

Stadium Design

The proposed SRFC Stadium is intended to accommodate a seating capacity of 12,000 seats with future intent to expand to approximately 20,000 seats, referenced throughout as Phase 1 and Phase 2, respectively. The 2016 SEIR studied up to a 25,000-seat capacity, more than twice Phase 1 proposal and above the expected ultimate build out of 20,000 seats. Phase 1 of the stadium is open to air and generally rectangular in structure, approximately 550 feet in length and 500 feet in width, excluding minor extension of elements such as access stairs and roof parapets. The stadium is surrounded by a wide concourse with single story service, operations, concessions, retail, and restroom facilities on the stadium and the street sides of the concourse. The grade elevation from North B Street to Railyards Boulevard would rise approximately 8 feet, similarly the grade of the concourse from the service yard entrance off North B around both sides of the stadium to the main entrances on Railyards Blvd would also rise approximately 8 feet. The Phase 1 parapet of the roof top terrace of the Stadium is positioned at an elevation approximately 65 feet above the west entry plaza and the top of the stand is approximately 35 feet above the east plaza (see **Figure 2-29.1**, PH1 Stadium West Elevation, Stadium South Elevation). Phase 2 includes a rectangular canopy roof above the Stadium, providing shade and rain protection for attendees in the Stadium and roughly expanding the building to approximately 700 feet in length and 575 feet in width, the concourse would remain generally intact with the addition of several more single-story buildings to accommodate the larger attendance for services, retail, concessions, and restrooms. The top of canopy of the Stadium would rise approximately 95 feet above the west entry plaza (see **Figure 2-29.2**, PH2 Stadium East Elevation, North Elevation).

The primary entrance to the Stadium would be located on the southwest corner of the structure, with secondary entrances on the southeast and northeast corners of the building. The proposed Stadium would have two general admission entrances facing Railyards Boulevard, a VIP entrance facing 8th Street on the west, and an entry plaza on the south. There would be a separate entrance for employees and media on the northwest corner of the Stadium. A location for a potential future separate supporter's entrance would be held on the northeast side of the Stadium between North B Street and 10th Street as part of a future project addition (in the event applicant obtains control of the property in this area and be able to complete 10th Street to North B Street).

The Field Level would be located approximately at the lowest planned grade approximately in line with the intersection of 8th Street and North B Street (see **Figure 2-31.1**, PH1 Stadium Longitudinal Building Sections, Transverse Building Sections). The Field Level would include the VIP entrance to the Stadium, the soccer pitch, general and field suite seating, locker rooms, clubs and lounges, concessions, retail, restrooms, kitchens, storage, a security command center and related facilities, first aid, loading docks and marshalling areas, ticketing facilities, and other operations and support facilities concentrated within the bowl of the stadium and around the northwest, north, and northeast corners which are all at the a similar lower grade(see **Figure 2-32.1**, PH1 Stadium Field Level Plan). Phase 2 of the Stadium would include additional concessions and restrooms to accommodate the increasing capacity of ticketholders (see **Figure 2-32.2**, PH2 Stadium Field Level Plan).

The Concourse Level would be located approximately 8 feet above the Field Level. The Concourse Level would include clubs and lounges, concessions, restrooms, storage, and other operations and support facilities, as well as horizontal circulation space. The Concourse would include approximately 26,000 gross sf of conditioned space (32,000 gross sf in PH2) predominantly in single story out buildings, 156,000 gross sf of open circulation primarily functioning as circulation to various entrance stairs, ramps and vomitories into the seating bowl (see **Figure 2-33.1**, PH1 Stadium Main Concourse Level Plan). Phase 2 of the Stadium would include infilling the corners of the seating bowl topped with additional horizontal circulation space at a new Platform Level above each corner, functioning as standing room only with bars (see **Figure 2-33.3**, PH2 Stadium Main Concourse Level Plan).

The Club Level will include an elevated, exterior concourse to access the North, South, and East seating bowl grandstands. Viewing platforms connect each of these stands in the corners of the stadium and the west premium stand. These platforms also provide space for portable concession stands. The west premium stand includes approximately 36,000 gross square feet divided between 25,000 gross sf of conditioned club space and 11,000 gross sf of unconditioned general admission space. The club space includes lounge, restrooms, concessions and support spaces. The general admission spaces include restrooms support spaces and areas for portable concession stands. Both spaces directly access the seating bowl.

The Suite and Press Level would include approximately 11,000 gross sf of conditioned space, and would include a total of 9 suites, including an owner's suite, bar and lounge areas, restrooms, storage, media rooms, television and radio booths, media and press facilities, as well as 13,000 gross sf of unconditioned space for the main bar and lounge areas and other operations and support facilities (see **Figure 2-34.1**, PH1 Stadium Suite Level Plan). Phase 2 of the Stadium would include an expansion to a total of 27 suites with media and press facilities being relocated to a new Press Level above (see **Figure 2-34.2**, PH2 Stadium Suite Level Plan and **Figure 2-34.3**, PH2 Stadium Suite Level Plan).

Phase 2 of the roof of the Stadium would be made of metal deck and a roof membrane.

Open Space

The primary entrances on the southwest and southeast corners of the Stadium would be accessed via open air entry plazas (see **Figure 2-36.1**, PH1 Stadium Plaza Plan). For visitors arriving from the west across 8th Street or from the south across Railyards Boulevard, their arrival at the Stadium would pass through the VIP entrance on the west, the southwest or southeast entry plazas at the Concourse Level. The seating bowl will be accessed via stairs or ramps on all sides of the Stadium; with elevators available in the West Stands in Phase 1 of the Stadium. The Concourse level, including the southwest and southeast entry plazas, and the Supporters plaza on the northside of the stadium would provide up to approximately 6 acres of open space, with the remainder of the site effectively functioning as double side concourse with service, concessions, retail, and restrooms on either side. Phase 2 of the Stadium would include additional elevators at each of the four corners for building access (see **Figure 2-36.2**, PH2 Stadium Plaza Plan).

The Stadium southwest and southeast entry plazas, and the Supporters Plaza on the northside are

anticipated to be actively used spaces that may include retail and ticketing storefronts, retail kiosks, seasonal events, musical and cultural events, and gardens. It is anticipated that these plaza areas would be occasionally used for small outdoor concerts or cultural or athletic events, including but not limited to events associated with the Sacramento Republic FC team. For some events, a portion of the entry plazas and 8th Street in front of the Stadium entrances could be secured to create an integrated outdoor experience for ticketed attendees. Video screens and speakers may be placed in the secured entry plaza area, allowing attendees to hear and see the activities going on inside the Stadium while outside in the entry plaza area.

An open-air plaza located on the northeast side of the Stadium would provide additional general seating access, as well as providing a dedicated Supporter Section entry. Vehicular access from North B Street would make the north plaza useable for food trucks.

A ticketed perimeter would encompass the entire Stadium site area, allowing for activation of the plaza spaces for pre- and post-event activities, as well as music festivals, concerts and community events. These outdoor plazas could be equipped with video screens and speakers, which would allow patrons to watch and hear the ongoing events while experiencing the outdoor spaces (see **Figure 2-37**, SRFC Stadium Amplified Sound Plan).

An integral element of the Stadium would be several open plazas intended to provide seamless flow in and out of the facility, pedestrian circulation around the Stadium, and pedestrian connectivity to 8th Street, 10th Street, and Railyards Boulevard. As depicted on **Figure 2-36**, Stadium Plaza Plan, approximately 265,000 sf (6 acres) of open space would be included in the plaza areas surrounding the Stadium.

The Stadium plaza areas would be comprised of hardscape and landscaped planters. Hardscape areas would feature use of a variety of paving materials and landscape plantings, and would include benches, art, and possibly water features.

Sustainability

The proposed SRFC Stadium would be designed and constructed to achieve best practices in energy and environmental design to the extents feasible. As a modern, state-of-the-art facility, the Stadium would comply with all state and local Green Building Standards Codes and Building Energy Efficiency Standards.

Depending on final designs, the proposed Stadium may exceed some minimum green building and energy efficiency requirements. Strategies being investigated to achieve a state-of-the-art facility include:

- Emphasis on quality transit and alternative mode use, including light rail/public transit, bicycle facilities, green vehicles;
- Site design that will facilitate rainwater management to the extent feasible within the DTSC Land Use Covenant, reduce heat island effects, reduced light pollution, and reduced water use;

- Water efficiency measures that reduce indoor and outdoor water use, including use of low-flow fixtures and water metering;
- Systems to optimize energy performance, including energy metering, demand response, maximizing use of shade structures and wind resources on the site, use of LED and sensor lighting, and potential use of battery storage and/or solar panels for on-site energy management.
- Optimizing use of green and raw materials, low emission cleaning products, compliance with City of Sacramento and State of California requirements regarding composting, food donation, and collection and storage of recyclables;
- Enhanced indoor air quality strategies, including use of low-emitting materials, efficient thermal comfort systems, and maximizing use of natural light; and
- Construction methods that minimize outdoor and indoor air pollution and construction waste.

Bicycles

It is anticipated that bicycle access to the proposed Stadium would be provided at multiple locations around the Stadium. The proposed Stadium would comply with the requirements of the Planning and Development Code for the provision of short- and long-term bicycle parking (see PDC Chapter 17.608.040, Section N, and Table 17.608.030C) and the California Green Building Standards Code. The proposed Stadium Bicycle Plan is depicted in **Figure 2-41**, Bicycle Plan.

Long- and short-term bicycle parking is contemplated for the project and will be provided in locations to facilitate safe, secure, and efficient access for patrons and employees. Bicycle parking would be a component to the required Event Transportation Management Plan.

For events with sufficient demand, the SRFC Stadium could provide for valet bicycle parking. The provision of valet bicycle parking could be flexible depending on the size of the event and the popularity, over time, of bicycling to events. As is presented on Figure 2-41, bicycle valet parking would be accommodated at one or more locations on the Stadium site. It may start with a small valet space at one location. For larger events and depending on weather, likely three bike valet locations would be set up for events serving bike traffic arriving at the site from the southwest, west and northwest.

If feasible, based on project design and space utilization, the proposed Stadium may make provisions for a Bikeshare docking station, if such a program is initiated by the City/SMAQMD. This provision could involve Bikeshare docking stations adjacent to the proposed Stadium in locations that support existing and proposed bicycle infrastructure and contribute to safe, secure, and efficient access for patrons and employees. A Bikeshare docking station near the proposed Stadium could be coordinated with the anticipated Bikeshare station at the Sacramento Valley Station.

Loading and Delivery

Loading and service delivery trucks would access the proposed Stadium from North B Street on the northwest corner of the site. A total of four truck loading bays and docks would be provided inside the screened and secured yard space near the northwest corner of the Stadium.

Truck and emergency vehicle access to the field (pitch) would be accomplished by an accessway located near the northwest corner of the Stadium, also accessed from North B Street. During events, an emergency vehicle would be stationed at this location for easy access to the pitch and departure from the site via North B Street, 8th Street, or 10th Street.

Prior to, during, and after events, media trucks would be parked within the screened and secured yard space accessed from North B Street near the northwest corner of the Stadium, north of the truck loading bays and the field access entrance.

Event Parking

Event attendees and stadium employees who drive to the proposed stadium would park their vehicles in surface lots and parking structures located in the vicinity of the site, including within the RSP Area, in the River District, and in downtown Sacramento.

As was analyzed in the 2016 RSPU SEIR, it is proposed that parking in the RSP Area would be provided initially in temporary surface lots covered with an all-weather surface (likely a shale or gravel layer) or paved joint use lots (see 2016 RSPU SEIR, Figure 2-14, Illustrative Temporary Surface Parking Plan). Over time, the parcels containing these temporary surface lots would be developed consistent with the RSPU, with parking transitioned to parking structures within and near the RSP Area that may be used by RSP Area or surrounding area employees during the day and event attendees and employees during evening and weekend events.

Lastly, it is expected that some event attendees and employees may use existing parking lots and structures located in the downtown area, particularly those that exist in or near the County government center, along I or J streets, or in and around Old Sacramento.

Event Transportation Management Plan

The Proposed Project would include an Event Transportation Management Plan (ETMP), a management and operating plan designed to facilitate multi-modal travel to and from events at the Stadium in a safe and efficient manner. The ETMP would be adapted and refined by the SRFC, the City of Sacramento, and other agencies responsible for carrying it out. An active monitoring process would occur during the first year of operation to provide the basis for adjustments by the SRFC and the City of Sacramento, with somewhat less intensive monitoring and refinements undertaken in subsequent years. It is also anticipated that subsequent adaptations or refinements would be made to respond to changing event types and schedules, new transportation access and parking opportunities, ongoing development activities in and around the RSP Area, and planned transportation improvements that may be implemented in the vicinity.

The ETMP would provide for the following:

- Transportation control strategies, including provision of an on-site Transportation Management Center (TMC) in the stadium (could occur in the Stadium Security Office), designation of a Traffic Control Officer (TCO) supervisor who would staff the TMC and manage event day traffic controls, and the location of TCO's who would direct vehicular, transit and pedestrian traffic under various event scenarios. The transportation control strategies would also address transit boarding at the nearby planned 7th Street & Summit Tunnel Avenue Street light rail station as well as Sacramento Valley Station.
- Communication strategies, including outreach and wayfinding strategies designed to inform event attendees of the various transportation options that would be available and provide directions on how they could be accessed
- Wayfinding strategies, including a series of permanent and temporary signs as well as permanent changeable message signs on freeways that could be used to facilitate pedestrian, bicycle, and vehicle access.

Construction and Phasing

Construction of the proposed Stadium and related entry plaza and open spaces would occur over an approximately year and a half period. The initiation of construction is tied to the selection of the General Contractor. Selection planned for as early as May 2025 and construction to complete in February 2027. There would be numerous overlapping construction phases, as is presented in Table 2-13.

TABLE 2-13.			
SACRAMENTO SRFC STADIUM CONSTRUCTION PHASING PLAN			
Construction Phase	Construction Time Period		
	Time Increment	Est. Start Date	Est. Finish Date
Grading	8 weeks	7/17/2025	9/11/2025
Dewatering	N/A	N/A	N/A
Foundations/Footings	12 weeks	1/8/2026	4/1/2026
Building Construction	12 months	1/8/2026	2/1/2027
Sitework/Landscape/Paving	16 weeks	10/26/2026	2/15/2027

Excavation and Grading

The construction would be initiated with a clear & grub within an overall grading phase, which would involve earth movement and hauling on an exposed site of approximately 14.7 acres (see Figure 2-42). It is currently estimated that about 90,000 cubic yards of existing onsite material will be excavated and recompacted within the project site. Additional import from beyond the project site limits is not

anticipated. During this phase, construction employment would average about 20 workers, with a peak of 30 workers.

Depending on final foundation design and the need for subbase settlement, soils beneath imported fill could be over-excavated to a depth of approximately four (4) feet below the existing grade and re-compacted in place to achieve suitable base prior to placement soils. The actual need to over-excavate and re-compact (to achieve compaction requirements) and the actual depth of excavated soils would be a function of the selected foundation methodology and design.

Prior to placement of the engineered fill, the site surface would be cleared and grubbed of all unsuitable material, including vegetative matter, industrial waste, debris, and miscellaneous items. Soils would be processed and placed in final state and location where the subsurface has been over-excavated and re-compacted to meet structural stability, or may be placed in a temporary state to surcharge the subsurface beneath. In either case, soils, either in temporary or final stage, would be monitored or surveyed for settlement using settlement hubs. Settlement would be considered to have achieved satisfactory equilibrium when the difference in successive readings over a reasonable time determined by a geotechnical engineer is determined to have been achieved.

Final site grades are depicted on Figure 2-42, illustrating the variation in final elevations. The process of soil handling, placement, and compaction would require the use of conventional equipment as determined by the general contractor. All soil handling activities would be conducted in accordance with the Railyards Soil and Groundwater Management Plan.

Soil handling activities near the mainline tracks would be conducted in accordance with regulations and procedures that determine such activities, including appropriate health and safety concerns, appropriate flagging, and consideration of subsurface stability.

Construction

Foundations

A combination of foundation systems and elements will be utilized to support the various structures that comprise the proposed Sacramento Republic FC Stadium.

Single-story light-weight structures for retail spaces, concessions and restrooms, and stadium operations, and other similar facilities will be supported on shallow spread footing foundations without ground improvement. In addition, the East, North, and South, grandstand structures may be suitable to be supported by shallow foundations. These structures may be subject to significant settlements in a large seismic event but would be anticipated to maintain strength and stability given the relatively light loading and single-story construction.

Two options are being considered to support the main West Stands Stadium structure and other more heavily loaded stadium elements such as the scoreboards and potentially the East, North, and South grandstands: deep foundations that develop support from end bearing and friction in the relatively dense and stiff soils below the zone of the liquefiable soils, or shallow foundations bearing on areas where ground improvements have been completed to mitigate soil liquefaction. Each option is discussed below.

Deep Foundations

Deep foundations consist of two major types: driven piles and drilled, cast-in-place concrete piles. Each type can be further classified as displacement or non-displacement. If driven piles are used, driven displacement piles would be preferable for the loose and soft soils beneath the stadium site. A wide variety of driven pile types are available, such as cast-in-place concrete piles (concrete poured inside a steel shell driven with a mandrel), steel pipe piles, and pre-cast concrete piles.

An alternative to driven piles would be drilled, cast-in-place concrete piles. As with driven piles, drilled, cast-in-place concrete piles are available in a wide range of diameters. The type and diameter of drilled, cast-in-place concrete pile would depend on the foundation layout and loads.

Based on preliminary reviews of the estimated column loads for the stadium with the project Geotechnical Engineer, 16" diameter, auger cast-in-place displacement piles have been identified as the baseline deep foundation system.

The final design of pile types, depths, spacing, size, and other related parameters, including method of pile driving and/or installation, would be determined once design has been completed. Due to the variable subsurface conditions that underlie the site, a comprehensive pile testing program would be appropriate to verify design capacities and pile tip depths.

Pile installation will comply with the relevant requirements of the Railyards Soil and Groundwater Management Plan. Final pile tip elevations would be reviewed to ensure compliance with DTSC requirements. It is anticipated that all piles will be advanced to a suitable bearing layer between 60-80 below current grade level.

Shallow Foundations with Ground Improvement

In lieu of deep foundations, shallow foundations consisting of either individual spread footings at columns, and continuous strip footings at walls, or a continuous mat foundation may be used in combination with ground improvement to mitigate the risk of soil liquefaction in a seismic event. Numerous ground improvement strategies and methods may achieve the required performance criteria to mitigate soil liquefaction. The final means and methods of ground improvement will be designed by a specialty ground improvement subcontractor to meet the performance requirements specified by the project Geotechnical Engineer.

Building Erection and Other Construction

The construction phase would involve the erection of steel, concrete and other construction elements, as well as interior and exterior finish work. Construction would take place over a period of about twelve (12) months. Stadium erection would involve the use of numerous cranes, loaders, welders, generators, concrete pumpers, and similar construction equipment. Interior and exterior finish work would involve a wide variety of construction activities involving creating and outfitting interior spaces and completing the exterior finish of the building, including plumbing, electrical, heating and air conditioning systems, seat and other event system installation, and the like. During this phase, construction employment would average about 200 workers with a peak of about 650 workers.

Exterior sitework, landscaping, and paving would be undertaken over a period of about four and a half

(4.5) months. During this final phase, construction employment would average 25 workers with a peak of 50 workers.

Dewatering

Given the proposed grading of the site, groundwater is not anticipated to be encountered within the upper 10 feet below the field level. Since the proposed Stadium concourse level and various amenities are anticipated to be above the field level, groundwater is not expected to affect these features. As such, the extent and need for temporary construction dewatering, if any, would primarily depend on foundation design and foundation constructability methods and requirements of the proposed facility.

Foundation design, depth, location, lateral extent, along with constructability methods selected to install foundation systems would determine volume, flow rates, zone of extraction, and types of well points used to accomplish such dewatering. To limit impact, dewatering would only be conducted when and where needed to facilitate foundation construction, and would be halted and/or terminated when such need is not present. The type of well point system, screen depth, size and type of pumps, would be selected with the primary goal to reduce extraction and discharge to the extent necessary to meet construction requirements. Other feasible measures, such as construction scheduling and phasing, would be used when possible to achieve the intended objectives of minimum impact and efficient and cost effective construction.

Discharge of extracted groundwater would be directed to the combined sanitary sewer. Discharge to the combined system would occur in accordance with a permit from Sacramento Regional County Sanitation District and City of Sacramento approval. An agreement with the City of Sacramento Department of Utilities would be secured prior to discharge.

If groundwater has to be treated prior to discharge a temporary groundwater treatment facility would be installed within the footprint of the proposed project to meet discharge flow rate and quality requirements. The treatment system would also be permitted by Sacramento Metropolitan Air Quality Management District, in the event the treatment system requires such permit.

Temporary dewatering and discharge would be closely coordinated with ongoing UPRR remediation activities and mandated requirements and with property owners surrounding the proposed project. All activities would be conducted in accordance with the requirements of the recorded Railyards Land Use Covenant, the Railyards Soil and Groundwater Management Plan, and operation and management requirements set for all Railyards facilities. Prior to discharge, approval would be secured from the DTSC, the lead agency regulating Railyards clean activities by UPRR

Temporary discharge of accumulated stormwater due to rainfall would occur independently from the temporary extraction of groundwater for purposes of dewatering. The temporary discharge of precipitation stormwater would be implemented in accordance with an approved Storm Water Pollution Prevention Plan dedicated for the project construction phase.

Subsidence monitoring would be conducted by observing pre-defined points at the site and within the

surrounding vicinity. The observation and recordation of potential changes in elevations that may be potentially caused by subsidence, if any, would be accomplished by surveying the identified points and comparing the survey results to previous readings during the duration of dewatering activities. A baseline of all identified points would be established before dewatering commences.

Circulation

Project Site

During construction, the entire project site would be fenced off. Construction fencing would be placed around the entire perimeter of the proposed Stadium site.

Truck Routes

As depicted on Figure 2-43, Stadium Construction Truck Routes, inbound truck trips would access the project site from northbound or southbound I-5, or from southbound SR 160 via Richards Boulevard and 7th Street. Outbound trucks headed to I-5 would depart the site on northbound 7th Street, to Richards Boulevard. Trucks heading toward SR 160 could travel north on 7th Street to either North B Street or to Richards Boulevard. Some trucks may depart the site on southbound 7th Street, either traveling toward West Sacramento via Capitol Mall and Tower Bridge, or to I-5 via the I Street onramp or south on 7th Street to the P Street onramps.