# 2 PROJECT DESCRIPTION

The proposed New Zoo at Elk Grove Project (New Zoo, or Project) would result in the construction and operation of a zoological park and associated support and operational facilities, restaurant, retail, lodging, and guest services facilities on the Project site. The Project would include a new Special Planning Area (SPA) referred to as the Zoological Park SPA, development of the zoo, parking facilities, off-site public infrastructure improvements, and an animal browse program. The following includes a detailed description of the Project components.

# 2.1 PROJECT LOCATION

The Project site (Assessor's Parcel Numbers [APNs] 132-0320-010, -001 and -002; and 132-2390-006) is located at the northwest intersection of Kammerer Road and Lotz Parkway (Figure 2-1) in the City of Elk Grove. The Project site is a fallow field surrounded by single-family residences to the east, agriculture to the south and west, and active construction of a new residential subdivision to the north (Figure 2-2). Historically, the Project site was used as rangeland for cattle from April to December. More detailed setting information is provided in Section 3 specific for each environmental topic area. The Project site is within the Livable Employment Area Community Plan and the core of the site has a land use designation of Parks and Open Space (P/O). The Livable Employment Area Community Plan includes consideration of the Project site as a zoological park.

# 2.2 PROJECT BACKGROUND AND HISTORY

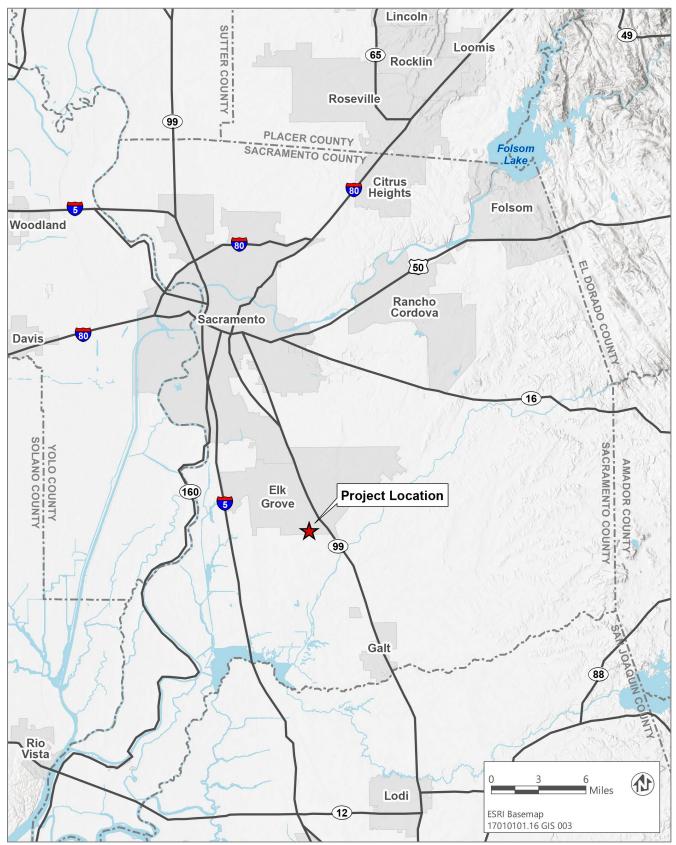
The Sacramento Zoo is located in William Land Park in the City of Sacramento. The Sacramento Zoo site is owned by the City of Sacramento and is operated, pursuant to a Partnership Agreement, by the Sacramento Zoological Society (also referred to as Society), the nonprofit organization that has complete managerial and financial control of the Zoo. The existing Zoo is a 94-year-old zoo in need of renovations to habitat and facilities to meet current animal care standards and guest experiences. The 14.7-acre facility is landlocked and unable to provide the necessary space for many of the species housed at the Sacramento Zoo. Space is also limited for visitor parking at the Sacramento Zoo and restricts the number of attendees and access to the Zoo.

The Sacramento Zoological Society manages the care and welfare of the Zoo and its animals. Over the past 30 years the Sacramento Zoo has lost many of its iconic animal species, such as tiger and bear, due to space constraints. The existing challenges at the Sacramento Zoo are proposed to be resolved by relocating the Zoo to an area that allows for large, modern habitats that meet the welfare needs of the animals, opportunity to care for a wider variety of animals to improve guest experience, and increased visitor parking to enhance visitor access.

# 2.3 PROJECT OBJECTIVES

The primary objectives of the New Zoo at Elk Grove Project are to:

- construct a new larger, sustainable, zoo with expanded habitats and facilities to support a broader range of animal species;
- ▶ meet current animal care Association of Zoos and Aquariums standards for animals housed in the zoo;
- ▶ increase access to the zoo with adequate parking facilities, easy accessibility, and access to transit and trails;
- increase and expand on the zoo mission and mission impact to inspire appreciation, respect and a connection with wildlife and nature through education, recreation, and conservation;
- ▶ provide enhanced visitor experience through education, overnight stay, event spaces, and animal encounters.



Source: adapted by Ascent in 2022.

#### Figure 2-1 Regional Location



Source: adapted by Ascent in 2022.

### Figure 2-2 Project Site

# 2.4 PROPOSED PROJECT

This section describes the requested entitlements needed to support Project implementation and includes a detailed description of all Project elements. The Project does not include repurposing of the existing Sacramento Zoo site in the City of Sacramento. Upon opening of the New Zoo the existing Sacramento Zoo would close and some animals may be transported to the New Zoo. Animals not transferred to the New Zoo would be re-homed to other facilities pursuant to Association of Zoos and Aguarium standards. The 1997 Zoo Operating Agreement (Agreement) between Sacramento City and the Society only requires the Society to remove its furniture and fixtures. Therefore, the Society and the City of Sacramento may need to amend their agreement if Sacramento City would like certain closure procedures from the Society. At a minimum the Society would turn over keys to the existing zoo site and explain locking mechanisms for the eight-foot-tall perimeter fence. The Society would remove from the Sacramento Zoo and relocate to the New Zoo assets including but are not limited to the carousel and okapi barn. Most other buildings and exhibit materials would remain at the Sacramento Zoo. The Sacramento Zoo site would remain under the jurisdiction of the City of Sacramento. The Society would no longer provide onsite security and the City of Sacramento would utilize their existing police personnel to patrol and respond to any potential issues at the vacant site, until such time as the former Sacramento Zoo property is open to the public. Sacramento City is aware that the Zoo's entrance, designed in 1961 ("Googie" style architecture, which developed out of mid-century modern architecture) was deemed a historic landmark because such demarcation was performed by their City Council and is a part of the City's register of historic and cultural resources. City policy regarding landmarks is clearly laid out and any disturbance of the entrance will require compliance with their preservation policy. The City of Sacramento has a parks maintenance department who would maintain the grounds within the fenced former Zoo area until such time as Sacramento City determines a future use in which it would then be subject to the appropriate environmental review. The City currently maintains the Land Park area outside the fence perimeter.

The Project consists of the following components that are described in further detail below:

- Zoological Park SPA
- Zoological Park
- Parking facilities
- ► Off-site public infrastructure improvements
- Animal Browse Program

# 2.4.1 Zoological Park SPA

The Project would result in a new SPA for the Project site that would establish a land use plan and allowed uses for properties within the Zoological Park SPA. The SPA would also include development standards such as minimum setbacks and height limits. The SPA would cover approximately 100 acres including areas for off-site improvements, such as the proposed parking facilities. Permitting requirements including thresholds for Design Review and identification of the approving authority for various permits required to construct and operate the proposed New Zoo would be contained in the SPA.

# 2.4.2 Zoological Park Overview

The zoological park would include various facilities and buildings to be developed in phases potentially starting in 2025 that would encompass the proposed New Zoo. The main facility would be on approximately 65 acres and would be designed to support an average annual attendance of between 1.1 and 1.6 million visitors. The facility would be organized into four primary zones: Green Corridor, Africa, California, and Australasia. The Green Corridor would be the main pedestrian pathway through the New Zoo. The proposed site plan for the New Zoo is shown in Figure 2-3. Table 2-1 shows proposed elements of the New Zoo.

It is currently anticipated that Phase 1 of the Project would involve construction of the Green Corridor and Africa (Figure 2-4). However, specific animal habitats within these zones may themselves be phased depending on project funding. Phase 1A would include the base Zoo footprint and Phase 1B would include the additional zoological features as shown in Figure 2-4. Phase 1A of the New Zoo would open for operation in early 2029 (or as early as 2027 with a rolling opening). Phase 1C would include the hippopotamus and additional savannas in the northwest corner of the site (Figure 2-4). The other zones of California and Australasia, along with development of permanent administrative offices, would occur in one or more phases as funding becomes available as are referred to as future phases (Phases 2-4) (see Figure 2-4). Detailed design of Phases 1A and 1B has been developed, while conceptual designs for future phases have been provided. Design approval for future phases would occur subsequent to the approval of the Zoological Park SPA, overall site plan, and Phase 1A/B. Construction of Phase 1A/B is anticipated to begin in summer of 2025 and last approximately 36 months. However, as previously mentioned, additional subphasing may occur based upon project funding.

#### Table 2-1Project Summary

Phase/Timing	Planning Area	Description	Proposed Facilities	Proposed Exhibits <sup>1</sup>		
Phase 1A: Near Term (30 months)						
	Main Entry Complex and Lodge	<ul> <li>Visitor services, ticketing, administration, gift shop, coffee café</li> <li>Lodge</li> </ul>	<ul> <li>Guest services/ticketing/restrooms: 4,700sf</li> <li>Retail building: 10,000sf (incl covered area over ticketing)</li> <li>Educational entry restrooms: 500sf</li> <li>Giraffe Lodge: 12,000 sf</li> <li>4,800 square foot events lawn (including pre-function and dining areas)</li> </ul>	<ul> <li>Dwarf mongoose: 215 sf</li> <li>Giraffe feeding shelter: 2,400 sf</li> </ul>		
	Green Corridor	<ul> <li>Primary guest pathway through the New Zoo</li> </ul>	<ul> <li>Open lawn</li> <li>Wildlife wetlands garden</li> <li>Carousel shelter: 1,600 sf</li> <li>Train station and tickets: 1,000 sf</li> <li>Multipurpose Rooms: (3) at 1000 sf each</li> </ul>	<ul> <li>Flamingo aviary: 8,600 sf</li> <li>Gelada: 24,000 sf</li> <li>Thick billed parrot: 2,500 sf</li> <li>Okapi: 12,150 sf</li> <li>Animal care quarters: 9,000 sf</li> </ul>		
	Africa Zone	<ul> <li>Savannas</li> <li>Overnight camp lawn</li> </ul>	<ul> <li>Three educational buildings: 1,000 sf each</li> <li>Restrooms:800 sf</li> <li>Hay storage: 500 sf</li> <li>Browse cooler: 200 sf</li> <li>Fodder storage: 200 sf</li> <li>Beer Garden Point of Sale 1: 250sf</li> <li>Beer Garden Point of Sale 2: 250 sf</li> </ul>	<ul> <li>Lion: 22,300 sf</li> <li>Savanna West: 52,300 sf</li> <li>Savanna East: 73,575 sf</li> <li>Rhino: 23380 sf</li> <li>Cheetah: 15,230 sf</li> <li>African Small Mammal 400 sf</li> <li>Meerkat: 1,600 sf</li> <li>Animal care quarters: 25,500 sf</li> </ul>		
	Animal Care Center	<ul> <li>Gelada café &amp; guest restrooms</li> <li>Nutrition Center</li> <li>Animal Care Hospital</li> <li>Animal Quarantine</li> </ul>	<ul> <li>Gelada café: 3,200 sf</li> <li>Guest restrooms: 1,000 sf</li> <li>Animal care center: 21,000 sf</li> <li>Viewing area: 2,500 sf</li> <li>Enclosed vet yard</li> <li>Service corridor and truck loading</li> <li>Maintenance Shed/Shops: 8,700 sf</li> </ul>	NA		

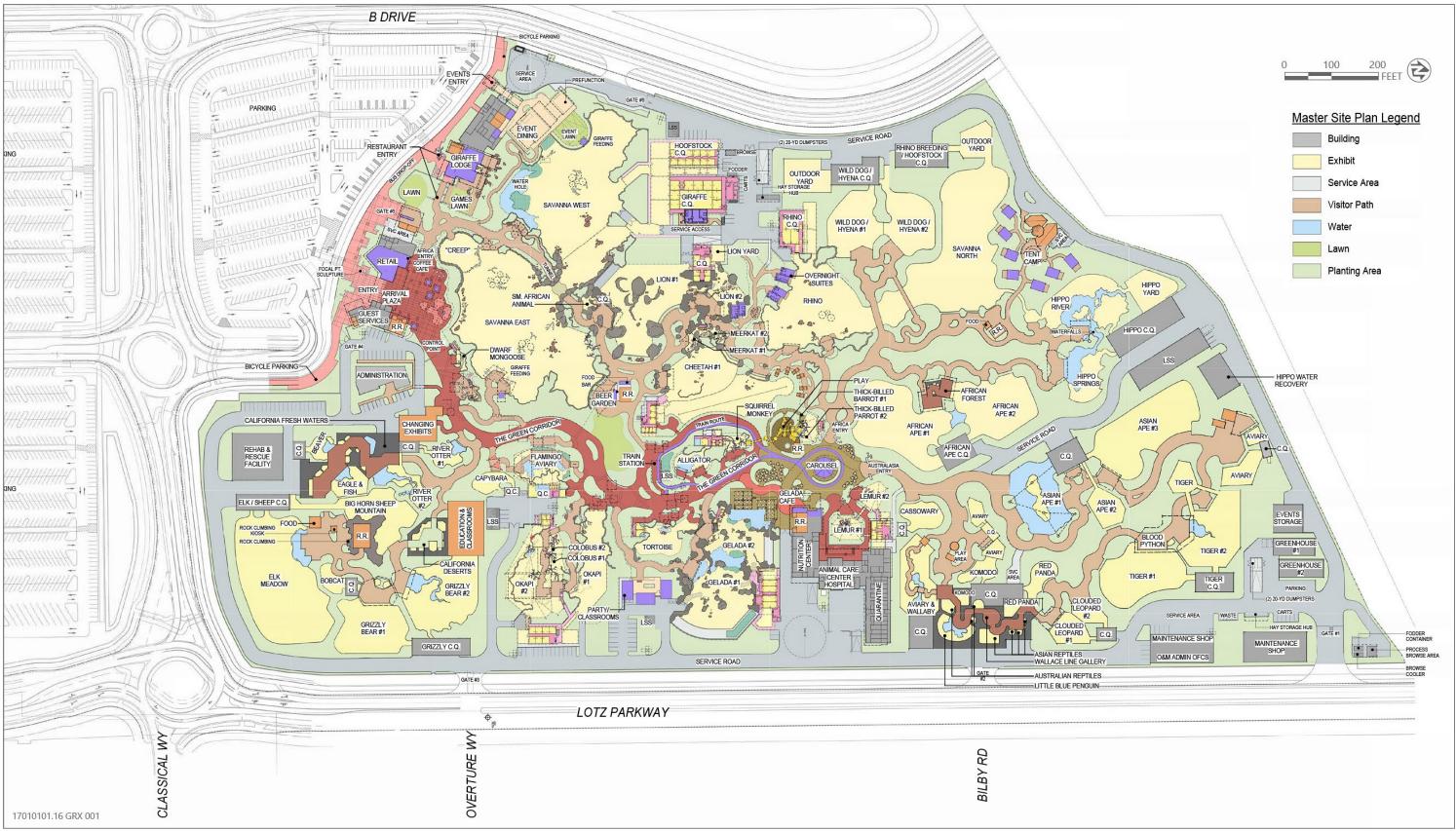
Phase/Timing	Planning Area	Description	Proposed Facilities	Proposed Exhibits <sup>1</sup>
	Parking	<ul> <li>Two guest parking lots – North Lot and South Lot</li> <li>On- and off-site employee parking</li> </ul>	<ul> <li>Paved north lot: 500 spaces</li> <li>Gravel south lot: 700 spaces</li> </ul>	NA
	Off-site Improvements	<ul> <li>Roadway improvements to Lotz Parkway, Kammerer Road, and Classical Drive</li> <li>New roadway B Drive</li> <li>Pedestrian and bicycle facilities</li> <li>Sewer infrastructure</li> <li>Water infrastructure</li> <li>Storm drainage detention basin</li> <li>Electrical, gas, and telecommunication facilities</li> </ul>	NA	NA
Phase 1B: Near	Term		L	
	Main Entry and Green Corridor	NA	NA	<ul> <li>Alligator: 2,500 sf</li> <li>Squirrel Monkey: 1,300 sf</li> <li>Lemur: 5,100 sf</li> <li>Africa Aviary (birds): 15,000 sf</li> <li>African Aviary (okapi area only): 7,500 sf</li> <li>Colobus Monkey: 3,200 sf</li> <li>Giant Tortoise: 5,800 sf</li> <li>Animal care quarters: 5,130 sf</li> </ul>
Phase 1C: Mid	Term			
	Africa Zone	<ul> <li>Removal of overnight camping lawn, replace with wild dog exhibits</li> <li>Tent camp area</li> <li>Overnight Guest Suites</li> </ul>	<ul> <li>Overnight Guest Suites: 3 at 900 sf ea.; 1 at 1,400 sf</li> </ul>	<ul> <li>Savanna North: 45,500sf</li> <li>Wild Dog: 25,500 sf</li> <li>Hippopotamus: 24,500 sf</li> <li>African Ape: 41,000 sf</li> <li>Animal care quarters: 20,000 sf</li> </ul>

Phase/Timing	Planning Area	Description	Proposed Facilities	Proposed Exhibits <sup>1</sup>
Future Phases	2-4: Long Term			
Phase 2	California Zone	<ul> <li>California exhibits</li> </ul>	<ul> <li>Rehab and rescue facility: 11,000 sf</li> <li>Food kiosk: 500 sf</li> <li>Restrooms: 1,800 sf</li> <li>Deserts Interior Exhibits building: 6,400 sf</li> <li>Fresh Waters Interior Exhibits building: 18,600 sf</li> <li>Education Building: 9,000 sf</li> <li>Changing Exhibits: 5,000 sf</li> </ul>	<ul> <li>Beaver: 2,100 sf</li> <li>Big horn sheep: 12,700 sf</li> <li>Bobcat: 2,100 sf</li> <li>California deserts interior exhibits: 2,000 sf</li> <li>California fresh waters interior exhibits: 2,000sf</li> <li>Eagle and fish: 4,000 sf</li> <li>Elk Meadow: 42,000 sf</li> <li>Grizzly Bear: 36,000 sf</li> <li>River otter: 8,300 sf</li> <li>California Sierra Nevada mountain exhibits: 500 sf</li> <li>Animal care quarters: 11,500 sf</li> </ul>
Phase 3	Administrative Buildings	Office complex	► Administration Building: 9,500 sf	NA
Phase 4	Australasia Zone	<ul> <li>Australia exhibits</li> <li>Asia exhibits</li> <li>Maintenance buildings and shops</li> </ul>	<ul> <li>Wallace Line Building: 22,000 sf</li> <li>Food Kiosk: 500 sf</li> <li>Playground</li> <li>Photo opportunity area</li> <li>Restrooms 1,000 sf</li> <li>Greenhouse 1 and 2: 7,600 sf</li> <li>Maintenance shed/shops: 8,500 sf</li> <li>Event storage: 3,800 sf</li> </ul>	<ul> <li>Australia Aviaries: 3,000 sf</li> <li>Australia/Wallaby aviary: 11,000 sf</li> <li>Cassowary: 4,500 sf</li> <li>Komodo Dragon: 3,000 sf</li> <li>Interior Exhibits: 8,300 sf</li> <li>Asian aviaries: 5,500 sf</li> <li>Blood python: 200 sf</li> <li>Clouded leopard: 7,000 sf</li> <li>Tiger: 38,000 sf</li> <li>Red Panda: 3,000 sf</li> <li>Asian Apes: 33,000 sf</li> <li>Animal care quarters: 18,000 sf</li> </ul>

Sf = square feet; NA = not applicable

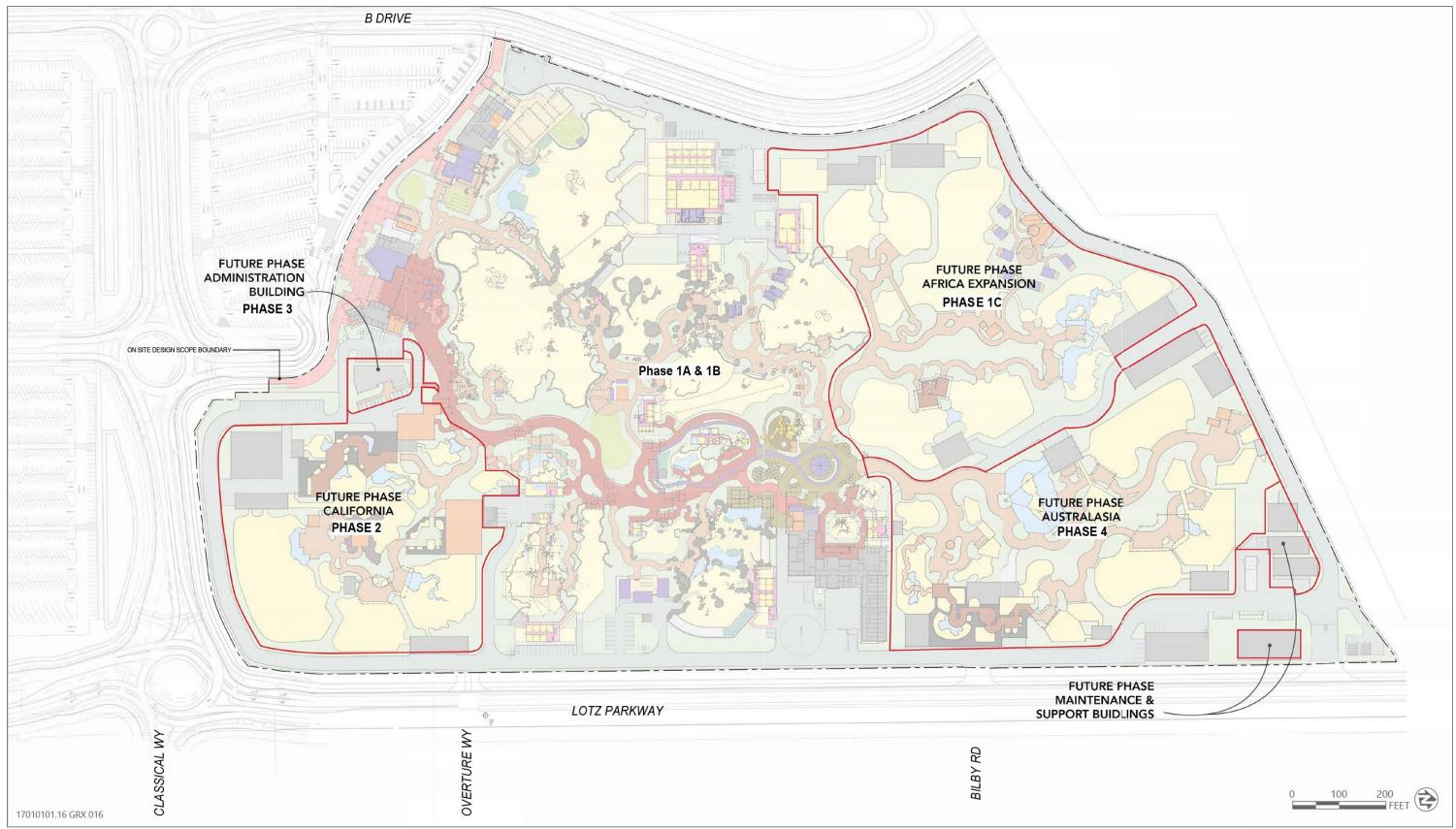
<sup>1</sup> Species listed are intended for each proposed exhibit; however, exhibits may house different species upon construction of future phases of the New Zoo. Source: Ascent 2023.

Note: All square footage numbers are approximate.



Source: SHR Studios

#### Figure 2-3New Zoo Plans Full Buildout



Source: SHR Studios.

#### Figure 2-4 New Zoo Development Phases

# 2.4.3 Phase 1

The following is a summary of the components of Phase 1, inclusive of subphases 1A, 1B, and 1C. As mentioned previously, Phases 1A and 1B may be built concurrently. Additionally, Phase 1C could be deferred until after Phase 2, 3, or 4, depending upon the needs of the Project and community and financial priorities.

## MAIN ENTRY COMPLEX

The main entry complex would be located at the southern portion of the site accessible from the main parking lot. The main entry complex would include visitor services, ticketing, administration, a gift shop, coffee café, and other concessions. The following buildings would be included in the main entry complex: guest services/ticketing/restroom building (4,700 square feet), retail building (6,000 square feet), and educational entry restrooms (500 square feet). Buildings range from approximately 12 to 20 feet tall with insulated metal stud walls, sheathing, and glazed doors and openings. The main entrance building would include steel framed walls and structural framing (Figure 2-5). Two focal point structures would be included in the entry complex. One on the exterior plaza and a second focal element in the arrival plaza. Buildings at the entry area would also include employee and office spaces for staff east of the main entry building.

## RESTAURANTS AND FOOD PAVILIONS

The New Zoo would include several restaurants and food pavilions. The main entry complex would include a coffee café for visitors. A beer garden is proposed along the Green Corridor near the savannah and cheetah habitat. The beer garden would include two 300 square foot buildings for beer and food, 1,000 square foot restrooms, and shade structures. The two buildings would be prefabricated 10 foot tall buildings.

A café and dining terrace, referred to as the Gelada Café, is proposed near the gelada exhibit and carousel and would be one of the main dining areas in the New Zoo. The 3,200 square foot Gelada Café would be connected to the nutrition center building, described below. The café would have a service counter, pickup counter, shaded queuing area, and outdoor seating area. The dining terrace would include views into the gelada exhibit from inside the cafe.

The Giraffe Café would be the main restaurant for the New Zoo. The café would be located on the southern portion of the site west of the main entry complex. The café would offer interior and exterior seating and be accessible inside the Zoo (as part of the ticketed experience) and to the general public (Figure 2-6). An outdoor games lawn would be connected to the café for visitor use. Visitors would be provided views of the savanna from the outdoor seating and windows in the café. The 12,000 square foot building would range from 13 to 18 feet in height with solar panels on the roof. A service entry with a separate gate system for the Giraffe Café would be provided off proposed B Drive. This area would include a truck turnaround for deliveries to the café and New Zoo. A 4,000 square foot concrete pad, with potential to be closed in later phases of construction, would be located adjacent to the Giraffe Café building for event dining. A 850 square foot prefunction concrete pad would be located adjacent to the Giraffe Lodge.

## ANIMAL CARE CENTER

The animal care center would be located along the eastern portion of the site near the gelada and lemur exhibits. The animal care center would consist of a nutrition center, animal care hospital, and quarantine area. The 16 foot tall building would be 21,000 square feet with solar panels on the roof, heated and cooled via a heat pump HVAC system. The building would be made of insulated metal stud walls with glazed doors and openings.

The veterinary hospital portion of the building would include areas for surgery, two treatment rooms, a recovery area, radiology room, lab, pharmacy and pharmacy storage, laundry, diet preparation room, and oxygen storage. Visitors would have the opportunity to experience views into the operating rooms (the two treatment rooms, surgery, and

lab) through the glazed openings from an approximately 2,500 square foot viewing area. The viewing area would be covered with shade structures. The animal care and quarantine areas would include housing areas for small, medium, and large animals, aquatic species, and reptiles. Hoofstock would have an indoor and outdoor housing area. An enclosed veterinary yard would be located east of the building with a separate secured gate for access. The yard would be large enough to allow for truck turnaround. A proposed gate off Lotz Parkway would provide a truck loading area, waste storage, and truck turnaround for additional access to the animal care center. The nutrition center would be located on the southern portion of the animal care center and consist of multiple rooms for animal food preparation and storage. Windows will allow guests to view the food preparation area and learn about animal caretaking and nutrition.

## PLAY AREAS

Play areas and structures would be located throughout the New Zoo. A carousel would be located toward the center of the New Zoo along the Green Corridor in a designated Play Zone. The carousel would be moved from the existing Sacramento Zoo and transported and installed at the New Zoo. A train ride route would be located near the carousel and circle the alligator and squirrel monkey exhibits. A play structure with ropes and other climbing and play apparatus would also be located near the carousel in the Play Zone. Other play structures in the New Zoo could include climbing towers and water play.

## OVERNIGHT ACCOMMODATIONS

The Project would include overnight accommodation facilities where guests could stay overnight at the New Zoo. Overnight accommodations would include an open lawn area in the northern portion of the site near the lion and rhino exhibits in the African Zone. The open lawn would be a place for guests to pitch their personal tents. The lawn would also serve as an event space for potential functions. Overnight guests would be able to attend a nighttime safari. The nighttime safari experience would follow the Green Corridor route and include a light display and amplified noise (Figure 2-7).

The site plan also identifies a "tent camp" lodging component, which would provide between seven and fifteen hospitability suites for overnight guests (Figure 2-8). The "tent camp" would function more like a hotel, in that it would be a permanent, constructed facility with beds, bathrooms, and other furniture. Support facilities may include, but are not necessarily limited to, a camp fire/fire pit gathering space, "front desk" and administration space, and dining space. The exact design of the "tent camp" is unknown at this time but could be in the form of safari tents or could be a more traditional building structure with solid walls, windows, and doors.

Additional overnight accommodations may be integrated into some of the animal habitats and care areas, including lion, giraffe, and rhino. Up to 30 suites would provide sleeping and restroom facilities for guests and provide viewing into the animal habitats or care areas. Inclusion of these accommodations is dependent upon financial capacity.

## EDUCATION SERVICES

The New Zoo would provide the opportunity for educational experiences for a variety of guests. As part of Phase 1, education operations and administration would occur within the modular office complex. Educational programs would occur throughout the campus, including at the overnight/event lawn and within three party rooms/classrooms located near the gelada and tortoise exhibits. The area would include three 1,000 square foot buildings, each approximately 14 feet tall, a food prep and storage area, restrooms and two patio courtyards.

A dedicated educational building would be included in Phase 2.

## ADMINISTRATION AND OPERATIONS

Administrative and office functions of the New Zoo would be located at numerous locations around the complex. Admissions and security would be located at the main entry complex at the front of the New Zoo. Animal medical staff would be located at the animal care building near Lotz Parkway. Animal care staff administration would be located in a modular office complex (measuring approximately 3,000 square feet) just north of the animal are building; however, the majority of care staff would be stationed or otherwise work out of the animal care areas located adjacent to each animal habitat.

Overall administrative functions would be housed at a modular office complex also just north of the animal care building. The total building area would include approximately 8,900 square feet. Each operations function would be located in a separate modular structure, with the group surrounding a central restroom and breakroom modular. In Phase 3, this complex would be replaced by a permanent office building just east of the main entry.

## WAREHOUSE AND STORAGE

Primary warehouse and storage support facilities would be located in a support services complex in the northeast corner of the site adjacent to Lotz Parkway. This area would provide storage and shop space for support staff, including a plant nursery, maintenance and construction equipment, event equipment storage, and other campus support operations. Generally, animal food would not be stored in this area, though some hay or other dry storage may occur here. Additional animal hay/dry food storage would occur near the hoofstock habitats on the west side of the New Zoo.

## LIFE SUPPORT SYSTEMS

Several of the exhibits at the New Zoo would incorporate aquatic features that would require life support systems (LSS). LSS would be located throughout the site as indicated as "LSS" on Figure 2-3. These systems would be designed to maintain suitable water quality for exhibit inhabitants and guest viewing stations. The LSS design for each exhibit depends on the exhibit volume, pool configuration, environmental influences, food loading, animal species, and viewing arrangement. A list of each exhibit requiring LSS and the water demand is included in Appendix B. Overall, the Project would require 153 acre feet per year of water during Phases 1A and 1B and 208 acre feet per year of water during Phases 1C, and Phases 2-4.

## ANIMAL HABITATS AND OFF-EXHIBIT CARE AREAS

The New Zoo would include numerous animal exhibits clustered throughout the Zoo by region of species origin (Figure 2-3). Exhibit zones for Phase 1 include Green Corridor and Africa. The Africa zone would include savanna areas with various species including giraffe and other hoof stock, as described in Table 2-1. Lion and cheetah habitats would be located north of savanna. Further north would be a rhino habitat. Care quarters for rhino, hoof stock, and giraffe are located on the perimeter near Road B (Figure 2-3). The Green Corridor would include the flamingo aviary, okapi habitat, gelada habitat, and thick-billed parrot habitat. Phase 1B would include additional habitats, as described in Table 2-1, but may be included with Phase 1A depending on funding. Examples include areas for colobus monkey, additional aviaries, giant tortoise, squirrel monkey, and alligator. Phase 1C would include expansion of the Africa Zone. Under Phase 1C the Africa zone would include wild dog, hornbill, zebra, and ostrich exhibits located further north, along with an expansion of rhino. The northern portion of the New Zoo would also include exhibits for hippopotamus and an African primate habitat. The primate habitat would be constructed at the location of the overnight camping lawn. Camping opportunities would relocate to other lawn area(s) of the New Zoo, to be determined at a later date. A detailed list of species and habitat size is included in Appendix C.

# 2.4.4 Future Phases

Phases 2 through 4 would include the buildout of the California and Australasia zones (see Table 2-1 and Figure 2-4) and construction of a permeant administration office building.

Phase 2 of the New Zoo would include the California zone with exhibits at the southeast portion of the site for eagle, river otter, elk, grizzly bear, waters for freshwater species, and other species native to California. The California zone would include restrooms, a rehab and rescue facility, as well as a building for changing exhibits and an education building. Additional overnight guest accommodations may also be included, with views into the animal habitats and holding areas.

Phase 3 would consist of construction of a permeant administration office building, replacing the modular buildings constructed in Phase 1. The Administration building would be located between the California zone and the entry complex. The building(s) would be no more than three stories tall.

The Australasia zone, Phase 4, would be located north of the Animal Care building near the northeast corner of the site. Habitats that may be included in this zone include, but are not limited to, cassowary, wallaby, emu, red panda, clouded leopard, tiger, orangutan, and other Australian and Asian animal species. Additional overnight guest accommodations may also be included, with views into the animal habitats and holding areas.

Animals for the California, Australia, and Asia zones would be housed at other zoos until completion of their habitats as part of future phases of the New Zoo.

Greenhouses and events storage buildings would be located north of the Australasia zone. The northeast corner of the New Zoo would be built out under future phases with maintenance shops, support offices, and other shop and warehouse spaces as shown in Table 2-1.

# 2.4.5 Other Project Improvements

### LANDSCAPE IMPROVEMENTS

Native and drought resistant plants would be included in Project landscaping to conserve water and create native species habitat. The landscaping would be designed to reduce runoff volume, peak flow rate, load, and water usage. Trees would line the Green Corridor to provide shade for visitors. The Green Corridor would include native plants with riparian groupings. Landscaped and lawn areas for Phase 1 are shown in Figure 2-9. Additional landscaping would be provided along the exterior of the site, in the main parking lot, and other areas of the site.

### ACCESS AND CIRCULATION

The main point of entry for the New Zoo site for guests would be from a driveway connecting along Classical Way. Additional details regarding guest arrival, parking, and access is described in more detail below.

Service and employee access to the site would be provided at several points along the exterior of the site. The primary access for staff would be a pedestrian gate at Lotz Parkway at the southern end of the site. The primary vehicle access for waste pickup vehicles would be a connection at Lotz Parkway at the north end of the site, just south of the Shed C Channel, with an uncontrolled left turn movement to enter the site. The entrance would remain an unsignalized intersection.

New roadways around and to the site would include Classical Way and B Drive. B Drive would extend from the Shed C Channel along the western portion of the site south to Kammerer Road (Figure 2-3). Roundabouts to direct traffic would be located at Classical Way and the entrance to the New Zoo and Classical Way and B Drive. A driveway would connect B Drive to the New Zoo's southwest service entrance, where deliveries to the Giraffe Lodge and the event space would occur. Off-site roadway improvements are discussed in Section 2.4.7.

The Project site would include six pedestrian gates (Figure 2-10). Four of the gates (pedestrian gates 6, 8, 9, and 10) would be located along the southern portion of the Zoo. Gates 6 and 9 would serve as guest entry and exit. Gate 8 would be the pedestrian gate for entry to the educational area. Gates 9 and 10 would serve as a controlled entry/exit from the Giraffe Lodge to the New Zoo and a controlled entry/exit for special events. Pedestrian gate 11 along the southwestern border of the Zoo site would serve as the pedestrian and vehicle entry to the service entry for events at the New Zoo. Pedestrian gate 4 would be located off Lotz Parkway for Zoo staff only as described above.

The Project site would include six vehicle gates for entry into the Zoo facilities (Figure 2-10). Gate 1, located at the northeast corner of the site, would serve as the main entrance/exit and entry for non-zoo vehicles with an attendant at the gate. Gates 2, 3, and 5 would serve as emergency entrance/exit gates and would be accessible via keycard. Gate 7 would be the service gate to serve the guest food deliveries and back of house waste areas, accessible via keycard. Finally, gate 12 at the southwest portion of the site would be for entry and exit via a keycard. Food and goods would be distributed to cafes around the Project site from the delivery area along the site perimeter (Figure 2-10).

## INFRASTRUCTURE IMPROVEMENTS

#### Drainage and Water Quality

The Project site is undeveloped without storm drain and water quality infrastructure. Project development would include the addition of drainage and water quality improvements to the site. Stormwater from the Project site flows into the Shed C channel. To manage these flows and address impacts from hydromodification, two new stormwater retention basins would be constructed in the southern parking lot and a series of retention basins in the northern parking lot (Figure 2-11). Additionally, a new stormwater detention basin would be constructed at the north end of B Drive south of Shed C channel, across the street from the Project. This facility was contemplated in the original approvals for the SouthEast Policy Area (SEPA) in 2014 (referred to as Basin S4). The environmental impacts of ground disturbance and general development of the new basin were addressed in the SouthEast Area Policy EIR (State Clearinghouse No. 2013042054). However, as part of the Project, the location and configuration of the basin is being modified such that the basin is west of B Drive and extends more north-south, as opposed to east-west. The basin would be constructed in phases, with Phase 1 addressing the needs of the Project. A future Phase 2 would increase the size of the basin, extending the basin west, to add capacity for development west of the Project site that is within the same storm drainage Subshed S4, as described in the SEPA plans. A new outfall of the basin into Shed C channel is included in the Project design. The Project would seek modifications to the existing Federal and State permits issued for the Shed C channel and detention basin improvements to allow for this modified and phased design. Movement and amending the basin permit would occur as part of ongoing refinements to the Storm Water Drainage Master Plan and would be covered through modification to existing permits. Stormwater from the Project, as well as B Drive and Classical Way, would be directed to the basin by way of storm water pipelines in the roadways. The Project would connect to these pipelines at various locations.

The majority of wastewater would not flow into stormwater because any wastewater within the buildings would flow into the sewer, as described below under "Wastewater Service." Wastewater collected from most of the exhibits would be collected on site in the stormwater retention basins. Incidental waste from the exhibits would go either into the LSS, where backwash would go into the sewer, or into one of the stormwater features on the site, as described above, and through layers of treatment before entering the stormwater retention basin.

The Project would utilize hydromodifications on the site to account for storage and water quality treatment prior to discharging into the City's storm drain infrastructure, proposed along B Drive. Features would include bioretention basins, Low Impact Development (LID) principles, and treatment control measures permitted within the Sacramento Regional Stormwater Quality Design Manual. These features would mitigate peak flows and work in concert with the storm drainage infrastructure planned west of the site. Hydromodification features in the New Zoo would increase natural water storage and slow runoff. The site has been delineated into drainage management areas to direct flow. All storm drain inlets are proposed to include catch basin insert filters for full trash capture measures.

#### Wastewater Service

Wastewater service would be provided to the Project by the Sacramento Area Sewer District (SacSewer). Flows from the Project site, specifically wastewater from inside the buildings, would be directed to the SEPA Sewer Lift Station (identified as facility number S153), located on Bilby Road just east of Bruceville Road. To connect to this facility, sewer lines would be constructed in B Drive and Classical Way (10-inches and 8-inches, respectively) (Figure 2-12). These lines would connect to the 12-inch sewer line in B Drive within the Souza Dairy development by way of a pipeline extended either by the Souza Dairy development or by the Project under the Shed C channel at the northern portion of the of B Drive. The onsite LSS system would collect incidental waste from the animal exhibits where backwash would enter the sewer.

### Water Supply Service

Water services to the Project would be provided by the Sacramento County Water Agency (SCWA). Extension of backbone water pipelines would be necessary to serve the Project. The following facilities would be constructed to serve the Project:

- A new 24-inch pipeline would be constructed in Lotz Parkway from Kyler Road south to Kammerer Road. Along this corridor the pipeline would connect with pipelines in Bilby Road and Kammerer Road.
- A new 20-inch pipeline would be constructed in Classical Way from Lotz Parkway west to B Drive.
- A new 20-inch pipeline would be constructed in B Drive from Classical Way north to Shed B, where the pipeline would connect with improvements completed by the Souza Diary project.

These improvements would provide a looped water service system along three sides of the Project site, complying with minimum service requirements for fire suppression (Figure 2-12). Water infrastructure would surround the main Zoo complex with connections into the Zoo to serve restrooms, restaurants, and the LSS systems. Additionally, the Project would construct recycled water service lines within B Drive and/or Classical Way, consistent with the Recycled Water Master Plan for the Southeast Policy Area.

### **Dry Utilities**

Dry utilities refer to electrical, gas, and telecommunications infrastructure. These facilities are typically constructed along public roads within Public Utility Easements (PUEs). Improvements to Lotz Parkway, Classical Way, B Drive, and Kammerer Road include the extension of these services within the proposed PUEs.

SMUD infrastructure for electrical services would be extended to the site within the PUEs, with points of connection to the Project. All SMUD wires would exist in underground conduits. Above ground transformers would be placed at various locations within landscape areas along the roadways as determined by SMUD, as well as interior to the Project. Existing power runs to the Project site would be sufficient to meet energy needs of the New Zoo and substation improvements would not be needed to serve the Project.

Buildings such as the guest services, retail, Giraffe Café, Gelada Café, and Animal Care Center would include solar panels on the roof to provide additional electricity. Solar panels may also be located in the parking lots on the site. Emergency power to serve the New Zoo during a power outage would be provided to the Animal Care Center and entry building to maintain animal health and site security. Backup power would be provided by battery systems that would operate overnight or otherwise when the photovoltaic systems are insufficient to provide power to the specified buildings/functions.

The New Zoo would be all electric with no natural gas for energy usage. Decorative gas usage for fire pits or lanterns may occur. While much of the Project would not involve the use of natural gas, there is the potential for Pacific Gas and Electric Company, the area natural gas provider, to extend their services along the area roadways. These services would be located underground within the PUEs.

Telecommunications facilities would be provided by various providers. Conduits would occur underground within the PUEs or within trenching within the roadway consistent with the City's Improvement Standards. On occasion, above

ground utility cabinets would be constructed by the provider(s). These cabinets would be similar to other telecommunications infrastructure found in Elk Grove.

#### Solid Waste Services

The Project site would include trash, recycling, and compost for solid waste (Figure 2-10). Two compostable animal waste and five non-compostable animal waste low boys or hoppers would be located on the site. Trash, recycling, and compost bins would be located throughout the New Zoo. Two collector areas at the northeast and northwest portions of the site would include a 20 yard dumpster for animal waste compost and three hoppers for trash, recycling, and compost. Animal waste would be picked up every one to two days.

# 2.4.6 Parking Facilities

Several parking facilities would be constructed to support the New Zoo. The primary parking facilities are two guest parking lots: the North Lot, which adjoins the guest entrance to the facility, and the South Lot, which would be across Classical Way to the south of the New Zoo (Figure 2-3). The North Lot would be paved with asphalt, while the South Lot would be a gravel lot. Between 1,600 and 1,700 parking stalls would be constructed in the two lots (Figure 2-12). The parking lots would be landscaped around the perimeter and the north parking lot would feature parking lot shading through a combination of landscaping and possible solar facilities. The Project would include 120 bicycle parking spaces.

Employee parking would occur in two ways: on-site and off-site of the New Zoo. Some employee parking would occur within the secured perimeter of the New Zoo, including adjoining the administration building, at the animal care center, and at the warehouse/storage support facilities.

A stand-alone employee lot would be constructed off-site, across Lotz Parkway at the intersection of Lotz Parkway and Overture Way (Figure 2-2). This site, which is approximately 2.22 acres, is currently owned by the Cosumnes Community Services District (CCSD). In 2008, this site was identified as a potential location for a new fire station; however, at this time the CCSD has identified an alternative location near Promenade Parkway and Kammerer Road that would provide superior emergency response time within the station's traditional service area and, as such, CCSD is open to selling the site. This parking lot would be constructed with fencing and landscaping around the perimeter and include parking lot shading from landscaping and/or solar facilities. An existing masonry is provided along the southern edge of the lot. Fencing would likely be constructed along the north, east, and west frontages. Driveway access would occur along Overture Way. This lot would be constructed after Phase 1B and as demand warrants.

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17010101.16 GRX 002

Source: SH|R Studios and Noll & Tam.

#### Figure 2-5 New Zoo Main Entrance Rendering



17010101.16 GRX 003

Source: SH|R Studios and Noll and Tam.

Figure 2-6 New Zoo Lodge Rendering





Source: SH|R Studios and Mangolin Creative.

Figure 2-7 Nighttime Experience Route



Source: SH|R Studios and Mangolin Creative.

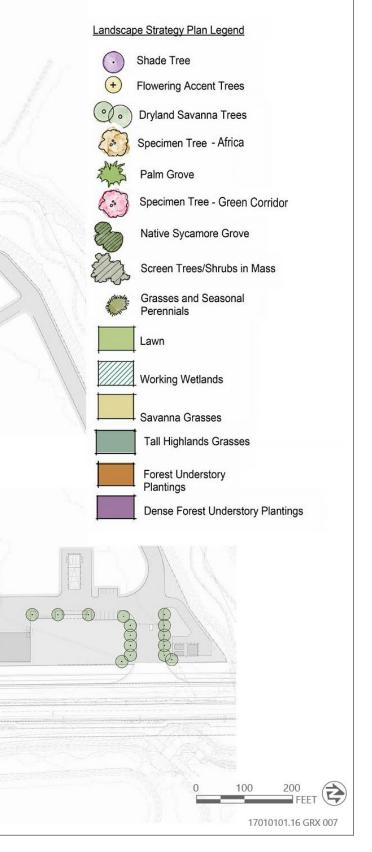
Figure 2-8 Proposed Tent Camp Rendering

City of Elk Grove The New Zoo at Elk Grove Project Draft ElR

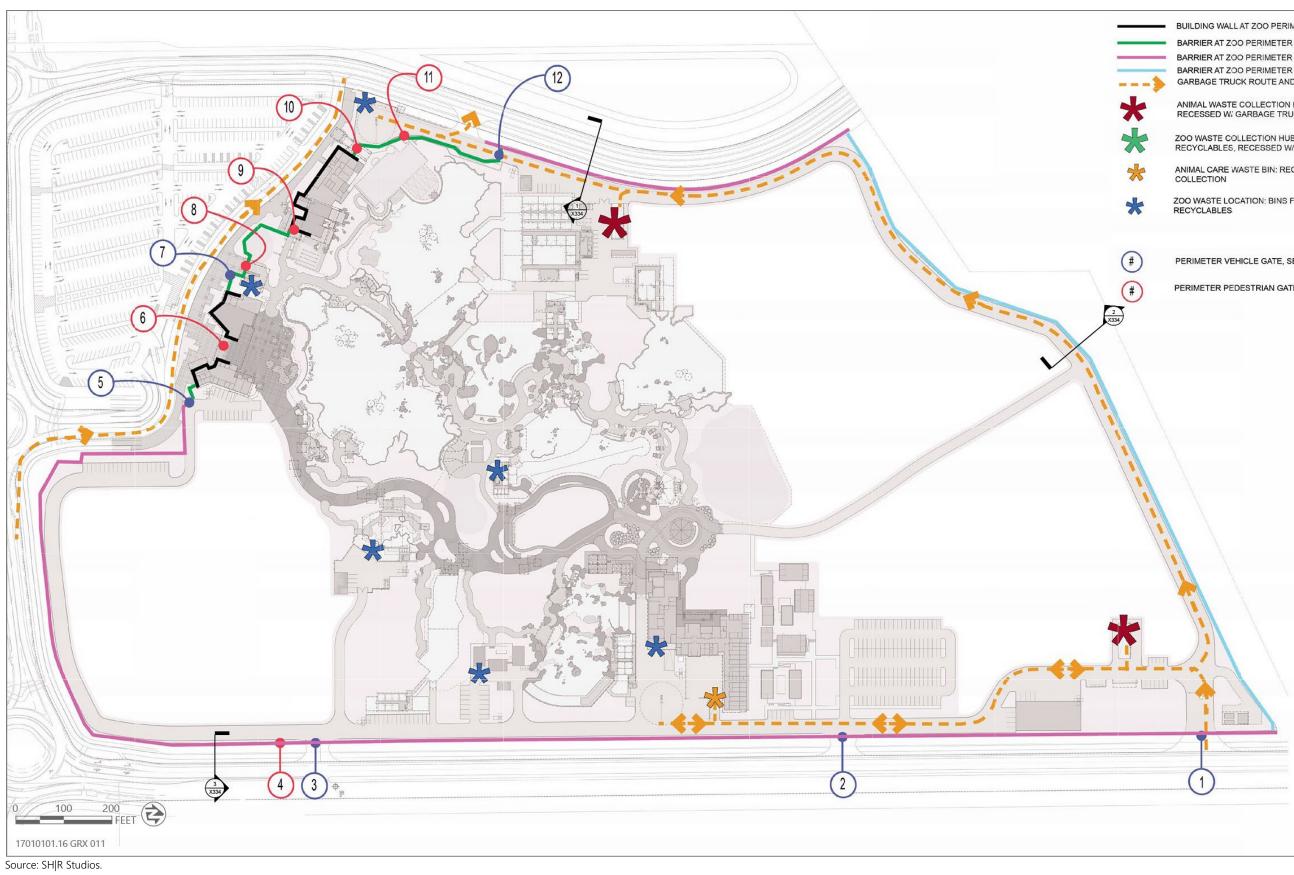


Source: SH|R Studios.

#### Figure 2-9 Phase 1 Landscaping







#### Figure 2-10 New Zoo Perimeter Gates

BUILDING WALL AT ZOO PERIMETER

BARRIER AT ZOO PERIMETER - ARCHITECTURAL WALL (HT. VARIES) BARRIER AT ZOO PERIMETER - 8' PRECAST CONCRETE PANEL WALL SECTIONS BARRIER AT ZOO PERIMETER - CHAINLINK FENCING WITH SLATS GARBAGE TRUCK ROUTE AND DIRECTION

ANIMAL WASTE COLLECTION HUB: (2) 20 YARD DUMPSTERS, RECESSED W/ GARBAGE TRUCK RAMP

ZOO WASTE COLLECTION HUB: BINS FOR SEFARATING TRASH, COMPOST, RECYCLABLES, RECESSED W/ GARBAGE TRUCK RAMP

ANIMAL CARE WASTE BIN: RECESSED WITH RAMP FOR SMALL TRUCK COLLECTION

ZOO WASTE LOCATION: BINS FOR SEPARATING TRASH, COMPOST, RECYCLABLES

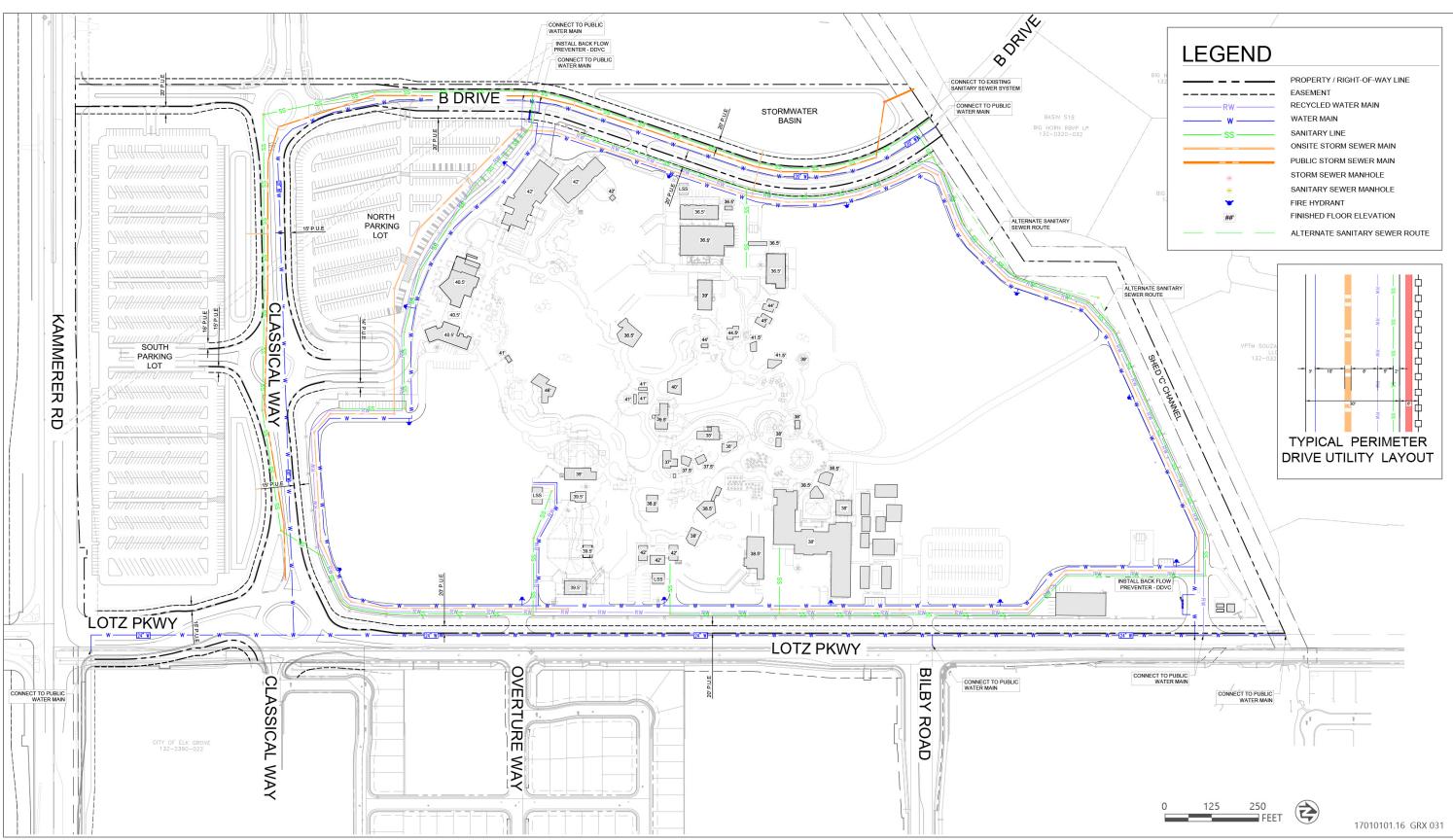
PERIMETER VEHICLE GATE, SEE SCHEDULE

PERIMETER PEDESTRIAN GATE, SEE SCHEDULE



Source: shr Studios.

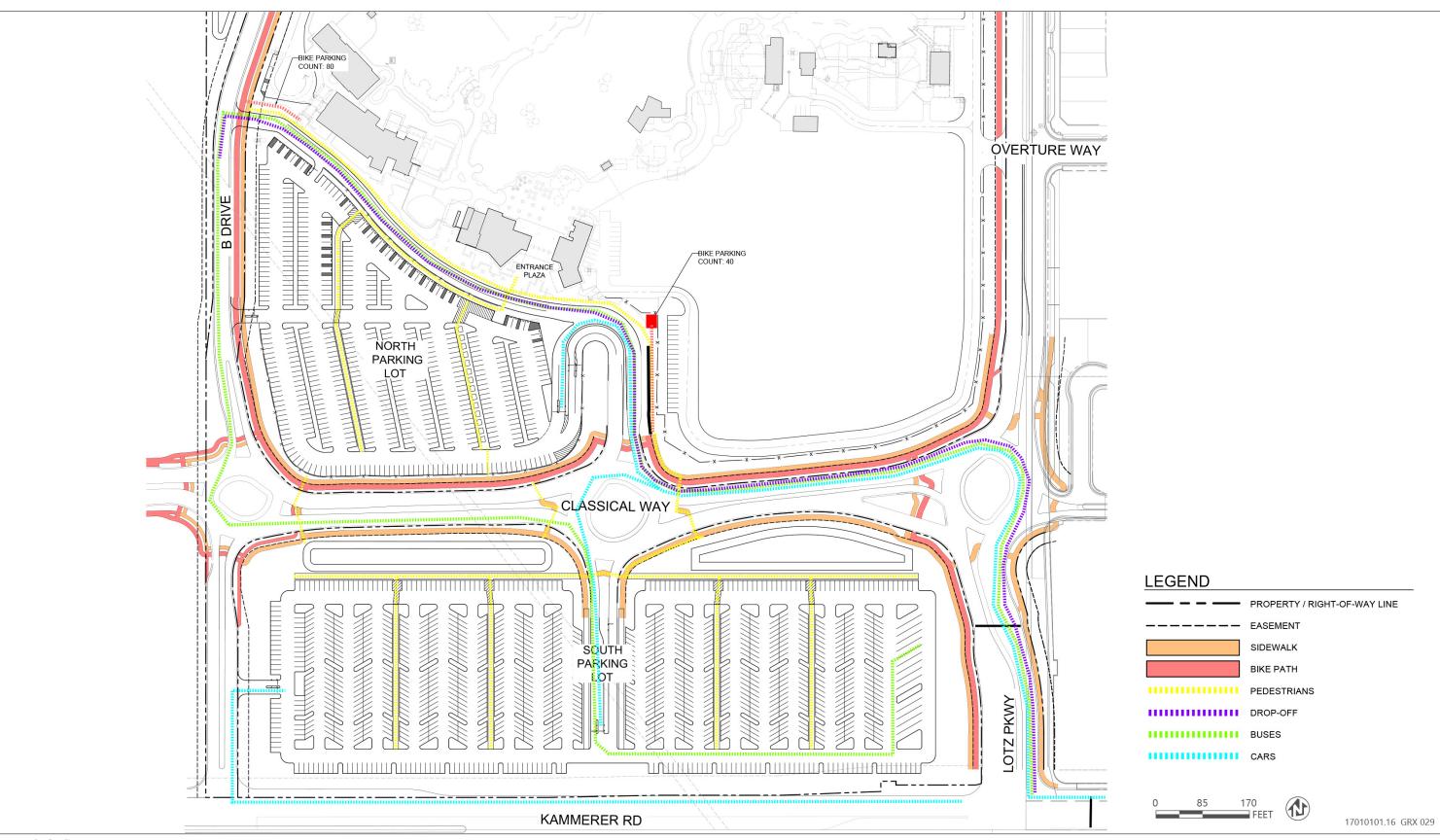
#### Figure 2-11 Drainage Management Areas



Source: Kimley Horn and shr Studios.

#### Figure 2-12 New Zoo Utility Plan





Source: shr Studios.

#### **Proposed Site Circulation** Figure 2-13



To support development of the New Zoo several off-site public infrastructure facilities would be constructed. Specific infrastructure improvements are described below.

## ROADWAY IMPROVEMENTS

Access to the Project site would occur from Kammerer Road, Lotz Parkway, Classical Drive, and from a new street, referred to as B Drive. Directional signage would be included along major approaches to the Project site. Improvements to these roadways are described below.

Kammerer Road extends from State Highway 99 (SR 99) west past the Project site. The portion from SR 99 to Lent Ranch Parkway is constructed as a six- to eight-lane facility. West of Lent Ranch Parkway, the center median and inside lanes (one each east- and westbound) have been constructed. As determined from roadway segment capacity analysis prepared for the Project, the Project would contribute to additional deficiency at the intersection of Kammerer Road and Promenade Parkway during the Cumulative (2050) scenario, which includes full Project buildout. The Project is not deemed to create this deficiency (attributed to robust development south of Kammerer Road anticipated in the future TDM), no improvement or modification is required at this time (Kimley Horn 2023).

Lotz Parkway is a planned arterial roadway that parallels SR 99 from the Elk Grove Automall south to Kammerer Road. As of the date of the EIR, portions of this road have been constructed as part of various private and public development projects, including the Madera East Subdivision, the Souza Dairy Subdivision, and the Sterling Meadows subdivision. Along the Project's eastern limits, Lotz Parkway exists as an undivided two-lane roadway. The two-lane roadway configuration reflects partial improvement, as the planned roadway condition included in the City's General Plan, is for a four-lane facility. Expansion to four-lanes will occur in stages. The first stage is the construction of the median and the inside southbound lane from the Shed C Channel to Kammerer Road. This improvement is the responsibility of the Souza Dairy project pursuant to a Development Agreement between the developer and the City of Elk Grove, dated August 2021. As of the date of preparation of this EIR, the construction plans for this phase of work have been reviewed and approved by the City and construction has commenced. It is anticipated that construction will be completed before the end of 2024.

The second phase of work would involve the construction of the outside southbound lane along the Project frontage, which would be completed by the Project (See Figure 2-3). The Project would also construct a landscape corridor and off-street bicycle and pedestrian facilities west of the roadway curb along the Project frontage. Additionally, the Project would include intersection improvements along the length of Lotz Parkway, as follows:

- ► Conversion of the intersection of Lotz Parkway and Classical Drive to a roundabout (see Figure 2-3);
- Construction of the signal and intersection at Lotz Parkway and Overture Drive to add the service driveway into the Project site;
- Modification of the signal and intersection at Lotz Parkway and Bilby Road to add the service driveway into the Project; and
- Modification of Lotz Parkway to add an unprotected left turn movement into the Project site just south of the Shed C crossing.

Classical Way is an east-west road within the Sterling Meadows subdivision to the east of the Project site. As part of the Project, Classical Way would be extended west as a four-lane facility to B Drive (Figure 2-13). This road would be constructed in phases, with Phase 1 as a two-lane facility and future widening to four lanes. Future development, as described in the City's Livable Employment Area Community Plan, would extend this roadway further to the west. Along Classical Way, three roundabout intersections would be constructed (see Figure 2-13). The first would be at Lotz Parkway as previously described. The next two would be at the public entry into the Project site and at the intersection with B Drive. As part of the initial development of the Project these roundabouts would be sized based

B Drive is a future 2-lane roadway that extends south from the Souza Dairy project across Shed C towards Kammerer Road. Construction of the culvert across B Drive is under the responsibility of the Souza Dairy project pursuant to their Development Agreement, described earlier. The Project would extend these improvements from the Shed C channel south along the western frontage of the Project site. Improvements would include, but are not limited to, one travel lane in each direction, pedestrian and bicycle facilities paralleling the roadway, and landscaping along the Project frontage. Partial intersection improvements at the intersection of B Drive and Kammerer Road are also included in the Project, allowing for right turn access from and onto Kammerer Road. No left turn access would be provided.

## PEDESTRIAN AND BICYCLE FACILITIES

Various pedestrian and bicycle facilities would be constructed as part of the Project. A new Class I bicycle and pedestrian trail would be located along the west side of Lotz Parkway from Shed C channel to Classical Way, then follow Classical Way to the entrance of the New Zoo (Figure 2-13). A new Class IV bicycle facility and a separate pedestrian sidewalk would be located along the east side of B Drive from the Shed C Channel to the New Zoo entrance. The Project would include up to 120 bicycle stalls. Bicycle showers would be provided for staff use following bicycling to work.

One or more of the pedestrian crossings at the intersection of Classical Way and the guest parking lot entrances may be grade separated. This improvement would require increasing the height of the finish grade of the roundabout approximately 14 feet to provide enough vertical clearance for pedestrian and bicycle users.

# 2.4.8 Sustainability Improvements

The Project would include several sustainability features. The New Zoo would be designed to be certified at minimum Leadership in Energy and Environmental Design (LEED) Silver. Solar panels would be included on several roofs of proposed buildings on the Project site. A minimum 20-kilowatt (kW) solar array would be installed on the proposed retail building and a minimum 14-kw array would be installed on the proposed office building. The Giraffe Lodge building would not have solar panels but would be photovoltaic (PV) ready. The Project would include 327 electric vehicle (EV) parking sparces consisting of 313 EV capable spaces, 80 EV charging stations, 7 EV standard accessible spaces, 2 EV van accessible spaces, and 5 EV ambulatory spaces. The Project would be all electric with no natural gas. Heating, ventilation, and air conditioning systems would use a packaged air cooled heat pump system and backup generators would be battery powered.

# 2.4.9 Project Operations and Special Events

The New Zoo would be open seven days a week from approximately 9 a.m. to 5 p.m., except Thanksgiving and Christmas, supporting an average annual attendance of between 1.1 million and 1.6 million visitors per year. Extended hours of operation would be provided for special events (as described below), or, based upon seasonal conditions, additional regular hours may occur (e.g., as late as 9 p.m.). Dining at the Giraffe Lodge may be open as late as 11:00 p.m. The New Zoo would employ approximately 150 to 300 people. Employment would vary seasonally with additional staff during the summer months to support summer camp, educational, and special event activities.

Deliveries to the project site would include food delivery to support restaurants at the New Zoo, as well as feed the animals. Food deliveries to support the restaurants and fresh food for the animals would occur twice a week. Hay and dry animal feed would be delivered up to four times a month. Waste removal would occur several times a week and would be picked up from the waste bins throughout the site.

Special events at the New Zoo are anticipated to include corporate events, birthdays, weddings, and other private parties. The New Zoo would host seasonal events such as happy hours, galas, membership evenings, daytime and nighttime safaris, and other nighttime programs and events. Evening events are expected to run from 6:00 p.m. to

11:00 p.m., though some activities, such as at the event space at the Giraffe Café, may begin earlier in the day. Overnight camping, as well as the "tent camp" and other lodging, would allow guests to spend the night at the New Zoo. These overnight stays would include various nighttime and early morning programming. The proposed educational buildings on the site would support field trips, summer camps, girl/boy scout badge days, and other similar events. Various events and programs will include the use of amplified sound, including music and representative animal sounds, as well as lighting and video displays.

# 2.4.10 Animal Browse Program

To address the nutritional needs of the herbivore and omnivore species housed at the New Zoo, the Project would include the development of a new Animal Browse Program. Under this program, plant clippings would be gathered from various sites around the City, processed at the New Zoo, and then fed to the animals. A shed would be located in the northeast corner of the Project site to process vegetation from the Animal Browse Program. Three types of facilities are planned for the Animal Browse Program:

- Existing Parks, Open Space, and Other Landscaping. The Zoological Society would work with the City and Consumes Community Services District (CCSD) to procure plant clippings from vegetation at exiting parks, open space areas, and other landscaped sites around the community. New tree plantings could occur at some facilities, at the discretion of the property owner.
- 2. New Browse Property Development. The CCSD would develop two sites to support the Browse Program:
  - a. Arcadian Village Park Site (located at APN 115-0150-074 and an historic address of 8341 Sheldon Road). This site, which measures approximately 8.55 gross acres, would include approximately 2-3 acres of local park features, including a play structure, picnic area, and other traditional neighborhood park amenities to support the active park needs of the community. The balance of the property would be developed with a Browse Grove, featuring a collection of tree and shrub species that would be selectively pruned or harvested to feed the animals. The Browse Grove would include trails and pathways for walking through the Grove, along with interpretative signage informing the public of the connection between the Grove and the New Zoo.
  - b. Elk Ridge Way Property (located between Elk Ridge Way and Lodestone Circle, just east of the Oaks Mobile Home Community, APNs 125-0060-004, -008, & -013). This 4.4-acre property would be enhanced with additional plantings that could be selectively pruned or harvested to feed the animals. The existing oak grove would be retained.
- 3. Community Browse Partnership. The Zoological Society would work with the community to expand their current browse donation program into Elk Grove. While all residents/neighborhoods could participate in the program, the Zoological Society would specifically work with the Rural Area of the City on opportunities to expand plant coverage in that area and take advantage of the rural densities and available open space to develop browse material.

# 2.5 PROJECT CONSTRUCTION

Construction of all Project phases is likely to be completed over 20 years. Timing of Project buildout would ultimately be based on economic conditions as funding becomes available. Roadway and infrastructure components may begin construction in late 2025. Phase 1 would include construction of the Green Corridor and Africa zones and is anticipated to begin in 2026 and last 36 months within anticipated opening in 2029. Opening of Phase 1 may also be phased with partial opening as early as 2027 while construction continues. Specific animal habitats within the Green Corridor and Africa zones may be further phased as funding allows. The California, administrative offices, and Australasia zones would be developed as part of future phases as funding becomes available.

Construction would generally occur 5 to 6 days per week (Monday through Saturday), up to 12 hours per day, during the daytime construction hour limits of 7:00 a.m. to 7:00 p.m. established under Section 6.32.100.E and 6.32.140.A of the Elk Grove Municipal Code. Cut and fill would be balanced on the Project site with approximately 98,000 cubic yards of cut. If additional fill material is needed it would be provided from the Sterling Meadows site adjacent to the Project site.

# 2.5.1 Other Local and Regional Agency Approvals

The following other local and regional permits and approvals would be required for the Project:

- ► City's approval of Zoning Amendment to include the New Zoo Special Planning Area;
- City's approval of the site development permits for the Project, including Conditional Use Permits, a District Development Plan (e.g., site plan), and Design Review (e.g., building architecture);
- City's approval of a License and Management and Operations Agreement between the City and the Sacramento Zoological Society;
- ► Sacramento County Water Agency approval of water supply distribution facility connections;
- ► Sacramento Area Sewer District approval of wastewater conveyance facility connections;
- ► Sacramento Municipal Utility District (SMUD) approval of electrical conveyance facility connections;
- ► Central Valley Regional Water Quality Control Board: Waste Discharge Requirements; and
- Sacramento Metropolitan Air Quality Management District: Clean Air Act compliance, approval of an Authority to Construct and Permit to Operate.

The following permits and approvals would also likely be required to construct the proposed Project:

#### State

California Fish and Wildlife approval of Section 1602 Permit;

Other state approvals may be necessary relative to University of California Davis support for animal care facilities and operations.

#### Federal

- ▶ US Army Corps of Engineers Section 401 and 404 permits; and
- ► Licensing by the US Department of Agriculture

In addition to the above approvals /subsequent actions, the City anticipates that as part of the License and Management and Operations Agreement the Sacramento Zoological Society will be required to make best efforts to secure and maintain accreditation of the facility with the Association of Zoos and Aquariums, or a similar organization deemed satisfactory to the City.