

PHX LAND REUSE STRATEGY IMPLEMENTATION PHASE

SPARK AREA 2
DEVELOPMENT
STANDARDS
AND DESIGN
GUIDELINES



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the City of Phoenix Aviation Department



DRAFT

PHX LAND REUSE STRATEGY IMPLEMENTATION PHASE

SPARK AREA 2 DEVELOPMENT STANDARDS AND DESIGN GUIDELINES

PREPARED FOR



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SPARK AREA 3
DEVELOPMENT
STANDARDS AND
DESIGN GUIDELINES

EL CAMPITO |
7TH STREET & BUCKEYE
CREATIVE CAMPUS

A hub of innovation celebrating Phoenix's past and projecting a future of jobs, education and training...



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The diagrams and drawings included in this document are for illustrative purposes only and do not constitute actual design solutions.



CONCEPTUAL SITE DESIGN SUMMARY

The El Campito Spark Area 2 development will create a **Hub for Innovation and Entrepreneurship** celebrating the confluence of Downtown ASU's T-Gen Millennial population and evolving talent within the area. The approximate 48-acres of land can accommodate several uses including traditional office, creative office, lifestyle tech, start-up complex, technical center, makerspace, retail, and food and beverage.

The flexible development potential of Spark Area 2 is well positioned to support economic growth in local engines for economic innovation such as bio-tech, green tech, IT R&D, digital media, as well as academic training institutions. This also includes incubating emerging start-ups and logistics companies. The site's location and large land area provide an opportunity for the inclusion of a business and innovation incubator that could serve as a central anchor, providing space for food, services and businesses, and a connection with the Cultural Corridor. Spark Area 2 will be a destination for the young, educated and engaged workforce, as well as local artisan culture and unique food and beverage concepts.

SITE INFORMATION:

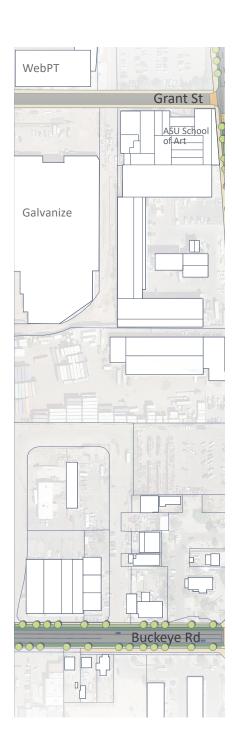
• Land Area: 47.70 AC

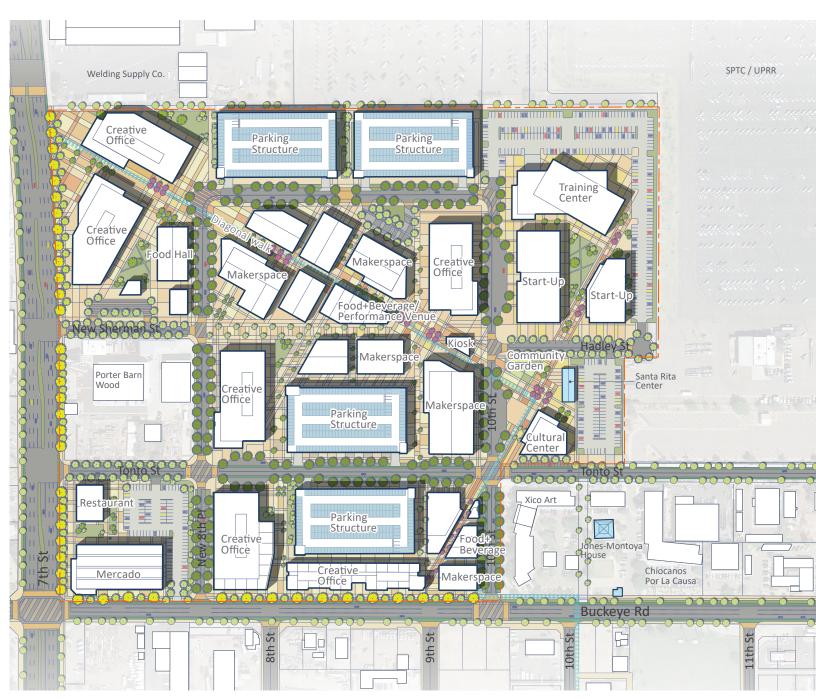
 Surrounding Streets: Buckeye Rd, 7th St, Tonto St

POTENTIAL DEVELOPMENT YIELD:

| Building Use | Building Area (GSF*) |
|--------------------------|-------------------------|
| Creative Office | 534,500 |
| Makerspace/Artisan Space | 212,000 |
| Tech/Training Center | 66,100 |
| Start-up/Incubator | 47,600 |
| Mercado | 30,500 |
| Retail/Service | 73,000 |
| Cultural Center | 11,400 |
| Total | 975,100 |

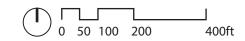
^{*} Gross Square Feet





(FIG 1.1) SPARK AREA 2 CONCEPTUAL SITE PLAN

The plan is conceptual and is subject to change based on future development proposals.





PURPOSE

The purpose of the Spark Area 2 Development Standards and Design Guidelines is (1) to ensure the creation of a high quality business and innovation incubator campus; (2) to ensure that each individual project contributes in a complementary manner while offering a degree of flexibility in the development process; and (3) to ensure new developments are compatible with airport operations and the adjacent neighborhoods.

The Spark Area 2 Development Standards and Design Guidelines are intended to encourage excellence and innovation in design. These standards and guidelines are developed to guide development of public streets, open spaces, individual buildings, landscaping, and all other built environment improvements that foster downtown's innovation economy growth and nurture a culture of experimentation and entrepreneurship.

APPLICABILITY

The Spark Area 2 Development Standards and Design Guidelines are applicable to all projects located within the Spark Area 2 boundary.

New developments and/or existing developments for any additions, remodel, relocation, reconfiguration or expansion of parking or landscaped areas, or other construction shall be in compliance with the standards and guidelines indicated in this document, as well as all other applicable regulations and zoning ordinances.

Structures that are to be constructed adjacent to or within 0.5-mile of designated or eligible historic properties should be designed in accordance with the Phoenix Zoning Ordinance Chapter 8, Historic Preservation and the City of Phoenix General Design Guidelines for Historic Properties.

OBJECTIVES

The Spark Area 2 Development Standards and Design Guidelines are intended to achieve the following objectives:



Establish an iconic creative campus character that strengthens Downtown's innovation corridor



Encourage high performance architectural design to support R&D, co-working, incubators, and makerspaces



Encourage a bicycle- and pedestrian-friendly campus environment



Contribute to a vibrant and active community with complementary uses and amenities



Incorporate various communal spaces for encouraging innovation, interaction and collaboration



Celebrate the unique desert environment and encourage sustainable design and best practices

DEVELOPMENT STANDARDS

BUILDING LOT STANDARDS

Main Building Setbacks

| a. Primary Frontage | 12-foot maximum |
|-----------------------|-----------------|
| b. Secondary Frontage | 10-foot maximum |
| c. Side Lot Line (1) | 0-foot minimum |
| d. Rear Lot Line (1) | 0-foot minimum |

(1) If new development is adjacent to historic preservation (HP) properties or districts, or HP eligible properties, a minimum 10-foot landscape setback is required; and when a building height is 48-foot or greater, a minimum 25-foot building setback (including a 10-foot landscape setback) measured from the property line is required.

Accessory Building Setbacks

Accessory buildings are subject to the setback standards of main buildings.

Parking Setbacks*

| e. Primary Frontage | 20-foot minimum or behind building |
|-----------------------|--|
| f. Secondary Frontage | 10-foot landscape setback from street right-of-way |
| g. Side Lot Line (2) | 0-foot minimum |
| h. Rear Lot Line (2) | 0-foot minimum |

⁽²⁾ Minimum 10-foot landscape setback when adjacent to historic preservation (HP) or HP eligible properties or districts.

Lot Requirements

| Maximum Lot Coverage** | 75% maximum |
|--------------------------------|-------------|
| Primary Building Frontage | 75% minimum |
| Secondary Building Frontage | 50% minimum |

^{**} Lot coverage maximum may vary depending on setback requirements when adjacent to existing historic preservation (HP) properties or districts, or HP eligible properties.

BUILDING FRONTAGE*

Frontage Types Allowed

| Primary Frontage | Active Front Yard, Storefront, Gallery/Arcade, Common Entry, Stoop/Door Well, Patio, Porch |
|--------------------|--|
| Secondary Frontage | All types indicated above |
| Entry Requirements | Minimum one per 50-foot of primary building frontage and one per 80-foot of secondary frontage |

Projections

| Maximum | Primary frontage: 10-foot; |
|-------------------|----------------------------|
| projections into | Secondary frontage: 5-foot |
| Frontage Setbacks | |

Fences

| Primary Frontage | 40-inch maximum height |
|---------------------|---|
| Secondary Frontage | 48-inch maximum height solid fence. Above 48-inch to 72-inch allowed only as a 70 percent open view fence, unless screening above grade utilities or trash enclosures |
| Side and Rear Yards | 6-foot maximum height |

Minimum Ground Floor Glazing

| Commercial | Primary Frontage: 75% minimum; |
|------------|---------------------------------|
| Frontages | Secondary Frontage: 50% minimum |

^{*} A minimum of 5-foot depth landscape strip shall be located between the front property line and the parking area, exclusive of driveways and walkways where any parking space is established between the front property line and the main building or structure.

DEVELOPMENT STANDARDS (CONTINUED)

BUILDING HEIGHT AND STEPBACKS

Building Height

| Main Building | 80 foot - 120 foot ⁽³⁾ |
|------------------------|---|
| Accessory Structure(s) | 30-foot maximum when adjacent to historic preservation (HP) districts or properties, or HP eligible properties |
| Parking Structures | Cannot exceed building height |

Building Stepbacks (3)

| At 48-foot of height | Minimum 20-foot stepback when adjacent to historic preservation (HP) districts or properties, or HP eligible properties |
|----------------------|--|
| Parking Structures | Minimum 20-foot stepback when adjacent to historic preservation (HP) districts or properties, or HP eligible properties if over 40-foot |

⁽³⁾ Maximum 80-foot height across the site except the north/west corner block (Block SA2-1) on 7th St allowing maximum 120-foot height with use permit and site plan. In no event can the height exceed above the airport Height Zone C limits per the Phoenix Airport Height Zoning Article, Ordinance G-5179, Height Zone C.

STREETSCAPE

Arterial Streets (7th St, Buckeye Rd)

| Sidewalk width | 10-foot minimum |
|---------------------|-----------------|
| Landscape width (4) | 5-foot minimum |

Collector Streets (10th St, Tonto St, Hadley St)

| Sidewalk width | 8-foot minimum |
|---------------------|----------------|
| Landscape width (4) | 5-foot minimum |

⁽⁴⁾ If not in conflict with public utilities.

Private Streets

| Sidewalk width | 5-foot minimum |
|---------------------|----------------|
| Landscape width (4) | 5-foot minimum |

⁽⁴⁾ If not in conflict with public utilities.

Street Trees

| Tree Spacing | 30-foot on center or equivalent groupings between curb and back |
|--------------|---|
| | of sidewalk |

VEHICULAR PARKING AND LOADING

Minimum Required Vehicular Parking*

| Office Building(s) (< 50,000 Gross Floor Area) | 1 space per 300 square feet |
|---|--|
| Office Building(s) (≥50,000 Gross Floor Area) | 3.5 spaces per 1,000 square feet |
| Retail Establishments; Day Care Center; and Professional Uses | 1 space per 300 square feet |
| Dining and Drinking Establishments | 1 space per 50 square feet |
| Schools, Vocational | 1 space per 60 square feet of classroom area |
| Museum, Public Assembly - General | 1 space per 60 square feet |
| Flex/Light Industrial (< 150,000 Gross Floor Area) | 1 space per 1,000 square feet |
| Fitness Center | 1 space per 150 square feet |
| Art Gallery/Studio | 1 space per 300 square feet |
| Furniture Store | 1 space per 400 square feet |
| Hotels | 1 space per 1 rooming unit |
| | |

^{*} As per the regulations of the Phoenix Zoning Ordinance Section 702.

Required Loading and Service Bays**

(square feet of aggregate Gross Floor Area)

| (3quare rect of aggregate of | 033 1 1001 7 11 Cd / |
|------------------------------|-----------------------------------|
| Commercial | < 25,000 square feet: 0; |
| Developments | 25,000 - 40,000 square feet: 1; |
| (< 60-foot in height) | 40,001 - 100,000 square feet: 2 |
| Office Developments | 25,000 - 100,000 square feet: 1; |
| (< 60-foot in height) | 100,001 - 200,000 square feet: 2 |
| Hotel; Commercial or | 25,000 - 100,000 square feet: 1; |
| Office Developments | 100,001 - 240,000 square feet: 2; |
| (> 60-foot in height) | 240,001 - 400,000 square feet: 3 |

^{**} As per the regulations of the Phoenix Zoning Ordinance Section 702.

Shared Parking Reductions

A prediction of reductions in parking requirements based on the City's standard shared parking model must be conducted and shall be approved as per the Phoenix Zoning Ordinance Section 702. E. 2

DEVELOPMENT STANDARDS

(CONTINUED)

BICYCLE PARKING AND AMENITIES

Required Bicycle Parking and Amenities

| Commercial and Office Uses (5,001 to 100,000 square feet) | 1 space per 25 vehicular spaces, with a maximum of 25 spaces |
|--|--|
| Commercial and Office Uses (> 100,000 square feet) | 1 space per 25 vehicular spaces, with a maximum of 50 spaces |
| | 2 shower stalls minimum and 10 lockers for the building's occupants |
| Dining and Drinking Establishments (< 5,000 square feet) | 2 bicycle spaces in the frontage setback and/or right-of-way if no vehicle parking is provided; additional one bicycle space for every 25 vehicle parking spaces should be provided when vehicle parking is provided |

LAND USE

Permitted Uses

As per the regulations of the Phoenix Zoning Ordinance Section 626. Commerce Park District. E. General Commerce Park Option

LIGHTING AND SCREENING

Outdoor lighting

Subject to the regulations of the Phoenix Zoning Ordinance Section 626. G.5

Screening Structures

| Height | 3-foot minimum; 6-foot maximum |
|-----------|-----------------------------------|
| Materials | decorative solid masonry |

OPEN SPACES AND LANDSCAPING

Open Space Requirements

| Open Space Area | 5% minimum of the net lot area when site net area is over 50,000 Square feet |
|----------------------|--|
| Open Space Dimension | minimum 500 square feet with a minimum dimension of 20-foot |

Landscape Standards

| Tree Canopy Coverage | 30% minimum at maturity |
|--------------------------------------|-------------------------|
| Living Vegetation Ground Coverage | 50% minimum |

Shade Standards

| Building(s) (> 5,000 square feet) | 75% minimum of public sidewalks shall be shaded |
|--|--|
| | 50% minimum of accessible public and private open space areas shall be shaded, of which 50% of the shade shall be provided by trees or trellised vines |
| Building Additions (> 500 square feet) | shall meet the above shade requirements |

SIGNAGE

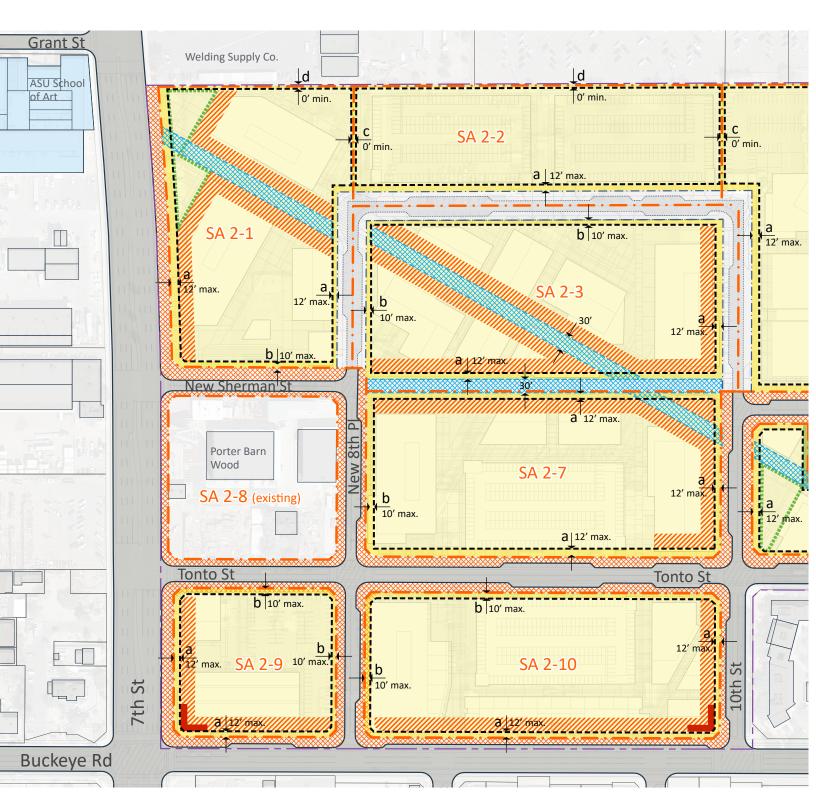
Signage Standards

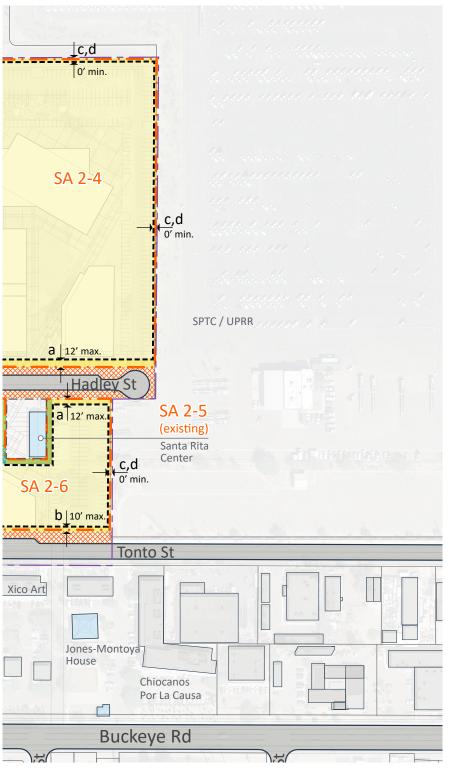
Subject to the regulations of the Phoenix Zoning Ordinance Section 705.

HISTORIC PROPERTIES

Historic Preservation Standards

Structures designated as significant historic properties are considered to be conforming and may be maintained, restored and/or rebuilt at each structure's historic setback and height subject to the provisions of Chapter 8, Historic Preservation.



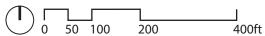


PARCELIZATION (CONCEPTUAL) AND SETBACK REQUIREMENTS



- a. Primary Frontage
- **b.** Secondary Frontage
- c. Side Lot Line
- **d.** Rear Lot Line

*Parcel boundaries, private street rights-of-way and curb lines, public pedestrian easement locations, and the shape of public gathering spaces indicated in this diagram are conceptual for illustrative purposes only and are subject to change.





PUBLIC REALM DESIGN GUIDELINES

INTENT

The public realm is comprised of the city's publiclyowned street rights-of-way and other publicly accessible open spaces. The public realm is a valuable asset and plays a crucial role to the vitality, perception, functionality, and livability of the shared spaces adjacent to private properties, creating a continuous spine of collaboration.

The intent of the Spark Area 2 Public Realm Design Guidelines is to (1) establish the distinct character of an urban innovation hub attracting tech firms, startups, small businesses, and visitors; (2) enhance existing streets - 7th St and Buckeye Rd - connecting new development with downtown destinations and the airport; (3) create an appealing campus environment for pedestrians and cyclists; and (4) prioritize superior design of public spaces for collaboration and outdoor thermal comfort.

- A. PROMOTE QUALITY CREATIVE CAMPUS DEVELOPMENT
- B. PRODUCE GREAT STREETS FOR PEDESTRIANS AND CYCLISTS
- C. ACTIVATE STREET EDGES AND CREATE A BUZZ OF ACTIVITY
- D. GENERATE GATHERING
 SPACES FOR CELEBRATIONS
 AND COLLABORATIONS
- E. ESTABLISH ICONIC IDENTITY
 WHILE CELEBRATING THE PAST
- F. STIMULATE SUSTAINABLE AND INNOVATIVE PRACTICES

D-1 | DIAGONAL WALK

Design a diagonal promenade as a spine to create a synergy between the public and private realms.

D-2 | GATHERING SPACES

Design and program various "cool pocket" spaces for sharing ideas and collaborations.

B-4 | CURB EXTENSIONS

Provide curb extensions ("bump-outs") at all corners of the intersections and mid-block crossings.

C-1 | STREET ACTIVITIES

Integrate community amenities into new developments and extend activities to adjacent pedestrian zones to activate streets.

B-1 | ROADWAYS

Reassess the best design for existing streets to include bicycle facilities and/or on-street parking.

B-5 | PAVING PATTERN

Employ accent surfaces to distinguish pedestrian zones along streets and pathways to add visual interest.

B-3 | CROSSWALKS

Use special pavers to add safety and visual appeal.

B-6 | BIKING FACILITIES

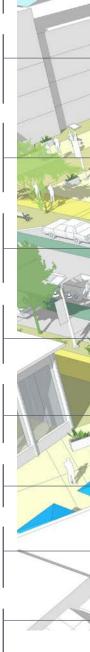
Provide adequate bicycle amenities along new bicycle lanes or at key activity nodes.

C-2 | STREET TREES

Infill street tree planting to develop a continuous shade canopy for aesthetics and environmental benefits.

B-2 | SIDEWALK

Ensure a continuous minimum 5-foot clearance for pedestrian passage along all streets.



(FIG 1.3) SPARK AREA 2 PUBLIC REALM IMPROVEMENT CONCEPT



F-1 | STORMWATER MANAGEMENT

Integrate drought-tolerant plants and/or native landscaping in the bioswale along planting strips to collect urban run-off.

B-7 | ELECTRIC VEHICLE CHARGING STATIONS

Install publicly accessible Electric Vehicle Charging Stations along street curbside where appropriate.

B-8 | DOCKLESS MOBILITY FACILITIES

Regulate the placement of dockless bicycles and electric scooters; ensure safe usage by passengers on public sidewalks/pathways.

E-3 | CULTURAL CORRIDOR

Employ a unified environmental graphic system to emphasize the Cultural Corridor's specific zone themes.

PUBLIC REALM DESIGN GUIDELINES

A. PROMOTE QUALITY CREATIVE CAMPUS DEVELOPMENT

- A-1 | URBAN CHARACTER: Establish an iconic character for the new urban innovative campus development reinforcing the Innovation Corridor in the downtown area. New development shall mix diverse programs within an individual building and/or a block to activate the site and maximize investment.
- A-2 | COMPATIBLE PATTERN: Ensure new development is compatible with adjacent neighborhoods, historic structures, and airport operations. Employ compatible scale, massing, and rhythms to define streetscape and public open spaces creating a sense of place. Encourage complementary design within individual developments.
- A-3 | SETBACKS: Organize continuous building frontage near the property lines to strengthen the urban character. Allow for some variations in setbacks to create various outdoor rooms activating the streets.
- A-4 | TRANSITIONS: Ensure an orderly transition of height, scale, program and visual appeal between new development and adjacent neighborhoods while mitigating potential impacts on adjacent properties.
- B. PRODUCE GREAT STREETS FOR PEDESTRIANS AND CYCLISTS
- B-1 | ROADWAYS: Reassess the best design for 7th St and Buckeye Rd to include biking facilities and/or onstreet parking. Provide an adequate buffer between the pedestrian zone and vehicular driving zones consisting of landscaping, shade trees and street amenities to ensure a safe and appealing street for all users. Promote "Woonerf" shared street design concept for Tonto St, 10th St, and other new public and private streets.
- B-2 | SIDEWALKS: Ensure that all streets have a continuous minimum 5-foot clearance for pedestrian passage along sidewalks. Provide generous sidewalks along 7th St and Buckeye Rd (minimum 10-foot) and along other streets, where possible, for safety and pedestrian comfort.

- B-3 | CROSSWALKS: Consider incorporating a protected intersection at 7th St and Buckeye Rd to protect cyclists and pedestrians from vehicles on busy streets. Explore using special paving materials, colors and/or patterns to highlight visibility and safety. Improve walkability and connectivity by reducing crossing distances; mid-block crosswalks shall be provided on all north-south blocks 500 feet or longer.
- B-4 | CURB EXTENSIONS: Provide curb extensions ("bump-outs") at all intersection corners and mid-block crossings. Integrate stormwater infiltration plantings into bump-out design. New projects that comprise one-third or 200 feet of the block frontage shall maintain the crosswalks and curb extensions on its side of the street.
- B-5 | PAVING PATTERN: Employ accent surfaces, such as special pavers, to distinguish pedestrian zones along sidewalks, public paseos and greenways while adding visual interests.

Below: Incorporate a protected intersection at busy intersections for protecting cyclists and pedestrians





Above: Generous sidewalk with distinctive street pavers

B. PRODUCE GREAT STREETS FOR PEDESTRIANS AND CYCLISTS (CONTINUED)

- B-6 | BIKING FACILITIES: Provide adequate bicycle parking facilities along planned bicycle lanes and at key activity nodes in highly visible locations; new development shall incorporate on-site bicycle amenities as per City standards.
- B-7 | ELECTRIC VEHICLE CHARGING STATIONS: Provide public accessible Electric Vehicle Charging Stations (EVCS) along streets, curbside where appropriate, to promote sustainable transportation and to reduce greenhouse gas emissions. Provide each EVCS with posted regulatory signage and protection mechanism including bollards, wheel stops, etc.
- B-8 | DOCKLESS MOBILITY FACILITIES: Develop and employ interim regulations and guidelines for regulating the placement of dockless bicycles, electric scooters and skateboards to ensure safe usage by passengers on public sidewalks and pathways.

C. ACTIVATE STREET EDGES AND CREATE A BUZZ OF ACTIVITY

- C-1 | STREET ACTIVITIES: Concentrate ground-floor active uses, such as cafes, fitness studios, dining and drinking establishments, and local shops along public sidewalks and walkways to encourage an active, all day long urban environment. Program street activities and events regularly to draw population.
- C-2 | SIDEWALK SEATING: Provide outdoor seating where sidewalk width is sufficiently wide. Extend social activities, outdoor dining and displays of selected goods to adjacent pedestrian zones to enrich the streetscape.
- C-3| STREETS TREES: Infill and intersperse varied street tree species along 7th St and Buckeye Rd. Ensure a continuous shade canopy along all streets for aesthetics and outdoor thermal comfort creating a desert oasis character throughout the site.
- C-4 | STREET FURNITURE: Place ample street amenities (e.g., benches, trash bins and bicycle racks, water stations) at frequent intervals along sidewalks. Explore opportunities for artistic design of street furniture that reflects local history and promotes the area's identity.

Right: A living street design ("Woonerf") to share street space for pedestrians, cyclists and cars



Right: Integrate dockless e-scooter placement within street parklet design





Above: Program street activities and events to create a buzz on the streets



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7TH ST EXISTING CONDITIONS

STREETSCAPE IMPROVEMENT

ARTERIAL STREET: 7TH ST

Proposed Right-Of-Way Width (Grant St to Buckeye Rd): Varies 130 to 140 feet

- Protected intersection
- Bike lanes with buffer
- 3 Continuous sidewalks
- 4 Wayfinding and pedestrian directional signage
- **6** Ample street amenities (bike racks, benches, trash bins, water stations etc.)
- 6 Special paving pattern adjacent to building entries
- Outdoor seating along sidewalks
- 8 Desert landscape and stormwater management
- Increased street tree canopy for shade and visual appeal



(FIG 1.5) 7TH ST STREET IMPROVEMENT CONCEPT (LOOKING NORTH)

STREETSCAPE IMPROVEMENT

ARTERIAL STREET: BUCKEYE RD

Proposed Right-Of-Way Width (7th St to 10th St): 82 feet

- Enhanced crosswalks
- 2 Street parking
- 3 New bike lanes and buffer
- 4 Ample street amenities (benches, trash bins, water stations etc.)
- **5** Outdoor seating along sidewalks
- 6 Shade structures and street frontage detail designs
- **7** Desert landscape and stormwater management
- 8 Varied street tree species along sidewalks
- **9** Cultural Corridor elements
- Wayfinding and pedestrian directional signage



KEY MAP



BUCKEYE RD EXISTING CONDITIONS



(FIG 1.6) BUCKEYE RD STREET IMPROVEMENT CONCEPT (LOOKING WEST)



STREETSCAPE IMPROVEMENT

COLLECTOR STREET: TONTO ST

Proposed Right-Of-Way Width New 8th Pl to West of Spark Area 2 Boundary: 74 feet 7th St to New 8th Pl: 60 feet



- 1 Enhanced crosswalks
- 2 Continuous sidewalks
- 3 Ample street amenities (bike racks, benches, trash bins, water stations, etc.)
- 4 Street parking with Electric Vehicle Charging Stations
- **6** New bike lanes
- 6 Stormwater curb extensions and desert landscape
- Increased street tree canopy along sidewalks
- 8 Shade structures and outdoor Seating



TONTO ST EXISTING CONDITIONS



STREETSCAPE IMPROVEMENT

COLLECTOR STREET: 10TH ST

Proposed Right-Of-Way Width (Buckeye Rd to Hadley St): 66 feet

- 1 Enhanced crosswalks
- Continuous sidewalks
- 3 New bike lanes
- 4 Street parking with Electric Vehicle Charging Stations
- **5** Ample street amenities (bike racks, benches, trash bins, etc.)
- 6 Increased street tree canopy along sidewalks
- Desert landscape and bioswales
- 8 E-Scooter parking zone
- **9** Wayfinding and pedestrian directional signage
- Cultural Corridor elements



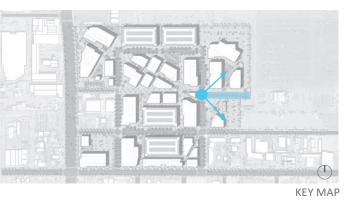
KEY MAP



10TH ST EXISTING CONDITIONS



(FIG 1.8) 10TH ST STREETSCAPE IMPROVEMENT CONCEPT (LOOKING SOUTH)



STREETSCAPE IMPROVEMENT

LOCAL STREET: HADLEY ST

Proposed Right-Of-Way Width (10th St to West of UPRR property): 66 feet



HADLEY ST EXISTING CONDITIONS

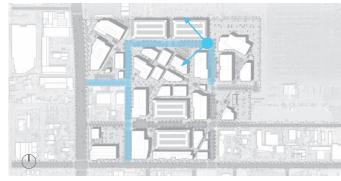
- 1 Enhanced crosswalks
- 2 Continuous sidewalks
- 3 Ample street amenities (bike racks, benches, trash bins, water stations, etc.)
- 4 Street parking with Electric Vehicle Charging Stations
- **6** Bike sharrows
- 6 Stormwater curb extensions and desert landscape
- **⑦** Increased street tree canopy along sidewalks



STREETSCAPE DESIGN

NEW PUBLIC STREETS, TYPICAL PRIVATE STREETS

Proposed Right-Of-Way Width: 60 feet



KEY MAP

- 1 Enhanced crosswalks and mid-block crosswalks
- 2 Continuous sidewalks
- 3 Street parking with Electric Vehicle Charging Stations
- 4 Ample street amenities (benches, trash bins, water stations, etc.)
- **5** Shade structures and outdoor seating
- 6 Stormwater curb extensions and desert landscape
- 7 Continuous street tree canopy along sidewalks
- **8** Bike sharrows



(FIG 1.10) TYPICAL PRIVATE STREET STREETSCAPE DESIGN CONCEPT (LOOKING WEST)

PUBLIC REALM DESIGN GUIDELINES

D. GENERATE GATHERING SPACES FOR CELEBRATIONS AND COLLABORATIONS

- D-1 | DIAGONAL WALK: Design a diagonal promenade the "Walk" (a 30-foot minimum wide public pedestrian easement) as a public space spine crossing through the site linking the northwest entry and Santa Rita Center. Promote quality design of the "Walk" to create a synergy between the public and private realms. New developments adjacent the promenade shall provide enhancement and maintenance on its side of the "Walk."
- D-2 | GATHERING SPACES: Create various types of gathering spaces differentiated in scale, size and function along the "Walk," paseos, and near building entrances. Design and program "cool pockets" as outdoor workstations for entrepreneurs, workers, and students to share ideas and technologies, establishing a niche to foster creative growth.

- D-3 | SHADE NETWORK: Develop a continuous shade network to promote a healthy year-round walking environment. Shade strategies could include canopies of trees, stand-alone structures, and architectural elements such as pergolas, fabric awnings, building entry coverings and portals.
- D-4 | WATER FEATURES: Consider employing water features to provide evaporative cooling and enhance outdoor thermal comfort. Water features including misting systems, fountains, ponds/falls should be located along the "Walk," or within plazas where large clusters of people can gather.
- D-5 | PUBLIC FURNITURE: Place skillfully designed public furniture along the "Walk" and/or in gathering spaces. Furniture can function as a place for reading, talking, brainstorming, resting, dining, and/or as a public Wi-Fi access node. Use high-tech design to provide shade, digital experience and environmental benefits.
- D-6 | ENVIRONMENTAL DESIGN: Integrate public art pieces and special lighting in the environmental design for placemaking and establishment of an iconic character.
- D-7 | PLANTING: Employ sculptural trees such as Date Palms along the "Walk" to reinforce the ceremonial and unique identity. Within the plazas/ greens, a variety of tree species may be used in order to provide shade and enrich visual appeal.



Above: Provide gathering spaces with shade along the "Walk" for communication and collaborations

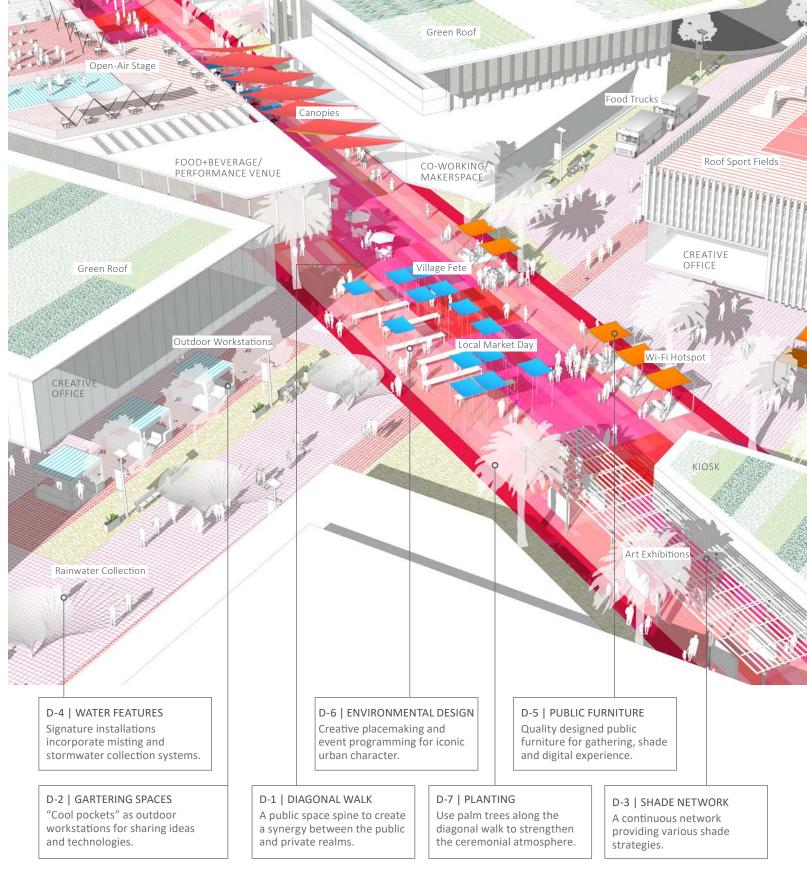


Above: Integrate special lighting into the environmental design to enhance the unique identity of the "Walk"





Above: Innovative public furniture design to create outdoor workspace Below: Use palms to shape an iconic and ceremonial character for the "Walk"







PUBLIC REALM DESIGN GUIDELINES

E. ESTABLISH ICONIC IDENTITY WHILE CELEBRATING THE PAST

- E-1 | ICONIC GATEWAY: Establish and encourage innovative design of an iconic gateway at the north/ west entry on 7th St. Design the gateway with surrounding buildings and public realm as its integral foundation. Program year-round events and activities to create an urban destination.
- E-2 | HISTORIC PRESERVATION: Retain and repair the existing historic property Santa Rita Center. Open the historic building to the public for honoring César Chávez. Integrate a public plaza space in front of the historic building for accommodating programmed ceremonies and community-oriented events.
- E-3 | CULTURAL CORRIDOR: Implement the Cultural Corridor along 10th St and the diagonal palm walk crossing through the site connecting the community's art, culture and history with new developments. Apply a unified family of street furnishings, public art, and signage elements to emphasize the specific identify of the Cultural Corridor themed Zone and promote the area's character. (*Please refer to PHX LRS Cultural Corridor Framework and Action Plan for more information regarding Cultural Corridor Theme Zone concept.*)
- E-4 | PUBLIC ART: Install public art pieces telling the stories of the historic neighborhood and celebrating the future. Explore opportunities to work with local artists and school art programs for promoting the artistic design of street amenities, shade structures, lighting posts, and utility boxes in the area.
- E-5 | WAYFINDING AND LIGHTING: Provide a cohesive system of signs to aid in pedestrian and vehicular orientation and wayfinding. Incorporate low level illumination lighting fixtures along public sidewalks, pathways and public spaces for added pedestrian comfort, visual appeal, as well as, safety and security after sunset.







(FIG 1.13) SPARK AREA 2 SANTA RITA CENTER DESIGN CONCEPT

F. STIMULATE SUSTAINABLE AND INNOVATIVE PRACTICES

- F-1 | STORMWATER MANAGEMENT: Integrate Low Impact Development (LID) Best Management Practices (BMPs) in public realm improvements where feasible. This could include bioretention areas, dry stream beds, vegetated buffers, vegetated swales, porous pavers, and planter boxes.
- F-2 | DESERT LANDSCAPE: Employ drought-tolerant and/or native planting in the public realm landscape design to celebrate the unique desert environment and capture urban run-off.
- F-3 | MATERIALS: Minimize impervious surfaces where possible in the public realm environment. Use alternative materials such as brick pavers, permeable concrete pavers, granite and flagstone to reduce the urban heat island and allow natural drainage and filtration.
- F-4 | SOLAR SOLUTION: Encourage innovative solar design in shade structures, street furniture, lighting, and public parking areas to increase energy efficiency.



Above: Employ low maintenance drought tolerant landscaping and LID practices to capture urban run-off



Above: Integrate solar solutions in public parking structures

PRIVATE REALM DESIGN GUIDELINES

INTENT

The Spark Area 2 Private Realm Design Guidelines provide a series of recommendations and design approaches for site planning, architectural and landscape design of private development projects within the Spark Area 2 boundary.

The intent of the Private Realm Design Guidelines is to (1) establish a unified development identity through building placement, massing and other elements of architectural and environmental design; (2) encourage diversified creative design within each individual project and building; (3) create a close-knit collaboration niche facilitating innovation and entrepreneurship while providing complementary uses and programs for the nearby community; and (4) promote a leading practice in sustainable design across Greater Phoenix and Arizona.

- A. OPTIMIZE BUILDING PLACEMENT AND ORIENTATION
- B. EMPLOY HIGH QUALITY

 ARCHITECTURAL DESIGN
- C. GENERATE COMMUNAL SPACES FOR INNOVATION AND INTERACTION
- D. PRODUCE A CONNECTED DESERT OASIS FOR THERMAL COMFORT
- E. CONTROL VEHICLE ACCESS AND ENCOURAGE ALTERNATIVE TRANSPORTATION
- F. INTEGRATE SUSTAINABILITY
 IN BUILDING DESIGN AND
 SITE DEVELOPMENT

A. OPTIMIZE BUILDING PLACEMENT AND ORIENTATION

- A-1 | BUILDING PLACEMENT: To the extent possible, buildings should generally be placed parallel to streets with varying setbacks to provide visual interest and to allow flexibility for generous sidewalks and "pocket spaces" to accommodate social activities.
- A-2 | SETBACKS: Create a contiguous and strong "street wall" by locating building frontages near the front property lines along Buckeye Rd, 7th and 10th streets. Vary the floor plate of a building to break down the mass and contribute to the quality and character of the street wall.
- A-3 | BUILDING ORIENTATION: Optimize building orientations on-site to harvest natural light and maximize daytime lighting. Where possible orient buildings along an east-west axis to minimize the exposure of western sun. Courtyards/external passages should be well-planned, shaded and designed to capture breeze and create a more comfortable micro-climate.
- A-4 | BUILDING ENTRANCES: Ensure the primary facades, storefront windows and entrance areas of buildings are facing abutting streets and/or other pedestrian-oriented circulation paths to provide opportunities for safety and interaction. Upper floors are to be served by common entrances that should be directly accessed from arterial streets and/or primary walkways.

Below: Sculpt the massing and create a continuous streetwall to define the public realm and enrich the streetscape



B. EMPLOY HIGH QUALITY ARCHITECTURAL DESIGN

- B-1 | SCALE AND HEIGHT: Ensure the scale and size of projects are compatible with adjacent and nearby neighborhoods, historic structures and airport operations. The maximum height of buildings/structures must meet applicable height restrictions indicated in this document and not exceed the airport height limits per the Phoenix Airport Height Zoning Article, Ordinance G-5179, Height Zone C.
- B-2 | BULK AND MASSING: Use setbacks, recesses, cornice and/or base features, and changes in materiality and glazing to break down building bulk, modulate the visual impact of building heights and add a human-scale at the street level.
- B-3 | BUILDING FRONTAGE: Differentiate the ground floor from upper floors through changes in massing, materiality, and architectural relief to provide eyelevel details. Integrate active functions such as cafes, fitness, and co-working spaces at the ground floor. Use projections, furniture, displays, signage, and landscaping to help animate the building edge and adjacent passages. Avoid negative visual impacts to adjacent or nearby historic structures.
- B-4 | FACADE ARTICULATION: Alternate different textures, colors, materials, and distinctive architectural treatments to provide pleasing proportions and three-dimensional quality. Apply architectural responses to reflect the desert context through entry overhangs, expressive shading devices, self-shading punched openings, and shade skins, etc.
- B-5 | FENESTRATION: Employ high-performance, well-detailed windows and doors that add to the scale and depth of the building's facade. Fenestration should unify a building's street wall and help define a building's architectural style and integrity.
 - Right and above: Explore different materiality and architectural treatments to reflect local climate context

- B-6 | GLAZING: Employ a high percentage of transparency at the ground floor of active functions to create visual connections and blur public and private space of the buildings. Where feasible, windows and doors should be designed to minimize heat gain and energy use impact.
- B-7 | COLORS AND MATERIALS: Employ a desert palette that is appropriate to the climate and region. Use high quality and durable materials and finishes in the new projects. Consider a higher light-reflectance value (LRV) color to reduce heat absorption and reduce glare on the ground and the building facade.
- B-8 | LIGHTING AND SIGNAGE: Develop a layered lighting system that contributes to a night-time experience. Encourage high-quality, innovative signage design to complement building facade.

Below: Activate ground floor uses and use canopies, displays, and furnishings to animate the pathways











PRIVATE REALM DESIGN GUIDELINES

C. GENERATE COMMUNAL SPACES FOR INNOVATION AND INTERACTION

- C-1 | COMMUNAL OPEN SPACES: Integrate a gradient of private space to semi-public space to pass-through spaces with architecture design. These spaces could include plazas/greens, courtyards, decks, and rooftop terraces and vary in the size and function; and should be easily accessible by the public.
- C-2| OUTDOOR AND INDOOR TRANSITIONS: Employ design approaches to blur the lines between outdoor/indoor rooms and create a close-knit niche for stimulating creativity and collaborations. Complement building design with compatible landscape architecture through concept, form and materials.
- C-3 | AMENITY FEATURES: Incorporate well designed quality furnishings, recreational amenities, and attractive landscape features to make outdoor rooms comfortable, inclusive and inviting. Consider flexibility (e.g., using movable chairs/tables) in the environmental design for adapting to weather shifts and supporting human occupation and use.

Right: Design outdoor collaborative spaces to blur public and private space



Right: Provide well designed high quality outdoor amenities to stimulate ideas and communications



D. PRODUCE A CONNECTED DESERT OASIS FOR THERMAL COMFORT

- D-1 | HEAT ISLAND NEUTRAL: Employ innovative strategies to mitigate heat island effect. These strategies could include shaded building facades, high-albedo and vegetated roofs, photovoltaic (PV) panels to shade roofs and paving, canopy trees and landscape cover, and water fountains and misting systems, etc.
- D-2 | SHADE STRUCTURES: Incorporate architectural elements such as overhead canopies, awnings, and overhangs, as well as stand-alone structures to shade buildings and paving. The outer surface of the shading element should have a minimum Solar Reflectance Index (SRI) of 29.
- D-3 | TREE CANOPIES: Provide canopies of trees arranged in linear alleys or groves to shade pedestrian paths, large expanses of paving, and courtyards. Ensure the selected planting palette is compatible with the surrounding buildings to create visual consistency. Employ drought-tolerant and/or native landscaping to strengthen the unique desert oasis character.
- D-4 | STORMWATER MANAGEMENT: Consider using alternative solutions for stormwater retention and water quality improvement. Approaches include employing permeable pavers, shaping of surfaces to capture and direct overland flow to landscaped zones (e.g., usable retention courtyards), and/or integrating a system of bioswales along greenstreets to harvest rainwater on-site.

Below: Use structures to shade pedestrian pathways





C-2 | OUTDOOR AND INDOOR TRANSITIONS

Blur outdoor/indoor room for a close-knit niche of innovation.

D-4 | STORMWATER MANAGEMENT

Use bioretentions, porous pavers, and decomposed granite (DG) to capture urban run-off.

C-1 | COMMUNAL SPACE

Provide shady outdoor rooms for interactions and innovations.

D-1 | HEAT ISLAND NEURAL

Use high-albedo and vegetated roofs to mitigate heat island effect.

D-3 | TREE CANOPIES

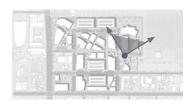
Native tree groves to shade courts and reinforce desert oasis character.

D-2 | SHADE STRUCTURES

Use architectural elements to shade buildings, pathways and large expanses of pavings.

C-3 | AMENITY FEATURES

Introduce movable seating for adapting to weather shifts and facilitating human occupation.



PRIVATE REALM DESIGN GUIDELINES

E. CONTROL VEHICLE ACCESS AND ENCOURAGE ALTERNATIVE TRANSPORTATION

- E-1 | PARKING AND SERVICE ACCESS: Limit the number and width of curb cuts and vehicular entries along arterial streets (7th St and Buckeye Rd) to promote street wall continuity and reduce conflicts with pedestrians and cyclists. Organize parking, loading and service access around E. Tonto St and internal streets where possible. Encourage parking and service access to share the same vehicular entries.
- E-2 | PARKING LOCATION: Employ structured parking on-site and locate it on the north side of the block to mitigate the noise impacts from the nearby railroad tracks. Provide sufficient on-street parking to meet the short-term parking demand. Off-street surface parking shall be located behind buildings or at the interior of a block with landscape screening.

- E-3 | SHARED PARKING: Encourage multiple buildings/projects to share parking garages and loading facilities in order to limit the amount of parking and service entries along the street frontage. Allow office/commercial parking garages to be accessible and used by the general public at off-peak times.
- E-4 | STRUCTURED PARKING DESIGN: Incorporate architectural treatments such as arches, attractive entrances, and decorative screening to add aesthetic interest and to ensure parking structures are visually compatible with nearby buildings.
- E-5 | FLEXIBILITY AND PROGRAMMING: Encourage surface parking lots and parking garages to be designed as programmable spaces when not required for parking. Accommodate events such as flea markets, food trucks, career fairs, etc.
- E-6 | BICYCLE PARKING: Provide sufficient bicycle amenities to encourage the use of alternate modes. Place bicycle racks near primary building entrances or near activity nodes in a safe, well-lit location. Consider providing bike valet stations, vertical bike racks and bike repair stations where necessary.
- E-7 | SCOOTER AND SKATEBOARD PARKING: Regulate and designate e-scooter drop zones along pedestrian walkways within the development blocks. Provide locking skateboard racks and E-scooters dropping areas near primary building entrances.

Right: Parking structure doubled use as temporary event site



Right: Locking skateboard racks near the building entrance and vertical bike racks





Above: Bike valet station integrated with shade canopy

F. INTEGRATE SUSTAINABILITY IN BUILDING DESIGN AND SITE DEVELOPMENT

- F-1 | SOUND MITIGATION: Employ acoustical site planning and building design techniques as well as "soundproofing" materials to reduce noise impacts from adjacent busy streets and nearby railroad and airport operations.
- F-2 | GREEN BUILDING DESIGN: Encourage new developments to integrate green building design solutions and technologies to achieve LEED Silver certification or above. Explore opportunities to utilize alternative energy sources, sustainable materials, green and solar roofs, natural light and ventilation to improve the building's environmental performance.
- F-3 | SUSTAINABLE SITE DEVELOPMENT: Employ drought-tolerant and/or native landscaping and promote low-impact development (LID) Best Management Practices (BMPs). Alternative paving materials such as permeable pavers, porous concrete, granite or similar materials should be used for on-site hardscaping to reduce urban heat island effect, and to capture and filter urban run-off.



Above: Employ sustainable design solutions to create an appealing indoor-outdoor transition for tenants



Above: Incorporate bioswales on-site for natural drainage and filtration



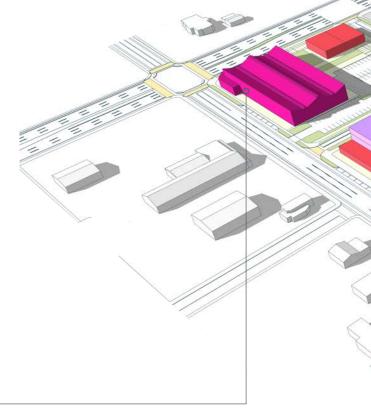


BUILDING TYPE RECOMMENDATIONS

INTENT

This section provides a series of building types that are recommended within the development sites of Spark Area 2.

The intent of the building type recommendations is to create a clear and predictable design and development of buildings that will comprise Spark Area 2. These recommendations are to maintain consistency with the Spark Area 2 master planning concept and ensure new development will be compatible with the existing scale of the neighborhood and the airport operations while supporting a high quality attractive innovative campus development.





MERCADO / MARKETPLACE

1 to 2 story medium- to largesized (50k to 100k GFA in size) structure functioning as an urban destination for local food and drinks. A mix of dining, shopping and entertainment augmented by landscaped courts and outdoor venues (e.g., beer garden, live music stage, etc.)



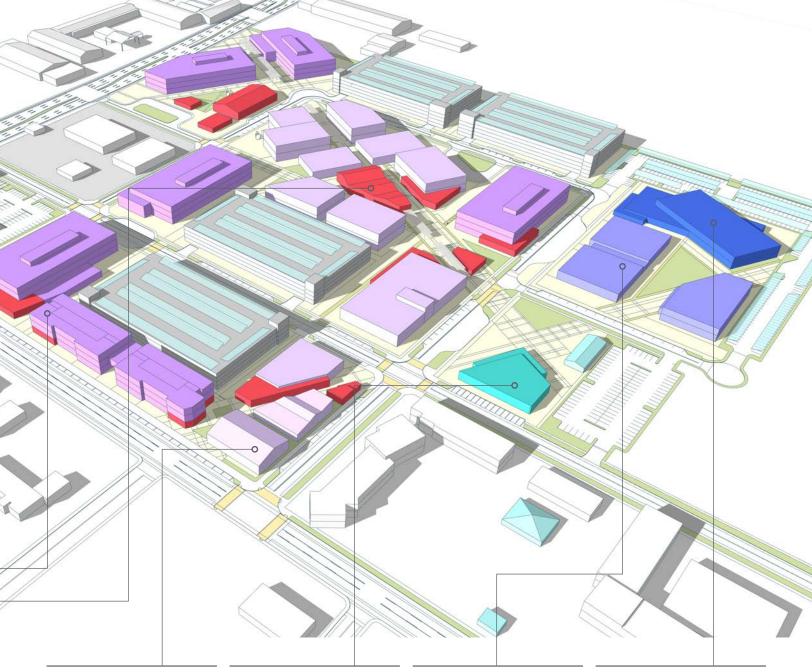
CREATIVE OFFICE

3 to 4 story compact, mixed-use office development featuring attractive architectural design, open floor plan, and flexible leasing terms. May house innovative workspace, laboratories, workshops, and amenities appealing to creatives and start-ups.



FOOD AND BEVERAGE VENUE / LIVE PERFORMANCE VENUE

1 story medium-sized (10k to 30k GFA in size) multipurpose complex associated with restaurants, breweries, bars, musical or theater performances, and fitnesss studios. Often incorporates outdoor spaces for dinning, performing, or social gatherings.





MAKERSPACE / CO-WORKING

1 to 2 story medium-sized (10k to 30k GFA in size) structure shared by multiple tenants. A collaborative workspace where people can gather to work on projects while sharing ideas, equipment, and knowledge. May contain showrooms, galleries, workshops, retail spaces, and amenities.



CULTURAL CENTER

1 to 2 story medium-sized (15k to 30k GFA in size) complex functioning as a multi-purpose community space that promotes local history, culture and arts. May house an art gallery, theater, DIY space, small activity space, multi-purpose room, a cafe, etc.



START-UP / INCUBATOR

1 to 2 story medium-sized (10k to 20k GFA in size) flex complex featuring open floorplans and flexible leasing-term. May house offices, conference rooms, research and development labs, advanced manufacturing workshops, courtyards and amenities; creating an ideal habitat attracting start-ups and tech talents.



TECH / TRAINING CENTER

2 to 4 story medium- to largesized (75k - 100k GFA in size) institutional development providing advanced (e.g., post secondary) occupational or technical training, developing a specialized labor pool for the airport-connected economy (e.g., logistics, advanced manufacturing, bio-life sciences, green tech, etc.)