CHAPTER FOUR: URBAN DESIGN AND GUIDELINES

4.1 INTRODUCTION

This chapter sets forth urban design concepts and guidelines to shape and facilitate redevelopment of the Plan Area, consistent with the Guiding Principles and land use provisions described above. The intent is to create an exciting, synergistic fusion of entertainment, fairgrounds, and mixed use destinations that builds on the regional visibility of the Plan Area and supports the ongoing success and long-term viability of the Solano County Fair, new Entertainment Mixed Use and Entertainment Commercial uses, and nearby major entertainment uses.

These design guidelines address both overall issues of site development and detailed issues of landscape, building form, walls and fences, and signage. Illustrative plans, photos and other materials are intended as guidelines and examples for review of future building approvals. Lastly, sustainability guidelines are included that both summarize sustainable project elements and provide suggestions for future development.

To assist future users of these design provisions, the following chapter contains separate sections for:

- The overall Plan Area,
- The Fair of the Future (Fairgrounds),
- Other Public Purpose Areas (Major Roads, Creek Park, Fairgrounds Channel, Transit/North Parking Center, and Shared Public Parking), and
- Private Purpose Areas (Entertainment Mixed Use and Entertainment Commercial parcels).

The information is this chapter is informed by the Plan's conceptual studies and may be subject to change as more detailed plans and specifications are developed as part of the design and development process. More detailed design guidelines will be incorporated into a Development/ Implementation Agreement between the County of Solano and the City of Vallejo.

4.2 PLAN AREA DESIGN

4.2.1 Urban Design Concepts

The Land Use Plan (Figure 3.1) establishes a framework for the Plan's proposed urban design features. The intent is to create a seamless integration of public and private areas, including Fairgrounds facilities and private mixed use development.









Guidelines are as follows:

- The Public Entertainment Core, the defining feature of Solano360, encompassing a lively, mixed use entertainment corridor connecting from the gateway at Fairgrounds Drive in the west to the demonstration farm at the Fair's eastern edge. The Public Entertainment Core includes:
 - The Creek Park with its walkways, promenades, plazas and bridges,
 - The Creek's Park's central water feature that connects public and private area and provides multiple benefits including visual amenity, wateredge promenades, onsite stormwater hydromodification, capture and reuse of stormwater for irrigation, and water quality treatment,
 - The thematic "Main Street" or Entry Road aligned with Creek Park, terminating at the new Exposition Hall and offering wide urban sidewalks and a pedestrian-friendly frontage for a "restaurant row", retail associated with entertainment uses, and gathering areas, and
 - Within the Fair, a major Arrival Plaza at the entrance to the Exposition Hall, a Midway/Event Lawn with terraced seating, the water feature and Creek Park with pedestrian bridge, and a demonstration farm oriented toward families and school groups.
- Indoor and outdoor venues for the Fair of the Future, fostering a year-round program of activities within a variety of active and passive spaces.
- Transformative Phase 1 project that includes the Creek Park with its water feature and creates a new Exposition Hall located as a focal point for the Entry Road.
- Strong relationship to nearby major entertainment uses via roadway and pedestrian connections, including integrated design elements and synergistic land use opportunities.
- Pedestrian, bicycle and transit connections integrated into streets and open space systems.
- Creation of a Rindler Creek drainage and adjacent buffer along the eastern, southern and western boundaries of the site to alleviate floodplain issues, establish riparian habitat and wetland benefits, and provide the opportunity for pedestrian trails.

These features are described further in this chapter and in Chapters Five and Six.

4.2.2 Access and Circulation

Connections to the Plan Area

Figure 4.7 illustrates key features relating to site access, parking, and entries.

The configuration of roads, entries and parking is intended to facilitate efficient access to parking facilities while focusing views on the Creek Park and other destinations, with attractive streets defined by buildings.

Because the Plan Area has a direct, physical connection to Six Flags Discovery Kingdom, the project has also been designed to establish a strong pedestrian character to encourage walking between the theme park and the Fair of the Future. Visitors to the Plan Area will be able to park, shop, dine, relax and visit Fair programs with the option of walking or taking a shuttle.

Connections within the Plan Area

The Plan proposes an integrated system of internal connections that encourages shared use, walking, bicycling and transit. Features include:

- Walkable grid of tree-shaded sidewalks, including special Entry Road streetscape (see Figures 4.24 to 26).
- Pedestrian trails within the Creek Park, connecting to continuous perimeter trail along the Fairgrounds Channel.
- Multi-use paths along the South Loop Road, connecting parking areas with the Public Entertainment Core.
- Continuous perimeter trail for the south area of the Plan Area as shown on Figure 5:10.
- New promenades and plazas within the Fair of the Future.
- Raised intersection and pedestrian crosswalks at the Entry Road/Loop Road to calm traffic and provide safe pedestrian crossings.
- A potential parking shuttle serving internal destinations and connecting to Six Flags Discovery Kingdom and the Transit/North Parking Center (see Figure 5.15: Transit and Shuttle Routes).

Accessibility

According to the Americans with Disabilities Act of 1990 "ADA" standards, new facilities constructed by, on behalf of, or for the use of a public entity must be designed and constructed in such manner that the facility or part of the facility is readily accessible to and usable by individuals with disabilities.

Public purpose areas within Solano360 will be designed to provide for ADA access according to applicable ADA Standards for Accessible Design.

4.2.3 Landscape Plan and Guidelines

Figure 4.8: Landscape Character illustrates the location and variety of landscape areas and public spaces envisioned for the Plan Area, including:

- Streetscape planting.
- Buffer/riparian planting along the Fairgrounds Channel, using species that are compatible with the flood control function of the channel.
- Planting along soft or earthen water edges.
- Park landscape.
- Turf, both regular and reinforced (such as with mesh reinforcement material).
- Rain gardens.







- Demonstration Farm.
- Hardscape and plaza areas (including the Fairgrounds Concourse).
- Terrace seating at grade changes along the Creek Park water feature and in the Fairgrounds amphitheater.
- Surface parking areas.

Specific guidelines for Fair property landscape features as well as for the Fairgrounds Channel and Creek Park are included in Section 4.3: Fair of the Future and Section 4.4: Other Public Areas, respectively. The following general guidelines apply to the Plan Area as a whole.

Street Character

- Hardscape and plazas should be paved attractively, with paving patterns and materials conducive to pedestrian circulation and gathering.
- Tree planting should be designed to create shaded areas, especially in public areas such as sidewalks, parking lots, roadways, courtyards, plazas and parks.
- Trees along the Entry Road and at the Arrival Plaza should be of a different character than the streetscape trees on the other roads, and should be planted in tree grates.
- Street trees should be placed in park strips between the curb and sidewalk as shown by Figures 4.24 to 4.26.
- Parkway strips and medians should be planted with a variety of drought-tolerant species.
- Contrasting tree species should be used for perimeter trees and trees along pedestrian corridors and hardscape areas to clearly identify paths of travel.
- Street trees should be spaced at approximately one tree per 25 feet, or less if smaller trees are used.
- Trees for major streets should be a minimum of 24-inch box container size. Fifteengallon container size may be used for minor streets and buffers.

Planting Criteria

- Plant materials should be selected from the plant palette in Appendix E: Solano360
 Plant Palette. Substitutions or additions may be considered based on the suitability of
 the species in terms of similarity of form, adaptability, tolerance to site soils, climatic
 conditions or water quality, or other pertinent characteristics. The plant list is not
 intended to be exhaustive but to provide a clear guide for selection. Additional plants
 may be used that are compatible with this list and are consistent with the intent of
 these guidelines.
- In order to establish a unique and cohesive image for the Plan Area, a limit range of plant material should be used for public roads, park and common areas, commercial sites, and the Fairgrounds. For these areas, the intent is to employ a limited number of plant species for the majority of the planting in each identified area.
- Plant materials should be selected to be at an appropriate scale for the surrounding area when at mature size. Larger, more dramatic species should be utilized for important public areas such as the Public Entertainment Core, major entries, and Loop Road.
- Plant materials should be selected to meet the criteria listed below.

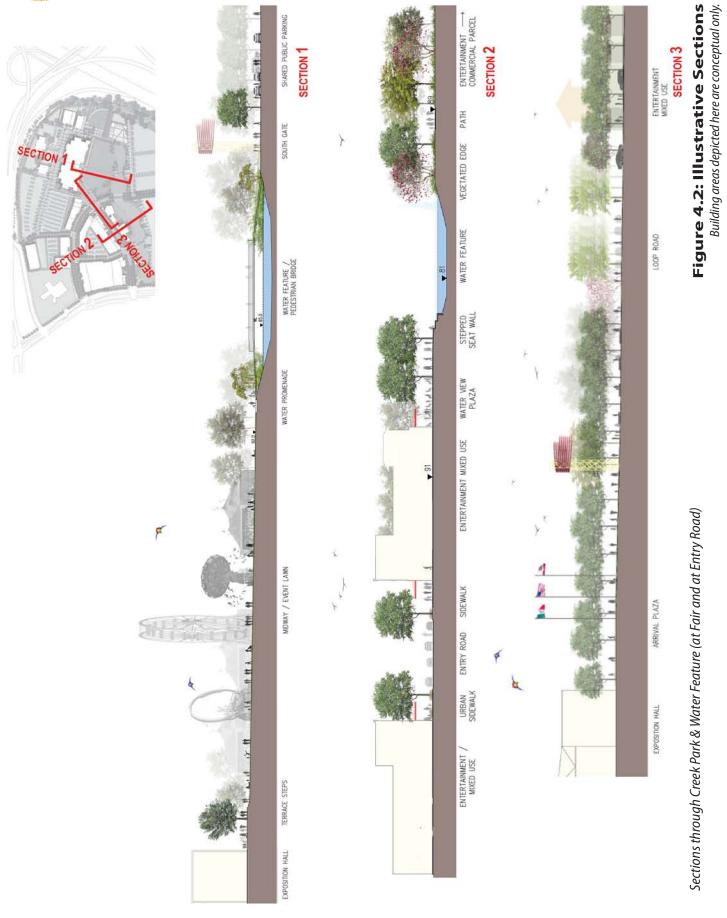
CHAPTER FOUR: URBAN DESIGN AND GUIDELINES

SOLANO360 SPECIFIC PLAN PUBLIC DRAFT



Figure 4.1: Illustrative Plan





CHAPTER FOUR: URBAN DESIGN AND GUIDELINES

SOLANO360 SPECIFIC PLAN PUBLIC DRAFT

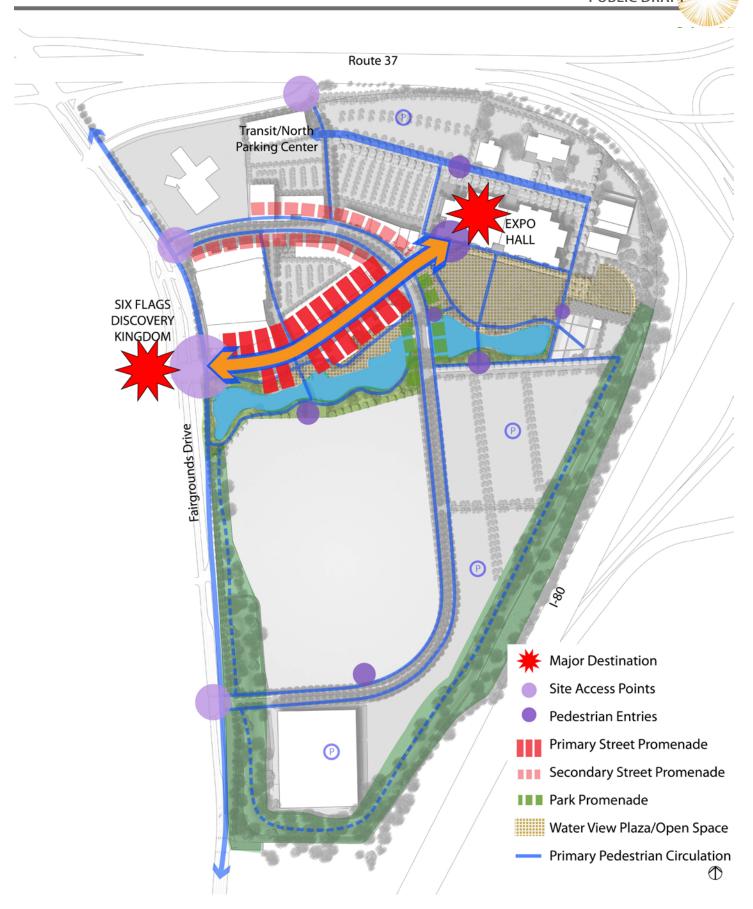
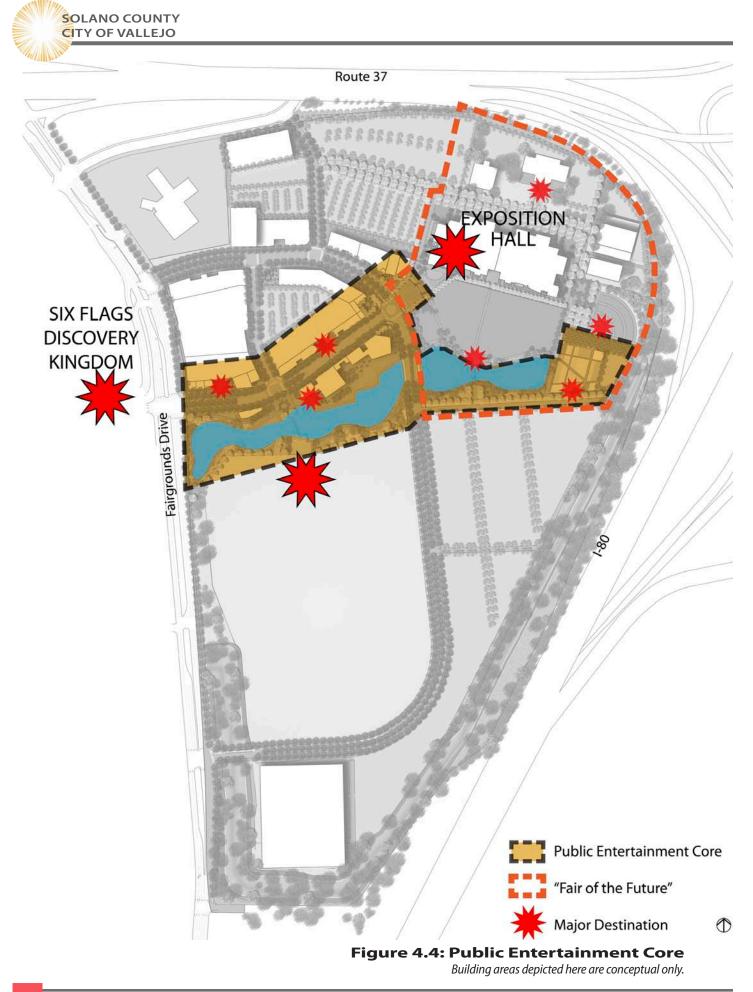


Figure 4.3: Urban Design Elements



SOLANO360 SPECIFIC PLAN PUBLIC DRAFT

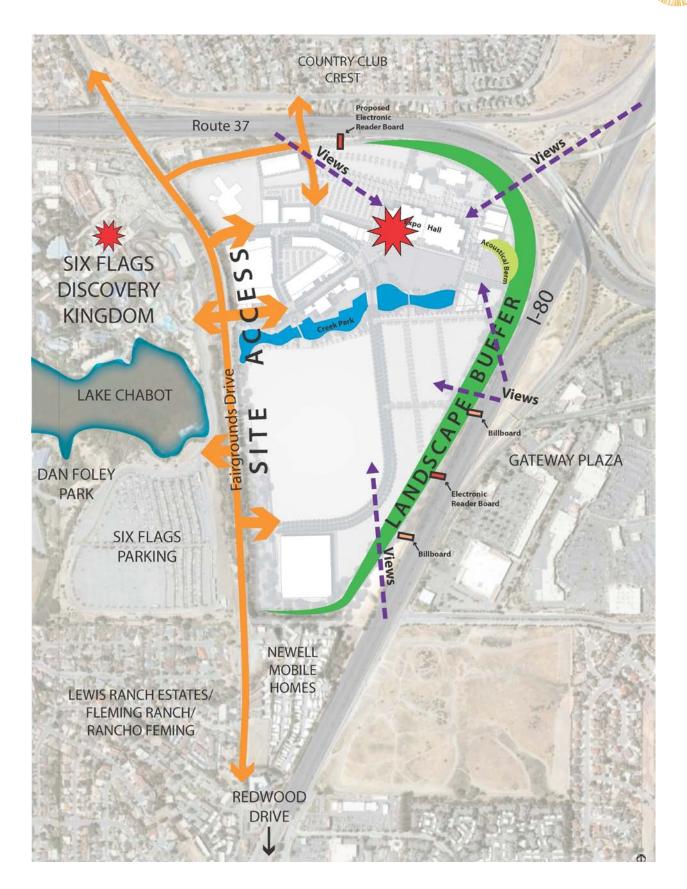


Figure 4.5: Site Relationships





View from I-80



View from S.R. 37

Figure 4.6: Perspective Views

- AN
- Emphasize the planting of drought-tolerant, long-lived plant species that are native and/or well adapted to the climatic and soils conditions of the Plan Area and require minimal maintenance.
- Avoid planting tree species with invasive root systems near utility lines, concrete and other paving. Such species may be utilized in setback areas adjacent to roadways or in transition areas, provided there is adequate clearance.
- Avoid the use of non-native, invasive species that may spread into areas of permanent, undeveloped open space.
- Landscaping is required where development is visible from major public roadways and public facilities including trails. Tree planting should consider the need to preserve solar access and views and maintain fire safety requirements.
- All plants should be carefully selected to avoid toxic species that could be harmful to children or cause allergic reactions.
- Planting design should consider year-round interest and seasonal character through the careful use of flower and leaf color.
- Landscape design should provide effective screening of parking areas, retaining walls, utility enclosures, utility cabinets, service areas, or service corridors to reduce negative visual impacts. Screen landscaping should incorporate evergreen plant species in order to maintain yearround leaf cover.
- Plant materials along water edges at the water feature and in the fairgrounds channel should be native vegetation capable of filtering water, preventing erosion, and providing habitat and food to native species.
- Landscaping within the Plan Area will be subject to any special requirements identified by future soils or drainage investigations.
- Landscape plans should be prepared by a landscape architect registered to practice in the State of California.

Irrigation and Maintenance

 The use of potable water for landscape should be minimized. It is anticipated that non-potable water from the onsite water feature will serve as the irrigation source







(refer to Chapter Six for additional details). If reclaimed water becomes available, it may be utilized as well. Any water-intensive planting should be concentrated in shaded areas, where natural runoff occurs, or at highly visible locations, such as within the Public Entertainment Core and at the Arrival Plaza.

- Groundcovers, grasses, or drought-tolerant turf should be used in place of standard lawn where possible.
- Existing vegetation is limited within the Plan Area; however, healthy existing vegetation along drainage ways or other areas should be retained to the extent feasible, with replacement provided where removal is unavoidable. In Phase 1, existing (and healthy) parking lot trees should be retained within parking areas if such trees do not interfere with site development.
- All public areas, rights-of-way and commercial project landscaping should have high efficiency, automatic irrigation systems. Low volume spray heads and drip irrigation systems should be utilized. Landscape improvements should be installed and maintained with a sustainable landscape maintenance plan that uses toxinfree organic or biological fertilizers and weed/pest control products.
- Landscape plans should be submitted to the City to insure water-efficient irrigation systems according to City requirements.

Transition Areas and Buffers

Grade transition areas between development and site edges are subject to the following:

- Transition areas should be landscaped to create a visually pleasing transition between development and common areas, and provide filtered views both from and toward the Plan Area. Landscaping of transition areas is required where development is visible from major public freeways or roadways and from public facilities.
- Landscaping of transition areas should emphasize trees and shrub planting and grasses. Irrigation should be provided for plant establishment.
- Site Drainage
- All site stormwater runoff must be treated consistent with the San Francisco Bay Region Municipal Regional Stormwater NPDES Permit (MRP) prior to discharging into an offsite drainage system. Treatment should utilize Best Management Practices (BMPs) and Low Impact Development (LID) principles as specified in MRP Provision C.3.
- Acceptable treatment measures within the Plan Area may include:
 - Infiltration
 - Evapotranspiration
 - Biotreatment (e.g., rain gardens, bioswales, biotreatment units, planter/tree boxes)
 - Minimizing impervious areas
 - Constructed riparian channel (see Section 4.4.3: Fairgrounds Channel)
- BMP's should be incorporated into parking lots, medians, and street/parcel edges.
- Sub-drains should be provided unless a percolation test shows such drains are unnecessary.

CHAPTER FOUR: URBAN DESIGN AND GUIDELINES

SOLANO360 SPECIFIC PLAN PUBLIC DRAFT

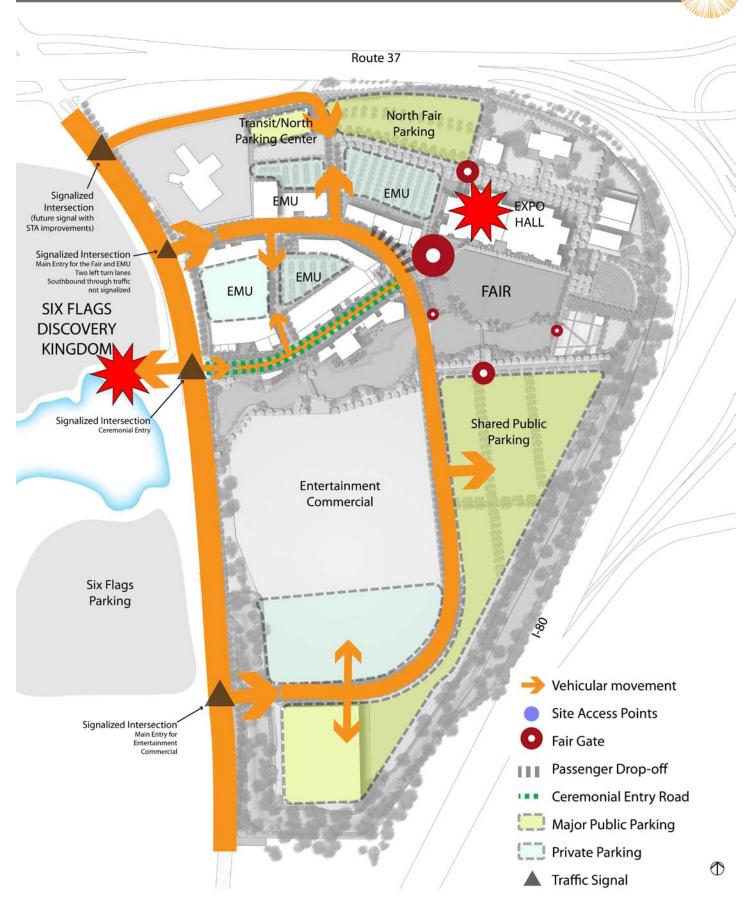
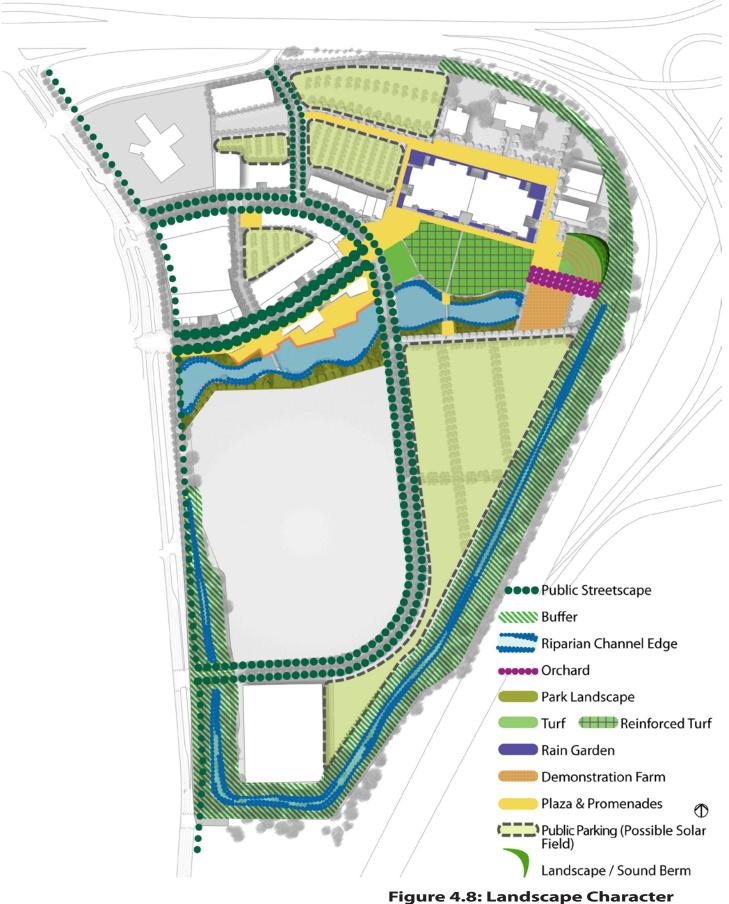


Figure 4.7: Site Access & Parking





Erosion and Sedimentation

• Grading operations should be planned and implemented to efficiently control erosion and sedimentation.

Berms, Channels and Swales

Berms, channels, and swales should:

- Be shaped to appear as an integral part of the graded or paved surface.
- · Have smooth transitions between changes in slopes.
- Be designed so as to appear a natural part of the site topography.

Slopes and Retaining Walls

- · Landscapes should incorporate smooth transitions between changes in slope.
- The maximum slope for a landscaped area should be 2:1 if the area is planted with a ground cover and 3:1 if planted with lawn.
- Where space constraints exist, terracing with retaining walls will be allowed.
- Retaining walls should not exceed three feet in height. For grade changes that exceed three feet, walls should be stepped in equal increments with three foot-wide planted terraces between.
- Retaining walls should be constructed of a low-maintenance, durable material compatible with nearby architecture.

4.2.4 Parking Areas

This section addresses design of parking facilities, located per Figure 5:14: Land Use and Parking. Chapter Five provides additional information on phasing of parking facilities.

Overall Guidelines

- In general, parking should be located and designed to allow buildings to be located directly along street frontages, with parking areas to the rear, while providing adequate parking facilities to serve commercial and public uses.
- During peak use periods, such as Saturdays and Sundays during Fair Week, parking may be augmented by shuttles to offsite locations.
- Parking facilities (including surface lots and structured parking) with pedestrian or vehicle access from Entry Road should be screened at the street level by buildings or significant amenity features to maintain an active street character and well-defined street edge.
- Signs indicating routes to parking should be displayed clearly along the Entry Road, Loop Road and Sage-Loop Connector Road in order to guide visitors.
- Shared parking between the Fairgrounds, nearby major entertainment uses, private development, and other parking users should be maximized and will be defined by a Parking Operations Management Plan to be prepared by the County and by parking agreements between the County and Six Flags Discovery Kingdom.
- Parking should not be located adjacent to the Creek Park or water feature in order to maintain the open space character of those areas (see Section 3.6.1).



Surface Lot Design and Landscaping

As described in Chapter Six, a majority of the Plan Area, including parking lots, will be designed to drain to the Creek Park water feature. The water feature will provide water quality treatment, but it is likely that bio-treatment will need to be integrated into the parking lot design as well.

- Surface parking lots should be planted with trees to minimize their visual impact, reduce heat gain, and create a more comfortable pedestrian setting.
- For private areas (EMU and EC development), trees should be planted at a rate of one tree per six parking stalls.
- Larger scale parking areas, such as Shared Public Parking, require more flexible landscape guidelines in order to serve multiple purposes such as temporary fairs and festivals; therefore, tree planting may be concentrated along perimeters, entries, and key pedestrian corridors.
- Parking lots may be developed with photovoltaic arrays (in place of trees) as described in Section 4.6.2 Next Step Sustainability Measures.
- Ample, well-lit and shaded (either by trees or solar collectors) pedestrian routes should be provided from parking areas to main destinations and building entries. Where possible, pedestrian circulation should be separated from vehicular areas.
- For interior parking lots, smaller trees should be selected to allow adequate visibility beneath mature tree canopies to building entries and storefronts.
- All surface lots should have landscape buffers at street or other public area edges. Landscape buffers should consist of trees and low plantings (to provide views into lot interiors) interrupted with regular pavers or other walkways for ease of pedestrian access.
- All major surface lots should incorporate bicycle parking facilities.
- Passenger loading areas for ridesharing vehicles and preferred parking for carpools and/or certified pure zero emission vehicles (100% battery electric and hydrogen fuel cell) and compressed natural gas (CNG) vehicles should be located near main building entrances.
- Two way parking lot drive aisles should be a minimum 24 feet wide.
- Parking lot landscape islands should be a minimum of eight feet wide at the aisle ends and a minimum of six feet wide elsewhere.
- Tree wells and planting strips should be a minimum of six feet diameter/ width and should be located between all doubled-loaded parking rows.
- Parking lots should incorporate handicapped spaces per ADA guidelines; such spaces should be located near entry points.

Design of Parking Structures

As parcels develop and land use intensifies, structured parking may replace surface lots in the southern end of the Plan Area (South Parking Structure), within the Transit/North Parking Center, and within the Entertainment Mixed Use area. These structures will support anticipated Phase 3 development including expansion of the Exposition Hall and expansion of the Entertainment Mixed Use and Entertainment Commercial development.

- Parking structures should be screened with planting of suitable scale and species.
- Parking structures located in the EMU area should be wrapped by ground floor retail



or entertainment uses along the North Loop Road or other public roads, and retail/commercial uses are encouraged for the ground floor of parking structures to activate streets and pedestrian corridors.

- The upper floors of parking structures should utilize planters, trellises, vegetated walls or other decorative screens along vertical walls at street frontages or other public area and open space frontages.
- Parking structures should be designed to complement nearby architecture in terms of style, massing, color and detailing, and should be located to prevent shadowy, windy canyons.

4.2.5 Signage and Lighting Guidelines

See Section 4.3.6 for Fair of the Future signage, lighting and site furnishing



guideline; see Section 4.4.6 for guidelines addressing electronic reader board signage on the Fairgrounds adjacent to I-80 and SR-37.

Figures 4.22 and 4.23 provide examples of site furnishings and lighting.

Signage

Signs will aid in establishing the sense of quality and character for the Plan Area, in addition to conveying critical wayfinding information for visitors.

- Comprehensive signage programs should be developed for both the Private and Public Purpose Areas. These programs should be prepared together or, if prepared separately, should be coordinated to convey a unified identity for Solano360 including the Fair of the Future, Creek Park, and the entertainment and retail development.
- Permanent signs prepared as part of comprehensive signage programs should include entry signs, area signs, directional signs for vehicles, bicyclists/pedestrians, street signs, interpretive and educational signage within the Creek Park and Fair, and signs identifying businesses in the EMU and EC areas.
- Temporary signs may include special event signs, temporary signage during construction or at the opening of a new venue or business, real estate information signs, and parking controls for major events.
- In general, signs should be utilized only where necessary, emphasizing an image
 of permanence and quality; however, signs should offer adequate visibility and
 reflectivity, where appropriate, to provide for safety and orientation at night. The
 purpose of permanent signage is to convey information, to aid in identifying visitor
 destinations and to add an element of consistency.
- Entry signs may be integrated into entry pylons, arches, or other features.
- All permanent signs and monuments should be constructed of durable, high quality



materials.

- Freestanding signs should be limited to directory-type signs with information limited to the name of the project for multi-parcel developments and building or address numbers.
- Access to parking should be adequately signed to guide visitors to parking facilities.
- All free-standing parcel or project signs along streets and common access drives should be designed as a 'family' of signs, consistent with the architectural style of related buildings.
- Small, free standing signs for individual buildings may be allowed near building entries; such signs should be consistent with the architectural style of the building. Other signs for individual buildings or tenants should be located on the building in a manner consistent with the architectural style.
- A digital kiosk or marquis sign at the Entry Road entry or other appropriate location may be allowed for use by the Fair Association for Fair and other Solano360 events.
- With the exceptions noted above, all signs within Private Purpose Areas should conform to the City Zoning Ordinance Chapter 16.64.





Lighting

Street-level and pedestrian lighting are important for safety and will also contribute to site identity and character within the Plan Area. Lighting elements should adhere to the following.

- Lighting should be designed to differentiate use areas, emphasize amenities and landscape features, provide continuity along street corridors and promote safety.
- Lighting may be combined with banners or incorporated into other pageantry and wayfinding features to create a festive setting.
- In general, lighting should provide sufficient levels of ambient light to create a safe and pleasant environment without causing light pollution or glare into adjacent properties.
- Low-level, cut-off, pedestrian-scale fixtures should be utilized to the degree possible.
- Street lighting should be directionally shaded to reduce off-site fugitive light and glare.
- Exterior building lighting should be shielded to minimize direct glare and reflections.
- Lighting should utilize LED or other energyefficient fixtures with pleasing light color.

- Materials for lighting fixtures should be durable and low maintenance. Natural finishes like bronze, and nickel steel are recommended.
- Spacing and illumination levels should be calibrated to achieve IESNA standards (e.g., a 0.5 foot candle level for sidewalks in medium pedestrian activity areas), and local requirements, based on photometric studies prepared as part of design submittals for each street.
- Intersection lights should be on 22-foot tall poles.
- Pedestrian lighting along sidewalks should not exceed 15 ft in height.
- Parking lot lights should be no higher than necessary to provide efficient lighting of the area, but should not exceed 28 feet, including the base.

4.2.6 Walls and Fences

Walls and fences may be used to define public and private boundaries and spaces, as described below. See additional guidelines for Fairgrounds fencing and entries in Section 4.3.

- Where used, walls and fences should be open and/or low to maintain an inviting, attractive appearance and provide adequate sight distance for entries. Materials should be compatible with and complementary to principal buildings. Fence and wall panels may be divided into regular modules that reflect the module of the principal building.
- Thick and thin elements should be used, with thicker pieces for supports and panel divisions. Fence posts and support columns should be emphasized and/or built-up.
- Screen walls are intended to screen uses such as loading, service areas, and utilities, while maintaining a common architectural language with the buildings surrounding them. All screen walls connected to buildings should match the building style. Maximum height of a screen wall should be six inches higher than the object being screened.
- Masonry walls should have a base and coping.
- Fences visible from public areas should be wrought iron, cast iron, and welded steel ornamental fences or wood. Metal fences may be mounted on a low masonry wall, and/or spanning masonry piers. Wooden fences should be painted, preferably a light color.
- Security fences should not be visually prominent. Black, vinyl-clad chain link fencing (with matching posts) may be used for security fencing with a maximum height of seven feet; taller fences may be allowed along freeway edges. Evergreen hedges, flowering vines and/or trees should be planted along the base of all security fences.







- Black, vinyl-clad chain link fencing (with matching posts) may be utilized for storage or service areas that are not visible from public areas, including public roads.
- Plywood, un-clad chain link, barbed wire or razor wire fence are prohibited.

4.2.7 Loading and Service Areas

- Loading areas should be sited to the rear building or sides of buildings not visible from public areas, including streets.
- All service, loading, trash, storage areas, and utility equipment should be screened from public view utilizing a combination of planting and architectural elements that are compatible with the building architecture.
- Loading/garage doors are prohibited on building facades facing a public street.
- Service loading from public streets is prohibited except for parcels where other configurations are not feasible, such as adjacent to the Creek Park.
- No refuse or storage areas may be located between the front of a building and a primary road right-of-way except for parcels where other configurations are not feasible, such as adjacent to the Creek Park.
- Refuse collection and storage should be located to the rear and sides of buildings, covered with a roof, and sized to contain all refuse generated on site between collections.
- Common recycling bins should be provided for all commercial uses and must be readily accessible to all tenants/employees, and be screened in the same manner as refuse collection areas.
- Transformers and other utility equipment should not be placed in the public street setback area.
- All rooftop equipment should be fully screened with the same or similar materials of which the building is constructed.

4.3 FAIR OF THE FUTURE

4.3.1 Fairgrounds Programming

Throughout the planning process, Solano County Fair Association representatives provided input regarding near-term and mid-term plans to establish a new Fair of the Future that could offer a broad array of year-round activities while maintaining the traditions and community connections of the existing Fair.

Outdoor spaces, including lawn and hardscape plazas, are of critical importance to the Fair.

Following are the identified program uses for the Fair of the Future:

- Establishment of a new, flexible event hall of approximately 50,000 net square feet of exposition/event space, with potential for expansion to 100,000 net square feet in the future when demand warrants such an expansion.
- Ability to provide an array of event and entertainment venues to respond to market opportunities and region serving demand.
- Selective update, expansion and/or replacement of existing Fair facilities.
- Desire to have complementary program to Six Flags Discovery Kingdom and adjacent



mixed-use development.

- Convenient and proximate transitions from indoor to outdoor venues.
- Branding and image to focus on local culture and heritage of the Fair, with consideration of the County Fair roots/heritage: Livestock, Agriculture, Food and Community.
- Reinforcement of important County Fair themes including (1) heritage of Solano County Fair;
 (2) sustainability; (3) agricultural demonstration.
- Expression of the diverse character of Solano County, (urban / rural, ethnic/cultural diversity, lifestyle diversity) and effective use of the site's key location at the crossroads of major roads.

In addition to current events and activities at the Fair, specific new attractions and programming could include:





- A Ferris wheel or similar feature visible from I-80.
- "Mini-midway", or small amusement park, with year-around operation.
- "Festival-on-the-green" program of activities within a new event open space; consideration of an outdoor inflatable movie screen.
- Demonstration Farm that could attract school groups and take advantage of interests in micro-sustainability and urban farming.
- Wedding events with location for wedding 'photo op.'
- Tractor pulls, livestock shows and similar agriculture-related events and activities.
- Running or walking races.
- Flea markets and farmer's markets.
- Complementary operational relationships with Six Flags Discovery Kingdom, local hotels, and other businesses, such as providing exhibit or meeting space to help hotels attract larger scale meetings or convention business.

4.3.2 Fairgrounds Design Objectives

Figures 4.11 and 4.12 illustrate the conceptual plans for the Fair's outdoor and building venues for Phases 1 and 3. As envisioned, the Fair of the Future plan upgrades the Fairgrounds in its current location, with long-term flexibility to expand southward into parking areas as additional space for event venues is required beyond the scope of this Plan.

The overall objectives of this conceptual-level design are as follows:



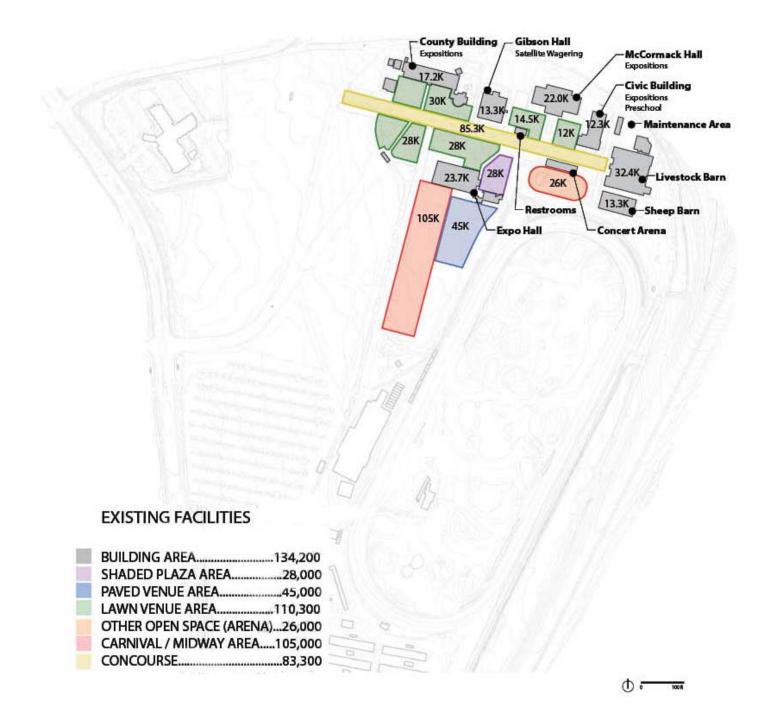


Figure 4.9: Existing Fairgrounds Facilities

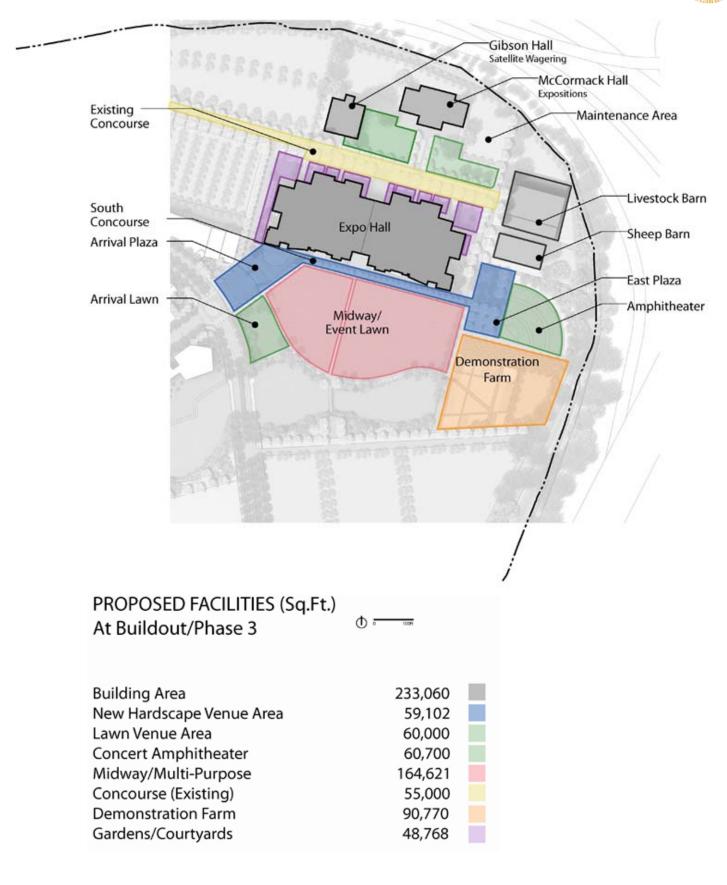


Figure 4.10: Proposed Fairgrounds Facilities



- Provide new, multi-functional event facilities that expand the Fair's abilities to market to a wide variety of entertainment, educational, commercial, and civic programs on a year-round basis.
- Create new outdoor venues adjacent to and in association with the new Exposition Hall to support the Fair's program of outdoor events and create appealing and durable outdoor public spaces. For maximum usability, these venues should include both turf and paved spaces and should be designed as "outdoor rooms" with simple, outdoor areas framed by trees and/or buildings.
- Distribute parking areas and entry gates, with clear wayfinding signage to enable flexible event programming and allow the Fair facilities to serve multiple, concurrent events.
- Develop options for year-round uses and products at the Fair; require that events and attractions stay relevant and relate to contemporary preferences for food, entertainment and education.
- Consider the selective update, expansion, and/or replacement of existing Fair facilities in a phased program that allows each incremental stage to function effectively.
- For intermediate/interim enhancements to Fair facilities, consider "facelifts" to key buildings and enhancements to the grounds.

4.3.3 Fairgrounds Phasing

Flexibility is a critical objective for the Fair of the Future. The phased upgrade of structures and open spaces is intended to allow multiple and shared uses, allowing the Fair to operate and generate revenue throughout the year and providing for maximum synergy with non-public and public uses on the overall site.



- Phase 1 (Phases 1a and 1b) includes the demolition of the existing Expo Hall and construction of the new Exposition Hall providing approximately 50,000 net square feet (approximately 72,000 to 77,000 gross square feet, depending on whether Administrative and Security Offices are included). Associated outdoor venues, including Arrival Plaza and Midway/Event Lawn and Creek Park with water feature, are scheduled for Phase 1. If funds are available, Phase 1 could include relocation of the existing Administrative and Security Offices into the building; alternatively, this may occur in Phase 3.
- In Phase 2, in order to provide for North Fair Parking expansion, the existing County Building will be demolished. The Fair's Administrative and Security Offices will also be demolished and housed in portable buildings, if not already located within the Exposition Hall in Phase 1.



• In Phase 3, or if sufficient demand arises in Phase 2 and if supported by onsite and offsite infrastructure and mitigations, the Exposition Hall will be expanded to approximately double the Phase 1 footprint and program. The Phase 3 expansion will require demolition of the existing concert arena and construction of a new amphitheater for concerts and theater events as shown in Figure 4.12. If Administrative and Security Offices are still housed in portables, they would be relocated into permanent space within the expanded Exposition Hall.

Together with the existing facilities that will continue to function (including Gibson, McCormack, the livestock and sheep buildings), this phased approach provides essential facilities that will allow for the efficient operation and financial sustainability of the Fair of the Future.

Facilities to Remain				
EXISTING BUILDINGS AT CONCOURSE (Note: does not include facilities for horse racing or golf course)	EXISTING QUANTITY (sq. ft.)	PHASE 1 (sq. ft.)	PHASE 2 (sq. ft.) ¹	PHASE 3 (sq. ft.) ¹
Admin/Directors Trailer/Security Office	5,110			
County Bldg	17,170	17,170		
Gibson Hall	13,325	13,325	13,325	13,32
Concourse Restroom	1,650			
McCormack Hall	22,000	22,000	22,000	22,00
Civic Bldg	12,325	12,325	12,325	
Trash Shed	2,000	2,000	2,000	2,00
Maintenance Shed	4,550	4,550	4,550	4,55
Livestock Bldg	32,400	32,400	32,400	32,40
Sheep Barn	13,285	13,285	13,285	13,28
Concert Arena/Grandstand Cover	5,200	5,200	5,200	
Twilight Patio Office/Concessions/Storage	1,800			
Existing Exposition Hall	23,730			
Guard Shack (adjacent to director's trailer)	1			
TOTAL Existing	154,545	122,255	105,085	87,56
NEW BUILDINGS (based on project description)		PHASE 1	PHASE 2 ¹	PHASE 3 ¹
New Exposition Hall ²		72,000	72,000	144,00
Temporary Administrative Offices (Phase 2)			5,000	
New Concert Arena/Grandstand Cover				5,50
TOTAL New		72,000	77,000	149,50
TOTAL Existing and New	154,545	194,255	182,085	237,06
Notes				
1. Totals are cumulative and include prior phases				

Table 4.1: Fair Building Program & Phasing

2. The Exposition Hall replaces existing Expo Hall and concourse restrooms; also adds lobby, circulation, kitchen, and meeting rooms. In Phase 2, existing Admin offices would be demolished to provide North Fair parking; if not provided in Phase 1 Expo Hall, Admin office would be housed in portables until Expo Hall expansion in Phase 3 provides permanent admin space.





Figure 4.11: Fair Illustrative Plan - Phase 1 Building areas depicted here are conceptual only.



Figure 4.12: Fair Illustrative Plan – Phase 3 Building areas depicted here are conceptual only.



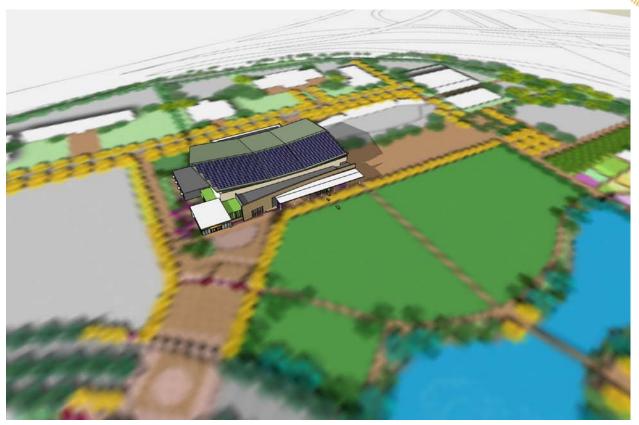


Figure 4.13: Aerial View - Phase 1 Building areas depicted here are conceptual only.



Figure 4.14: Aerial View - Phase 3 Building areas depicted here are conceptual only.



4.3.4 Exposition Hall

As part of Phase 1a, the Plan proposes to replace the existing Expo Hall with a new Exposition Hall that offers 48,600 net square feet of exhibition space in a flexible, highly marketable venue integrated with the existing fair concourse and other facilities. This flexible space can be subdivided in logical increments, as described below, in order to accommodate a wide range of events including conventions, consumer shows, festivals, large parties, and other special events.

In addition to exhibition space, the Exposition Hall provides support space for lobbies, circulation, meeting rooms, kitchen, storage of movable wall panels, and restrooms for a total of 72,000 square feet.

Figure 4.15 to 4.19 illustrate the layout and architectural concepts for this important event building, which is envisioned as follows.

The following descriptions refer to the initial building proposed for construction in Phase 1a and anticipated to serve the Fair through Phase 2. Possible expansion in Phase 3 will approximately double this space and also provide for office space for Fair Administration and Security services.

Building Concept

Conceptual design for the Exposition Hall represents a functional, economical and flexible building design that also provides an architecturally distinct and compelling landmark facility for the Plan Area. In addition to its style and massing, a range of contemporary building materials were selected to reflect a forward-looking vision for the "Fair of the Future". The conceptual design for the Exposition Hall includes the following key elements:

- In addition to serving as interior circulation and gathering spaces, the entry lobby and lounge areas (located on the south side of the building) have been organized to open directly onto a covered exterior terrace and multi-purpose lawn/event space, with views and direct access to the water feature beyond.
- The simple, yet geometrically expressive roof shape of the main Exposition Hall provides an iconic and easily identified building element within the overall site. With its inclined roof surfaces—reminiscent of the hillsides that surround the site—and exposed wall surfaces at both the east and west ends, the building's height and orientation provide a highly visible signage/graphic opportunity when viewed from both SR-37 and I-80.
- The conceptual design embodies a commitment to environmental responsibility, and sustainable goals and practices through proposals for a variety of material selections, features, and elements (see below).

Central Exposition Space

- Nominally, a 270' long by 180' wide (48,600 net square feet), column-free exposition space for each phase, with 30 feet clear to the underside of the structural grid above.
- The space will likely be constructed as a system of steel columns and roof trusses at 15 feet on center, which will clear span the entire (180 feet) width of the hall.
- The interior layout for each phase accommodates the following program functionalities.
 - Up to 235 vendor booths, (at 10' x 10' each)
 - Approximately 1,823 people for banquet-type events, (assuming 20 s.f./person)
 - Approximately 3,645 people for live concerts and shows, (assuming 10 s.f./person)
- Movable, full-height wall panels allow the main space to be subdivided into multiple

configurations and a broad range of sizes, including: 48,600; 32,400; 16,200; 10,800; 8,100; and 5,400 square foot options.

- Windows provide natural daylight at upper levels of exterior walls, and along east elevation of building, which can be fully blacked out (with movable drapes).
- The floor finish will be natural concrete, with painted interior gypsum board walls, with painted roof trusses and metal deck ceiling/roof.
- Electrical power will be provided at: the perimeter of the main space; the upper level grid/catwalk; and distributed locations across the floor (via floor boxes).
- Provisions will be made to accommodate audio/visual presentations in any of the various room configurations. Room lighting controls will be integrated with the A/V presentation systems.
- A system of catwalks (accessed by an interior caged ladder) will be provided at the bottom chord of roof trusses, to accommodate special event lighting and rigging systems (by others).
- HVAC and lighting systems will be separately zoned and controlled to accommodate the various room configurations.
- Event load-in and load-out will be achieved through on-grade access doors (including standard and high-bay doors) distributed around the perimeter of the building.

Entry Lobby/Café/Lobbies

These areas serve as the primary arrival/entrance point to the facility. The Entry Lobby has been positioned to be easily viewed from the main Entry Road and Arrival Plaza, yet can be easily accessed from secondary entry points. Features include:

- Two exterior walls of the Entry Lobby will be fully glazed to bring natural light into the building interior.
- Interior finishes will include either a carpet tile or quarry tile floor; painted gypsum board or wood paneled accent walls; and a decorative wood slat ceiling below acoustically absorptive materials.
- Secondary Lobbies and Corridors will be finished in a similar manner, and will include glass doors and windows, and a system of movable glass walls to open Lobby spaces directly to the exterior.
- A small café has been located along one wall of the Entry Lobby, to provide snacks and beverages to visitors.

Meeting Rooms

Four break-out meeting rooms have been provided with movable wall partition systems, allowing a variety of room sizes and configurations to serve larger and smaller group needs. Features include:

- Each Meeting Room will be provided with separately controlled lighting and audio/ visual presentation systems
- Interior finish materials will include: carpet tile floors; painted gypsum board walls; and suspended acoustical tile ceilings (+12' high), which accommodate fluorescent room and display/accent lighting.
- Natural daylight will be provided through a glazed exterior wall system, (including



provisions for drapes to fully black-out the room during presentations), with doors to access a landscaped exterior patio/garden.

Kitchen

The plan provides space for an approximately 1,800 s.f. commercial grade kitchen in the northeast corner of the building, immediately adjacent to the main Exhibition Hall, (and future Phase III expansion). The Kitchen, as currently sized, will be able to prepare and serve sit down meals to approximately 350-500 diners, in one or more of the exhibition halls or meeting rooms.

To serve larger events, the Kitchen will be optimized to also function as a "catering kitchen" (with food preparation/cooking done off-site, and delivery in warming ovens). For such events, plating and set up will likely need to be provided in temporary exterior space, or utilize a portion of one of the sub-divided exhibition halls.

Features include:

- Interior finishes will be commercial grade, durable and washable and able to meet stringent public health codes and sanitation standards.
- All kitchen appliances will be standard commercial grade.

Administrative Offices

In Phase 3 (or in Phase 1 or 2, if funds are available), the Fair's administrative offices should be located within the Exposition Hall to optimize operational efficiencies and enhance the market appeal of the new facility. Approximately 5,000 square feet will provide for fair management, security, and parking management, with areas for small staff meetings. Larger groups, such as the Fair Association Board, could make use of the Exposition Hall meeting rooms during non-paid events.

- If incorporated into the building in Phase 1, the administrative offices may be situated as second floor uses over the meeting rooms and hallway; this approach may be the most cost effective as it makes use of building elements (walls and roof) already in place and requires only the addition of stairs, a one-story elevator, and flooring.
- If incorporated into the expanded Phase 3 building, the administrative offices would occupy the portion of the building designated as "Meeting Rooms" in the Phase 1 structure.

Restrooms

Restrooms have been provided in strategic locations around the Exposition Hall.

Positioned on the exterior of the building, restroom entrances have been organized to allow direct access from either interior or exterior events, (and administratively controlled). The new restrooms on the north side of the building will replace the existing restrooms currently located along the concourse.

Exterior Elevations, Materials and Features

- Based on a system of pre-manufactured, insulated metal panels, exterior walls will include a variety of additional finish options (alternate colors, textures, or metal finishes; cement plaster; or stone veneer at select locations).
- Similar to the exterior walls, the main Exposition Hall roof structure will be based on a system of pre-manufactured, insulated metal panels, with a pre-finished standing seam metal roof finish.





Figure 4.15: Exposition Hall – Schematic Floor Plan



North Elevation



South Elevation



East Elevation



West Elevation

Figure 4.16: Exposition Hall – Elevations

- Lower (single-story) roofs will be designed with open-web roof trusses, metal decking, and a built-up or single-ply roofing system over rigid insulation.
- Glazing at the main and secondary entrance locations will be designed around a prefinished (either natural or painted), aluminum storefront system. Additionally, large sections of the exterior glazing system will be designed as operable walls, to increase the inter-connection between interior and exterior spaces.
- As conceived, portions of the main Exposition Hall roof will receive photovoltaic and/ or solar hot water heating panels.
- Gutters and roof drains will be also be piped to a series of landscaped "rain garden" areas, where rainwater can be collected and filtered before draining to the central water feature.

Sustainable Building Features and Goals

- The south-facing half of the Exposition Hall is proposed for installation of photovoltaic arrays and/or solar water heaters. With a total roof surface of approximately 50,000 square feet, this south-facing portion would provide an area of approximately 25,000 square feet. Additional roof areas over the entry lobby, meeting rooms, and/or southfacing shade canopy could also be utilized, depending on the results of more detailed studies in conjunction with overall energy programs for the Plan Area.
- Pre-manufactured exterior wall and ceiling panels should be selected to provide high insulation values, with metal support framing and finish surface options containing up to 85% recycled material content.
- Concrete slabs and foundations should include reinforcing steel with recycled content (typically ranging between 45% and 70%) and fly-ash, as part of a recycled waste diversion program.
- High efficiency water fixtures should be utilized to conserve water and offset high peak loads within the facility.
- To minimize the use of artificial light, south-facing yet shaded lobby/lounge spaces (as well as small meeting rooms) should have access to natural daylight through operable windows and exterior doors that open directly onto landscape areas. Additionally, skylights or light tubes should be included wherever practical.
- Operable windows should be provided at the upper (clerestory) level of the main Exposition Hall to provide natural daylight, as well as naturally ventilate the space.
- Efficient interior lighting and control systems should be provided, and occupancy sensors utilized wherever practical.

Phase 3 Expansion

Phase 3 assumes a doubling in size of the Exposition Hall from approximately 50,000 net square feet (72,000 gross square feet) to approximately 100,000 net square feet (144,000 gross square feet). If the administrative offices are already accommodated within the Phase 1 building, these uses would be accommodated. At full build out, the Exposition Hall will be a contiguous, column-free space that is sub-dividable into multiple smaller halls, as in Phase 1.

A second Entry Lobby will be "mirrored" at the opposite end of the building, to provide another primary entry point into the expanded facility. Similar in layout to Phase 1, additional lobbies, meeting rooms, restrooms, and an expansion of the Kitchen are also proposed in Phase 3.



4.3.4 Outdoor Venues

Arrival Plaza

- At the eastern terminus of Entry Road, a new Arrival Plaza at the Exposition Hall entry is envisioned for Phase 1a as a location for congregation, ticketing and entry, and a paved outdoor venue for art exhibitions, car shows, or similar events.
- The Arrival Plaza would create a flexible space incorporating movable bollards, planters, or other barriers to accommodate primarily pedestrians, but also occasional vehicles, according to the scheduled event. The width of the plaza should allow for turnaround of passenger vehicles (approximately 80-foot diameter) and drive-through of safety and service vehicles that need to access the west or south sides of the Exposition Hall, with exits to the landscape concourse.
- Portable ticket booths may be integrated into a dramatic entry element. The plaza design and ticket booth location should create spaces for pedestrian gathering and orientation both outside and inside a secured perimeter. Ticket booths may be integrated with signage, banners, and other elements celebrating the Fair of the Future.
- The Arrival Plaza would also be a suitable area for Farmer's Markets or other similar and temporary events.

Exposition Hall Gardens

 Rain gardens constructed as part of the Phase 1a and Phase 3 Exposition Hall should surround the building in order to capture, filter, and retain stormwater draining from the large roof surface. The rain gardens should be installed with suitable soil and drainage measures, and planted with species that tolerate rain garden conditions and provide visual appeal.

Midway/Event Lawn and South Concourse

- South of the Exposition Hall, a new Midway/Event Lawn of approximately four acres is proposed for Phase 1a to accommodate the midway during Fair week(s) and other major events throughout the year such as dog shows, festivals, and other activities where a turf surface is desirable. Between events, this area could serve as an extension of the Creek Park, with public access for strolling, picnicking, painting, and other passive recreation.
- The Midway/Event Lawn is intended as a simple grassy area sloping gently toward the water feature, with walks and ramps that provide accessibility. The slope should be approximately two percent in order to provide positive drainage and allow a wide range of activities.
- Mesh-reinforced turf should be used for the Midway in order to accommodate vehicles and temporary structures. A recommended surface material is reinforced turf (such as Grasspave or Advanced Pave Tech Turf) incorporating a root zone mesh or other system that provides a free draining natural grass surface with high load-bearing capability.
- The south-facing edge of the Exposition Hall is intended to include a South Concourse; this pedestrian promenade should be a minimum of 10 feet in width to accommodate service vehicles. The promenade could include terraced steps that lead to the Event Lawn, providing a location of seating and viewing the Midway and water feature.



East Plaza

- In Phase 1, the East Plaza would provide a paved venue for outdoor events adjacent to the expanded portion of the Exposition Hall. It could also serve as a staging area and meeting place near the amphitheater.
- This area would also be suitable for art installations, either permanent or temporary.

Amphitheater

In Phase 3, with expansion of the Exposition Hall, a new amphitheater is proposed to replace the Fair's 6,000-person existing concert venue. The new amphitheater is intended as a series of grassy terraces with concrete seat walls and steps for flexibility and visually appeal. A portion of the terraces may be designed to accommodate tables and chairs, so that the amphitheater can accommodate dinner concerts, weddings, and similar events.





- To protect the amphitheater from freeway noise, the upper areas should include berms and/or walls as suggested by Figure 4.20: Amphitheater Section.
- Mesh turf should be considered for amphitheater terraces.

Demonstration Farm

The Demonstration Farm is envisioned for Phase 1a or 1b. Modeled after the popular Centennial Gardens in Orange County, the Demonstration Farm pays homage to Solano County's rich agricultural heritage and provides an outdoor living classroom for children and families to learn about new techniques in urban agriculture, horticulture, composting, food preparation, healthy living and solar energy or other alternative energy technologies (for example, biofuel production).

Located at the eastern terminus of the Creek Park, the Demonstration Farm celebrates and carry forward the traditions of the Solano County Fair while allowing for exploration and year-round visits from families and school groups.

- The farm should be located close to parking areas to allow easy access for school groups, visitors and service vehicles. The farm should be secured by permanent fencing as needed for security and operations.
- The Demonstration Farm should be planted with rotating crops in all seasons to provide year-round visual interest.

4.3.5 Fairgrounds Fencing, Walls and Gates

Figure 4.21 illustrates the locations of proposed fencing and gates for the Fair of the Future.

SOLANO COUNTY CITY OF VALLEJO



Figure 4.17: Arrival Plaza Illustrative (Phase 3/Buildout Condition)



Figure 4.18: Arrival Plaza Perspective





Figure 4.19: South Lobby Perspective



SECTION 4

Figure 4.20: Amphitheater Section

Entries are planned for:

- North Gate at the existing concourse to serve the Exposition Hall and buildings including the satellite wagering facility and McCormack Hall.
- Main Gate at the Arrival Plaza to serve the Exposition Hall, overall Fairgrounds, Creek Park, and pedestrian traffic along the Entry Road.
- South Gate at the Creek Park to link from Shared Public Parking into the Midway and central areas.
- Farm Gate to also link from Shared Public Parking and serve school groups coming to visit the Demonstration Farm.
- Service gates at the north and south ends of the perimeter service road.
- In general, the Fairgrounds should appear open and welcoming to visitors throughout the year. A fortified, "closed for business" appearance should be avoided.

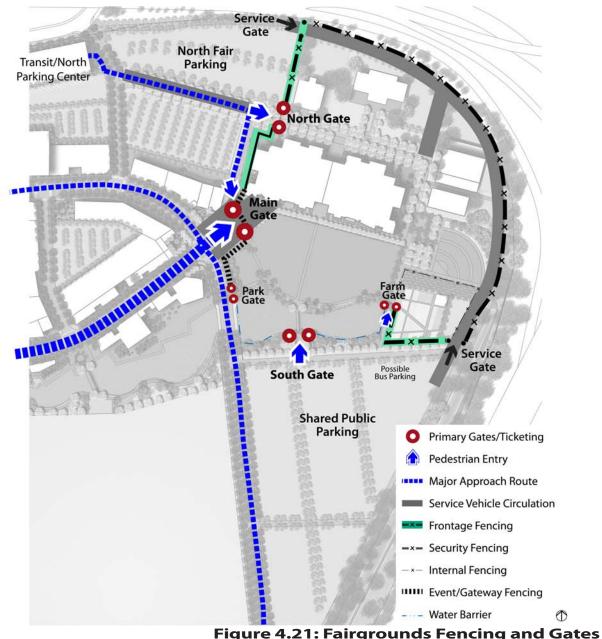
While providing an open, park-like appearance, the Fair's edges and entry points should be designed to provide flexible solutions for safety, security and controlled access to a variety of ticketed venues, with separate gates for concurrent events.

- Attractive, permanent frontage fencing of six to eight feet in height should be used along the more public and visible edges of the Fair, as defined by Figure 4.21. Such fences should be combined with landscape planting and constructed of wrought iron or similar high quality materials. Metal fences may be mounted on a low masonry wall, and/or spanning masonry piers.
- Movable barriers used at the Arrival Plaza for Fair Week and other special events should be designed to create an attractive, festive appearance. Portable ticket booths and other gateways elements should likewise be designed to be compatible with the Exposition Hall architecture and convey an image of quality befitting the Fair of the Future.
- Black, vinyl-clad chain link fencing (with matching posts) may be used to provide security and safety along the north and eastern edges of the Fair and for less visible storage or service areas within the Fair. Evergreen hedges, flowering vines and/or trees should be planted along the base of all security fences. Security fences should be approximately seven feet in height or as needed for security.
- Walls may be used to accommodate grade transitions and provide informal seating areas along the water feature, amphitheater, or other areas. Walls should provide an image of permanence and quality, and may be used as locations for signage and permanent graphics.
- Plywood, un-clad chain link, barbed wire or razor wire fence are prohibited.

4.3.6 Fairgrounds Signage, Lighting and Site Furnishings

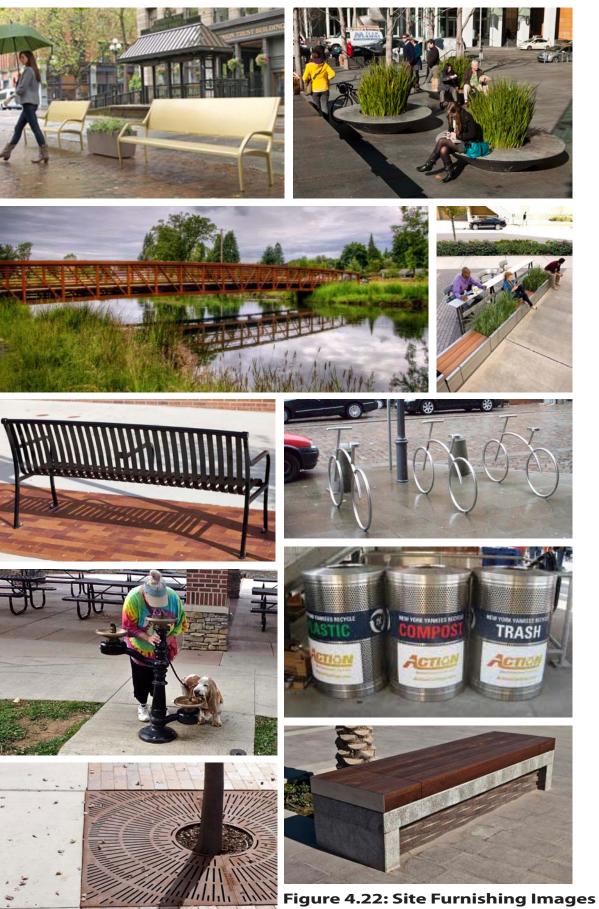
- Signage for the Fair of the Future should be designed as a comprehensive "family" of elements to:
 - announce arrival at entry gates,
 - provide schedule of current and upcoming events,
 - direct service vehicles and pedestrians to their destinations, and
 - supply information on the Fair's history and current features.

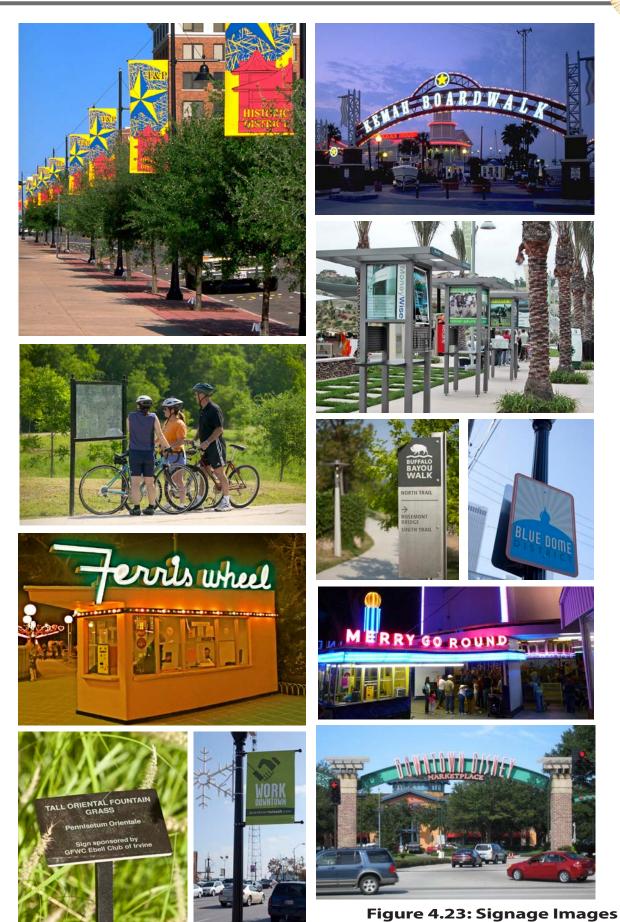
- Signage may be incorporated into gateway features such as the Arrival Plaza's turnstile/ security check point.
- Signage should be considered in conjunction with other site furnishings including lighting and seating.
- All site furnishings should be selected to be low-maintenance, durable and attractive elements that harmonize with and complement the Exposition Hall architecture.
- Fairgrounds lighting fixtures should provide attractive, low-level lighting that promotes a safe environment for all users, but remains pedestrian-oriented.
- Lighting should utilize LED or other energy-efficient fixtures that provide pleasing light color.
- Materials for lighting fixtures should be durable and low maintenance. Natural finishes like bronze and nickel steel are recommended.



Building areas depicted here are conceptual only.









4.4 GUIDELINES FOR RIGHT-OF-WAY AND OTHER PUBLIC AREAS

4.4.1 Streetscape and Entries

Streetscape

- Streetscape should conform to the street sections provided in Figures 4.24 to 4.26 and the provisions of Chapter Five.
- Regularly-spaced street trees should be installed as part of roadway construction to along all new roadways to visually unify street edges, establish an identity with the Plan Area, provide a sense of visual enclosure along corridors and perimeters, and generate shade for pedestrian comfort.
- Special street sections include the following:
 - The North Loop Road includes a passenger drop-off lane along Parcel 6, northwest of the Exposition Hall Arrival Plaza. This drop-off serves visitors to the Exposition Hall and also helps to activate a small entry plaza within the Parcel 6 EMU development.
 - The South Loop Road segment between the Entry Road and the bridge includes the same travel lane dimensions as the North Loop Road, with 10-foot wide monolithic sidewalks and no landscape area. Tree wells may be included in the sidewalk, but any additional landscaping would be located within the adjacent Fair or EMU parcels.
 - At the bridge itself, the South Loop Road sidewalks are 12 feet wide to serve bicycles and pedestrians. This segment does not include any street side landscape.





- Streetscapes should reflect the hierarchy and identity of the roadway system. Taller trees should define the Entry Road and Loop Road, with the most impressive tree type marking the Entry Road. Mediumsized trees may articulate the Sage-Loop Connector Road and secondary onsite roads.
- Major streets should be planted with single species of trees to establish gracious and distinctive corridors. Trees should be used to enclose the street, create a comfortable pedestrian scale, and contribute to the identity of the street. Plant selection should consider City of Vallejo guidelines and be limited to hardy species that are droughttolerant and will thrive in local climate and soil conditions.
- In general, street trees should at maturity be medium or large canopy trees, equal to or greater than the height of adjacent buildings. The planting pattern and species may vary at intersections to provide a flowering or contrasting tree.



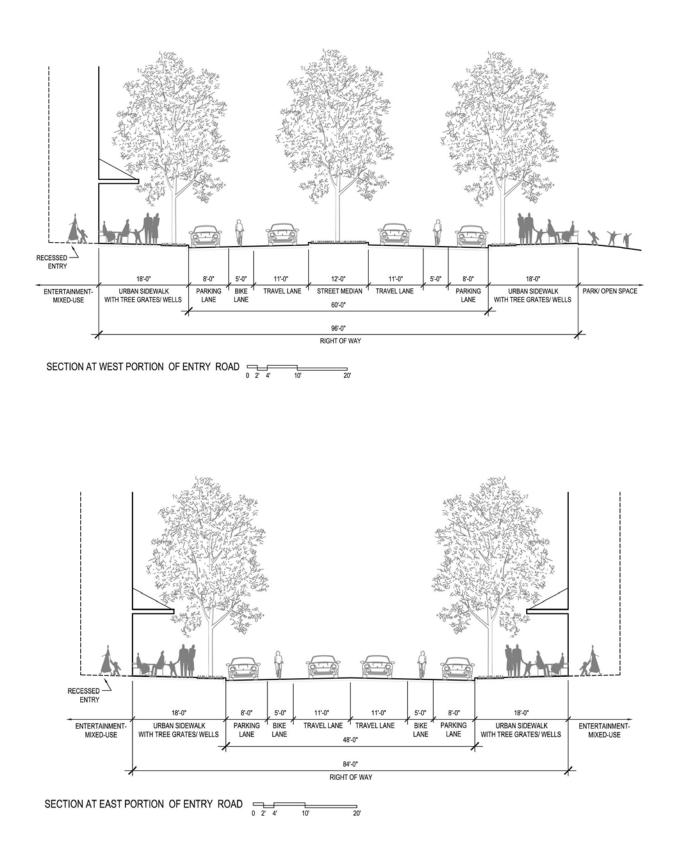


Figure 4.24: Entry Road Sections

- Trees should be planted between the curb and the sidewalk to protect pedestrians and reduce the scale of the street. Large street trees should be regularly spaced, typically 25 feet on center, but spacing may vary to accommodate street lights, driveways and utility boxes, or other conditions. Smaller scale trees may be spaced more closely.
- For street promenades along the Entry Road and at the pedestrian drop-off near the Arrival Plaza, trees should be provided within minimum five-foot wide tree grates.
- Parkway strips between sidewalks and the curb should be a minimum of seven feet in width, measured from sidewalk to face of curb. Parkways should be planted in low maintenance shrubs, groundcovers or lawn, grasses or wild flowers. Plant material should be selected to be well-suited to location; for example, lawn is preferred to shrubs in areas where foot traffic is expected.
- Parkway strips should not be compacted as part of road bed preparation, or if compacted should be properly amended to support healthy root development and plant growth.
- Non-fruiting street trees species are preferred. If fruiting trees or vines are utilized, they
 should be located so as not to overhang sidewalks or otherwise create maintenance
 problems.
- Where bump-outs are provided, trees may be shifted into the enlarged planter area provided sight safety distances are maintained.
- Design of the Solano 360 public open space and street areas should create a consistent character and environment conducive to entertainment and urban activities, with a festive and colorful atmosphere.
- Site furnishings (including lighting, seating, wayfinding and waste/recycling receptacles) throughout the Plan Area should be designed and selected to establish a unified vocabulary of related forms and materials to reflect a sense of unity and identity.
- Bike lanes and pedestrian multi-use spaces will characterize the street environment in the Plan Area. As such, lighting, signalization and signage should be pedestrian-scale and should facilitate easy pedestrian and bicycle movement.
- Seating should be provided at frequent areas throughout the Plan Area in the form of benches, movable tables and chairs and seat walls to encourage walking while providing rest opportunities.
- Low road speeds throughout the Plan Area should be defined to foster pedestrian and bicycle-friendly streets (see Section 5.2.1 for traffic calming features).

Entries and Intersections

- Roadway entries into the Solano360 Plan Area should provide a sense of arrival and celebration. The primary pedestrian and "ceremonial" entry at the Entry Road should be designed to welcome pedestrians and orient views toward the water feature. The Loop Road entries should likewise provide a strong sense of place, with clear signage indicated vehicular routes to parking areas.
- The Sage Street entry should emphasize clear signage for service vehicles, buses, and Transit/North Parking Center access.
- Entry plans should be prepared for each project entry prior to development of adjacent improvements. These plans should address landscape, pedestrian access,



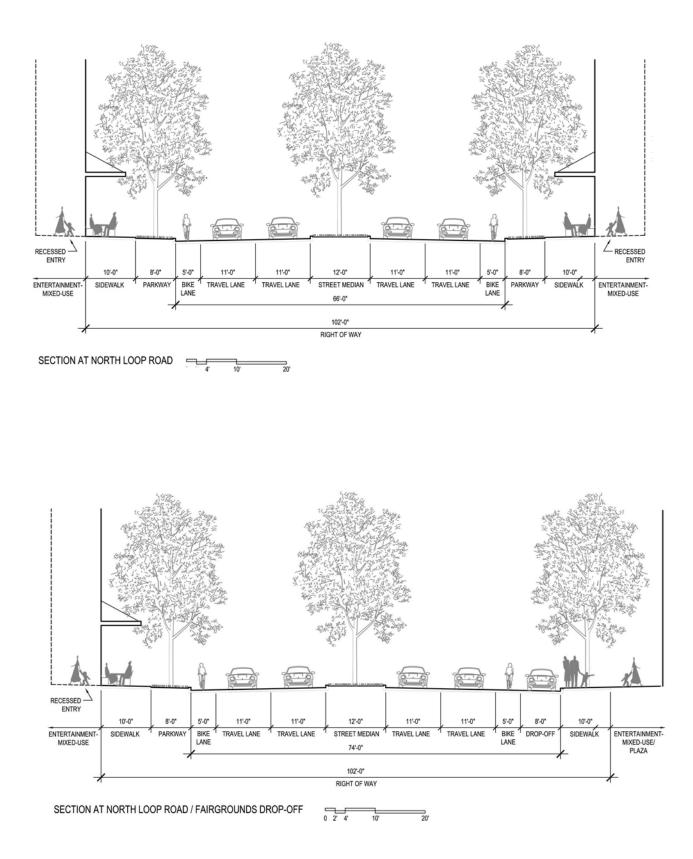


Figure 4.25: North Loop Road Sections



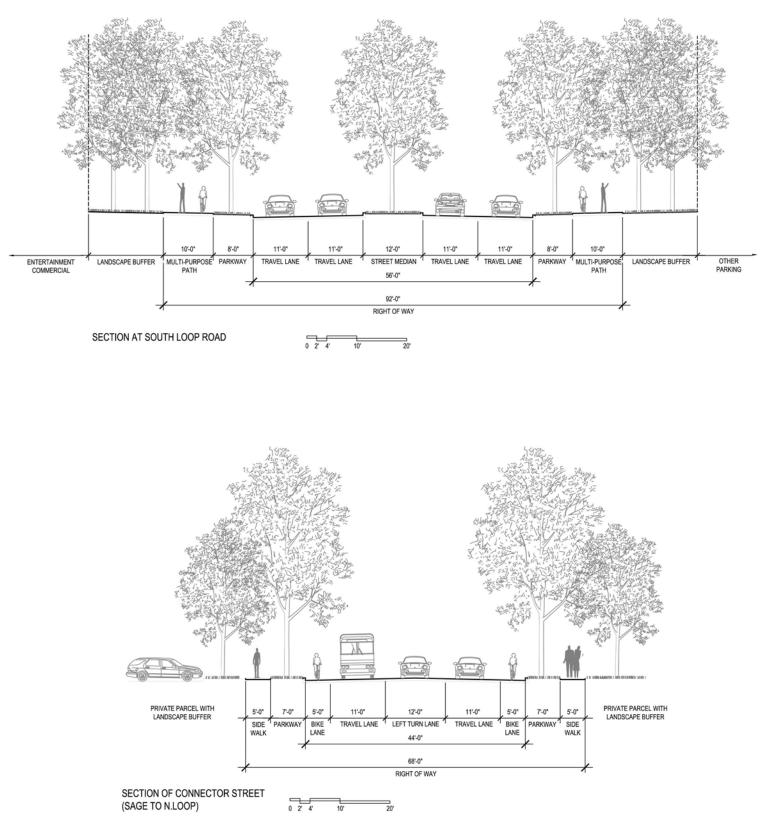


Figure 4.26: South Loop Road and Sage-Loop Connector Road Sections



grading, drainage, monuments, signage, lighting and other public amenities.

- The design of the intersection of the Entry Road and Loop Road should include special features for traffic calming and pedestrian comfort. As envisioned, this stop sign-controlled intersection will be raised six inches to alert vehicles and provide continuous, level crossings for pedestrians from the Entry Road promenade through to the Arrival Plaza.
- Other intersections along the Entry Road and Loop Road should also include traffic calming, bulb-outs to narrow the crossing distances for pedestrians, high-visibility striping, and special paving or textured crosswalks to enhance pedestrian safety. Up lighting may be considered to enhance safety at night and provide a festive atmosphere.

4.4.2 Creek Park and Water Feature

The Creek Park is a critical project component, not only because of its ecologic and hydrologic function, but also because it will provide an important public open space and recreational amenity for visitors and future residents.

The Creek Park forms a new open space corridor through the site with waterfront promenades, picnic areas, lawn terraces, water view plazas, wetlands, and bridges. This example of sustainable design addresses drainage, flooding and water quality issues while providing an iconic feature that visually enhances the project's entries and activities within the central area.

Appendix F provides additional design criteria addressing water balance, water quality management, creation of wetlands, shoreline conditions, and shoreline safety.

Landscape and Amenity Features

- Creek Park should be a comfortable and beautiful multi-use space.
- The Creek Park should be planted with native and low-water vegetation to minimize irrigation needs.
- Plantings on flat, upland areas should vary from garden-like and decorative to more hardy species conducive to play, but requiring little maintenance.
- Pedestrian amenities within the park, including lighting, seating,









wayfinding and waste/recycling receptacles should be designed and selected to establish a unified character for the park.

- The South Loop Road crossing over the water feature should be designed economically, while creating the appearance of a continuous waterway.
- A variety of edge conditions along the waterfront should be established to provide a safe and visually intriguing waterfront with opportunities for enjoyment of the water.
- Figure 4.27: Water Feature Section describes how the water feature could incorporate a wall or bulkhead in some areas, with riparian vegetation in other areas (see Appendix F for further details).

Recreation Opportunities

- The park should accommodate a wide-range of passive and active recreational uses including strolling, jogging, people watching, enjoying views, picnicking, meeting with friends, kite-flying and similar activities.
- Pedal boat rental could be considered as a concession in the Fairgrounds portion of the Creek Park so that visitors can interact with the park via the water feature.

Hydrological Function

Onsite stormwater will be routed through the Creek Park water feature which will discharge into an existing storm drain system and then into Lake Chabot. Offsite stormwater flows from Rindler Creek and/or Blue Rock springs will not be diverted through the onsite water feature but will continue to flow through the Fairgrounds Channel (Chapter Six provides additional detailed information).

The water feature will capture, treat and store onsite stormwater runoff for water quality improvements and re-use (see Chapter Six).





- The minimum surface area and depth should be based on flood control and water quality requirements. The surface area is planned to be approximately 5.4 acres and the depth will be eight feet with a shallow shelf for wetland planting and safety (see Chapter Six and Appendix F for additional details).
- Sufficient freeboard should be provided between the normal water surface elevation and adjacent development, taking into account the varying types of land uses. Freeboard should be designed to accommodate fluctuations in the water elevation for water quality and flood control purposes.
- The minimum distance between shorelines should provide sufficient space for sides slopes taking into account the varying types of edge conditions. The maximum distance between shorelines should take the bridge designs into consideration. The

maximum bridge span is currently planned to be no greater than 100 feet.

 Side slopes may vary depending on the edge conditions, safety considerations and liner requirements. In general, slopes should not exceed 4:1 in most locations. The bottom surface should be sloped at 2% minimum toward the middle of the water feature.

Access

- Plaza and hardscape areas along the west side of the park are associated with retail, shopping and dining uses along Entry Road and should engage pedestrian activity as follows:
 - A main plaza should be established along the north waterfront, visible from Entry Road.
 - Plaza and hardscape areas along the waterfront should provide ample room for dining and viewing.
 - West Creek Park and all plaza and hardscape areas should be publically accessible, year round.
- The east portion of Creek Park is associated with the Fair of the Future programming. With the exception of facilities operated by private companies, for example a Ferris wheel, these portions of the park should be publically accessible except during major ticketed Fair events and as needed for maintenance and security of Fair facilities.

4.4.3 Fairgrounds Channel

• To the extent possible within the designated Fairgrounds Channel area as shown by Figure 3.1: Land Use Plan, the channel should be defined in a natural-appearing

manner, with a meandering horizontal alignment and banks that vary in slope. If meandering or varied side slope angles are not possible within the Fairgrounds Channel area, the channel bottom should be constructed to undulate as much as is feasible, without creating undesirable ponding.

 The final design of the drainage corridor must meet the hydrological requirements for flood control and conform to the space limitations of the designated Fairgrounds Channel area.

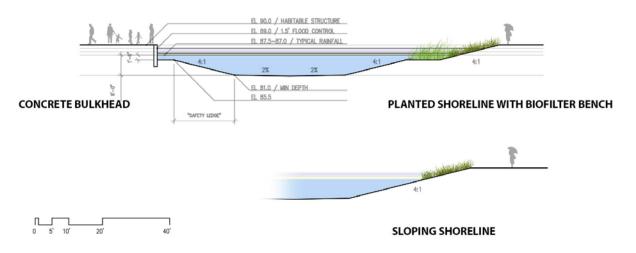


Figure 4.27: Water Feature Section

- To increase the biotic value of the drainage channel, planting benches should be incorporated into the channel design. The banks of the creeks should be stabilized with native vegetation such as willow, and other native riparian plants adapted to the climate of Vallejo.
- Where feasible, the native tule at the bottom of the current channel may be left and will recruit naturally, as will sedges and rushes that could be planted on the channel benches. Side slopes should be planted with a variety of riparian plants adapted to the local climate; these include willows, coyote bush, wild rose, and native grasses. The overstory may be planted with larger, native trees such as sycamore and oak to provide shade and provide a visual buffer from adjacent freeways.
- Invasive species, such as arundo, tamarisk, or star thistle, should be eradicated if present along the drainage corridor.
- Preconstruction surveys should be carried out for special-status species, nesting raptors, nesting song birds and for roosting bats if mature trees will be removed along riparian area. To prevent direct take of a special-status species, under provisions of a Section 7 permit, any special-status species should be moved to a safe location or appropriately mitigated for, according to the requirements of the permitting process.
- Best Management Practices should be used to avoid siltation of the drainage channels from any onsite stormwater runoff.
- A SWPPP should be prepared specifically for the conditions of the site in compliance with the NPDES permit. Examples of BMPs include:





- Conduct all in-channel construction activities during the regional "dry" period as approved by the RWQCB. All efforts should be made to perform all channel work potentially impacting surface waters during periods when surface water flows are at their lowest point.
- No diversion of surface waters should occur during migration periods for special-status species.
- The re-vegetation of banks should follow guidelines and specifications as outlined by environmental review for the Solano 360 project.
- If creek flow is from Rindler Creek and/or Blue Rock Springs Creek is determined to be perennial, work should be conducted during the lowest flow portion of the year. Stream flow should be diverted around the work area using temporary bypass pipes, flumes, or excavated channels that temporarily re-route water around construction area(s). A qualified biologist should be present documenting the conditions and the impact of the construction activity, and assist in relocating stranded

wildlife, where necessary.

- Erosion control blankets and/or mats should be used to control erosion of banks and offer bank stabilization.
- Project construction should comply with all terms and conditions of a Streambed Alteration Agreement. Depending on the results of the Phase 1 ESA, and in coordination with the RWCQB, borrow materials should be examined for potential contaminants (e.g., mercury).
- The channel design should incorporate a walking/jogging trail as indicated in Figure 5.10: Pedestrian Circulation. To avoid adding extra width to the channel, this trail should make use of maintenance driveways if possible.

4.4.4 Transit / North Parking Center

The Plan proposes 2.2 acres for a transit/parking facility in the northwest area of site. The Transit/ North Parking Center will provide bus access and parking through all phases of the project. In Phase 1, this consists of a bus stop and surface parking. Starting in Phase 2, a three-level parking garage will replace surface parking to serve commuters during the weekdays and parking for the Fair on weekends and at night.

Guidelines are as follows:

- The Transit/North Parking Center access should be from Sage Street and the North Loop Road.
- Buses, shuttles (to/from local hotels, nearby major entertainment uses and the Vallejo Ferry Terminal), taxis, Paratransit (and similar services for disabled individuals), personal electric vehicles and bicycles should be encouraged to use the Transit/North Parking Center.
- Secure bicycle parking should be provided and a bicycle repair and rental facility should also be included.
- Priority parking should be available for disabled persons and car-share services.
- Priority parking should be available for certified pure zero emission vehicles (100% battery electric and hydrogen fuel cell) and compressed natural gas (CNG) vehicles.

4.4.5 Public Parking

Public parking will be provided in parking lots and garages as shown in Figure 5.14: Land Use and Parking, and on the Entry Road.

- Parking facilities should adhere to the guidelines in Section 4.2.4: Parking Areas.
- Parking structures in Public Purpose Areas are not required to incorporate retail uses or other non-parking uses at street level.
- To provide screening from public view, landscape plans for parking structures should include planting, trellises, vegetated walls or other decorative screens, both at the ground level and along vertical walls at street frontages or other public area and open space frontages.

4.4.6 Electronic Reader Boards

Electronic reader boards are planned along the freeway edges, in the locations shown on Figure 4.5: Site Relationships. These signs are intended to provide a revenue source for the Fair and include a new electronic reader board along SR-37, an upgraded electronic reader board along I-80, and two static electronic signs along I-80.



- Design and siting of electronic reader boards should not impede Fair programming or detract from the overall visual and aesthetic character of the Plan Area.
- Electronic reader boards should be oriented away from the Plan Area and toward freeways.
- Electronic reader boards should not contribute to light pollution that would affect nearby residences and should not adversely impact highway travel safety.

4.5 GUIDELINES FOR PRIVATE PURPOSE AREAS

Private Purpose Areas consist of the Entertainment Mixed Use (EMU) parcels, totaling 18.8 acres, and the Entertainment Commercial (EC) parcel of 30 acres. These uses are distinct, as follows:

- EMU development is envisioned to create a connected, walkable area of family entertainment commercial (FEC) businesses and associated restaurants and retail, with buildings oriented to Entry Road, Creek Park, and North Loop Road. As the intensity of this area increases through Phases 2 and 3, development will include vertically mixed uses that contribute to a vibrant, pedestrian-oriented Public Entertainment Core.
- EC development is envisioned to be a single destination theme park or amusement park with outdoor rides and venues visible from adjacent freeways and public roads, contributing to the visibility and identity of Solano360 as an entertainment district. Should the EC area be developed as a multi-parcel, mixed-use commercial center, the land use and design provisions for EMU areas will apply.

Section 3.6 provides land use policies for these areas.

Section 4.2 establishes guidelines applicable to all portions of the Plan Area, including the Private Purpose Areas. The following guidelines address additional site and architectural standards for EMU and EC development.





4.5.1 Entertainment Mixed Use (EMU) Guidelines

Urban Design

- Primary intersections, particularly those along Entry Road and Creek Park, should be reinforced with high quality landmark buildings or gateway elements to support the identity of the Plan Area. Such buildings should exhibit thoughtful, imaginative architectural design to welcome visitors and promote a pedestrian-oriented character.
- The Entry Road should provide an urban, pedestrian-oriented corridor of specialty shops and services, restaurants, tree-shaded sidewalks, and art illustrating the history of Vallejo and Solano County, all developed at an appealing pedestrian scale.

- Design of buildings and outdoor spaces along Entry Road should utilize complementary color, special materials, signage, furnishings and landscaping to promote a unique identity and active commercial heart for the Plan Area.
- Buildings and entries should be located primarily at the back of road rights-of-way. Where building entries are set back in courtyards, paseos, or arcades, landscape features such as vertical planting treatments, trellises, or decorative walls should define and clearly mark such openings at the street edge.
- To create a "restaurant row" and active pedestrian promenade along the Entry Road, blocks that include FEC's or large retail stores are envisioned to include smaller footprint storefronts along the primary road right-of-way (see Figure

4.28: Entertainment-Mixed Use Building Prototype).

- Entries to large footprint buildings, such as FEC's or large retail stores, may be recessed, emphasized with architectural elements, or otherwise articulated to identify entry points to primary FEC uses.
- Development along North Loop Road in Phase 3 may also include large footprint buildings, but should also incorporate smaller, street-oriented retails shops with recessed entries or entries off of an interior courtyard or arcade.
- All buildings should provide a clearly articulated pedestrian entrance, either via storefront, recessed storefront, arcade or courtyard, with direct pedestrian access to either North Loop Road or Entry Road.
- Parking should be located to the rear of parcels. By Phase 3, no surface parking lots should front on either Entry Road or North Loop Road.
- Open spaces for recreation, gathering and visual relief should be designed to appear deliberate and not as "left over" space between buildings.
- Outdoor dining should be encouraged along sidewalks and promenades to promote street activity.

Architectural Design

Buildings should reflect the vibrant, urban mixed-use nature of the Solano360 Plan Area, supporting the pedestrian character of streets and contributing to an overall identity for the project.

Massing and Articulation

- Buildings should establish continuous storefronts and courtyard openings along Entry Road and, in Phase 3, North Loop Road. Buildings should maintain a distinctive urban character with storefronts oriented to streets.
- Building frontages should contribute to an active street life by providing ample seating, gathering places, and exterior protection from sun and rain in the form of recessed walkways, awnings, canopies, or trellises along primary pedestrian traffic areas.
- Building façades longer than 200 feet should be designed to appear as more than one building, aggregated on the block with variation in massing, eave/parapet, color, material and balcony depth.
- Buildings should incorporate vertical height variety to break the monotony of long un-interrupted building facades of matching height.
- Building floor plans should be designed with flexibility to accommodate changes in



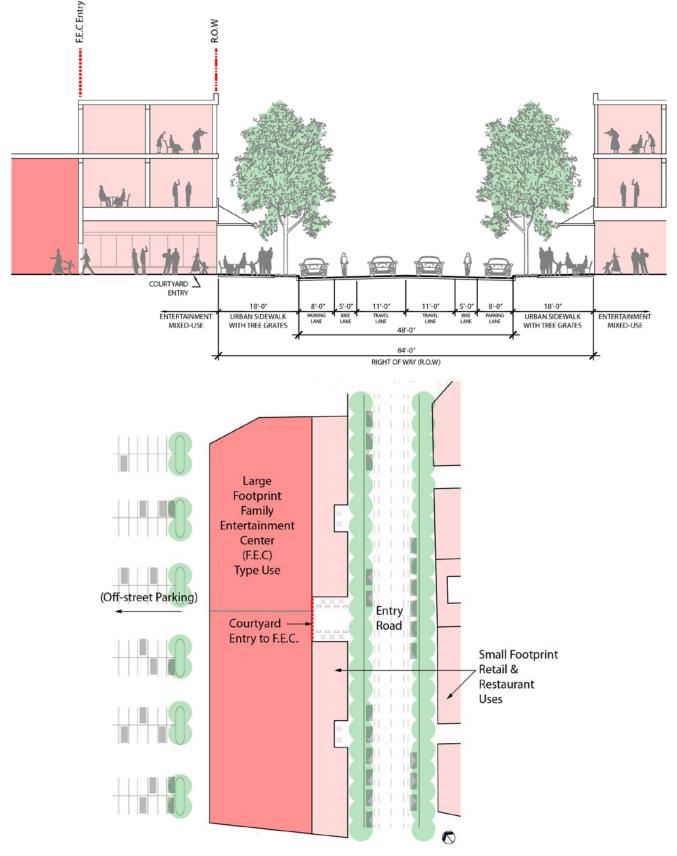


Figure 4.28: Entertainment-Mixed Use Building Prototype

Building areas depicted here are conceptual only.

commercial tenants over time.

- Sun angles should be considered in the design and placement of structures to allow sunlight into deep spaces and provide for both shaded and sunlit public spaces.
- Mechanical equipment should be hidden or screened by architectural elements that match the architecture of the rest of the building.

Windows and Doors

- Wall openings should show depth of the wall, without use of flat or tacked-on window trims.
- Windows and doors should be simple in both design and placement. Use of mullions that divide window into panes of glass is encouraged.
- Building doors and windows facing street frontages should be fully functional.

Porches and Patios

• Upper level patios (either recessed or extended) or French balconies are encouraged, but should be usable and not merely decorative.

Colors and Materials

- Rich materials such as stone, brick, and wood are encouraged. Material mixture must be in accord with the simplicity of building massing.
- Brick and stone should be detailed in proper corner-turning and load-bearing proportions.
- Local materials and vendors are preferred.

Lighting and Signage for Buildings

- Materials for lighting and signage fixtures should be durable and weather well.
- Natural finishes like bronze, nickel steel and sustainably-treated wood are recommended.
- Lighting and signage should be integrated into building design.
- Lighting, where appropriate for convenience and safety, should not cause light pollution or glare into adjacent properties.
- Energy-efficient LED lighting is highly encouraged.
- In addition to wall signs, pedestrian scale signage such as blade signs, awning signs, and window decal signs are encouraged throughout the project to contribute to an active, vibrant pedestrian experience. Signage that clutters pedestrian environments is discouraged.

4.5.2 Entertainment Commercial (EC) Guidelines

In addition to the general guidelines provided in Section 4.2, the following guidelines are included to address the Entertainment Commercial (EC) area.

- Design of the northern portion of the EC parcel should address the Creek Park by incorporating a pedestrian gateway connected to trails and promenades along Entry Road and Creek Park. Design of venues and structures along this northern edge should create appealing, festive views for visitors traveling southbound on Fairgrounds Drive.
- · EC entries should be reinforced with high quality, highly visible landmark structures

or gateway elements to support the identity of the Plan Area as an entertainment hub for Vallejo and the greater Solano County. Such elements should exhibit thoughtful, imaginative architectural design to welcome visitors.

- Any security barriers along Creek Park should consist of high quality, ornamental fencing with low vegetation that allows filtered views. Visually impermeable barriers along the Creek Park should be avoided.
- Taller rides and venues, up to 250 feet in height, should be concentrated within the central and eastern portions of the EC parcel in order to maximize visibility from I-80 and provide transitions to Fairgrounds Drive and the Creek Park. Along the EC parcel's northern, western, and southern boundaries, maximum heights should be limited to approximately 150 feet.
- Parking areas should be concentrated in the southern portion of the EC parcel, with active venues concentrated to the north along the Creek Park and the west along Fairgrounds Drive (see Section 3.6: Land Use Policies). Design of venues should consider creation of exciting views from freeways.
- EC development should incorporate locations for shuttle stops along the Loop Road.

4.6 SUSTAINABILITY AND RESOURCE MANAGEMENT

4.6.1 Solano360 Sustainable Design Attributes

The Plan incorporates sustainable design and development within the land use, transportation, infrastructure, and design provisions described in this document. The following section summarizes those measures and provides cross-references to relevant sections. In addition, this section provides "next step" measures for sustainability that can be incorporated into subsequent design proposals and project implementation.





The following measures incorporate aspects of national guidelines and standards for sustainability, including the United States Green Building Council (USGBC) Leadership in Energy & Environmental Design – Neighborhood Development (LEED-ND) rating system and the Guidelines and Performance Benchmarks identified under the Sustainable Sites Initiative (SSI).

Sustainable Site and Building Design

 Location and Facility Reuse: The Plan makes use of areas that have been previously developed, including significant portions of the existing Fairgrounds facilities. Approximately 87,000 square feet of existing Fair building area will be retained as well as the concourse itself (approximately 83,300 square feet.) and associated outdoor (paved and lawn) venue areas totaling over 30,000 square feet. This approach recycles previously disturbed land and reduces the need for construction of buildings and infrastructure. Reusing buildings, materials

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and existing paved surfaces also reduces waste, debris, and air quality impacts that would be generated during demolition.

- Compact Development: The Plan land use mix emphasizes the phased development of themed entertainment park and family entertainment uses, with flexibility accommodate office to and residential uses. Higher density development helps to conserve land and preserve open space and, when provided alongside a mix of uses, promotes livability, transportation efficiency and walkability.
- Diversity of Uses: The housing allowed in the Private Purpose Areas would be located within a quarter-mile (five minute) walk of onsite uses including shops, restaurant, entertainment and offices. As mentioned in Section 3.6.2, establishing a small grocery store onsite would deter some vehicle trips for residents and workers.





- Open Space: Open space areas can provide habitat, reduce urban heat island effects and allow for enhanced stormwater management. The Plan establishes a variety of open spaces that encourage walking, physical activity and time spent outdoors. New open space uses include six acres of Creek Park within Private Development Area and three acres within the Fair, two acres of Demonstration Farm, four acres of Midway/ Event Lawn, one and a half acres of concert amphitheater, three acres of paved plazas and promenades, and one acre of other gardens and courtyards around the new Exposition Hall (acreages are approximate).
- Sustainable Building Design: The proposed conceptual design for the Exposition Hall incorporates sustainable features, such as natural ventilation and photovoltaic roof panels, that will partially enable the building to obtain LEED Silver certification or meet equivalent performance standards, as required by County General Plan policy. The Plan will comply with the Solano County General Plan requirement relative to energy efficiency and green construction policies.

Health and Well-Being

• Bicycle and Pedestrian System: In addition to the open space described above, the Plan proposes pedestrian and bicycle routes as illustrated by Figures 5.10 and 5.11. In addition, a jogging circuit is

proposed along the Fairgrounds Channel. These public trails, promenades, bike lanes and paths encourage residents and visitors to get out of their cars and walk, bike or jog from

destinations within and near the Plan Area.

- Walkable Streets: Walking is key to providing healthy and sustainable communities. The major roads (Entry Road and Loop Road) provide a minimum of 10-foot wide, treeshaded sidewalks or multi-purpose paths on each side. Controlled intersections, bulbouts, and high-visibility crosswalks are provided at onsite intersections to enhance pedestrian safety; this includes the raised intersection at the Fairgrounds Arrival Plaza (see Figure 4.17).
- Bicycle Facilities: The Plan proposes bicycle facilities along the Entry Road and Loop Road, connecting to proposed bike lanes on Fairgrounds Drive between SR 37 and Redwood Parkway and allowing easy bike connections to onsite destinations. These facilities consist of bike lanes on Entry Road and North Loop Road, multi-purpose paths along South Loop Road, and secure bicycle parking at key activity nodes including the Fairgrounds and private purpose development (EMU and EC) parcels. The Transit/North Parking Center will also provide a secure bicycle parking area and may include other bicycle amenities such as a bicycle repair facility (see Figure 5.11: Bicycle Circulation).
- Noise: To the extent possible, the Plan provides buffers and provisions for onsite uses that may be particularly sensitive to noise impacts. The amphitheater, located in the eastern portion of the Fairgrounds near the I-80 freeway, is buffered by an earthen berm as shown by Figure 4.20: Amphitheater Section. Within the Fairgrounds, the amphitheater is separated from the future midway to avoid noise impacts during multiple events or Fair Week. Possible housing is restricted to the western portions of the Plan Area in order to avoid impacts from noise and air quality. Impacts by the project on offsite uses are mitigated by the distance between noise-generating uses, such as the amphitheater or midway, and sensitive offsite areas such as residential neighborhoods.
- Equitable Site Use: Site uses will provide economic or social benefits to the local community, with public access to recreational and civic facilities such as the Creek Park, renovated Fair of the Future and outdoor spaces, and Demonstration Farm.
- Sustainability Awareness and Education: The proposed Demonstration Farm provides
 opportunities to celebrate the historic agricultural character of the area and provide
 educational programming. Other environmental education programs may be
 provided through the Fair. Educational and interpretive signs describing restored
 habitat and water conveyance systems will be located throughout the Creek Park.

Water Quality and Management

- Flood Control: The Plan proposes removing the western and southern portions of the Plan Area from the floodplain, alleviating flooding in the offsite mobile home park to the extent possible, and improving the quality of onsite storm runoff. As described in Chapter Six, these improvements involve enlarging the Fairgrounds Channel and adding improving the existing crossing under Fairgrounds Drive.
- Stormwater Collection and Re-use: The new multi-purpose water feature within Creek Park will retain and improve runoff from the Plan Area, which can then be re-used onsite for irrigation. It also functions as a recreational amenity and water quality BMP (see Chapter Six). Capture and reuse is consistent with Low Impact Development practices and the San Francisco Bay Area NPDES stormwater quality permit. As described in Chapter Six, a majority of the Plan Area will be designed to drain to the Creek Park water feature for water quality treatment. Portions of the southern Plan Area may

drain to the Fairgrounds Channel depending on the storm drain system hydraulic limitations.

- PotableWaterDemand:Capture and reuse of stormwater for irrigation within the water feature will reduce potable water demand. Use of drought-tolerant and local plant species will further reduce potable water demand (see Section 4.2.3: Landscape Plan and Guidelines). In addition, a "purple-pipe" (recycled water) system is planned within each backbone roadway (see Figure 6.3: Non-Potable Water Exhibit). The "purple-pipe" system will be installed in accordance with Title 22 standards for recycled water use in the event recycled water becomes available on a municipal scale.
- Low Impact Design (LID): Structural LIDs proposed by the Plan include the water feature bioswales and rain gardens to collect water from the Exposition Hall roof. Non-structure LID's include minimization of paved





parking areas through creation of shared parking strategies and multi-purpose turf areas, such as the midway, that can accommodate overflow parking.

• Wastewater: The Plan's water reduction and conservation measures also result in reduced generation of wastewater due to recycling and reduced flows.

Chapter Six provides additional measures (see Sections 6.2.4, 6.3.4, and 6.4.4).

Transportation

- Transit: The Plan provides a multi-modal Transit/North Parking Center where commuters can park their vehicles and board buses bound for job centers or other destinations such as the Vallejo Ferry Terminal. Frequent local bus service will provide a better option for bringing people to the project, reducing the overall traffic impact. The Transit/North Parking Center can also be used for parking during weekend events.
- Linked Trips: The project is designed to include a variety of complementary venues and attractions within easy walking distance of each other, resulting in a 33% rate of linked vehicular trips and a corresponding reduction of transportation impacts.
- Parking: The Plan designates paved parking areas to serve development uses as the project builds out, but minimizes the extent of parking through phased and shared parking strategies and multi-purpose turf areas, such as the midway, that can accommodate overflow parking when it is not in use for outdoor events. Within the Entertainment Mixed Use areas, parking is allocated to the side and/or rear of blocks, creating more pedestrian-oriented streets. Larger surface lots will have landscape buffers at the street and channels edges and will incorporate shade trees or, as



described below, solar arrays for an onsite source of renewable energy.

Energy

- Solar Arrays at Exposition Hall: As described in Section 4.3.3, the main Exposition Hall roof is proposed for a photovoltaic array and/or solar hot water heating panel installation of approximately 24,300 or more square feet. Other buildings and parking facilities are also available for installation of photovoltaics.
- Natural Cooling: The Exposition Hall incorporates a shade canopy to mitigate the effects of solar glare along the south-facing facade.

4.6.2 Next Step Sustainability Measures

In addition to the sustainable provisions embodied in the Plan as described above, additional "next step" measures are proposed for consideration during implementation of projects within the Plan Area.

Green Building

- Other green building and low impact design (LID) measures should be considered for more detailed stages of building and site design. These may include:
 - cisterns to capture rain water,
 - recycled water facilities for flushing toilets and other uses where potable water is not required,
 - high efficiency fixtures and appliances within buildings,
 - vegetated roofs and photovoltaic arrays on roofs,
 - use of recycled and locally available materials,
 - maximizing opportunities for natural shading and ventilation,
 - orientation of buildings to maximize energy efficiency and provide natural cooling and ventilation,
 - deciduous trees next to buildings and along streets to reduce ambient temperature, reduce heat gain, allow for cooler natural ventilation, and provide a more pleasant pedestrian environment,
 - deciduous trees and vines in front of south-facing walls and windows to further cool buildings by intercepting sunlight during summer months, yet allow direct sunlight during the winter,
 - green screens (metal lattices planted with vines and/or climbing flowers) to shade south- and west-facing walls to reduce interior heat gain and beautify buildings,
 - trees of appropriate heights and spreads to provide ample shade in the summer months for outdoor spaces such as patios and plazas, pedestrian walkways, roadways, and parking lots,
 - structures such as trellises and porticoes incorporated into the building/landscape edge, especially on south- and west-facing exposures, to provide shade in the summer and allow solar penetration when the sun is at a low angle in the winter,
 - landscape buffers, screens, and windrows to permit facilitate cooling by prevailing breezes in summer months and to reduce interior heat gain, and
 - site lighting minimized to reduce light pollution and minimize energy usage,



using full cutoff luminaries, low-reflectance surfaces, and low-angle spotlights.

- Non-structural LID measures should be established where practical. These may include, but are not limited to, programs to monitor pavement cleaning (street sweeping), illicit discharge elimination, and parking lot design and management.
- Developer of projects within the Plan Area should be encouraged to pursue LEED certification and other green building credits and awards, as such recognition will physically and symbolically represent the sustainability values of Solano360.

Energy

The following measures are in addition to the photovoltaic arrays / solar hot water heating panels planned for the Exposition Hall roof, as described previously. All proposals should be developed in





coordination with the County Operations Manager.

- A Public Private Partnership (PPP) with a solar partner may be pursued to provide some of the infrastructure costs associated with the site development. The Plan allocates extensive areas for parking, including approximately 24.7 acres for Shared Public Parking. These large-scale facilities could include photovoltaic arrays to provide onsite energy, shade for cars, cost savings and a possible revenue source (as excess energy could be sold).
- A district energy system, or cogeneration, could be evaluated to provide on-site energy and reduce building water heating and cooling requirements. The water feature in the Creek Park could be utilized to provide cooling via a heat transfer/cooling tower device for adjacent buildings.
- Photovoltaic arrays should be considered for all new and retrofitted buildings, including structures within the EMU and EC areas.
- Wind turbine and other alternative energy technologies could be incorporated into the Demonstration Farm to test and provide educational examples for families and visiting school groups.

Waste Management

• A construction waste management plan could be developed that would identify salvage, recycling or donation of construction materials.

Materials, Operations and Maintenance

No wood from threatened tree species should be used in construction or finishing.



Certified wood should be used wherever practical.

- Building and landscape materials should contain recycled content wherever practical.
- Materials that are produced and sold locally, including soils, should be used wherever practical.
- Any adhesives, sealants, paints and coatings used should be those with reduced VOC emissions.