3 PROJECT DESCRIPTION

3.1 INTRODUCTION AND PROPOSED PROJECT

The Dry Creek Greenway East Trail (a multi-use trail along Dry, Cirby, and Linda Creeks from Riverside Avenue to Old Auburn Road) (proposed project) is a proposed 4.25-mile, paved, multi-use trail in the City of Roseville (City) (see Exhibit 3-1, Project Vicinity). The proposed project would be a multi-use trail for pedestrians, bicyclists, and other non-motorized vehicle users that would connect neighborhoods, parks, schools, businesses, natural areas, and the on-street bikeway system across the south side of the City.

3.1.1 Project Location and Setting

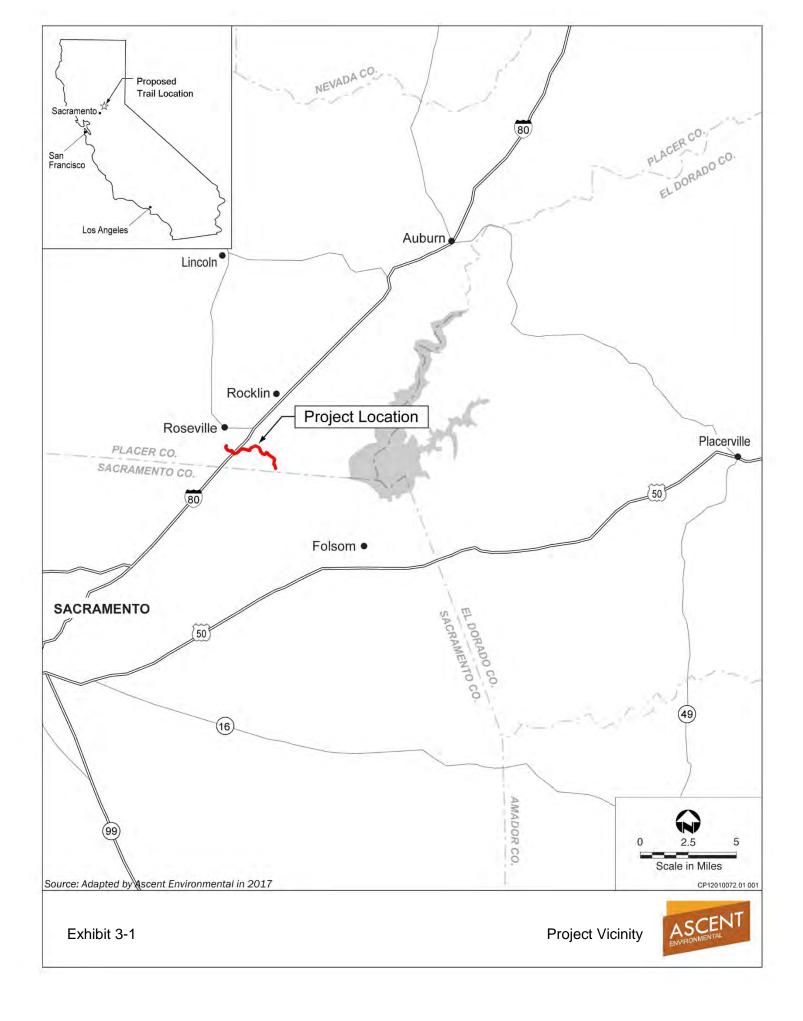
The proposed 4.25-mile, multi-use trail would extend from the existing Saugstad/Royer Park trail near the intersection of Riverside Avenue and Darling Way eastward to the City limits, just past the Old Auburn Road/South Cirby Way intersection (see Exhibit 3-2, Project Location). The trail would follow creek corridors along portions of Dry, Cirby, and Linda Creeks. These corridors currently contain segments of existing unimproved, natural-surface paths and paved multi-use paths, some of which do not meet current City design standards. Much of the corridor has been used historically for recreation, infrastructure maintenance access, and transportation. It continues to be used for these purposes along both improved and unimproved segments.

EXISTING CONDITIONS

Land Use and Zoning

The proposed trail project would be located primarily within City-owned property zoned as Open Space with Floodway or Floodway Fringe Overlays. Small segments of the trail would also be located on property zoned for residential, commercial, and parks and recreation use with the Floodway or Floodway Fringe Overlays. While most of the project corridor is on public property, use of some privately-owned parcels is necessary. Trail development is a permitted use in all of these zone districts.

The proposed project would be aligned within the creek corridors of developed neighborhoods and business districts in the City of Roseville. With the exception of a few scattered parcels, the properties surrounding the creek corridors are fully developed. The properties adjacent to the proposed trail corridor include a mix of residential, commercial, parks, open space and public/quasi-public uses. Flood control improvements, including floodwalls, berms, bypass channel, bypass culverts, and a detention basin are located along the length of the proposed project from Interstate 80 (I-80), easterly to Old Auburn Road. A flood control bypass channel and detention basin are located along the south side of Linda Creek east of Rocky Ridge Drive and north of Cirby Way. Commercially zoned properties are concentrated along Sunrise Avenue to the north and south of the project site along Linda Creek. Commercial areas are also found near the western part of the proposed trail along Riverside Avenue between Darling and Cirby Ways.



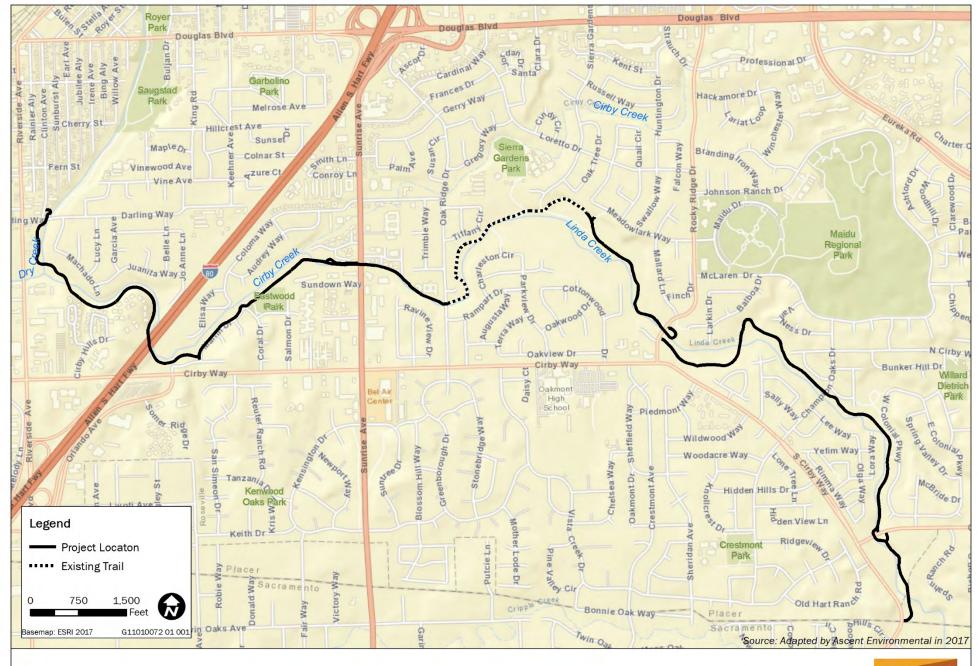


Exhibit 3-2

Project Location



Habitat

Within the trail corridor, fish and wildlife habitat quality ranges from disturbed, low-quality land to high-quality undisturbed habitat. Although the habitat value of the urban creek corridor may be diminished because of adjacent and surrounding development, the creek corridor still provides year-round and seasonal migratory habitat for a variety of fish and wildlife species. Annual grassland occurs in open, cleared, or disturbed areas along the proposed trail and forms the understory of mixed riparian and valley oak woodland communities. The vegetation along the stream banks, bottoms, and adjacent floodplains varies throughout the trail corridor and depends on local hydrologic and soil conditions. Central Valley fall-run Chinook salmon have been previously documented in all three creeks; regionally, the creeks provide migration and spawning habitat for adult and rearing habitat for juvenile Chinook salmon. In addition to its natural qualities, the habitat offers passive recreation and interpretive opportunities.

Parks

The proposed trail would be located in close proximity to several parks, including Maidu Regional Park, Saugstad Park, Eastwood Park, and Willard Dietrich Park as shown on Exhibit 3-2. An existing multiuse path along the east side of Rocky Ridge Drive as well as on-street bike lanes on Rocky Ridge Drive currently provide connections from the proposed trail to Maidu Regional Park. Much of the corridor passes through pastoral settings of oak woodland, grassland, and riparian settings, offering opportunities for a variety of recreational pursuits.

Neighborhoods

The City of Roseville is organized into neighborhoods that are served by associations. The purpose of the neighborhood associations is to improve the social, physical, and economic health in the Roseville community by sharing information, facilitating training and education, providing resources, and encouraging communication and participation among neighbors, neighborhoods, government, businesses and other participants. There are currently 39 neighborhood association areas. The proposed Dry Creek Greenway East Trail would be aligned through, or adjacent to the Cherry Glen, Cirby Side, Cresthaven, Hillcrest, Maidu, Meadow Oaks, Sierra Gardens, and South Cirby neighborhoods.

Bikeway and Transit Connections

Enhancing connectivity is an integral part of planning a successful multi-use trail system. Connections to other multi-use trails, on-street bikeways, neighborhoods, business districts and transit increase trail access and promote trail use. The proposed project has a number of opportunities for connections to the community and existing and proposed transportation facilities. Table 3-1 is a list of potential trail connections.

Table 3-1	Potential Bicvcle T	rail Path	and Route	System (Connections
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Point of Connection	Facility Type	Sheet number*	Purpose
Darling Way	Class III (e)	1	Connection to Riverside Avenue business district, Roseville Transit routes A & B, Cirby Elementary School, and Hillcrest, Cherry Glen and Los Cerritos neighborhoods
Saugstad/Royer/ Miners Ravine Trails	Class I (e)	1	Connection to Miners Ravine Trail and Downtown Roseville, including Downtown transit stations, offering transportation and looped recreation opportunities
Riverside Avenue	Class I (p) & Class II (p)	1	Future trail connection to Atkinson Street, Morgan Creek, Dry Creek Parkway Ueda Parkway and Sacramento Northern Trails (part of regional looped trail system) Roseville Transit routes A & B

Table 3-1 Potential Bicycle Trail, Path, and Route System Connections

Point of Connection	Facility Type	Sheet number*	Purpose
Hernandez/Machado Way	Class I (e)	1	Neighborhood connection to Hillcrest area
Cirby Hills Townhomes	Class I (p)	1	Neighborhood connection to residential community
Windscape Apartments	Class I (p)	1	Neighborhood connection to residential community
Marlin Drive	Class I/II (e)	2	Connection to Eastwood Park, Cirby Side neighborhood and Class II bike lane on Orlando Avenue, which connects to the Louis/Orlando transit station
Tina Way	Footbridge (e)	2	Connection to residential areas along Coloma Way
Sunrise Avenue	Class I (p)	3	Potential connection to Sunrise Avenue business district and Roseville Transit routes A, B, C, & F
Meadow Gate Drive	Class I/III (p)	3	Potential connection to residential neighborhood
Oakridge	Class III (e)	4	Connection to Meadow Oaks, Sierra Gardens and Cirby Ranch areas
Woodlake Lane	Class I (e)	4	Connections to Eich Middle School and Meadow Oaks area
Eich/Sierra Gardens Drive	Class I (e)	5	Connection to middle school and Sierra Gardens neighborhood
Meadowlark Lane	Class I (e)	5	Connection to Maidu Park and Sierra Gardens neighborhood
Rocky Ridge Drive	Class I/II	6	On-street and off-street connection to Maidu Park, including park-n-ride lot, Roseville Transit Routes C & F, and Maidu/South Cirby neighborhoods
Champion Oaks/N. Cirby	Class III (e)	7	On-street connection to Maidu Park and Maidu/South Cirby areas
W. Colonial Parkway	Class III (p)	7 & 8	On-street connection to Maidu/South Cirby areas
Old Auburn Way	Class I/II (p)	8	Class III connection to Citrus Heights & future Class I regional connection to American River Parkway at Beals Point (part of regional looped trail system)

Note: * See Exhibit 3-4 for an overview of the map sheet locations.

(p) = proposed; (e) = existing

Class I = Off-Street Bike Paths, located in a separate right of way, for the exclusive use of bicycles and pedestrians, with minimal cross flow by motor vehicles.

Class II = On-Street Bike Lanes, areas within paved streets that are identified by striping and signs for preferential (semi-exclusive) bicycle

Class III = On-Street Bike Route, on-street routes where bikes share the road with cars.

Source: City of Roseville's 2008 Bicycle Master Plan - compiled by Psomas Engineering 2013.

Access to the trail for all users would be a key element of its community value. Accessibility guidelines for trails (as defined in the Design Standards and the Americans with Disabilities Act [ADA] standards of the Advanced Notice of Proposed Rulemaking for Shared Use Paths) would be met, where feasible. Neighborhood access would be achieved from local streets crossing the trail. Each street crossing would be identified and directional signs would be placed at street intersections identifying destinations and distances along the trail and within the surrounding community.

Trailheads (i.e., parking areas with a formal trail entrance) would serve all trail users. They would provide information about the trail (e.g., maps) and may have trail user facilities like trash receptacles, information kiosks, and benches. The proposed project would include one new trailhead with accompanying parking lot at the western end of the project with driveway access from Riverside Avenue. The parking lot would include approximately 35 parking spaces.

3.1.2 Project Background

The City's 2008 Bicycle Master Plan (BMP) includes a plan for development of over 28 miles of Class I trails in Roseville, including the Dry Creek Greenway East Trail. The proposed project is identified as a priority project in the BMP, because of its potential to provide a safe, comfortable, and convenient bicycle route in an area of the City with limited existing options for bicyclists.

The City prepared the Dry Creek Greenway Planning and Feasibility Study in 2009. The study outlined the existing conditions, opportunities and constraints, alignment options, evaluation criteria, and a recommended alignment for a paved path from Riverside Avenue and Darling Way to the City limits just south of Old Auburn Road. The study also included design treatment options, cost estimates, and a phasing plan. The City Council accepted the study in 2010. The study was updated in 2013 to provide further information regarding alternative trail alignments.

During preparation of the original and updated feasibility study, the City used a community-based planning approach with an emphasis on public outreach. The public outreach efforts included establishment of a Stakeholder Representative Group (SRG) that represented a broad array of community interests. The SRG met 10 times between 2008 and 2013. The public outreach efforts also included three community meetings, an online survey and numerous neighborhood meetings. The community input received during this process informed the proposed project's design and alignment, and the community input was also considered during the formulation of the optional alignments and project alternatives presented in this EIR.

The City also identified a need for a fluvial audit to assess the potential risk to the trail because of the future trajectory of the creek and existing bank erosion. The analysis employed a processed-based geomorphic assessment which coupled desk-based analysis of historical aerials, LiDAR data, and specific stream power with a field-based fluvial audit. The fluvial audit characterized various indicators of geomorphic process (e.g., channel reach type, bank erosion, depositional sedimentary bars) as well as factors influencing channel and floodplain morphology (e.g., bank protection, sediment input, large woody debris, etc). The analysis concluded there are some areas where there could be future risks of erosion to the trail. As a result, some bank stabilization elements were added in certain areas of the proposed project (described under Exhibit 3-5, Sheet 1 Segment, Exhibit 3-10, Sheet 6 Segment, and Exhibit 3-12, Sheet 8 Segment).

3.1.3 Purpose and Need

The proposed project is identified in the City of Roseville General Plan and the BMP as an alternative for pedestrian and bicyclists to using busy City streets, as well as an important recreational amenity for residents. It also would ultimately provide an important regional connection for the greater South Placer/Sacramento area as the broader network of trails is built. Because there are currently limited options in the project vicinity for safe, comfortable, and convenient bicycle travel, the City has identified the need for development of additional separated bicycle paths. The BMP identifies Class I off-street bike paths as preferred by Roseville residents because of their alignments through areas with scenic beauty and their limited motorist interaction and crossing vehicle traffic flows. They are most often used for recreational purposes, but they are also important for commuters where they allow bicyclists to avoid high traffic volume areas, such as highway interchanges or major arterial streets.

The proposed trail would also serve as a paved, all-weather access for City maintenance crews. This would provide access to the City's sewer, water, and drainage outfalls that follow the creeks. In addition, the trail and its access points would provide creek maintenance crews with access to remove blockages within the stream channel and maintain conveyance of stormwater. The trail would also provide access for emergency service responders.

During development of the 2009 Dry Creek Greenway Planning and Feasibility Study, the following Purpose and Need Statement was drafted by the SRG and accepted by the City Council:

"The Dry Creek Greenway East trail is envisioned as a paved, off-street trail along Dry, Cirby, and Linda Creeks that will provide residents a place for bicycling, walking, running, and dogwalking, for fun, education, recreation, health, and transportation.

The Dry Creek Greenway trail is a vital component of the City of Roseville Bikeway and Trail system because it will provide a safe, comfortable, convenient, and highly connected bike route as an alternative to using City streets in an area of the City that is underserved by bicycle facilities. The Dry Creek Greenway trail will connect schools and businesses to residential neighborhoods. The trail will also provide important regional connections as it is part of a series of existing and planned paths that will form a loop around the greater South Placer/Sacramento area."

3.1.4 Project Objectives

The proposed project objectives for the Dry Creek Greenway East Trail are developed in consideration of the California Environmental Quality Act (CEQA), the City of Roseville General Plan, 2008 Bicycle Master Plan, and the 2009 Dry Creek Greenway Planning and Feasibility Study. The project objectives are as follows:

- Develop a safe and continuous trail alignment that maximizes opportunities for bicycle and pedestrian travel separate from roadway vehicle traffic by connecting neighborhoods, shopping and employment, schools, parks, transit, and other existing and planned trails, bikeways and walkways.
- ▲ Enhance access to the Dry Creek, Cirby Creek, and Linda Creek open space areas for public recreational and educational opportunities, utility maintenance, open space maintenance, and emergency response.
- Protect the natural habitat and special-status wildlife species of the Dry Creek, Cirby Creek, and Linda Creek open space areas, minimize the potential for loss of life and property because of flooding, enhance compatibility with private properties, and reduce the need for right-of-way acquisition.
- ✓ Seek the most effective and efficient balance of capital cost, operational and maintenance costs, environmental and community impacts, and public benefits.

Direct consideration of cost is not required under CEQA. However, efforts to attain this objective are part of the design process employed by the City in meeting its health, welfare and economic obligations to the citizens of Roseville.

3.1.5 Project Design Elements

The proposed multi-use trail would conform to all federal and State standards for design. These would include the American Association of State Highway and Transportation Organizations Bikeway Guide, Caltrans Highway Design Manual, Manual on Uniform Traffic Control Devices, and the Notice of Proposed Rulemaking for Design of Shared Use Paths.

TRAIL CROSS SECTION

The proposed paved, multi-use trail would conform to the City of Roseville Design Standards (Section 13 Bikeways) and other provisions of the City of Roseville Construction Standards. A typical cross-section for the proposed trail would consist of a 10-foot-wide Roller Compacted Concrete or asphalt

paved trail with two-foot shoulders on each side (one consisting of decomposed granite and one of aggregate base), for a total width of 14 feet (see Exhibit 3-3, Typical Trail Cross Section). The shoulder base would be between 4 and 8 inches. The trail may also include drainage swales on one or both shoulders, as needed. The proposed trail may be narrowed to an eight-foot wide paved section with 1-or 2-foot wide shoulders for access spurs and in "pinch-point" locations that have severe physical or environmental constraints. The narrower cross section would still support safe, two-way travel, but would limit physical disturbance where design constraints prevent implementation of the standard cross-section. The proposed trail may also be widened in areas where additional shoulder or trail width is desired to enhance user comfort and safety. In these instances, the shoulder width may be increased to between 5 and 10 feet on one side of the trail.

The profile of the trail would be set to minimize impacts to the floodplain/floodway and minimize impacts to private property and the environment. The profile would closely follow the existing topography, where feasible, to reduce the trail footprint. The profile would conform to the City of Roseville Design Standards (Section 13 Bikeways). The maximum grades would be generally five percent; in some locations where physical constraints exist, on approaches to bridges and at undercrossing locations, the grades would be increased to eight percent. Per the Design/Construction standards, the desired vertical clearance at undercrossings would be 12 feet to allow for passage of fire vehicle access. In constrained areas or where fire vehicle access is not needed, the minimum vertical clearance at undercrossings would be 9 feet.

The proposed trail would, to the extent feasible, be designed to provide maintenance and emergency access for the City Environmental Utilities Department, open space and storm water maintenance crews, and the Roseville Fire Department. It would provide a safe route for walkers, joggers, cyclists, wheelchair users, and others traveling on non-motorized vehicles to access parks and other paths.

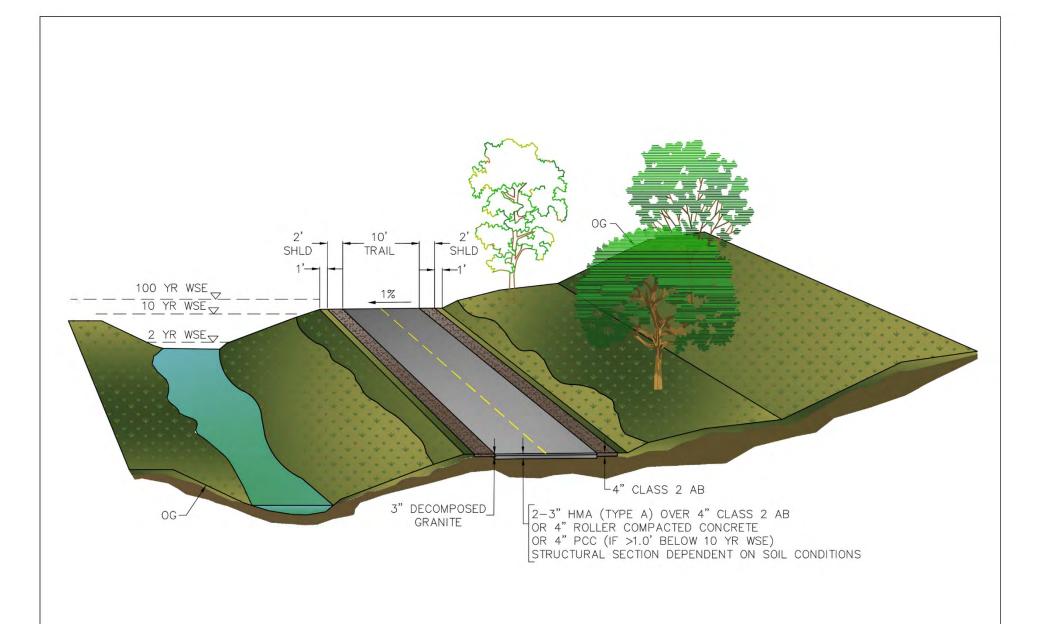
TRAIL ALIGNMENT

The proposed trail would follow the alignment described below and shown on the following exhibits. In certain locations, optional alignments are evaluated at an equal level of detail to that of the proposed project to provide an informed choice, recognizing potential impacts to the environment. These optional alignments are discussed below in subsection 3.2. The proposed alignment has been organized into 8 plan sheets numbered from west to east (see Exhibit 3-4). All existing and proposed bridges across creeks have also been numbered for ease of reference. The common design elements of the project are discussed below. Following these discussions, the trail alignment is described in greater detail by plan sheet number and name.

DESIGN TREATMENT

Several portions of the trail may be located more than 1 foot below the 10-year storm event water surface elevation, such as where the alignment passes beneath an existing bridge structure. In these places, the trail would conform to Section 13-5, Bike Paths in Floodplains, of the City's Design/Construction Standards to prevent the trail from being undermined during flood events and would include a Portland cement concrete surface. In addition, cut-off walls and retaining walls are proposed to protect the integrity of the trail.

As outlined in the City of Roseville Design Standards (City of Roseville 2013), a minimum of 2 feet of graded shoulders on each side of the trail is required. One shoulder would consist of Class 2 Aggregate Base material, and the other of decomposed granite. Where grades are four percent or greater, the decomposed granite may be stabilized with lime/fly ash or cement treatment; otherwise, Class 2 Aggregate Base material may be used for the shoulders.



Source: PSOMAS 2017 X11010072 01 002



Consistent with Section 13 of the City's Design Standards, bike paths constructed within cut-slopes would include a drainage ditch of suitable dimensions along the uphill side to intercept the hillside runoff. Bike paths constructed on top of fill slopes would include a drainage ditch of suitable dimensions along the downhill side to intercept runoff from the trail (City of Roseville 2013:5).

ROADWAY UNDERCROSSINGS

The proposed project would include undercrossings of the following roadways:

- Darling Way, east of Riverside Avenue,
- I-80, north of Cirby Way.
- Sunrise Avenue, south of Coloma Way
- Rocky Ridge Drive, north of Cirby Way
- Old Auburn Road, north of South Cirby Way

With one exception, all of the roadway undercrossings would be under bridge structures where the roads cross over creeks. The exception would be Rocky Ridge Drive, which currently uses a series of box culverts to allow passage of Linda Creek flows. The trail undercrossing at Rocky Ridge Drive would either use one of the existing box culverts, or construct a new box culvert north of the existing structures, with culvert improvements designed to accommodate both trail use and high stream flows, when needed.

BRIDGE CROSSINGS

Implementation of the proposed project would include the construction or modification of up to eight bridges to provide creek crossings throughout the alignment (see Table 3-2 for bridge numbering). With the exception of Bridge #13 and Bridge #20, all new bridges are proposed to be pre-fabricated steel truss bridges supported on abutments located outside the floodway. The pre-fabricated steel bridge structures are proposed to be a weathered steel finish to blend into the natural environment. The first segment would travel across the Darling Way Bridge, which may include widening the existing street bridge by 8 feet on the north side to accommodate a 10-foot-wide, multi-use trail and full vehicle lane across the bridge. Potential widening of the Darling Way Bridge may require the addition of a row of concrete piles within the creek channel. It is anticipated that piles would also be used as foundation support for the abutments for all the new bridges located within the floodplain. With the exception of the Darling Way Bridge, all of the proposed bridges would span the creeks and no piles would be constructed within the existing creek channel. Pile driving would not be required. Piles underpinning all bridge abutments and the added row of piles in the creek channel at the Darling Street Bridge would be cast in drilled-hole piles. See Table 3-2 below for information regarding the proposed bridge work.

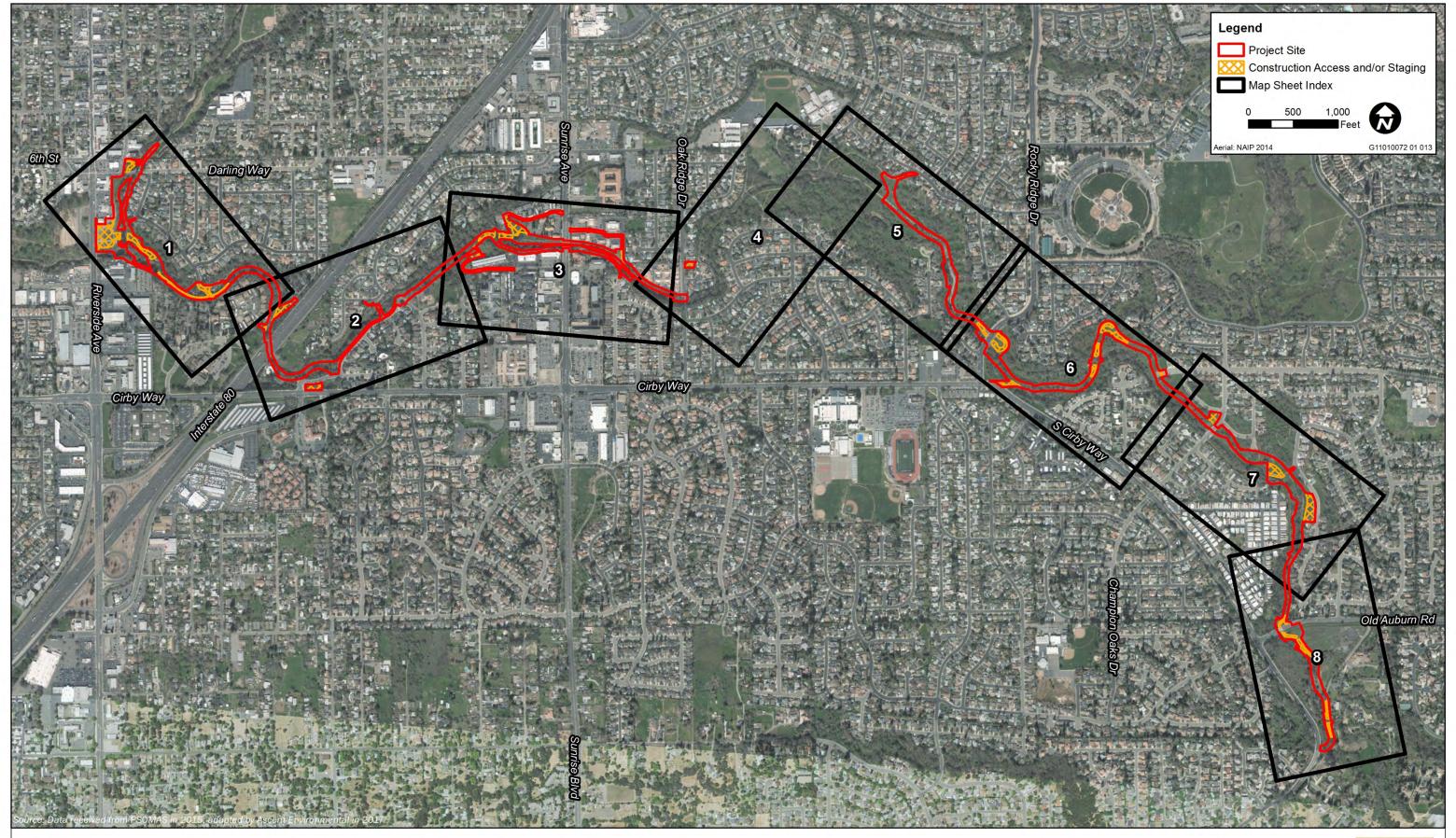


Table 3-2 Proposed Bridge Work

Table 3-2 Proposed Br	iage vvork				
Bridges ¹	Width ²	Overall Span Length	Truss Height/Railing Height	Deck Thickness	Туре
Existing and Proposed Bridge #1 – Darling Way (see Sheet 1 (Exhibits 3-5 and 3-13)) ³ (Proposed project and Alignment Option 1A)	Existing 35 feet Proposed 43 feet	128 feet (4x28- footspans)	Truss height – N/A Existing bridge railing 4'-2" above deck Proposed railing 5'-0" above deck 4'-6" above trail surface	1'-4"	Flat Slab Reinforced Concrete Bridge supported on drilled-hole piles
Proposed Bridge #2 – Dry Creek (North) (see Sheet 1 (Exhibits 3-5 and 3-14)) ³ (Proposed project and Alignment Option 1C)	16 feet	110 feet	Truss height - 8'-0" includes deck thickness Hand railing – 54" high	2'-0"	Prefabricated Steel Bridge supported on abutments on piles
Proposed Bridge #3 – Dry Creek (West) (see Exhibit 3-13) (Alignment Option 1A only)	16 feet	160 feet	Truss height - 14'-0" includes deck thickness Hand railing – 54" high	2'-0"	Prefabricated Steel Bridge supported on abutments on piles
Proposed Bridge #4 – Cirby Creek (see Sheet 1 (Exhibits 3-5 and 3- 14)) ³ (Proposed project and Alignment Option 1C)	16 feet	160 feet	Truss height - 14'-0" includes deck thickness Hand railing – 54" high	2'-0"	Prefabricated Steel Bridge supported on abutments on piles
Proposed Bridge Rehabilitation of existing bridge connection from Marlin Drive to Tina Way (see Sheet 2 (Exhibit 3-6)) ³		Four span bridge 129'-6" long (existing)	Railing - 4' existing chain link fence	TBD	Timber bridge on two concrete seat type abutments, two 11" diameter timber drilled-pile extensions at each bent.
Proposed Bridge #13 – Linda Creek (see Sheet 3 (Exhibit 3-7)) ³	16 feet	80 feet	Truss height – N/A 54" collapsible railing	2'-9"	Flat Slab Reinforced Concrete Bridge supported on abutments on piles
Proposed Bridge #14 – Linda Creek (see Exhibit 3-15) (Alignment Option 5A only)	16 feet	100 feet	Truss height - 8'-0" includes deck thickness Hand railing – 54" high	2'-0"	Prefabricated Steel Bridge supported on abutments on piles
Proposed Bridge #20 – Linda Creek (see Sheet 6) (Exhibit 3-10) ³	16 feet	100 feet	Hand railing – 54" high	2'-0"	Pre-Cast I-girder/ reinforced concrete deck bridge supported on abutments on piles
Existing Bridge #21 – Strap Ravine (see Sheet 6) (Exhibit 3-10) ³	Existing 9.5 feet Proposed 12 feet	60 feet	Existing Railcar Structure – upgrade bridge Hand railing – 54" high; or, replace with new prefabricated steel bridge	2'-0"	Increase existing bridge width to 12 feet using wood deck and install two new glulam beams with wood picket rail fence; or, new prefabricated steel bridge
Proposed Bridge #30 – Linda Creek (see Sheet 8) (Exhibit 3-12) ³	16 feet	80 feet	Truss height – 7'-0" includes deck thickness Hand railing – 54" high	2'-0"	Prefabricated Steel Bridge supported on abutments on piles

Notes:

Source: Compiled by Psomas Engineering 2013

¹ The numbering for the proposed bridges was generated during the long planning process and originally included various bridges that have since been dismissed from further evaluation. Therefore, the bridge numbering may not be sequential.

New bridges may include a cantilevered pop-out, such as for a viewing area that would increase bridge width for a short distance.

New bridges construction or existing bridge rehabilitation included under the proposed project.

RETAINING WALLS

In general, the proposed trail alignment would be located within the floodplain and would be designed to minimize earthwork and impacts to the water surface elevation. As a result of existing topography, retaining walls would be required at several locations along the proposed alignment where required by existing topography and other constraints. Retaining walls are depicted in the preliminary layout drawings and are described in the alignment summaries below.

The proposed wall types would include gravity walls (reinforced concrete) and anchored walls (soil nail and tie back walls). The type and approximate extent of the currently proposed retaining walls are shown in Table 3-3. Additional walls may be required after geotechnical reports are completed and additional topographical data is available during the detailed engineering design phase of the project.

Table 3-3 Retaining Walls

	Retaining Wall Type				
Sheet #	Reinforced Concrete Area (ft²)1	Tie-Back Retaining Wall (ft²)¹	Soil Nail Wall (ft²)1	Concrete Cut-Off Wall (ft ²)	
Sheet 1	2,796	833	3,259	3,054	
Sheet 2	0	2,450	835	1,434	
Sheet 3	268	0	0	5,832	
Sheet 4	0	0	0	0	
Sheet 5	0	0	0	0	
Sheet 6	810	0	1,316	1,842	
Sheet 7	0	0	0	0	
Sheet 8	208	880	0	1,224	

Note: ¹ Includes architectural treatments for visually interesting surface appearance.

Source: Compiled by Psomas Engineering 2013

Where the alignment passes under existing bridge structures, tie-back retaining walls would be constructed. This would avoid impacts to the existing bridge abutments and maintain the integrity of the existing structure. Concrete cut-off walls would be proposed on steep cross slopes and where the trail alignment is adjacent to the creek to avoid the potential for undermining of the trail. Depending on the type of wall and location of these walls, an architectural facing may be applied to the walls to improve the aesthetic quality of the walls and allow them to blend more naturally into the surrounding environment.

Benches

Benches may be placed at key areas and viewpoints to provide rest areas. Benches could be simple (e.g., wood slates) or more ornate (e.g., stone, wrought iron, concrete), depending on the needs in each bench location. The benches within the 100-year floodplain would be anchored to avoid movement during high-water events.

OTHER DESIGN FEATURES

The proposed trail would generally meet current standards for a 20-mph design speed. Per state and local standards, safety railings or barriers would be constructed where walls or steep drop offs occur adjacent to the trail.

Lighting would be installed in locations where a lengthy portion of trail passes under roadways, such as the I-80 and Rocky Ridge Drive undercrossings; lighting would be considered at shorter undercrossings, such as Sunrise Avenue. Lighting could also be installed on the bridges. Lighting would be low-level, downward-facing lamps that prevent excessive nighttime light, in accordance with City standards. All lighting would be directed away from the creek to the extent possible.

During high-water events, portable signs would be used to prohibit trail user access to the trails. Bollards or other design features would be used at each access point to prohibit the unauthorized entry of motor vehicles. Per the Municipal Code, the trail would be closed from one hour after sunset until sunrise. Several access points would be provided to all the trail segments to provide alternative route options to users.

PROJECT EASEMENTS AND RIGHT-OF-WAY ACQUISITIONS

The majority of the proposed trail alignment would be located within City of Roseville-owned property. There are some locations where the proposed trail alignment would pass through private property and would require the acquisition of right-of-way or permanent easements. Residential and commercial right-of-way requirements are discussed in Section 4.9, "Land Use and Planning."

UTILITY RELOCATION OR MODIFICATION

There are several utilities along the corridor that would require relocation or modifications during construction of the proposed trail. An existing sewer trunk line runs along the creek corridor. Where the proposed trail alignment crosses or parallels the sewer line, adjustments to the grade of the trail or manholes may be needed, or the trail alignment would be shifted slightly to avoid the manholes. Other facilities including water, telecommunications, and gas lines may also require relocation and/or adjustments of valves and manholes.

Existing gas and water lines at the Darling Way Bridge and Sunrise Avenue Bridge would also need to be relocated. If the Darling Way Bridge is widened, the existing 6-inch gas line attached to the north side of the bridge would be relocated onto the north side of the widened bridge, and the existing 12-inch water line supported on the south side of the bridge would be raised to provide better clearance for the trail users.

LANDSCAPING

The project would include landscaping, where needed or desired, to create a physical and visual separation between the trail and adjacent properties and provide scenic improvements along the trail. Vegetative buffers would be multi-purpose, creating a natural privacy screen, providing habitat for some of the wildlife that live in the creek corridor (e.g., birds, small mammals), and stabilizing the creek bank.

SIGNS

Signs for the Dry Creek Greenway East Trail would include both regulatory and wayfinding signs. Trail etiquette and other information would be available at trailheads. Interpretive signs may be located at selected locations throughout the trail corridor.

PROPOSED ALIGNMENT DESCRIPTION

Sheet 1 Segment

The proposed trail would begin at the existing Saugstad/Royer Park trail near the intersection of Riverside Avenue and Darling Way, extend to the confluence of Dry and Cirby Creeks (see Exhibit 3-5),

continue along the north side of Cirby Creek parallel to Machado Lane to a bridge crossing to the south side of Cirby Creek, and continue towards I-80. Key proposed features of the trail shown on the Sheet 1 Segment include:

- an undercrossing of Darling Way;
- a bridge crossing of Dry Creek (Bridge #2);
- ▲ a temporary construction staging area south of Dry Creek in vacant commercial/floodway property;
- a connection to Riverside Avenue;
- a proposed trailhead and approximately 35 parking spaces;
- ▲ bank stabilization using gabion basket wall, secondary channel excavation and implementation of erosion control measures;
- retaining walls at Darling Way Bridge undercrossing and in constrained areas adjacent to the trail;
- a bridge crossing of Cirby Creek (Bridge #4) and related retaining walls; and
- a connection to Hernandez Lane.

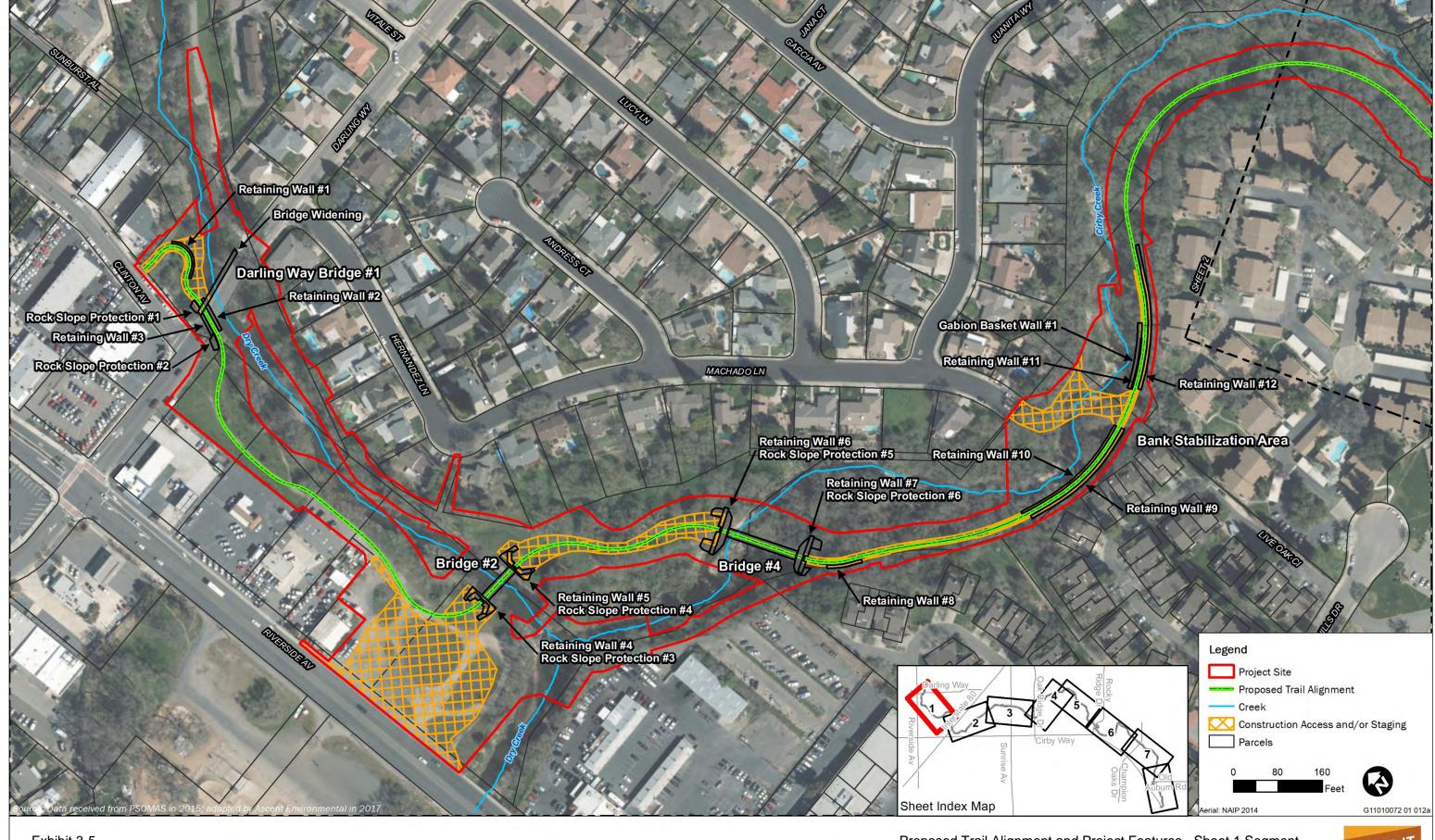
This segment of trail would require acquisition of right-of-way of commercial/floodway properties along Riverside Avenue, a rear portion of a residential/floodway property on the south side of Cirby Creek, and open space property on the south side of Cirby Creek. Residential and commercial right-of-way requirements are discussed and shown in Section 4.9, "Land Use and Planning."

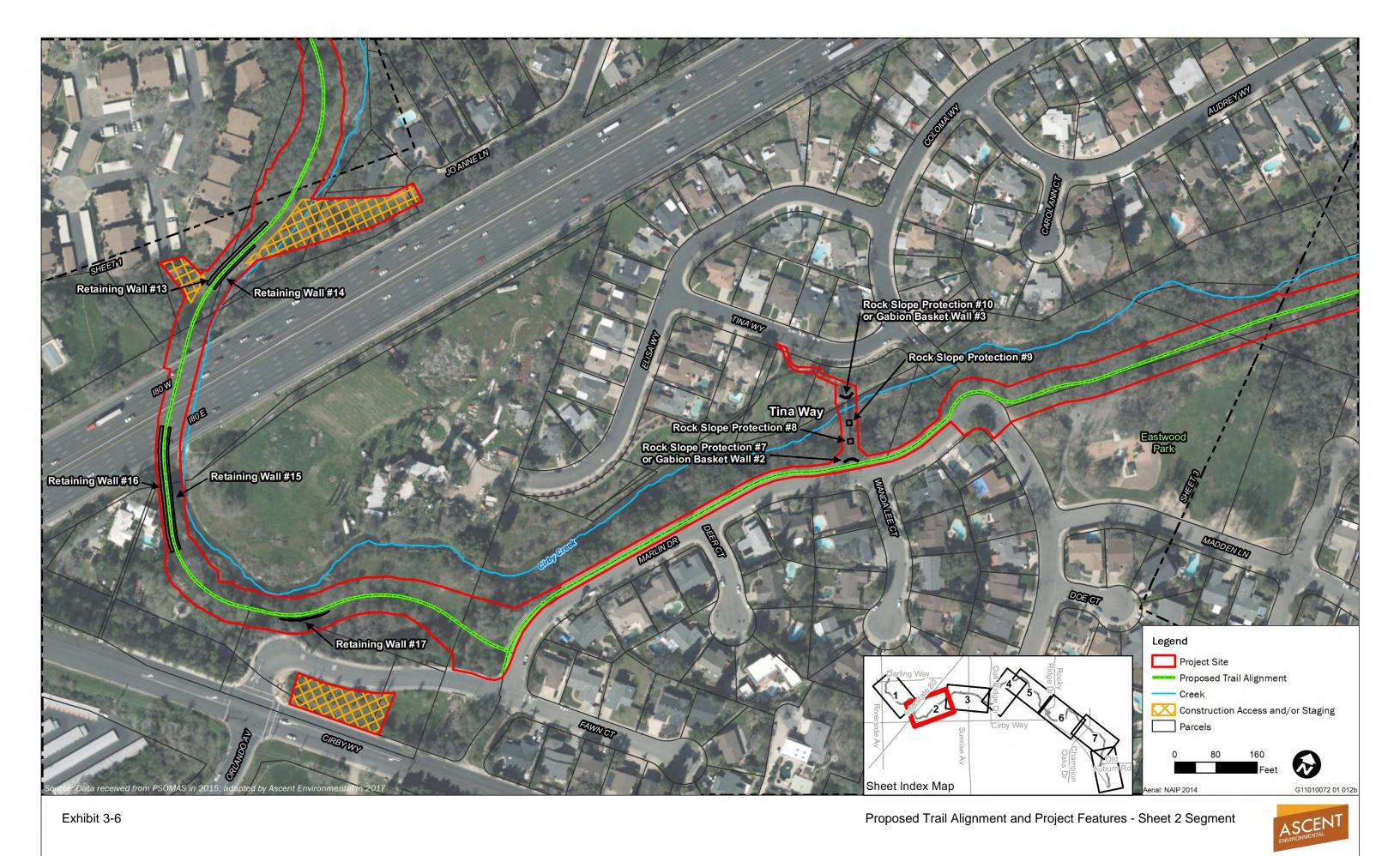
Sheet 2 Segment

The Sheet 2 Segment would, as shown on Exhibit 3-6, extend from the undercrossing of I-80 to Marlin Drive, turn northeast to travel along Marlin Drive, continue along the south side of Cirby Creek from Marlin Drive near Coral Drive, and then along the north side of Eastwood Park. Key proposed features of the trail segment include:

- an undercrossing of I-80;
- extension of an existing culverted drainage;
- a temporary construction staging area on City-owned property south of Marlin Drive;
- retaining walls on either side of the trail, east of the I-80 bridge undercrossing;
- widening of the existing, substandard side path along the north side of Marlin Drive to construct a separated, two-way path;
- rehabilitation of existing timber bridge that links Marlin Drive to Tina Way. Work includes RSP to protect abutments and replacement of timber running boards and Hot Mix Asphalt surfacing;
- a connection to Eastwood Park as the trail parallels the northwest boundary of Eastwood Park; and
- a culvert crossing of a drainage on the east side of Eastwood Park.

The City owns a trail easement through this area, but additional right-of-way acquisition from the undeveloped portion of a residential/floodway property may be required. On-street parking is available at Eastwood Park, making this a suitable access point for the trail.





Sheet 3 Segment

The Sheet 3 Segment of the proposed trail, as shown on Exhibit 3-7, would continue northeast from Eastwood Park and then turn southeast to follow the north side of Linda Creek towards Sunrise Avenue, and then extend from Sunrise Avenue to the Alta Manor senior residence on Oak Ridge Drive. Key features of the segment would include:

- a low flow bridge crossing (Bridge #13) of Linda Creek just east of the Cirby/Linda Creek confluence.
- a connector trail segment leading to the west side of Sunrise Avenue,
- ■ access to the west side of Sunrise Avenue, and
- use of the existing bench area previously created with the City flood control project.

This segment of trail would require acquisition of right-of-way of residential and commercial property on the north side of Linda Creek and a temporary construction easement mid-way down Sundown Way. Residential and commercial right-of-way requirements and easements are discussed and shown in Section 4.9, "Land Use and Planning."

Sheet 4 Segment

As shown on Exhibit 3-8, the Sheet 4 Segment would continue the trail from the Alta Manor senior residence to an at-grade road crossing of Oak Ridge Drive which connects the project to the existing paved paths that begin at Oak Ridge Drive. The existing path continues on City-owned property to the Woodlake Lane pedestrian bridge, then enters property owned by the Roseville City School District (with paved connections to Eich Middle School), and then re-enters City-owned open space near Sierra Gardens Drive. Key proposed features of this trail segment include:

- ▲ placement of the trail on an existing unpaved berm on the north side of Linda Creek,
- access to the Meadow Oaks and Sierra Gardens neighborhoods at Oak Ridge Drive,
- at-grade crossing of Oak Ridge Drive,
- connection to Eich Middle School via existing paths on property owned by the Roseville City School District.

This segment of trail would not require acquisition of right-of-way.

Sheet 5 Segment

The Sheet 5 Segment would continue from the existing path that connects Sierra Gardens Drive to Meadowlark Way. From there, it continues along the existing maintenance path behind homes along Meadowlark Way and Mallard Lane (see Exhibit 3-9). Key features would include:

- new intersection treatment where the trail leading to Sierra Gardens Drive merges with the connection to Meadowlark Way;
- drainage improvements to eliminate standing water on the existing trail during rain events;
- prior to Meadowlark Way, the proposed trail would turn south to connect to the existing unpaved maintenance path;
- enhanced shoulder width where the proposed paved path would adjoin the existing maintenance path;
- bank stabilization just downstream of the existing sewer line crossing, through use of a gabion basket wall and a rock (or log) vane to re-direct channel flow away from the bank; and
- re-construction of an unpaved access road for the purposes of maintaining an existing easement that provides access to the backyards of residential properties along Meadowlark Way and Mallard Lane.

This segment of trail would require acquisition of right-of-way from the rear yards of homes along Mallard Lane.

Sheet 6 Segment

The Sheet 6 Segment continues along the existing maintenance path behind Mallard Lane homes to an undercrossing of Rocky Ridge Drive. From there, the trail would loop around to connect to an existing 12-foot wide paved path on the east side of Rocky Ridge Drive. The trail would then cross to the south side of Linda Creek using the existing paved path and continue east on the south side of Linda Creek, south of the existing flood by-pass channel. The trail would continue on the south side of Linda Creek along an existing utility corridor and wetland preserve north of Nighthawk Circle, cross to the north side of Linda Creek at proposed bridge #20, and then cross Strap Ravine at existing bridge #21 west of Jo Court (see Exhibit 3-10). Key features would include:

- re-construction of an unpaved access road for the purposes of maintaining an existing easement that provides access to the backyards of residential properties along Mallard Lane. As the access road approaches Rocky Ridge Drive, it would also be used for trail user access to the west side of Rocky Ridge Drive;
- improvements to an existing box culvert, or installation of a new box culvert, under Rocky Ridge Drive to accommodate the trail and continue to allow for high stream flows;
- access to Maidu Park along the paved side path on Rocky Ridge Drive;
- ▲ a temporary construction staging area in the open area on the east side of Rocky Ridge Drive;
- a new bridge over Linda Creek (#20);
- improvements to the existing bridge over Strap Ravine, or replacement with a new pre-fabricated steel bridge (#21), to facilitate bicycle and pedestrian use;
- an at-grade crossing at the dead end of North Cirby Way, providing a connection to the Maidu neighborhood; and
- a temporary construction staging area at the end of North Cirby Way and in the adjacent open space west of North Cirby.

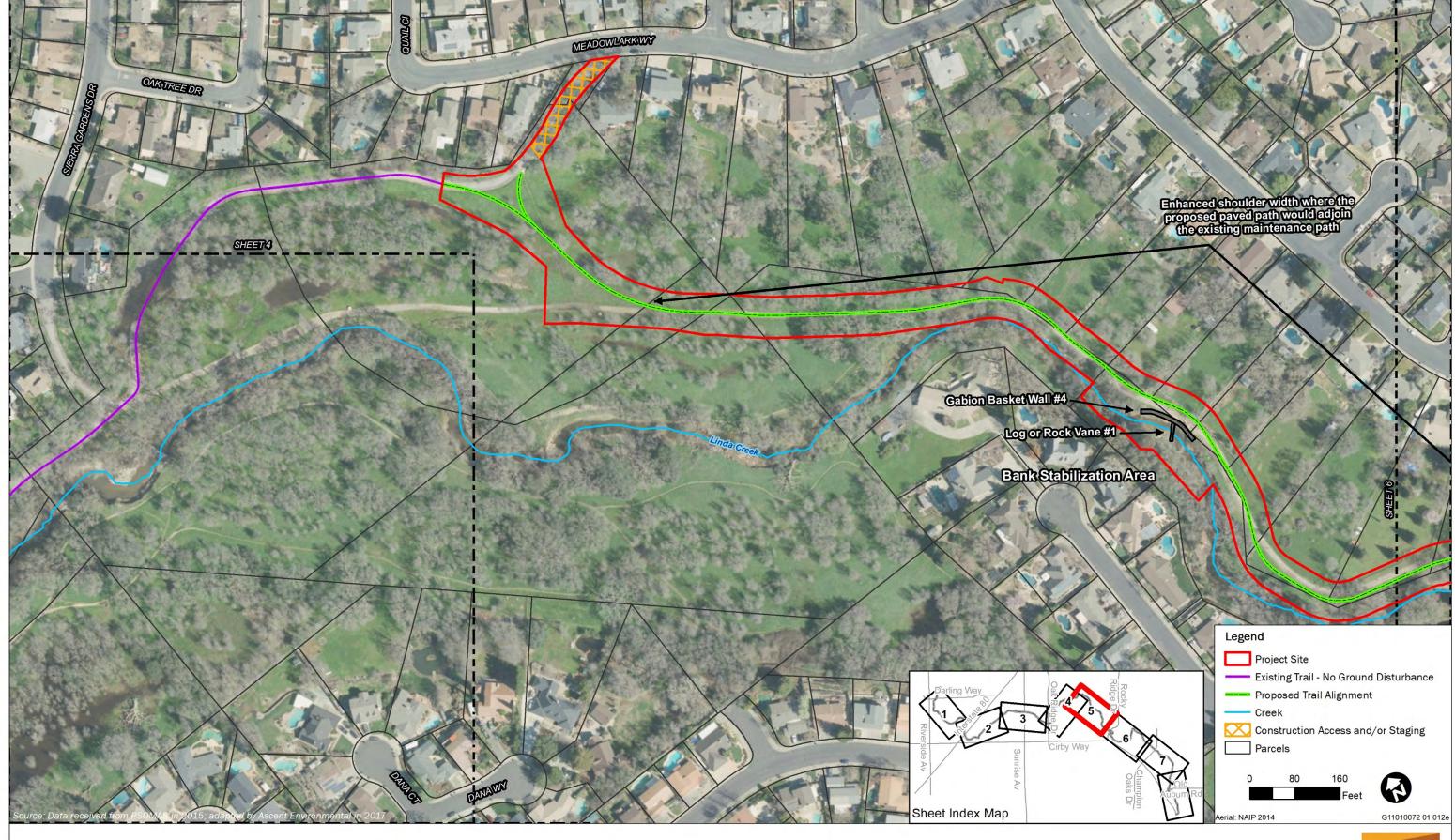
This segment of trail would require acquisition of right-of-way from the rear yards of homes along Mallard Lane as shown in Section 4.9, "Land Use and Planning."



















Sheet 7 Segment

As shown on Exhibit 3-11, the Sheet 7 Segment continues on the north side of Linda Creek to Champion Oaks Drive and then toward West Colonial Parkway. Key proposed features include:

- a temporary construction staging area on City-owned property at the corner of Samoa Way and Champion Oaks Drive;
- ■ an at-grade crossing of Champion Oaks Drive, providing a connection to the Maidu neighborhood;
- ▲ placement of the trail on a bank above the Linda Creek overbank/low flow channel;
- culvert crossing of a drainage parallel to Meadow Lane;
- connection to a sewer maintenance path that would also facilitate a paved connection to West Colonial Parkway;
- a temporary construction staging area on City-owned open space west of West Colonial Parkway; and
- integration with existing decomposed granite trails in the open space along West Colonial Parkway. In this area the cross-section of the paved trail may be widened to maintain a decomposed granite path.

This segment of trail would require acquisition of right-of-way from several vacant residential/floodway parcels along Samoa Way and from two vacant residential/floodway parcels along Hurst Way. The City Flood Control Project of 1999 required a permit from the US Army Corps of Engineers (USACE). The USACE permit included a number of measures, including dedication of conservation easements on certain parcels in the Hurst Way/West Colonial Parkway area that are proposed for use by the proposed project, and mitigation plantings that may be affected by the proposed project. The conservation easements have not yet been recorded because property purchases pursuant to the Flood Control Project permit are still underway. Upon completion of the property purchases, under this separate project the City will work with USACE to dedicate a conservation easement or alternative restrictions for use of these parcels. It is anticipated that the proposed project would be a permitted use, consistent with City zoning and land use regulations for other open space areas. If the multi-use trail construction is anticipated to impact any previously planted Flood Control Project mitigation plantings, then the City would need to obtain prior approval from USACE through a USACE permit process.

Sheet 8 Segment

The Sheet 8 Segment continues on the north side of Linda Creek from West Colonial Parkway toward Old Auburn Road to a connection with Spahn Ranch Road at the Roseville City limits as shown on Exhibit 3-12. It then continues along the southwest side of Spahn Ranch Road to a connection with Old Auburn Road. Key features would include:

- an undercrossing of Old Auburn Road,
- ▲ bank stabilization through use of a gabion basket wall,
- a temporary construction staging area on City-owned property east of Old Auburn Road,
- ▲ a bridge crossing of Linda Creek (Bridge #30), and
- a connection to Old Auburn Road at the south City limits.

This segment of trail would not require acquisition of right-of-way.

DEVELOPING TRAIL THEMES

A design theme is important for any trail system. A theme can create a unique and enriching experience for the trail user, and help strengthen the community's identity around the Dry Creek area.

The Dry Creek Greenway East Trail would be designed around a theme that blends with the existing cultural and geologic history present in the area. Key elements of this theme could include:

- interpretation of the role of Dry Creek corridor in supporting Native American residents and the early historic development of the area,
- references to cultural/historical/Native American themes, and
- references to the local geological features as a design element on the trail in the form of retaining walls and bollards.

CONSTRUCTION STAGING AREAS

As noted in the alignment descriptions and shown on the 8 plan sheets, the proposed project would include construction staging areas where equipment would be temporarily stored during project construction. The construction staging areas would occur within the City's existing right-of-way or on property acquired by the City for the permanent trail alignment or temporary construction use. Residential and commercial right-of-way and easement requirements are discussed in Section 4.9, "Land Use and Planning."

As described above, construction of the proposed multi-use trail would require removal of vegetation and existing features, grading, placement of aggregate base material, construction of five roadway undercrossings, construction or modification of up to eight bridges, and approximately 27,000 square feet of retaining walls.

CONSTRUCTION EQUIPMENT AND METHODS

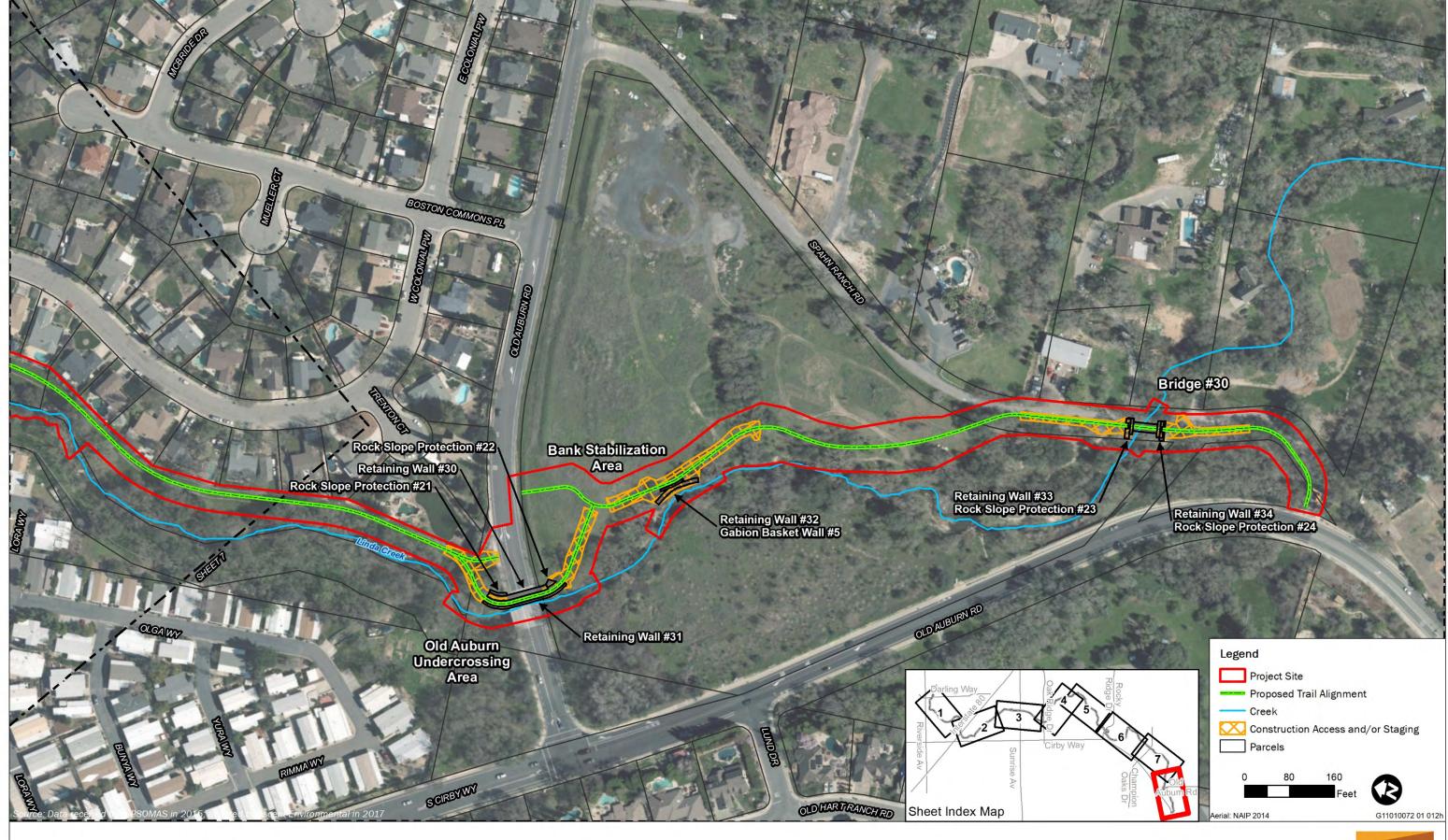
Construction equipment would include graders, loaders/backhoes, excavators, vibratory rollers/compactors, pickup trucks, drill rigs, a truck mounted crane, concrete delivery trucks, water trucks, hydro-seeding trucks and various generators, and hand equipment. Required materials would include concrete, asphalt, aggregate base, decomposed granitic base, and prefabricated metal bridges. Equipment and construction material would be brought to the construction site and staged in staging areas. Topsoil would be excavated and stored during construction operations and respread over disturbed soil areas after construction activities in that area are complete. Disturbed soil areas would be revegetated through planting of native grasses, shrubs, and trees.

Temporary stream diversions (clear water diversions) would be installed for the construction of the Darling Way bridge widening, the Rocky Ridge and Old Auburn Road undercrossings, and for the three stream bank stabilization components. Clear water diversions are used in waterways to enclose a construction area and reduce sediment pollution from construction work taking place in or adjacent to water. The diversions would consist of a temporary dam constructed just upstream of the existing bridge and temporary pipes of sufficient number and size to carry stream flow from the temporary dam, through the construction site, to a point downstream. In addition to a piped diversion, the Cirby Creek bank stabilization area would also include the excavation of a secondary low-flow channel in a sand bar on the opposite side of the stream bed. This secondary channel would be vegetated with native grasses and would remain after completion of the project. After the completion of in-channel construction, the diversion dams would be removed and the stream bed restored. In-channel construction would be limited to periods of seasonal low-flow conditions. See Section 4.8, "Hydrology and Water Quality," in this Draft EIR for additional details regarding this work.











PROJECT PHASING

A phasing plan would be developed for this project to provide a logical sequence of implementation for each identified phase. The phasing would consider aspects such as right-of-way requirements, environmental impacts, estimated capital costs and funding opportunities, and connectivity to key nodes such as schools, parks, trailheads and neighborhoods. It is estimated that the project would be constructed in up to four phases over 4 years, commencing in 2021. Phase 1 would involve construction from Darling way to Eastwood Park, Phase 2 from Eastwood Park to Oak Ridge Drive, Phase 3 from near Eich School to Rocky Ridge Drive, and Phase 4 from Rocky Ridge Drive to Spahn Ranch Road. The City was recently awarded grant funding, which may allow Phases 1 to 3 to proceed as a single project beginning in approximately 2021 or 2022.

3.2 ALIGNMENT OPTIONS

As described previously in subsection 3.1.2, "Project Background," the City prepared the Dry Creek Greenway Planning and Feasibility Study in 2009. The study outlined the existing conditions, opportunities and constraints, alignment options, evaluation criteria, and a recommended alignment for a paved multi-use trail from Riverside Avenue and Darling Way to the City limits just south of Old Auburn Road.

During the 2009 Dry Creek Greenway Planning and Feasibility Study process, two segments of the trail contained alternative alignment options that were retained for further consideration. These were referred to as Segment 1 – Hillcrest and Segment 5 – Sunrise Avenue in the feasibility study. Segment 1 is the first portion of the proposed trail between the end of the Saugstad/Royer Trail at Darling Way to the area south of Machado Lane, west of the I-80 underpass. Segment 5 is located in the Cirby Side neighborhood to the east and west of Sunrise Avenue. Segment 5 begins near the Cirby Creek/Linda Creek confluence west of Sunrise Avenue to just east of the Sunrise Avenue bridge near the Meadow Gate connection.

The feasibility study was updated in 2013 to provide further information regarding alternative trail alignment options. Each of the alignment options were evaluated using criteria developed during the 2009 Feasibility Study Phase of this project, in conjunction with the SRG, and based on the ability of each option to meet the project goals and objectives, as well as the feasibility criteria. A matrix was used to compare benefits, constraints, advantages and disadvantages of each option. It was ultimately decided to provide information that would allow the City Council to select between the proposed alignment and the feasibility study alternatives. Therefore, this EIR presents project-level CEQA analysis of both the proposed alignment and the feasibility study alternatives, referred to as alignment options in this EIR. The alignment options are further described below.

3.2.1 Alignment Option Segment 1 – Hillcrest

Two alignment options (1A and 1C), in addition to the proposed alignment, are being considered for the Hillcrest area of the proposed project. These alignment options are depicted on Exhibits 3-13 and 3-14, which show the same project area as Sheet 1, Exhibit 3-5.

ALIGNMENT OPTION 1A

Option 1A would begin at the existing terminus of the Saugstad/Royer trail, travel across Darling Way Bridge (potentially requiring widening of the bridge) and loop under the bridge on the west side of Dry Creek. The alignment would continue south for approximately 900 feet, crossing Dry Creek via Bridge

#3 to the southern bank of Cirby Creek, from where it would traverse the existing steep slope down to the existing bench located above the 2-year water surface elevation, and continue within the floodplain along the south side of Cirby Creek toward the I-80 undercrossing. This option would require a retaining wall on the south side of Cirby Creek, east of the confluence with Dry Creek. Prior to Bridge #3 (on the north side of Dry Creek), access would be provided to the proposed trail-head parking area at Riverside Avenue and to the future trail extension to Vernon Street. Alignment Option 1A would require Bridge #3, but would eliminate the need for Bridge #2 and Bridge #4.

ALIGNMENT OPTION 1C

Option 1C would begin just before the existing terminus of the Saugstad/Royer trail, travel under the bridge on the east side of Dry Creek and continue south for approximately 700 feet. A spur to the west would provide access to the proposed trail head parking and future trail extension toward Vernon Street, via Bridge # 2 over Dry Creek. The alignment option would continue along the east side of Dry Creek and Cirby Creek for approximately 400 feet before crossing Cirby Creek via Bridge #4 to the southern bank of Cirby Creek, from where it would continue within the floodplain along the south side of Cirby Creek toward the I-80 undercrossing. Alignment Option 1C would not require the widening of the Darling Way Bridge. A retaining wall on the east side of Dry Creek would be required. Similar to the proposed alignment, Alignment Option 1C would include the construction of two bridges (#2 and #4).

3.2.2 Alignment Option Segment 5 – Sunrise Avenue

One alignment option (5A), in addition to the proposed trail alignment, is being considered for the Sunrise Avenue area of the proposed project. This option is depicted on Exhibit 3-15, which shows the same project area as Sheet 3, Exhibit 3-7.

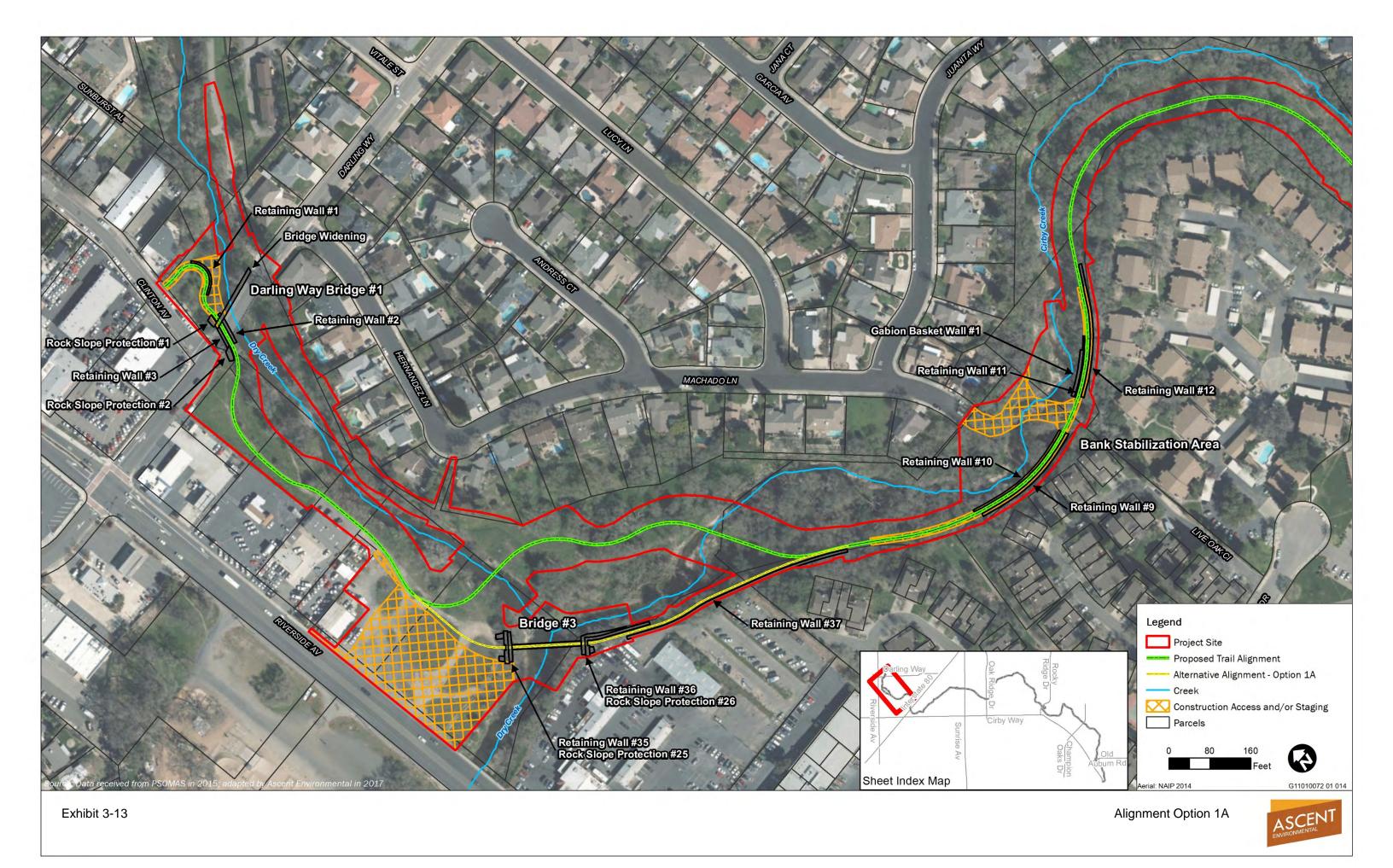
ALIGNMENT OPTION 5A

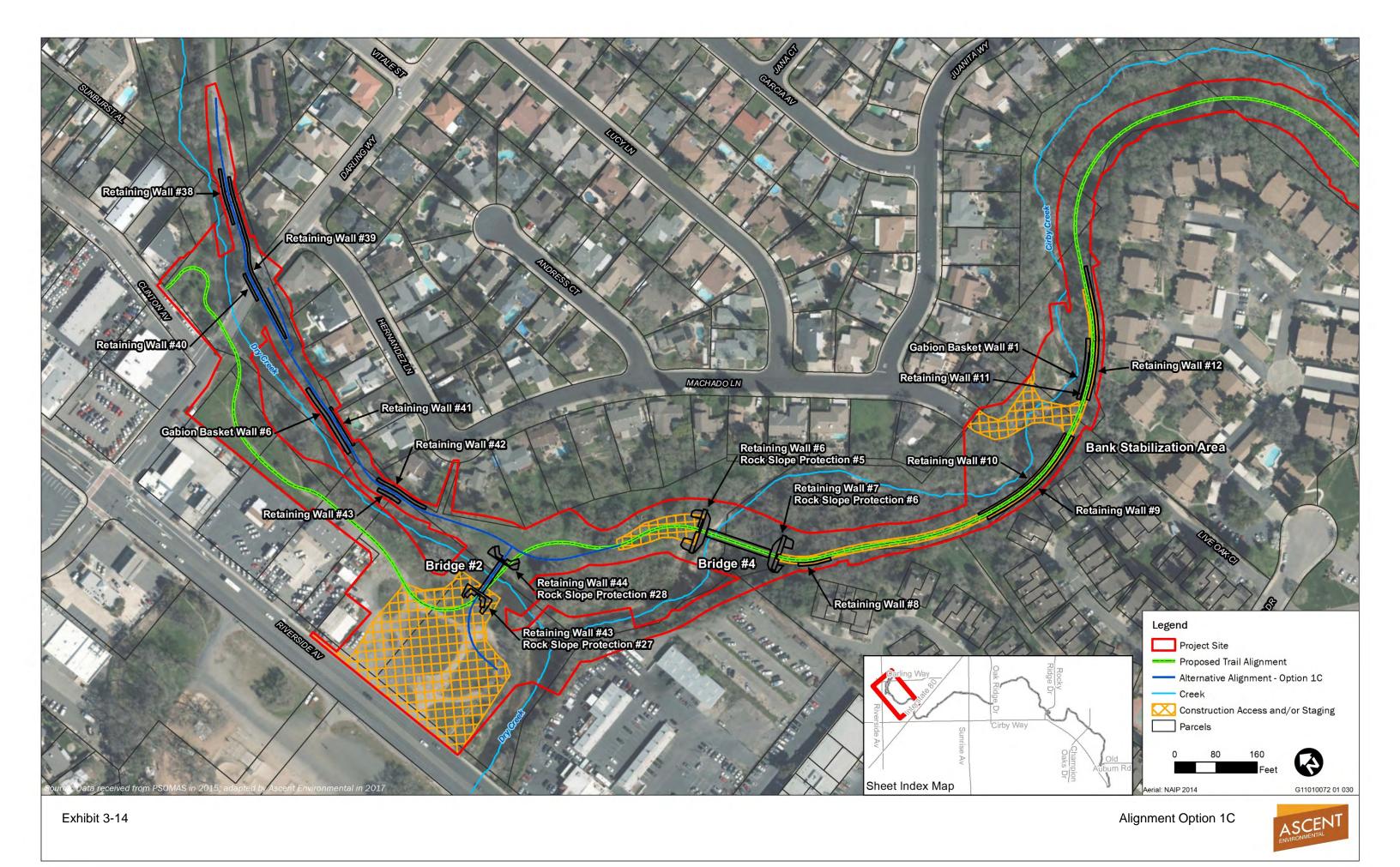
Option 5A would begin just south of the confluence of Cirby Creek and Linda Creek and remain on the south side, following the southern bank of Linda Creek within City-owned property. The trail would travel eastward and pass beneath Sunrise Avenue. Connecting ramps would provide access to both sides of Sunrise Avenue. The alignment would continue to just east of the existing drainage outfall structure at which point it would cross to the north side of Linda Creek via Bridge #14, before continuing further east toward Oak Ridge Drive. Alignment Option 5A would eliminate the need for Bridge #13.

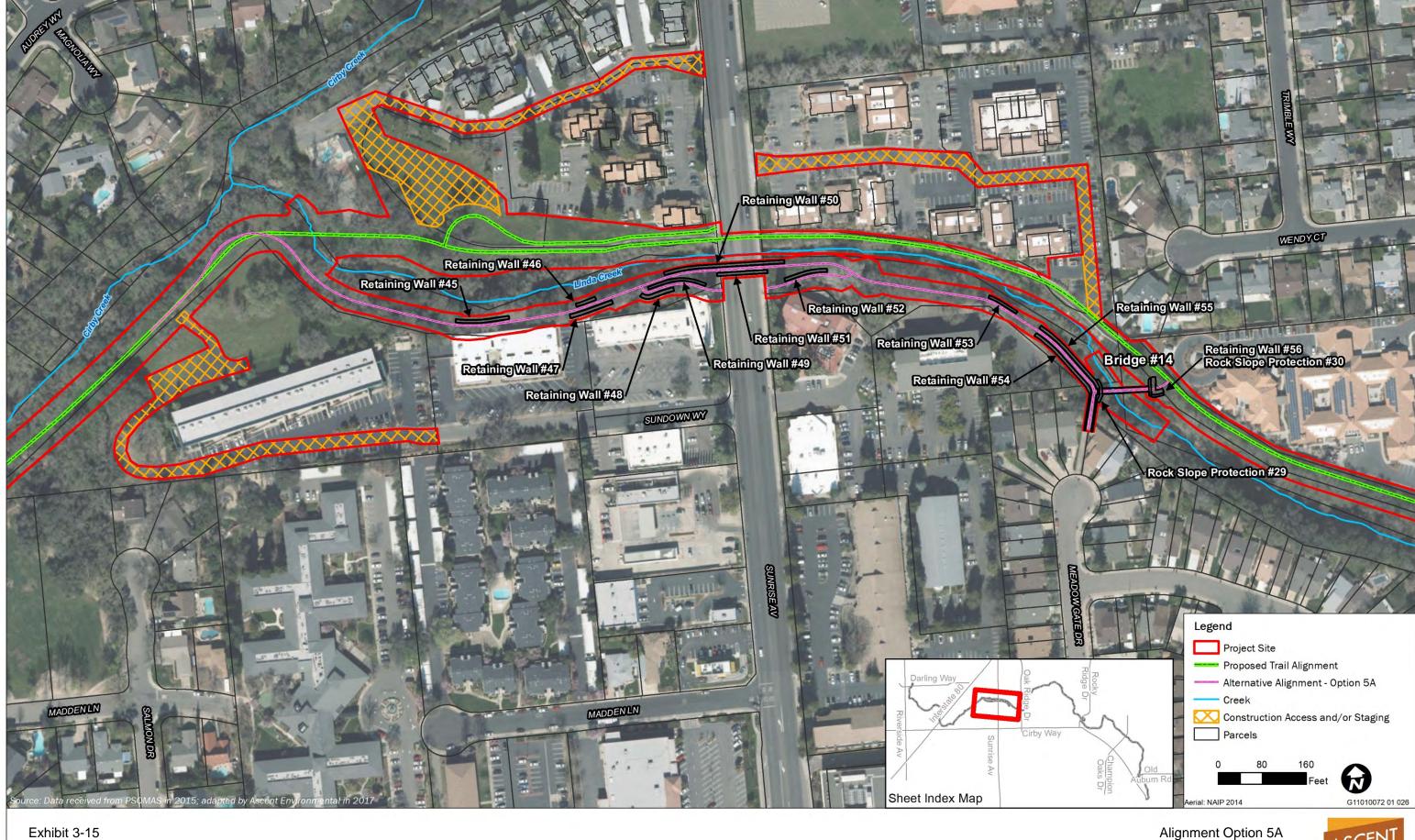
3.3 REQUIRED CITY ACTIONS

The City of Roseville requires the following CEQA compliance and discretionary action for project approval:

▲ EIR Certification. Before the City can approve the proposed project, the City Council must certify that the EIR was completed in compliance with the requirements of the CEQA, that the decision-making body has reviewed and considered the information in the EIR, and that the EIR reflects the independent judgment of the City of Roseville. Approval of the project also requires adoption of a Mitigation Monitoring Plan, which specifies the methods for monitoring mitigation measures required to eliminate or reduce the project's significant effects on the environment. The City would also adopt CEQA Findings of Fact regarding any significant effects on the environment and, for any effects determined to be significant and unavoidable, a Statement of Overriding Considerations, as part of project approval. Action by the City Council would follow a recommendation from the City of Roseville Transportation Commission.









■ Trail Project Approval. After certification of the EIR, the City will consider approval of a trail alignment from the choices between the proposed alignment and its options. If the City approves a trail alignment, the City will also authorize staff to pursue final design, permitting, right-of-way acquisition, and construction funding for phased construction. Also, if the City approves a project, it would file a Notice of Determination with the County Clerk and State Clearinghouse to conclude the CEQA process.

3.4 OTHER PERMITS AND APPROVALS

3.4.1 Responsible Agencies and Federal Agencies

Several agencies would be involved in the consideration and approval of proposed project elements. Federal, state, and regional agency approvals and permits that would be considered for the proposed project would include wetlands verification, encroachment, water quality, and streambed alteration permits. State and regional responsible agencies and federal agencies with approval authority would include:

- Regional and State Responsible Agencies:
 - California Department of Fish and Wildlife
 - Central Valley Regional Water Quality Control Board
 - Central Valley Flood Protection Board
 - California Department of Transportation (Caltrans)
- ▲ Federal Agencies:
 - ▼ U.S. Army Corps of Engineers
 - U.S. Fish and Wildlife Service
 - National Oceanic and Atmospheric Administration Fisheries
 - Federal Highway Administration (NEPA authority delegated to Caltrans)

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