

# PACIFIC PROVING GROUNDS NORTH

## Development Unit 2 Development Unit Plan

November 10, 2014

Section 4.5 Revised 5-14-15



PPGN Development Unit 2 – Development Unit Plan  
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# Section 1 | Development Unit 2 DUP Overview

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## 1.1. DU2 Introductory and Purpose

As required by Section 3 of the Proving Grounds North Community Plan (“PPGN Community Plan”), the Development Unit 2 Development Unit Plan (“Development Unit 2 DUP”) is being established for approximately 297 acres within the overall 484 acre PPGN community (see [Exhibit 1.1 – Community Map](#) and [Exhibit 1.2 – Development Unit Map](#)). Development Unit 2 represents the residential heart of PPGN and will include a mix of community serving uses such as retail, employment, and recreation and education facilities.

**Administration of the Development Unit Plan.** Pacific Proving Grounds North is subject to the terms and provisions of the PPGN Community Plan, which establishes the regulatory framework for development of the overall community. The PPGN Community Plan sets forth a hierarchy of governing documents as outlined below.

**Community Plan.** The PPGN Community Plan is the initial planning and regulatory document that establishes the overall project vision, regulatory framework, administrative procedures, and development controls including land use groups, permitted uses, general development standards, a land use budget, and general design guidelines and concepts. The PPGN Community Plan also includes the master plans for public infrastructure and divides the master plan into distinct Development Units (“DU”), which represent the various phases or development areas within the project. The core regulatory components of the PPGN Community Plan are the unique development standards and planning processes that will be used to govern all future development.

**Development Unit Plans.** Development Unit Plans (“DUP”) represent the second level of planning and establish a more detailed planning framework that is specific to each DU within the overall Community Plan. A DUP will include detailed design guidelines specific to each DU, the general location and approximate acreage for each LUG to be used, and updates to master infrastructure reports, as necessary. A DUP may also include refinements to the General Development Standards and modifications to Engineering Standards, if approved by the City Engineer and/or City Traffic Engineer, or designee.

**Site Plans and Subdivision Plats.** The final level of planning includes Site Plan and Design Review for all non-single residence projects and Subdivision Plat review for all single residence projects and all non-single residence projects within PPGN that are subject to subdivision approval through the City of Mesa. Site Plans and Subdivision Plats establish the specific location of each allowed LUG, details of individual parcels including lot layout and building placement as appropriate, Development Parcel Allocations, and must demonstrate compliance with requirements of both the Community Plan and the applicable DUP.

The Development Unit 2 DUP has been developed in furtherance of the goals and objectives set forth in the PPGN Community Plan and promotes a cohesive, high quality development that achieves the vision for PPGN as a compact, connected and pedestrian friendly community through the creation of more detail design guidelines and design vision. This document, along with the PPGN Community Plan, shall be used as a guide for all development within DU2. Except where specifically noted, this DUP is not intended to create highly prescriptive requirements that dictate a particular style or layout, but instead establish a refined set of performance criteria that encourage diversity and creativity in site planning and architectural design with the specific intent to further the overall vision for the community. These performance criteria, however, establish a baseline for the expected quality and level of design. It is the burden of the developer to justify any deviation from these design guidelines and the design vision set forth herein.

As with the PPGN community, the Development Unit 2 DUP is intended to be a dynamic document that will evolve with the community and may require amendments from time to time. All amendments to the approved Development Unit 2 DUP shall be processed in the manner set forth within the PPGN Community Plan. In the event the Development Unit 2 DUP is amended in a manner that makes previously approved and completed improvements no longer compliant, such improvements shall be considered grandfathered, non-conforming uses. Pursuant to Section 3.2 of the PPGN Community Plan, which provides that the City of Mesa Zoning Ordinance governs zoning requirements, development standards, and regulatory processes that are not specifically articulated within the PPGN Community Plan, the expansion or alteration of non-conforming uses is subject to the provisions of Chapter 36, Non-Conforming Uses, Structures, and Lots, of the City of Mesa Zoning Ordinance.

## 1.2. DU2 Site and Context Discussion

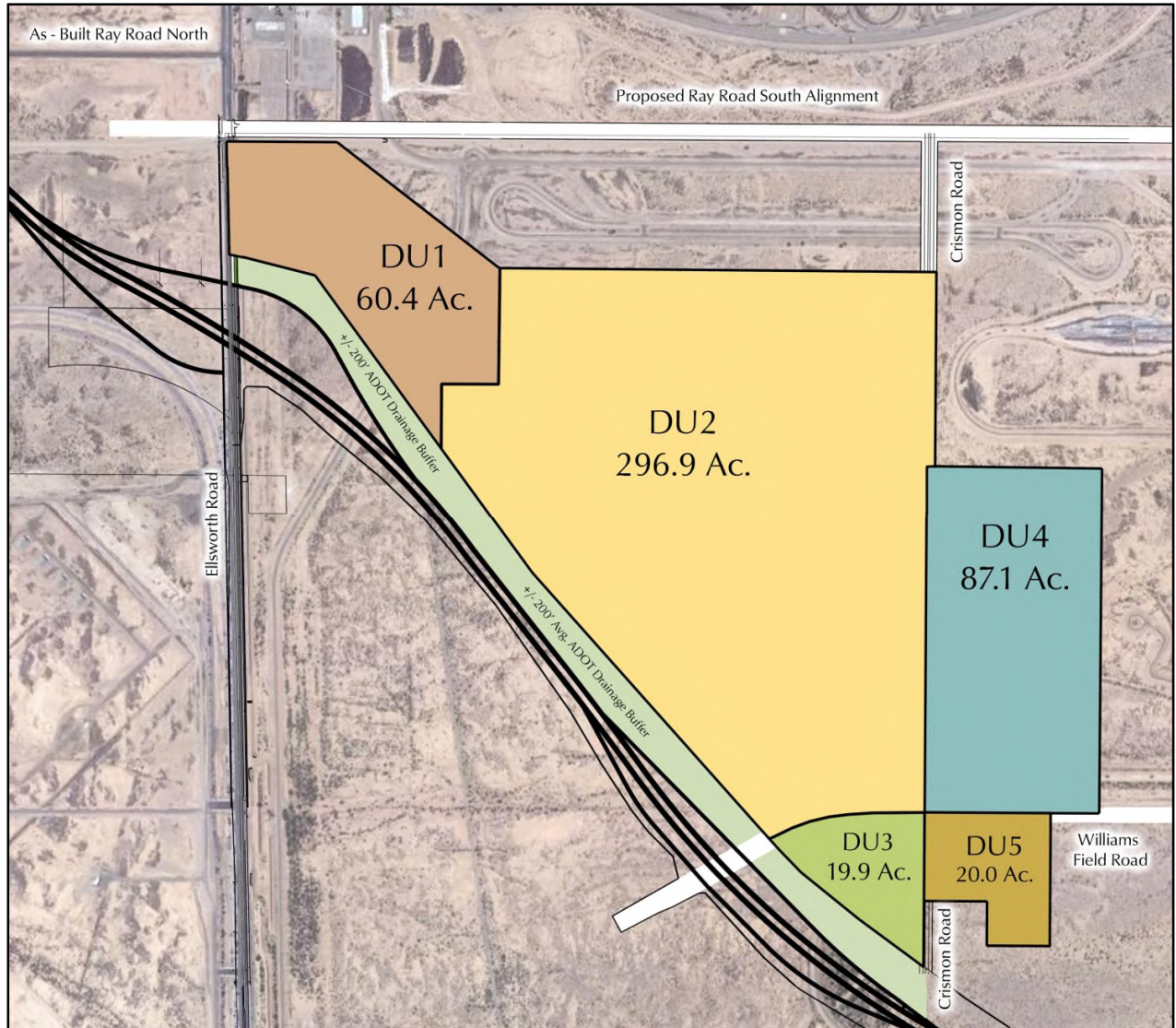
### Regional Context.

PPGN is comprised of 484 acres that was formerly part of the General Motors Proving Grounds. The PPGN property is located in the southeastern portion of the City of Mesa planning area and is generally bounded by Ellsworth Road to the west, the Williams Gateway Freeway alignment (SR 24) to the south, Signal Butte Road to the east and the Powerline Floodway Channel and Ray Road alignment to the north (see *Exhibit 1.1, Community Map*). Notable neighboring land uses include the Phoenix-Mesa Gateway Airport and the Eastmark master planned community. Development Unit 2 is located within the central portion of PPGN with Crismon Road as its eastern boundary and the SR 24 Freeway alignment to the south (see *Exhibit 1.2, Development Unit Map*).

Exhibit 1.1 – Community Map



Exhibit 1.2 – Development Unit Map



### 1.3. Development Unit 2 Character

Development Unit 2 consists of 296.9 acres and is the primary location for residential neighborhoods within PPGN. Development Unit 2 is generally located in the core of PPGN with Crismon Road serving as its eastern border, Williams Field Road as its southern border, and the SR 24 alignment as its southwest border. The northern and eastern boundaries are shared with the adjacent DMB/Eastmark development.

Pursuant to the PPGN Community Plan, Development Unit 2 will be comprised of a variety of moderate density and compact single residence homes, a community recreation center, a planned elementary school and local serving commercial. Predominant land uses within Development Unit 2 include single residence, neighborhood retail and community facilities. Opportunities also exist for higher density attached single residence and multi-residence land uses.

The land use fabric within Development Unit 2 will be organized through a hierarchy of planning areas that includes Intimate Neighborhoods, Residential Villages, and the larger PPGN Community. Intimate Neighborhoods are individual residential neighborhoods that are targeted to be approximately 15 to 20 acres in size and organized around a neighborhood focal element such as a park, open space or other community gathering space. Residential Villages represent an organic collection of Intimate Neighborhoods that are within a walkable distance and are connected through the community's pedestrian pathway system. Residential Villages will generally include one or more destination amenities such as the community recreation center, a neighborhood school or neighborhood serving retail uses. The PPGN Community represents the entire 484 acre Pacific Proving Grounds North planning area.

Intimate Neighborhoods within PPGN are planned to be compact, connected and pedestrian friendly. Each Intimate Neighborhood will be planned around a focal park and will include a system of pedestrian pathways and community open spaces that are interconnected to other Intimate Neighborhoods and Residential Villages within the PPGN Community and outside PPGN where feasible. Strong emphasis will be placed on creating an active streetscape with homes and outdoors spaces oriented towards the public realm to foster a socially interactive community. The community recreation center is planned as the social and activity heart of the Residential Villages and will include both indoor and outdoor amenities located within a seven to ten acre park setting. The PPGN Community Plan accommodates and encourages neighborhood oriented retail and service uses within and adjacent to the community center. A portion of the community recreation center will be developed with the first phase of residential housing and will then evolve as the community matures. An elementary school site is planned for the southern portion of Development Unit 2 and will be co-located with a community park that will include sports fields for programmed recreation opportunities. Development Unit 2 is anticipated to accommodate a neighborhood retail center near Williams Field and Crismon Roads. The retail center will be carefully integrated, both visually and physically, within the surrounding Residential Villages to encourage easy and informal access to the retail center for residents. The development framework for Development Unit 2



allows the opportunity for higher density housing to materialize near the retail center or larger community park areas as well.

## 1.4. PPGN New Traditional Community Vision

The City of Mesa has a long history characterized by its agricultural roots and suburban beginnings. Mesa continues to evolve and thrive as one of the fastest growing cities in the nation. Mesa's growth, in particular, has been focused on the burgeoning area surrounding the Phoenix-Mesa Gateway Airport ("Gateway Area"). As part of this evolution, a vision has emerged for Mesa's Gateway Area through the Mesa-Gateway Strategic Development Plan and input of the City, Airport and Stakeholders. This vision leaves behind the Gateway Area's former identity as a sprawling airport-related industrial area and instead embraces a holistic approach to land use that promotes a sustainable and integrated mixed-use environment that focuses on creating a nationally recognized place for people to live, work, learn and recreate. An important component of the Gateway Area vision includes the creation of high quality residential environments strategically located in close proximity to existing and future job centers. The PPGN Community Plan was designed to respond to this vision by establishing the structure for a master planned community in close proximity to jobs and regional transportation corridors that is built upon a framework of compact, connected and pedestrian friendly Residential Villages. PPGN, as a New Traditional Community, balances modern planning ideals with market trends, and is a perfect complement to the Gateway Area vision.

### **Definition of a New Traditional Community.**

A New Traditional Community reflects a modern, marketable and livable community planning ideal that draws influence from modern smart growth principles as well as uncomplicated and timeless American neighborhoods that are designed to respond to the core needs of residents. In a New Traditional Community, the simplicity of these early American neighborhoods has been combined with modern smart growth principles such as compact, walkable neighborhoods, dynamic streetscapes that have a positive influence on the public realm, strong connectivity through pedestrian and bicycle systems to maximize mobility, integrated and accessible open space, and community centers within walking distance. The result is a modern planning ideal that responds to consumer and market expectations, and fulfills municipal planning goals. This New Traditional Community planning ideal is the basis for community design at PPGN.

## 1.5. DU2 PPGN Planning Framework

The New Traditional Community Concept within PPGN will be implemented within Development Unit 2 by utilizing a planning framework that is built upon four core structural elements. The core structural elements are:

- a. **Neighborhoods:** *Compact, Connected and Walkable Neighborhood Design.*
- b. **Streets and Pedestrian Systems:** *Active Streetscapes and Interconnected Pedestrian Systems.*
- c. **Parks and Open Space:** *Parks and Open Space as Community Focal Points.*
- d. **Architecture:** *Purposeful Architectural Design.*

An integral component of the PPGN planning framework is to establish a community whose form, functions, and activities are highly connected and integrated resulting in a natural transition from neighborhood to neighborhood and from land use to land use throughout the community. Connectivity and integration will occur at many levels and is a primary aspect of the overall design. Connectivity will start with the design and development of great streets, which are the backbone of the community and will be used to bring people together and create memorable places. Each core structural element of the PPGN Planning Framework will incorporate design concepts that will lead to a connected and integrated community.

**Neighborhoods.** The Intimate Neighborhoods and Residential Villages within PPGN form the core of the overall community design and are planned to create a compact and walkable environment that offers a diversity of housing opportunities and integrated commercial centers. Tree-lined streets will provide a shade-laden vegetated canopy complimented by homes, businesses and outdoor spaces oriented towards the street to foster a socially interactive community. The Intimate Neighborhoods will be designed so that residential lots and other adjacent land uses front to the street or open space areas directly. The placement of rear yards next to streets and open spaces should be minimized. Each Intimate Neighborhood will be organized around a focal park that functions as a strong organizing element and community identifier. Further, individual Intimate Neighborhoods, through the use of the Residential Village concept, will have strong linkages to larger community parks and the community recreation center. Smaller pocket parks and playgrounds will be tucked throughout the individual Intimate Neighborhoods. Streets and pedestrian pathways will provide connectivity throughout the entire PPGN Community and will be designed to provide walkable and bikeable connections between Intimate Neighborhoods, the community recreation center, and community retail centers.

A key characteristic of PPGN neighborhood design will be compact block lengths and uncomplicated neighborhood layouts to promote efficient use of the land and foster a more intense pedestrian

experience. Block sizes, open spaces, parks and neighborhood amenities will be scaled at a walkable, pedestrian scale to provide frequent choices of activities, and encourage alternate connections. When feasible, perimeter walls will be discouraged, and activities will be encouraged to front or side next to one another, with streets, parks and open spaces being used as the “places between.”

Neighborhoods within PPGN will include a variety of residential homes at varying densities and on varying lot sizes as well as opportunities for attached single residence homes and multi-residence apartment homes. The Intimate Neighborhoods will be complimented by commercial centers that are visually integrated and physically connected within Residential Villages and the larger PPGN Community as a whole. The creation of a seamless transition between differing land uses is a primary neighborhood planning goal within PPGN. In order to foster a community environment that encourages a mix of uses, the PPGN Community Plan also provides opportunities for home occupations in residential areas and neighborhood serving commercial in places such as the community recreation center and adjacent to larger community parks.

**Streets and Pedestrian Systems.** The streets within PPGN have been designed not only to function as movement corridors, but also as an important component of the public realm that contribute to the overall sense of place and social life of the community. Neighborhood planning will be closely coordinated with the streetscape design to promote an active, lively street scene that is complimented by homes oriented towards the street with public places such as porches, patios and courtyards designed to enliven the front yard experience. Non-residential areas will include design elements such as shaded sidewalks, outdoor seating and dining, buffer areas for protection from vehicles, and distinctive and functional design elements that create interesting places along the streets. Parking areas will be visually minimized. This will be accomplished through parking areas located so as to minimize disruption of the pedestrian network. . Buildings, landscaping and other architectural design elements may also be used to screen parking areas.

The street system will be both formal and simple, providing uncomplicated access within Intimate Neighborhoods and between Residential Villages to establish a strong backbone for landscaping throughout the community. Streets will be visually narrowed through the use of classic, formal tree-lined streets and other design elements such as landscape buffering and medians. The signature feature of the PPGN street system is a network of focal roundabouts that will act as both a formal terminus for each internal roadway segment and as an important community identity element. The roundabouts will be complimented by adjacent parks that are positioned to accent these special community features and identify recreational nodes.

The streets are also designed to extend and enrich the open space system and network of pedestrian pathways throughout the PPGN Community. A comprehensive sidewalk system is planned and will be interconnected to the off-street pedestrian and bicycle pathways, and to land adjacent to the PPGN

community. These pathways are designed to promote walkability and provide an amenity for each Intimate Neighborhood while forging strong links with surrounding Intimate Neighborhoods and the larger Residential Villages.

**Parks and Open Space.** The parks and open space system within PPGN is designed as the nucleus of the PPGN Community and reinforces neighborhood structure and community identity. Every Intimate Neighborhood will contain a park as a focal point with resident serving amenities and direct pedestrian linkages. Homes within Intimate Neighborhoods will be oriented towards parks and open space areas, which will become a natural extension of private open space areas and integral to the social structure of each Intimate Neighborhood. A comprehensive system of passive and active recreational facilities will contribute to a logical hierarchy of open spaces that provide a diversity of spatial experiences for PPGN residents within the Residential Villages. Large parks and playfields will offer active recreational opportunities. Smaller neighborhood parks will be used to contribute to a sense of community. Open spaces and plazas will provide destinations for social gatherings and informal social interaction. A neighborhood school and community park will act as a unifying element. The community recreation center will function as the social heart of the community. A continuous system of landscaped sidewalks, trails and paseos will provide on and off-street interconnectivity throughout the community and tie the parks and open space systems together.

**Architecture.** Building architecture plays an important role in creating the backdrop for the public places and the streetscape within the PPGN community, but is equally important in establishing the overall community identity. Architecture within PPGN will promote core architectural values that place strong emphasis on function, durability and visual appeal.

***Function:*** Building designs will be based on simple building blocks and roof forms that have a direct relationship to internal functionality. Buildings will be designed with a strong street orientation including porches, front entries and other public areas designed to foster neighborliness and social interaction among community residents. Shade elements will be architecturally integrated into the building design to provide protection from the desert sun.

***Timelessness:*** Building articulation, materials, landscaping and color schemes will have a relationship to the desert southwest and be selected to create a sense of timelessness and enduring quality within the community.

***Visual Appeal:*** Traditional design elements and architecture with a local flavor will be complimented by well-articulated public spaces including porches and patios, meaningful front door design, and thoughtful design and material selection for garage doors. Minimal setbacks will be utilized to promote a compact, walkable neighborhood and landscaping will play an important role in creating the overall visual landscape for each home, street and neighborhood.

Neighborhoods will include a mix of single story and two story homes to provide diversity in the street façade.

This approach to architectural direction will apply to all structures, including schools, recreational facilities and non-residential buildings. It is envisioned that this more honest approach to core architectural values will create a unique and refreshing persona for the PPGN Community as well as provide a set of tools for the building designers and architects that allow them to be more respectful to time tested architectural styles.

## 1.6. DU2 Compatibility with Phoenix-Mesa Gateway Airport

The Phoenix–Mesa Gateway Airport is a prominent contextual feature that guides development within PPGN. Development of PPGN is specifically intended to compliment and support the current and planned operations at the Airport. Development Unit 2 will comply with the airport compatibility measures set forth within the PPGN Community Plan.



## Section 2 | Development Unit 2 Land Use Plan

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### 2.1. DU2 Land Use Group Summary and Location

Development Unit 2 is the primary location for residential neighborhoods within PPGN and will generally be comprised of single residence homes complimented by the Community Recreation Park, Community Activity Park and Elementary School and neighborhood commercial opportunities. Opportunities exist for high density residential uses, such as apartments or townhomes in transitional areas between residential neighborhoods and retail or mixed-use areas. Individual neighborhoods will be linked to one another through the community parks, open spaces, and a system of on-street sidewalks with secondary off-street trail connections.

Development Unit 2 will predominantly be comprised of the Community Residential (“CR”) and Community Residential Small Lot (“CRSL”) Land Use Groups. Other Land Use Groups that will be utilized within Development Unit 2 include some combination of Community Multi-Residence (“CMR”), Community Commercial (“CC”) and/or Community Mixed Use (“CMU”). Each Land Use Group may be utilized within Development Unit 2 up to the maximum allowable percentage of gross land area as set forth within the PPGN Community Plan, subject to minimum and maximum residential dwelling unit and non-residential gross floor area limits. Within Development Unit 2, a minimum of 750 dwelling units is required with a maximum of 2,200 allowed. A minimum of 50,000 sf of non-residential development is required with a maximum of 125,000 sf allowed. Non-residential square footage includes commercial uses, schools, recreation facilities, community centers and other similar uses. The complete Land Use Budget for PPGN is included in Chapter 5 of the PPGN Community Plan. The development standards for each Land Use Group are contained within the PPGN Community Plan in Chapter 7 for residential land uses and Chapter 8 for non-residential land uses.

The following chart sets forth the maximum allowable acreage percentage of each Land Use Group within Development Unit 2:

	CR and/or CRSL	CMR	CC	CMU
Development Unit 2 269.9 acres	95% 256.40 ac	20% 53.98 ac	20% 53.98 ac	20% 53.98 ac

The following exhibits set forth the allowed locations for each Land Use Group within Development Unit 2, subject to the limitations described above.

## Community Residential (CR) Land Use Group



### PACIFIC PROVING GROUNDS NORTH M E S A , A R I Z O N A DEVELOPMENT UNIT PLAN 2

## Community Residential Small Lot (CRSL) Land Use Group



### PACIFIC PROVING GROUNDS NORTH M E S A , A R I Z O N A DEVELOPMENT UNIT PLAN 2

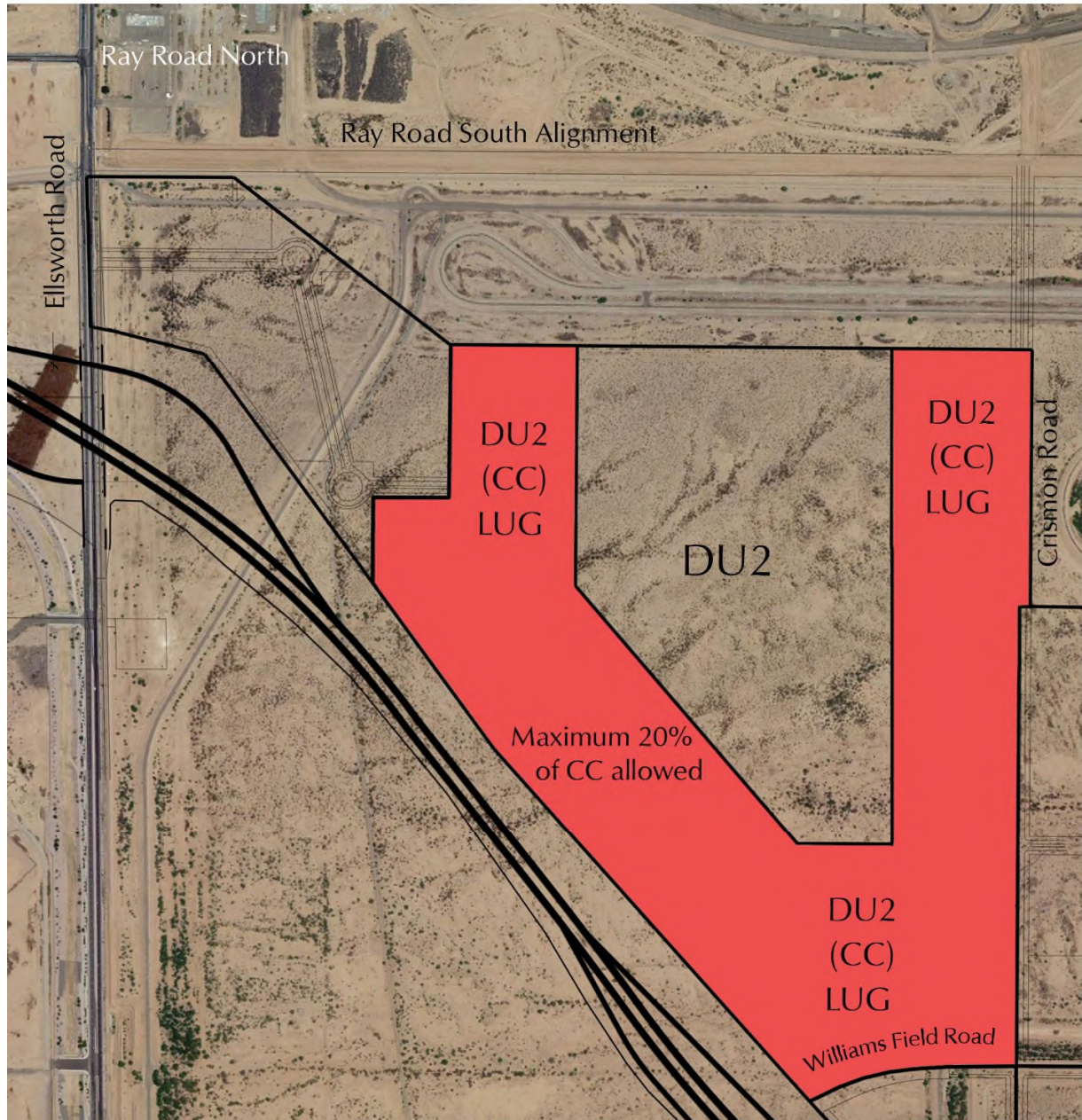


## Community Multi-Residence (CMR) Land Use Group



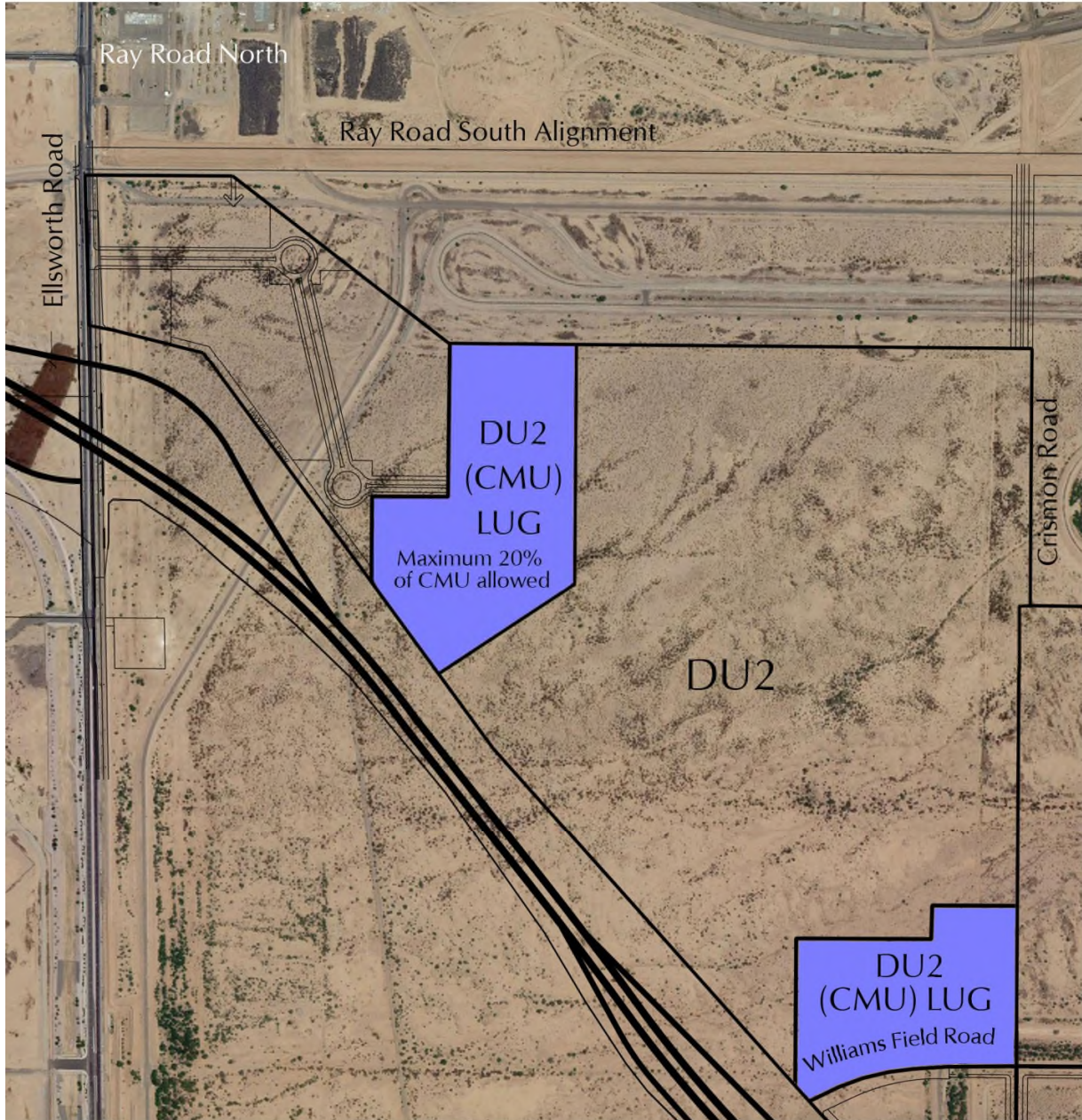
### PACIFIC PROVING GROUNDS NORTH M E S A , A R I Z O N A DEVELOPMENT UNIT PLAN 2

## Community Commercial (CC) Land Use Group



### PACIFIC PROVING GROUNDS NORTH M E S A , A R I Z O N A DEVELOPMENT UNIT PLAN 2

# Community Mixed Use (CMU) Land Use Group

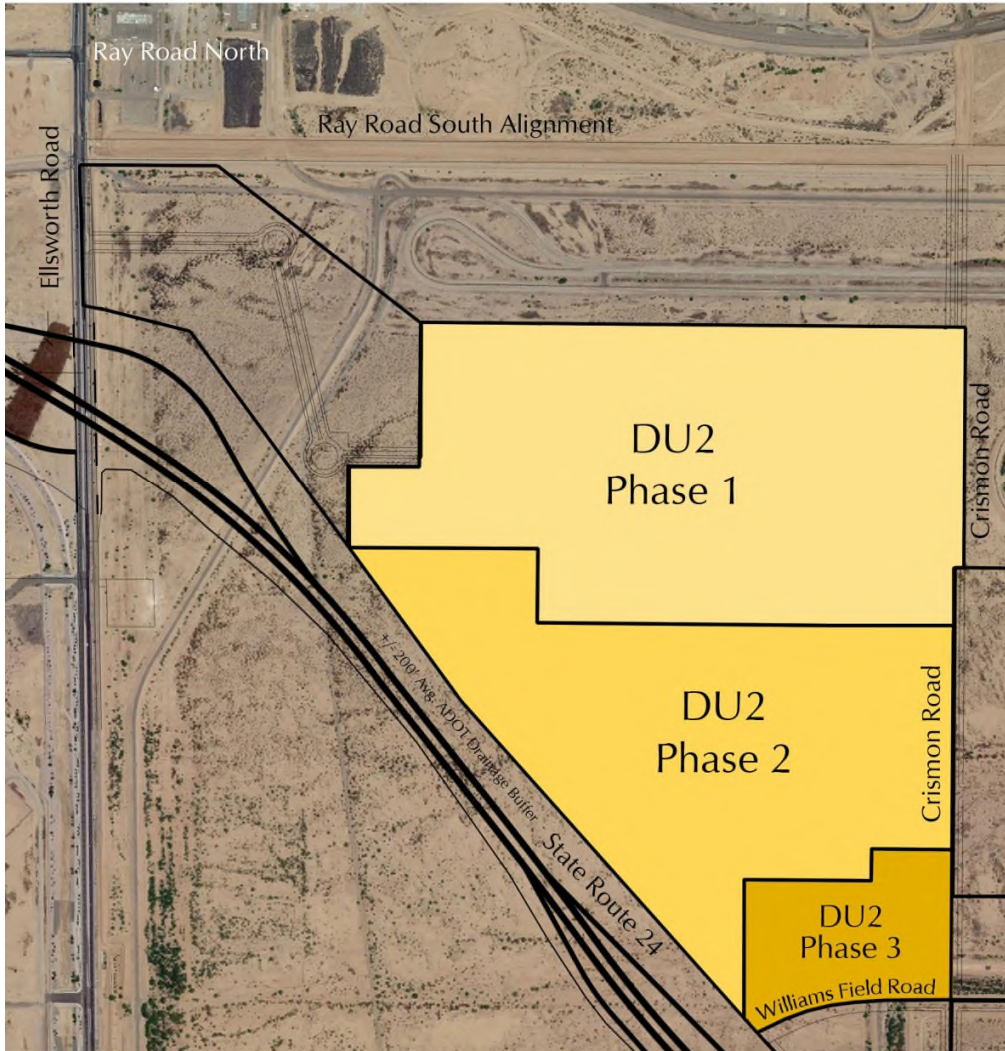


## PACIFIC PROVING GROUNDS NORTH M E S A , A R I Z O N A DEVELOPMENT UNIT PLAN 2

## 2.2. DU2 Development Phasing

Development Unit 2 will be developed in multiple phases in response to market conditions. Development is anticipated to begin in the north central portion of Development Unit 2 with residential neighborhoods being the primary development form. Access to Development Unit 2, for the initial phases of development, will occur via the primary community entry off Ellsworth Road with secondary access occurring via Crismon Road. Water, sewer and roadway infrastructure will be developed along the community collector alignment from Ellsworth Road to serve Development Unit 2. A community entry designed consistent with the concept and vision for Development Unit 1 as outlined within the PPGN Community Plan will be developed at the Ellsworth Road entrance in conjunction with the first phases of housing. This community entry feature will be constructed prior to development occurring in the adjacent Development Unit 1; however, it will be designed as an enduring element that is intended to promote and establish an identity for the residential development within Development Unit 2 that will occur during the early phases of the project and then continues a signature component of the future mixed-use node planned for Development Unit 1. Internal to Development Unit 2, a portion of the Community Recreation Park and community center building will be developed with initial residential development. The following conceptual phasing plan illustrates projected phasing within Development Unit 2.

## Conceptual Community Phasing Plan



## Section 3 | Development Parcel Allocation

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### 3.1. Development Parcel Overview

The Land Use Budget included in Chapter 5 of the PPGN Community Plan sets forth minimum and maximum residential units and non-residential gross floor area for each Development Unit within the overall project. As each DUP is approved, and as development progresses, the minimum and maximum residential units and non-residential gross floor area must be allocated within each DU and to individual development parcels. The initial development parcel allocation for DU 2 occurs at the time of DUP approval. Subsequent allocations may occur as development parcels are subdivided, and allocations may be transferred among development parcels and Development Units, subject to the provisions in Chapter 5 of the PPGN Community Plan. As required by Chapter 5 of the PPGN Community Plan, the official Development Parcel Allocation for PPGN shall be kept and recorded as Appendix 19.4 to the PPGN Community Plan. Please refer to Appendix 19.4 of the PPGN Community Plan for the most current approved Development Parcel Allocation.

## Section 4.1 | DU2 Neighborhood Design and Character

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Development within DU2 will be designed and developed such that the smaller individual single-residence, multi-residence, and non-residential areas of the community are integrated into the desired New Traditional Neighborhood pattern in a seamless way. While Intimate Neighborhoods and Residential Villages within the community may take on a distinctly residential or non-residential character, the design concepts listed below will be used to ensure that the different areas are brought together using consistent design elements and standards to form a complete, connected community that brings life to the streets and public spaces.

### **Residential Neighborhood Design Concepts.**

The Intimate Neighborhoods and Residential Villages within Development Unit 2 form the core of the community and are planned to create a compact and walkable environment that offers a diversity of housing opportunities. The development planned for this portion of the community will provide a mix of housing types that will give families, seniors, single workers, young couples, and students opportunities to live in close proximity to each other and develop a rich and diverse neighborhood fabric. Individual residential neighborhoods that are targeted to be approximately 15 to 20 acres in size will be organized around an open space, park or other community gathering elements that are designed to establish a unique identity for that neighborhood and encourage social interaction among residents (the Intimate Neighborhoods). All Intimate Neighborhoods will have compact block lengths, tree-lined streetscapes, and immediate access to recreational amenities. Sidewalks and trails will be provided throughout Development Unit 2 to provide connectivity within Intimate Neighborhoods, between Intimate Neighborhoods, between Residential Villages and to the larger PPGN community and the region as a whole. Outdoor spaces, both public and private, community centers, and commercial areas will be strategically located and contribute towards creating a socially interactive community.

The following establishes the site planning and neighborhood design standards to guide the organization and layout of Intimate Neighborhoods and Residential Villages within Development Unit 2. Multi-residence areas within Residential Villages should utilize as many of the same design principles as described for single residence neighborhoods as feasible. Multi-residence development will be designed into the surrounding pattern of commercial and single-residence development as an integral part of the

### **Pacific Proving Grounds North**

fabric of the community. Specific site layout standards and development standards for multi-residence development is included in Section 7.8 of the PPGN Community Plan.

### **Neighborhood Scale and Layout.**

A basic component of the New Traditional Community concept is a compact and walkable development pattern. This pattern of development is achieved through shorter block lengths and a grid street pattern that provides multiple travel options and gives more opportunity for social interaction. Development Unit 2 will employ the following design standards for the scale and layout of neighborhood blocks:

- a. Compact Block Lengths. Block lengths (the distance along a block face from one intersection to another) are encouraged to be less than 500 feet in length.
- b. Neighborhood Identity Element. Each neighborhood area will have an identifying or organizing element such as a small park, open space, or recreational facility that will provide a place for nearby residents to gather and foster a sense of place for each neighborhood.
- c. Cul de Sacs. Cul de sacs should be used minimally and strategically to provide connections, or 'windows' to open spaces areas and pedestrian trails.

### **Neighborhood Streetscape.**

Neighborhood streetscapes within Development Unit 2 are important public spaces that will be designed to bring community residents together. The neighborhood streetscapes include the public areas outside resident's front doors, including front yards, sidewalks, trails and open spaces along the streets and the street itself. Plans detailing the neighborhood streetscapes, including streetscape landscaping, amenities, monument and wall design, signage, and lighting, will be submitted for review in conjunction with the first preliminary plat applications in order to establish the overall neighborhood streetscape theme. Streetscapes will be developed to encourage pedestrian activity by using the following standards:

- a. Street Design. All streets within Development Unit 2 must comply with the approved street cross sections included in Section 5, subject to approval by the City of Mesa. Specific street cross sections will be determined at the time of Preliminary Plat.
- b. Visually Narrow Streets. Neighborhood streets will be both visually narrower and shorter in length than traditional suburban standards to promote slower vehicular speeds and a more intimate streetscape. Elements such as tree-lined streets with prominent



pedestrian sidewalk areas and on-street parking may be used to help visually narrow the street. The utilization of a grid pattern for neighborhood layout and compact block lengths that are generally 500' or less will be used to create shorter street and block lengths.

- c. Streetscape Shade. Streets and sidewalks will be shaded to encourage pedestrian activity. An emphasis on shade elements, such as landscaping, trees or shade structures, will be provided at key nodes where pedestrian activity is more likely to occur, such as at the confluence of sidewalks and trails, and near open space or recreation areas.
- d. On-Street Parking. On-street parking is encouraged within residential neighborhoods.
- e. Public Neighborhood Landscape. Public neighborhood landscape areas, including front yards, open space and park areas, and right-of-ways, will be controlled and defined by specific plant and tree palettes, tree planting locations and maintenance expectations to assure the neighborhoods are both attractive and designed with a cohesive theme to sustain value and visual appeal long term. Specific landscape theme and planting palettes will be developed prior to the submittal of initial improvement plans.

#### **Neighborhood Parks and Open Spaces.**

Neighborhood parks and open spaces will be provided within each neighborhood to encourage social interaction and provide a sense of identity to each neighborhood using the following standards:

- a. Neighborhood Parks. Each neighborhood will be organized around a park that functions as a strong organizing element and community identifier. Each neighborhood park will have a unique design theme (such as a rose garden park or community recreation center park) that will also be used to help establish an identity for that neighborhood as a whole. Neighborhood parks will be strategically and centrally located to act as a strong visual identity element for the neighborhood and ensure convenient access for residents.
- b. Homes Fronting on Parks. Neighborhood parks and community parks will be framed with public streets and residential units along those streets will front onto these open spaces. Rear yards should not abut parks or active recreation areas except in very unique design circumstances.
- c. Walking Distance to Open Spaces. As a general rule, residential units shall be within 300 feet of an open space area (including community parks, neighborhood parks, passive open space areas, off-street community trails or paseos).

### **Neighborhood Linkages.**

To form a unified, pedestrian-friendly community of new traditional neighborhoods, the individual neighborhoods will be designed to be linked together and flow smoothly from one to another in a seamless way. The following standards will be used to accomplish this objective:

- a. Neighborhood Integration. Continuity between Intimate Neighborhoods and Residential Villages will be achieved through the use of a consistent pattern of landscaping, shading elements, decorative paving, street furniture, architectural themes, and pedestrian connectivity systems. Further, differing land uses will be planned to transition seamlessly from one to another while minimizing hard edges. These design elements will help link Intimate Neighborhoods and Residential Villages into the greater PPGN community. A cohesive palette of public streetscape elements is required throughout Development Unit 2.
- b. Neighborhood Linkages. The sidewalk system along streets, supplemented with off-street trails and trails through open space areas, will provide connections from each Intimate Neighborhood to other Intimate Neighborhoods, to other Residential Villages, larger community parks, the community recreation center, and commercial and mixed-use areas.
- c. Perimeter Walls. Perimeter walls around entire Intimate Neighborhoods or individual projects are strongly discouraged and will only be allowed as an exception to the rule. Where necessary for privacy in individual yards, or for screening or security, perimeter walls can be used and will be designed with distinct architectural characteristics that complement the architecture on the property.
- d. Neighborhood Connections. Each Intimate Neighborhood shall have at least two street connections to two different streets. More connections are encouraged.

## PPGN Core Neighborhood Characteristics



### **Non-Residential and Mixed Use Design Concepts.**

Commercial and mixed-use areas within Development Unit 2 will be designed such that they create a unique sense of place and identity for the community and provide opportunities for pedestrian activity and social interaction. Freestanding pads are allowed, but must be integrated into the overall site design in a manner that encourages and facilitates pedestrian connections between adjacent buildings (street frontages and pedestrian oriented areas on the site, allowing users to park once and conveniently visit multiple shops. Commercial and mixed-use areas will be designed as an integral component of Residential Villages and also will be used to tie PPGN to the larger community.



The following site planning principles and design standards are applicable to non-residential and mixed-use development within Development Unit 2.

#### **Site Plan Scale and Layout**

- a. Street Pattern and Layout. A clear pattern of streets and driveways will be used to break down the scale of non-residential projects and reinforce the concept of a walkable community. Consistent with the Intimate Neighborhoods, block lengths should generally be 500' as a maximum. This pattern of streets and driveways will include pedestrian, bicycle and vehicular linkages between non-residential areas and adjacent activity areas and Intimate Neighborhoods.
- b. Transitions to Residential Neighborhoods. Non-residential and mixed-use areas will be designed to transition to adjacent Intimate Neighborhoods. Buildings will be sited to reinforce the circulation pattern along the street and promote pedestrian activity.
- c. Intensification Over Time. The pattern of streets and parking should allow for intensification of the site over time.

#### **Neighborhood Streetscape**

- a. Street Design. All streets within Development Unit 2 must comply with the approved street cross sections included in Section 5, subject to approval by the City of Mesa.

- b. Visually Narrow Streets. Streets will be both visually narrower and shorter in length than traditional suburban standards to promote slower vehicular speeds and a more intimate streetscape. Elements such as tree-lined streets with prominent pedestrian sidewalk areas, and on-street parking will help visually narrow the street scene. Street lengths and block lengths should generally be 500' or less.
- c. Streetscape Shade. Streets and sidewalks will be shaded to encourage pedestrian activity. Shade elements may include trees, landscape or shade structures.
- d. On-Street Parking. On-street parking is strongly encouraged.

#### **Parks, Open Space, and Community Activity Areas**

- a. Community Spaces. Plazas, courtyards, pocket parks, and other open space areas will be designed as an integral part of non-residential and mixed-use areas to promote a pedestrian friendly community and create active gathering places.

#### **Neighborhood Linkages**

- a. Pedestrian Connectivity. Continuous pedestrian pathways will be provided to connect all development components and with the sidewalks along the public streets. Active ground level uses will be oriented towards the pedestrian ways and sidewalks.
- b. Land Use Integration. The integration of non-residential and mixed-use areas with neighboring land uses, including residential neighborhoods, will be achieved through thoughtful site design that minimizes hard edges between projects and promotes a sense of seamlessness throughout the community. Traditional neighborhood design principles that encourage pedestrian activity and promote variety and interest along the street will be utilized to achieve this goal.
- c. Building Variety. Buildings will be oriented to create pedestrian connections, create outdoor activity areas and reduce impact of parking separating uses.

#### **Site Development**

- a. Parking Areas. Surface parking lots should be designed as outdoor "rooms" that are spatially defined by buildings, open space areas and other site features, such as landscaping, shade and screening from street view.
- b. Service Areas. Service and loading areas must be oriented away from public and pedestrian intensive areas, and screened from public view

## Section 4.2 | DU2 Street Design and Transportation Plan

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### Street Design Concepts

Streets within PPGN are designed as a core component of the overall planning framework and are integral to the New Traditional Community concept. The streets will be designed to function as efficient movement corridors that play an important role in shaping the sense of place and social life of the community. Street design within PPGN is based upon the “Great Streets” concept, which recognizes that streets are an important public place that are a critical component of overall place-making and should be designed to provide equal access to all modes of transportation as well as place an emphasis on the importance of pedestrian activity along the street.

The street system is designed to be both formal and simple, providing uncomplicated access to the various land uses and establishing a strong backbone for landscaping throughout the community. Streets will be visually narrowed through strategic use of formal tree-lined streets and other design elements such as landscape buffering and medians. A signature feature the PPGN street concept is a network of focal roundabouts that act as both a formal terminus for each internal roadway segment and as an important community identity element. The roundabouts will be complimented by adjacent parks that are positioned to accent these special community features and both identify and connect recreational nodes.

Neighborhood planning will be closely coordinated with the streetscape design to promote an active, lively street scene that is complimented by homes and buildings oriented towards the street with public places such as porches, patios and courtyards designed to enliven the front yard experience. Non-residential areas will include design elements such as shaded sidewalks, outdoor seating and dining, buffer areas for protection from vehicles, and distinctive and functional design elements that create interesting places along the streets. Parking areas will be visually minimized and located to the side or behind buildings where possible. On street parking is encouraged both in residential and non-residential areas.

The streets within PPGN will also be designed to extend and enrich the open space system and network of pedestrian pathways throughout the community. A comprehensive on-street sidewalk system is planned that will be interconnected to a secondary off-street pedestrian trails and paseos. Pedestrian pathways will be designed to promote walkability and provide an amenity for each neighborhood while forging strong links with surrounding neighborhoods. The trail and paseo system will include direct linkages to the on-street connectivity system, resulting in a highly accessible and connected community designed to serve the varying needs of all residents and users.

## Street Types

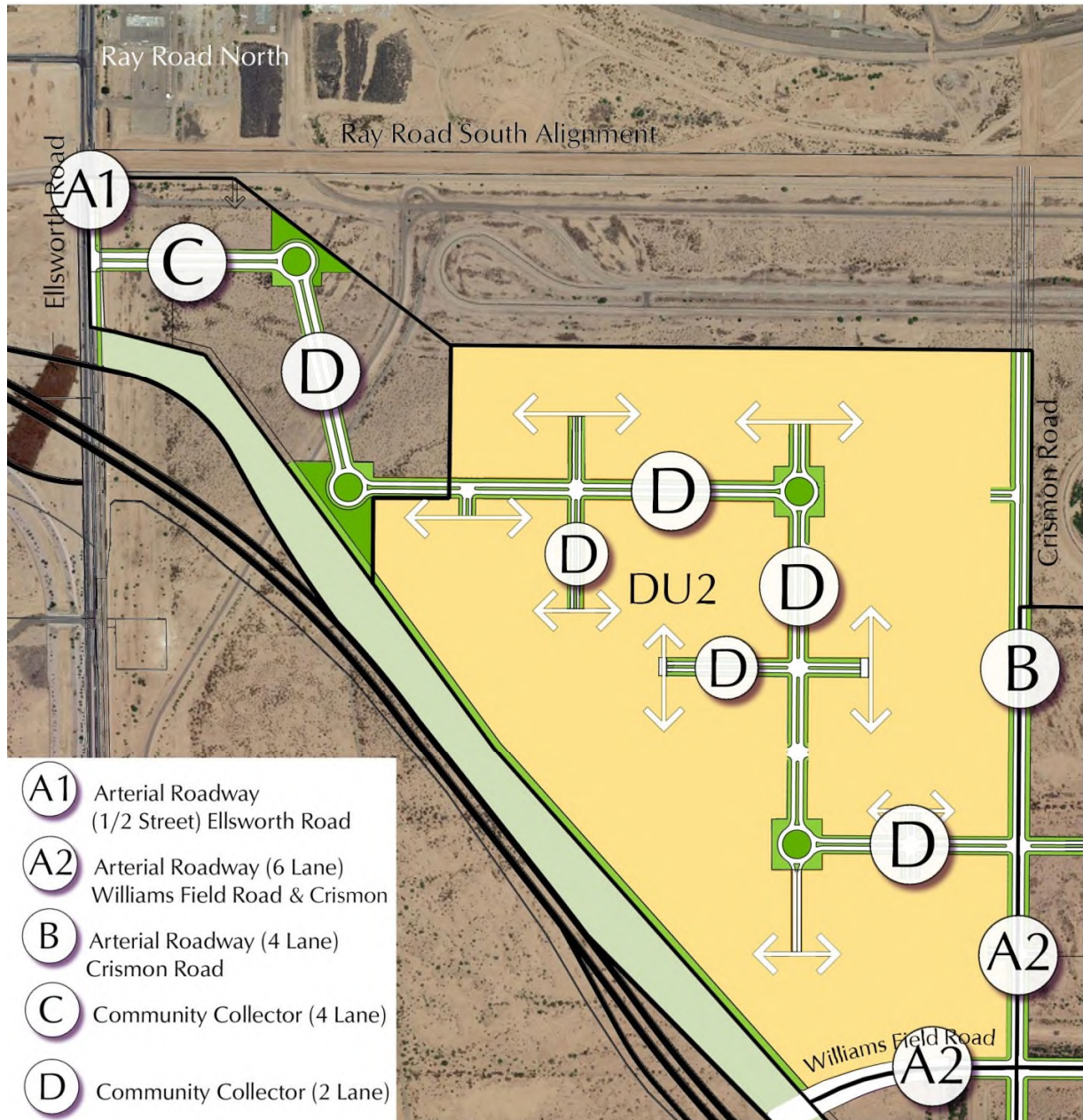
The roadway system within Development Unit 2 is comprised of three main roadway classifications, 1) Arterials, 2) Community Collectors, and 3) Local Streets. The hierarchy of internal streets gives structure to the overall community and is designed to provide efficient vehicular circulation to the perimeter regional transportation corridors, including Ellsworth, Crismon and Williams Field Roads, and the future SR24 freeway. Multiple connections to the perimeter arterial streets will be established to promote an even distribution of traffic that minimizes impacts on individual neighborhoods and adjacent communities

**Arterial Streets.** Arterial streets adjacent to Development Unit 2 include Crismon Road to the east and Williams Field Road to the south. The arterial roadways are high traffic volume streets that establish community edges. Crismon Road, to the north, becomes the Inspirian Parkway alignment within the Eastmark community. Crismon Road is an important arterial within the community as it bisects Development Units 2 and 4. Care will be taken to provide both a physical and visual transition between Development Units 2 and 4 to ensure that cohesive community character is maintained. The Arterial Streets will be designed to City of Mesa standards.

**Community Collectors.** The Community Collector is planned as a signature design element within PPGN and forms the backbone of the vehicular and pedestrian circulation system. The Community Collector is comprised of a series of straight, formal roadway segments punctuated by focal roundabouts that act as both a formal terminus for each internal roadway segment and as an important community identity element. The Community Collector is two lane median separated roadway within Development Unit 2 that transitions to a four lane median separated roadway within Development Unit 1. The two lane Community Collector cross section may also be used for neighborhood entries. Landscape areas are planned immediately back of curb along the streets and provide a generous canvas for community themed landscaping and street trees. Sidewalks are set back a minimum of ten feet from the back of curb to provide a safe pedestrian environment that encourages walking throughout the community.

**Local Streets.** Local Streets are the primary street type within the neighborhoods throughout PPGN and will connect individual homes, buildings and community amenities. Local Streets are designed to accommodate significant pedestrian traffic and provide sidewalk connections to community amenities such as parks, open spaces and pedestrian trails. Local Streets may include on-street parking, which will contribute to visually narrowing the street corridor.

The following Street and Circulation Plan identifies the general planned location for various street types.





## Traffic Impact Analysis

As part of the PPGN Community Plan, a Master Traffic Impact Analysis (“Master TIA”) was prepared and approved by the City of Mesa in August 2014. A revised Master TIA was prepared in coordination with this Development Unit Plan for DU2 to reflect a reduction in overall density. The Master TIA analyzes the entire PPGN development plan based on maximum allowable densities and estimates traffic generation and traffic distribution and establishes lane configurations and traffic control needs both internal to PPGN and at adjacent intersections and roadways.

## Private Street Segments

Certain locations within the residential portions of PPGN will include private street segments that are intended to be a visual extension of the public street system, but function like a shared private drive for generally two to four homes. These private street segments will be differentiated from the public street by a concrete drive strip and sidewalk. Utilities within the private street segments will also be private, and maintained by the HOA. Homes beyond 150’ from the public right-of-way must be sprinklered as determined by the City of Mesa Fire Department, and the asphalt surface within the private street segment will be designed and constructed with a pavement width of 24’ – 35’, similar to the public streets. See [Exhibit 4.2.2 – Private Street Segments](#) for a typical detail and notes regarding design requirements for the private street segments.

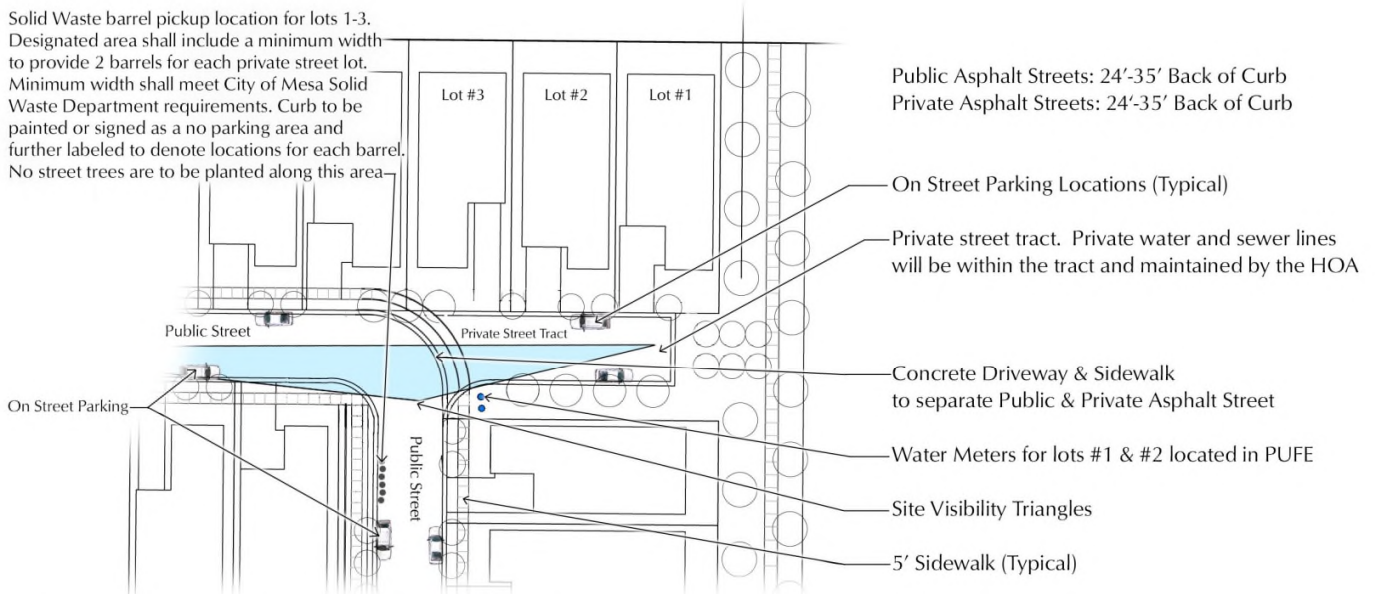
## Community Street Cross Sections

Specific street cross sections for PPGN were approved as part of the PPGN Community Plan. Updated cross sections have been included within the Development Unit 2 DUP to provide additional development options for the Community Collector and Local Streets. Specifically these cross sections provide an option where the right-of-way is located back of curb (See [Exhibit 4.2.3 – Community Cross Sections](#)). Project specific implementation of the alternate cross sections within Development Unit 2 is subject to review and approval by the City Engineer or designee pursuant to Chapter 3.12(c) of the PPGN Community Plan.

## Street Improvement Phasing

Street improvements within Development Unit 2 will be phased as necessary to support overall development phasing. The Community Collector will be, at a minimum, partially developed with phase one residential housing from Ellsworth Road to the terminus of the third roundabout. Improvements to Ellsworth Road will be required adjacent to the primary project entry as part of phase one as required by the City of Mesa. Requirements for secondary access for phase one and future phases will be coordinated with the City of Mesa. Specific phasing and timing of all street improvements will require approval by the City of Mesa.

## Exhibit 4.2.2 – Private Street Segments



\*Site visibility triangles as shown are conceptual and must be submitted with plans for all approaches from all directions.

\*\* Homes beyond 150' from the edge of fire access street must be sprinklered.



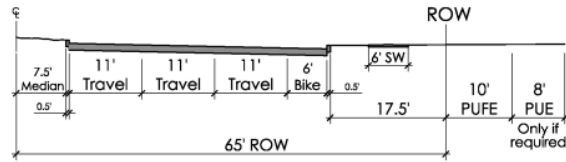
Public/Private Asphalt Streets Example

Pacific Proving Grounds North Typical Residential Dead End Street Exhibit

## Exhibit 4.2.3 – Community Street Sections

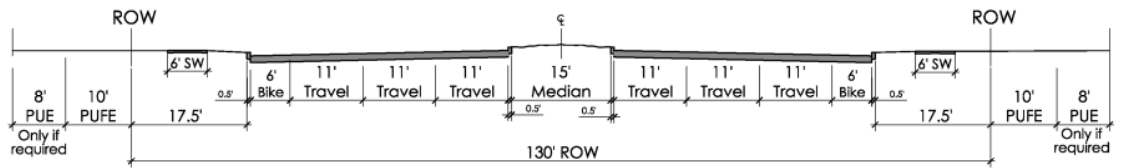
### A1

Arterial Roadway  
1/2 Street (3 Lane)  
Ellsworth Road



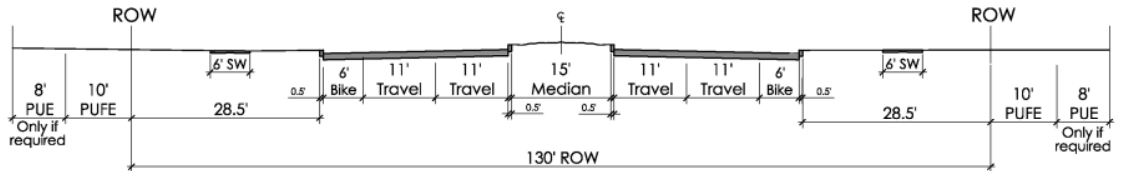
### A2

Arterial Roadway  
(6 Lane)  
Williams Field Road  
& Crismon Road



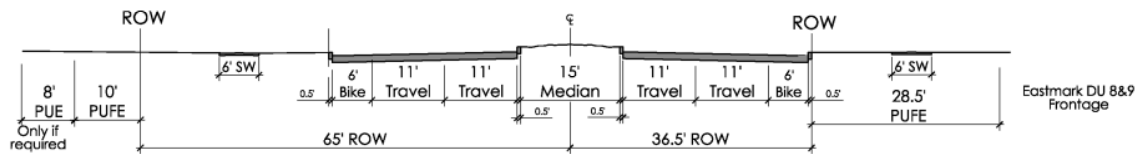
### B1

Arterial Roadway  
(4 Lane)  
Crismon Road



### B2

Arterial Roadway  
(4 Lane)  
Crismon Road



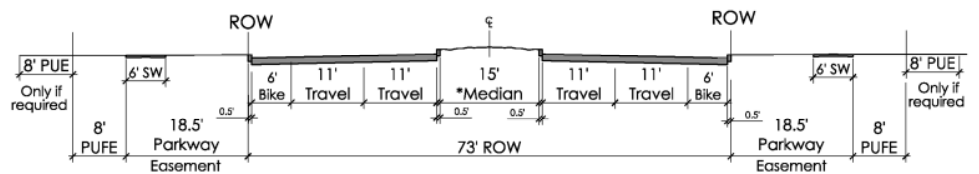
B2 will be used as necessary to transition from Crismon Road within Eastmark to the B1 cross section within PPGN.

### C

Community Collector  
(4 Lane)

\*Medians may be located within a private tract with a PUE or Parkway Easement in certain locations upon review and approval by the Engineering Department.

\*\* Parkway width may vary when sidewalk is detached.

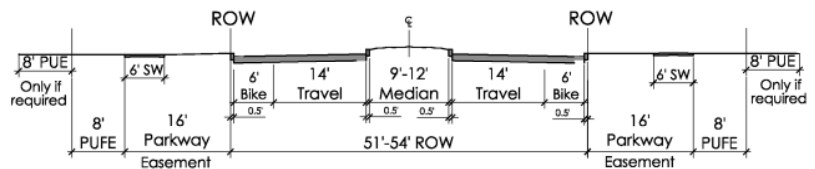


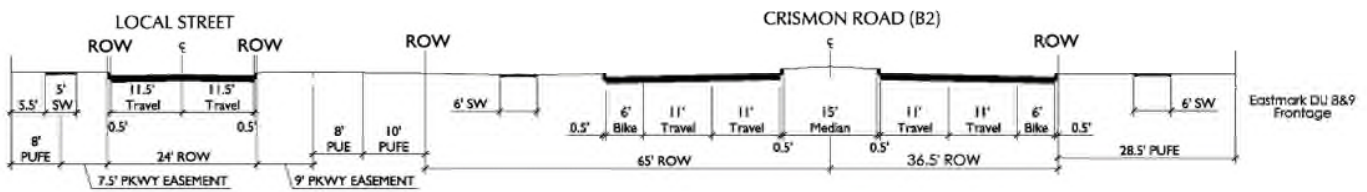
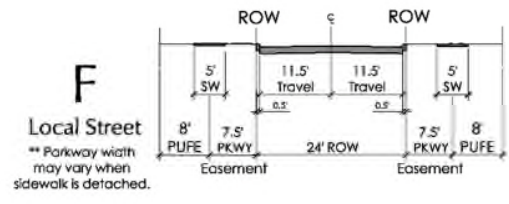
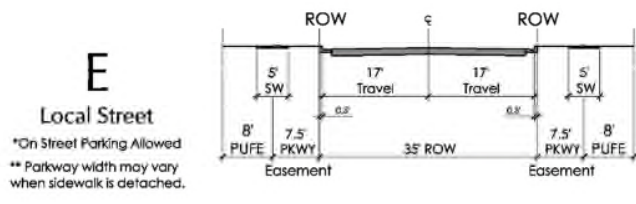
### D

Community Collector Road & Neighborhood Entry (2 Lane)

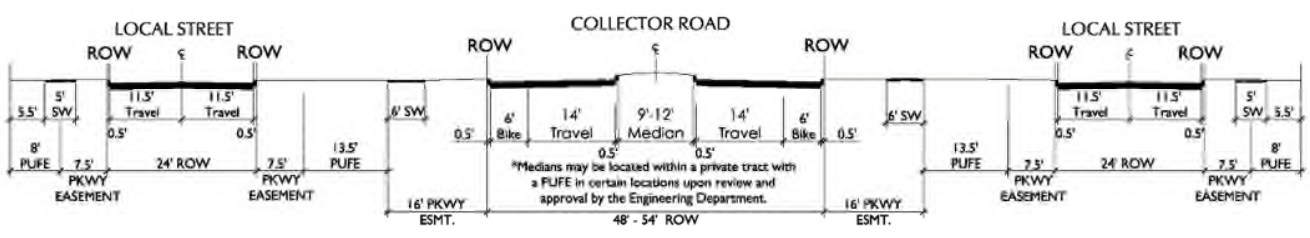
\*Medians may be located within a private tract with a PUE or Parkway Easement in certain locations upon review and approval by the Engineering Department.

\*\* Parkway width may vary when sidewalk is detached.





**G1** CRISMON ROAD PARALLEL WITH A LOCAL STREET



**H1** COMMUNITY COLLECTOR PARALLEL WITH A LOCAL STREET

# Pacific Proving Grounds North Street Sections

July 22, 2014

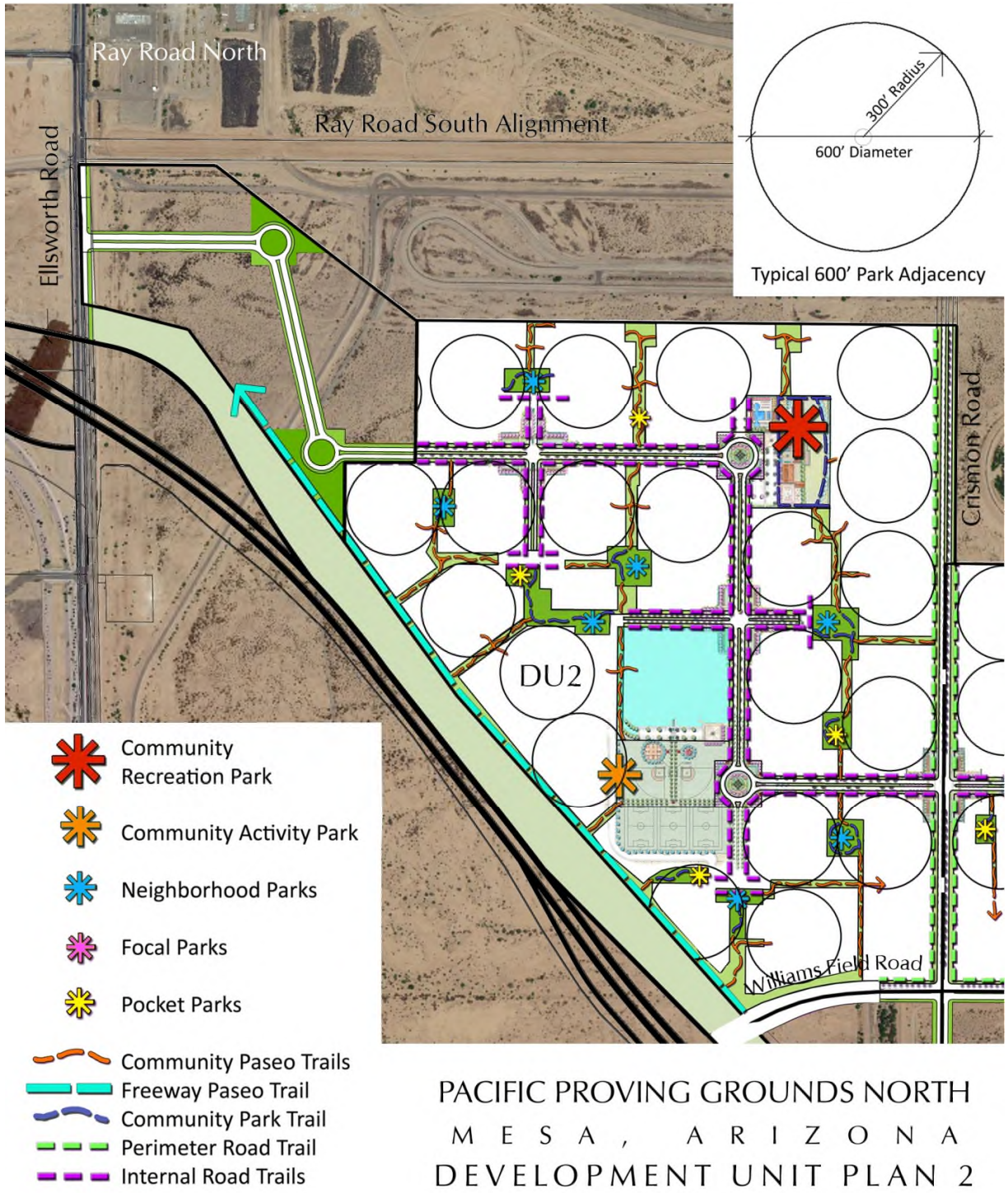
## Section 4.3 | Parks and Open Space

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The parks and open space system within PPGN is designed as the social nucleus of the community and reinforces neighborhood structure and community identity by providing important activity centers and gathering spots that are connected by a comprehensive system of pedestrian linkages. A signature feature of the parks and open space system is that every resident will have convenient, walkable access to a park, open space area or off-street trail or paseo. Every Intimate Neighborhood will be within close proximity to a park as a focal point or other resident serving amenities such as direct pedestrian linkages to the larger trail and open space system. The parks and open space network will contain both passive and active recreational facilities that contribute to a logical hierarchy of open spaces and provide a diversity of spatial experiences for the residents. Importantly, homes within Intimate Neighborhoods will be oriented towards parks and open space areas to reinforce the importance of these amenities and expand the public realm such that parks and open spaces become a natural extension of private open space areas and integral to the social structure of each neighborhood. The Development Unit 2 Parks and Open Space system has been designed to ensure that every resident will generally be within 300 feet of a park, open space or trail connection.

Development Unit 2 contains each of the following types of park and open spaces areas, which are defined in detail within Chapter 10 of the PPGN Community Plan:

1. Community Recreation Park.
2. Community Activity Park.
3. Neighborhood Parks.
4. Focal Parks.
5. Pocket Parks.
6. Community Plazas.
7. Trail and Paseo Network.



The following guidelines focus on the programming potential and desired character and treatment of these parks and open spaces.

### **Community Recreation Park**

The Community Recreation Park is planned as a destination amenity that will fulfill a role as the social heart of the community. Strategically located as a focal element along the community collector road, the Community Recreation Park will act as a visual anchor and strong community identifier. The park is highly accessible, visible and connected to the greater PPGN community through several pedestrian linkages, residential streets, and linear park and paseo trails.

Planned for development on 7 to 10 acres within Development Unit 2, the Community Recreation Park may be constructed in two or three phases, with the first phase coinciding with initial residential development. The Community Recreation Park facilities are specifically intended for the use of PPGN residents and will be maintained long term by the master homeowner's association.

#### ***Community Recreation Park Facilities***

The signature feature of the Community Recreation Park is the community recreation and event center building (see exhibits on page 4.3.6). This facility is planned as a multi-purpose community gathering spot and may include a community lounge and meeting room, homeowner's association office, fitness facility, gymnasium and multi-purpose events room. In the spirit of the New Traditional Community concept, the Community Recreation Park site design includes flexibility to accommodate neighborhood serving retail uses, either temporary or permanent, as the market may demand. These uses could be accommodated within the community recreation and event center, in a stand-alone flexible tenant space, or in temporary facilities such as pop-up retail or a farmer's market venue. Homes surrounding the Community Recreation Park will be designed to front on the park facilities.

#### ***Potential Recreational and Other Uses***

The Community Recreation Park will accommodate a variety of active, programmed and passive uses. A swimming pool complex will complement the community recreation and event center building and be surrounded by shade structures and formal landscaping. The Community Recreation Park will also include areas for programmed recreational activities such as basketball and volleyball courts along with large open turf areas that can be used for community and sporting events. Children's play areas and play equipment will provide play opportunities for smaller children. Event and open lawn areas provide flexible space for community celebrations, special events, weddings, parties, art fairs, farmer's markets and outdoor theater performances. Group and party ramadas will be provided adjacent to the event and open lawn areas.

#### ***Sidewalk and Trail Connections***

The Community Recreation Park will be connected to the greater PPGN community through several connections to the community trail system that facilitate uninterrupted pedestrian and bicycle access to the facilities. Connections to the larger community will be made through on-street sidewalk and off-street trail connections to the arterial roadway network.

***Parking***

Parking for the Community Recreation Park will include onsite parking areas adjacent to the buildings and parallel parking on the perimeter of the park. Parking areas will be distributed to avoid large expanses of asphalt and to promote a sense of convenience.





Artists Conceptual Rendering



## **Community Activity Park and Elementary School**

The Community Activity Park and Elementary School are located on approximately 15 acres in the southern portion of Development Unit 2 and are planned as a second prominent community gathering spot. The 5 to 6 acre Community Activity Park is co-located adjacent to the proposed elementary school and will be will joint use facility that may be used by the community, school and public. The elementary school will occupy approximately 8 to 10 acres adjacent to the park.

### ***Community Activity Park and Elementary School Facilities***

The Community Activity Park and Elementary School are prominently located on the view terminus of the main community collector from Crismon Road and will be accessible through pedestrian linkages, residential streets, and linear park and paseo trails. The Community Activity Park facilities will include mainly outdoor recreation areas, shade structures, ramadas and restroom facilities. The elementary school building will be designed as a community landmark with building entries and publicly oriented activities located towards the street to present a welcoming front to the neighborhood. The Community Activity Park is planned as a joint use facility for use by the school and community at large. Homes surrounding the Community Activity Park and Elementary School will be designed to front onto the park and school.

### ***Potential Recreational Uses***

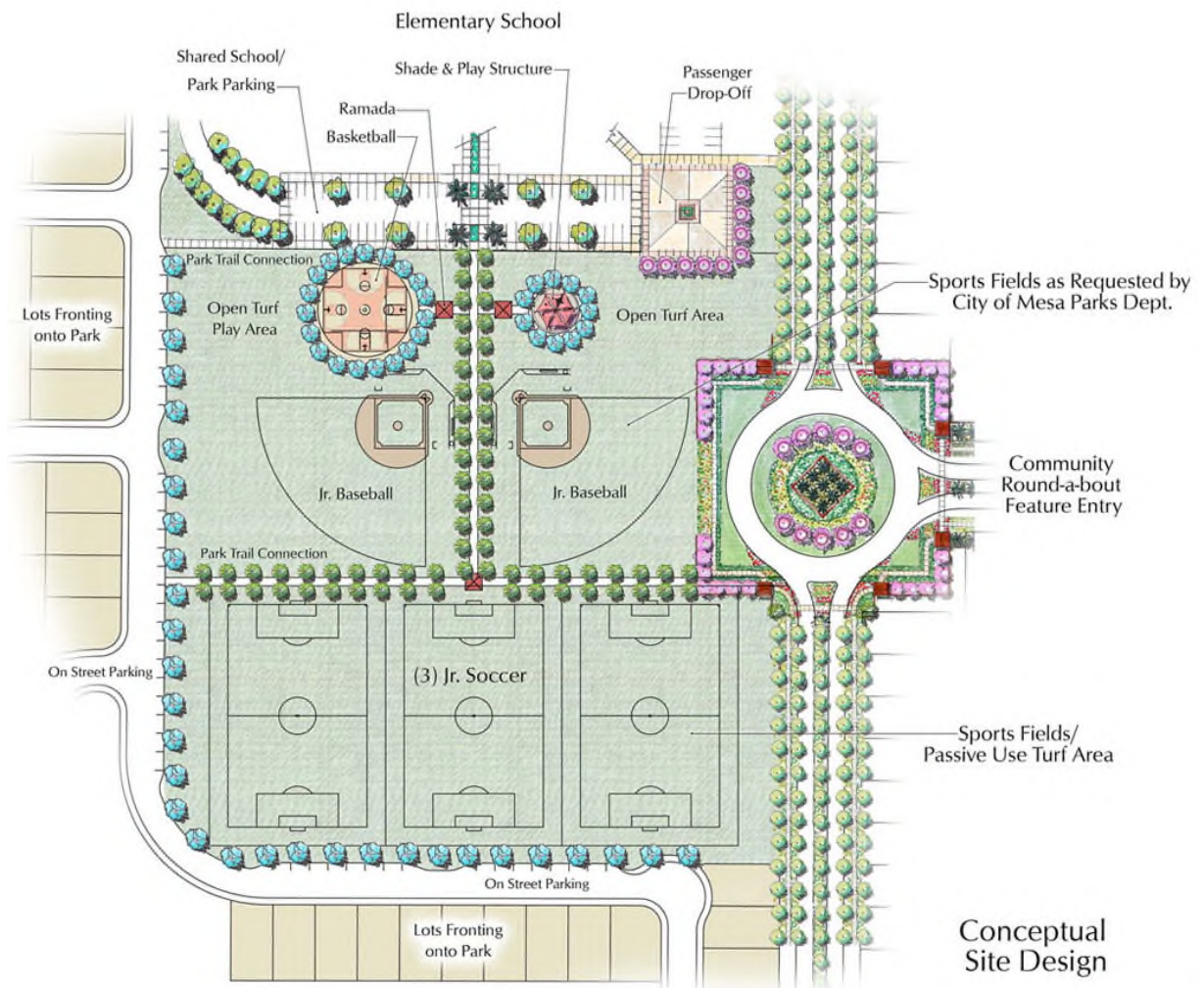
The Community Activity Park will include multi-purpose sports fields and sport courts as the main recreational elements that will be designed to accommodate a variety of recreational endeavors such as baseball, soccer, football and basketball. The sports fields will be sufficiently sized to accommodate a variety of programmed sports activities. Additional park amenities will include play structures and ramadas or shade structures as a compliment to sports fields and sport courts.

### ***Sidewalk and Trail Connections***

The Community Activity Park and Elementary School will be connected to the greater PPGN community through convenient connections to the community trail system, which will facilitate pedestrian and bicycle access to the facilities. Connections to the larger community will be made through on-street sidewalk and off-street trail connections to the arterial roadway network.

### ***Parking***

The Community Activity Park will include onsite parking adjacent to the elementary school and parallel parking on the perimeter of the park. The elementary school will also have separate parking facilities and drop-off areas, which will be designed to provide a safe and secure environment around the school and to avoid conflicts with park traffic. Parking areas should be designed to avoid large expanses of asphalt and to promote a sense of convenience.



## **Neighborhood Parks and Pocket Parks**

Neighborhood Parks ranging in size from one to four acres are planned throughout the Development Unit 2 and will act as neighborhood gathering spots and social centers. The Neighborhood Parks will be strategically located at neighborhood entries or at central locations within neighborhoods and will act as a strong identification element for each neighborhood. Importantly, residential homes will be designed and sited to front onto the Neighborhood Parks so that the parks become a natural extension of private open space areas and integral to the social structure of each neighborhood.

Several small Pocket Parks will be located throughout Development Unit 2 and will function as intimate open space areas designed to serve individual neighborhoods. Pocket Parks will generally be  $\frac{1}{4}$  to  $\frac{1}{2}$  acre in size and will be located near secondary neighborhood entries or adjacent to linear parks and paseos. All pocket parks will have passive open spaces, and may include open turf areas and desert planting.

### ***Potential Recreational Uses***

Neighborhood Parks will be individually designed for each neighborhood and will include some combination of passive open spaces, ramadas, shade structures, playground areas, open turf play areas and sport courts. Other unique amenities may include outdoor dining areas, formal and informal seating areas and community gardens. Pocket Parks will be more passive in nature, but could include small play structures, formal and informal seating areas, open turf areas and community gardens.

### ***Sidewalk and Trail Connections***

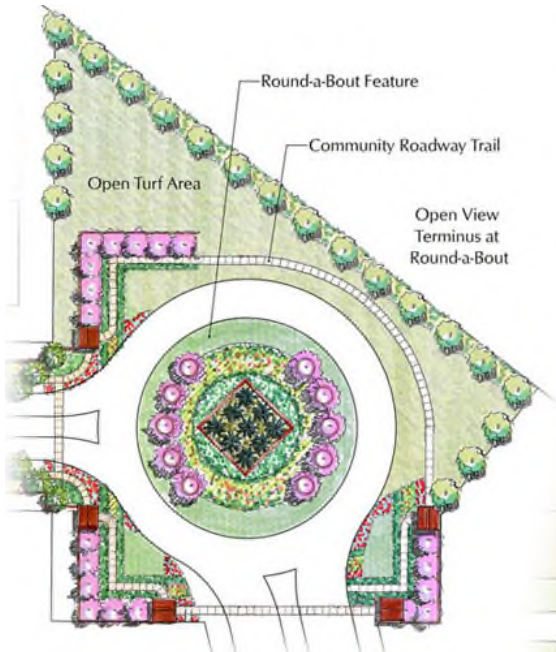
Neighborhood Parks and Pocket Parks will be connected to the larger open space and trail system and accessible through pedestrian linkages, residential streets, and linear park and paseo trails. Connections to the larger community will be made through on-street sidewalk and off-street trail connections to the arterial roadway network.

### ***Parking***

Larger Neighborhood Parks will include parallel parking on the street at the perimeter of the park. Smaller Neighborhood Parks and Pocket Parks that are located in close proximity to adjacent residential will not include dedicated parking areas.

## **Focal Parks**

Two Focal Parks are located within the PPGN community on the view terminus of the community collector. One of these Focal Parks is located at the western edge of Development Unit 2. The Focal Parks are passive open space areas that will serve an important role as signature community identification elements in concert with the iconic roundabouts. The Focal Parks will be accessible through pedestrian linkages, community streets, and linear park and paseo trails. Focal Parks will have passive landscaped open spaces, and may include a street side trail and informal seating areas.



Conceptual Focal/  
Passive Park Site Design



Conceptual Neighborhood Park Site Design



## Community Plazas

Non-residential areas within Development Unit 2 will be designed to include appropriately scaled plazas and open space areas that will serve as both formal and informal community gathering spots. Community Plazas will be both active and passive and may include elements such as seating areas and shade, outdoor dining amenities, water elements and gardens, or simple hardscape. Community Plazas will be designed to contribute to an active streetscape and a sense of place.



## Pedestrian Sidewalk, Trail and Paseo System

A continuous system of landscaped on-street sidewalks, and off-street trails and paseos will provide interconnectivity throughout the community and will extend and enrich the community-wide parks and open space system. A comprehensive on-street sidewalk system is planned along all community streets. An extensive system of off-street pedestrian and bicycle trails and paseos will be directly connected to the on-street sidewalk system to ensure comprehensive and uninterrupted connectivity throughout the community and to destinations outside of PPGN. This pedestrian sidewalk, trail and paseo system is designed to promote walkability and provide an amenity for each neighborhood while forging strong links with surrounding neighborhoods. The PPGN community will contain five different types of sidewalks and trails as shown on the exhibit on the following page. They include: Paseo Trails, the Freeway Paseo Trail, Park Trails, Internal Street Sidewalks, and Perimeter Road Sidewalks.

### *Freeway Paseo Trail*

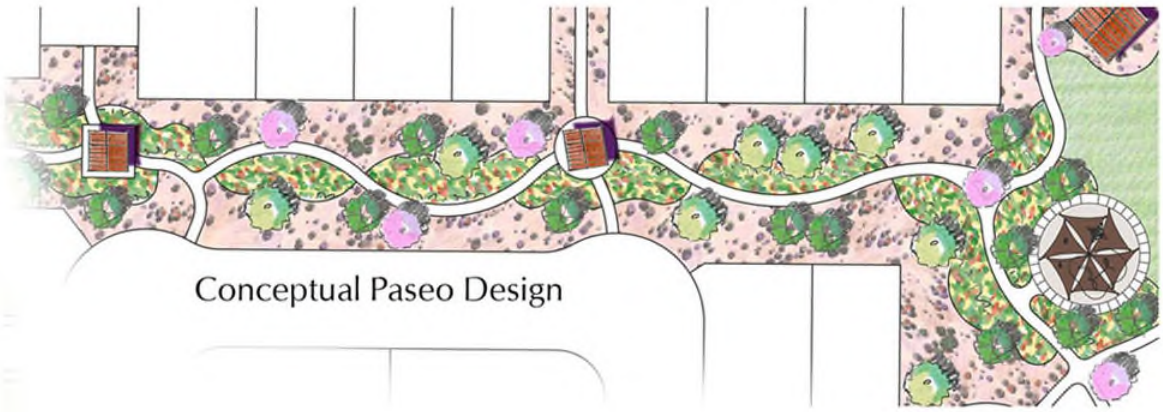
A paseo trail and freeway buffer will be developed along the southern boundary of Development Unit 2, adjacent to the future SR24 Freeway corridor, as an asset for the residents of the community and a visual amenity for travelling public. The paseo trail serves as a noise and visual buffer and is also an integral component of the overall community connectivity system. The paseo trail, averaging approximately 50 feet in width with a minimum width of 25 feet, is enhanced as a community noise buffer by the planned

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## Pacific Proving Grounds North

regional drainage corridor along the north side of the future SR24 Freeway. This buffer provides a substantial opportunity for physical separation and noise mitigation and allows for a compatible coexistence between the future SR24 Freeway and the PPGN community.

The paseo trail is envisioned as a passive, natural area featuring landscaping and trees that are complimentary to the overall community landscape design, walkways and paths to accommodate pedestrians and bicyclists, benches and shade, and opportunities for mini-parks and public art features. Access to the paseo trail will be integrated into individual neighborhoods, commercial centers and community parks. The trail will provide uninterrupted off-street access between the residential neighborhoods and mixed-use community destinations located near regional transportation corridors. The formal paseo trail will transition into Development Unit 1 at its eastern edge and will then become a part of the walkable, pedestrian oriented Development Unit 1 mixed-use environment, which is a destination of the paseo trail. The paseo trail will also provide connectivity to the larger community on-street sidewalk system to provide access to the larger regional roadway network.



Conceptual Paseo Design



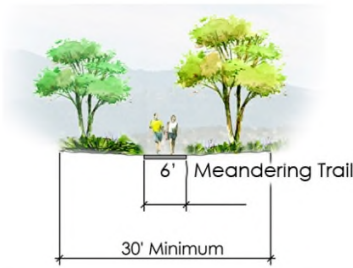
Artists Conceptual Rendering





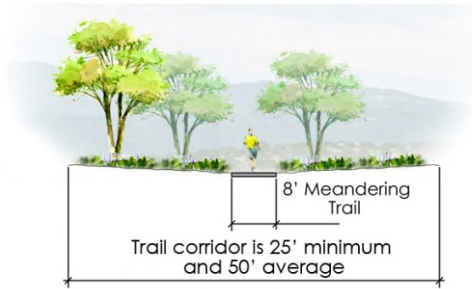


### Community Paseo Trail



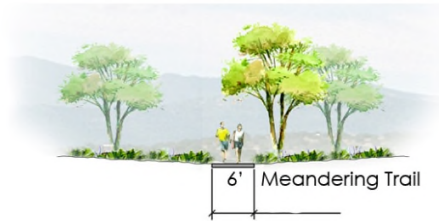
The Community Paseo Trail will serve as off street, non-vehicular connections through the community. This trail system serves to physically and visually tie the various neighborhoods and Development Units together while also providing regional open space connectivity. The internal paseo trail network will be designed to provide safe and convenient connections between open spaces and land uses.

### Freeway Paseo



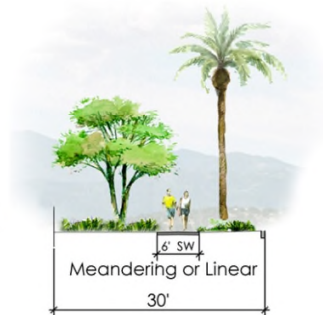
Freeway Paseo Trails will predominately serve as a passive open space buffer trail. This trail system serves to physically tie the freeway adjacent neighborhoods together while also providing regional open space connectivity. The Freeway Paseo trail network will be designed to provide safe and convenient connections between open spaces and land uses.

### Community Park Trails



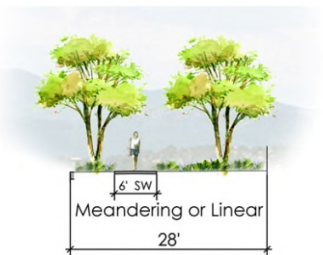
Meandering Community Park Trails work directly with all of the Community Park designs. This trail system serves to physically tie the park system to the adjacent neighborhoods and paseo trail connectivity. Park trails will be designed to provide safe and convenient connections between open spaces and land uses.

### Internal Road Trail



The Internal Roadway Trails connect all community neighborhoods and land uses along the Community Collector Roads. All Parks, paseos, and neighborhoods can be accessed by the linear pathways. The trails will be placed between formal landscape areas to provide shade in a safe pedestrian environment.

### Perimeter Road Trail



Perimeter Road Trails connect to nearby communities and meander along major arterial or collector roadways. This trail system may connect to neighborhoods and paseo trails adjacent to the major roadways.

## Section 4.4 | Architectural Design and Character

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Building architecture plays an important role in creating the backdrop for the public places and the streetscape within the PPGN community, but is equally important in establishing the overall community identity. Architecture within PPGN will promote core architectural values that place strong emphasis on function, timelessness and visual appeal.

***Function:*** Building designs will be based on simple building blocks and roof forms that have a direct relationship to internal functionality. Buildings and residences will be designed to activate the street frontage with a strong street orientation including porches and front entries designed to foster neighborliness and social interaction among community residents. Shade elements will be thoughtfully integrated to provide protection from the desert sun.

***Timelessness:*** Building articulation, materials, landscaping and color schemes will have a relationship to the desert southwest and be selected to create a sense of timelessness and enduring quality within the community.

***Visual Appeal:*** Traditional design elements and timeless architecture will be complemented by well-articulated public spaces including porches and patios, outdoor dining spaces, meaningful front door and building entry design, and thoughtful design and material selection for all building elements. Buildings will be designed to engage the street and promote a compact, walkable neighborhoods. Landscaping will play an important role in creating the overall visual landscape for the entire community. Residential neighborhoods and commercial/mixed-use areas will include a mix of single story and multi-story buildings to provide diversity in the street façade.

These core architectural values will be employed in the design of all structures within PPGN as implemented through the following architectural design concepts. Architectural diversity is strongly encouraged throughout the community. There is no singular architectural style that is representative of PPGN's architectural vision. The following design guidelines more fully articulate the core architectural values and must be applied to the design of all buildings within Development Unit 2. Specific development standards for each land use and building type are located within the PPGN Community Plan. Compliance with these guidelines and the additional requirements of the PPGN Community Plan related to architectural design will be evaluated during Home Product Review for single residence homes and during Site Plan Review for all other buildings.

## 4.4a Single Residence Architectural Design Concepts

**Street Presence.** Homes will be designed as distinctive buildings that compose, as a group within an individual block, a cohesive street presence. Homes must be well detailed and articulated, and will incorporate the following design concepts:

**Front Elevations.** Front elevations must incorporate a combination of the following design elements sufficient to achieve the overall architectural design goals of Function, Timelessness and Visual Appeal:

- Front elevation outdoor living spaces, such as a front porch, patio or entry courtyard.
- Garage located within the rear half of the lot.
- Traditional roof forms such as sloping roofs with gables, hips and dormers or flat roofs forms that respect regional architectural heritage.
- A principal or feature window that is recessed a minimum of 12" behind the plane of the wall in which the window is located.
- A signature architectural or design element that provides unique identity to the home, such as a focal front entry, highly detailed window treatment and articulation, or unique garage door design or treatment.

**Side Elevations.**

- Side elevations of homes adjacent to streets or community open space areas, such as neighborhood parks, shall be one story in height. Alternatively, for two-story homes, such side elevations may have a one story element along the exposed lot line and the length of the one story element should be at least 25% of the total side elevation length.
- If more than 25% of a side elevation is exposed and not screened by a solid wall, then the side elevation shall include upgraded architectural details consistent with those required for the front elevation.
- Door and/or window openings are required on side elevations and shall be articulated.

**Rear Elevations.**

- Rear elevations adjacent to streets or community open space areas shall include articulation to the building mass that consists of a minimum of one of the following:
  - Variation in roof planes.

- Second story balcony or roof deck with or without a roof element. Roof elements must be consistent in design with the main portion of the building.
  - Covered patio with a roof treatment consistent in design with the main portion of the building.
  - Principal or feature window.
- Two-story rear elevations next to streets or community open space shall have architectural treatments consistent with the front elevation.
  - Door and window openings are required on rear elevations and shall be articulated.

**Corner Lots.**

- Homes on corner lots must be sited and designed to present an attractive elevation to both street frontages employing design strategies that include landscaping elements, house massing, architectural detailing, and wrap-around porches.
- Perimeter wall fences on corner lots that encompass part of the side yard shall not be closer than 20 feet to the front elevation.
- A landscape area is required between a perimeter wall fence on a corner lot and the adjacent public sidewalk and street.

**Terminus Lots.** Homes on lots that terminate streets or view corridors should be designed to take advantage of site specific conditions and should be particularly well composed and articulated.

**Garage Treatment.** Garage doors are an architecturally important element of the home. Design treatments such as stepping back garage doors from the main front elevation, splitting up garages, articulating garage doors, and creatively addressing where cars are parked can help minimize the dominance of the garage, but also incorporate the garage as a meaningful component of both the building and the streetscape. Specific standards regarding garage door setbacks are included in Section 7.7(a)(i).

- The architectural design of garage doors must contribute to a visually interesting street frontage.

- Garage door treatments must reflect the architectural style of the home.
- A variety of compatible garage door designs must be utilized throughout an individual neighborhood block to contribute towards streetscape diversity.
- All garage doors must be recessed a minimum of 12" from the face of the exterior of the garage wall. Pop outs may not be used to achieve the 12" recess.
- No more than two garage doors may face the street, although one may be a two-car garage door. Additional garages must be side loaded or set behind the front façade of the home.
- Garage doors should not be a dominant design features and shall generally comprise less than 50% of the front façade of a house.

#### **Front Porches, Courtyards and Public Spaces.**

- Utilize shaded, usable front porches, patios or entry courtyards to encourage activity within the public realm of the front yard and that contribute meaningfully towards creating a socially interactive street. Specific requirements for useable outdoor open space are in Section 7.4(b) of the PPGN Community Plan.
- Encourage house designs that have active use areas at the front of the house to increase use of the front porch, patio, or courtyard.

#### **Variation and Diversity.**

- Each block shall contain a variety of floor plans and building elevations to create a diverse streetscape. A minimum separation of at least three lots should be maintained for any model with similar elevation, colors or materials. A minimum of three different floor plans and three different architectural styles must be offered for each product line.
- A mix of single, one and one-half, and two-story buildings should be integrated within each block.
- A mix of materials, colors and façade treatments shall be employed within each residential neighborhood block. A minimum of three distinct color schemes must be offered for each architectural style.

**Roof Forms.** A variety of roof forms and roof materials will be used within each block length to promote diversity within the streetscape. Roof forms should be functional and purposeful in design.

- A wide variety of roof materials is encouraged. Roof materials such as mission, barrel or s-tiles and standing seam metal roofs are encouraged. Flat roofs are allowed if respectfully designed in response to regional architectural character. A minimum of two different roof tile options in at least two different color schemes must be offered for homes with tile roofs.
- Pitched roofs pitches should range from 3:12 to 8:12, but any other desired pitch is allowed. Flat roofs must have a minimum 24" parapet wall. Rake and eave overhangs must be a minimum of 24".
- Flat roofed areas, which may include roof parapet patios, must be internally drained, or surfaced drained behind a parapet wall to an area not visible from the street. Scuppers or continuous openings for sheet flow are not allowed if visible from the street.
- Rooftop equipment is not allowed in single-residence structures (except for photovoltaic and solar water heating systems) and must be architecturally integrated within the volume of the building and not visible from public streets.
- Photovoltaic and solar water heating systems are encouraged and should be integrated into the roof or building form through color, pitch or distance above the roof surface.

**Building Height and Massing.** Building height and massing must be designed to reinforce a cohesive and visually interesting streetscape by incorporating the following design techniques.

- Changes in volume, building plane, sloping roofs or porches should be used to reduce the perceived scale of the structure.
- Basic architectural shapes and volumes, and uncluttered architectural details are encouraged.

**Building Materials and Color.**

- Building materials and colors should reflect the architectural character or historical reference of the home.

- Variety in buildings materials and colors is encouraged within a neighborhood, but should also compliment the natural desert environment. A minimum of three distinct color schemes must be offered for each architectural style.
- A simple and harmonious application of materials is encouraged. Materials changes should occur when there is a change in volume or plane, or other logical change.

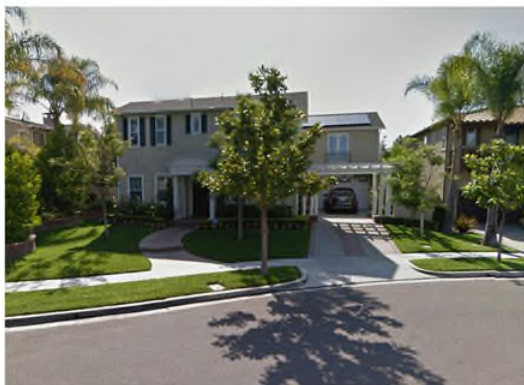
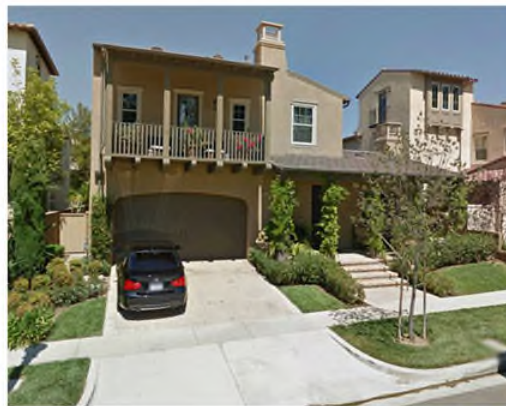
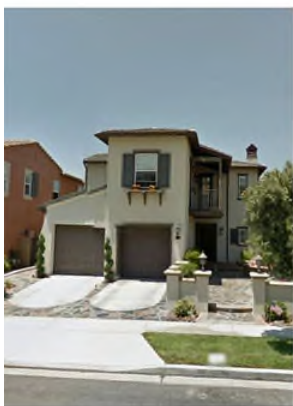




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**Pacific Proving Grounds North**

Development Unit 2 – Section 4.4 Architectural Design & Character  
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#### 4.4b Multiple Residence Architectural Design Concepts

Multiple residence and residential mixed-use buildings are encouraged in transitional locations throughout PPGN, adjacent to transit thoroughfares, and within mixed-use areas. Multiple residence structures are envisioned as an integral part of the overall community fabric and will continue the fabric of pedestrian friendly streets and provide an appropriate scale transition to single-residence neighborhoods. Clustering of multiple residence structures will help create activity centers and density of residents necessary to support commercial, restaurants and other amenities in designated mixed-use centers. The specific design guidelines and development standards governing multiple residence structures are included within Section 7.8 the PPGN Community Plan.



#### 4.4c Non-Residential Architectural Design Concepts

Non-residential buildings within Development Unit 2 will generally be comprised of neighborhood serving commercial uses and community amenities such as the community center. Non-residential uses are expected to extend the pattern of meaningful open space and pedestrian areas that are a hallmark of community design within PPGN. Non-residential site planning and building design should contribute meaningfully to the creation of distinctive sense of place. Specific development standards for non-residential land uses are included within Section 8 of the PPGN Community Plan. The following architectural design concepts must be addressed for all non-residential development within Development Unit 2.

##### **Cohesive Site Design**

- Buildings will be designed to contribute to the larger spatial composition and identity of the overall development.
- A clear pattern of streets and pedestrian corridors should be used to break down the scale of the project and to provide pedestrian, bicycle and vehicular linkages to adjacent activity areas.
- Surface parking lots should be designed as outdoor “rooms” that are spatially defined by buildings, open space areas and other site features and should generally be located to the sides and rear of buildings.
- The pattern of streets and surface parking should allow for intensification of the site over time.
- Continuous pedestrian pathways will be provided to connect all development components and with the sidewalks along the public streets. Active ground level uses will be oriented towards the pedestrian ways and sidewalks.
- Plazas, courtyards, pocket parks, and other open space areas will be designed as an integral part of the development to promote a pedestrian friendly community and create active gathering places.
- Service and loading areas must be oriented away from public and pedestrian intensive areas, and screened from public view.

##### **Building Facades and Elevations**

- Brand buildings or formulaic “stand-alone” solutions are strongly encouraged to incorporate design themes consistent with the overall project design theme and should also include strong landscape and other streetscape or design elements that help integrate the building into the surrounding development pattern.
- Buildings should have a clear architectural relationship with one another, employing common high-quality building materials or architectural elements, while creating diversity and interest.

- Buildings must include four-sided architecture. Window trim, window recesses, cornices, belt courses, changes in material, or other design elements, should be incorporated into the façade to create an integrated composition. Architectural features of the front façade shall be incorporated into the rear and side elevations.
- Building entries should be easily identifiable and carefully placed in conjunction with the overall pedestrian pathway system.
- Building elevations should employ awnings, canopies, recesses or arcades to provide shade and shelter, and create architectural interest across the length of the building.
- Retail buildings should include transparent storefronts and display windows to create visual interest.
- Small-scaled retail or other ‘storefront’ design features are encouraged along the face or side of larger retail structures, such as big box users, to promote diversity and promote a pedestrian scale.
- Vary exterior building walls in depth and/or direction. Building walls shall exhibit offsets, recesses, or projections with enough depth to create shadow lines and interest, a repeated pattern of offsets, recesses, or projections of smaller depth in a well-integrated composition.

#### **Roof Form**

- Provide architectural interest at the skyline and accentuate appropriate building elements. Vary building height so that a significant portion of the building has a noticeable change in height; or roof forms are varied over different portions of the building through changes in pitch, plane, and orientation.

#### **Building Form and Massing**

- Buildings should be appropriately scaled to create pedestrian friendly and inviting public spaces.
- Building mass should be broken up to reduce the visual impact of larger buildings. Variations in building mass should be used to create an attractive, pedestrian friendly building elevation at the street level.

#### **Adaptable Design**

- Building design should be flexible to accommodate resource efficient change over time and permit reuse by other tenants. Highly specialized buildings suitable for only one tenant are discouraged.



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**Pacific Proving Grounds North**

Development Unit 2 – Section 4.4 Architectural Design & Character  
November 10, 2014

## Section 4.5 | Development Unit 2 Landscape Character

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### Landscape Character

The landscape character envisioned for the PPGN Community supports the New Traditional Community theme and vision. Landscape for the community consists of a balanced blend of lush, and desert appropriate plant materials arranged in formal and informal patterns along straight and meandering sidewalks, with emphasis on shade and color along the street. Neighborhood entries will be highlighted by unique portal elements framed by large shade trees. Community walls will be designed to complement both a traditional and modern aesthetic and will incorporate elements reminiscent of classic neighborhoods. Individual homebuilders will incorporate this character into individual neighborhood landscape themes.

#### **Private Residential Landscaping**

A diversity of plant materials is encouraged on private residential lots. Landscapes will include a variety of desert appropriate plants to provide seasonal color, texture, foliage interest and screening capabilities. Trees within front yards should be located to maximize canopy coverage and shade potential.

#### **Shading of Southern and Western Walls**

Trees should be used on southern and western wall exposures to maximize shading of buildings. Trees selected for such use in these areas will be ones whose typical mature height will be sufficient to provide shading.

#### **Park Landscaping**

Landscaping in parks, open spaces and pedestrian trail areas shall include a diversity of desert appropriate plants materials and strategic use of trees to create nodes of shade. Turf should be used only where functionally appropriate for recreational fields, useable open spaces and as a complement to shaded nodes.

#### **Groundcover**

All exposed and unpaved natural soil within developed areas will be planted with turf, groundcover or covered with decomposed granite. Turf will be sensitively used in deference to the desert environment, but may be strategically used as part of the community streetscape and at community entries as well as within both passive and active open space and recreation areas.

### Streetscape Furniture

Benches, trash receptacles, shade structures, landscape lighting and paving materials contribute significantly to the character and amenity of the public environment. These elements will be incorporated where appropriate along community streets and in public areas. A consistent style of public streetscape elements will be used throughout PPGN to reinforce the overall community theme.





# Landscape Standards

The specific landscape standards for use throughout PPGN are included in Chapter 14 of the PPGN Community Plan. These standards include minimum plant sizes and quantity, standards for parking area landscaping, foundation base landscaping and streetscape landscaping.

## Landscape Plant Palette

The following plants are approved for use in all areas throughout PPGN.

### TREES

#### BOTANICAL NAME

#### COMMON NAME

Acacia aneura 'Mulga'	Acacia Aneura
Acacia greggii	Catclaw
Acacia rigidula	Blackbrush Acacia
Bachharis salicifolia	Seep Willow
Callistemon viminalis	Bottle Brush Tree
Carya sp.	Pecan
Celtis reticulata	Canyon Hackberry
Cercidium (see Parkinsonia)	Palo Verde
Chilopsis linearis	Desert Willow
Chilopsis linearis 'Bubba'	Desert Willow
Chilopsis linearis 'Lucretia Hamilton'	Desert Willow
Chilotalpa tashkentensis	Chilotalpa
Cupressus arizonica	Arizona Cypress
Dalbergia sissoo	Indian Rosewood
Franxinus uhdei (Wenzig) Lingelsh	Shamel Ash, Tropical Ash
Franxinus velutina	Arizona Ash
Fraxinus velutina 'Bonita'	Bonita Ash
Fraxinus velutina 'Fan-tex'	Fan-tex Ash
Gleditsia tricanthos inermis	Honeylocust
Jacaranda acutifolia / Jacaranda mimosifolia	Jacaranda
Juglans major	Arizona Walnut
Juniperus monospermus	One Seed Juniper
Olea europea 'Wilsonii'	Wilsonii Fruitless Olive
Olneya tesota	Ironwood
Parkinsonia floridum	Blue Palo Verde
Parkinsonia hybrid 'Desert Museum'	Desert Museum Palo Verde
Parkinsonia microphyllum	Foothills Palo Verde

<i>Pinus eldarica</i>	Afgan Pine, Eldarica Pine
<i>Pinus halepensis</i>	Aleppo Pine
<i>Pistacia atlantica</i> x <i>Intergerrima</i>	Red Push Pistache
<i>Pistacia vera</i> L.	Pistachio
<i>Populus fremontii</i>	Cottonwood
<i>Prosopis glandulosa</i>	Honey Mesquite
<i>Prosopis</i> hybrid 'Phoenix'	Phoenix Mesquite, Argentine Mesquite, Thornless South American Mesquite, Chilean Mesquite
<i>Prosopis pubescens</i>	Screwbean Mesquite
<i>Prosopis velutina</i>	Velvet Mesquite
<i>Quercus emoryi</i>	Emory Oak
<i>Quercus virginiana</i>	Live Oak
<i>Rhus lancea</i>	African Sumac
<i>Salix exigua</i>	Coyote Willow
<i>Salix gooddingii</i>	Goodding's Willow
<i>Tipuana Tipu</i>	Tipu
<i>Ulmus parvifolia</i>	Chinese Elm
<i>Ulmus parvifolia</i> Allee	Chinese Elm Allee, Chinese Elm Bosque
<i>Vitex agnus-castus</i>	Chaste Tree
<i>Brahea armata</i>	Mexican Blue Palm
<i>Chamaerops humilis</i>	Mediterranean Fan Palm
<i>Phoenix canariensis</i>	Canary Island Date Palm
<i>Phoenix dactylifera</i>	Date Palm
<i>Washingtonia filifera</i>	California Fan Palm, Hybrid Fan Palm (wide trunk)
<i>Acacia willardiana</i>	Palo Blanco
<i>Bauhinia blankeana</i>	Hong Kong Orchid Tree
<i>Bauhinia lunaroides</i>	Anacacho Orchid
<i>Caesalpinia cacalaco</i>	Cascalote
<i>Cercis canadensis</i> v. 'Mexicana'	Mexican Redbud
<i>Chorisia speciosa</i>	Silk Floss Tree
<i>Citrus</i> sp.	Citrus Tree
<i>Cordia boissierii</i>	Texas Olive
<i>Cupressus sempervirens</i>	Italian Cypress
<i>Diospyros texana</i>	Texas persimmon
<i>Fraxinus greggii</i>	Littleleaf Ash
<i>Nerium oleander</i> 'Sister Agnes'	Giant White Oleander
<i>Lagerstroemia indica</i>	Crape Myrtle
<i>Laurua nobilis</i>	Bay Laurel
<i>Pistacia lentiscu</i>	Mastic Tree
<i>Pithecellobium flexicaule</i>	Texas Ebony
<i>Pithecellobium mexicanum</i>	Mexican Ebony
<i>Pithecellobium pallens</i>	Tenaza

Plantanus wrightii  
Prunus armeniaca  
Prunus cerasifea  
Prunus persica  
Pyrus calleryana 'Bradford'  
Pyrus kawakamii  
Quercus suber  
Sophora japonica  
Sophora secundiflora  
Thevetia peruviana

Arizona Sycamore  
Apricot  
Purple Leaf Plum  
Peach  
Bradford Pear  
Evergreen Pear  
Cork Oak  
Japanese Pagoda Tree  
Texas Mountain Laurel  
Mexican Oleander

## SHRUBS

### BOTANICAL NAME

### COMMON NAME

Abutilon palmeri  
Acacia craspedocarpa  
Alyogyne huegelii  
Ambrosia abrosoides  
Ambrosia deltoidea  
Anisicathus quadrifidus  
Atriplex canescens  
Atriplex lentiformis  
Buddleia marrubifolia  
Buxus m. japonica  
Caesalpinia gilliesii  
Caesalpinia mexicana  
Caesalpinia pulcherrima  
Calliandra californica  
Calliandra eriophylla  
Callistemon citrinus 'Little John'  
Carissa grandifolora 'Compacta'  
Cassia artemisoides  
Celtis pallida  
Cordia parvifolia  
Dalea frutescens  
Dalea pulchra  
Dodonaea viscosa  
Dodonaea viscosa 'Purpurea'  
Encelia farinosa  
Ephedra viridis  
Ericameria laricifolia  
Euphorbia biglandulosa

Indian Mallow  
Leather Leaf Acacia  
Blue Hibiscus  
Giant Bursage  
Bursage  
Mountain Flame  
Fourwing Saltbrush  
Quail Bush  
Woolly Butterfly Bush  
Japanese Boxwood  
Mexican Bird of Paradise  
Yellow Bird of Paradise  
Desert Bird of Paradise  
Red Fairy Duster  
Native Fairy Duster  
Little John  
Natal Plum  
Silver Cassia  
Desert Hackberry  
Littleleaf Olive  
Black Dalea  
Indigo Bush  
Hopbush  
Purple-leafed Hopbush  
Brittlebush  
Mormon Tea  
Turpentine Bush  
Gopher Plant

Gaura lindheimerii	Whirling Butterflies 'white'
Hibiscus rosa-sinensis	Hibiscus
Hyptis emoryi	Desert Lavender
Jasminum sambac	Jasmine
Justicia californica	Chuparosa
Justicia spicigera	Mexican Honeysuckle
Larrea tridentata	Creosote
Leucophyllum sp.	Sage (small)
Leucophyllum sp.	Sage (large)
Leucophyllum frutescens	Texas Ranger
Leucophyllum frutescens 'Compacta'	Texas Ranger
Leucophyllum laevigatum	Chihuahuan Sage
Leucophyllum laevigatum 'Rio Bravo'	Chihuahuan Sage
Leucophyllum zygophyllum 'Cimarron'	Cimarron Texas Ranger
Lycium andersonii	Wolfberry
Lycium fremontii	Wolfberry
Myrtus boetica	Twisted Myrtle
Myrtus communis	Myrtle
Nerium oleander Dwarf	Dwarf Oleander
Nerium oleander	Common Oleander
Perovskia atriplicifolia	Russian Sage
Psilostrophe cooperi	Paperflower
Rhus ovata	Sugarbush
Rhus virens	Evergreen Sumac
Rosmarinus officinalis 'Huntington Carpet'	Upright Rosemary
Ruellia brittoniana	Ruellia
Ruellia peninsularis	Baja Ruellia
Russellia equisetiformis	Coral Fountain
Salvia coccinea	Scarlet Sage
Salvia greggii	Autumn Sage
Salvia leucantha	Mexican Bush Sage
Sambucus mexicana	Mexican Elderberry
Senna covesii	Desert Senna
Simmondsia chinensis	Jojoba
Tecomaria capensis	Cape Honeysuckle
Tecoma stans	Yellow Tecoma Stans
Tecoma stans 'Orange Jubilee'	Orange Tecoma Stans
Vauquelinia californica	Arizona Rosewood
Viguiera deltoidea	Goldeneye
Xylosma congesta 'Compacta'	Compact Xylosma
Ziziphus obtusifolia	Grey Thorn

## ACCENTS

### BOTANICAL NAME

### COMMON NAME

Agave americana 'Marginata'	Century Plant
Agave bovicornuta	Cowhorn Agave
Agave desmenttiana	Agave
Agave geminiflora	Twin Flowered Agave
Agave parryi 'Truncata'	Parry's Agave
Agave schidigera 'Durano Delight'	Durango Delight Agave
Agave vilimoriana	Octopus Agave
Agave sp.	Agave
Aloe barbadensis	Yellow Aloe
Aloe x 'Blue Elf'	Blue Elf Aloe
Aloe sp.	Aloe
Asclepias subulata	Desert Milkweed
Asparagus densiflorus 'foxtail'	Asparagus Fern
Carnegiea gigantea	Saguaro
Cereus peruvianus	Night Blooming Cereus
Cycas revolta	Sago Palm
Dasyilirion quadrangulatum	Toothless Desert Spoon
Dasyilirion texanum	Green Desert Spoon
Dasyilirion wheelerii	Desert Spoon
Dietes bicolor	Fortnight Lily
Echinocactus grusonii	Golden Barrel Cactus
Echinocerus engelmannii	Hedgehog Cactus
Eremophila glabra	Mingenew Gold
Eremophila maculate	Valentine Shrub
Eremophila hygrophana	Blue Bells Shrub
Eremophila prostrata 'outback sunrise'	Outback Sunrise
Erigeron divergens	Fleabane
Euphorbia antisyphilitica	Candelilla
Ferocactus wislizenii	Native Barrel Cactus
Fouquieria splendens	Ocotillo - seed grown
Hemerocallis sp.	Daylily
Hesperaloe funifera	Giant Hesperaloe
Hesperaloe nocturna	Night blooming hesperaloe
Hesperaloe parviflora	Yellow/Red Yucca

Hesperaloe parviflora var 'Brakelight'	Brakelight Red Yucca
Lophocereus schottii fa. Monstrosus	Totem Pole Cactus
Manfreda masculosa	Manfreda
Opuntia sp.	Prickly Pear
Opuntia acanthocarpa	Buckhorn Cholla
Opuntia basilaris	Beavertail Prickly Pear
Opuntia engelmannii	Native Prickly Pear
Opuntia ficus-indica	Indian Fig Prickly Pear
Opuntia fulgida	Chainfruit Cholla
Opuntia santa-rita	Purple Prickly Pear
Opuntia spinoslor	Cane Cholla
Pachycereus marginatus	Mexican Organ Pipe
Pedilanthus macrocarpus	Lady Slipper
Rosa sp.	Rose
Stenocereus thurberi	Organ Pipe Cactus
Strelitzia reginae	Tropical Bird of Paradise
Trachelospermum jasminoides	Star Jasmine
Yucca aloifolia	Spanish Bayonet
Yucca baccata	Banana Yucca
Yucca pallida	Pale Leaf Yucca
Yucca recurvifolia	Curve Leaf Yucca
Yuccan rostrata	specimen
Yucca rupicola	Twisted Leaf Yucca
Common Succulents	Common Succulents (in pots or defined beds)
Common Fruits and Vegetables	Edible Garden Plants (in pots or defined beds)

## PERENNIALS and GROUNDCOVERS

<u>BOTANICAL NAME</u>	<u>COMMON NAME</u>
Acacia redolens	Prostrate Acacia
Baileya multiradiata	Desert Marigold
Bulbine frutescens	Bulbine
Convolvulus cneorum	Bush Morning Glory
Dalea captata 'Sierra Gold'	Dalea
Dyssodia acerosa	Shrubby Dogweed
Dyssodia pentachaeta	Dogweed
Echinacea purpurea	Coneflower
Eschscholzia californica sp. Mexicana	Mexican Gold Poppy
Gazania rigens 'Sun Gold'	Gazania sp.
Lantana camara 'New Gold'	Lantana
Lantana montevidensis	Lantana
Lantana camara 'Radiation'	Lantana

Lavender sp.  
 Lippa nodiflora  
 Liriope muscari  
 Lupinus sparsiflorus  
 Melampodium leucanthum  
 Penstemon parryii  
 Penstemon sp.  
 Portulacaria afra  
 Ratibida columnifera  
 Rosmarinus officinalis Prostratal  
 Sphaeralcea ambigua  
 Sphagneticola trilobata  
 Setcreasea pallida  
 Tetranauris acaulis  
 Verbena gooddingii  
 Verbena pulchella  
 Zephyranthes candida  
 Common Annuals (to season)

Lavender  
 Frogfruit  
 Lilyturf  
 Desert Lupine  
 Blackfoot Daisy  
 Parry Penstemon  
 Penstemon  
 Elephant Food  
 Mexican Hat  
 Prostrate Rosemary  
 Desert Globemallow  
 Yellow Dot  
 Purple Heart  
 Angelita Daisy  
 Native Verbena  
 Verbena  
 White Rain Lily  
 Colorful Annuals (in pots or defined beds)

## GRASSES

### BOTANICAL NAME

Aristida purpurea  
 Bouteloua curtipendula  
 Bouteloua gracilis  
 Bouteloua gracilis 'Blond Ambition'  
 Cynodon dactylon Hybrid  
 Distichlis spocate  
 Lolium sp.  
 Muhlenbergia capillaris  
 Muhlenbergia lindheimeri  
 Muhlenbergia rigens  
 Muhlenbergia rigens 'Nashville'  
 Nolina sp.  
 Paspalum Vaginatum  
 Sporobolus airoides  
 Sporobolus cryptandrus

### COMMON NAME

Purple Three Awn  
 Sideouts Grama  
 Blue Grama  
 Blond Ambition Blue Grama  
 Hybrid Bermuda  
 Saltgrass  
 Rye Grass (seasonal only)  
 Regal Mist  
 Lindheimer's Muhly  
 Deergrass  
 Nashville Deergrass  
 Beargrass  
 Seashore Paspalum  
 Alkali Sacaton  
 Sand Dropseed

## VINES

**BOTANICAL NAME**

Antigonon leptopus  
Bougainvillea spp.  
Campsis radicans  
Ficus pumila  
Gelsemium sempervirens  
Hardendergia violacea  
Lonicera japonica 'Halliana'  
Macfadyena unguis-cati  
Mascagnia macroptera  
Parthenocissus sp. Hacienda  
Passiflora caerulea  
Podranea ricasoliana  
Rosa banksiae  
Solanum jasminoides  
Trachelospermum jasminoides  
Vigna caracalla  
Vitis sp. 'Roger's Red'

**COMMON NAME**

Queen's Wreath Vine  
Bougainvillea  
Trumpet Vine  
Creeping Fig Vine  
Caroline Jasmine  
Lilac Vine  
Hall's Honeysuckle  
Cat's Claw  
Yellow Orchid Vine  
Hacienda Creeper  
Passion Vine  
Pink Trumpet Vine  
Lady Banks Rose  
White Potato Vine  
Star Jasmine  
Snail Vine  
Roger's Red Vine (grape)

**PROHIBITED PLANT LIST****BOTANICAL NAME**

Baccharis sarathroides  
Brassica tournefortii  
Bromus rubens  
Casuarina species  
Centaurea melitensis  
Chamaecyparis species  
Cynodon dactylon  
Grevillea robusta  
Pennisetum ciliare  
Tamarix aphylla  
Olea Europea  
Morus Alba

**COMMON NAME**

Desert Broom  
Saharan Mustard  
Red Bromegrass  
Beefwood  
Malta Starthistle  
False Cypress  
Common Bermuda Grass  
Silk Oak  
Buffel Grass  
Tamarisk or Salt Cedar  
Swan Hill Olive  
White Mulberry



## Section 4.6 | Community Lighting Design and Character

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### Community Lighting

Community lighting is an important public streetscape element that helps define community character and creates an attractive environment while establishing a sense of safety and security. A comprehensive lighting scheme will be utilized throughout Development Unit 2 and PPGN as a whole. Lighting standards must comply with those specifically set forth within the PPGN Community Plan, the City of Mesa Zoning Ordinance, and the Outdoor Light Control Ordinance of the City of Mesa. Perimeter arterial streets will be illuminated per the City of Mesa standards.

Lighting throughout the PPGN community will focus on two key goals: 1) Provide a safe and comfortable night environment along key community roadways, trails and public spaces, and 2) create an enticing ambient setting that invites outdoor activity well into the Sonoran desert evening.

The lighting concept for the PPGN community will complement the thoughtful and formal structure of the community design and respect the New Traditional values that define PPGN. Light standards will be designed utilizing a custom application of modern lighting technology and equipment in a traditional style, thus achieving the very best of both the technical and aesthetic world. The details and application of the lighting family is critical, yet lighting is a part of a larger orchestration of landscape, hardscape, pathways and streets, and will reflect the appropriate amount of detail while not being the center of attention or detracting from landscape design. Outdoor lighting character within the interiors of the PPGN community will be a very low light, non-glow environment. Lighting will be utilized wisely and spaced to achieve the previously stated goals of safety and ambience. Lighting layout and design will be closely coordinated with proposed landscaping to maximize light distribution and avoid conflicts.

A lighting hierarchy for Development Unit 2 that includes Primary Monument and Icon Lighting, Collector Road Lighting, Neighborhood Lighting, Parking Area Lighting, and Park, Open Space and Trail Lighting forms the framework of the community lighting scheme as shown on [Exhibit 4.6.1 – Lighting Master Plan](#). The basic character of community lighting is depicted in [Exhibit 4.6.2 – Conceptual Streetscape Lighting Design](#). Street light poles will be painted or powder coated in a dark brown, dark gray and black color. Energy efficient, long life LED technology will be used within community fixtures.

Exhibit 4.6.1 – Lighting Master Plan

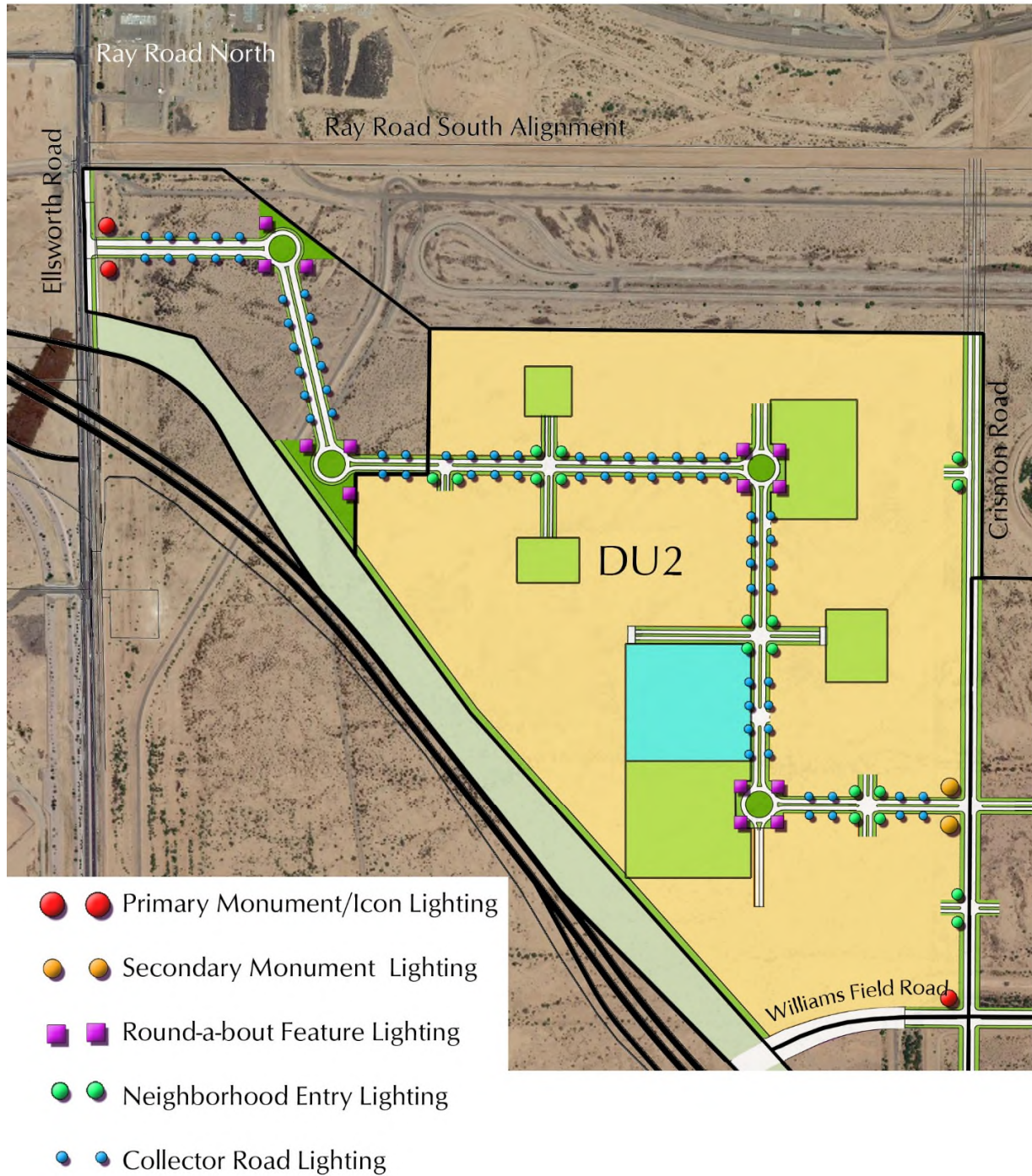
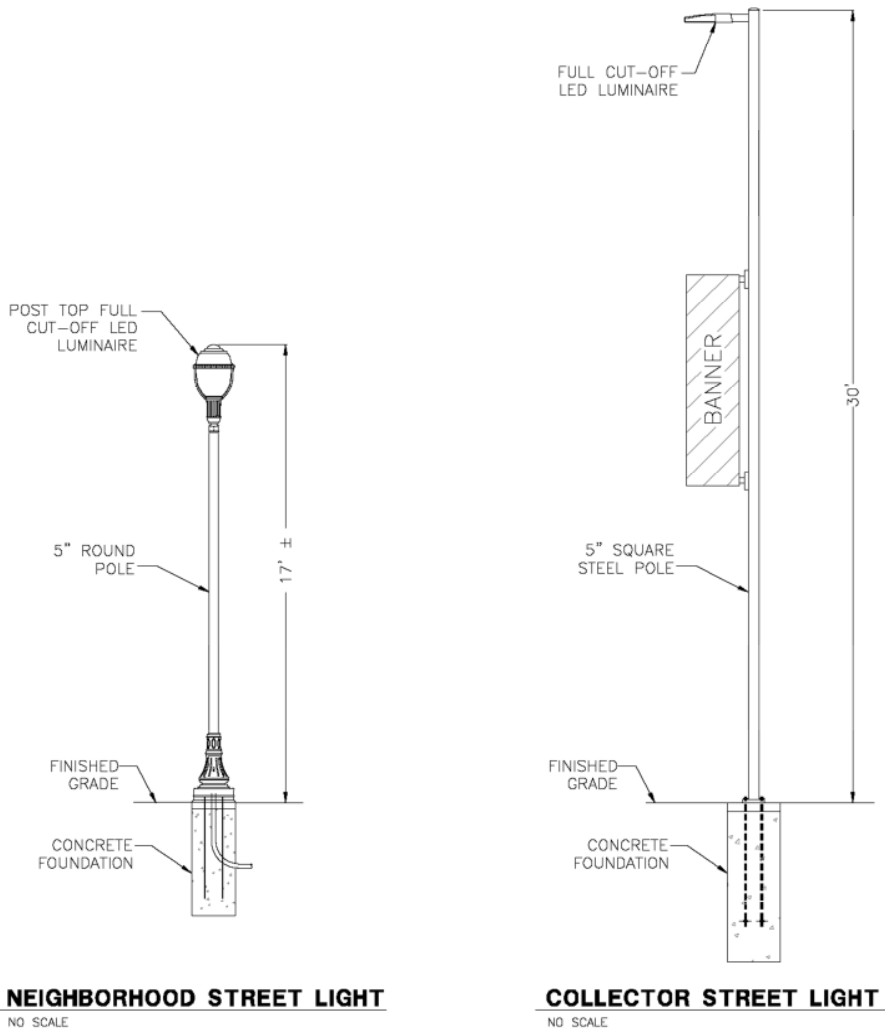


Exhibit 4.6.2 – Conceptual Streetscape Lighting Design



Lighting character within Development Unit 2 shall generally fall into one of the following lighting character types.

### **Primary Monument and Icon Lighting**



*Primary Monument and Icon Lighting Concept*

The lighting design for the PPGN gateway monument will be very unique, utilizing a variety of lighting applications. A careful orchestration of front, back and internal architecture lighting will blend to delicately wash stone and brick details, light community signage while creating a nighttime focal point along Ellsworth Road.

### **Secondary Monument Lighting**

Lighting at the Secondary Monument entrance on Crismon Road will be comprised of a scaled down version of the lighting concepts utilized at the Ellsworth Road Primary Monument entrance and will incorporate similar design elements and materials. Lighting will be used to enhance monument signage to create a nighttime focal point along Crismon Road.

### **Round-A-Bout Feature Lighting**

The signature round-a-bouts, which are passive focal open space areas within the community, will include landscape and feature lighting that subtly enhances the round-a-bout design elements and enhances the both the pedestrian and vehicular experience along the roadway system.

### **Neighborhood Entry Lighting**

Lighting at neighborhood entrances within Development Unit 2, if desired, will generally be ambient in character and may include streetscape, pedestrian, landscape, wall and monument and architectural lighting. Neighborhood streets will be lit utilizing fixtures that complement the collector road lighting fixtures.

### Collector Road Lighting

Lighting along the signature collector roadway shall be consistent throughout the community and include an appropriate combination of roadway lighting, pedestrian lighting and landscape lighting to provide a safe yet intimate environment along this important community corridor.

**Park, Open Space and Trail Lighting** Community parks, open spaces and trails may be illuminated if intended for nighttime use or if desired as part of the community lighting scheme. Active recreation areas and community parks are allowed to have sports field lighting as necessary for turf recreation areas and sports fields. Maximum illumination limits shall not apply to sports field lighting (except as restricted by the Mesa City Code), but restrictions on hours of operation may be imposed by the PPGN Master Homeowner’s Association

### Parking Area Lighting

Lighting within parking areas and driveways in non-residential areas and at the community center will be designed to create a safe and functional environment for pedestrian traffic. The maximum height for parking area lighting fixtures shall be appropriate for the surrounding context but should generally not be greater than 25 feet except where unique circumstances warrant consideration of a taller fixture. Pedestrian level lighting will be provided along defined pedestrian pathways. Driveways are not required to be lit, but ambient and landscape lighting is encouraged.



## Section 4.7 | Community Signage Design and Character

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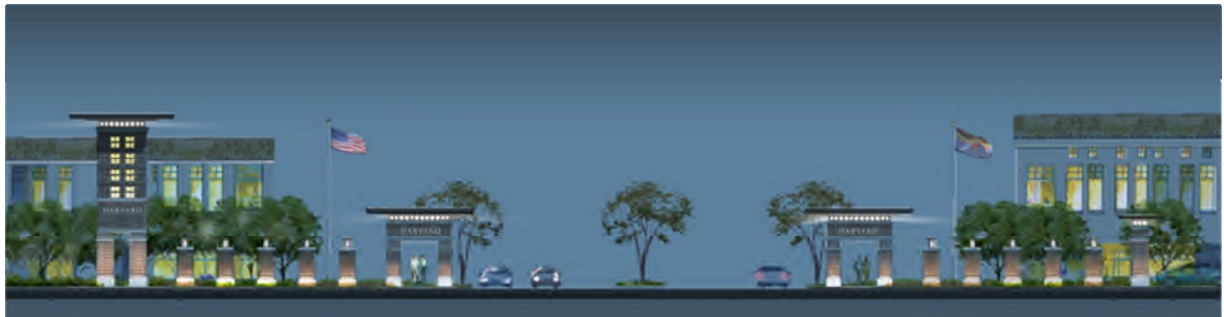
### Community Signage

Community Signage within PPGN is an important component of the overall community theme and identity and relates to all aspects of the built environment. Signage plays a vital role in communicating to residents and visitors alike, both at the pedestrian level and along roadway corridors. The base signage standards and criteria for PPGN are those set forth in the Mesa Zoning Ordinance except as modified within the PPGN Community Plan, or as approved through a comprehensive sign plan. All permanent signage within PPGN must be reviewed and approved as part of a Master Comprehensive Sign Plan or Individual Comprehensive Sign Plan. Certain temporary signs are subject to approval of a Temporary Comprehensive Sign Plan. These requirements are discussed fully within Chapter 15 of the PPGN Community Plan.

The signage family within Development Unit 2 will include a broad spectrum of sign types with a clear hierarchy of sign presentation as outlined below:

1. Community Monumentation (Primary and Secondary)
2. Builder Identification
3. Neighborhood Entry Signage
4. Amenity and Facility Identification
5. Attached Wall Mounted Signs and Detached Freestanding Monument Signs
6. Directional and Public Safety

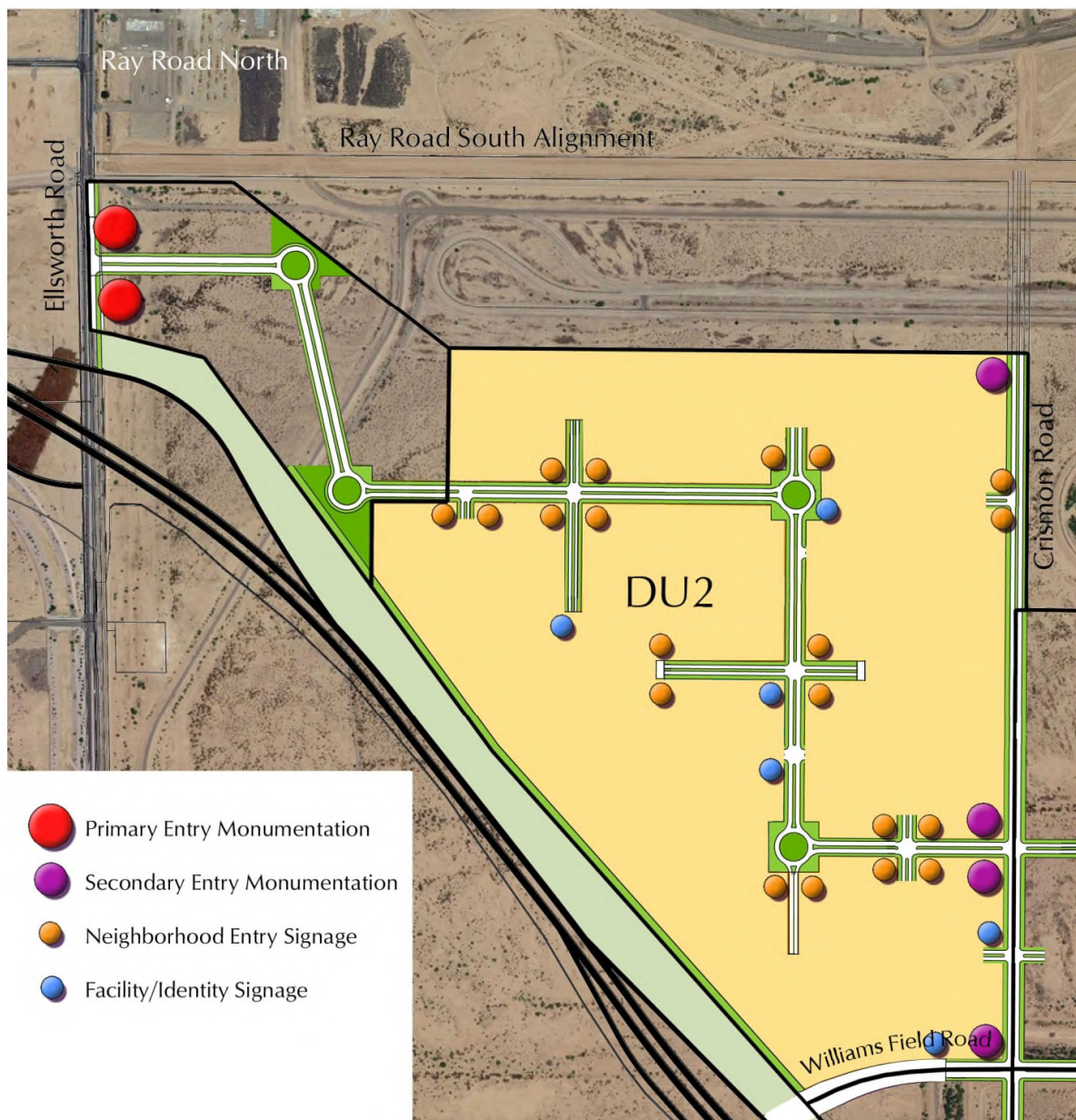
#### *Primary Community Monumentation Concept*



### **Pacific Proving Grounds North**

The following Monument and Signage plan provides general locations for PPGN Community Monumentation (Primary and Secondary), Neighborhood Entry Signage and Amenity and Facility Identification. Community Monumentation signs are not limited to the number or location shown. Support and temporary signage will be limited in number and location as approved within a Comprehensive Sign Plan to avoid signage clutter along streetscape.

## Monument & Signage Plan



## Community Signage Types

### ***Community Monumentation (Primary and Secondary)***

Community Monumentation will be used to establish an overall community identity for PPGN and act as a memorable signifier informing residents and guests of their arrival within the PPGN community. Community Monumentation will be located at strategic entry points at the perimeter of the community. Primary Community Monumentation located along Ellsworth Road within Development Unit 1 will be developed with the initial phases of Development Unit 2 in order to establish regional visibility for the community. Secondary Community Monumentation will be developed along Crismon Road subject to project phasing and timing.

### ***Builder Identification***

Builder identification will play an important role in establishing a marketing presence for the various builders and individual subdivisions within PPGN. Builder identification must be designed in harmony with the overall signage theme for PPGN and is subject to review and approval through a Temporary Comprehensive Sign Plan as outlined in Chapter 15 of the PPGN Community Plan.

### ***Neighborhood Entry Signage***

Permanent neighborhood entry signage will be constructed with each phase of development to create a unique presence and identity for each individual neighborhood within PPGN. Neighborhood Entry Signage will be designed utilizing the same design theme as the Community Monumentation and will be controlled and developed by the Master Developer. Neighborhood Entry Signage may consist of monument signs or signage mounted on thematic entry walls.

### ***Amenity and Facility Identification***

Amenity and Facility Identification will be developed to promote key community amenities such as larger neighborhood parks, the Community Activity Park and Elementary School, and Community Recreation Park as well as employment and retail centers. Amenity and Facility Identification signage will be held to the same design quality standards and themes established for Community Monumentation and Neighborhood Entry Signage.

### ***Attached Wall Mounted Signs and Detached Freestanding Monument Signs***

Wall signs and freestanding monument signs may be used in a variety of applications throughout PPGN for amenities and non-residential applications. All such signage must be approved through a Master Comprehensive Sign Plan or Individual Comprehensive Sign Plan pursuant to Chapter 15 of the PPGN Community Plan.



### ***Directional and Public Safety***

Directional signs are permitted as necessary and appropriate throughout PPGN. Directional signage must be sized appropriately to promote readability and may not advertise tenants or occupants.

Specific standards for all signage types within PPGN are outlined in Chapter 15 of the PPGN Community Plan.

### **Community Signage Design and Character**

As with all aspects of design throughout PPGN, the design character of Community Signage shall reflect the New Traditional vision of the overall community theme, which reflects a modern planning ideal that draws influence from uncomplicated and timeless American neighborhoods. Signage may reflect an eclectic design aesthetic and are not limited to one single style or font, and may include both a traditional and modern design elements. The following general design standards are applicable to all signs:

- Sign colors must compliment both the adjacent buildings and surrounding site design.
- Signs should provide simple, understandable color contrasts between base materials and letter fonts to promote readability.
- Signs must be scaled to fit appropriately on the surface or wall in which it is intended. Scale and proportion is important to allow successful readability while not overpowering a street scene or building design.
- Signs may be internally or externally lighted.
- Sign lighting must be manageable via hour control.
- The use of exposed neon is limited to commercial uses and must be approved as part of a Comprehensive Sign Plan.
- Sources of signage light must not be visible except where lighting is an integral part of the signage design, and only as approved as part of a Comprehensive Sign Plan.
- Reverse pan channel sign lighting is allowed provided the light source is hidden and evenly distributed.
- Signs shall be unique and well designed to reflect the outstanding nature of the PPGN community.

### **Prohibited Signage or Design Specifications**

- Signs not approved as part of a Comprehensive Sign Plan.
- Reflective materials and trimming.
- Plexiglas backing material.
- Front lighted acrylic letters.

- Roof mounted signs.
- Change panel configurations.
- Exposed electrical wiring, conduit and connections.
- Hand painted letters
- Inflatable signs or other attention grabbers.
- Neon “open” or “closed” signs.
- Paper/vinyl letters, decals or printed temporary signs.
- Freestanding, blinking kinetic or arduous signs.
- Signs with any offensive graphic depiction or verbal material.

## Section 4.8 | Sustainability Principles

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### Sustainability

Planning principles that advocate for a sustainable community are integral to the New Traditional Community concept and are an important foundational element of the PPGN Community Plan. Development within PPGN will advance sustainability through both land planning principles and building techniques and methodology. The following sustainability measures will be incorporated as appropriate and feasible within Development Unit 2. Specific design guidelines and development standards that direct implementation of these sustainability principles are incorporated throughout the Development Unit 2 DUP and the PPGN Community Plan.

#### Economic Viability

**Marketability:** PPGN will encourage the use of sustainability strategies and technologies that homebuilders can incorporate to increase the affordability of homes. This may include the use of new technologies, energy efficient building methods and materials, and green building techniques.

**Local and Regional Economy:** Major employment areas are planned to the west and south of Development Unit 2. Housing within Development Unit 2 will be in close proximity to these employment opportunities, including significant regional employers, and transportation corridors thus promoting a regional “live, work, play and recreate” environment. Via the community collector road out to Ellsworth and the multiple street connections to Crismon, Development Unit 2 provides ready and convenient access to the major street network to reduce travel distances and time to move from home to work and back. Final design of the street system and neighborhoods within Development Unit 2 will continue to develop these connections.

**Stability Through Diversity:** Diversity in housing types, densities and lot sizes will be offered and will provide a wide spectrum of living opportunities that appeal to a diverse socioeconomic and demographic cross section.

#### Resource Efficiency

**Land Use:** A compact, pedestrian-oriented development form that helps reduce urban sprawl is a primary planning goal within PPGN. A mix of housing types and sizes will be developed to accommodate a strong demographic cross-section of residents. Further, the Community Plan is designed to encourage a mix of non-single residence land uses that includes high density residential, commercial and employment.

**Transportation:** Streets will be designed to take into consideration the needs of pedestrians and will incorporate “Great Streets” concepts. Bike and pedestrian connectivity will be provided throughout the community, including convenient and secure areas for bike and scooter parking to encourage alternative modes of transportation.

**Water:** Efficient use of water will be encouraged through landscaping techniques such as low water use plant selection and efficient irrigation systems. Water efficient toilets, showerheads, faucets, clothes washers and dishwashers will be strongly encouraged as a community standard.

**Building Materials:** The use of recycled, local or regionally produced building materials will be encouraged along with the reuse or recycle of construction waste. Fluorescent and LED lighting is encouraged along with high performance windows, insulation and HVAC systems. Builders will be encouraged incorporate LEED or other green building techniques and strategies (such as Energy Star or Home Energy Rating System standards). Some specific energy efficiency and environmentally-friendly building techniques that builders may offer include:

- MERV8 air filtration system
- Low VOC interior paint
- CRI-green label carpet and pad
- Central vacuum system, promoting indoor air quality by carrying dust-laden air directly to canister in garage
- 100% Fluorescent lights throughout the home - interior and exterior
- Occupancy sensors
- Advanced programmable thermostat
- Radiant barrier roof sheathing
- Energy-efficient HVAC air conditioners
- Innovative attic insulation made from recycled material that enhances energy efficiency and promotes cleaner air and increased noise reduction
- Dual Low-E spectrally selective glass windows, which reduce heat and ultraviolet (UV) rays and provide optimal insulation
- Recycled cellulose insulation — R-38 Attic & R-19 Wall System
- Solar-ready components to Arizona utility company specifications
- Roof integrated solar electric powered system generating solar electricity for your home (on select homes and exteriors)
- ENERGY STAR® low-water, energy-saving, front-loading washing machines and dryers
- ENERGY STAR® refrigerator

- ENERGY STAR® dishwasher
- Tankless water heater with control panel for temperature adjustments
- CRI-green label carpet and pad made from recycled material in choice of designer-selected colors
- Engineered wood that resists warping, splitting and shrinking, while preserving our forests
- Low-fiber flooring using materials from quickly rejuvenating managed forests eliminates carpet fibers that harbor dust mites, pet dander and other allergens, improving indoor air quality
- Water saving faucets, dramatically cutting water usage while maintaining desired water pressure
- Low-flow toilets which use half the water as regular toilets
- Water-sensing irrigation valve (climate-controlled)
- Reverse osmosis water system at kitchen
- Tankless water heater
- On-demand water recirculation pump at tankless water heater

As an allowed alternative to meet the requirements of the City's adopted Energy Code, builders may choose to utilize an alternate HER's rating. Documentation of the intent to meet the alternate rating must be submitted at the time of Home Product Review and the builder must commit to third party inspections during construction.

### **Response to Context and Location**

***Open Space:*** A continuous community open space system that includes a balance of passive and active open spaces areas is a signature design feature of the PPGN community. Open space areas will be conveniently accessible from all areas within the community, including as a general rule of thumb that every resident will be within 300' of a park, open space area or trail. Compact and efficient development forms allow more opportunities for community open space areas throughout the community.

***Solar Intensity and Temperature:*** Solar orientation will be considered to maximize efficiency within buildings. This includes consideration regarding the solar orientation of single residence lots as well as individual buildings. Thoughtful consideration in the selection of building materials and colors is encouraged to reduce overall heat gain. Shade for outdoor activity areas such as connecting walkways, gathering areas and courtyards is strongly encouraged and may be supplemented with a variety of design elements and landscaping for a cooling effect.

**Landscaping:** Landscaping guidelines encourage the utilization of low water, desert appropriate plant materials to provide natural shade and cooling.

