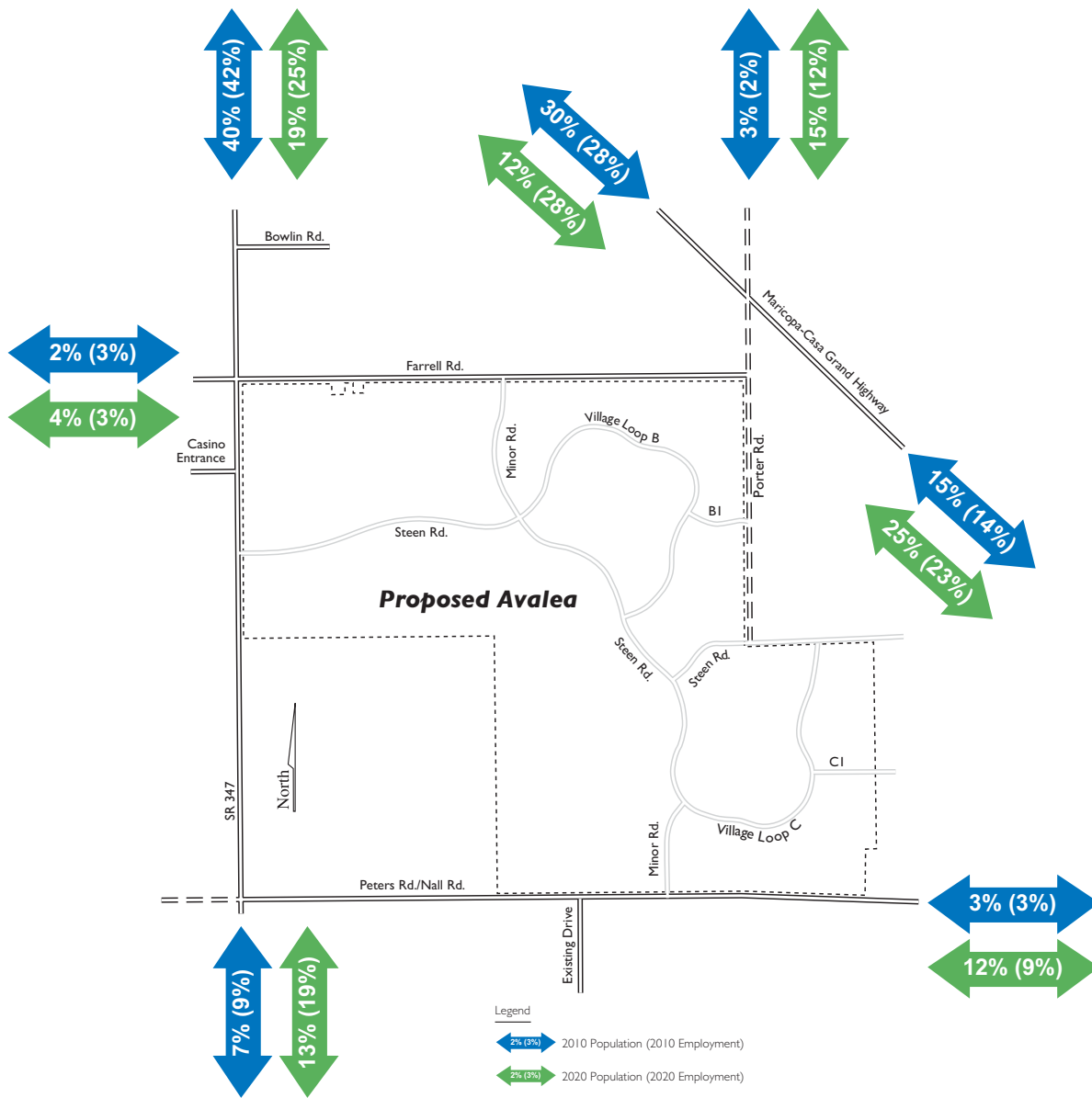


Figure 5:
Trip Distribution

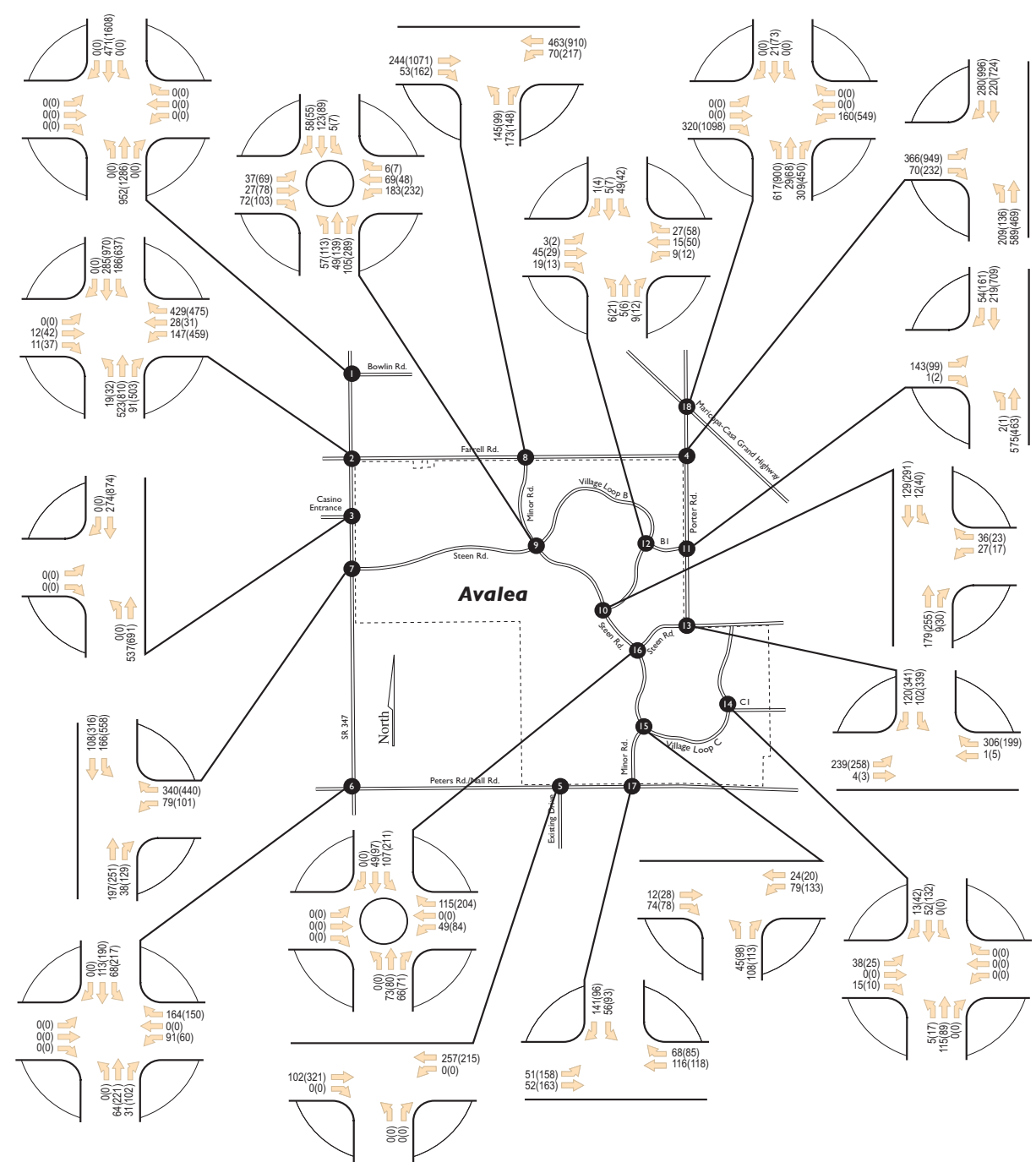


Figure 6:
2008 AM/PM Site Traffic Volumes

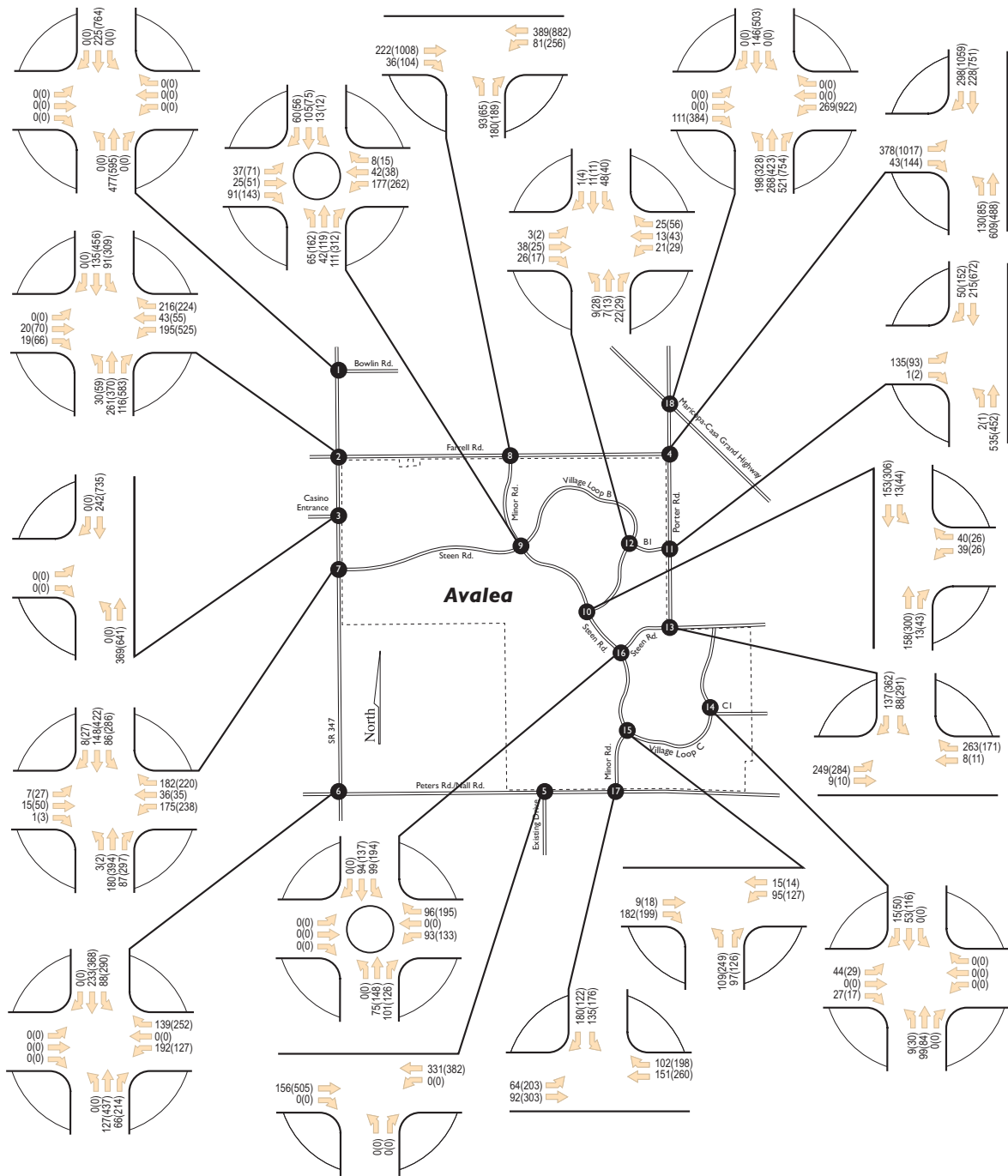


Figure 7:
2018-2023 AM/PM Site Traffic Volumes

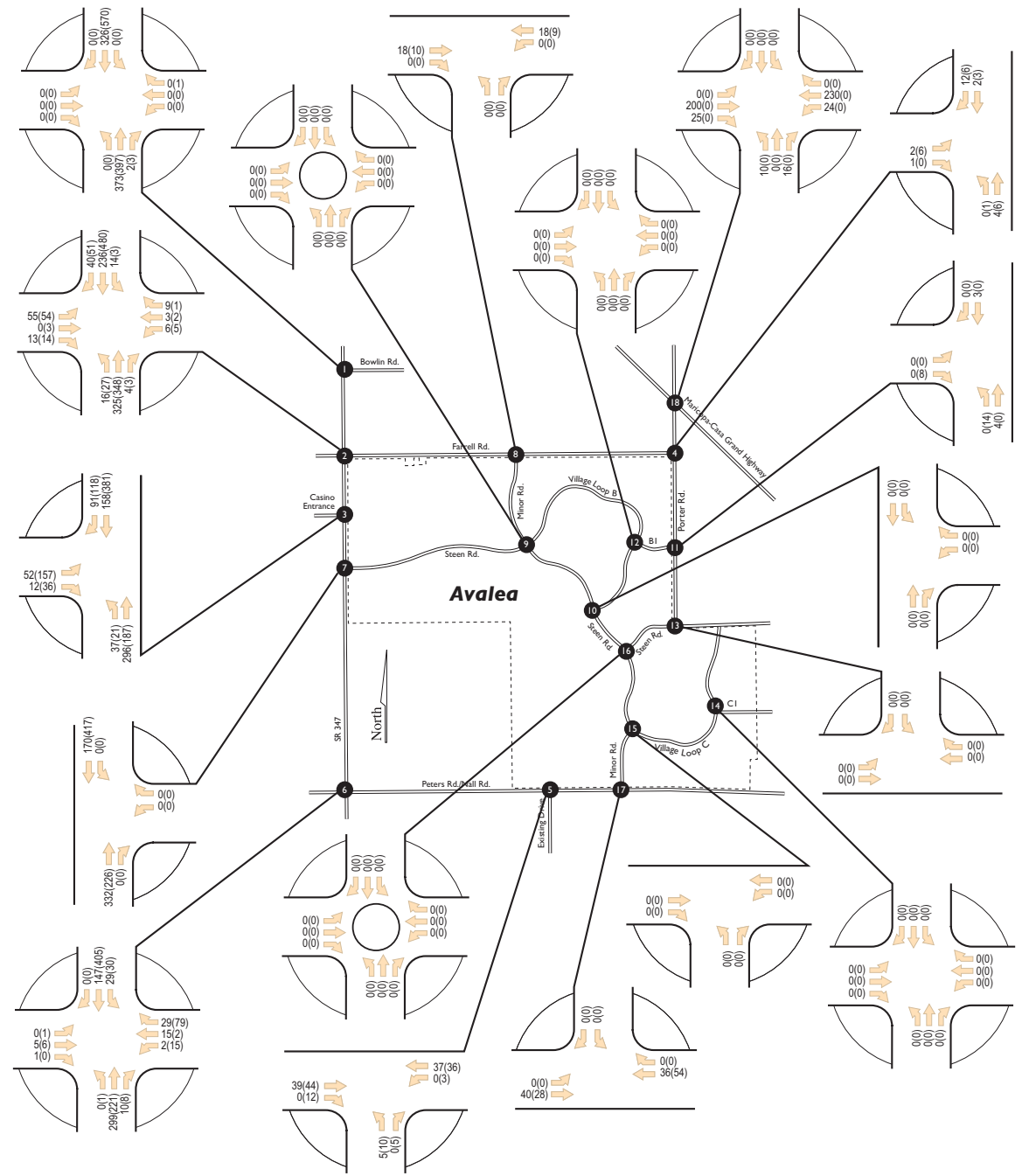


Figure 8:
2008 AM/PM Background Traffic Volumes

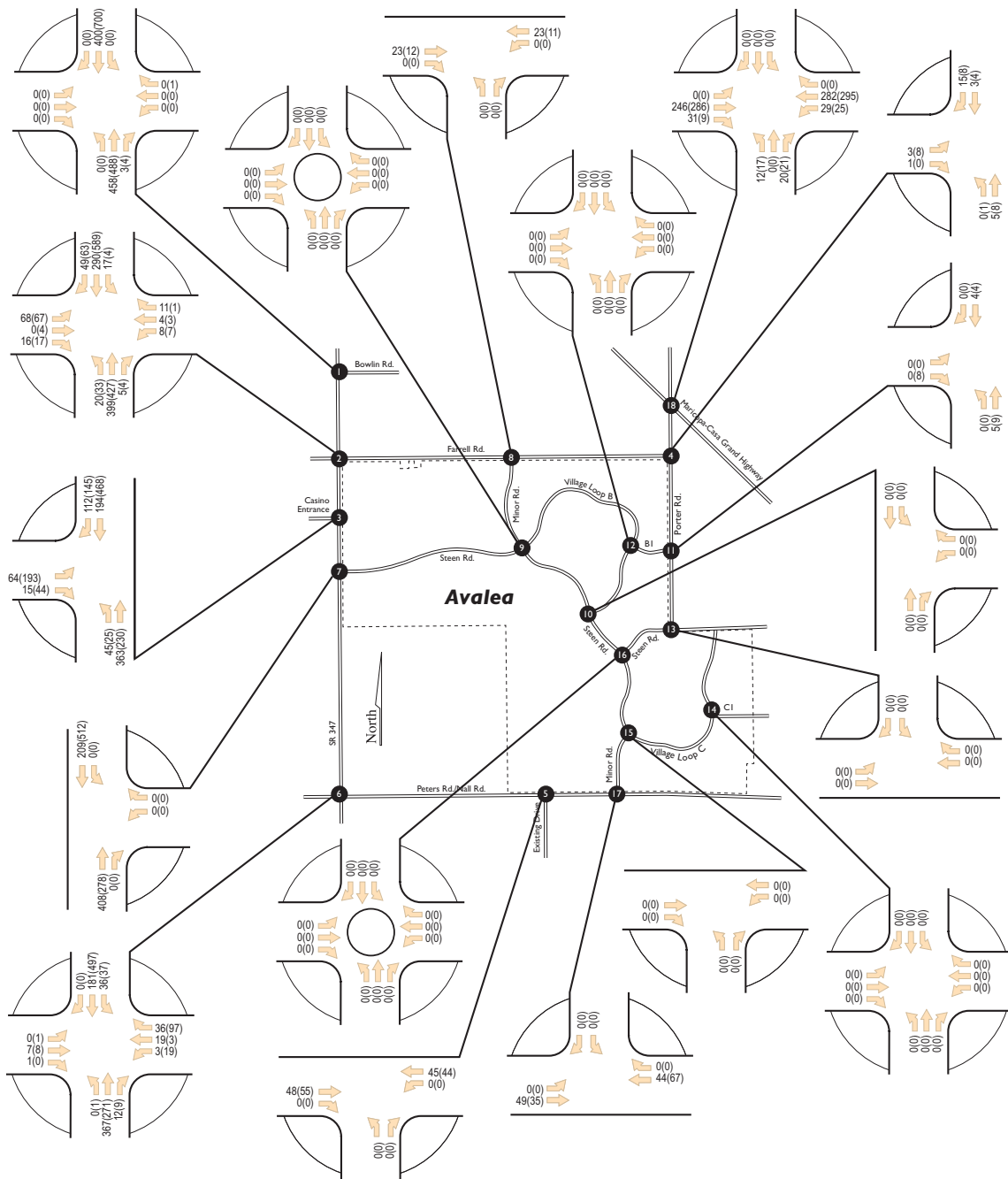


Figure 9:
2013 AM/PM Background Traffic Volumes

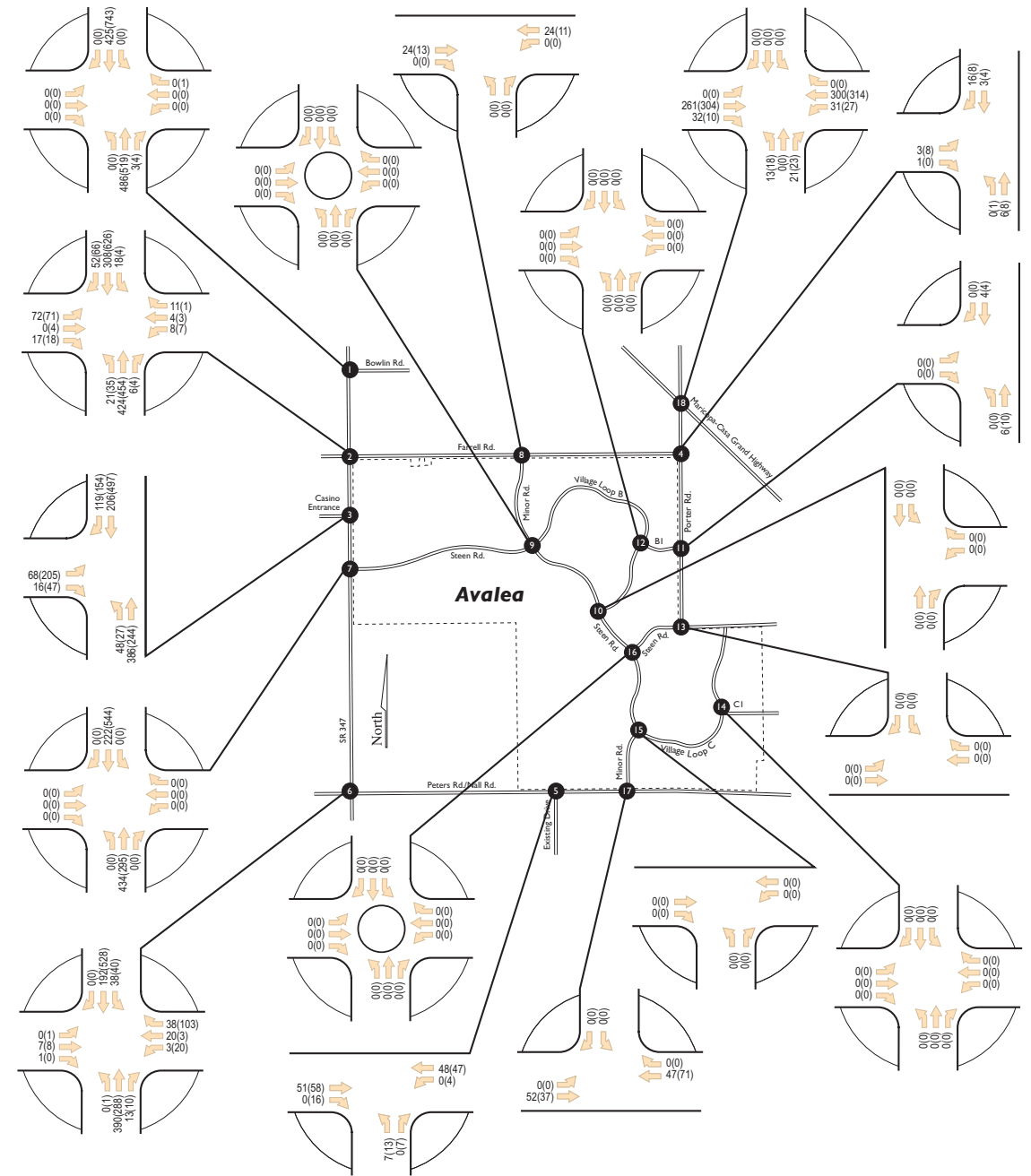


Figure 10:
2018 AM/PM Background Traffic Volumes

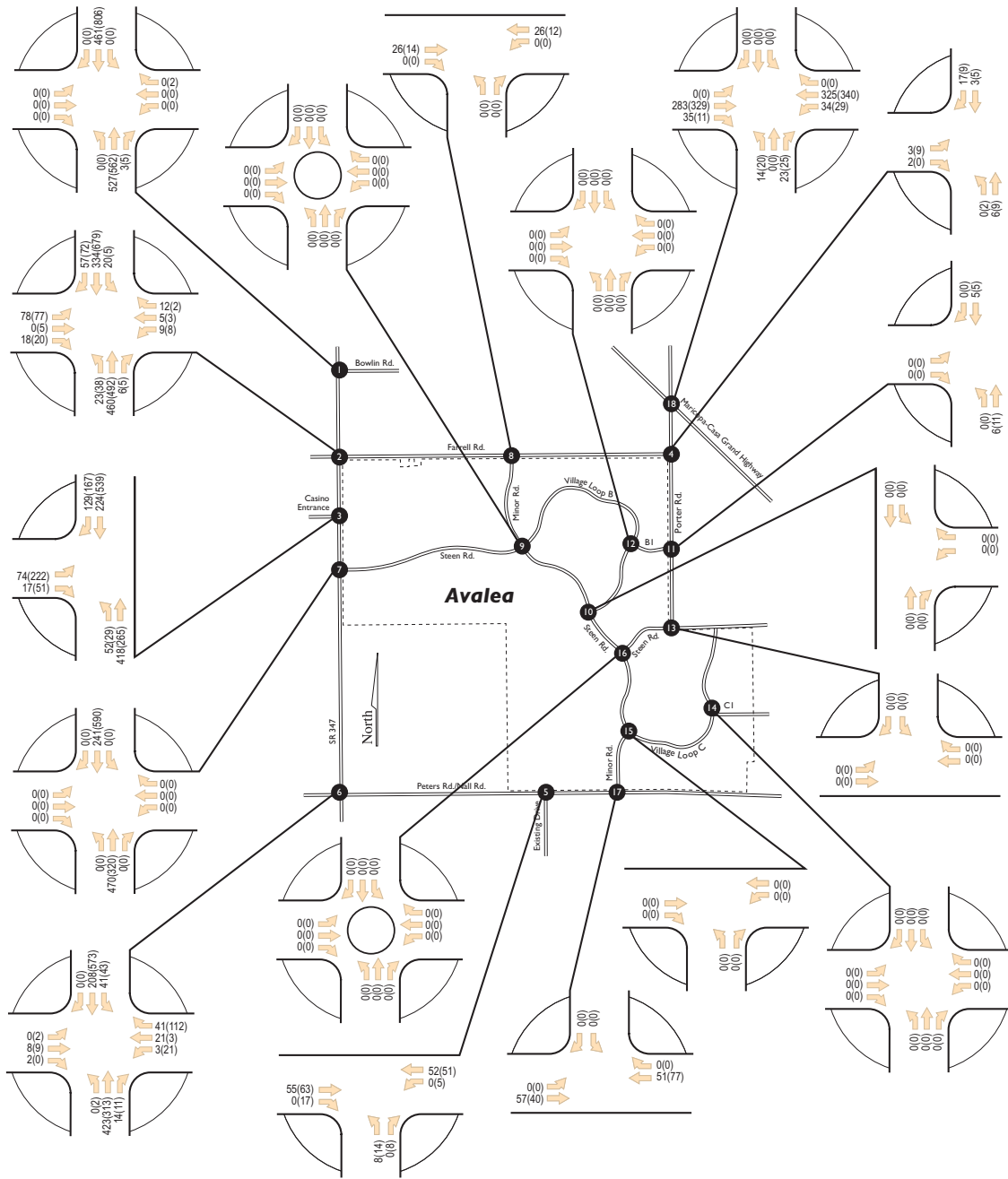


Figure 11:
2023 AM/PM Background Traffic Volumes

Avalea

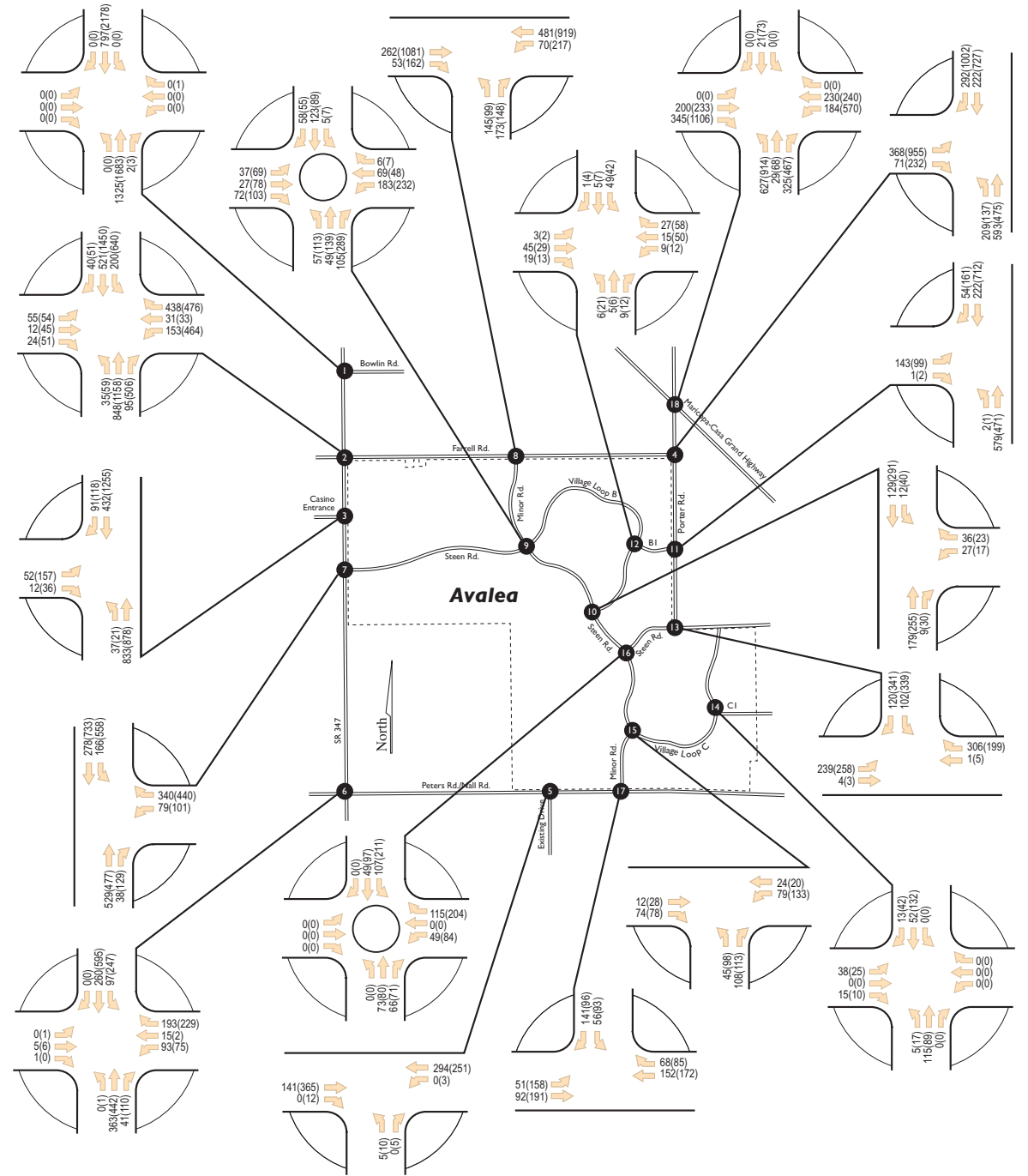


Figure 12:
2008 AM/PM Total Traffic Volumes

Avalea



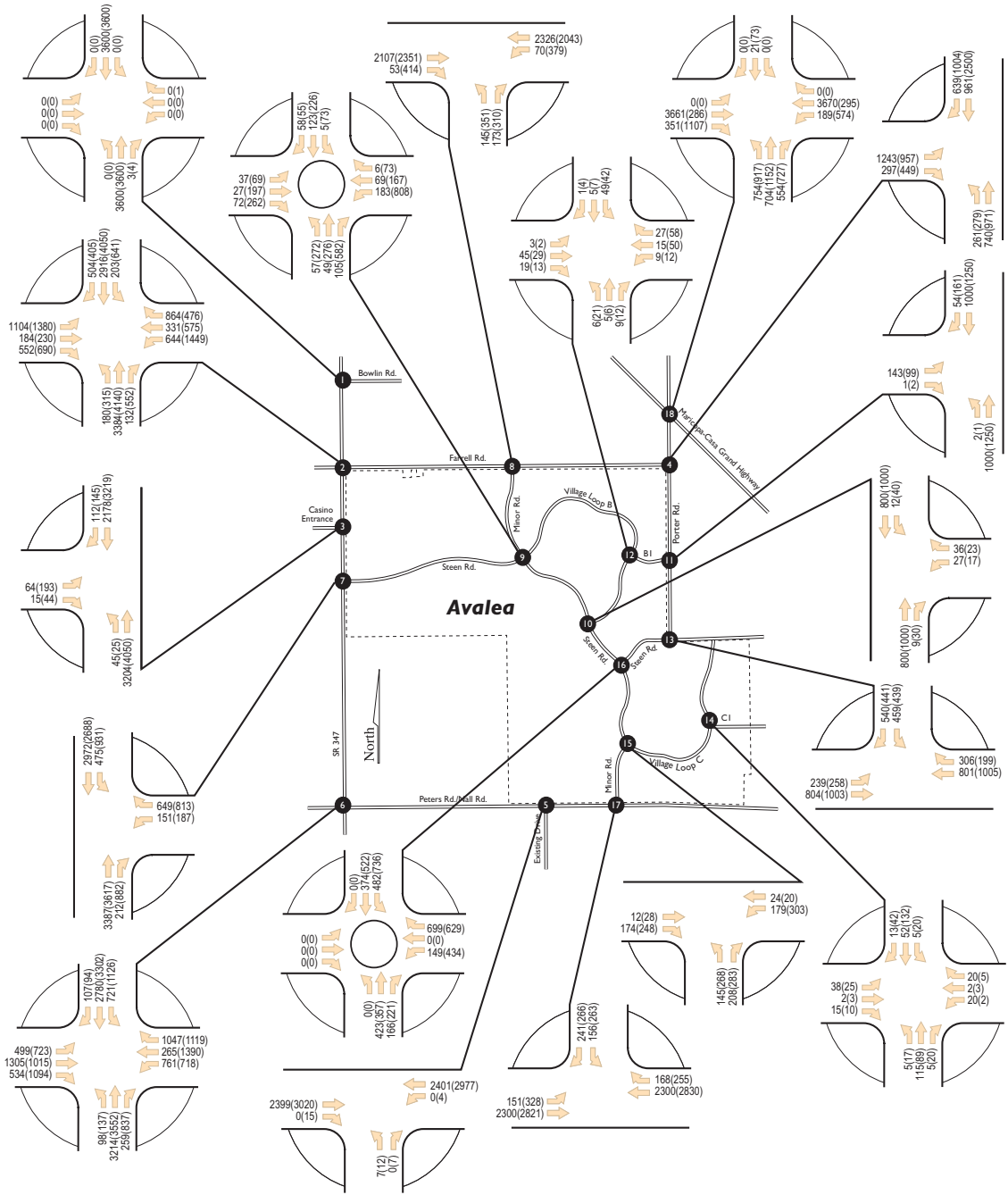


Figure 13:
2013 AM/PM Total Traffic Volumes

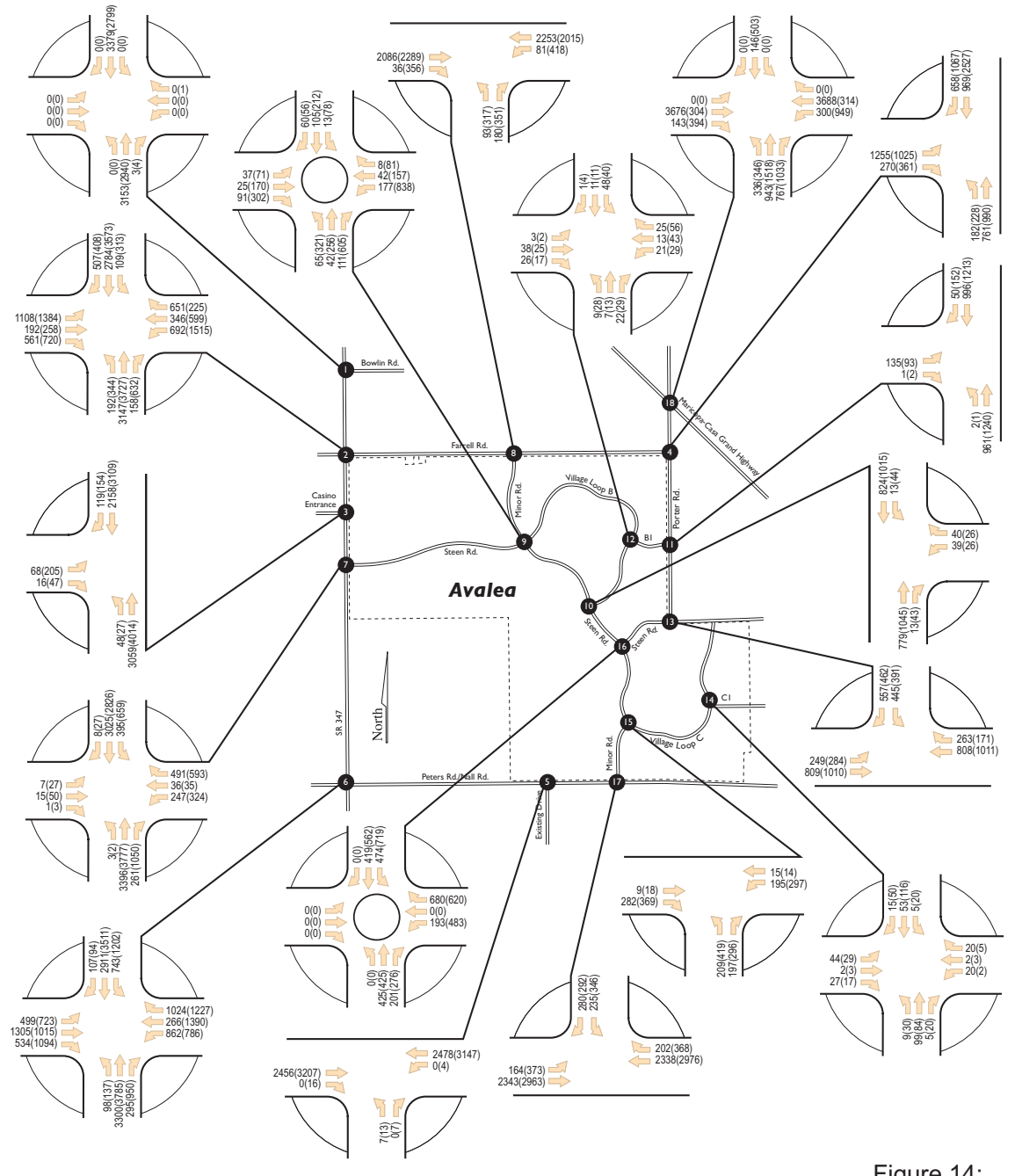


Figure 14:
2018 AM/PM Total Traffic Volumes

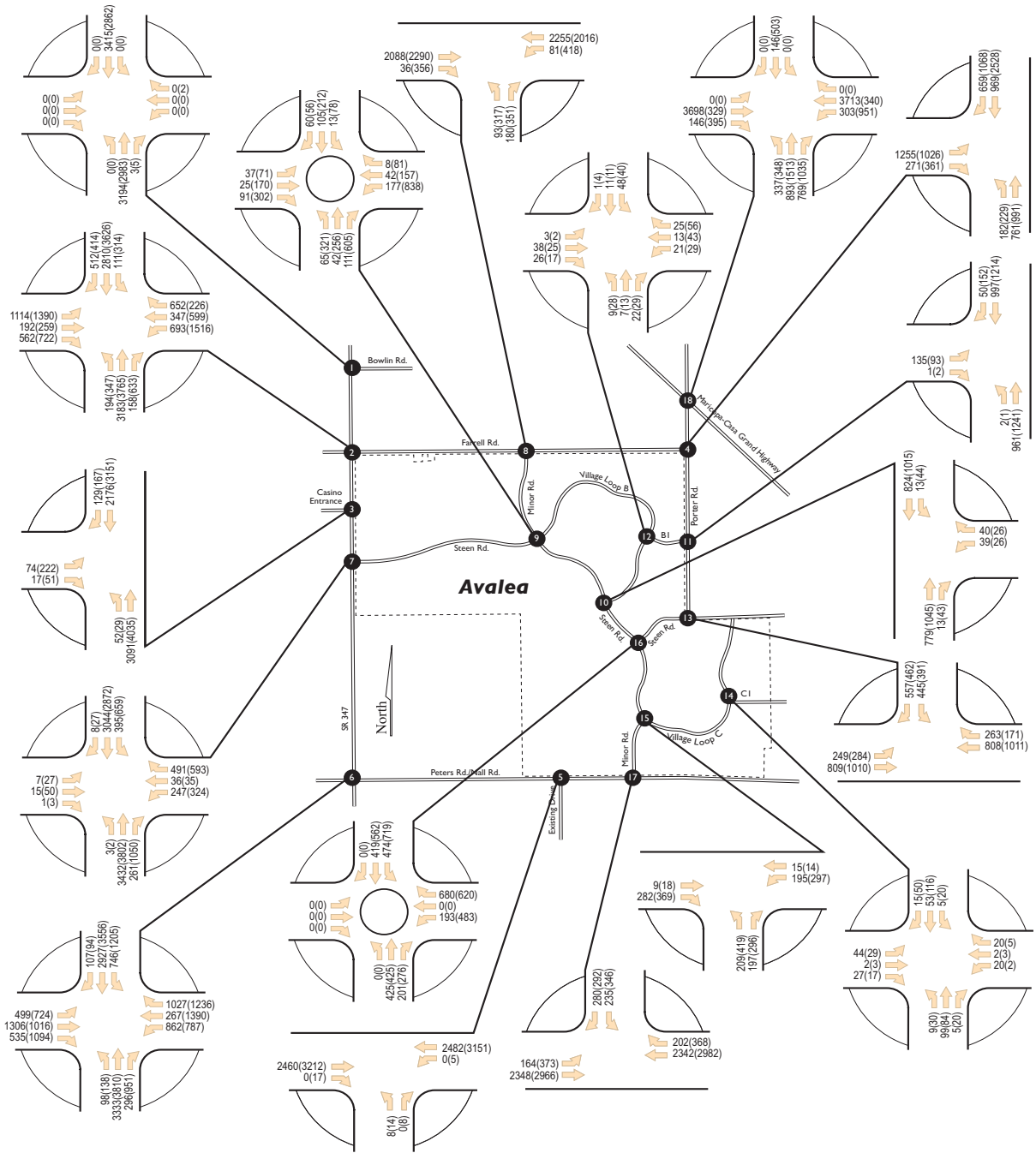


Figure 15:
2023 AM/PM Total Traffic Volumes

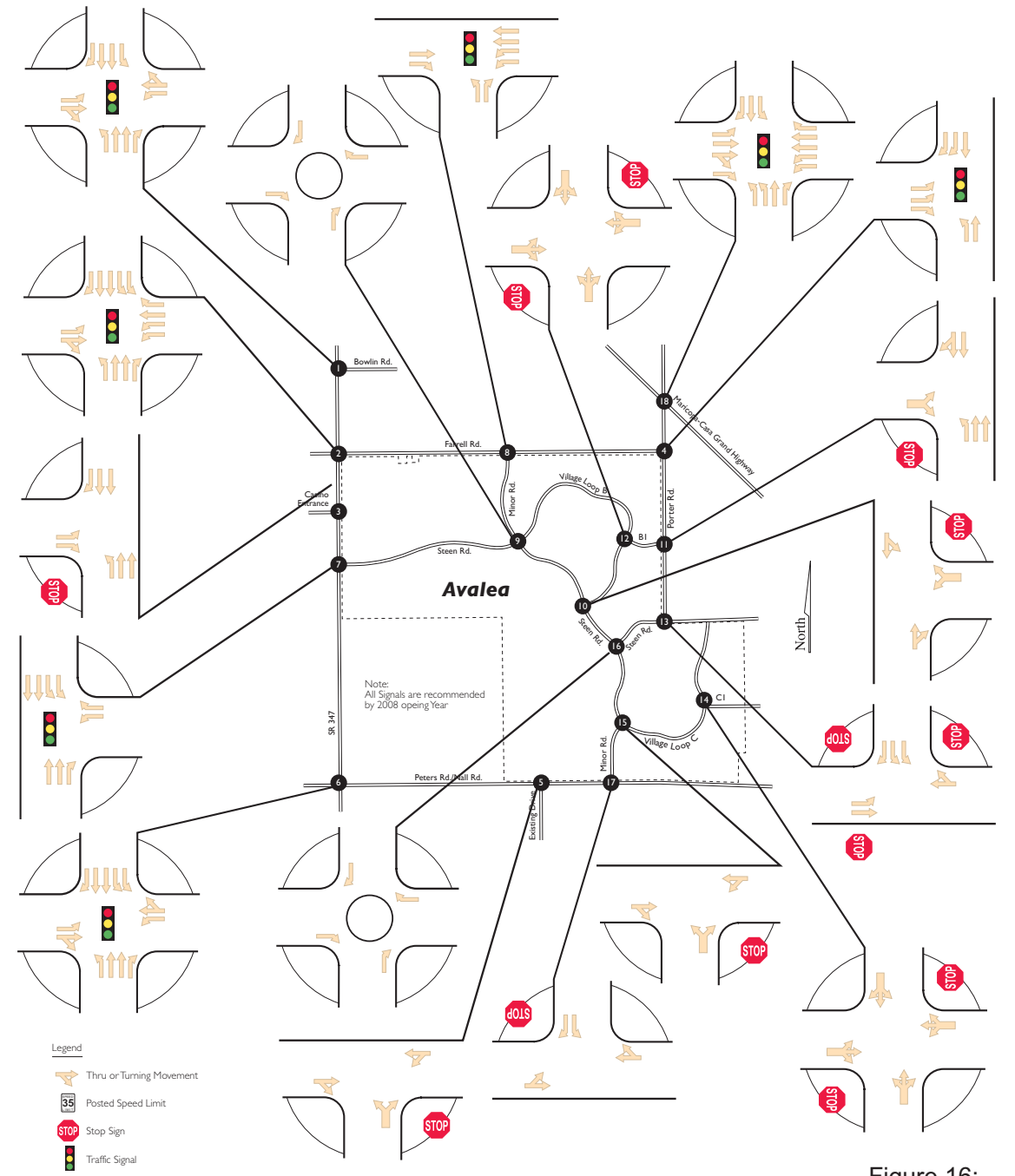


Figure 16:
2008 Proposed Lane Configurations

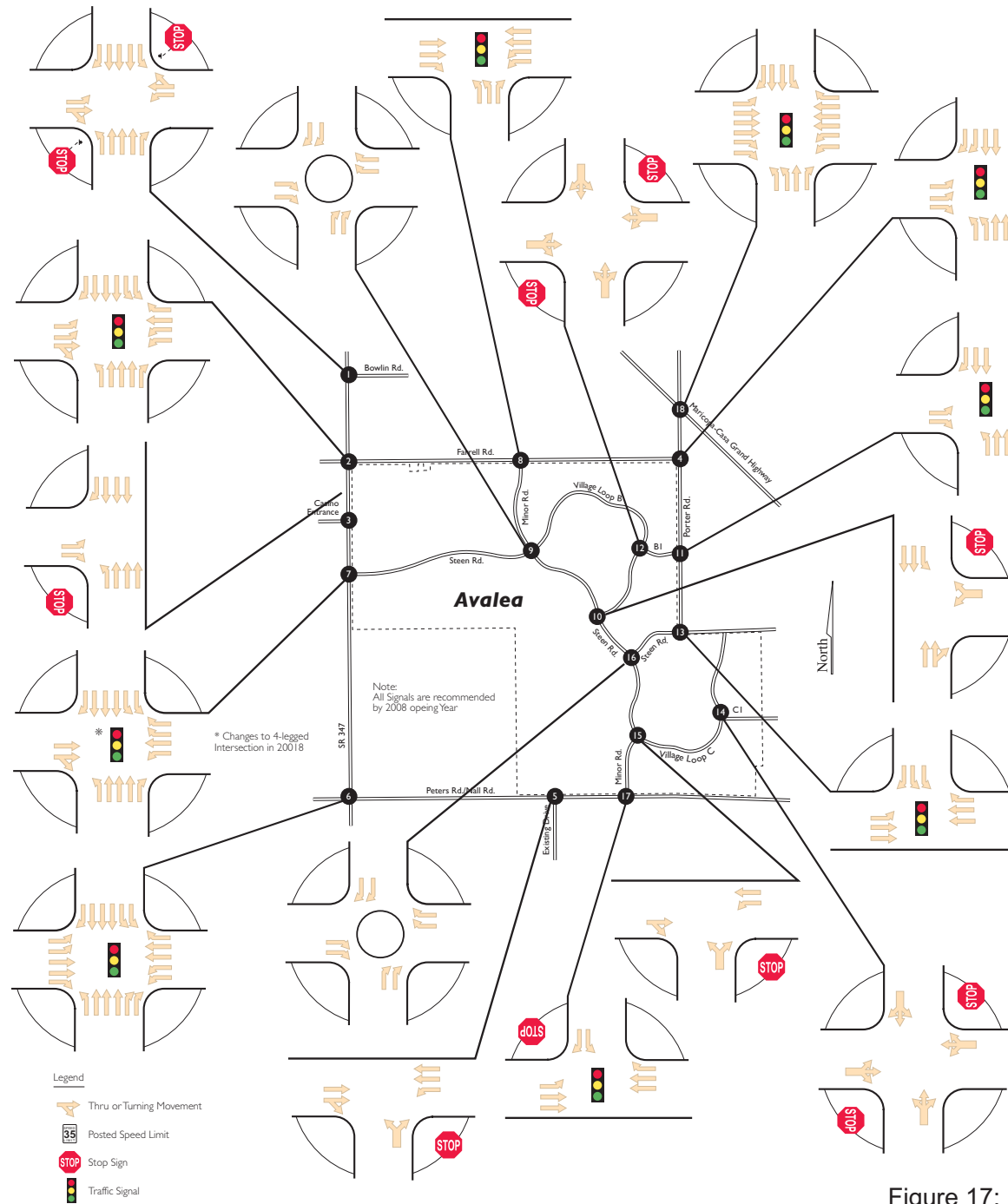


Figure 17:
Buildout Proposed Lane Configurations