

City of Sisters Creekside Park and Campground Master Plan December 10, 2015

FINAL

Creekside Park and Creekside Campground

Purpose: The purpose of this Master Plan is to establish a guide for future improvements at Creekside Park and Campground. The intent of this plan is not to illustrate the exact and/or final locations of all improvements but rather to provide a detailed concept to guide future improvements. Additionally, should decisions for minor revisions be made for improvements or exchange types of improvements, this master plan should not be revised in its entirety.

Location: Sisters Creekside Park and Campground is located within the City of Sisters near the eastern edge of the City limits. Whychus Creek bisects the Park from the Campground. Creekside Park is located south of Highway 20 and east of Jefferson Avenue, and Locust Street. Creekside Campground is bounded by Whychus Creek to the north, Locust Street on the West and Tyee Drive to the south. The park is adjacent to low density residential development to the west and south. A vacant 1.52 acres tract of land adjoins Creekside Park to the north and Sisters Elementary School is located across Highway 20. The park connects to Five Pine Lodge and commercial center to the east via Sister City Park Drive.

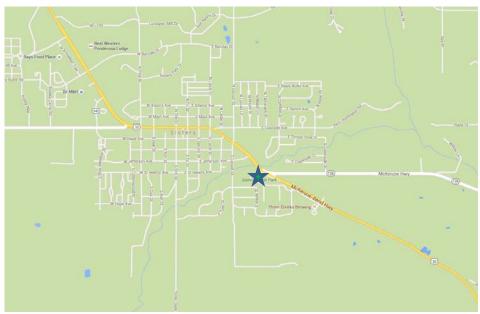


Figure 1. Vicinity Map

Acreage and setting:

The property comprises 13.42 total acres and includes Creekside Park, Creekside Campground and an undeveloped area to the east. Of the total area, Creekside Park contains approximately 2.65 acres on the north side of Whychus Creek and Creekside Campground contains approximately 6.72 acres south of Whychus Creek. The remainder area is approximately 4.05 acres and is planned for future park development.

<u>Site Description</u>: The site is mostly level with the Whychus Creek flowing between Creekside Park and Creekside Campground in a generally southwest to northeast direction. A covered wooden bridge over Whychus Creek connects the two areas. The Whychus Creek Trail runs along the southern side of Whychus Creek and Highway 20 and starts at Locust Street and ends near the Five Pine campus. The site includes Ponderosa and Juniper Trees, grass and natural landscaping.

Background:

The Park area was deeded to the City on July 7, 1983 (Document 1983-11043)¹ from the Oregon State Parks and Recreation Division with the intention of maintaining and/or improving services. A Correction Deed was recorded on June 24, 1985 (Document 1985-12895)².

In 1990, a draft City Park Master Plan was prepared for Creekside Park (day use) and the Campground; however, the Plan was never approved by the Oregon Parks and Recreation Department. The Draft Plan First Phase Development Improvements Summary states that there were 40 unimproved overnight campsites, with 15 fire pits and 15 picnic tables. There were six hose bibs scattered throughout the Park but no irrigation system existed. An RV dump station was located at the east entrance to the Park. There was also a restroom facility that included two sinks, one urinal and three toilets. The day use area consisted of three fire pits and five picnic tables. There was no irrigation system in place and there was one drinking fountain. Creekside Campground has become increasingly popular with the transient RV population as well as with our local camping enthusiasts.

In 2008, the Creekside Campground had approximately 40 RV sites and 16 tent sites. Electricity, water and sewer hookups were not available at each site, but there was a RV dump station and watering station available for campers.

Between 2009 and 2010, the City of Sisters converted 20 non-hook up sites to 25 full hook-up sites. More specifically, in 2009 the City installed 19 full hook-ups (fifteen-30 amp and four- 50 amp) and in 2010 – installed 6 full hook-ups (five-30 amp and one-50 amp). In 2010, the City also installed two ADA Showers.

In 2010, the City completed the installation of a multi-use trail now known as Whychus Creek Trail. The Trail is approximately 1,650 lineal feet and begins at Locust Street, meanders along the creek through the Sisters Creekside Campground and connects to the Five Pine campus. Since 2010, the City has completed several landscaping projects, repaved the east entrance, and improved the signage.

Zoning and Comprehensive Plan

The property is zoned Open Space (OS) District; however the area located along Whychus Creek that is within the 100-year flood plain is zoned Floodplain (FP) District. The property has a Comprehensive Plan designation of Open Space (OS) and the area located along Whychus Creek that is within the 100-year flood plain has a Comprehensive Plan designation of Floodplain (FP).

¹ Document available upon request at Sisters City Hall.

² Document available upon request at Sisters City Hall.

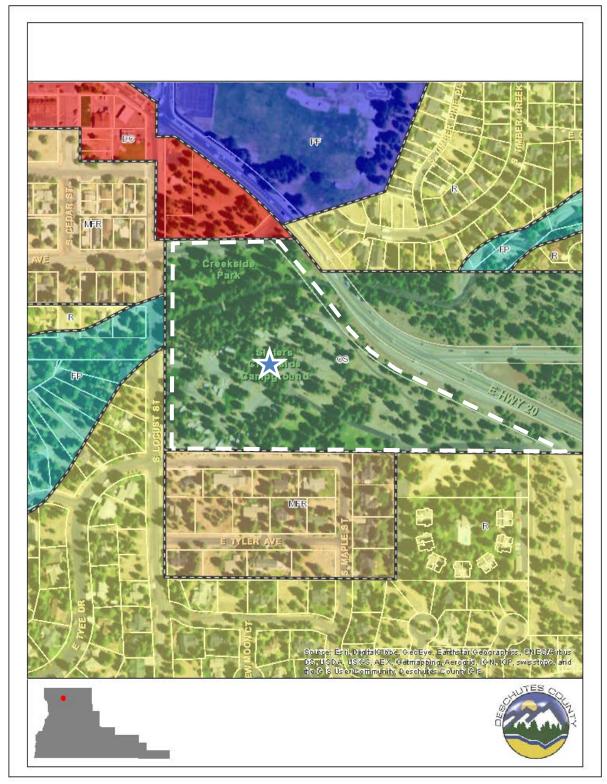


Figure 2. Zoning Map



Figure 3. Existing Park Map-overview

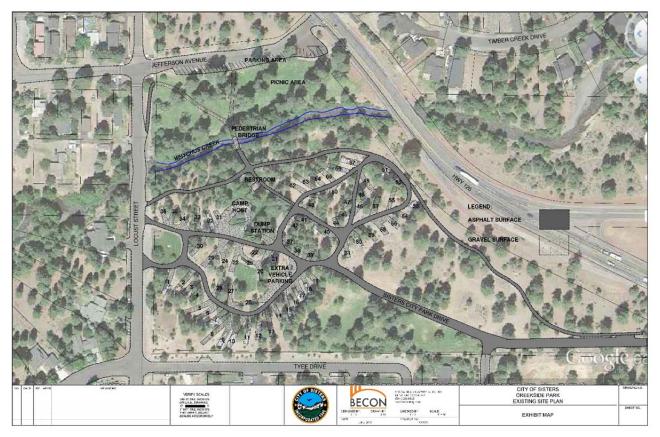


Figure 4. Existing Park Map-overview with improvements

Existing Conditions- Creekside Park (day use side)

The 2.65-acre Creekside Park is used most frequently for picnicking, as it has several picnic tables spread throughout an expanse of large coniferous trees and open lawn. The park is also used for several special community events throughout the year.

Existing Facilities

- Signage
- Information/directional signage
- Parking
- Creek Access
- Bike and Pedestrian Bridge
- Picnic Tables (10)
- Benches (1)
- Dog Station (1)
- Drinking Fountain (1)
- Trees and Landscaping
- Restrooms are accessible via a pedestrian footbridge that spans Whychus Creek.



Figures 5 and 6. Photos of Day Use Side

GOALS AND OBJECTIVE FOR CREEKSIDE PARK (DAY USE):

Goal 1: Enhance appropriate Park use in an enjoyable and safe environment

Objectives: A. Conduct improvements as needed to accommodate existing and future park users.

Tasks:

- 1. Construct ADA improvements to the Whychus Creek pedestrian bridge.
- 2. Construct entryway, landscape and lighting improvements.
- 3. Construct electrical upgrades.
- 4. Upgrade existing pathways.
- 5. Construct additional parking as needed.

Goal 2: <u>Maintain or enhance scenic character and natural resources of the Park.</u>

Objectives: A. Improve management of existing trees and landscaping.

Tasks:

- 1. Work with Urban Forestry Board (UFB) to develop management plan for existing and future landscaping.
- 2. Install landscaping improvements per future needs as determined by UFB and City Parks Advisory Board (CPAB).
- B. Study options for restoration project along Whychus Creek.

Tasks:

- 1. Work with Upper Deschutes Watershed Council to implement restoration project recommendations.
- 2. Install interpretive signage along Whychus Creek.

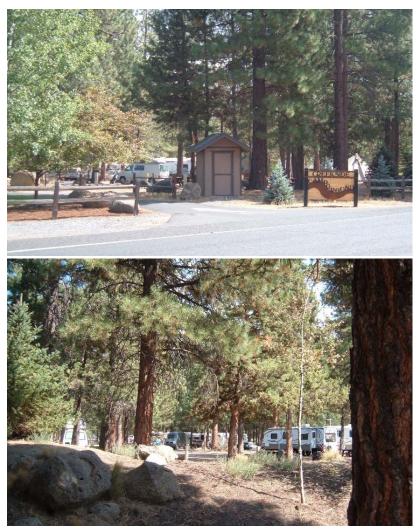
Existing Conditions- Creekside Campground

The 6.72 acre Creekside Campground is a developed campground for tent and RV visitors. It includes 67 sites of which 20 sites are full hook-up sites at 30 amps, 5 are full hook up at 50 amps and 42 are non-hook up/tent sites. A grassy area exists to the east which is planned for future development. There is also one walk-in hiker/biker site available and a full hook up site for the camp host.

Existing Facilities

- Camping Full hook up 30 amp: (20)
- Camping Full hook up 50 amp: (5)
- Non hook up /tent sites (42)
- RV Sewage Disposal Station
- Storage Sheds (3)
- Camp Host Site
- Fire Pits for Each Campsite
- Pay Station
- Picnic Table for each campsite

- Trash Dumpster (1)
- Signage
- Access to Whychus Creek Trail and Covered Footbridge
- Access to Whychus Creek
- Restrooms
- Two showers
- Walk-in hiker/biker site



Figures 7 and 8. Photos of Campground Side

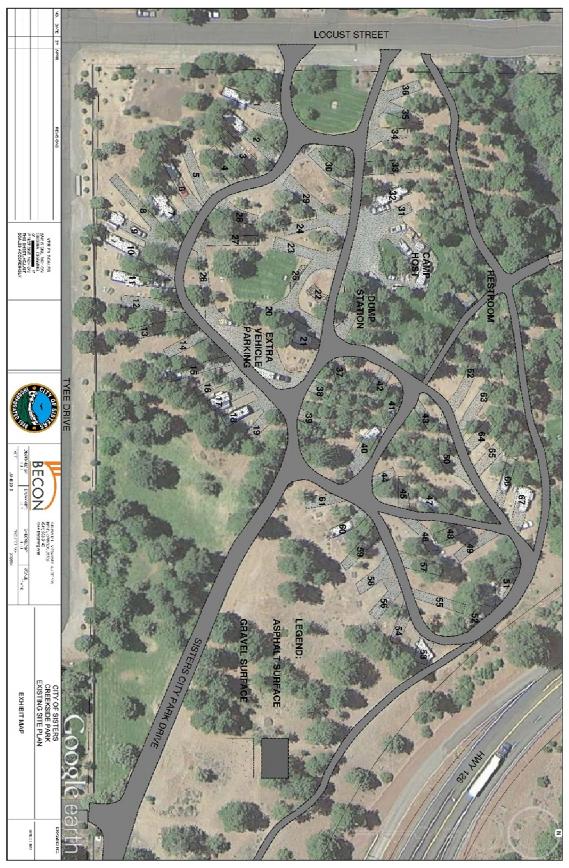


Figure 9. Creekside Campground-Existing Conditions Map

Goals and Objectives for Creekside Campground

Goal 1: Enhance appropriate Park use in an enjoyable and safe environment

Objectives: A. Conduct improvements as needed to accommodate existing and future park users and to reduce impacts to adjacent neighborhoods.

Tasks:

- 1. Construct berm and landscaping adjacent to Locust Street.
- 2. Install landscape improvements adjacent to Tyee Drive.
- 3. Construct ADA improvements for up to four existing camping spaces to meet ADA guidelines.
- 4. Replace existing restrooms including additional showers and toilets.
- 5. Relocate existing dump station to east side expansion area.
- 6. Remove five existing RV sites to provide additional buffering to the adjacent neighborhood and landscape those areas (see map).
- 7. Shorten sites 8-13 to provide landscape buffer to the adjacent neighborhood.
- 8. Convert five existing non-hook up spaces to full hook up (spaces 56 and 58-61; see map).
- 9. Relocate existing camp host site to dump station site
- 10. Install Whychus Creek interpretive signage.
- B. Provide additional facilities and/or amenities for park users.

Tasks:

- 1. Install additional irrigation and landscaping to minimize dust pollution and fire danger.
- 2. Construct a dishwashing station and public BBQ amenity .
- 3. Install bollard lighting to Whychus Creek Trail for pedestrian safety.
- 4. Construct additional electrical service as needed.
- 5. Install WIFI network.

Goal 2: Develop vacant area east of Campground area as appropriate

Objectives: A. Design and install improvements for east side expansion as appropriate. Decisions regarding the final design of additional amenities that may be affected by a realignment of the intersection of Hwy 20/Hwy 126 and the truck scales should be closely coordinated with ODOT and OPRD.

Tasks:

- 1. Create five additional walk-in tent sites with parking.
- 2. Construct relocated dump station with sufficient turnaround space
- 3. Install wayfinding sign/kiosks.

Options for future amenities:

- Picnic Shelter
- Restroom
- Off leash dog park.
- Dirt bike track
- Play equipment
- B. Continue public outreach efforts and coordinating with State agencies for future improvements.

Goal 3: <u>Maintain or enhance the overall scenic character and natural resources of</u> the Park.

Objectives: A. Work with Urban Forestry Board and City Forester on managing existing trees.

B. Study options and implement restoration project for Whychus Creek.

Goal 4: Improve access to and circulation within the Park.

Objectives: A. Improve circulation and travel patterns.

Tasks:

- 1. Construct entry/exit improvements and install signage to direct traffic appropriately.
- 2. Revise City web page and reservation contacts for Campground to inform visitors of options for access
- 3. Widen and repair existing roadways where necessary to help accommodate RV traffic.
- 4. Construct staging area next to relocated camp host site.
- B. Improve accessibility between Creekside Park and Creekside Campground.
- C. Improve signage throughout park.

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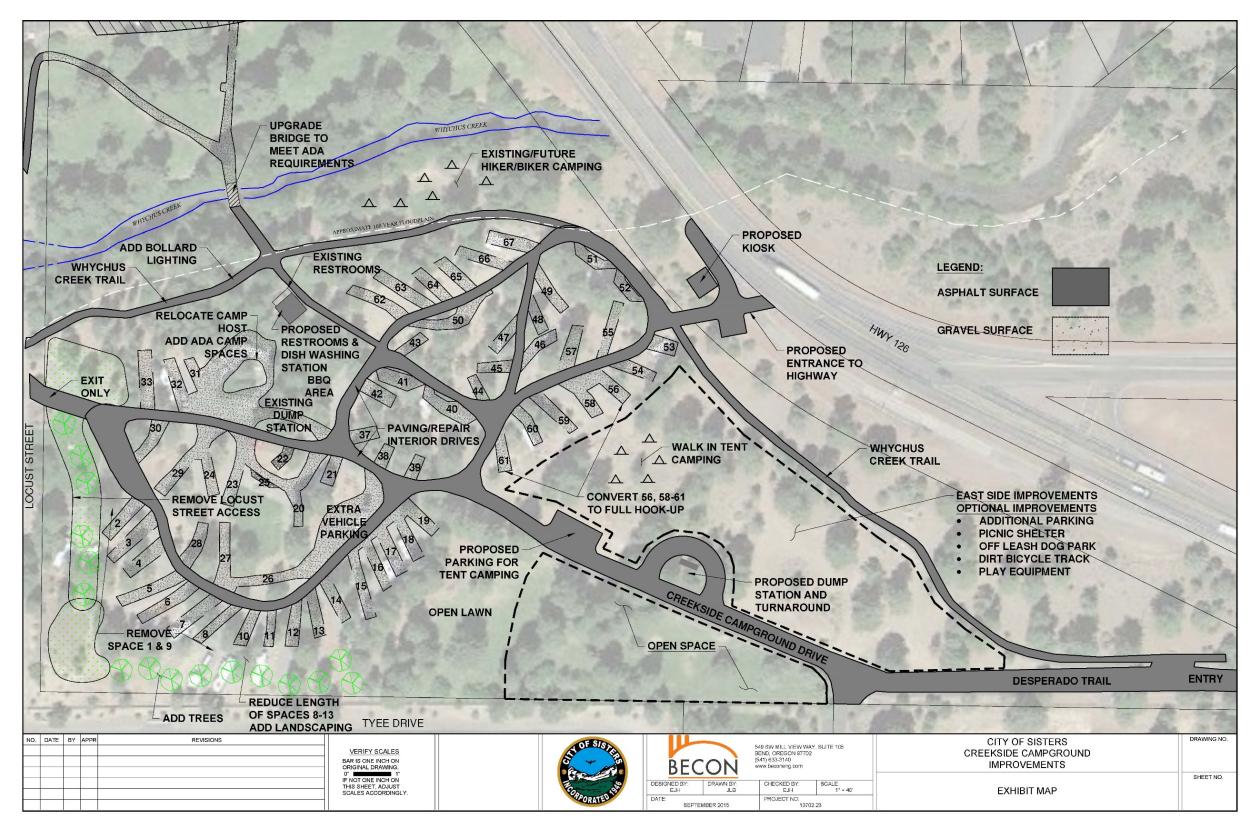


Figure 10. Creekside Park and Campground: Future Conditions Master Plan

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TRAFFIC STUDY RESULTS SUPPORTING INGRESS/EGRESS REVISIONS TO CAMPGROUND

To address concerns by surrounding property owners regarding access to the Campground, the City funded a traffic study that was performed by Kittleson and Associates (Appendix A). The traffic study assessed the impacts of changing the access for the campground to a one way ingress at Buckaroo Trail off of Highway 20 and a one way egress at Locust Street. The study was presented to the CPAB and City Council and public comments were received. The study indicated that there would be no negative impacts on traffic movements if the ingress/egress requirements were revised to require one way ingress at Buckaroo Trail off of Highway 20 and a one way 20 and a one way egress requirements were revised to require

The CPAB received public testimony during multiple meetings regarding revising the access to the Campground. During its regular meeting on 11/03/15, the CPAB approved the draft Master Plan without revising the access requirements to the Campground and on December 10, 2015, the City Council accepted the CPAB's recommendations and approved the Master Plan

PUBLIC INVOLVEMENT

The City has offered numerous opportunities for public involvement during the preparation of this master plan. Below is a list of recent meeting dates that the City Parks Advisory Board (CPAB) and City Council offered opportunities for public input:

- 12/10/15 City Council regular meeting
- 11/19/15 City Council workshop
- 11/03/15 CPAB regular meeting
- 10/22/15 City Council regular meeting
- 10/20/15 Special CPAB workshop
- 10/07/15 CPAB regular meeting
- 09/17/15 City Council regular meeting
- 09/09/15 CPAB regular meeting
- 08/27/15 City Council workshop
- 08/05/15 CPAB regular meeting
- 07/08/15 CPAB regular meeting
- 06/10/15 CPAB regular meeting
- 05/14/15 City Council regular meeting
- 05/06/15 CPAB regular meeting
- 04/01/15 CPAB regular meeting
- 03/25/15 CPAB special meeting
- 01/07/15 CPAB regular meeting

CONCLUSION

- This Master plan is not a static document and future revisions should be considered as conditions warrant.
- The City should continue to work closely with residents and business owners adjacent to the Campground to monitor the RV traffic accessing the campground and be prepared to make adjustments to access, landscape buffers and internal circulation patterns as appropriate.
- The City should continually pursue external funding sources to leverage future capital improvements at the Campground and to assist in funding a Transportation System Plan update which focuses on future ingress/egress improvements to the Park and Campground.

APPENDIX A - TRAFFIC STUDY BY KITTLESON AND ASSOCIATES



KITTELSON & ASSOCIATES, INC. TRANSPORTATION ENGINEERING / PLANNING 354 SW Upper Terrace Drive, Suite 101, Bend, Oregon 97702 P 541.312.8300 F 541.312.4585

MEMORANDUM

July 29, 2015	Project #: 13821
Patrick Davenport, AICP	STERED PROFESS
Scott Beaird, PE	9204PE
City of Sisters On-Call Services	- Content
Creekside Campground Access Evaluation	01200N 7/21/15
	Patrick Davenport, AICP Scott Beaird, PE City of Sisters On-Call Services

(LA

3: 12/31/15

BACKGROUND

Sisters Creekside Campground is a municipal park providing campground amenities on a seasonal basis. The park is located south of US 20 and east of Locust Street. The primary access to the park is from Locust Street. The park can also be accessed from Desperado Trail via the connection of Buckaroo Trail to US 20.

Concerns over campground traffic using neighborhood streets south of the park to circulate has led the Parks Advisory Board to ask City of Sisters staff to consider alternative access scenarios. The following two options have been proposed for further evaluation.

- Option 1: Access to and from Locust Street would be eliminated and access from US 20 would be
 obtained from Desperado Trail via the connection of Buckaroo Trail.
- Option 2: Inbound traffic to the park would access from Desperado Trail and outbound traffic would leave the park at Locust Street. No inbound access to the park would be permitted from Locust Street.

This memorandum summarizes the existing conditions of the transportation system in the vicinity of the campground and an evaluation of the two proposed alternative access scenarios.

EXISTING CONDITIONS

Four intersections were evaluated to determine the impact of each access scenario on traffic operations. The intersections include:

- Locust Street/Creekside Campground Entrance
- Locust Street/US 20
- Buckaroo Trail /US 20
- Desperado Trail/Buckaroo Trail

Intersection Operations

The existing lane configurations and traffic control for each of the study intersections are summarized in Figure 1. Turning movement counts were collected at each of the study intersections on June 5, 2015. The counts were collected on a Friday to capture the combined peak of school and campground traffic. The afternoon peak hour across the four study intersections was 3:15-4:15 p.m. *Appendix A includes the turning movement counts.*

The observed peak hour turning movement counts were evaluated with the lane configurations and traffic control shown in Figure 1. Figure 2 summarizes the resulting intersection operational analysis¹. As shown in Figure 2, each of the study intersections, with the exception of US 20/Locust Street, operate under capacity and with acceptable level of service (LOS). Demand at the US 20/Locust Street intersection exceeds capacity and operates at LOS F during the weekday afternoon peak period.

Crash Data

Crash data was collected for the most recently available five-year period (2009-2013). As shown in Table 1, over the five-year period, six crashes were reported at the US 20/Locust Street intersection and one crash was reported at the US 20/Buckaroo Trail intersection. No crashes were reported at the Locust Street/Campground Entrance or Buckaroo Trail/Desperado Trail intersections.

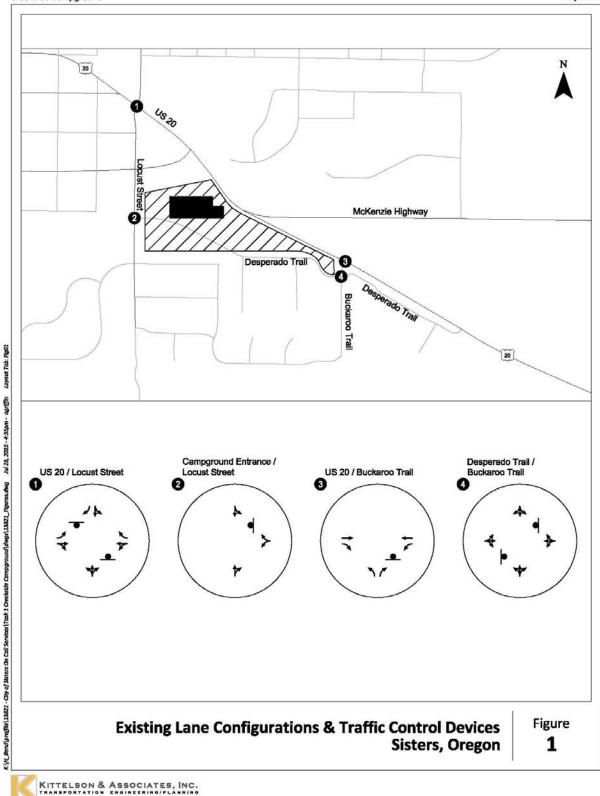
	Crash Type						Crash Sevei	ity			
Intersection	Rear-End	Angle	Turning	Fixed Object	Other	PDO	Injury	Fatal	Total		
US 20/Locust Street	3	1	2	0	0	2	4	0	6		
Locust Street/Campground Entrance	0	0	0	0	0	0	0	0	0		
US 20/Buckaroo Trail	0	o	0	0	1	0	1	o	1		
Buckaroo Trail/Desperado Trail	0	0	0	0	0	0	0	0	0		

Table 1. Study Intersection Crashes (2009-2013)

¹ The volumes shown in the figures and used in the operational analysis include traffic associated with the approved but not yet constructed Highland Village residential development.

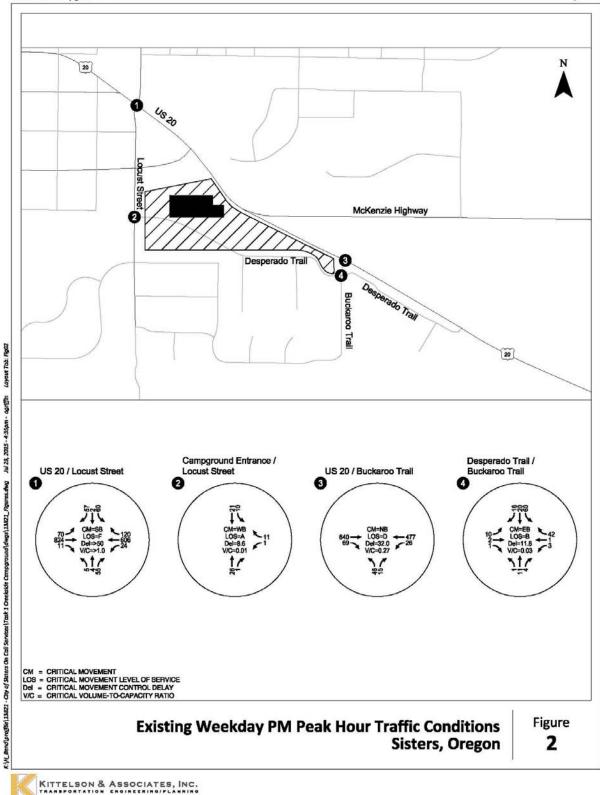












Posted Speed

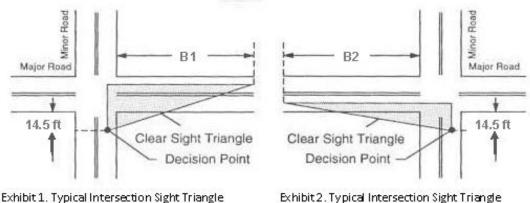
In the study area, only US 20 has posted speeds, which are summarized in Table 2. According to the Oregon Department of Transportation's Traffic Roadway Speed Zone Standards, areas in residential districts and public parks that do not have a posted speed are presumed to be 25 miles per hour (mph) speed zones.

Table 2. Posted Speeds in Study Area

Roa dway Segment	Speed (mph)		
u S 20 East of Buccaroo Trall	4S		
u S 20 West of Buctaroo Trail	35		
u S 20 an Loc ast Street	20		

Intersection Sight Distance

Intersection sight distance was evaluated at the US 20/Locust Street and US 20/Buckaroo Trail intersections. Sight distance measurements and requirements are based on the American Association of State Highway and Transportation Officials (AASHTO) Green Book, 2011. Given the minor-street stop-control, intersection sight triangles were developed based on guidance cited in the Green Book for Conditions B1 (left-turn from minor road) and B2 (right-turn from minor road). All distances were measured from a vertex point located 14.5 feet from the major-road travel way along the center of the approaching travel lane, accounting for comfortable positioning distance from the travel way (6.5 feet) and the distance from the front of the vehicle to the driver eye (8.0 feet). The assumed eye height is 3.5 feet above the departing road and the object height is also 3.5 feet above the major road. Exhibits 1 and 2 illustrate the sight distance measurements at a typical stop-controlled approach.



Measurements for Case B1 (Left-Turn from Stop).

Exhibit 2. Typical Intersection Sight Triangle Measurements for Case B2 (Right-Turn from Stop).

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US 20/Locust Street Intersection Sight Distance

At the US 20/Locust Street intersection, sight distance was measured for the northbound Locust Street movement. As identified in Table 2, the posted speed for US 20 at this intersection is 20 miles per hour (mph). According to AASHTO, the minimum sight distance at 20 mph is 225 feet for the left-turn movement (Case B1) and 195 feet for the right-turn movement (Case B2). The available sight distance for both the left-turn and right-turn movements at the US20/Locust Street intersection exceeds the minimum distance identified in AASHTO.

While the available sight distance exceeds the minimum required sight distance for a driver eye height of 3.5 feet, the sign for the fuel station in the southwest quadrant of the intersection, shown in Exhibit 3, may limit the available sight distance for drivers in vehicles that sit higher, such as recreational vehicles. These drivers may be required to move forward towards the travel lane and beyond the stop bar to have adequate visibility of oncoming traffic.



Exhibit 3. Sight Distance for Vehicles Turning Right from Locust Street to US 20

US 20/Buckaroo Trail Intersection Sight Distance

At the US 20/Buckaroo Trail intersection, sight distance was measured for the northbound Buckaroo Trail movement. As identified in Table 2, the posted speed for US 20 at this intersection is 45 mph to the east and 35 mph to the west. According to AASHTO, the minimum sight distance at 45 mph is 500

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feet for the left-turn movement (Case B1). The minimum sight distance at 35 mph is 335 feet for the right-turn movement (Case B2).

The available sight distance to the west (Case B2) exceeds the minimum of 335 feet. However, the sight distance to the east (Case B1) is limited by the fence and sign in the southeast quadrant of the intersection, as shown in Exhibit 4. The available sight distance to the east is approximately 230 feet. To gain adequate sight distance to the east, drivers are required to move forward past the stop bar.



Exhibit 4. Sight Distance for Vehicles Turning Left from Buckaroo Trail to US 20

OPERATIONAL ANALYSIS OF SHORT-TERM ALTERNATIVES

To address concerns related to campground traffic using Locust Street, the following two options were evaluated.

- Option 1: Access to and from Locust Street would be eliminated and access from US 20 would be obtained from Desperado Trail via the connection of Buckaroo Trail.
- Option 2: Inbound traffic to the park would access from Desperado Trail and outbound traffic would leave the park at Locust Street. No inbound access to the park would be permitted from Locust Street.

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Bend, Oregon

Option 1: No Access to Locust Street

Under Option 1, no access would be permitted to the campground from Locust Street. All ingress and egress movements would occur via Desperado Trail and Buckaroo Trail. Figure 3 demonstrates how the campground turning movements would be rerouted. Figure 4 summarizes the intersection operations with these rerouted volumes. As shown, there is little change in intersection operations with the rerouted traffic. The available storage at each intersection is adequate to accommodate changes to queue lengths associated with rerouted traffic.

Option 2: Ingress from Desperado Trail, Egress to Locust Street

Under Option 2, only traffic exiting the campground would access Locust Street. Inbound traffic would access the campground from Desperado Trail via Buckaroo Trail. Figure 5 demonstrates how the inbound turning movements would be rerouted. Figure 6 summarizes the intersection operations with these rerouted volumes. Similar to Option 1, there is little change in intersection operations with the rerouted traffic. The available storage at each intersection is adequate to accommodate changes to queue lengths associated with rerouted traffic.

SUMMARY OF FINDINGS AND RECOMMENDATIONS

The following summarizes the existing conditions observations and alternatives analysis.

- The US 20/Locust Street intersection currently operates over capacity and with LOS F. This condition will continue regardless of the access scenario for the campground.
- The sign in the southwest quadrant of the US 20/Locust Street intersection potentially limits sight distance for taller vehicles.
 - Recommendation: The City should consider whether restriping the northbound stop bar in a location closer to the travel lane would improve the sight distance for taller vehicles.
- The fence and sign in the southeast quadrant of the US 20/Buckaroo Trail intersection restricts sight distance to less than the minimum required sight distance.
 - Option 1 would add additional traffic to this movement, while Option 2 would reduce traffic making this movement
 - Recommendation: Regardless of the access option selected, the City should work with ODOT to determine whether restriping the stop bar in a location closer to the travel lane would improve the sight distance at this intersection or whether the fence and sign can be relocated.
- Under both Options 1 and 2, the change in intersection operations compared to the existing
 condition is minimal and the changes in queue lengths associated with the rerouted traffic can be
 accommodated within the available storage at the study intersections.

Recommendations for Next Steps

Short-Term Recommendations

The intersection operational analysis does not indicate a need to change the access scenario for the campground. However, if a decision is made to change the access scenario due to neighborhood concerns, we recommend that the City begin with Option 2. This option allows a phased trial period.

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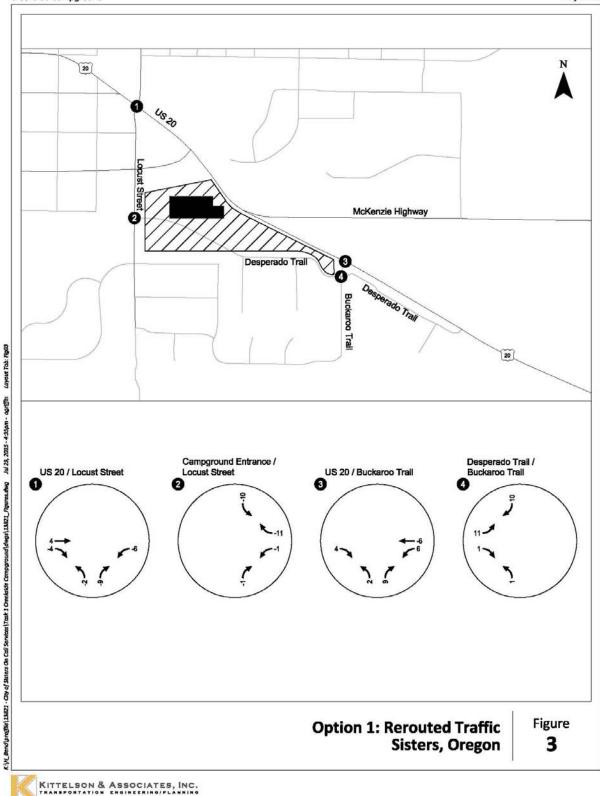
If this option is implemented, guide signage would likely be necessary on the highway to direct campground visitors to the correct ingress location.

Longer-Term Recommendations

The City intends to conduct a refinement plan to the City's Transportation System Plan focused on the eastside transportation facilities. The refinement plan should consider the potential for longer-term campground access scenarios, such as access to Jefferson Avenue or access to US 20 across from OR 126. This would require additional coordination with ODOT to determine the future of the truck weigh station.

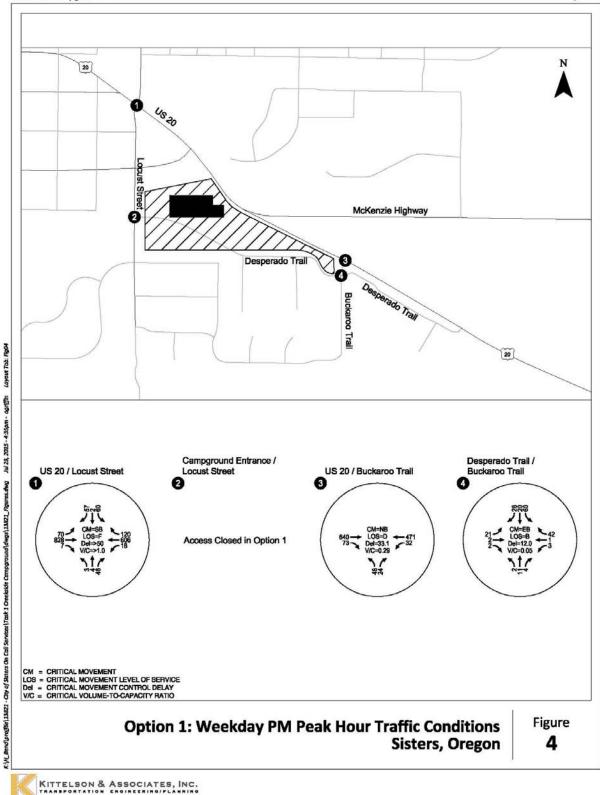






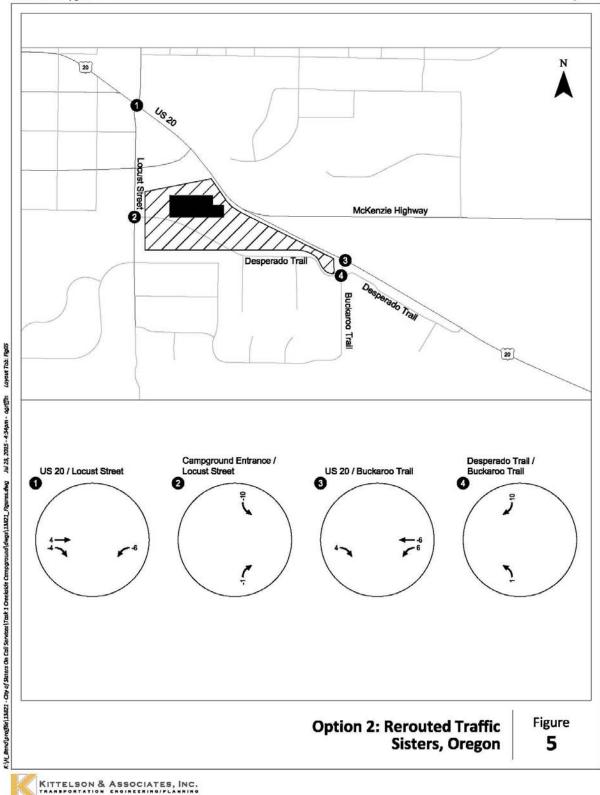






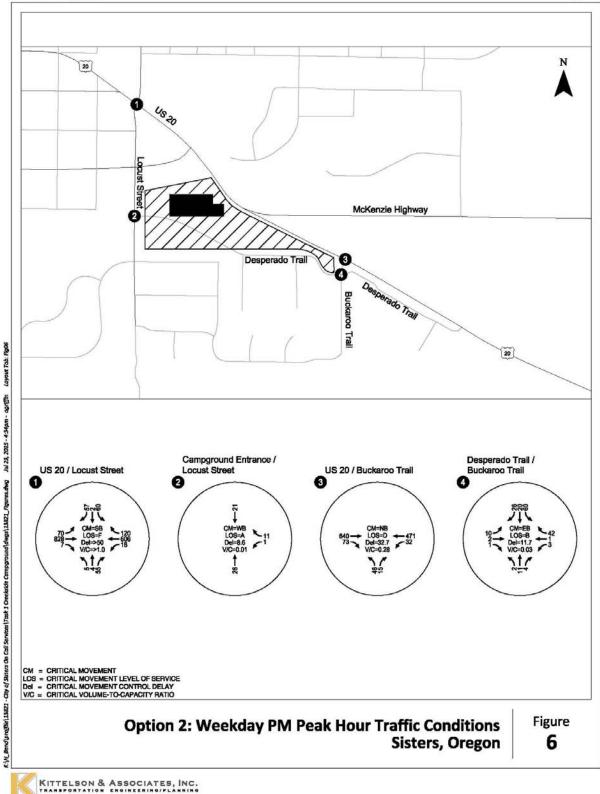












Appendix A Turning Movement Counts

