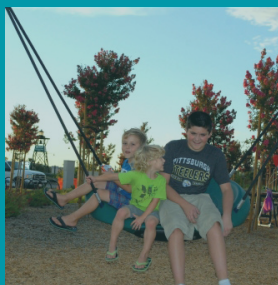
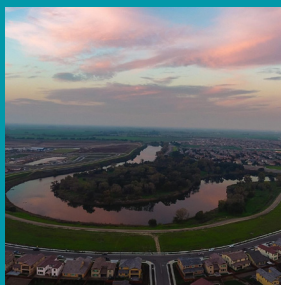




RIVER ISLANDS PARKS & OPEN SPACE MASTER PLAN

Lathrop, California

PHASE 2



RIVER ISLANDS

Phase 2 Parks & Open Space

Master Plan

04.13.2021

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RIVER ISLANDS

CHAPTER 1

INTRODUCTION



INTRODUCTION

The Parks Master Plan lays out a network of neighborhood and community parks, trails, and paseos for River Islands Phase 2 development. In addition, this Master Plan will continue to highlight the relationship between the community and the surrounding river system by providing opportunities to experience the river in multiple ways. The park system celebrates its location along the rivers and offers a variety of recreational amenities for the community to interact with this amazing natural resource. Locations of parks and open spaces ensure that recreational amenities are accessible to all community members. Pedestrian and bicycle connections are laid out to facilitate safe non-vehicular circulation between the community and park sites.

1.1 PURPOSE OF DOCUMENT

The Phase 2 Parks Master Plan will provide inventory, assessment and recommendations regarding River Islands park and open space network. This master plan builds upon the 2015 Phase 1 Parks and Open Space Master Plan, as well as the Phase 1A-2B Neighborhood Development Plans, and continues to provide a system of valuable community assets and recreational opportunities throughout the development.

1.2 ROLE OF PARKS AND OPEN SPACE

Parks and open spaces are invaluable parts of a vibrant community. Studies continue to demonstrate the benefits of public parks for individual and community health. An investment in expanding parks and open space amenities can ensure the long-term health of both individuals and the community. As a new waterfront master-planned community, River Islands strives to provide residents an idyllic lifestyle through the expansion of recreational and environmental services. Opportunities to foster community and sense of place may be created through recreational programming, and incorporating historical themes throughout the design.

1.3 PARKS MASTER PLAN OVERVIEW

Chapter 1: Introduction

This chapter introduces the purpose of the Master Plan, and reviews the process of preparation of the Parks Master Plan.

Chapter 2: Project Context

This chapter includes a survey of existing parks and open space that were previously laid out in Phase 1 Parks Master Plan and the Neighborhood Development Plan.

Chapter 3: Phase 2 Park System Guidelines

This chapter provides a review of best practices associated with design and construction of future parks and recreational facilities.

Chapter 4: Proposed Parks Master Plan And Parks Concepts

This chapter includes an overview of the Proposed Parks Master Plan, preliminary park design concepts, as well as recommendation of future parks and recreational facilities.



Chapter 2

PROJECT CONTEXT

The content of this section covers existing parks and open space amenities that were laid out in the River Islands Phase 1 Master Parks and Open Space Plan and have either been developed or are in various phases of development.

2.1 CONTEXT

The City of Lathrop is located in the northern half of California’s Central Valley west of the San Joaquin River. It is approximately 70 miles east of San Francisco and within a 30 minute commute of many central valley and East Bay cities (Tracy, Manteca, Stockton, Lodi, Modesto, Livermore, and Pleasanton). The 23-square-mile city is at the intersection of I-5 and SR 120 freeways. It is part of the lowland region with elevations close to sea level and has natural runoff into the adjacent San Joaquin River.

Based on 2019 information from the U.S. Census Bureau, the estimated current population is 24,483. About 45% of the city population is Caucasian, 26% is of Asian descent, and 6.6% are African Americans. Lathrop has a population density of 1,242, people per square mile, with a population growth rate of about 2.8% annually. The median household income is \$82,658 with a poverty rate of 10.9%. Approximately 78.6% of the population age 25 or above have obtained a high school degree or higher.

The City of Lathrop boasts an inventory of approximately 84 acres of parks and open space and 18 park and recreation facilities together comprising a growing, robust parks system. Current recreational amenities range from athletic fields and courts, a skate park, an amphitheater, playgrounds, outdoor fitness equipment, dog parks, and other recreational amenities, such as open space, pedestrian paths, and picnic facilities. The City runs programs out of a Community Center, Generations Center, and Senior Center facilities. The City of Lathrop currently provides recreational programs for youth, adults, and seniors including summer camps, kid’s clubs, exercise classes, sports lessons, craft classes, etc., and hosts many community events throughout the year from weekly Zumba classes to a tree lighting ceremony in December.

2.2 PHASE 1 EXISTING FACILITIES

Condition 116 of Vesting Tentative Map 3694 required a minimum number and size (in acres) of various recreational facilities for the Phase 1 River Islands development. Parks that were designed and built as a part of Phase 1 development include elements required by Condition 116. A list of the require facilities is listed in Table 2.1 for reference.

Other related community scale facilities are planned for inclusion within the phase 1 area.

TABLE 2.1 - PHASE 1 MINIMUM FACILITY REQUIREMENTS-CONDITION 116

DESIGN ELEMENT	POPULATION STANDARD	ACREAGE GUIDELINES
Basketball Courts	1 per 3,750 residents	0.7 acres per court
Tennis Courts	1 per 3,750 residents	0.2 acres per court
Volleyball Courts	1 per 5,000 residents	0.2 acres per court
Baseball Diamonds	1 per 15,000 residents	3.0 acres per field
Lighted Diamonds	1 per 15,000 residents	3.0 acres per field
Softball Diamonds	1 per 2,500 residents	2.3 acres per field
Lighted Diamonds	1 per 15,000 residents	2.3 acres per field
Football Fields	1 per 10,000 residents	1.5 acres per field
Soccer Fields		
Adult	1 per 5,000 residents	2.2 acres per field
Youth	1 per 3,000 residents	1.3 acres per field
Multi-Play Courts	1 per 10,000 residents	0.46 acres per court
Public Swimming Pool	1 per 20,000 residents	1.5 acres per pool

2.3 EXISTING PARKS AND OPEN SPACES

River Islands parks and open space can be classified into several categories that indicate size and amenities provided. The following list is color-coded to indicate the type of park. The same color-coding is used in the following inventory sheets to enable quick identification of park type. As can be seen in the Phase 1 Parks Master Plan, only some of these facilities are intended to satisfy Quimby Act requirements.

Phase one includes approximately 85 acres of Quimby Act qualified parks and open space. As phase 1 is not completely built out to date, these spaces are at various levels of completion and planning. Table 2.2 has been provided to clarify the typology of the open spaces, Quimby Act status, and level of completion. Phase 1 also includes privately maintained and operated facilities that service the needs of the community such as Islander's Field, and Sunset Point/ the Boathouse.

TABLE 2.2 - PHASE 1 PARKS & OPEN SPACE

PHASE 1 PARKS & OPEN SPACE DESIGNATIONS & STATUS			
PARK #	Park Name	Quimby Act Designated	Completion Status
COMMUNITY PARK - (APPROX. 39 ACRES)			
C1	Town Center Community Park	Yes	Early Planning
C2	East Village Community park	Yes	Bidding
C3	Elementary School Play Field (Town Center)	Yes	Construction
NEIGHBORHOOD PARK - (APPROX. 26 ACRES)			
N1	Michael Vega park	Yes	Completed
N2	Somerston Park	Yes	Completed
N3	Reflections Park	Yes	Completed
N4	Crystal Cove Park	Yes	Completed
N6	Summer House Park	Yes	Completed
N7	Tidewater Park	Yes	Completed
N9	Nototomne Park	Yes	Construction Document Phase
N10	Neighborhood Park10 (4.5 acres)	Yes	Early Planning
POCKET PARK - (APPROX. 27 ACRES)			
P1-P50	n/a	No	Varies (planning-completed)
WATER RELATED OPEN SPACE - (APPROX. 9 ACRES)			
W1&W2	n/a	No	Completed
TRAILS - (APPROX. 168 ACRES)			
T1-T4	n/a	No	Varies (planning-completed)
GENERAL OPEN SPACE - (APPROX. 162 ACRES)			
n/a	n/a	No	Varies (planning-completed)



Chapter 3

PHASE 2 PARK SYSTEM GUIDELINES

PHASE 2 PARK SYSTEM GUIDELINES

The following chapter provides a review of parks and recreation guidelines and planning as they pertain to this phase of development at River Islands. This chapter reviews standards and trends in parks and recreation usage, design guidelines, and sustainable practice which will inform a basis of design for the master planning of this park system.

3.1 TRENDS IN PARKS

Health Trends

In its “Healthy Parks Healthy People” guide, the National Park Service specifically mentions that connection to local parks will help children “lead healthier, happier, more fulfilled lives” in addition to connecting them to natural resources. Efforts such as these by the National Park Service and others by the State and local entities have made the dialogue surrounding health and parks mainstream. It is now widely acknowledged that increasing exposure to nature and exercise encourages physical and mental health for users of all ages. River Islands enthusiastically integrates this concept into its development by encouraging recreation throughout all aspects of the development. **Best practices for parks and recreation development include maximizing opportunities to engage users in creative forms of exercise.** The focus must be on engaging the entire community to participate more actively in parks and recreation. Parents and grandparents engaged in active pursuits will likely encourage the same values and habits in children and youth. Communities with varying demographics must feel comfortable using their public parks and recreation system. Existing cultural and hobby-related community groups provide a desire to participate in a number of activities such as little leagues, futbol clubs, etc.

Current trends show an increase in including opportunities for community gardens. The positive impact of gardening is far-reaching and proves to be beneficial for all members in the community. **Community gardens support a sense of community pride and build connections amongst neighbors.** They provide the opportunity for people of different cultures to share and build upon cultural connections from farming to food.

Level of Service

National Parks and Recreation organizations, including the National Recreation and Park Association, began to scale back from issuing national standards for facilities level of service per population about twenty years ago. Rather it was deemed appropriate that level-of-service standards should be determined by individual municipalities and tailored to the unique needs of each city. Since the 1975 Quimby Act (California Government Code §66477) was passed, cities and counties in the state of California have had the power to establish land dedication ordinances and require that developers contribute in one of several ways to dedicating land for park improvements. Quimby Act standards include dedication of 3-5 acres per 1,000 residents in a given jurisdiction to ensure adequate park land is developed along with housing construction. While five acres does not constitute a maximum allowable park acreage, it does represent in the Quimby Act the maximum park acreage per 1,000 residents that may be required for developers. The City of Lathrop has further defined these acreages by requiring three (3) acres of Community Park per 1,000 residents and two (2) acres of Neighborhood Park per 1,000 residents. Per the City’s General Plan, minimum acreages apply to the sizes of individual community and neighborhood parks. The minimum size for a community park is 15 acres, the minimum size for a neighborhood park is 4 acres.



3.2 PARK DESIGN GUIDELINES

Each park, regardless of size, provides varying unique services to target user groups. The following section categorizes parks by size and summarizes the types of amenities typical of each park typology. For clarity and consistency, these categories reflect those found in the Phase 1 Parks Master Plan and the Neighborhood Development Plan: Community Park, Neighborhood Park, Pocket Park, and Linear Parks. The following typology sections provide an overview of each type of park within the River Islands park and open space system and include typical features which may be appropriate for the separate categories.

Recreation Goals

River Islands echoes the recreational goals of the City of Lathrop by embracing the following:

- Provisions for diverse recreational spaces and opportunities that can support music, dance, arts and crafts, sports, drama, nature study, games, special events, and educational learning activities;
- provisions for opportunities regardless of an individual's age, religion, ethnic background, economic status, sex, or level of abilities;
- opportunities for fostering of leadership skills in the community through safe outdoor environments that allow for social interaction, creative expressions, and community involvement;
- options for year-round engagement in active and passive recreation whether programmed or not;
- and, education of the community on how to recreate in positive and community building ways.

Community Parks

Community parks often incorporate a variety of recreational programming to provide active and passive recreational opportunities for all. Most residents should be able to access a community park within ½ to 1 mile from their home. An ideal Community Park connects residents to outdoor recreation options, fosters public growth and establishes collective identity. Per the City of Lathrop, community parks are primarily intended to serve the needs of organized sports and active recreation.

Community Parks are recommended for development on land greater than fifteen (15) acres. The service area for Community Parks is measured as ½ mile from the boundaries of the park, approximately 10-20 minute walk for pedestrians.

Typical features include those found in a Neighborhood Park (see Neighborhood Parks description) with the addition of any number of other features. These may include sports fields (lighted and unlighted depending on programming), sport courts, concession stands, restrooms, and amphitheater or performing arts facilities, nature education opportunities, splash pads or other water-play features, dog parks, and fitness courses. The design may also include areas for specialty athletics and recreation. Each design will attempt to provide the highest level of accessibility and safety possible for the benefit of the community and the for the park's continued success.

Unique to River Islands, community park space also includes miles of non-motorized levee trails that circle the development providing safe access to anywhere within the development. These parks are located near schools to maximize recreational space and programming. These open spaces may also include storm water quality features and facilities accessory to the park.

On-site parking facilities are important within community parks to service patron heavy activities that typically occur in these parks. During the design phases of each community park, the necessary number of parking stalls to accommodate users will be identified based on specific park amenities included in the design. The number of parking stalls will vary at each park site.

Neighborhood Parks

Neighborhood parks serve as an extended back yard for local residents and provide both passive and active recreation opportunities. An ideal Neighborhood Park connects residents to outdoor recreation and increases residents' sense of ownership of their own community. Neighborhood parks are generally a minimum of four acres and are recommended for new neighborhoods as amenities that may be accessed within a 5-10 minute walk. This service is measured as ¼ mile from the boundary of the park.

Neighborhood Parks are recommended for development on land greater than four (4) acres. Neighborhood Park N10 (illustrated on Page 38 is less than (4) acres at 2.73 acres. This acreage is less than the recommended minimum for Neighborhood Parks but is

acceptable by the City. The design of each park will take into consideration the unique needs and demographics of the neighborhood within which it is placed. Each design will attempt to provide the highest level of accessibility and safety possible for the benefit of the community and the for the park’s continued success. Parks should be as centrally located as possible within new developments, and not located along high speed roads.

Neighborhood Parks typically include a mixture of active and passive recreational opportunities and more variety of amenities than pocket parks. Playground structures, fitness equipment, and shaded benches and/or table are typical. BBQ facilities may be appropriate, and provision of waste stations (trash, recycling, and dog waste) will help support maintaining a clean neighborhood. Fenced dog parks located within neighborhood parks are designed to serve communities within the immediate neighborhood vicinity. The dog parks should be strategically located near levee access points to encourage pedestrian use between parks and levee trail. Open lawn areas large enough to provide spaces for youth team sport practices are encouraged. Sports courts are also appropriate and maybe include bocce, horseshoes, volleyball, basketball, or multi-sport courts.

Pocket Parks

Pocket Parks are geared toward serving residents within the immediate adjacent neighborhood. The standard measurement to determine park service coverage is measured as a quarter-mile radius from the park border, which is roughly a 5-10 minute walk. The park design should consider the unique needs and the demographics within its service radius. Each design should attempt to provide the highest level of accessibility and safety possible for the benefit of the community and for the parks continued success. Parks will be as centrally located as possible within new developments, and not located along high speed roads.

Pocket parks typically include a mixture of active and passive recreational opportunities. These are essentially extended “backyards” of the neighborhood and so provide play opportunities as well as social space for residents. Typical features include, fitness equipment, shaded benches, and tables. BBQ facilities may be appropriate, and provision of waste stations (trash, recycling, and dog waste) will help support maintaining a clean neighborhood amenity. Pocket Parks may also support community garden initiatives. Pocket parks do not qualify for Quimby Act credit.

Linear Parks

Linear parks can be designed for multiple functions and purposes. They may function to connect park spaces with safe non-motorized paths that can be used by individuals and families to navigate the network of trails and parks while avoiding automobile traffic. They may be a combined vehicle and pedestrian parkway, they may even act as a buffer between residential and commercial areas, or combine storm water conveyance infrastructure with non-motorized trails. In general, these trails also encourage pedestrian movement throughout the community while improving visibility and increasing observant “eyes” on the community.

Linear parks typically include a mixture of active and passive recreational opportunities, but with less amenities than neighborhood parks. Typical features include fitness equipment, benches, and tables. Linear parks do not qualify for Quimby Act credit.

3.3 SUSTAINABILITY

There is a common misconception that sustainable building alternatives are inherently more expensive than traditional planning and building practices. In a 2009 survey by the National Recreation and Park Association, Parks and Recreation leaders noted concerns about keeping up with funding environmental improvements while struggling with budget cuts and reductions in water supply. Fortunately, water-saving technology and practices have improved such that conforming with state-mandated water usage restrictions is now widely achievable across even the most arid parts of California. Integration of modern irrigation equipment and selection of low-water using plant material will save funds on irrigation water for its parks as well as demonstrate to residents the



accessibility of low water using landscapes.

Sustainability practices are being incorporated into all River Islands parks development. Best practice guidelines outlining the potential strategies that should be included are listed below.

- Implement Low Impact Development (LID) stormwater management technology into designs. Vegetated swales capture all water on site and clean it prior to discharging it into the many lakes within the community. The lake water is then used to irrigate the many public open spaces.
- Install hardy, native and adapted plant varieties, avoiding invasive or water-intensive plant varieties.
- Recycled water is being used with all irrigation systems to the maximum extent feasible.
- Central control irrigation system controllers utilizing weather-based sensors, flow sensors, master valves, and point source irrigation help to minimize over-watering and avoid catastrophic losses of water due to breaks and vandalism.
- Consider incorporating community gardens to foster community ownership of park space and educate the public about food security.

3.4 SAFETY AND SECURITY

The most important aspect of monitoring and providing safe parks and open space is maintaining an existing partnership with municipal law enforcement. Law enforcement agencies provide “boots on the ground” throughout parks and open space assets, and are therefore uniquely able to advise on the unique needs and proven methods for various locations. Parks will be designed with security in mind. Similarly, surveillance cameras located in particularly problematic areas may be the best option for certain locations. A variety of wireless, cloud-based security camera technology is currently available to streamline installation and monitoring of the equipment. Local law enforcement feedback will be central to any decisions related to security at public parks.



The most widely recognized set of best practice standards relating to safety in parks are Crime Prevention Through Environmental Design (CPTED) principles include:

Natural Surveillance

The overall goal of CPTED is the idea that a person will be less likely to commit a crime if there is risk of being seen. This principle encourages “see and be seen” quality in public spaces.

- New parks will, when feasible be designed such that there are buildings or roads fronting all sides of the park for maximum surveillance.
- Where feasible homes and businesses should face toward the park.
- Design and maintain safe pedestrian routes to the park and clear lines of sight from these routes into major activity zones within the park.
- Encourage neighbors to keep an eye on the park by keeping nighttime lighting pleasant and non-obtrusive and by enforcing hours or park usage to avoid nuisances that could cause neighbors to close doors and windows facing the park.
- Where feasible use pleasant, dimmer lighting rather than bright, blinding lighting to avoid creating the excessively dark areas that form just outside the reach of the bright lights.
- Security cameras may be installed on a case-by-case basis as deterrent to crime and vandalism.
- Where feasible, use of motion sensor lighting to alert others when movement in the park is registered.



This CPTED principle encourages use of creative access control using pathway alignment, landscape/ topographic features, signage or other features to direct the flow of user traffic, rather than traditional but intimidating mechanisms such as fences and wire.

- Avoid using control mechanisms such as barbed wire fences. This aesthetic supports the perception that the facility is dangerous.
- A combination of eyes-on-the-park, sufficient lighting and patrolling, and other measures may be used where possible.
- Incorporate clear, bilingual signage at the major pedestrian entrance(s) to the park. This signage may include information about park hours, maintenance/littering, and emergency contact information.
- Avoid landscape features that create blind spots and prevent adequate surveillance.
- Select plant materials to groundcover height (less than 2') and maintain tree canopies to a minimum of 6' above ground level. Keeping the 2'-6' visual range open will increase surveillance capabilities and reduce perceptions of possible criminal activity areas.

Territorial Reinforcement

Use of visual cues, such as consistent types of pavement, plant materials, or signage to encourage specific usage of park space and to delineate public/private divisions is an important part of CPTED. In the case of public parks, this territorial reinforcement will:

- Encourage community ownership of and presence at parks.
- Use varied plant materials to encourage activity in some areas and to discourage unwanted activities.
- Support the formation of community service group adoption and maintenance programs.

Maintenance

Maintenance is of high importance of CPTED safety guidelines. Consider the "broken window" theory, which is the theory that poorly maintained properties will breed criminal activity. Well-maintained places indicate that there is regular human presence which monitors the site and that the community cares about that park, which can deter criminals and deviants from that space. River Islands is dedicated to consistent maintenance practices:

- Dedicated maintenance staff to low-hanging maintenance needs, including regular clean-up of litter and graffiti.
- Adequate staff and funding to maintain and prune trees and shrubs. This is important in order to keep the trees healthy and make the parks safer and cleaner without excess dead landscape material.
- Scheduled periodic repairs of site amenities such as benches, tables, playground equipment, barbeque's and garbage receptacles.
- Scheduled regular maintenance of ball field surfaces where the field is "closed" to repair and replace turf/ clay as needed.
- Regular interaction with City staff who interact with scheduled user groups. Coordinate with City Staff as well.
- Staffing of enough maintenance personnel to visit each park on a regular rotation.
- Determined maintenance schedules based upon regular review of park needs with maintenance staff.
- Outcome-based maintenance standards for landscape maintenance. Outcome-based standards emphasize "expected end result" maintenance standards.

3.5 NON-MOTORIZED CIRCULATION

Safe pedestrian and bicyclist connections, linking parks, open spaces, and schools throughout the community is a priority. To this end, a complex non-motorized circulation system has been developed to accomplish this goal. The circulation typology (as reflected in Figure 4.5 - Phase 2 Circulation Map) consists of elevated (levee) trails, classes 1, 2 & 3 bicycle lanes, pedestrian trails, and pedestrian connections. Also included as Figure 4.6 (Phase 2 Safe Routes To Schools) is a highlight of the routes which may be used by children to walk or bike to school safely. These typology designations are described below.

Elevated (Levee) Trails

Phase 2 elevated trails are designed to encircle the development following the levees that protect the development from flood events. They are designed for pedestrians, bicyclists, and equestrian riders. They are also designed for maximum safety by avoiding conflicts with automobile traffic. The trail cross section is 40' wide, with 30' designed for recreational use. The 30' is intended to include a 12' wide paved path with a class II aggregate base shoulder on one side, a class II equestrian trail on the other side (per California State Parks Trail Handbook, and an aggregate base shoulder for other trail amenities. See Section 3.6 for more detailed trail information. Within the 30' recreational use space other trail related amenities will be included to enhance the value of the trail system. Those amenities may include features such as: exercise stations at strategic access locations, scenic overlooks, kiosk stations, interpretive/ education signage about the river and surrounding habitat, benches/tables for resting, bike racks at rest locations, mile markers, directional signage, etc.

Class I Bike Path

Class I paths are paved rights-of-way completely separated from streets. Bike paths will have a limited number of cross streets and driveways. These paths are typically shared with pedestrians and often called mixed-use paths. The Highway Design Manual (HDM) standards define these paths as 8'-10' wide paths with 2' aggregate base shoulders on either side.

Class II Bike Lane

Class II lanes are on-street facilities designated for bicyclists using stripes and stencils. Bike lanes may include buffer striping to provide greater separation between bicyclists and parked or moving vehicles. Bike lanes are the preferred treatment for all arterial and collector streets on the bikeway network, and not typically installed on low-volume, low-speed residential streets. The HDM standards define these paths as minimum 4'-6' wide paths.

Class III Bike Route

Class III routes are streets designated for bicycle travel and shared with motor vehicles. While the only required treatment is signage, streets are designated as bike routes because they are suitable for sharing with motor vehicles and provide better connectivity than other streets. The HDM notes that minimum widths for Class III bikeways are represented, in the minimum standards for highway lanes and shoulders.

Pedestrian Trails

Pedestrian trails are designated walkways for travel by pedestrian and are not wide enough for traversing with bicycles. These paths vary in width, but are never narrower than 4' wide.

Pedestrian Connections

Pedestrian connections are designated walkways for travel by pedestrian and typically connect two other circulation path designations. These paths vary in width, but are never narrower than 4' wide.

3.6 ELEVATED LEVEE TRAILS

The River Islands Community has a unique recreational opportunity as it is surrounded with a 200 yr. flood levee that not only protects the community, but also affords the residents a trail system loop longer than most City-wide trail systems. The following paragraphs describe this nearly 18 mile trail system in detail with supporting figures for clarity.

Trail Design

Roughly eight miles of planned levee trails will follow along the top of the levee, generally centered on the center line of the levee alignment. Access point will be provided from the development side of the levee at intervals to allow for recreational and maintenance uses. The levee trails are maintained and overseen by Reclamation District 2062. The levee trails exceed Highway Design Manual (HMD) standards for two directional class I trails, with a total paved width of 12' and unimproved aggregate base shoulders totaling 10' in width: 4' wide class II aggregate base shoulder, and 6' wide class II equestrian trail. The remaining 8' wide path shall be set aside for trail amenities such as overlooks, educational/interpretative signage, benches and/or exercise equipment. Figures 3.1 depicts the standard trail design for River Islands levee trails.

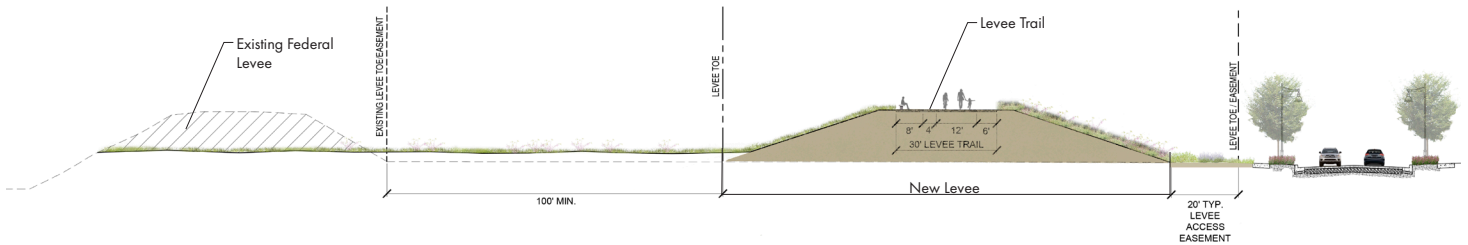


Open Space On Waterside of Levees

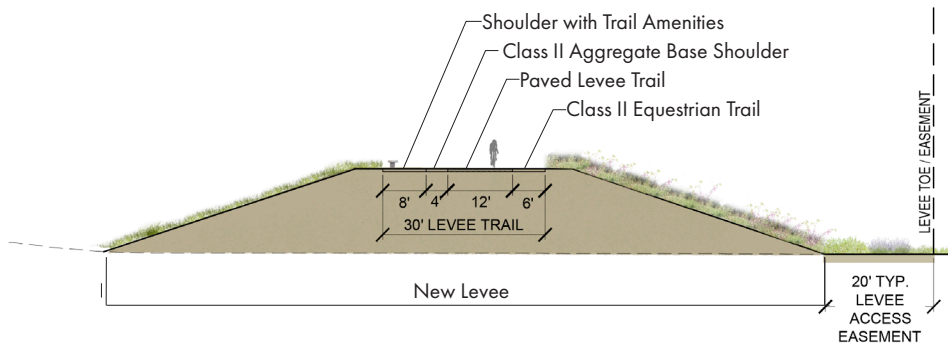
The open space areas on the waterside of elevated levees are maintained and overseen by Reclamation District 2062. The open space will be maintained to remain in a natural state as much as possible, using hydro-seeding and erosion control methods. Public access is allowed along the 30' wide elevated levee trails for recreational and maintenance uses. No permanent barriers are planned to restrict public access to the waterside open spaces. However, there will be no recreational trails or amenities in these areas to encourage public access.

FIGURE 3.1 - TYPICAL TRAIL SECTIONS (ILLUSTRATIVE ONLY)

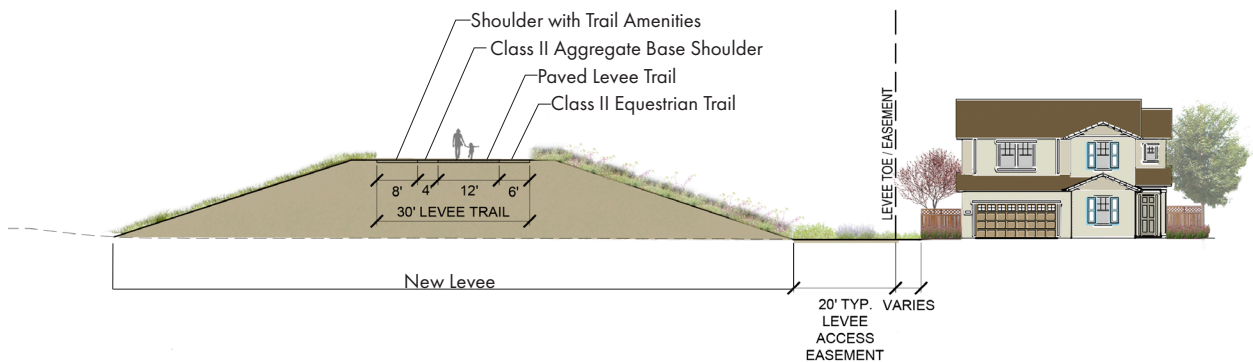
Typical Open Space on Waterside of Levee Trail



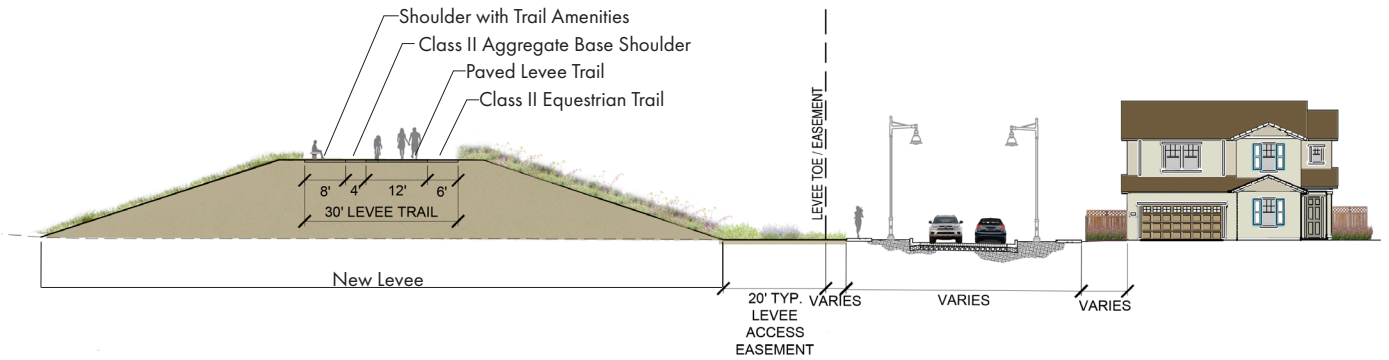
Typical levee trail



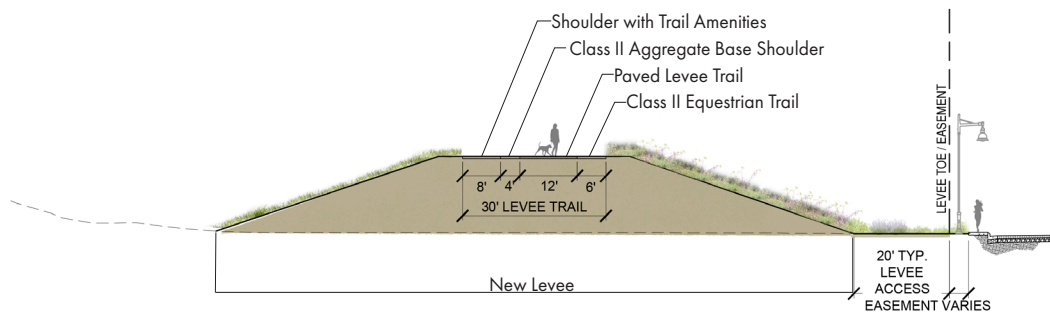
Levee trail along private property



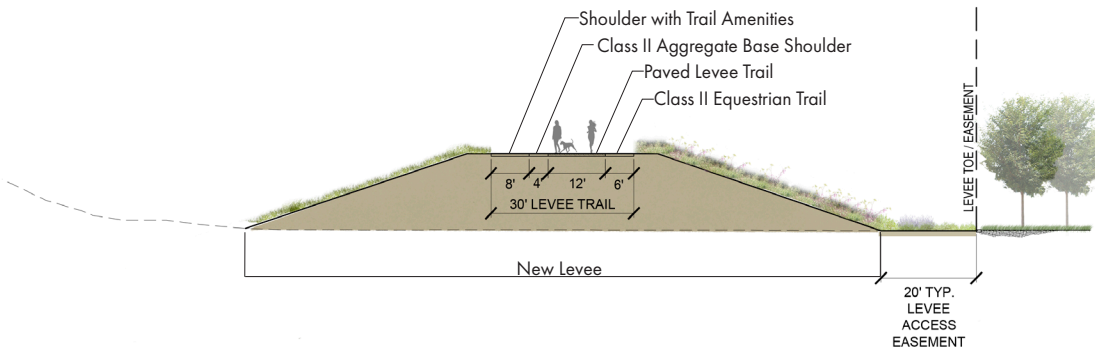
Levee trail along a street frontage



Levee trail along a cul-de-sac



Levee trail along a park



Levee trail along open space

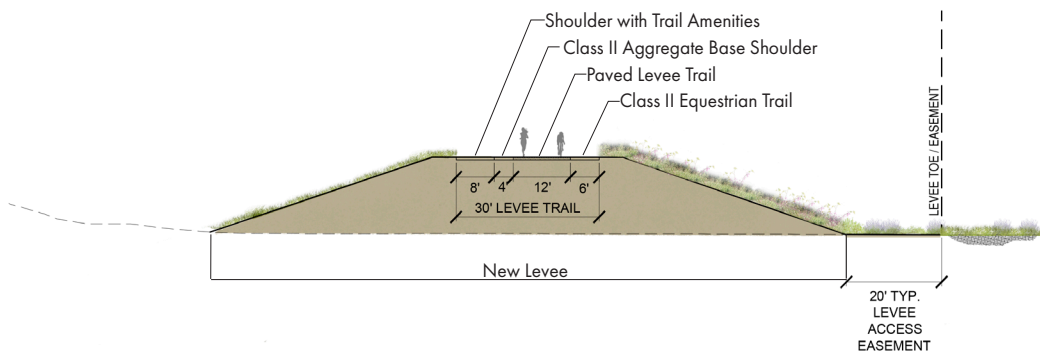


FIGURE 3.2 - TYPICAL TRAIL PLAN VIEW

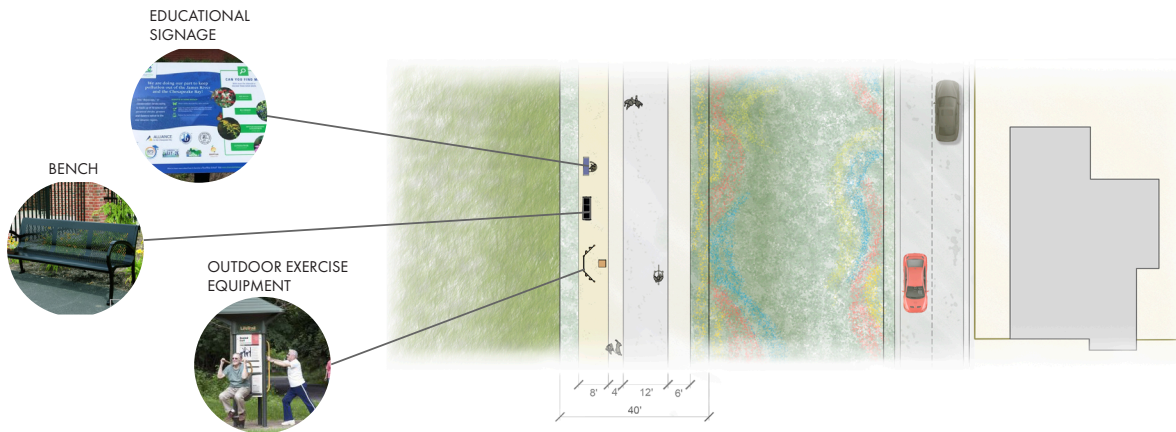
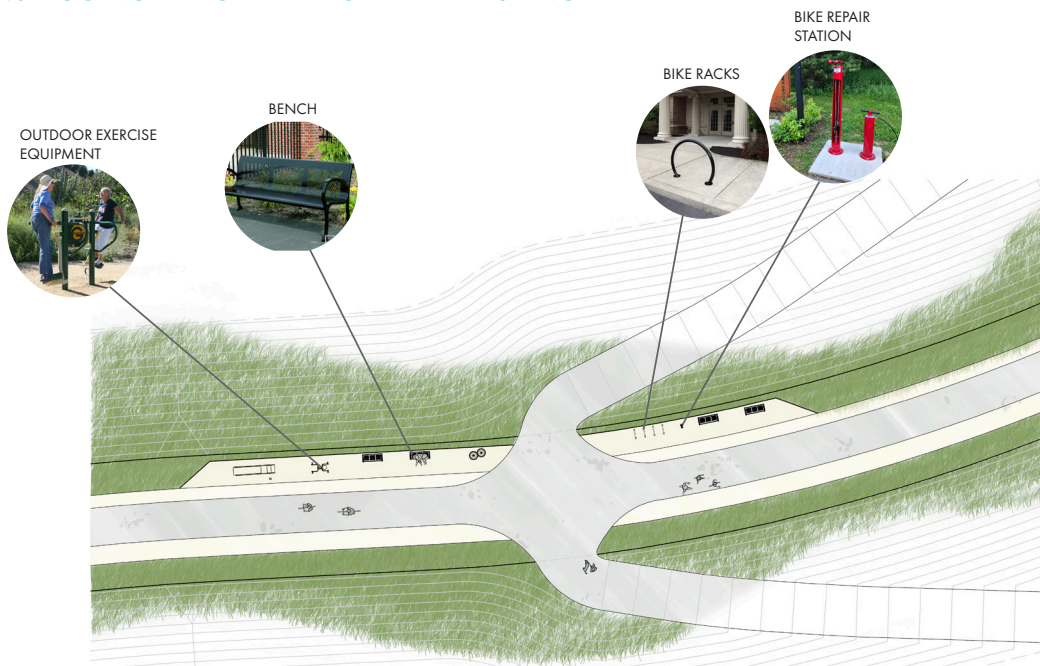


FIGURE 3.3 - CONCEPT FOR A TYPICAL TRAIL REST NODE



Trail Surfacing

The paved section of trail will be constructed of 3" of asphalt over 6" of road base. There will be no painted striping on the surface of the trail. Shoulders of the trail will be constructed with 6" of compacted Class II aggregate base. Slopes of the levee will be stabilized with erosion control hydroseed. There will be no ornamental landscape or irrigation systems constructed in conjunction with any permanent levee trails.

Trail Access

The following figure highlights pedestrian and non-motorized access to the levee trail, which is crucial to the concept of a walkable community. To this end, the levees have been designed with multiple access points at strategic neighborhood locations and to facilitate required levee maintenance. In order to accommodate bike groups, equestrian riders, and other groups that require staging areas, strategic off-site parking locations will be available for access to the trail. These off-site access locations, designated with appropriate signage, won't necessarily coincide with parks or open spaces, but are more closely associated with trail access points and adjacent uses with adequate parking. These sites may include Community Park C1, the transit oriented development area, the employment center, and the high school site. The transit oriented development area has been identified as a potential equestrian

staging area location due to its proximity and access to the levee trail. If equestrian access is required prior to development of the staging area, an interim location can be determined to provide parking, potable water access and other amenities necessary.



3.7 PLANTING

Plant materials for all parks and open spaces will be selected from Table 3.1 - Parks & Open Space Plant Species List. Alternative species may be substituted or added and will be considered on a project by project basis by the agency listed in Table 4.3 - Agency Review Table. Substitutions will be based on the suitability of the species in terms of similarity of theme, characteristics, size, form, tolerance of climatic conditions, soil requirements and water usage. Plant species have been selected to mimic existing characteristics and habitat of the delta waterways and vegetated agricultural hedgerows. Plant material selection will strongly consider the use of drought-tolerant, durable and long-lived species that give the appearance and imagery of the Delta Valley. Species are well adapted to the climatic conditions and soil types typical of the River Islands

Development. Large naturally shaped flowering shrubs species should be selected to mimic the image of traditional hedgerows typical of the surrounding agricultural region. Flowering species that create year-round interest are of high preference. Plant and tree selections do not include invasive characteristics, such as: surface roots that can spread, creating trip hazards or that can be destructive to surrounding curbs and walks, species that produce large wind blown seed varieties that become invasive or destructive, varieties that are extremely allergenic and varieties with toxic properties that can be digested by humans or animals.

While fruiting varieties of trees or shrubs may hearken to the true agricultural use of the River Islands project, the use of such species can create maintenance challenges and become problematic as litter creating rodent or pest problems. These species will be avoided except in specific locations where maintenance and control can be exercised. Plant selections have been determined based upon natural shape of species with minimal pruning or maintenance. Shrubs will be used as a screen for fences or utility structures in parks and open spaces. Evergreen plant material as a background is preferable to maintain year-round screening, however, the usage of decorative deciduous plant species is desirable and recommended with care being taken to maintain year-round interest and structure. Spacing of plant material will be made based upon the species being utilized to create fullness and allow for ultimate growth impact.

The use of traditional "lawn" species and spaces will be limited to parks and public open spaces that encourage active recreational use. When "lawn" species are utilized, varieties will include deep rooting species that use less water than traditional varieties. The use and application of "lawn" species will follow the guideline and requirements set for in AB1881. Where bio-swales will be incorporated, species will be selected that filter and slow the movement of water from curb inlets to drain inlets. Species will be tolerant of flooding and will be irrigated to maintain an alternative appearance year-round.

Tree varieties have been selected to imitate a rural Delta Valley aesthetic. Evergreen varieties will be used to frame and give additional interest year-round to selected areas. Flowering or accent trees will be selected for year-round interest through flower characteristics, branching patterns, bark color and shape.

TABLE 3.1 - PARKS & OPEN SPACE PLANT SPECIES LIST

APPROPRIATE PLANT SPECIES FOR PARKS AND OPEN SPACES WITHIN RI PHASE 2							
Parks	Trail*	Botanical Name	Common Name	Use Height	Use Width	Water Use	Attributes
Trees							
	✓	<i>Acer negundo</i> var. <i>californica</i>	California Box Elder	30'-50'		M	
✓		<i>Acer rubrum</i> 'Armstrong', 'October Glory', Redpointe'	Armstrong Red Maple	40'-50'	15'	H	
✓		<i>Aesculus carnea</i>	Red Horsechestnut	40'	30'	M	
	✓	<i>Alnus rhombifolia</i>	White Alder				
✓		<i>Arbutus unedo</i>	Strawberry Tree	8'-25'	8'-25'	L	
✓		<i>Arbutus</i> 'Marina'	Marina' Strawberry Tree	20'-30'	20'-30'	L	
✓		<i>Arbutus marina</i> - 'Multi-trunked'	Strawberry Tree	15'-30'	15'-20'	L	Dark green oblong foliage with rosy pink fall flowers
✓		<i>Betula jacquemontii</i> (<i>Betula utilis jacquemontii</i>)	White Barked Himalyan Birch	40'-60'	25'-30'	H	
✓		<i>Carpinus betulus</i> 'Fastigiata'	European Hornbeam	40'	30'	M	
✓		<i>Catalpa speciosa</i>	Western Catalpa	40'-60'	20'-40'	M	
✓		<i>Cercidium</i> x 'Desert Museum'	Desert Museum Palo Verde	20'	20'	?	
✓		<i>Cercis canadensis</i> 'Oklahoma'	Eastern Redbud	25'-35'	25'-35'	M	
✓		<i>Cercis occidentalis</i>	Western Redbud	10'-20'	10'-20'	VL	
	✓	<i>Cercocarpus betuloides</i>	Island Mountain Mahogany	5'-20'	5'-20'	VL	
✓		<i>Chilopsis linearis</i> 'Monhews'	Timeless Beauty Desert Willow	15'-20'	15'-20'	VL	Fragrant showy purple flowers
✓		<i>Cupressus arizonica</i>	Arizona Cypress	40'	20'	VL	
✓		<i>Ginkgo biloba</i> 'Autumn Gold' (Male only)	Ginkgo, 'Autumn Gold'	35'-40'	25'-35'	M	Use male only varieties
✓		<i>Koelreuteria paniculata</i>	Goldenrain Tree	20'-35'	25'-40'	M	
✓		<i>Lagerstroemia indica</i> 'Dynamite'	Crape Myrtle	15'-25'	15'-20'	L	Red Flowers
✓		<i>Lagerstroemia</i> x <i>fauriei</i> 'Natchez'	Crape Myrtle	20'-30'	15'-20'	L	
✓		<i>Lagerstroemia</i> x <i>faurei</i> 'Natchez' - 'Multi-Trunked'	Natchez Crape Myrtle	15'-20'	12' Wide	L	White flowers
✓		<i>Lagerstroemia</i> x <i>fauriei</i> 'Muskogee'	Crape Myrtle	20'-30'	15'-20'	L	
✓		<i>Magnolia soulangiana</i> 'D.D. Blanchard'	Tulip Magnolia	50'	25'-35'	M	
✓		<i>Olea europaea</i> 'Swan Hill'	Swan Hill Olive	25'-30'	25'-30'	VL	
✓		<i>Parkinsonia aculeata</i>	Mexican Palo Verde	15'-20'	10'-20'	VL	
✓		<i>Pinus pinea</i>	Stone Pine			L	
✓		<i>Pinus radiata</i>	Monterey Pine	80'-100'	25'-35'	M	
✓		<i>Pistacia chinensis</i> 'Pearl Street', 'Red Push' or 'Keith Davey'	Chinese Pistache Varieties	30'-60'	50'	L	

APPROPRIATE PLANT SPECIES FOR PARKS AND OPEN SPACES WITHIN RI PHASE 2							
Parks	Trail*	Botanical Name	Common Name	Use Height	Use Width	Water Use	Attributes
✓		Platanus acerifolia 'Bloodgood'	London Plane	40'-50'	25'-30'	M	
✓		Platanus X acerifolia 'Columbia'				M	
✓		Platanus racemosa	California Sycamore	50'-90'	30'-50'	M	
	✓	Populus alba 'Pyramidalis'	Seedless Bolleana Poplar	50'	15'	M	
	✓	Populus fremontii	Fremont Cottonwood	40'-60'	30'-40'	M	
	✓	Populus nigra 'Italica'	Lombardy Poplar	100'	15'-30'	M	
✓		Prosopis glandulosa 'Maverick'	Texas Mesquite	25'-30'	25'-30'	L	
✓		Quercus agrifolia	Coast Live Oak	20'-70'	40'-80'	VL	
✓		Quercus coccinea	Scarlet Oak	60'-80'	40'-60'	M	
✓		Quercus douglasii	Blue Oak	30'-50'	40'-70'	VL	
✓		Quercus ilex	Holly Oak	40'-60'	40'-60'	L	
✓		Quercus lobata	Valley Oak	50'-75'	50'-80'	L	
✓		Quercus muehlenbergii	Quinkpin Oak			?	
✓		Quercus robur	English Oak	50'-60'	30'	M	
✓		Quercus suber	Cork Oak	30'-60'	30'-60'	L	
✓		Quercus virginiana	Southern Live Oak	40'-80'	60'-90'	M	
✓		Quercus wislizenii	Interior Live Oak	30'-70'	30'-70'	VL	
✓		Robinia 'Purple Robe'				L	
	✓	Salix goodingii	Gooding's Black Willow	10'-25'		H	
	✓	Salix laevigata	Red Willow	15'-30'		H	
	✓	Salix lucida var. lasiandra	Pacific Willow			H	
✓		Schinus molle	California Pepper tree	25'-40'	25'-40'	L	
✓		Tilia cordata 'Greenspire'	Littleleaf Linden	30'-50'	15'-30'	M	
✓		Ulmus parvifolia 'Drake'	Chinese Elm	50'-70'	30'-50'	M	
✓		Ulmus wilsoniana 'Frontier'		20'		M	
✓		Ulmus wilsoniana 'Patriot'		30'		L	
✓		Ulmus wilsoniana 'Emerald Sunshine'				L	
✓		Ulmus wilsoniana 'Prospector'				L	
✓		Umbellularia californica	California Laurel	20'-35'	20'-35'	M	
✓		Zelkova serrata 'Green Vase'	Zelkova, Green Vase	50'	50'	M	
Shrubs (Large Background)							
✓		Abelia grandiflora	Glossy Abelia	8'	5'	M	
	✓	Agave filifera				L	
✓		Anisodonteia x hypomandarum	Cape Mallow	4'	4'	M	Purple/pink flowers
✓		Arbutus u. 'Oktoberfest'	Strawberry Tree	6'-8'	6'-8'	L	Dark green foliage

APPROPRIATE PLANT SPECIES FOR PARKS AND OPEN SPACES WITHIN RI PHASE 2							
Parks	Trail*	Botanical Name	Common Name	Use Height	Use Width	Water Use	Attributes
✓		<i>Berberis thunbergii</i>	Japanese Barberry	4'-6'		L	
✓		<i>Buddleja davidii</i>	Butterfly Bush	6'-10'	6'-10'	M	
✓		<i>Carpenteria californica</i>	Bush Anemone	3'-6'		L	
	✓	<i>Cephalanthus occidentalis</i>	Button Willow	3'-15'	3'-15'	M	
✓		<i>Cistus hybridus</i> (<i>Cistus corbariensis</i>)	White Rockrose	2'-5'	2'-4'	L	
✓		<i>Cistus ladanifer</i> (<i>Cistus ladaniferus maculatus</i>)	Crimson-Spot Rockrose	3'-5'	3'-5'	L	
✓		<i>Cistus x purpureus</i>	Orchid Roserock	4'	4'	M	Dark pink flowers
	✓	<i>Cornus stolonifera</i> (<i>sericea</i>) 'Bailey'	Red-Twigged Dogwood	6'-8'	6'-8'	H	
✓		<i>Cotinus coggygria</i> (<i>Rhus cotinus</i>) 'Purpureus'	Smoke Bush	15'	15'	L	
✓		<i>Dodonaea viscosa</i> 'Purpurea'	Purple Hopseed Bush	10'	8'-10'	L	Red/burgundy foliage
✓		<i>Elaeagnus pungens</i>	Silverberry	6'-15'		L	
	✓	<i>Eriogonum fasciculatum</i>	California Buckwheat	1'-3'	4'	L	
✓		<i>Fremontodendron californicum</i>	California Flannelbush			VL	
✓		<i>Grevillea x 'Noell'</i>	Noell Grevillea	5'	6'	L	Glossy lime green needle-like foliage with pink and white flowers
✓		<i>Heteromeles arbutifolia</i>	Toyon	6'-10'		VL	
✓		<i>Laurus nobilis</i>	Bay Laurel	12'-40'		L	
✓		<i>Lavatera maritima</i>	Tree Mallow	6'	6'	L	Gray-Green foliage with light pink/purple flowers
✓		<i>Lavatera thuringiaca</i> 'Mrs Bamsley'	Mallow			L	
✓		<i>Leucophyllum frutescens</i> 'Compactum'	Texas Ranger	4'-5'	4'-5'	L	
✓		<i>Lupinus arboreus</i>	Yellow Bush Lupine	5'-8'	5'-8'	L	
✓		<i>Mahonia aquifolium</i>	Oregon Grape	6'		M	
✓		<i>Nerium oleander</i> 'Little Red'	Dwarf Red Oleander	4'	4'	L	Red flowers
✓		<i>Nerium oleander</i> 'Petite Pink'	Dwarf Pink Oleander	4'	4'	L	Pink flowers
✓		<i>Osmanthus fragrans</i>	Sweet Olive	10'	10'-12'	M	
✓		<i>Osmanthus x fortunei</i>	Hybrid Tea Olive	6'-20'	10'-12'	M	
	✓	<i>Philadelphus lewisii</i>	Wild Mock-orange	4'-10'	6'-10'	M	
	✓	<i>Philadelphus</i> 'Belle Etoile'	Purple Spot Mock Orange	5'-7'	5'-7'	M	
✓		<i>Phormium tenax</i> 'Atropurpureum'	New Zealand Flax	4'-5'	4'-5'	L	Burgundy-bronze bladed foliage
✓		<i>Phormium</i> 'Yellow Wave'	Yellow Wave New Zealand Flax	4'-5'	4'-5'	M	Yellow and lime green bladed foliage
✓		<i>Rhapiolepis indica</i>	India Hawthorn	4'-5'		L	

APPROPRIATE PLANT SPECIES FOR PARKS AND OPEN SPACES WITHIN RI PHASE 2							
Parks	Trail*	Botanical Name	Common Name	Use Height	Use Width	Water Use	Attributes
✓		Rhaphiolepis indica 'Clara'	India Hawthorn	3'-5'	3'-5'	L	
✓		Rhaphiolepis indica 'Springtime'	India Hawthorn	4'-6'		L	
✓		Raphiolepis umbellata	Yeddo Hawthorn	4'-6'	4'-6'	L	
✓		Rhamnus californica'Mound San Bruno'	San Bruno Coffeberry	3'-15'	8'	L	
✓		Rhamnus californica 'Eve Case'	Dwarf Coffeberry	4'-8'	4'- 6'	L	
✓		Rhamnus crocea	Redberry				
✓		Rhamnus tomentella	Hoary Coffeeberry			L	
	✓	Ribes aureum (var. gracillimum)	Golden Currant	3'-6'		L	
✓		Ribes sanguineum	Pink Flowering Currant	4'-12'		M	
	✓	Rosa californica 'Plena'	California Wild Rose			L	
✓		Teucrium fruticans	Bush Germander	5'-6'	5'-6'	L	Gray leaves, lavender flowers
✓		Teucrium fruticans	Bush Germander	4'-8'	4'-10'	L	
✓		Viburnum t. 'Spring Bouquet'	Spring Bouquet Viburnum	4'-6'	4'-6'	M	Deep green leathery foliage with tight clusters of pink buds and white flowers
✓		Xylosma congestum	Shiny Xylosma	8-10'	8-10'	L	
Shrubs (Medium Foreground)							
✓		Berberis thunbergii 'Cruzam'	Crimson Ruby Japanese Barberry	2'	2'	M	Deep red/burgundy foliage
✓		Callistemon citrinus 'Compacta'	Bottlebrush			L	
✓		Callistemon citrinus 'Little John' or 'Captain Cook'	Dwarf Bottlebrush	3'	3'	L	
✓		Coleonema pulchrum	Pink Breath of Heaven	3'-4'	4'	M	Light green foliage with tiny pink flowers
✓		Mahonia aquifolium 'Compacta'				M	
✓		Myrsine africana	African Boxwood	3'-8'	3'-6'	L	
✓		Punica granatum 'Nana'	Dwarf Pomegranate	3'	5'	L	Orange flowers
✓		Rhaphiolepis indica 'Ballerina'	Dwarf Pink Indian Hawthorne	2'	4'	L	Pink flowers
✓		Salvia greggii / Salvia x jamensis	Autumn Sage	3-4'	2'	L	
✓		Salvia greggii 'Alba'		1'-4'	1'-4'	L	
✓		Salvia microphylla	Mint Bush Sage	3-5'	4'-8'	M	
✓		Spiraea bumalda	Spiraea	2'-3'	3'-4'	M	
✓		Spiraea x bumalda 'Goldflame'	Goldflame Spirea	3'-4'	4'	M	Yellow-green foliage with pink/red flowers
✓		Viburnum davidii	David Viburnum	3'	3'	M	Large glossy green deep veined foliage, pink buds and white flowers

APPROPRIATE PLANT SPECIES FOR PARKS AND OPEN SPACES WITHIN RI PHASE 2							
Parks	Trail*	Botanical Name	Common Name	Use Height	Use Width	Water Use	Attributes
✓		Zauschneria californica	California Fuschia	3'	3'-4'	L	Gray leaves w/ red flowers
Shrubs (Accents)							
	✓	Achillea millefolium californica	Yarrow	1-3'	1-3'	L	
	✓	Achillea millefolium rosea 'Island Pink'	Pink Yarrow	1'-3'		L	
	✓	Achillea tomentosa	Woolly Yarrow	6"		L	
	✓	Aloe species		varies		L	
	✓	Amsonia tabernaemontana	Blue Star Flower	2'-3'		?	
	✓	Aquilegia eximia	Serpentine Columbine	2'	1-3'	L	
✓		Artemisia 'Powis Castle'	Powis Castle Sagebrush	3'	6'	L	
	✓	Asclepias fascicularis	Narrow-leaved Milkweed	1'-3'	1'	?	
✓		Dietes bicolor	Fortnight Lily, Bicolor Iris			L	
✓		Erigeron karvinskianus	Santa Barbara Daisy	1'-2'	3'-5'	L	White with some pink flowers
✓		Helleborus x hybridus	Lenten Rose			M	
✓		Hemorcallis x 'Stella de Oro'	Stella De Oro Dwarf Daylily	2'	2'	M	Heavy clusters of large yellow flowers
✓		Hesperaloe parviflora	Coral Yucca	2'	2'	/	
✓		Heuchera 'Lillian's Pink'	Lillian's Pink Coral Bells			/	
✓		Heuchera 'Rosada'	Rosada Coral Bells			?	
✓		Heuchera sanguinea	Coral Bells			M	
	✓	Iris 'Canyon Snow'	Canyon Snow Pacific Iris			?	
✓		Kniphofia uvaria	Red Hot Poker			M	
✓		Lavandula angustifolia	English Lavender	8"-2'	8"-2'	L	
✓		Lavandula a. 'Buena Vista'	English Lavender	2'	2'	L	Gray-green foliage with deep violet blue flowers
✓		Lavandula 'Goodwin Creek Grey'	Goodwin Creek Lavender			L	
✓		Lavandula stoechas 'Otto Quast'	Otto Quast Spanish Lavender	18"-3'	2'	L	
✓		Liriope muscari	Lily Turf			M	
✓		Lupinus albifrons	Bush Lupine	3-5'	2-3'	L	
✓		Penstemon heterophylus 'Margarita'	Foothill Penstemon	1'-3'	1'-2'	L	Lavender flowers
✓		Penstemon species				M-L	
✓		Penstemon spectabilis	Showy Penstemon	3'		M-L	
✓		Perovskia a. 'Little Spire'	Russian Sage	2'	2'	L	Vertical spikey gray-green foliage with lavender-blue flowers

APPROPRIATE PLANT SPECIES FOR PARKS AND OPEN SPACES WITHIN RI PHASE 2							
Parks	Trail*	Botanical Name	Common Name	Use Height	Use Width	Water Use	Attributes
✓		Phormium tenax 'Apricot Queen'	New Zealand Flax	3'	4'	L	Yellow wit green margined bladed foliage
✓		Phormium tenax 'Dusky Chief'	New Zealand Flax	5'-6'	4'-5'	L	Reddish brown bladed foliage
✓		Phormium tenax 'shirazz'	New Zealand Flax			L	
✓		Salvia				L-M	
✓		Salvia 'Bee's Bliss'	Bee's Bliss Salvia	1'-2'	8'	M	
✓		Salvia m. 'Hot Lips'	Hot Lips Sage	3'	3'	L	Red/white flowers
✓		Salvia 'Mrs. Beard'	Mrs. Beard Salvia	2'	3 - 6'	L	
✓		Salvia sonomensis	Creeping Sage			L	
✓		Salvia spathacea	Hummingbird Sage			L	
	✓	Solidago californica	California Goldenrod	1-3'	18"-3'	L	
	✓	Symphyotrichum chilense	California aster	1-3'		L	
✓		Tulbaghia violacea	Society Garlic	18"	18"	L	Purple flowers
✓		Tulbaghia v. 'Silver lace'	Variiegated Society Garlic	18"	18"	L	Silver/white blades w/ purple flowers
✓		Zauschneria californica 'Catalina'	Island California Fuschia	1-3'	1-3'	L	
✓		Zauschneria cana	California Fuschia	2-3'	18"-3'	L	
Shrubs (Grasses)							
✓		Bouteloua gracilis	Blue Grama Grass	6"-18"	6"-1'	L	
✓		Calamagrostis x acutiflora 'Karl Foerster'	Karl Foerster's Feather Reed Grass	2'	2'	L	Stunning vertical feathery plumes, turn golden in fall
✓		Carex barbarae	White Root Sedge	1'-3'	1'-3'	M	Deep green native meadow grass
✓		Carex divulsa	Berkeley Sedge			L	Deep green clumping evergreen grass
✓		Carex pansa	California Meadow Sedge	3'-4"		M	
✓		Carex praegracilis	Clustered-field Sedge	1'	6"	M	
✓		Carex testacea	Orange Sedge	18"-24"	18"-24"	M	Evergreen, green and orange spring / summer, vibrant orange in winter
✓		Deschampsia caespitosa	Tufted Hair Grass	1'-3'	1'-3'	L	
✓		Deschampsia elongata	Slender Hair Grass	3'		L	
✓		Eleocharis macrostachys	Spike Rush	3'	2'	L	
✓		Elymus glaucus 'Anderson'	Blue Wild Rye	2-3'	2'	L	
✓		Elymus triticoides	Creeping Wildrye			L	
✓		Eschscholzia californica	California Poppy	1'	1.5'	VL	
✓		Festuca californica	California Fescue	2'-3'	2-3'	M	

APPROPRIATE PLANT SPECIES FOR PARKS AND OPEN SPACES WITHIN RI PHASE 2							
Parks	Trail*	Botanical Name	Common Name	Use Height	Use Width	Water Use	Attributes
✓		<i>Festuca idahoensis</i> 'siskiyou blue'	Blue Bunch Grass	14"	10"	L	
✓		<i>Festuca mairei</i>	Atlas Fescue	2'-3'	2'-3'	L	Evergreen clumping yellowish gray-green foliage
✓		<i>Festuca occidentalis</i>				M	
✓		<i>Festuca ovina</i> 'Glauca'	Elijah's Blue, Blue Festuca	4"-10"	6"	M	
✓		<i>Festuca rubra</i>	Red Fescue	3"-12"	6"	M	
✓		<i>Grindelia camporum</i>	Gum Plant	1'-3'	1'-3'	L	
✓		<i>Helictotrichon sempervirens</i>	Blue Oat Grass	2'-3'		L	
✓		<i>Hordeum brachyantherum</i> 'Californicum'	Meadow Barley			VL	
	✓	<i>Imperata cylindrica</i> 'Rubra'	Japanese Blood Grass	1'-2'		H	
	✓	<i>Juncus balticus</i> (<i>balticus</i> ?)	Baltic Rush	3'		H	
	✓	<i>Juncus effusus</i>	Pacific Rush	3'-6'	3'	H	
	✓	<i>Juncus patens</i>	CA Gray Rush	2'	2'	H	
	✓	<i>Leersia oryzoides</i>	Rice Cutgrass			M	
✓		<i>Leymus condensatus</i> 'Canyon Prince'	Canyon Prince Wild Rye	2'-4'	2'	VL	
✓		<i>Leymus triticoides</i> 'Grey Dawn'	Creeping Wild Rye	2'	18"	VL	
✓		<i>Lomandra l.</i> 'Breeze'	Dwarf Mat Rush	2'-3'	2'-4'	L	
✓		<i>Melica imperfecta</i>	Coast Melic Grass, Oniongrass	1'-2'	1'-2'	VL	
✓		<i>Melica californica</i>	Melica	4'		?	
✓		<i>Miscanthus sinensis</i>	Japanese Silver Grass	5'-6'	3'-4'	H	
✓		<i>Miscanthus sinensis</i> 'Morning Light'		5'-6'	3'-4'	H	
✓		<i>Muhlenbergia capillaris</i>	Hairy Awn Muhly	3'	6'	L	
✓		<i>Muhlenbergia dubia</i>	Mexican Deergrass	2'-3'	2'-3'	L	
✓		<i>Muhlenbergia rigens</i>	Deer Grass	3'	3'	L	
✓		<i>Nasella pulchra</i> 'Yolo'	Purple Needle Grass	2'	2'-3'	L	
✓		<i>Pennisetum alopecuroides</i> 'Little Bunny'	Dwarf Fountain Grass	18"	18"	L	Trim to ground in winter
✓		<i>Pennisetum alopecuroides</i> 'Moudry'	Black Fountain Grass	18"-2'	18"-2'	L	
✓		<i>Pennisetum orientale</i>	Oriental Fountain Grass	12"-18"	12-18"	L	
✓		<i>Pennisetum setaceum</i> 'Rubrum'	Red Fountain Grass	3'-4'	3'-4'	L	
✓		<i>Scirpus americanus</i>	Three-square Bulrush	5'	5'	H	
✓		<i>Scirpus actus</i> var. <i>occidentalis</i>	Hardstem Bulrush	5'-8'	5'-8'	H	
✓		<i>Scirpus californica</i>	California Bulrush	6"-10"	6"-10"	H	

APPROPRIATE PLANT SPECIES FOR PARKS AND OPEN SPACES WITHIN RI PHASE 2							
Parks	Trail*	Botanical Name	Common Name	Use Height	Use Width	Water Use	Attributes
✓		<i>Scirpus microcarpus</i>	Small-fruited Bulrush	6"-10"	6"-10"	H	
	✓	<i>Sporobolus airoides</i>	Alkali Sacaton	1'-3'	3'	VL	
✓		<i>Stipa cernua</i>	Nodding Feather Grass	2'-3'	2'-3'	VL	
✓		<i>Stipa pulchra</i>	Purple Needle Grass	1'-2'	1'-2'	L	
✓		<i>Stipa gigantea</i>	Giant Feather Grass	2'-3'	2'-3'	VL	
✓		ETY Mix (<i>Carex Divulsa</i> , <i>Eschscholzia californica</i> , <i>Festuca Idahoensis</i> , <i>Layia platyglossa</i> , <i>Salvia l.</i> "Bee's Bliss", <i>Sysyrinchium idahoensis</i>)	Entry Mix	1'-2'	1'-2'	L	
✓		Native Mow Free Mix (<i>Festuca idahoensis</i> , <i>Festuca rubra</i> , <i>Festuca occidentalis</i>)	No Mow Fescue	12"-18"		M	
Shrubs (Groundcovers)							
✓		<i>Acacia r.</i> 'Desert Carpet'	Desert Carpet Acacia	1'-2'	10'-12'	L	Leathery gray green foliage with puffy yellow ball shaped flowers
✓		<i>Arctostaphylos</i> 'Pacific Mist'		2 1/2'	4'	L	
✓		<i>Artemisia californica</i> 'Montara'	California Sagebrush	18"-5'		L	
✓		<i>Artemesia</i> 'Powis Castle'	Powis Castle Artemesia	3'	5'	M	gray green foliage
✓		<i>Baccharis pilularis</i>	Coyote Bush			L	
✓		<i>Baccharis pilularis</i> 'Pigeon Point'	Dwarf Coyote Brush	6'	6'	L	
✓		<i>Ceanothus griseus horizontalis</i> 'Yankee Point'	Shrub Ceanothus	2'-3'	8'	L	Blue flowers
✓		<i>Ceanothus maritimus</i> 'Valley Violet'	Valley Violet Maritime Lilac			L	
✓		<i>Ceanothus thyrsiflorus</i> 'Skylark'	Blueblossom	3'-6'	5'	L	
✓		<i>Ceanothus</i> 'Concha'				L	
✓		<i>Ceanothus</i> 'Dark Star'	Dark Star California Lilac	5'-6'	8'-10'	L	
✓		<i>Ceanothus</i> 'Joyce Coulter'	Wild California Lilac	3'-5'	8'-10'	L	
✓		<i>Ceanothus</i> 'Ray Hartman'	Ray Hartman California	12'-20'	15'-20'	L	
✓		<i>Cistus salvifolius</i>	Sageleaf Rockrose	2'	6'	L	
✓		<i>Coprosma kirkii</i>	Kirk's Coprosma	2-3'		L	
✓		<i>Cotoneaster dammeri</i> 'Eichholz'	Bearberry Cotoneaster	8"	6'-8'	L	White flowers, red berries
✓		<i>Cotoneaster lacteus</i> (<i>Cotoneaster parneyi</i>)		8'	10'	L	
✓		<i>Cotoneaster microphyllus</i>	Rockspray Cotoneaster	2-3'	6'	L	
✓		<i>Erigeron</i> 'Wayne Roderick'	Wayne Roderick Seaside Daisy	8"	1 1/2'	M	
✓		<i>Erigeron karvinskianus</i>	Santa Barbara Daisy	10"-20"	3'	L	

APPROPRIATE PLANT SPECIES FOR PARKS AND OPEN SPACES WITHIN RI PHASE 2							
Parks	Trail*	Botanical Name	Common Name	Use Height	Use Width	Water Use	Attributes
	✓	<i>Eschscholzia californica</i>	California Poppy	1'	1.5'	VL	
✓		<i>Hypericum calycinum</i>	Aaron's Beard	1'		M	
✓		<i>Hypericum moseranum</i>	Gold Flower	1'		M	
✓		<i>Lessingia filaginifolia</i> var. <i>californica</i> 'Silver Carpet'	Silver Carpet California-Aster			M	
	✓	<i>Lobularia maritima</i>	Sweet Alyssum	2"-12"	8"-12"	M	
	✓	<i>Lupinus microcarpus</i>	Chick Lupine	2 1/2'		M	
	✓	<i>Myoporum parvifolium</i>	Myoporum	6"	9'	L	
✓		<i>Oenothera hookeri</i>	Evening Primrose	1'-3'	1'-3'	L	
	✓	<i>Ribes viburnifolium</i>	Evergreen Currant	3'-6'	12'	L	
✓		<i>Rosa</i> 'Noamel'	Apple Blossom Flower Carpet Rose	2'	3'	M	White/pink flowers
✓		<i>Rosa</i> 'Noare'	Red Flower Carpet Rose	2'	3'	M	Red flowers
✓		<i>Rosa</i> 'Noaschnee'	White Flower Carpet Rose	2'	3'	M	White flowers
✓		<i>Rosa</i> 'Noatraum'	Pink Flower Carpet	2'	3'	M	Pink flowers
✓		<i>Rosmarinus</i> o. 'Irene'	Rosemary	1'-1 1/2'	2"-3"	L	Blue flowers
✓		<i>Rosmarinus</i> o. <i>Prostratus</i>	Dwarf Rosemary	2'	4'	L	Blue flowers
	✓	<i>Sisyrinchium bellum</i>	Blue-eyed Grass	4"-12"	6"-24"	L	
✓		<i>Trachelospermum asiaticum</i>	Asian Jasmine	2'	10'	M	
✓		<i>Trachelospermum jasminoides</i>	Star Jasmine	2'	10'	M	
Vines							
	✓	<i>Aristolochia californica</i>	California Pipevine			L	
✓		<i>Clematis armandii</i> 'Snow Drift'	Evergreen clematis	15-20'		M	
✓		<i>Clytostoma callistegioides</i>	Violet Trumpet Vine			M	
✓		<i>Distictis buccinatoria</i>	Trumpet Vine	20'-30'		M	
✓		<i>Ficus pumila</i>	Creeping Fig	10'		M	
✓		<i>Hardenberdia violacea</i> 'Happy Wanderer'	Hardenbergia Vine	10'		M	
✓		<i>Jasminum polyanthum</i>	Pink Jasmine	20'		M	
✓		<i>Lonicera hispidula</i>	Honeysuckle	3-10'		L	
✓		<i>Macfadyena unguis-cati</i>	Cats Claw	20-40'		L	
	✓	<i>Vitis californica</i>	California Wild Grape	12-30'		VL	
✓		<i>Wisteria sinensis</i> 'Alba' or 'Cooke's Special'				M	

* Trails near waterways, bioswales, or other stormwater related infrastructure

Note: Current conditions and regulations do not allow irrigation, and thus horticultural plantings, to be installed on the levee and within 20' of the levee toe. It is possible that regulations may change, and that other design features such as "fat levees" will be allowed to include irrigation and planting. If conditions and regulations are revised by the State, modifications to landscaping will be considered.

3.8 SITE FIXTURES

CPTED principles emphasize the importance of lighting and overall park maintenance as contributors to perceptions of safety in parks. Investment in basic maintenance and community ownership can change usage patterns for the better. The following guidelines provide best practices for provision of site fixtures to support community goals for safe usable parks.

Lighting

Lighting of public spaces should conform to the Illuminating Engineering Society’s guidelines. These include provision of sufficient lighting for users to discern changes in topography and surface type as well as physical details of approaching figures.

- Motion sensor activated security lighting may be considered for all new park construction and existing park renovation as method of security lighting.
- Parks may be evaluated for feasibility of dimming or motion sensor activated lighting complaint with California Energy Commission Title 24 on a case-by-case basis.
- The Project for Public Spaces emphasizes the importance of not “over-lighting” and area. This creates a harsh adjustment for the eye and deeper shadows just outside the lighting candle for park users.
- Light fixtures will be installed to appropriate heights for usage. In general, Neighborhood parks will not be lighted. Lighting in larger parks may be required for safety and to light sports fields and large areas.
- Neighborhood parks may require lights installed to an appropriate pedestrian height, while sports field lighting will require greater height.
- LED and solar lights offer benefits of low energy consumption with a minimum of construction disruption to the surrounding area. Solar lighting is appropriate for providing light for pedestrian areas and pathways, not large-scale night lighting of parks.
- Though not utilized in most parks, some parks may include decorative bollard lighting and railings as is found throughout the River Islands Development. Typically these have been used along lake frontages, along River Islands Parkway, and at trailhead pocket parks.



Site Furniture

- Site furniture should be attractive and inviting, yet durable enough to withstand heavy use.
- Site furnishings will be manufactured to include River Islands and City logo to reinforce consistent community sense of place.
- Post concise, bilingual signage requiring dog owners to clean up after their animals.
- Add dog waster bag dispensers at prominent entrances and at intervals along pedestrian pathways at park facilities.
- Ensure all playgrounds receive regular safety inspections by a Certified Playground Safety Inspector (CPSI)
- Fixtures should be selected that will discourage lying down. Handrail-divided or curvilinear benches are options.
- Site furniture and other fixtures should discourage skateboarding and activities in non-designated areas.
- Select fixtures that will not create visual obstructions or potential blind spots which could impair surveillance.
- Provide trash receptacles at locations that may be easily monitored and emptied by maintenance staff.
- Park signs will include River Islands logo and City of Lathrop logo to reinforce the commitment to the community.
- Site furniture will be approved by City. Drinking fountains should include an option for dog watering stations where appropriate.

River Islands Standard Furnishings



3.9 CONNECTIVITY

Connecting parks to their users is an important piece of increasing community investment and use of parks facilities. Best practices typically involve locating new parks centrally within a neighborhood or adjacent to other community amenities, such as schools or community centers, in order to increase visibility and use. Alternately, locating walkable streets and bicycle paths to connect parks with other community hot spots provides alternative access for users who cannot or do not prefer to drive. The same efforts may be made to align public transportation stops with parks, in an effort to coordinate parks and trail heads adjacent to public transit.

In the case of River Islands, geographically adjacent amenities such as schools, town center, lakes, and the rivers are opportunities for establishing walkable, bike-able connections. A non-vehicular option to navigate these sites and others within the community might encourage users to walk or bike between natural and cultural amenities firsthand rather than driving between each. Establishing and utilizing levee trails and connecting them to park locations helps establish a non-vehicular connection in River Islands.

Easy pedestrian and non-motorized access to the levee trail is crucial to the concept of a walkable community. Multiple off-site parking options will be available for access to the trail for those who need to travel to an access point for vehicle or horse off-load. An equestrian staging area is proposed near the transit oriented area due to its ample space and access to the levee trail. These off-site access locations, designated with appropriate signage, may be included at Community Park C1, the transit oriented development area, the employment center, and at the high school site.



3.10 ACCESS AND INCLUSION

ADA and Beyond Planning for inclusion

Trends in park development nationwide are beginning to include varied recreation opportunities such that all members of a community may enjoy public recreation facilities. It is standard best practice to comply with all local and federal guidelines for universal accessibility in public spaces per the Americans with Disabilities (ADA) regulations. New projects and retrofits to existing parks and facilities must seek to include all members of the community. In addition to complying with ADA standards for basic accessibility, park designs may include standards from the California State Parks Accessibility Guidelines in order to increase accessibility to its facilities for all users.

Recreation amenities such as walking paths may include signage and wayfinding for persons with visual impairment, while play areas may include accessibility options for caregivers with varied levels of physical ability. Play areas should include solid impact-attenuating surfaces in order to ensure a safe path of travel for all users.

Universal Design and Social Inclusion

In more recent years, park features have moved toward including universal access, social inclusion, and sensory integration to include everyone. Incorporating these elements increases the parks' ability to attract many unique users and increases the functionality of the amenity. Parks and recreation amenities which encourage participation by all residents and visitors, regardless of physical or mental ability, demonstrate investment in the public.

Playground areas provide children space to develop essential emotional, social and physical skills. Therefore, these spaces should include elements appropriate for supporting all facets of childhood development in a safe environment. Cutting-edge studies of children and nature suggest a myriad of benefits in integrating opportunities for spontaneous learning with natural systems into playgrounds. Examples may include non-programmed areas consisting of varied topography and surface materials, planting of trees within the playground space, flexible play space edges to encourage play to extend to other natural areas of the park. As a valuable experience in childhood development, nature play may be explored as a signature resource to be developed.

Seven Principles of Universal Design¹³

- Equitable Use
- Flexible Use
- Intuitive Use
- Perceptible Information
- Tolerance for Error
- Low Physical Effort
- Size and Space for Approach and Use

The National Recreation and Park Association (NRPA) defines three pillars impactful to our communities.

- Conservation
- Health and Wellness
- Social Equity

Social equity in parks refer to a person’s ability to access health and wellness benefits associated with using the park. Universal design enables groups in society who struggle with physical or mental abilities to fully access and utilize parks and recreational spaces. The following six areas of park design contribute to creating socially inclusive spaces with universal accessibility and sensory integration.

- 1. Facilities:** parking areas, pathways, restrooms, public buildings, and access to water.
- 2. Parking:** provide more than the minimum ADA requirements for parking spaces. Provide accessible parking throughout the park and located near inclusive play areas. This provides numerous access points available to all users.
- 3. Pathways:** Exceed ADA width guidelines Wider pathways allow for easier group access and multiple wheeled devices like wheelchairs and strollers.
- 4. Restrooms** Locate restrooms near ball fields and inclusive play areas. Include family restrooms large enough to house a full-size changing table, and large enough for a caregiver to attend to a full-size adult.
- 5. Splash Pads:** Access to pools and water areas can benefit individuals with different disabilities. Splash pads are a great way to provide easy access to water. Actuators should be planned for locations and heights that are accessible.
- 6. Playgrounds:** Children with disabilities are one of the largest under served minority groups in our nations. 8.9% of children between the ages of 3 and 21 years old have a disability. Of these, approximately 1.1% will have a physical disability, 1.1% will have a sensory disability, 19.1% will have a communicative disability, 11.2% will have a social/emotional disability, and 53.9% will have an intellectual disability. Additionally, 2.2% will have multiple disabilities and 10.1% will have chronic health impairment such as cancer. Disability is often misconstrued as inability to experience play because of limitation form impairment. With over 16% of the local population of





children 5 and up having some sort of disability, and over 27% of the local population aged 18 and under, the need for a place to play together regardless of physical or mental limitations is evident. When feasible and when budgets allow socially inclusive and sensory integrated play principals as noted below will be used.

- Comprehensive and Balances Sensory Play opportunities: Sight, Smell, Sounds, Touch, Taste, Interoceptive, Vestibular, and Proprioceptive.
- Cozy spaces: Areas designed to escape sensory overload and re-engage after self-regulation.
- Unitary System Impact Attenuating Surfaces: For unimpeded access to recreation
- Shade Play: Areas must have ample shade to provide respite from heat.
- Diversity: Provide diversity in play opportunities that exceed ADA minimums (i.e. types, materials, grasping requirements, level of difficulty, elevated vs ground level)
- Cognitive Simplicity: Play spaces should be easy to navigate with recognizable landmarks and wayfinding.
- Social Play Opportunities: For social interaction and play that promote multi-users.
- Intergenerational Play: Activities that encourage multiple generations to play together and interact.
- Fencing: Some children on the autism spectrum and with disabilities have a tendency to bolt from the playground. The playground should be fenced to keep children from running onto nearby roads, canals, and/or other hazards.
- Allergens: Select plant species that will be plant near playgrounds and parks that produce low levels of allergens and are not irritant to skin when touched. The Ogren's Allergy Scale or OPALS Scale can be used to determine this.

Playground Surfacing

The primary safety surfacing system used in the River Islands Development is engineered wood fiber (EWF). This surface has been used in all the Phase 1 parks helping to maintain and enhance the natural environment theme

Resources

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The Center for Universal Design (1997). *The Principles of Universal Design*. Version 2.0 Raleigh, NC: North Carolina State University



CHAPTER 4

PROPOSED PARKS MASTER PLAN &
PARK CONCEPT PLANS

4.1 CITY OF LATHROP PARKS AND OPEN SPACE GENERAL PLAN REQUIREMENTS

The Lathrop General Plan calls for a network of open spaces which include neighborhood parks, community parks, and recreation corridors that run along waterbodies or connect major components of the overall park system. This system will in part follow along boundary levees and sloughs as well as the river system, and be made up of pedestrian and bike trails, open space and formal parks. Irrigation of open spaces will implement recycled water distributed through a purple pipe system to reduce the amount of potable water used. Some parks will be adjacent to schools to maximize their usefulness for the community, while others will be standalone parks separate from educational facilities. Wildlife habitat including wetlands have been created to enhance natural habitat, which will aid in resource management of the planning area.

4.2 PARK ACREAGE & SERVICE AREA STANDARDS

Condition 116 of Vesting Tentative Map 3694 requires a minimum number and size (in acres) of various recreational facilities for Phase 1 of River Islands. The City of Lathrop has had the discretion to substitute certain facilities to provide more flexibility in programming. For instance, a multi-use field may be constructed to accommodate both softball and baseball, but credit could be given for the specific facility shown in Condition 116. Parks that were designed and built as a part of Phase 1 development included mandatory elements required by Condition 116 or otherwise required by the City, and “additional recreational facilities”, facilities that were not required by condition of approval. Phase 2 acreages and facilities/amenities have been calculated and determined separately from the Phase 1 development and will stand apart from any Phase 1 development requirements. Phase 2 requirements are outlined below in Tables 4.1 and 4.2.

Community and neighborhood park acreages for Phase 2 were used to calculate and meet the State’s minimum parkland dedication requirements. Neighborhood Parks must be provided at a rate of 2 acres per 1,000 population and Community Parks at 3 acres per 1,000 populations. The population is estimated by using 3.0 persons per household. The following table summarizes the minimum acreage requirement and shows that the minimum requirement has been met for Phase 2.

TABLE 4.1 - QUIMBY ACT CALCULATIONS BY PARK TYPOLOGY

QUIMBY ACT CALCULATION				
	STANDARD	REQUIREMENT	PHASE 2 CALCS	DIFFERENCE
DWELLING UNITS			10,726	
POPULATION	3.0 per DU		32,178	
COMMUNITY PARKS (C)	3 acres/1000	96.53 acres	97.44 acres	+0.91 acres
NEIGHBORHOODPARKS (N)	2 acres / 1000	64.36 acres	64.36 acres	+0 acres
TOTAL C & N PARKS	5 ACRES/1000	160.89 ACRES	161.80 ACRES	+0.91 ACRES

-Sizes and locations of parks subject to change through Neighborhood Development Plan process and subject to City review and approval.



4.3 DISTRIBUTION OF EXISTING PARKS AND FACILITIES

Current maps of River Islands parks were studied based upon established measurements of user walkability and recommended park programming to determine new park locations for Phase 2. Smaller neighborhood parks service the immediate surrounding neighborhood with the minimum being $\frac{1}{4}$ mile radius up to $\frac{1}{2}$ mile radius. Larger community parks have a larger service radius with the range of $\frac{1}{2}$ mile to 1 mile radius.

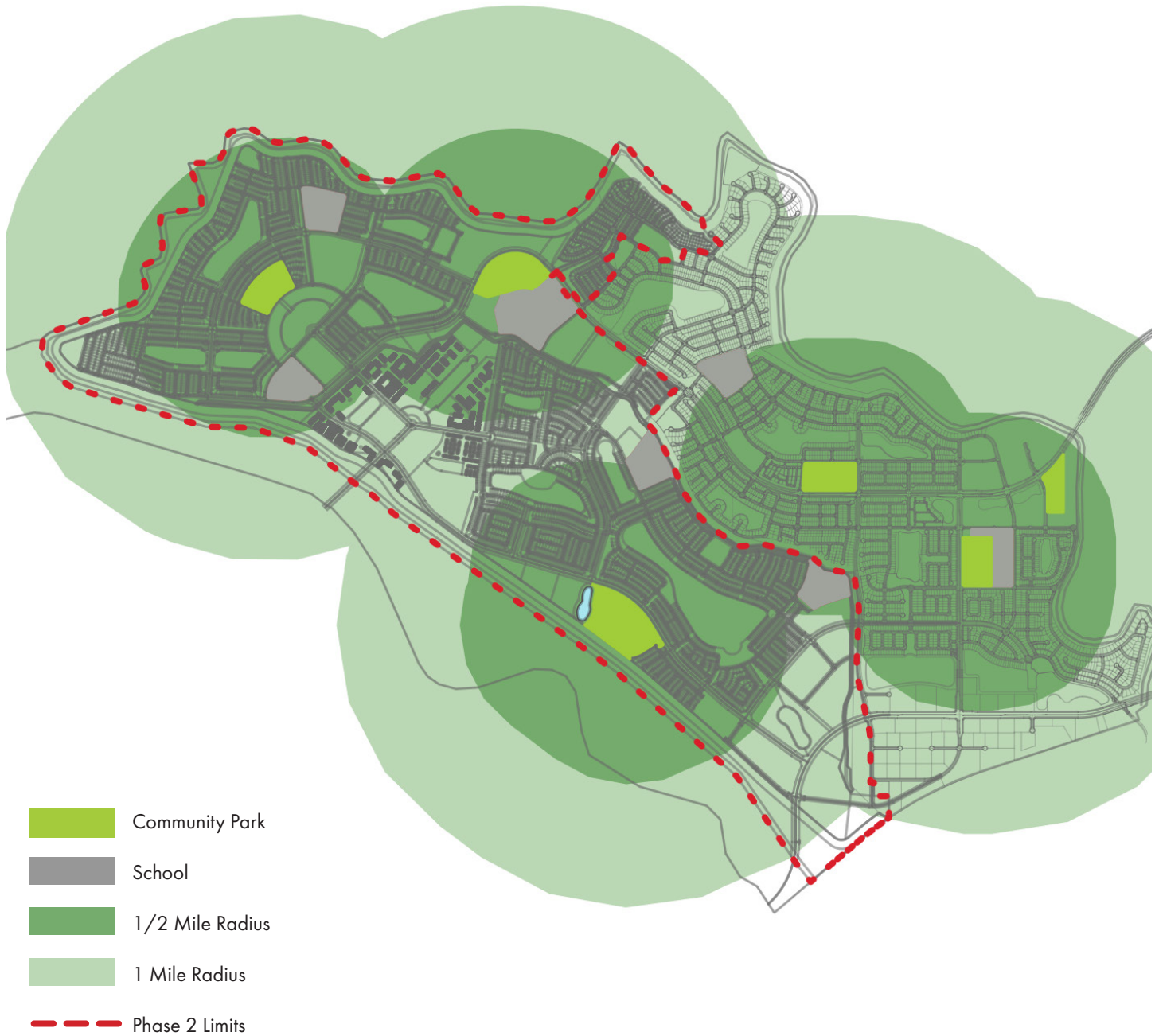
Figure 4.1 shows most areas within Phase 1 and Phase 2 are covered within the $\frac{1}{4}$ mile radius, and all areas are serviced within $\frac{1}{2}$ mile. As can be seen all areas within Phase 2 fall within the $\frac{1}{2}$ mile service range for neighborhood parks, most areas falling within a $\frac{1}{4}$ mile radius.

FIGURE 4.1 - NEIGHBORHOOD PARK SERVICE AREA MAP



Figure 4.2 shows a more even distribution of community parks within Phase 1 than in Phase 2. A small area within the transit oriented development (TOD) areas falls outside the community park buffer. This area will primarily be parking and infrastructure related to the Valley Link train station. With this exception, all areas within the development fall within a 1 mile radius of a Community Park and most areas fall within a ½ mile service area.

FIGURE 4.2 - COMMUNITY PARK SERVICE AREA MAP



4.4 PARK AMENITY BENCHMARKS

The National Recreation and Park Association (NRPA) has long been an organization relied on for guidelines and instruction regarding best practices for parks and open spaces. In 2019 the NRPA published an Agency Performance Review document providing benchmarks for suggested amenity counts based on residents per square mile. Table 4.2 reflects the number of amenities proposed for phase 2 based on the NRPA's published recommendations and Table 4.4 reflects which parks they are located in.

4.5 PROPOSED PARKS & OPEN SPACE SYSTEM

The parks and open space system depicted in this chapter were developed following multiple meetings and reviews of park system components with City of Lathrop staff. In order to clearly identify the components of the system maps were created and are included in this chapter as follows:

- [Figure 4.3 - Phase 2 Park Designation Map](#)
- [Figure 4.4 - Phase 2 Quimby Act Park Designation Map](#)

TABLE 4.2 - PHASE 2 PROJECTED FACILITY REQUIREMENTS

OUTDOOR PARK AND RECREATION FACILITIES PER NRPA PERFORMANCE BENCHMARKS				
	Population	SQ Mile	Residents/SQ Mile	
Phase 2 Population:	32,178	5.17	6,224	
Design Element	Population Standard (1 per shown population)	Design Element Standard for RI Phase 2 Development	Phase 2 Facilities Proposed	Required Standard Met
Court Sports				
Basketball Courts	7,400	4.35	6	✓
Tennis Courts	4,858	6.62	8	✓
Multiuse courts (basketball/volleyball/other)	16,250	1.98	2	✓
Diamond Fields*				
Baseball (Youth)	7,369	4.37	4	✓
Baseball (Adult)	25,834	1.25	1	✓
Softball Adult	13,773	2.34	2	✓
Softball Youth	15,000	2.15	2	✓
Rectangular Fields				
Multi Purpose	9,000	3.58	4	✓
Soccer Youth	8,784	3.66	4	✓
Soccer Adult	15,000	2.15	2	✓
Football	35,572	0.90	1	✓
Other				
Dog Park	55,675	0.58	2	✓
Skate Park	62,325	0.51	0	✓

* 4 lighted fields, 2 deferred from Phase 1

- Figure 4.5 - Phase 2 Circulation Map
- Figure 4.6 - Phase 2 Safe Routes To Schools

4.6 PRELIMINARY PARK CONCEPT PLANS

In order to identify intended locations of required and additional park elements throughout the development, preliminary concept plans have been developed for all Quimby Act related community parks and neighborhood parks. In addition examples of potential pocket parks, and linear parks have also been shown which will be built by River Islands, but not intended to be built in order to meet Quimby Act requirements. All concepts are simple concepts to convey basic park ideas and are not to be misconstrued as final designs. As each neighborhood is developed the park designs will be revisited and adjusted to meet specific neighborhood, budget, and recreational needs. Any changes to the park locations, acreages, or amenities must be approved by the City of Lathrop prior to construction. Modifications to park locations, acreages and/or planned amenities shall be reviewed and approved by the City of Lathrop prior to construction. Amendments to this Parks & Open Space Plan shall be reviewed and approved by the City of Lathrop.

4.7 CITY OVERSIGHT & DEVELOPMENT PROCESS

There are many types of open spaces and recreational facilities incorporated into the River Islands Phase 2 development. While the development is located within the City boundaries, portions of these open spaces are owned by Reclamation District 2062 (RD2062) and all parks and open space are maintained by the River Islands Public Finance Authority (RIPFA). The following table has been provided to clearly delineate the required reviews to be completed by each agency, for each open space type.

The following descriptions describe the review typology listed in Table 4.3.

- Comprehensive Review - Comprehensive review refers to plan review for construction level improvement plans. Prior to Improvement Plans, a Site Plan for Neighborhood Parks and Community Parks shall be reviewed and approved by the City and Parks & Recreation Commission. These plans are typically reviewed and signed by the Public Works Department, Parks & Recreation Department, and the Lathrop Manteca Fire District. The City may determine which departments are required for review based on a project by project basis.
- Courtesy Review - A courtesy review of construction level improvement plans by the Public Works Department for open spaces owned and maintained by RD2062 and/or RIPFA but not in the public right of way.
- Utility Only Review - A review by the Public Works Department of construction level utility plans only, for spaces owned and maintained by RD2062 and/or RIPFA.

TABLE 4.3 - AGENCY REVIEW TABLE

OPEN SPACE TYPE	TYPE OF REVIEW				
	City of Lathrop Comprehensive Review	City of Lathrop Utility Only Review	RD 2062	Parks & Recreation Commission	City Council
Community Park	✓			✓	
Levee Trail	✓		✓		
Neighborhood Park	✓			✓	
Pocket Park		✓	✓		
Linear Trail	✓		✓		
Water Rltd Open Space (non-park)		✓	✓		
Open Space (outside ROW)			✓		
Open Space (ROW Related)	✓		✓		
Parks & Open Space Master Plan	✓			✓	✓

TABLE 4.4 - PHASE 2 PARK FACILITIES BY LOCATION

OUTDOOR PARK AND RECREATION FACILITIES PER NRPA PERFORMANCE BENCHMARKS BY PARK *															
	Park C1	Park C2	Park C3	Park N1	Park N2	Park N3	Park N4	Park N5	Park N6	Park N7	Park N8	Park N9	Park N10	Park N11	Total
Basketball Courts		2	1	1					1			1			6
Tennis Courts	6		2												8
Multiuse courts	1											1			2
Baseball (Youth)	4														4
Baseball (Adult)		1													1
Softball Adult		2													2
Softball Youth		2													2
Multi Purpose							1		2		1				4
Soccer Youth			3					1							4
Soccer Adult							1				1				2
Football			1												1
Dog Park					1				1						2

* Lighted fields are required for (2) adult softball, (1) adult baseball, and (1) lighted soccer/multi purpose field.



FIGURE 4.3 - PHASE 2 PARK DESIGNATION MAP

PARK #	PARK NAME	ACREAGE	QUIMBY ACT	OWNERSHIP
--------	-----------	---------	------------	-----------

Neighborhood Parks ----- 64.36

N1	Neighborhood Park 1	5.97	X	RD 2062
N2	Neighborhood Park 2	6.02	X	CITY
N3	Neighborhood Park 3	4.55	X	CITY
N4	Neighborhood Park 4	4.01	X	CITY
N5	Neighborhood Park 5	5.39	X	CITY
N6	Neighborhood Park 6	7.10	X	CITY
N7	Neighborhood Park 7	5.12	X	CITY
N8	Neighborhood Park 8	5.28	X	RD 2062
N9	Neighborhood Park 9	4.19	X	RD 2062
N10	Neighborhood Park 10	2.73	X	RD 2062
N11	Neighborhood Park 11	4.00	X	CITY
	School Sites*	10.0	X	SCHOOL

Pocket Parks ----- 20.06

P1	Pocket Park 1	0.81		RD 2062
P2	Pocket Park 2	0.31		RD 2062
P3	Pocket Park 3	0.49		RD 2062
P4	Pocket Park 4	0.37		RD 2062
P5	Pocket Park 5	0.33		RD 2062
P6	Pocket Park 6	1.47		RD 2062
P7	Pocket Park 7	0.19		RD 2062
P8	Pocket Park 8	1.13		RD 2062
P9	Pocket Park 9	0.48		RD 2062
P10	Pocket Park 10	0.54		RD 2062
P11	Pocket Park 11	0.46		RD 2062
P12	Pocket Park 12	0.76		RD 2062
P13	Pocket Park 13	1.41		RD 2062
P14	Pocket Park 14	0.65		RD 2062
P15	Pocket Park 15	0.33		RD 2062
P16	Pocket Park 16	0.35		RD 2062
P17	Pocket Park 17	0.89		RD 2062
P18	Pocket Park 18	0.33		RD 2062
P19	Pocket Park 19	0.73		RD 2062
P20	Pocket Park 20	0.29		RD 2062
P21	Pocket Park 21	0.45		RD 2062
P22	Pocket Park 22	0.37		RD 2062
P23	Pocket Park 23	0.79		RD 2062
P24	Pocket Park 24	0.28		RD 2062
P25	Pocket Park 25	0.31		RD 2062
P26	Pocket Park 26	0.22		RD 2060
P27	Pocket Park 27	0.20		RD 2062
P28	Pocket Park 28	0.93		RD 2062
P29	Pocket Park 29	0.86		RD 2062
P30	Pocket Park 30	0.42		RD 2062
P31	Pocket Park 31	0.27		RD 2062
P32	Pocket Park 32	0.20		RD 2062
P33	Pocket Park 33	0.39		RD 2062
P34	Pocket Park 34	1.22		RD 2062
P35	Pocket Park 35	0.12		RD 2062
P36	Pocket Park 36	0.21		RD 2062
P37	Pocket Park 37	0.50		RD 2062

PARK #	PARK NAME	ACREAGE	MILES	QUIMBY ACT	OWNERSHIP
--------	-----------	---------	-------	------------	-----------

Community Parks ----- 97.44

C1	Community Park 1**	31.93	-	x	CITY
C2	Community Park 2	22.50	-	x	CITY
C3	Community Park 3	15.01	-	x	CITY
C4	Levee Trail***	28.00	7.7	x	RD 2062

Linear Parks ----- 48.43

LP1	Linear Park 1	16.65	1.99		RD 2062
LP2	Linear Park 2	2.56	0.28		RD 2062
LP3	Linear Park 3	1.39	0.18		RD 2062
LP4	Linear Park 4	0.35	0.04		RD 2062
LP5	Linear Park 5	5.63	0.46		RD 2062
LP6	Linear Park 6	0.94	0.14		RD 2062
LP7	Linear Park 7	0.72	0.09		RD 2062
LP8	Linear Park 8	1.19	0.16		RD 2062
LP9	Linear Park 9	16.70	1.24		RD 2062
LP10	Linear Park 10	2.29	0.18		RD 2062

Open Space ----- 272.48 acres

Phase 2 Limits



*School Sites Calculation: # of Schools x 2.5 acres = total acres

**Community Park 1 acreage does not include wetland area.

- When a park is adjacent to the levee, a 20' distance from the toe of levee is not included in park acreage calculations.

***Levee Trail Calculation: Total Linear Feet x 30' width = total sq ft (43,560 sq ft = 1 acre)

Total Miles = 7.7 Miles

The 30' wide levee trail has been used to calculate acreage of the Quimby Act and does not include the levee slopes or 20-foot levee toe.

The applicant intends to regrade the federal levee into a waterside bench which will be maintained by Reclamation District 2062. There will be no public access to the levee, only the waterside bench.

FIGURE 4.4 - PHASE 2 QUIMBY ACT PARK DESIGNATION MAP

PARK #	PARK NAME	ACREAGE	QUIMBY ACT	OWNERSHIP
--------	-----------	---------	------------	-----------

Neighborhood Parks ----- 64.36

N1	Neighborhood Park 1	5.97	X	RD 2062
N2	Neighborhood Park 2	6.02	X	CITY
N3	Neighborhood Park 3	4.55	X	CITY
N4	Neighborhood Park 4	4.01	X	CITY
N5	Neighborhood Park 5	5.39	X	CITY
N6	Neighborhood Park 6	7.10	X	CITY
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N9	Neighborhood Park 9	4.19	X	RD 2062
N10	Neighborhood Park 10	2.73	X	CITY
N11	Neighborhood Park 11	4.00	X	CITY
	School Sites*	10.0	X	SCHOOL

Community Parks----- 97.44

C1	Community Park 1**	31.93	x	CITY
C2	Community Park 2	22.50	x	CITY
C3	Community Park 3	15.01	x	CITY
C4	Levee Trail***	28.00	x	RD 2062

Phase 2 Limits



*School Sites Calculation: # of Schools x 2.5 acres = total acres

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- When a park is adjacent to the levee, a 20' distance from the toe of levee is not included in park acreage calculations.

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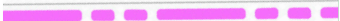
The 30' wide levee trail has been used to calculate acreage of the Quimby Act and does not include the levee slopes or 20-foot levee toe.

The applicant intends to regrade the federal levee into a waterside bench which will be maintained by Reclamation District 2062. There will be no public access to the levee, only the waterside bench.

QUIMBY ACT CALCULATION				
	STANDARD	REQUIREMENT	PHASE 2 CALCS	DIFFERENCE
DWELLING UNITS			10,726	
POPULATION	3.0 per DU		32,178	
COMMUNITY PARKS (C)	3 acres/1000	96.53 acres	97.44 acres	+0.91 acres
NEIGHBORHOOD PARKS (N)	2 acres / 1000	64.36 acres	64.36 acres	+0 acres
TOTAL C & N PARKS	5 ACRES/1000	160.89 ACRES	161.80ACRES	+0.91 ACRES

Sizes and locations of parks subject to change through Neighborhood Development Plan process subject to City review and approval.

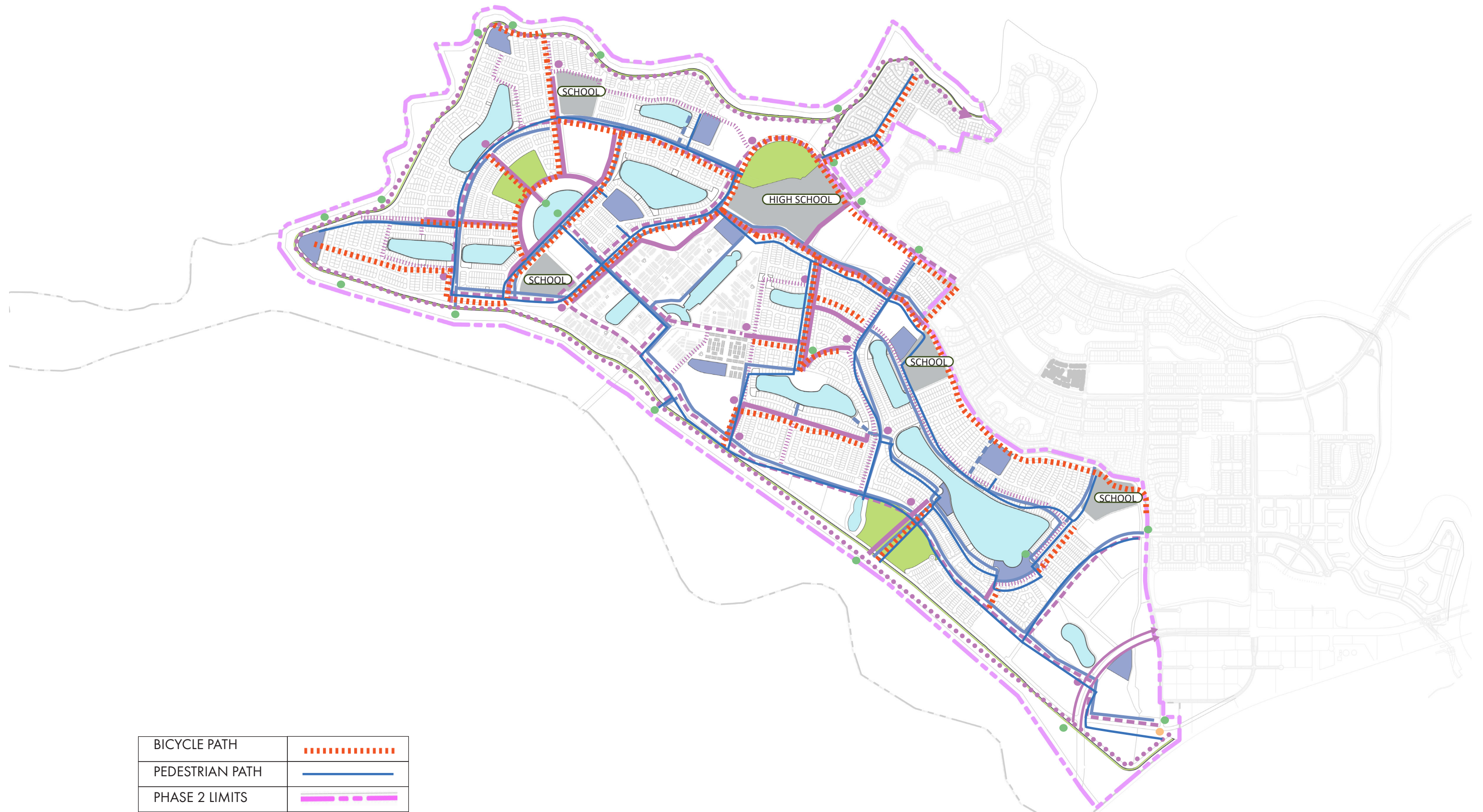
FIGURE 4.5 - PHASE 2 CIRCULATION MAP

ELEVATED TRAIL Hikers and Bicyclists	
CLASS I BIKE PATH Separated from Automobile traffic	
CLASS II BIKE LANE Striped and Signed Lane on Roadway	
CLASS III BIKE ROUTE Signage on Roadway	
PHASE 1 LEVEE TRAIL	
PEDESTRIAN TRAIL	
PEDESTRIAN CONNECTION	
BIKE SIGNAGE	
WAYFINDING	
EQUESTRIAN STAGING AREA	
PHASE 2 LIMITS	

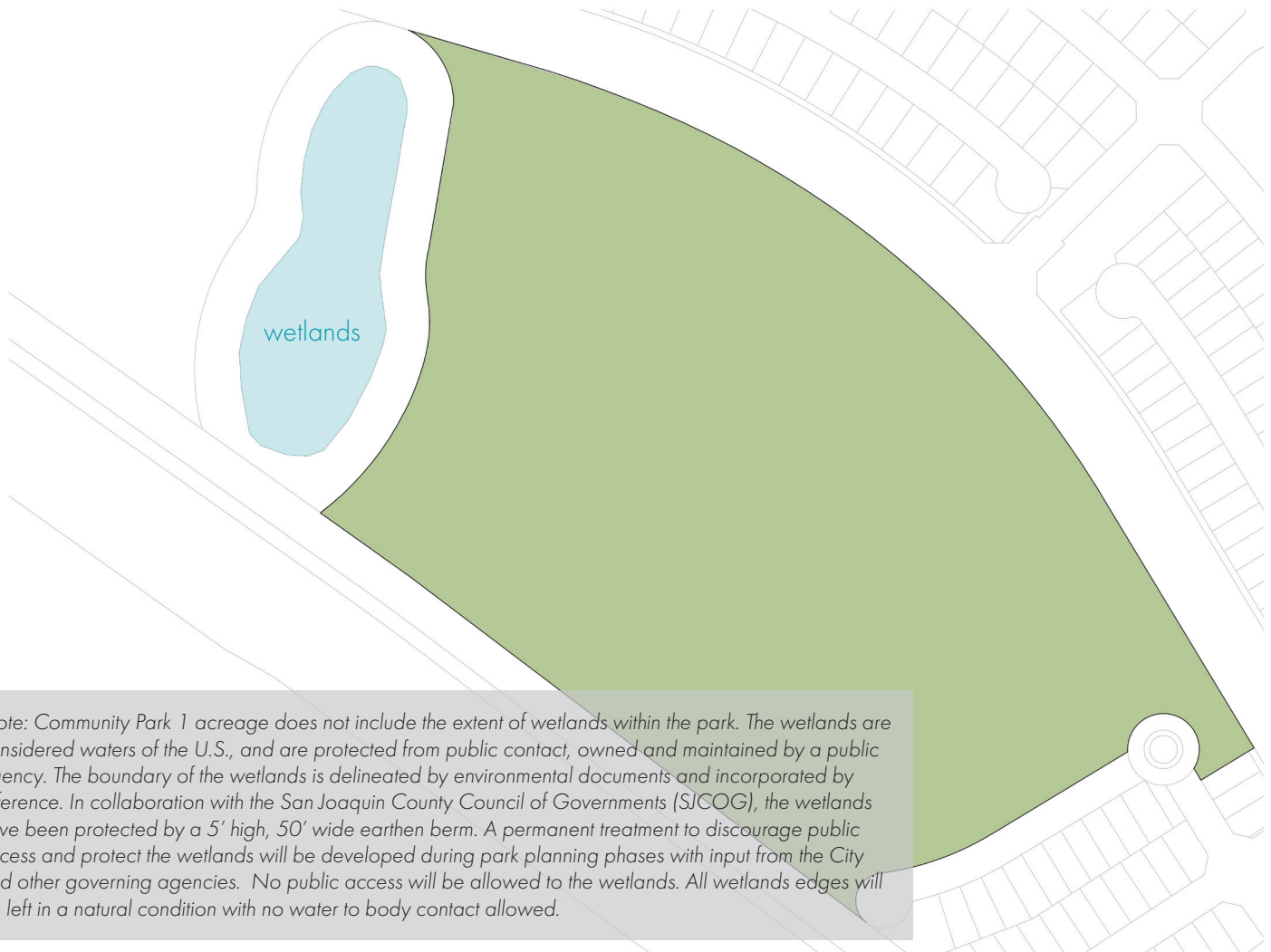
All bike signage and wayfinding will include City logo



FIGURE 4.6 - PHASE 2 SAFE ROUTES TO SCHOOLS



COMMUNITY PARK 1



Note: Community Park 1 acreage does not include the extent of wetlands within the park. The wetlands are considered waters of the U.S., and are protected from public contact, owned and maintained by a public agency. The boundary of the wetlands is delineated by environmental documents and incorporated by reference. In collaboration with the San Joaquin County Council of Governments (SJCOCG), the wetlands have been protected by a 5' high, 50' wide earthen berm. A permanent treatment to discourage public access and protect the wetlands will be developed during park planning phases with input from the City and other governing agencies. No public access will be allowed to the wetlands. All wetlands edges will be left in a natural condition with no water to body contact allowed.

For illustrative purposes only

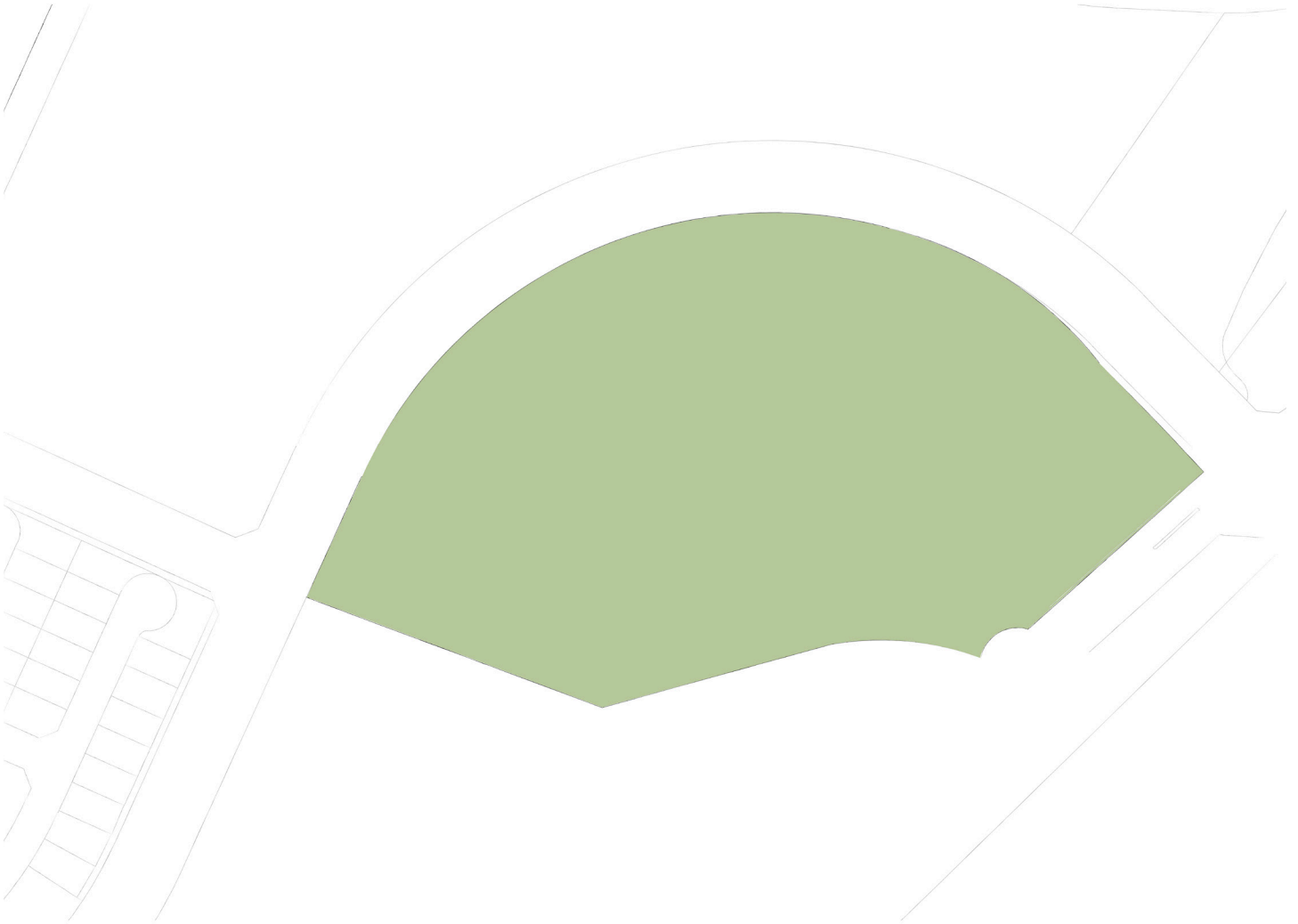
PARK AMENITIES

- (4) Baseball Fields
- (6) Tennis Courts
- (1) Multi-court
- On-Site Parking Lot
- Restroom
- Main Playground with Splash Pad
- Wetland Overlook
- Shade Structures, Benches, Tables and BBQ's
- Picnic Areas & Open Space
- Access to Levee Trail with Exercise Equipment
- Spraypad

COMMUNITY PARK:
31.9 ACRES



COMMUNITY PARK 2

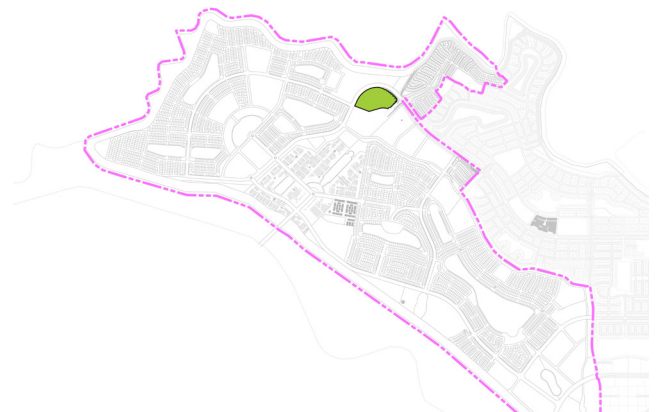


For illustrative purposes only

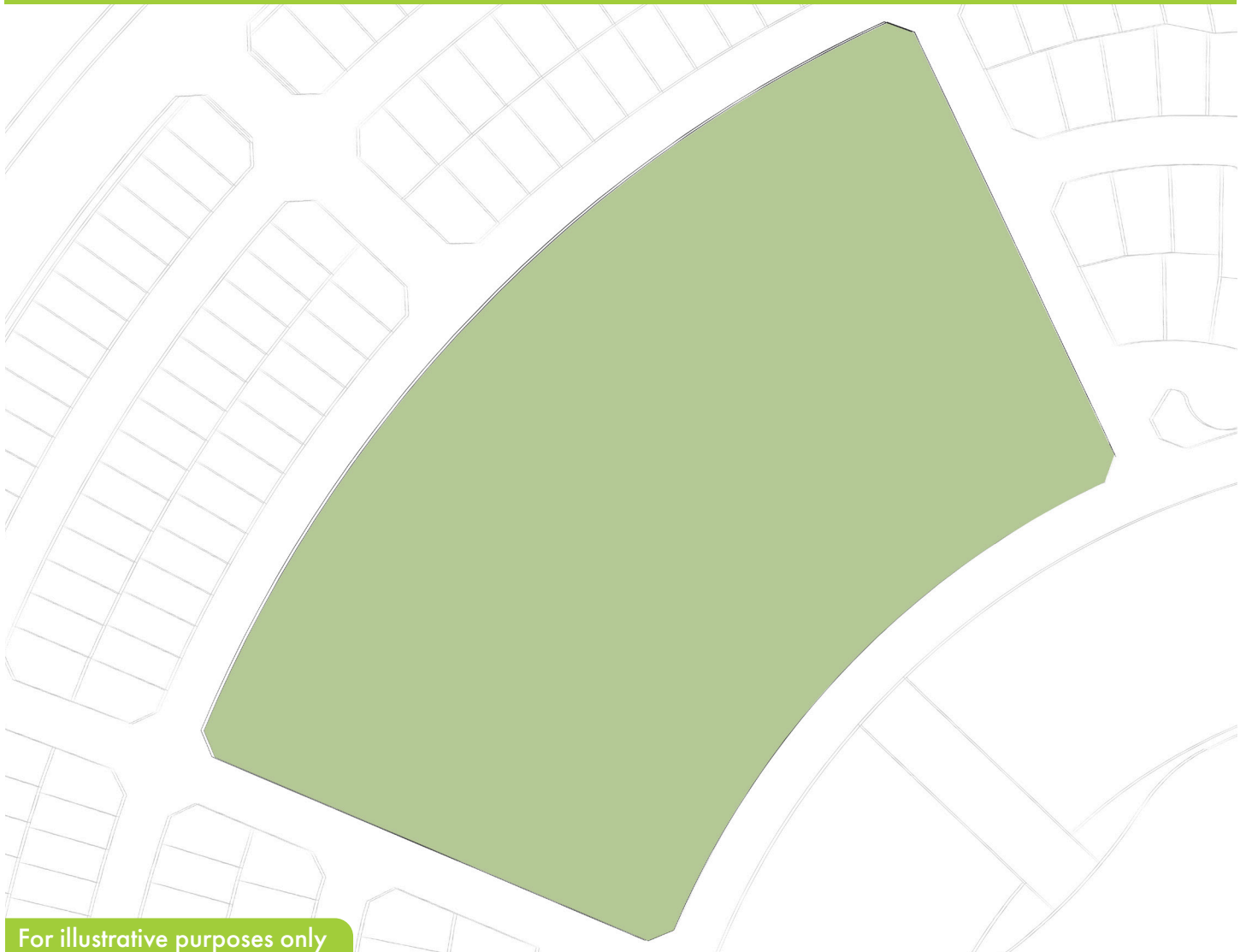
PARK AMENITIES

- (4) Softball Fields
- (1) Baseball Fields
- (2) Basketball Courts
- Storage Space for Sports Equipment
- Concessions/Restroom Building
- On-Site Parking Lot
- Main Playground with Splash Pad
- Shade Structures, Benches, Tables and BBQ's
- Access to Linear Trail
- Spraypad

COMMUNITY PARK:
22.5 ACRES



COMMUNITY PARK 3



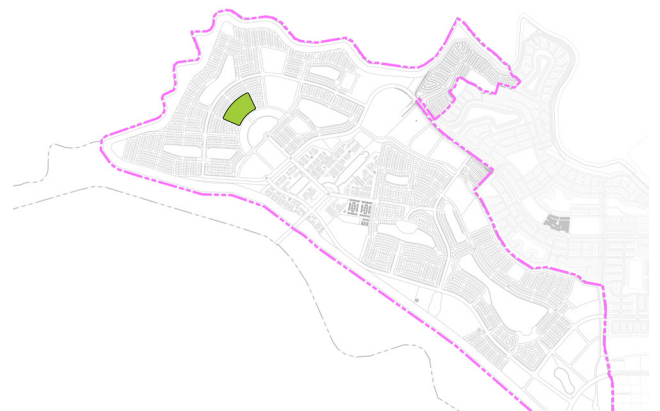
For illustrative purposes only

PARK AMENITIES

- (3) Soccer Fields
- (1) Football sized sports field
- (2) Pickleball Courts
- (2) Tennis Courts
- (2) Bocce Ball Courts
- (1) Basketball Court
- On-Site Parking Lot
- Playground
- Restroom Building
- Benches
- Shade Structures and Picnic Tables

COMMUNITY PARK:

15.0 ACRES

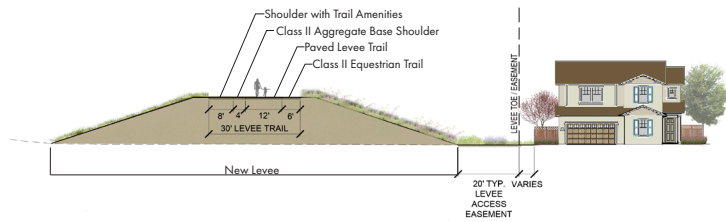


COMMUNITY PARK 4 - LEVEE TRAILS

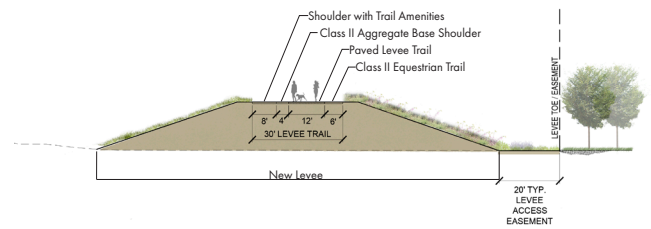


Levee trail along a public street

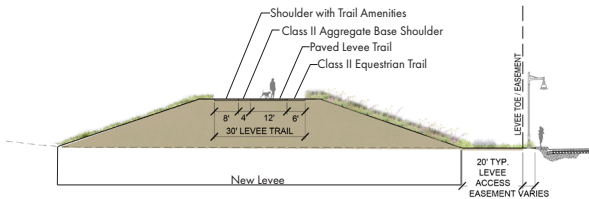
Levee trail along private property



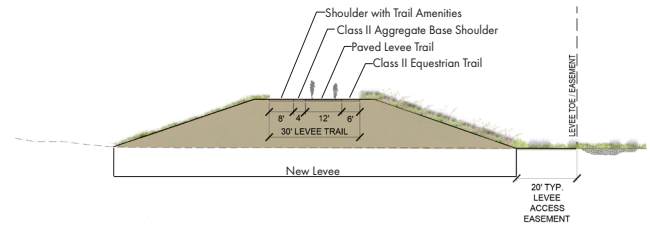
Levee trail along a park



Levee trail along a cul-de-sac



Levee trail along open space

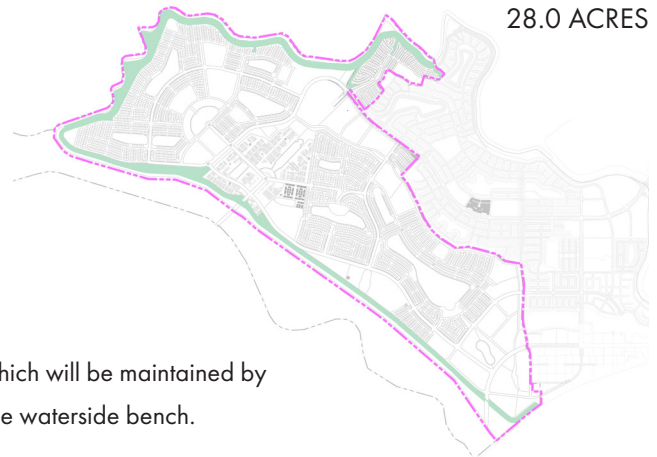


For illustrative purposes only

PARK AMENITIES

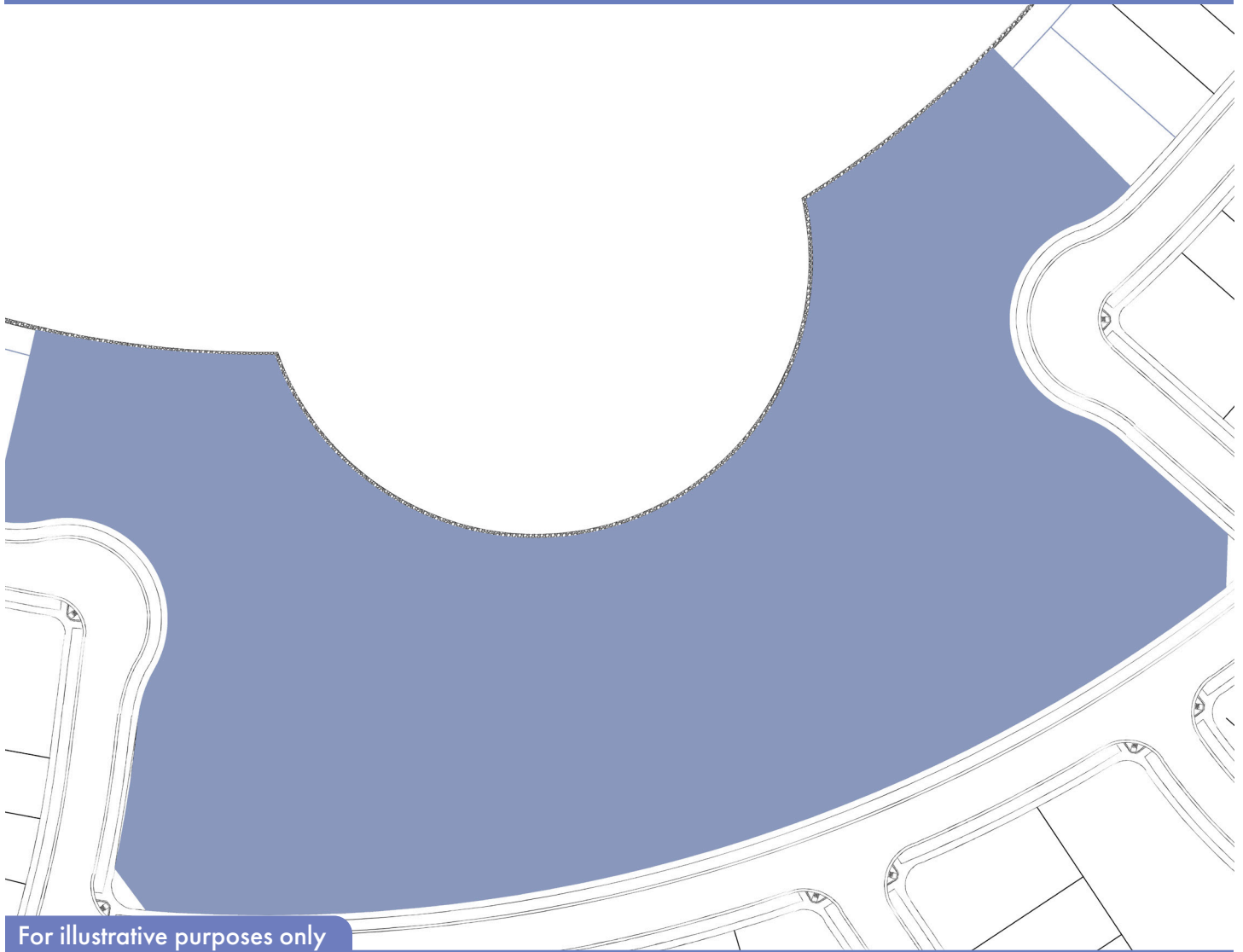
- All-weather Paving (12' paved trail with 4' shoulder)
- Informational Kiosks
- Overlook Views
- Site furnishings and exercise equipment
- Equestrian Trail (6' class II aggregate base on edge of paved trail)

LEVEE TRAILS:
28.0 ACRES



*The applicant intends to regrade the federal levee into a waterside bench which will be maintained by Reclamation District 2062. There will be no public access to the levee, only the waterside bench.

NEIGHBORHOOD PARK 1



For illustrative purposes only

PARK AMENITIES

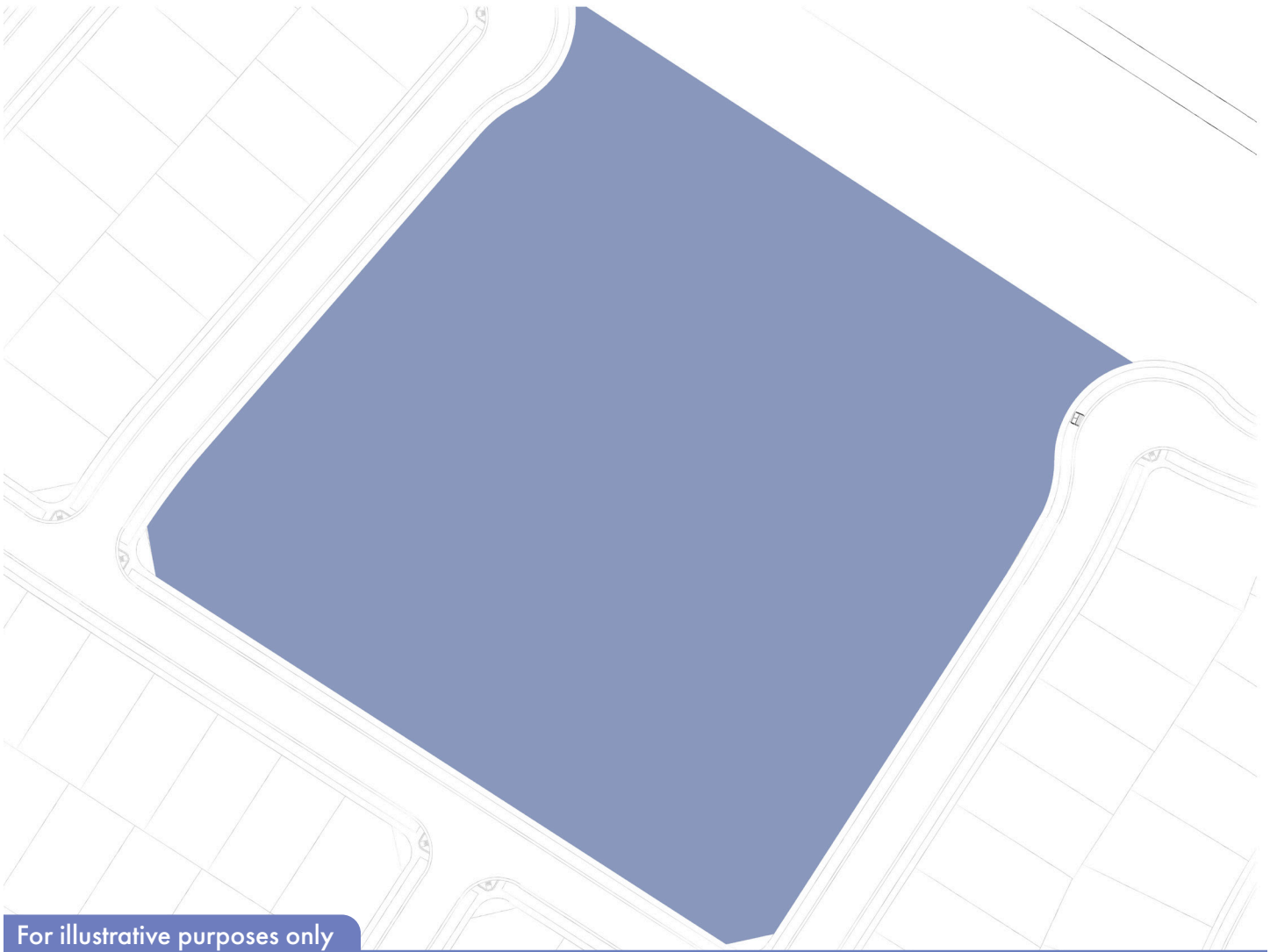
- (1) Basketball Court
- Sensory Play Equipment & Playground - "Touch"
- Aromatic/Herb Garden - "Smell & Taste"
- Lake Overlook & Access with Wind Chimes - "Hear"
- Labyrinth Path- "Sight"
- Benches
- Shade Structure
- Picnic Tables
- BBQ
- Open Space

NEIGHBORHOOD PARK:

5.97 ACRES



NEIGHBORHOOD PARK 2



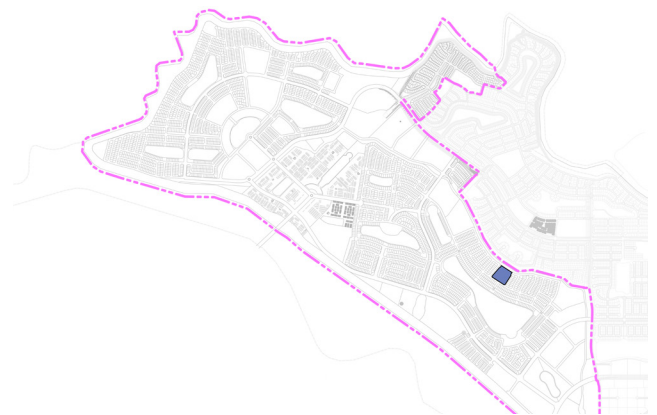
For illustrative purposes only

PARK AMENITIES

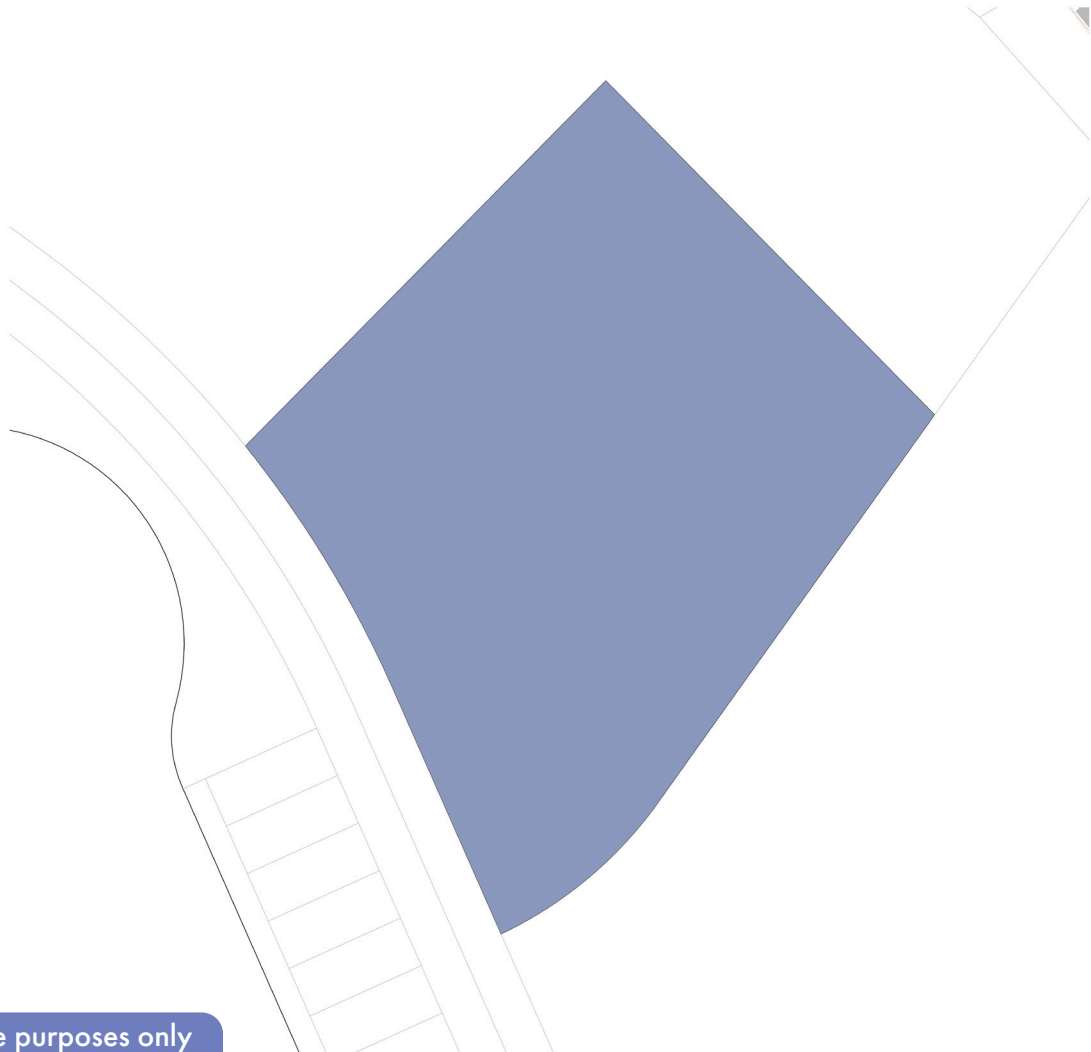
- Sensory Garden
- Agility Training
- Small and Large Dog Park
- Pet Wash Stations
- Playground
- Benches
- Shade Structure
- Picnic Tables
- BBQ
- Open Space

NEIGHBORHOOD PARK:

6.0 ACRES



NEIGHBORHOOD PARK 3



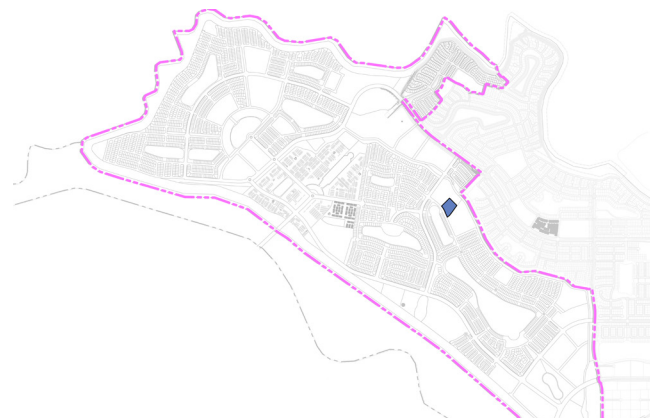
For illustrative purposes only

PARK AMENITIES

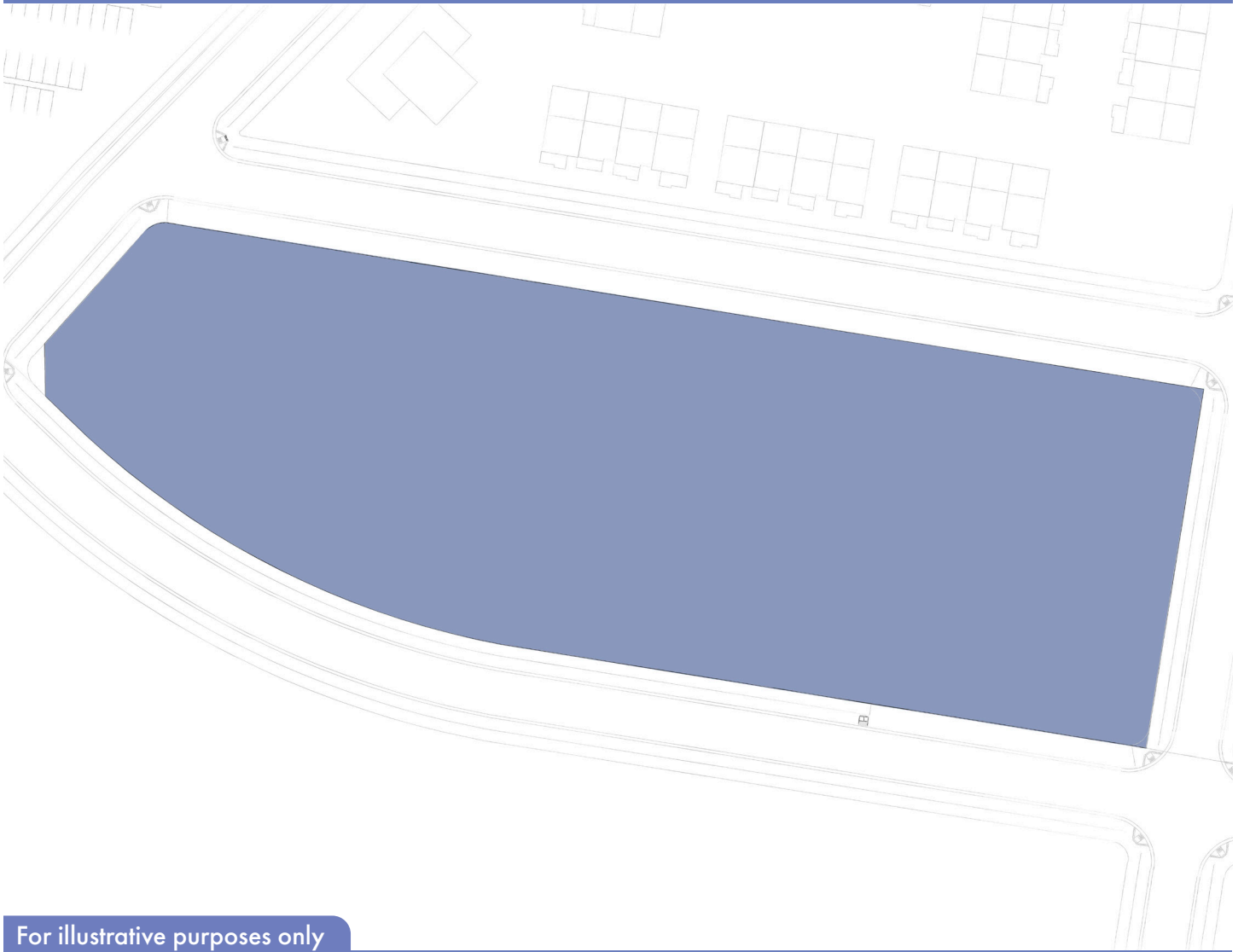
- Playground
- Benches
- Shade Structure
- Picnic Tables
- BBQ
- Open Space

NEIGHBORHOOD PARK:

4.55 ACRES



NEIGHBORHOOD PARK 4



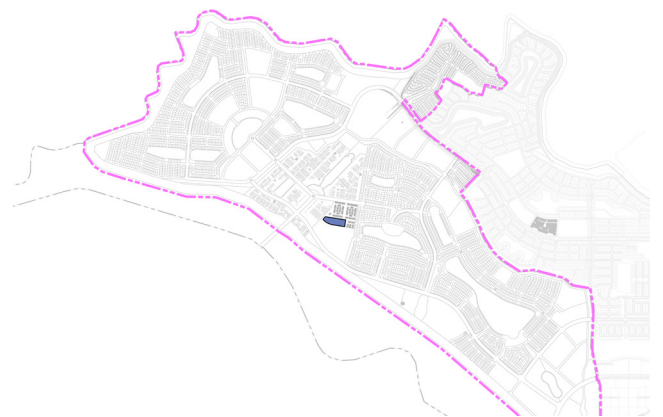
For illustrative purposes only

PARK AMENITIES

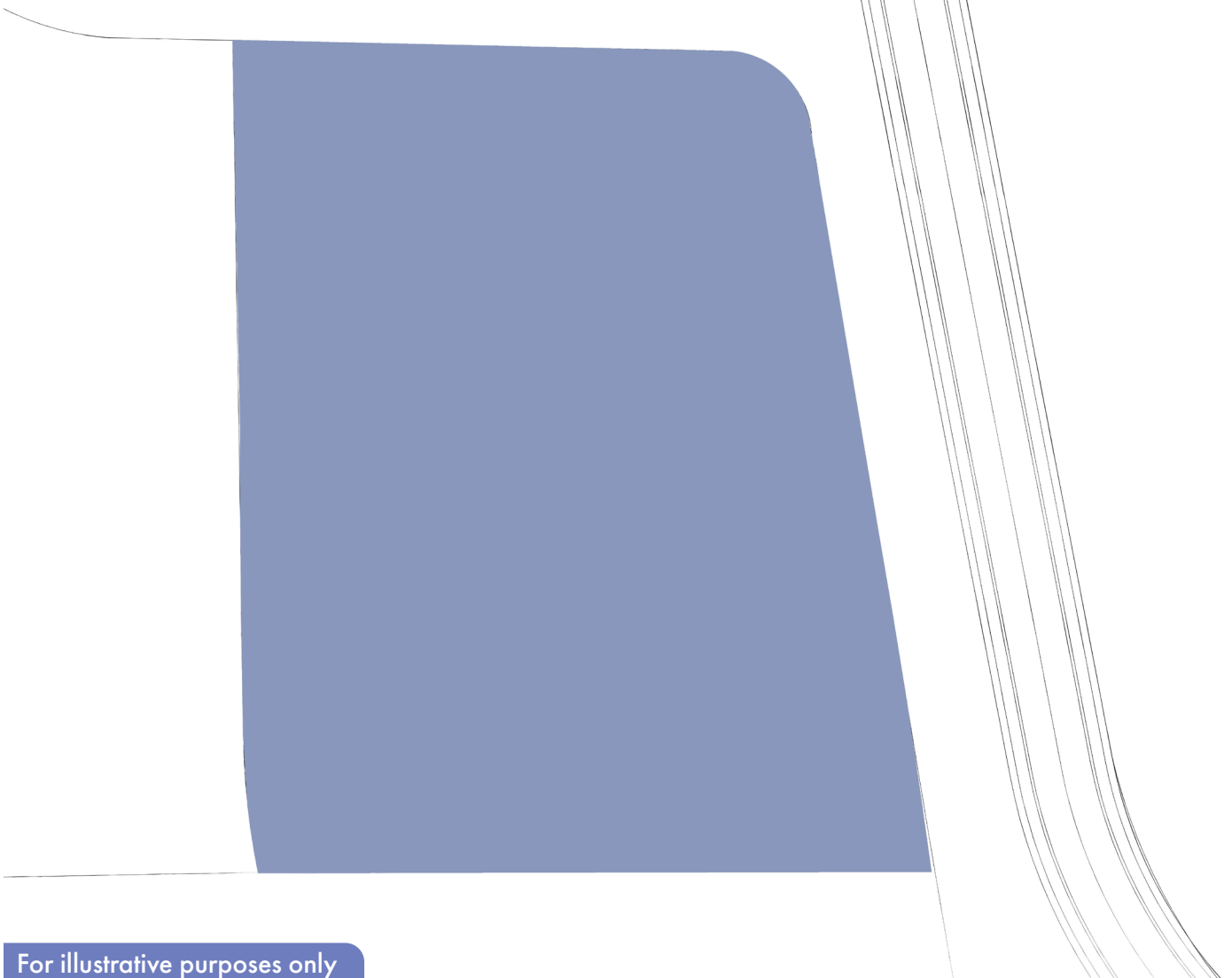
- Playground with Shade Sail
- Outdoor Adult Fitness Equipment
- Adult Strength Training
- (1) Soccer Field
- (1) Multi-purpose Field
- Benches
- Shade Structure
- Picnic Tables
- BBQ
- Open Space

NEIGHBORHOOD PARK:

4.0 ACRES



NEIGHBORHOOD PARK 5

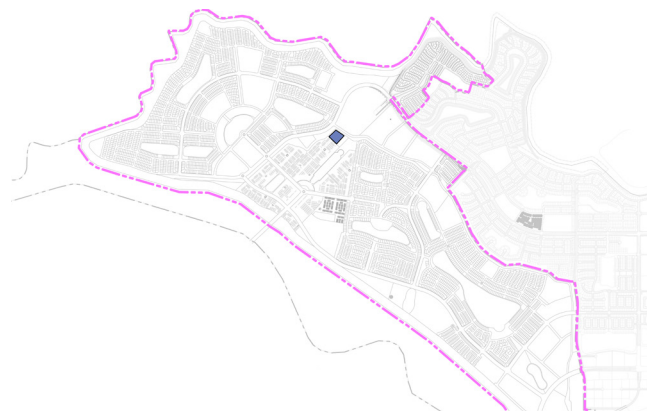


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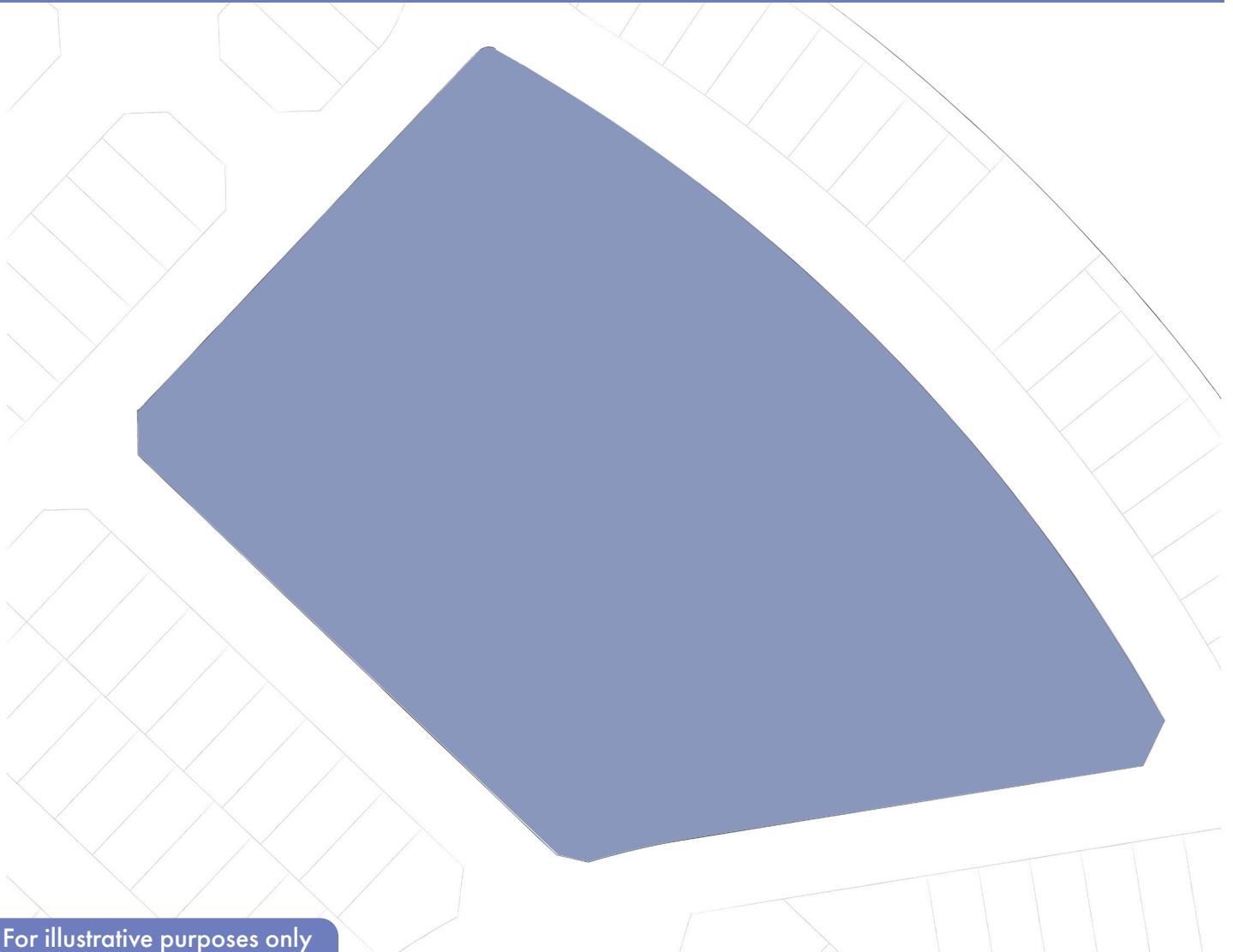
PARK AMENITIES

- (1) Soccer Field
- On-site Parking
- Outdoor Gathering/Performance Space
- Shaded Walkways

NEIGHBORHOOD PARK:
5.4 ACRES



NEIGHBORHOOD PARK 6



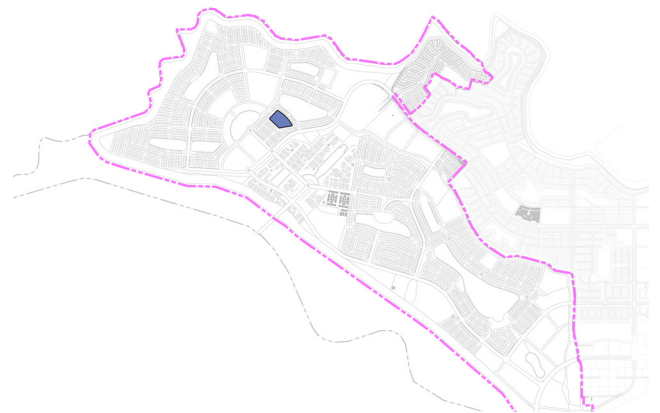
For illustrative purposes only

PARK AMENITIES

- (1) Basketball Court
- (2) Multi-Purpose Field
- Agility Training
- Small Dog Park
- Large Dog Park
- Playground
- Benches
- Shade Structure
- Picnic Tables
- BBQ
- Open Space

NEIGHBORHOOD PARK:

7.1 ACRES



NEIGHBORHOOD PARK 7



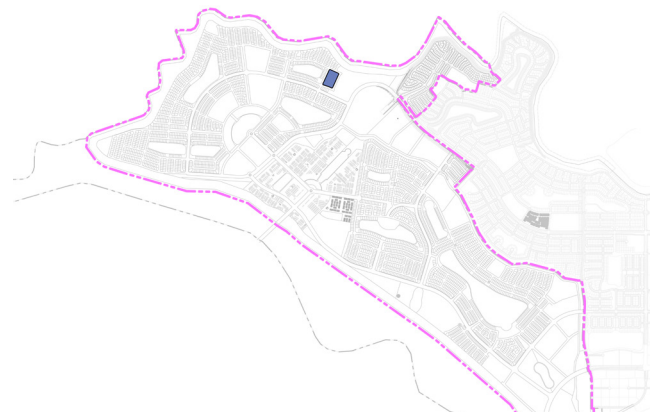
For illustrative purposes only

PARK AMENITIES

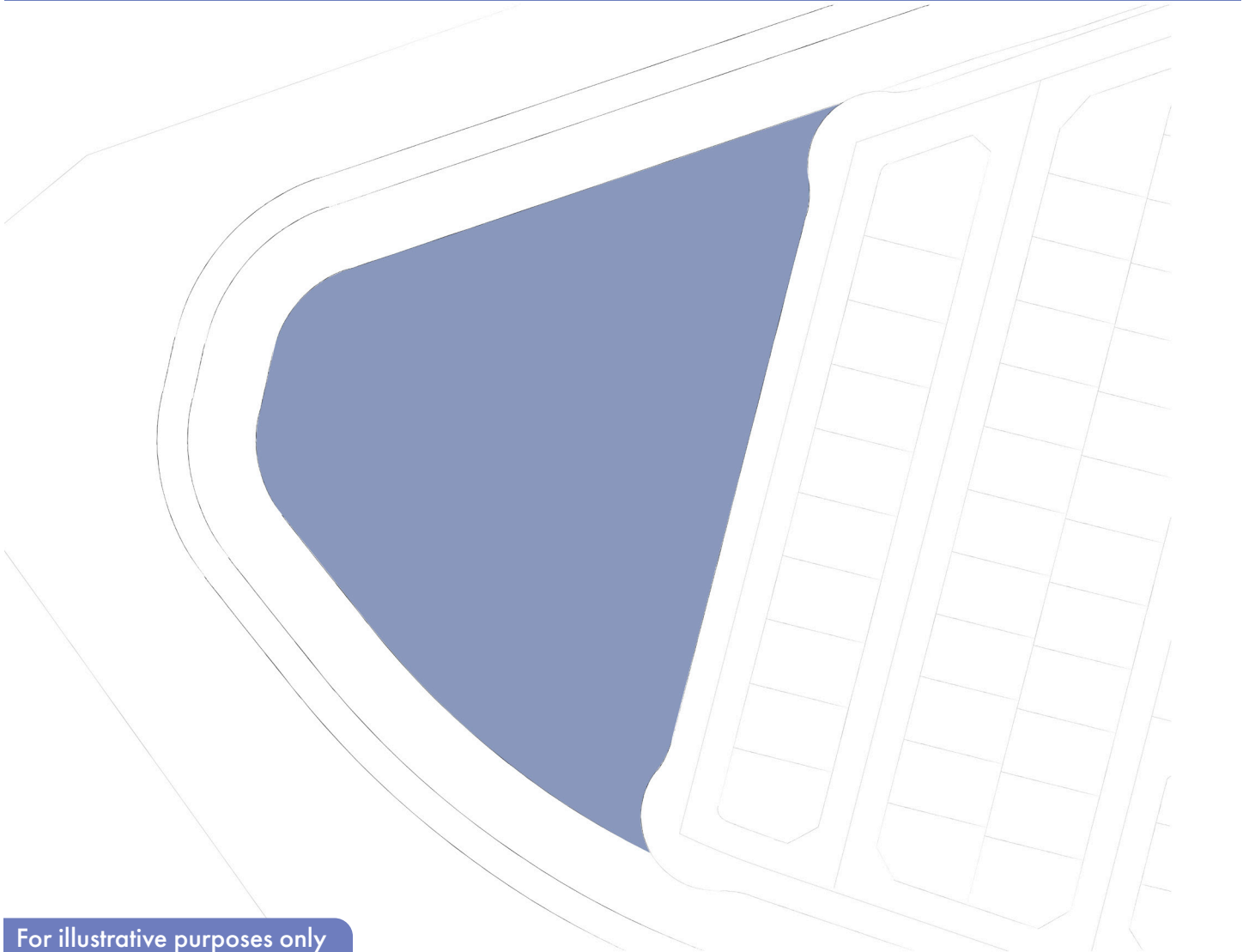
- Playground (2-5 years)
- Playground (5-12 years)
- Playground
- Benches
- Shade Structure
- Picnic Tables
- BBQ
- Tree Grove
- Open Space

NEIGHBORHOOD PARK:

5.1 ACRES



NEIGHBORHOOD PARK 8



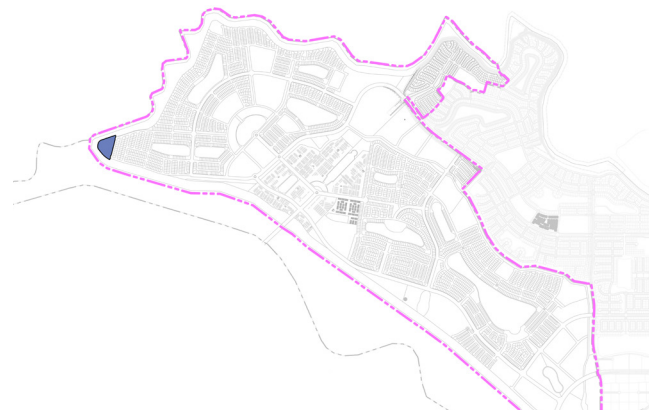
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PARK AMENITIES

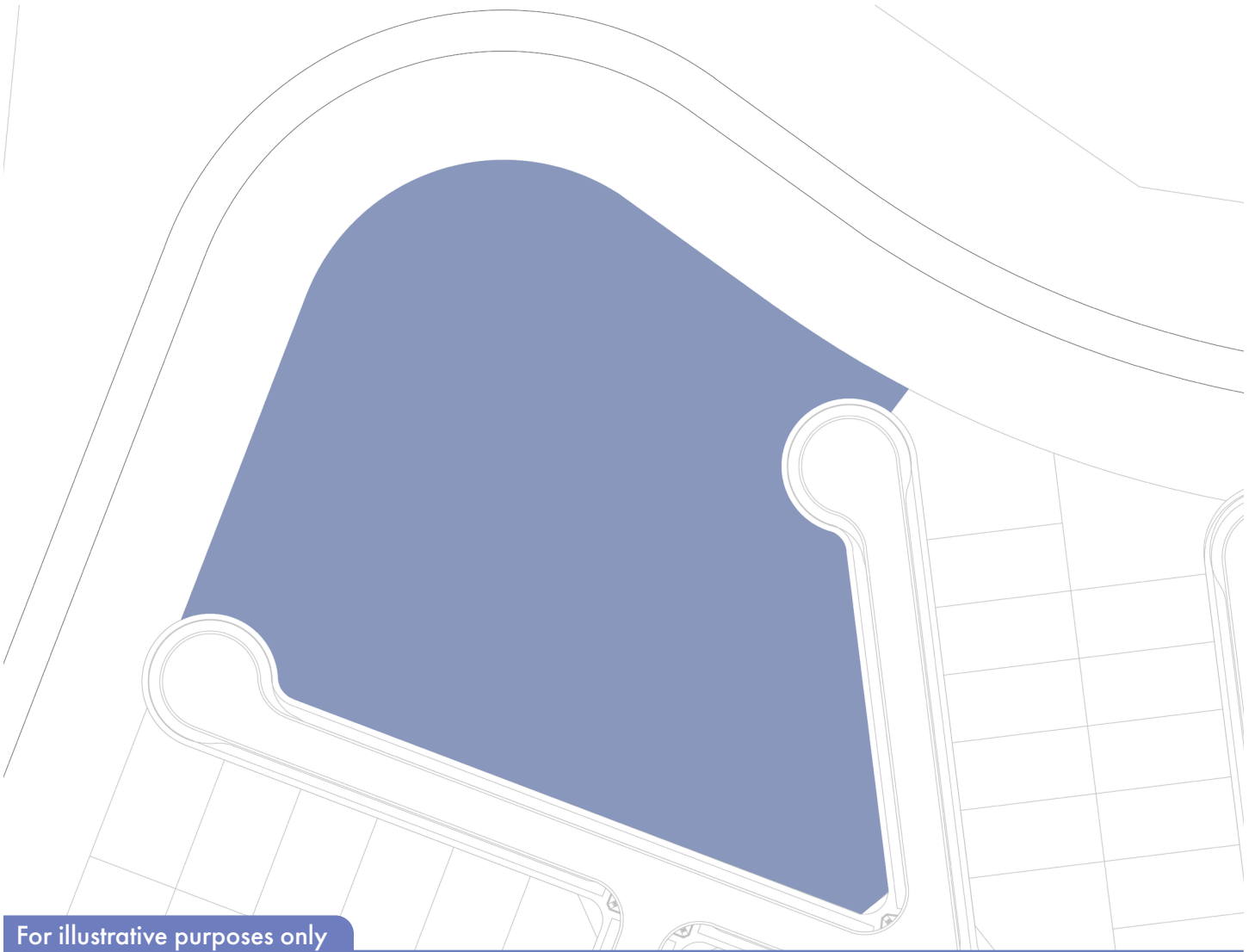
- (1) Adult Soccer Field
- (1) Multi-Purpose Field
- (1) Pickleball Court
- Playground
- Benches
- Shade Structure
- Picnic Tables
- BBQ
- Connection to Levee Trail
- Open Space

NEIGHBORHOOD PARK:

5.3 ACRES



NEIGHBORHOOD PARK 9



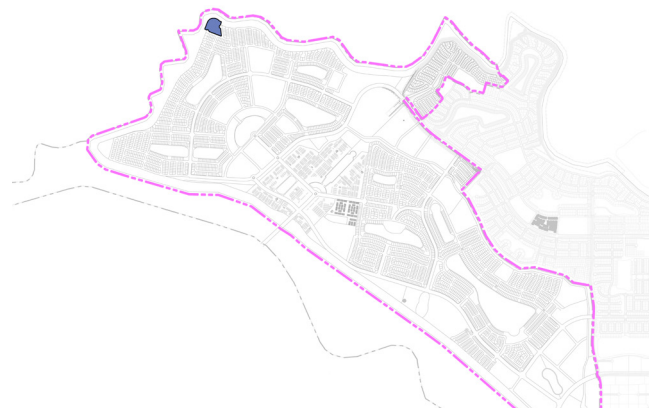
For illustrative purposes only

PARK AMENITIES

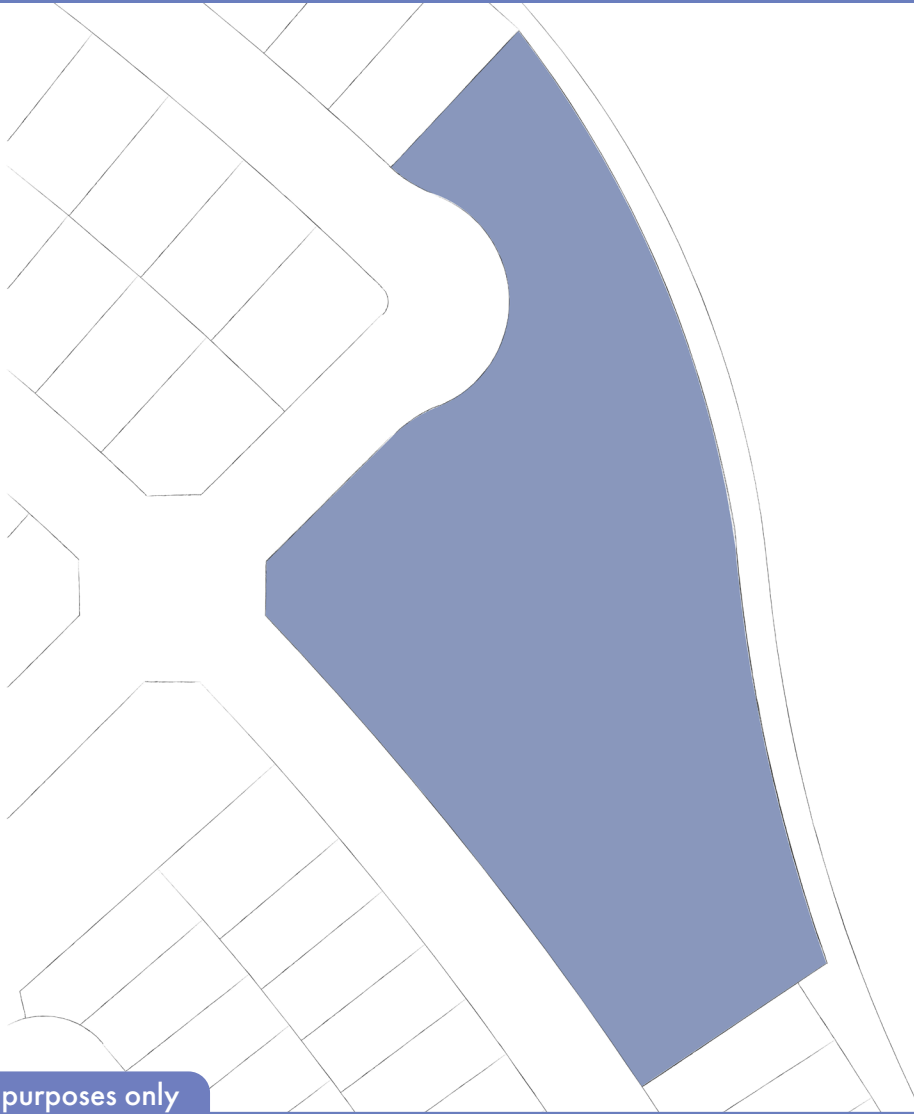
- (1) Basketball Courts
- (1) Multi use-court
- Sundial Feature
- Nature Walk
- Playground
- Benches
- Shade Structure
- Picnic Tables
- BBQ
- Connection to Levee Trail
- Open Space

NEIGHBORHOOD PARK:

4.2 ACRES



NEIGHBORHOOD PARK 10



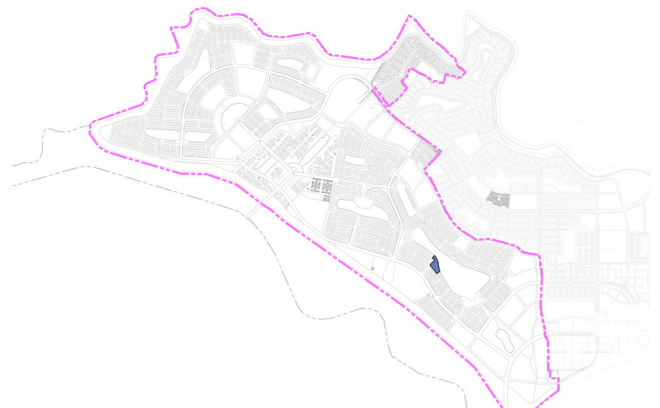
For illustrative purposes only

PARK AMENITIES

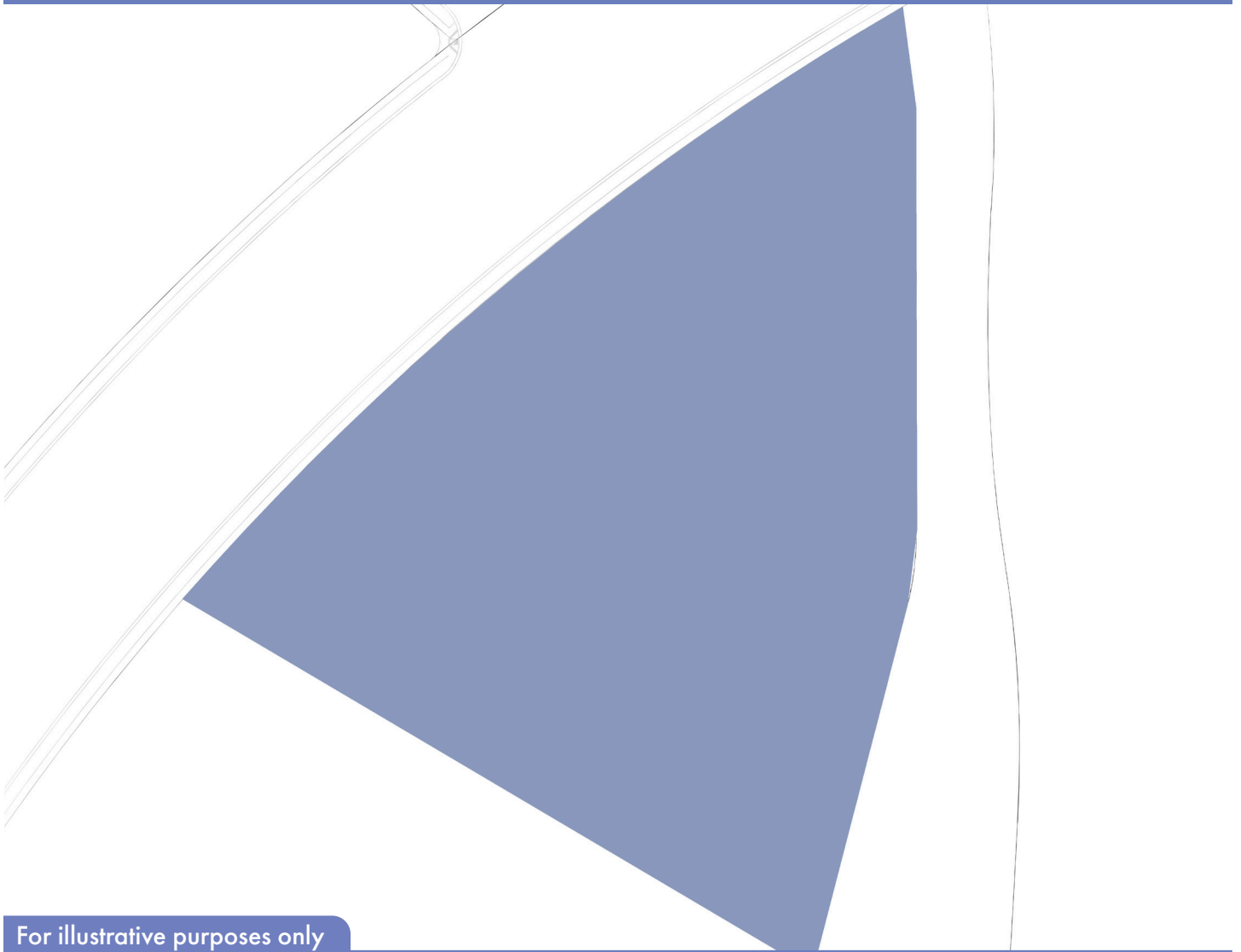
- Perimeter Walk
- Playground
- Benches
- Picnic Tables
- BBQ
- Open Space

NEIGHBORHOOD PARK:

2.7 ACRES



NEIGHBORHOOD PARK 11



For illustrative purposes only

PARK AMENITIES

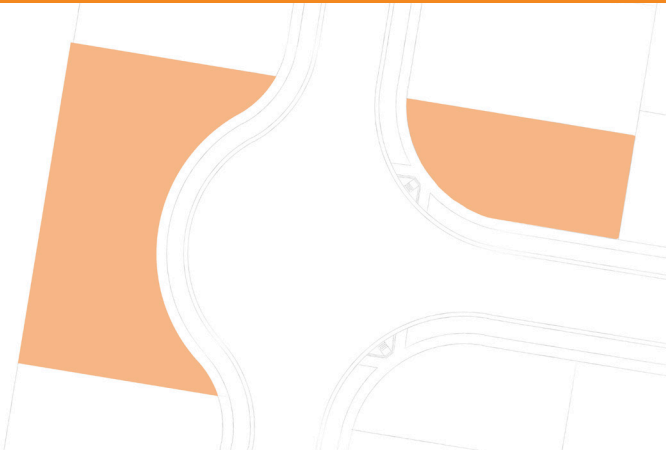
- Perimeter Walk
- Playground
- Benches
- Picnic Tables
- BBQ
- Open Space

NEIGHBORHOOD PARK:

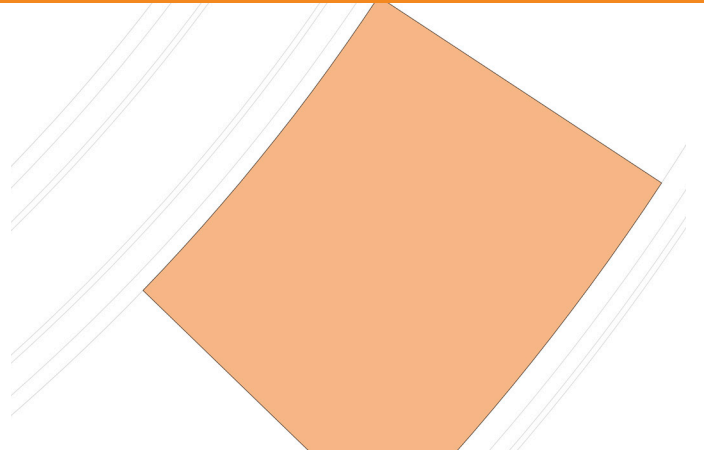
4.0 ACRES



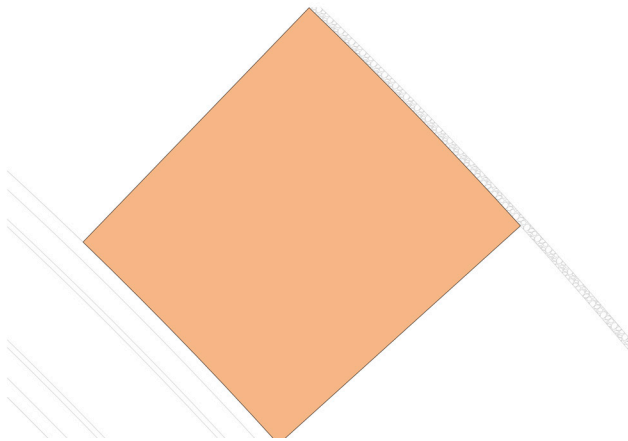
POCKET PARKS



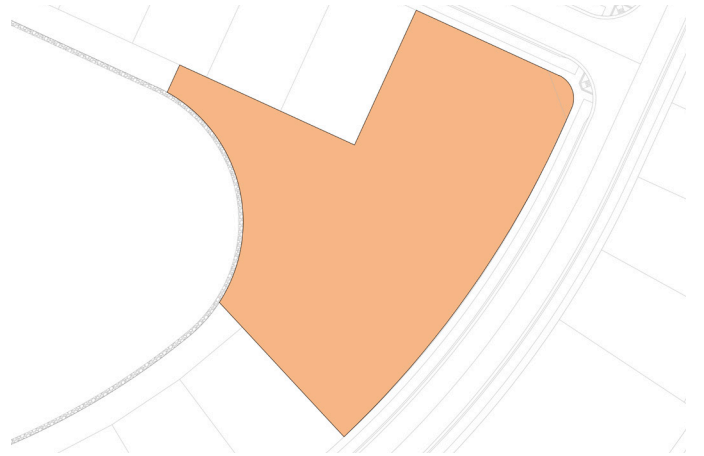
THROUGH BLOCK POCKET PARK



STREET ACCESS POCKET PARK



SMALL LOT LAKE ACCESS POCKET PARK



LARGE LAKE ACCESS OPEN SPACE POCKET PARK

For illustrative purposes only

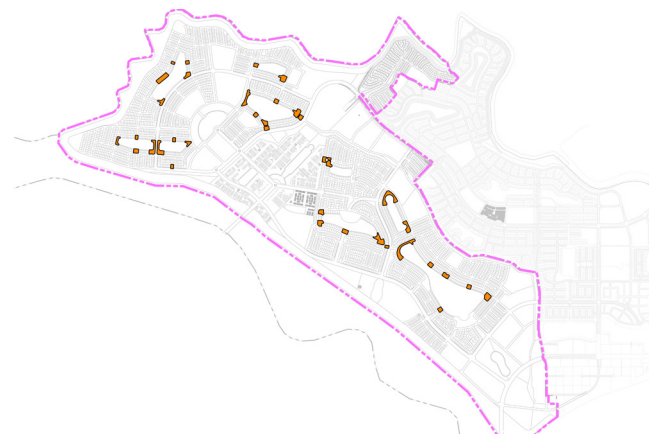
PARK AMENITIES

Pocket parks may include

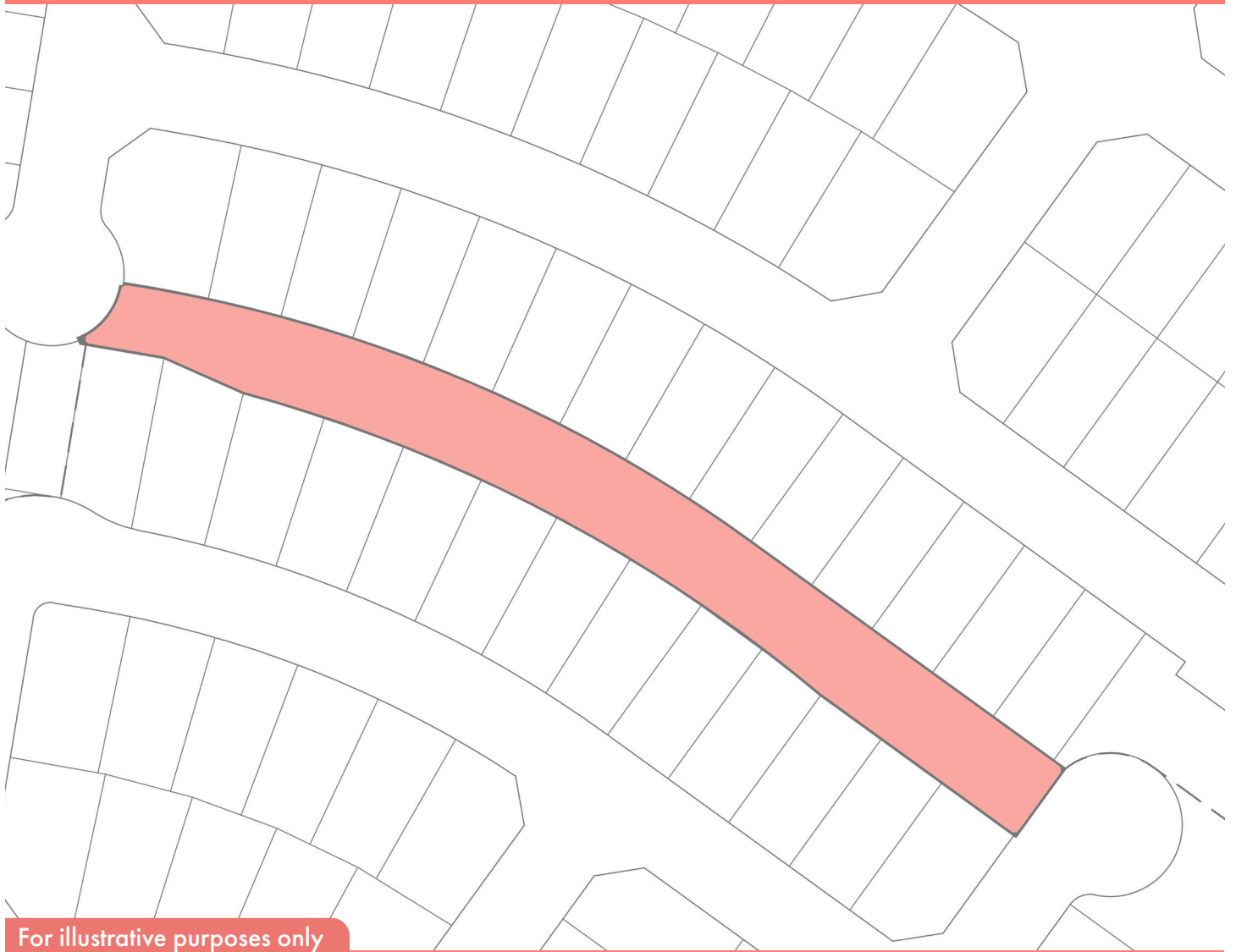
- Access Paths
- Benches
- Picnic Tables
- Lake Access Docks
- Small Open Spaces

POCKET PARKS 1-37:

20.0 ACRES



LINEAR PARKS



For illustrative purposes only

PARK AMENITIES

Linear parks may include:

- Access Paths
- All-Weather Trails
- Benches
- Picnic Tables
- Lake Access
- Interpretive Signage
- Small Open Spaces

LINEAR PARKS 1-10:

48.4 ACRES

