

Lost Canyon Ranch Open Space Master Plan

JULY 2025



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Executive Summary : *A Place of Awe & Wonder*

Lost Canyon Ranch, located on the Town of Castle Rock's southeastern border, is a 681-acre property characterized by a stunning blend of grasslands, towering Ponderosa pines, and dramatic canyon cliffs — a landscape rich with history, diverse wildlife, and sweeping scenic views that echo the beauty of its neighbor, Castlewood Canyon State Park. The property, which was purchased by the town in May of 2024, is the largest single acquisition of open space in the Town's history and demonstrates a commitment to the preservation and protection of open space.

In addition to the property's value for habitat preservation, the site's direct connection to other protected properties work to make Lost Canyon Ranch Open Space a unique site. The property shares a ¾-mile boundary with Castlewood Canyon State Park, which shares a southern boundary with Prairie Canyon Ranch Open Space, a 978-acre, historic working cattle ranch and open space managed by Douglas County Division of Open Space and Natural Resources. By prioritizing the preservation of the land's natural state, vital wildlife habitats and migration corridors have been safeguarded, ensuring that the conservation values cherished by the community are upheld.

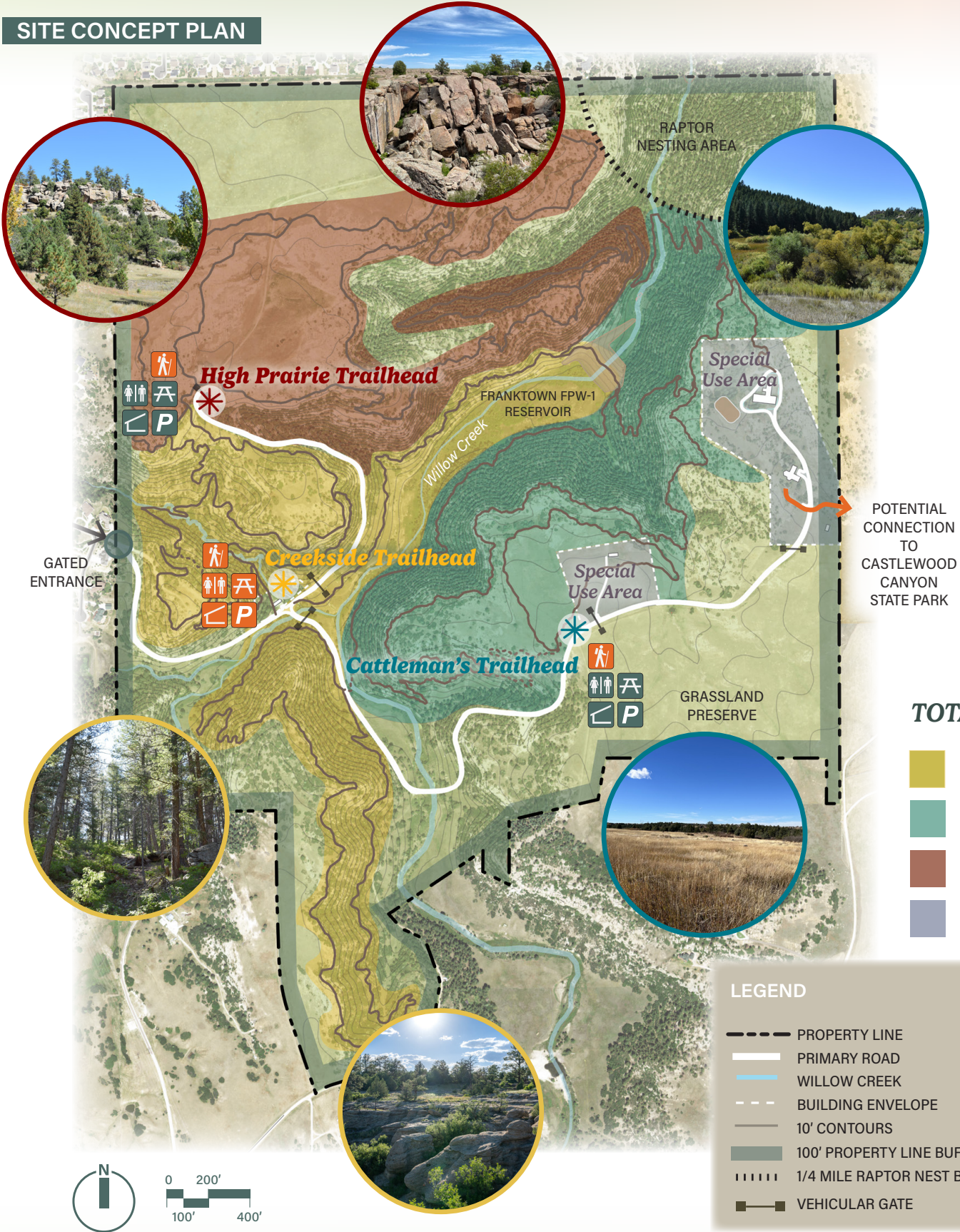
This strategic partnership has not only prevented the disruption of the delicate ecosystem near Castlewood Canyon State Park but also preserved the integrity of the visitor experience, marking a significant victory for open space conservation and management. Together, these parcels create nearly 4,300 acres of contiguous critical wildlife habitat and movement corridor as well as unique historical, cultural, and ecological resources to be cherished, and enjoyed by generations of Coloradans to come.

The goal of this project is to provide access to the property through a network of trails while balancing use with the overarching project values of conservation and protection of site resources. Previously developed building envelopes throughout the site allow for more varied programming that aligns with the project values.

As part of the project process, the Town of Castle Rock and the consultant team, led by Wenk Associates, facilitated the planning and community outreach process to formulate recommendations for the use and development of the Lost Canyon property. The team undertook a thorough site analysis investigation through a combination of site visits, GIS analysis, and research. This analysis informed preliminary recommendations and plans that were shared through a series of meetings with the surrounding neighborhoods and two community-wide open houses.

This document summarizes site analysis findings, community engagement responses, and preliminary recommendations for the Lost Canyon Ranch property's development and use. Due to the sensitive nature of the site and the conservation easement in place, recommendations for development may evolve as the site opens and additional visitation information is gathered. Recommendations highlighted in this document are not requirements for the property's development and have been guided by the information gathered thus far. A separate management plan is being developed in addition to this master plan document to help guide the stewardship of the property into the future.

SITE CONCEPT PLAN



TRAIL PRECEDENTS



TOTAL TRAILS: +-16 Miles

- Creekside Trailhead Area
- Cattleman's Trailhead Area
- High Prairie Trailhead Area
- Special Use Area

LEGEND

- PROPERTY LINE
- PRIMARY ROAD
- WILLOW CREEK
- BUILDING ENVELOPE
- 10' CONTOURS
- 100' PROPERTY LINE BUFFER
- 1/4 MILE RAPTOR NEST BUFFER
- VEHICULAR GATE

TRAILHEAD AMENITIES

- | INITIAL | FUTURE |
|---------------|---------------|
| RESTROOM | RESTROOM |
| PICNIC TABLES | PICNIC TABLES |
| SHELTER | SHELTER |
| PARKING LOTS | PARKING LOTS |
| HIKING TRAIL | HIKING TRAIL |

Note: Trails are conceptually shown and locations are subject to change.

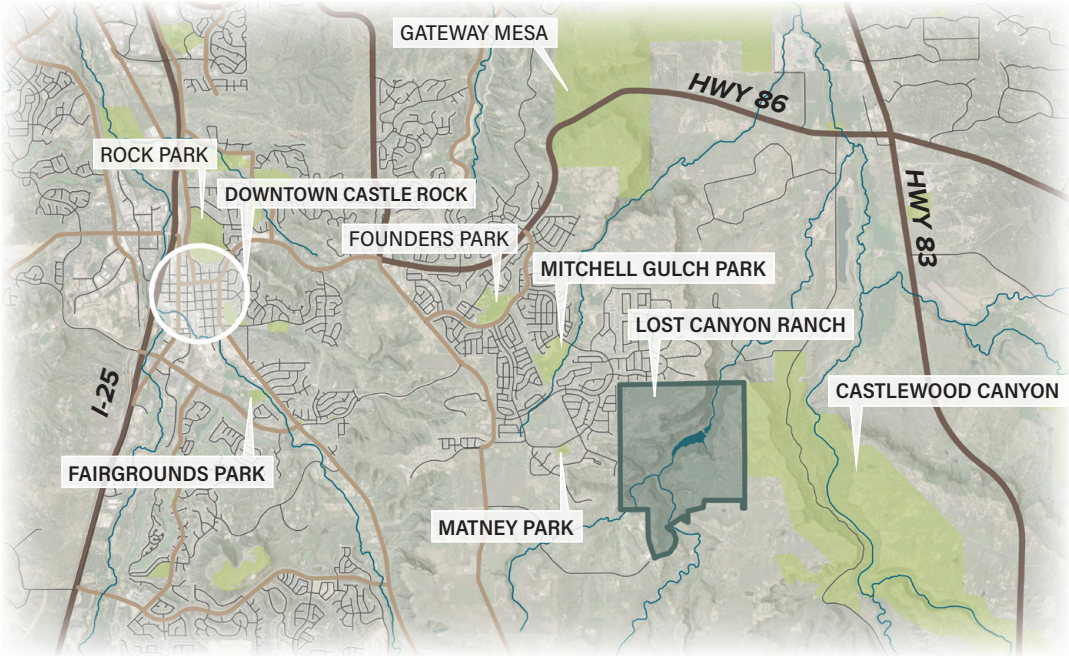


Introduction



Project Goals & Vision

VICINITY MAP



Protect and preserve the site’s natural habitat and cultural resources.



Provide public access to the site for passive outdoor recreation and education.



Integrate the site into the larger Town of Castle Rock open space and trails program.

Provide a buffer from expanding development pressures.

Find the balance between conservation and access.

Master Plan Recommendations

Access Recommendations

- Evaluate access improvements along Lost Canyon Ranch Road.
- Provide additional directional signs on Lost Canyon Ranch Road.
- Consider adding traffic calming measures along Lost Canyon Ranch Road, as needed.
- Add an additional gate closer to the entry of the property at Lost Canyon Ranch Road.
- Limit hours of access to dawn to dusk with the exception of special events.

Design Recommendations

- Locate primary trailhead and parking lot at the western building envelope site.
- Potential trailhead and parking locations have been identified.
- Trails to be single-track and minimally impactful, except at identified accessible trails.
- Preliminary wayfinding and signage details have been provided in this document. A complete signage package will be developed after master plan approval by Town Council.

Program Recommendations

- All current and future programming should align with the conservation values of the site.
- Concept development for future uses within building envelopes has been provided. Flexible, minimally invasive spaces that emphasize diverse programming, while protecting the site's character, should be provided at the building envelopes.

Conservation Recommendations

- Trails are designed for hiking access only. Bikes and dogs are not recommended at this time.
- Evaluate future uses on the site.
- Avoid sensitive areas to protect the site's natural and cultural resources.
- Appropriately manage access to sensitive areas such as through guided tours.

Cultural & Natural Resources

Lost Canyon Ranch hosts a wealth of important natural and cultural resources that should remain protected, while allowing the public to experience all the natural wonders the site has to offer. At 681-acres, the site provides crucial habitat and food sources for a variety of species and adds to an important wildlife corridor for the region. Landscape ecologies vary greatly across the site, from cap rock and scrub oak savannahs to dense Ponderosa Pine, and Douglas Fir forests. Willow Creek runs through the site creating a complex and delicate riparian ecosystem that provides essential ecological functions. The site also has immense cultural significance. The Franktown Cave, a prehistoric cave shelter located on the site, is a significant piece of archaeological history that gleans precious information about previous inhabitants of the site. Archaeological artifacts found on the site date continuous habitation for over 8,000 years and may be the first appearance of the ancestral Apache in Colorado.

Cultural Significance

- » Franktown Cave is a prehistoric archaeological site in a large rock shelter that contained artifacts from prehistoric occupations over 8,000 years ago, leaving a legacy that needs to be protected. Due to the historic and cultural significance of the cave, the Town elected to do a cultural resource survey of the property to identify any sensitive areas. Should areas of significance be found, trail alignments and other proposed improvements will be relocated accordingly to protect and preserve those areas.

Wildlife Diversity

- » Mountain lions, bears, bobcats, coyotes, badgers, elk, mule deer, pronghorns, and birds of prey such as, Golden Eagles are present on the site.

Landscape Communities

- » Lost Canyon Ranch is located on a raised plateau, known as the Palmer Divide. A variety of landscape communities can be found, including remnants of the Black Forest ecosystem.

Geology

- » Two sedimentary rocks, Castle Rock Conglomerate and Dawson Arkose, are found on the site. The erosion of the softer Dawson Arkose under the harder Castle Rock Conglomerate has formed unique rock features such as overhangs and hoodoos.

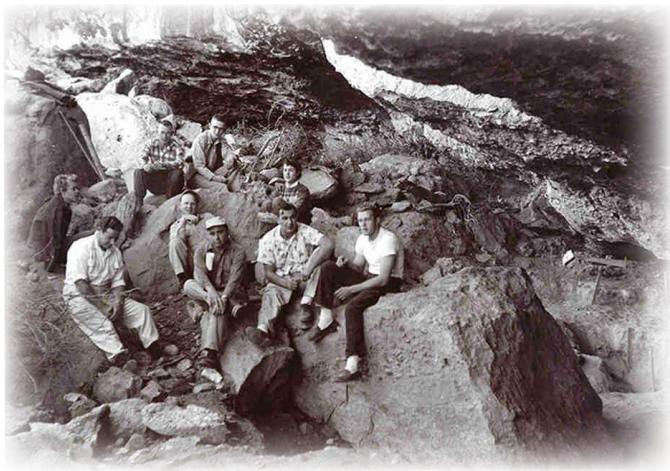
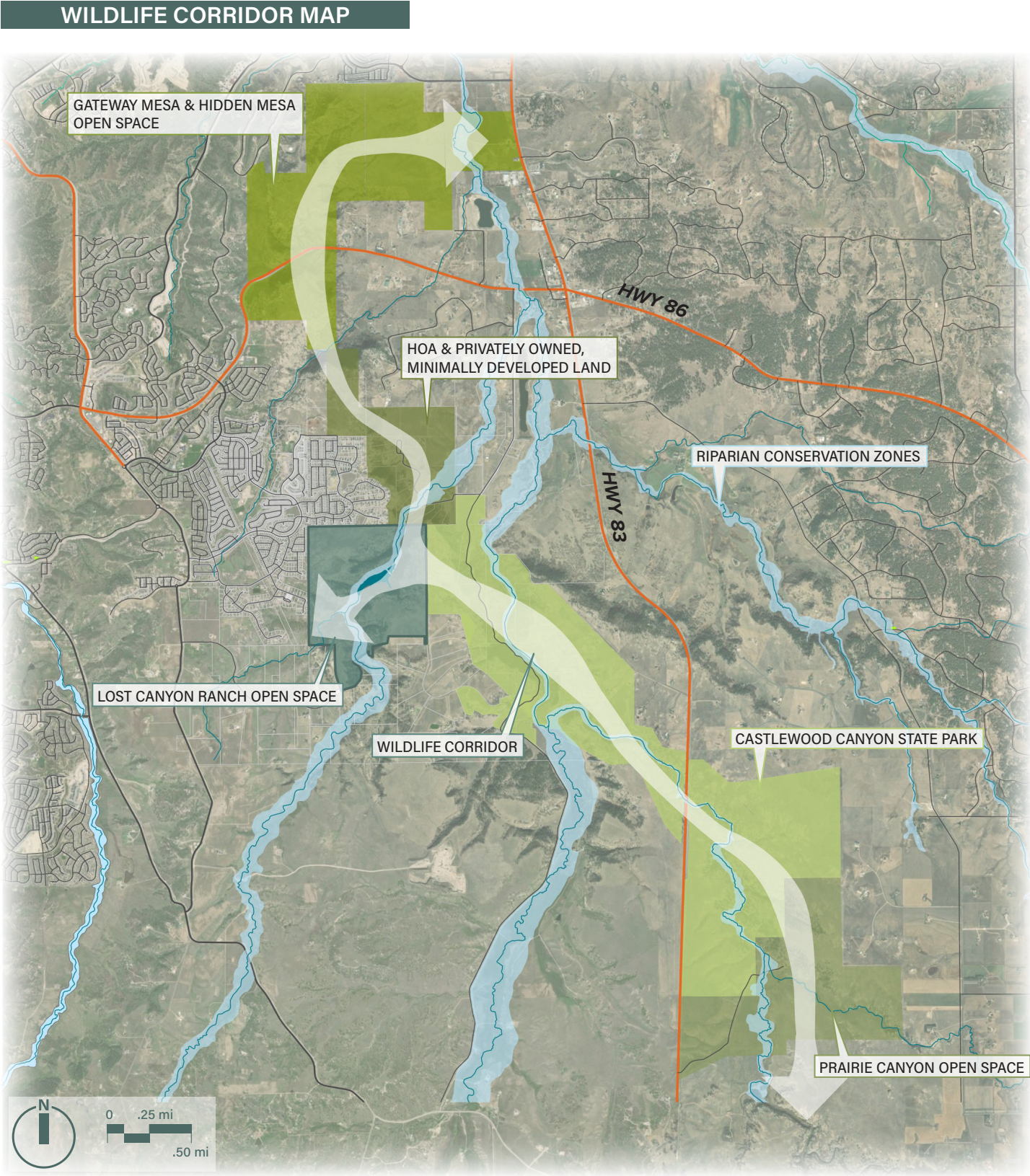


Image Credit: Colorado Encyclopedia



Image Credit: Town of Castle Rock



Note: Reference Baseline Inventory Report in the management plan for more information on the site's resources.

Conservation Easement



The Lost Canyon Ranch property was purchased with a conservation easement in place. The conservation easement guides usage and program elements on the site. Within the easement, disturbance and development is limited. The purpose of the easement is to:

Preserve Land for Outdoor Recreation and Education for the General Public

- » Provide access for passive outdoor recreation and education.
- » Integrate the site into the Town of Castle Rock's open space and trails program.

Protect the Relatively Natural Habitat of Wildlife and Plants

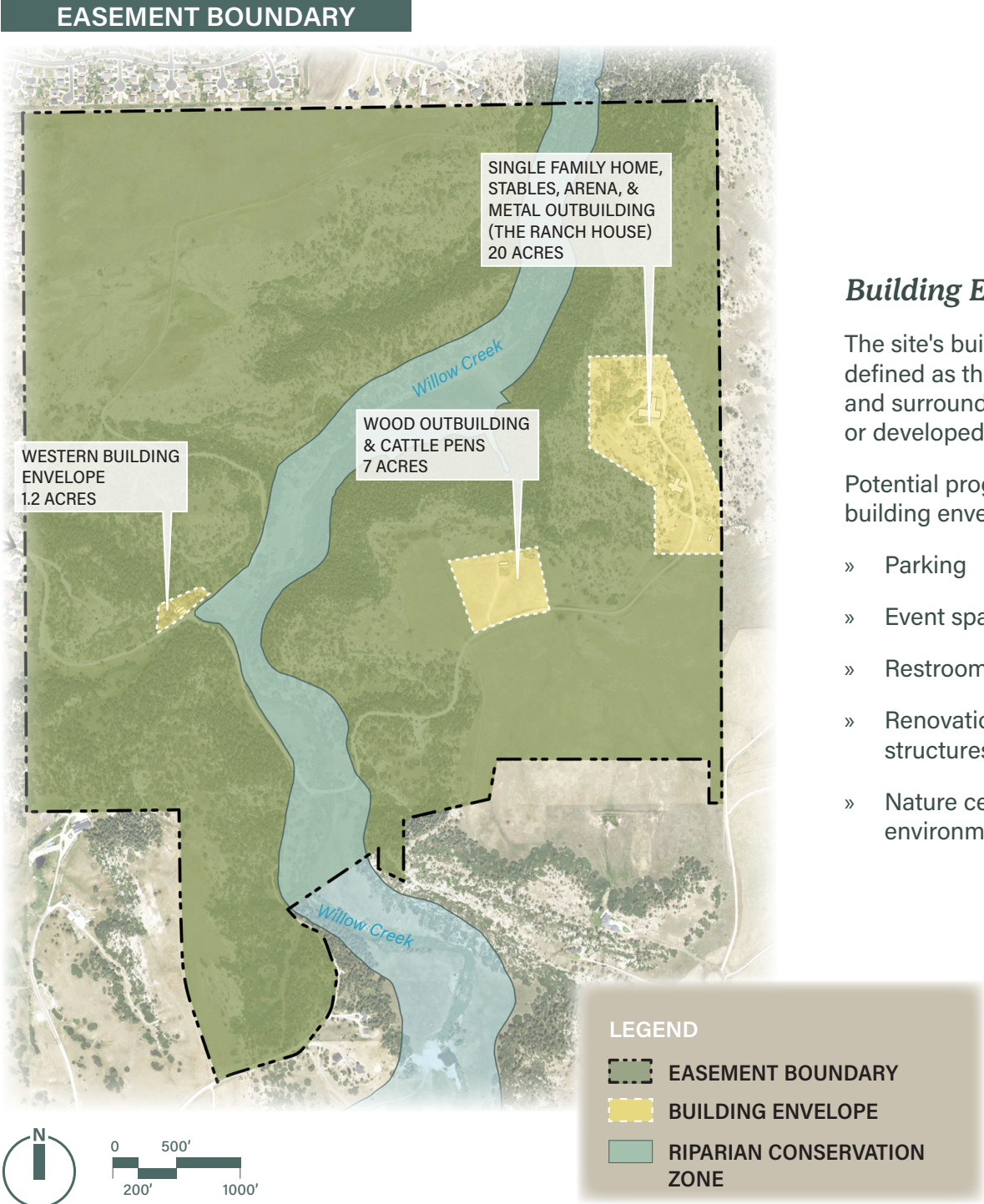
- » Maintain diverse vegetation communities that provide food, shelter, breeding grounds, and a migration corridor for several wildlife species.
- » Protect the natural habitat for the Preble’s meadow jumping mouse, a species listed under the Endangered Species Act (ESA), and whose habitat is identified by the riparian conservation zone.

Preserve Open Space

- » Protect scenic distant views.
- » Meet the objectives of the Town and County’s Conservation Policy and Comprehensive Master Plan's visioning on open space.
- » Maintain visual congruity of the open space to Castlewood Canyon State Park

Preserve History

- » Preserve historically important land.
- » Preserve the Franktown Cave which is listed under the National Register of Historic Places.
- » Preserve historical artifacts.



Building Envelopes

The site's building envelopes are defined as the existing buildings and surrounding disturbed and/or developed land.

Potential program within the building envelopes can include:

- » Parking
- » Event space
- » Restrooms
- » Renovations to existing structures
- » Nature center and environmental education



Existing Conditions & Site Analysis



Slope Analysis

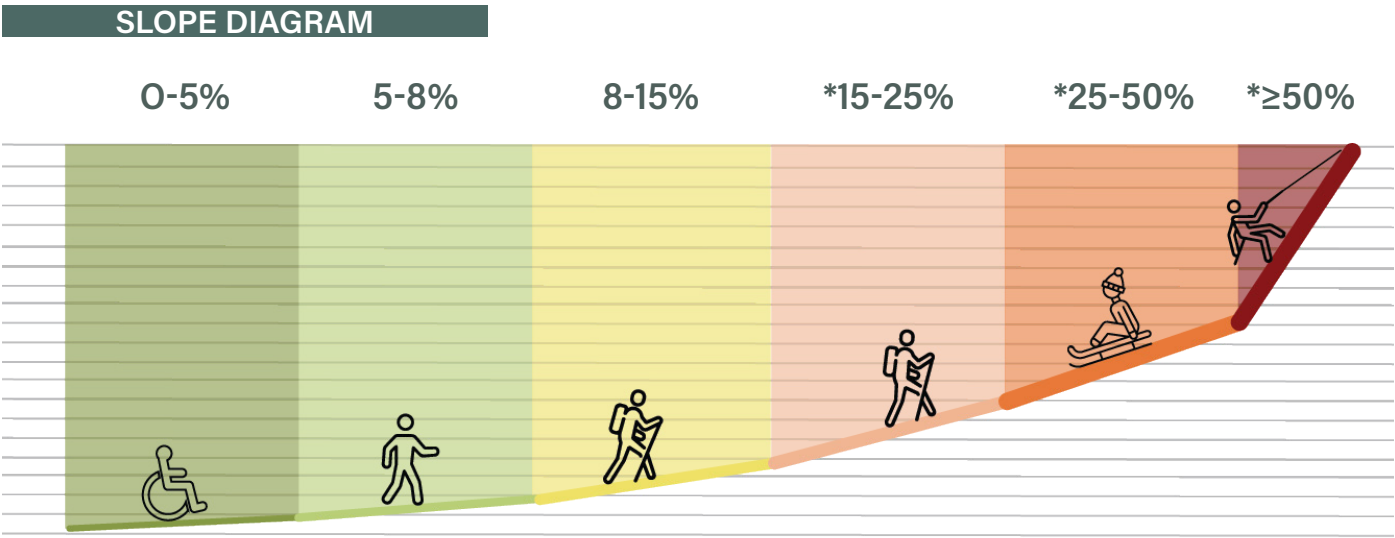
Topography was a key consideration in the design and layout of the trail network. Slopes and topography vary greatly across the site, ranging from prairie to steep cliff faces. The canyon extends through the center of the property and dominates the site. Sheer canyon faces result in dramatic views and unique geologic features but pose logistical challenges to the development of the trail network. There is a 320-foot elevation difference from the high point of the site located in the northwest to the low point in the northeast. The varied topography across the site provides a unique experience not found elsewhere in the town. The site drains to the northeast following the Willow Creek drainage pattern towards Cherry Creek.

Slope plays a crucial role in trail development and alignment as it influences erosion control, user safety, and sustainability. Steep slopes across a majority of the site will require design and construction strategies such as:

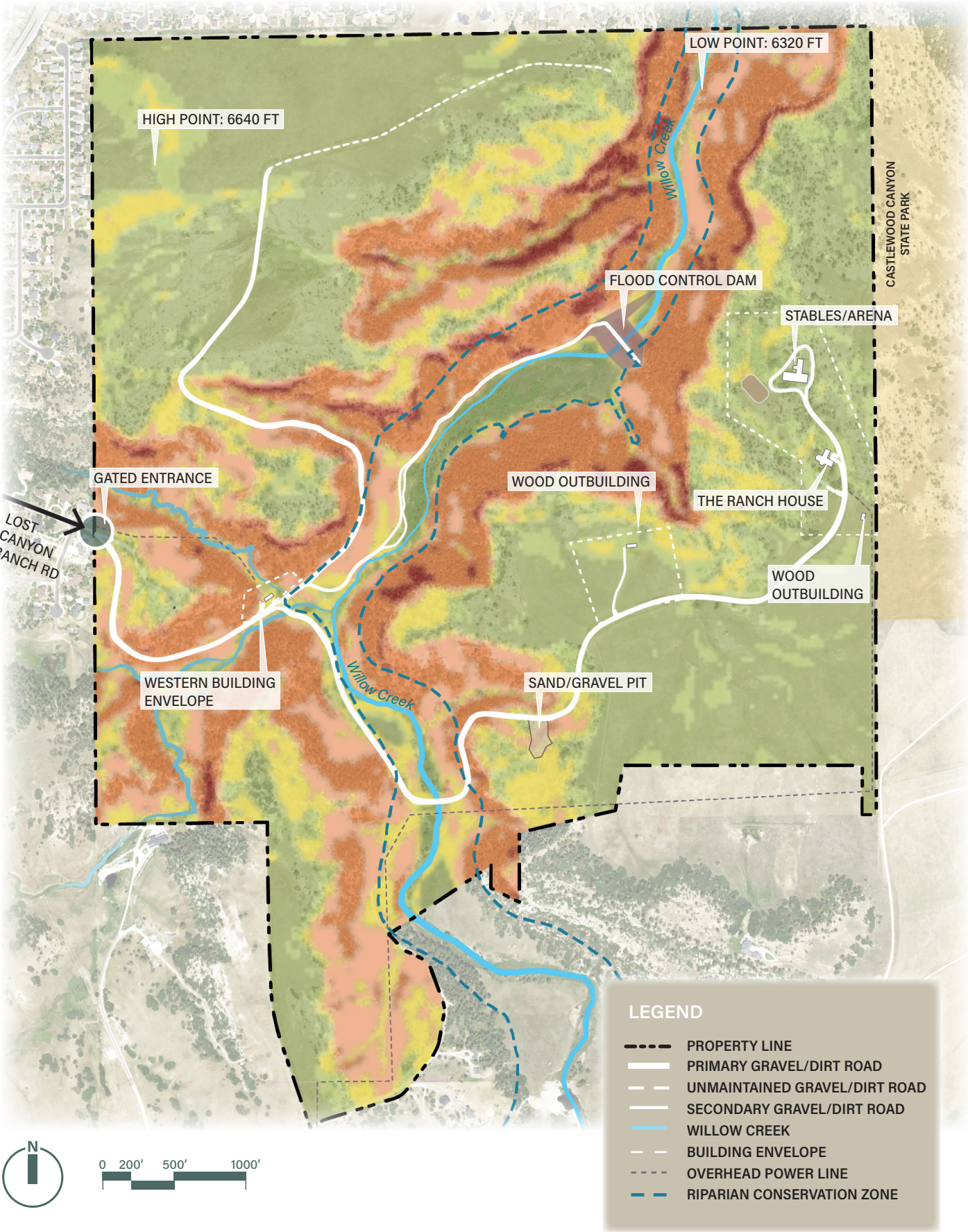
- Single-track trails designed for hiking use only
- Switchbacks, rock steps, chain holds, cables, and other steel features assist with grade and access rock surfaces with a slope greater than 50%
- Trails built into existing grade benches along hillsides

However, despite the predominance of steep slopes throughout the site, there are several flatter areas on the canyon rim and base where gentler, more accessible routes are possible.

The steep cliff edges of the canyon present opportunities for rock climbing. The Town will continue to evaluate this use and means of permitting for professionally installed and maintained routes in select areas.



*** SWITCHBACKS REQUIRED AT TRAILS FOR STEEPER SLOPES**



Landscape Communities

Lost Canyon Ranch is located on the Palmer Divide, a raised plateau that extends east through central Colorado. Its unique location between the high plains to the east and the Rocky Mountains to the west contributes to a high level of ecological and vegetative diversity.

The following landscape types can be observed on the site:

- **Canyon rim & mixed shrublands:** Canyon edges give way to gambel oak thickets, mountain mahogany, snowberry and chokecherry along dry slopes.
- **Cap rock & scrub oak savannah:** Gambel oak and junipers interspersed with fields of lichen-covered cap rock, cacti, and swathes of short grasses.
- **Ponderosa Pine & Douglas Fir forests:** Tall stands of Ponderosa Pines dominate the south-facing slopes. Large Douglas firs, gambel oak, and a variety of forbs, grasses, and small shrubs in the understory can be found on north-facing slopes and in shady areas.
- **Riparian:** Along Willow Creek and its tributaries, willow, cottonwood, and a variety of sedges, grasses, and forbs can be found. Invasive species such as Russian olive are also prevalent. Intermittent ponds, and small, plunge-pool wetlands can be found in forested areas throughout the site. The existing earth dam and Franktown Reservoir have also created a wetland environment.
- **Mixed grasslands:** The grasslands contain a wide variety of short and tall grass species endemic to the region such as big bluestem, blue grama, western wheatgrass, and side oats grama. The composition of the grasslands has been greatly effected by horse and cattle grazing.

Note: Reference Baseline Inventory Report in the management plan for more information on the site's landscape communities.



AREA A - CANYON RIM & MIXED SHRUBLAND



AREA A - CANYON RIM & MIXED SHRUBLAND



AREA B - CAP ROCK & SCRUB OAK SAVANNAH



AREA C - PONDEROSA & DOUGLAS FIR FOREST

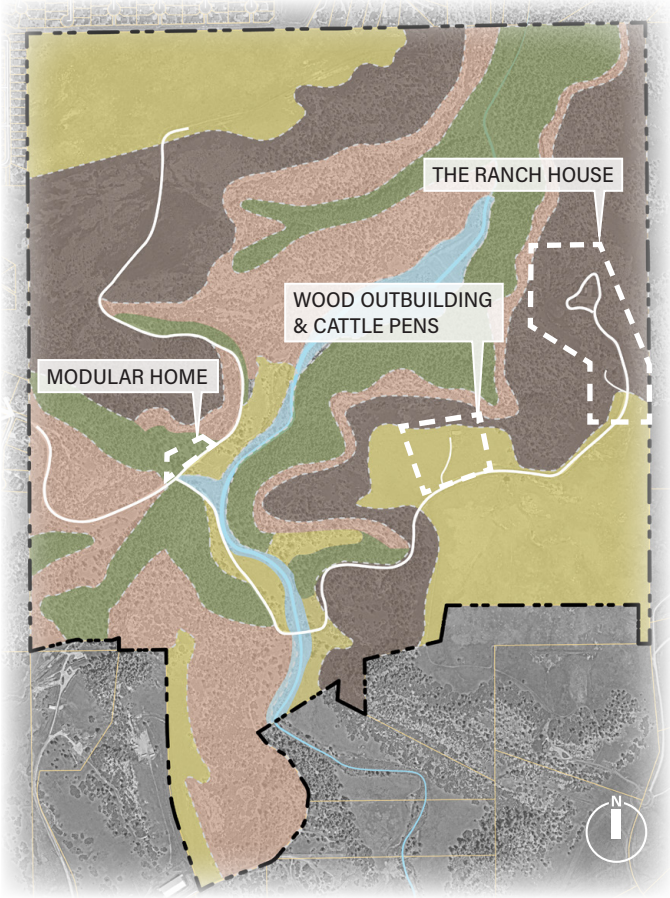


AREA D - RIPARIAN



AREA D - RIPARIAN

AREA KEY MAP



- | | |
|--------|--------------------------------|
| AREA A | CANYON RIM & MIXED SHRUBLAND |
| AREA B | CAP ROCK & SCRUB OAK SAVANNAH |
| AREA C | PONDEROSA & DOUGLAS FIR FOREST |
| AREA D | RIPARIAN |
| AREA E | MIXED GRASSLAND |

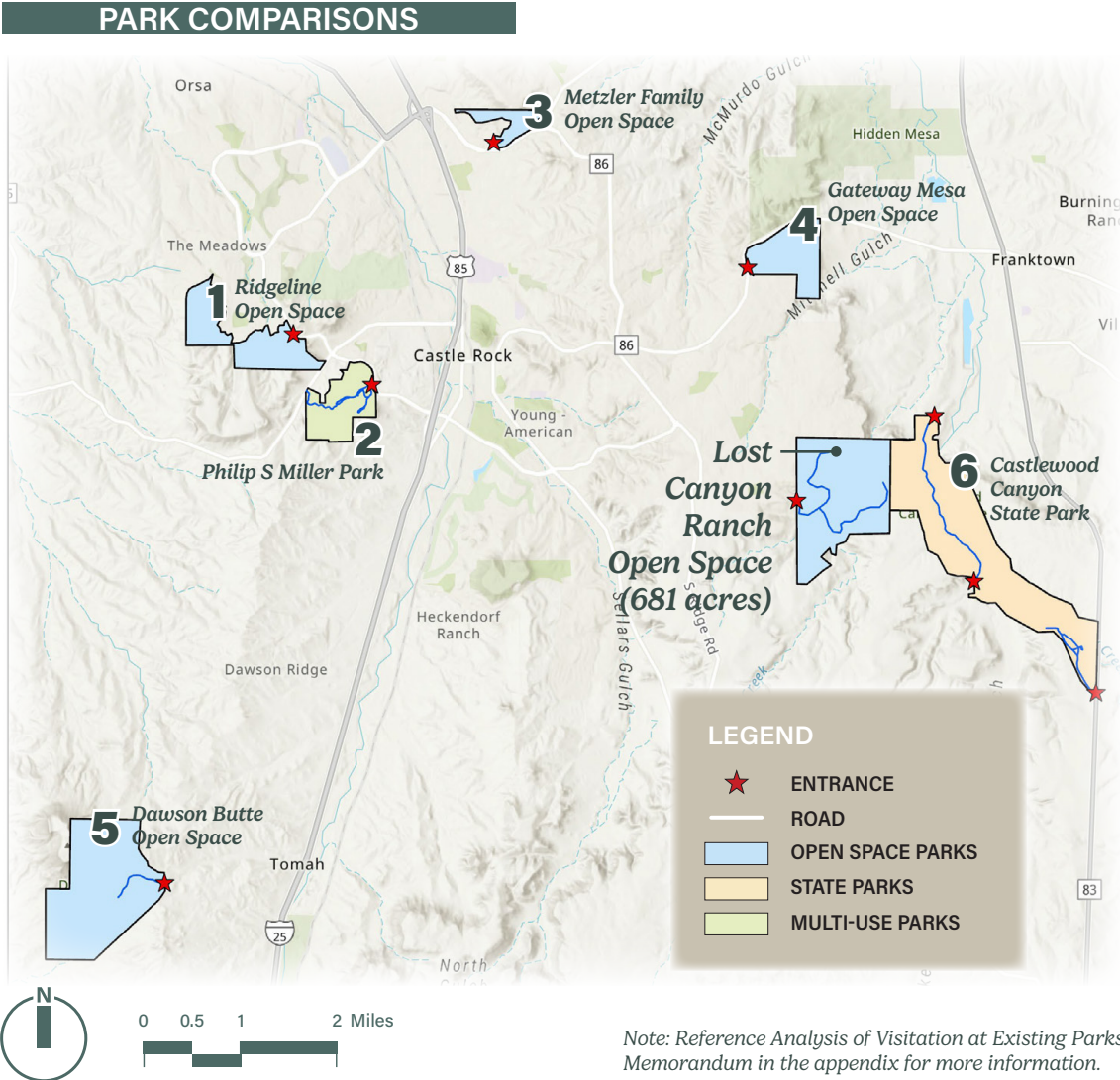


AREA E - MIXED GRASSLAND

Parking Assessment

Size, programming, daily visitors, and parking counts of several nearby precedent parks and open spaces were analyzed to help forecast usage and parking needs for Lost Canyon Ranch. Lost Canyon Ranch is similar in size to Dawson Butte Open Space however varies greatly in allowed uses and total trail mileage. Ridgeline Open Space has similar trail mileage to the proposed trail plan at Lost Canyon Ranch and the data forecasts that Lost Canyon Ranch will experience a similar daily visitor count.

Parking areas should be sized to handle the number of expected visitors during peak periods. It is recommended to maximize the number parking spaces in the first trailhead lot. Future parking should be provided across the property to help distribute users and accommodate demand. Total parking counts may change based on visitation data gathered after the property's opening. The Town should continue to monitor visitation and parking needs as the property evolves and additional programming is added.



1 : Ridgeline Open Space



SIZE 367 acres

PARKING

- (1) paved parking lot with 32 spaces, second parking lot located in Bison Park

DESCRIPTION

- (4) unpaved trails cover 13.5 miles
- Average Daily Trail Count (Clear Sky Way and Coachline) = 184

2 : Philip S. Miller Park



SIZE 320 acres

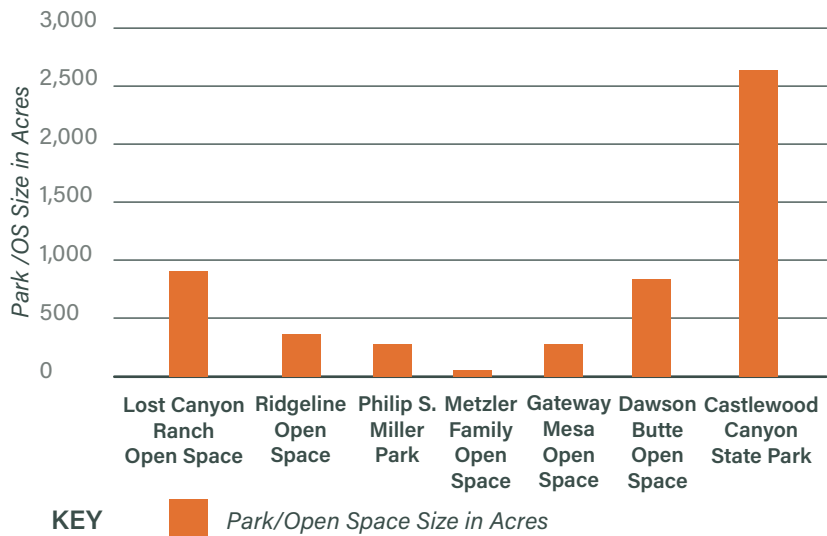
PARKING

- (4) paved parking lots with unpaved overflow spaces available

DESCRIPTION

- Multi-use park
- (3) paved and unpaved trails cover 11.5 miles
- Amphitheater and recreation center
- Plaza, splash pad, and a zipline/adventure course
- Turf fields
- Average Daily Traffic Count = 1,094

Acreage by Park/Open Space



3 : Metzler Family Open Space



SIZE 109 acres

PARKING

- (1) paved parking lot with 55 spaces
- DESCRIPTION
- (1) 4-mile unpaved trail through a historic homestead
- Average Daily Traffic Count = 60
- Average Daily Trail Count = 34

4 : Gateway Mesa Open Space



SIZE 276 acres

PARKING

- (1) gravel parking lot (~45 spaces)

DESCRIPTION

- (2) unpaved trails with wooden steps on a bluff with cliffs
- Average Daily Trail Count (Legacy Trail) = 61

5 : Dawson Butte Open Space



SIZE 828 acres

PARKING

- (1) gravel parking lot with car and horse trailer spots
- DESCRIPTION
- (2) trails include a 5-mile loop and 2.7 miles of horse paths with over 60 jumps.
- Average Daily Trail Count = 82

6 : Castlewood Canyon State Park

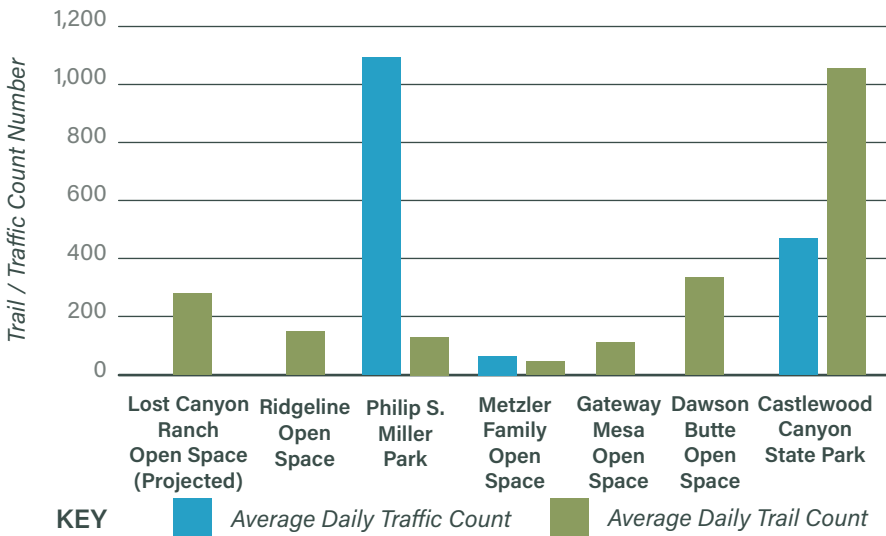


SIZE 2,628 acres

PARKING

- (4) parking lots and EV chargers
- DESCRIPTION
- (14) trails covering 12 miles
- 60-foot rock-climbing wall
- Pike's Peak Amphitheater
- 3 covered shelters
- Bridge Canyon Overlook
- Average Daily Traffic Count = 466

Average Daily Traffic/Trail Counts by Park/Open Space



Traffic Assessment

Expected Travel Patterns to Lost Canyon Ranch Open Space



Lost Canyon Ranch Road is a dead-end road that branches at the property gate. A noticeable downhill slope contributes to high speeds, despite a 20 mile-per-hour speed limit. Residents in the surrounding neighborhood have raised concerns about elevated speeds, particularly in the winter, when the road is often icy. Daily traffic data was collected over a 7-day period to establish a baseline for vehicle volumes and speed data. This data will be crucial in comparing baseline levels to usage and traffic after the property opens. Key takeaways from counter data:

- Busiest times of travel are weekday mornings and evenings
- 87% of cars recorded were going above the posted speed limit of 20 mph
- 11% of cars recorded were going above 40 mph

Surrounding neighbors have expressed concerns about the level of traffic that may increase due to Lost Canyon Ranch opening to the public.

Note: Reference Roadway Improvements Memorandum in the appendix for more information.

TRAFFIC CALMING CONSIDERATIONS

1 : Lost Canyon Ranch Road and Killen Avenue Intersection

EXISTING:

- Stop sign at Killen Ave

CONSIDERATIONS:



Speed Feedback Display

Add to existing 20 MPH speed limit sign to make drivers aware as they approach the downhill



Curb Extensions

Extend curb into Lost Canyon Ranch Rd to improve safety for pedestrians and encourage slower driving

Several areas have been identified for traffic calming interventions along Lost Canyon Ranch Road. All of these recommendations can be implemented as needed, depending on observed traffic level increases after the property opens. Recommendations to evaluate installing prior to opening include:

- Wayfinding and signage to be installed at new entry gate
- Addition of a stop sign at the exit of the gate



2 : Potential Traffic Calming Areas

EXISTING:

- Open sections of roadway with considerable hill on west end
- Volume: 128 vehicles per day (Oct 2024)
- Speed: 85% of vehicles are going 37 mph or less (Oct 2024)

CONSIDERATIONS:



Speed Cushion

Rounded raised areas of pavement to slow vehicles



Chicanes

Horizontal deflection to discourage higher speeds



Striping

Paint centerline and shoulder/parking to visually narrow the road

3 : Park Entrance Considerations

EXISTING:

- Currently uncontrolled (no stop signs)

CONSIDERATIONS:



Gateway Entrance

Proposed Open Space entrance gateway to slow traffic



Stop-Control

Stop sign for vehicles leaving the Open Space (neighborhood traffic does not stop)

Existing Roadway Conditions

Lost Canyon Ranch Road continues as a gravel road into the property. The road width changes throughout the property and will require improvements prior to opening to ensure visitor safety. The average existing road width is 20 feet and at its narrowest point is 14.5 feet wide. On the south side of the road, from the entrance to the western building envelope, the slopes drop off at the road edge in most locations, so a majority of the areas requiring widening will happen along the northern edge. There is an existing drainage ditch that runs along the northern edge of the road. There are three locations along the road where an inlet connects via underground culvert to an outlet on the southern side of the road. The existing CMP east of the western building envelope and drainage pattern along the road should be evaluated as part of the roadway analysis.



The existing westernmost culvert.



A significant amount of rutting in the road can be observed after use, especially after a storm.



Note: Reference Typical Roadway Sections in the appendix for more information.



At the western building envelope runoff sheet flows across the road creating gullies.



In many locations the road drops off quickly to the south.



The narrow road that branches off to the north of the western building envelope.



Asphalt at the main entry is deteriorating and breaking away at the edges.



The road heading north from the modular home site.



The road at the western building envelope after a snow storm. Many areas along the road are shaded by existing vegetation, resulting in icy conditions after heavy snowfall.



Master Plan Recommendations



Public Outreach Process Overview

Public Engagement

The Town of Castle Rock and the consultant team held a series of neighborhood meetings and two town-wide open houses to collect comments and feedback regarding the Lost Canyon Ranch property. Roughly 40 people attended the neighborhood meetings and 80 people attended each of the two town-wide open houses.

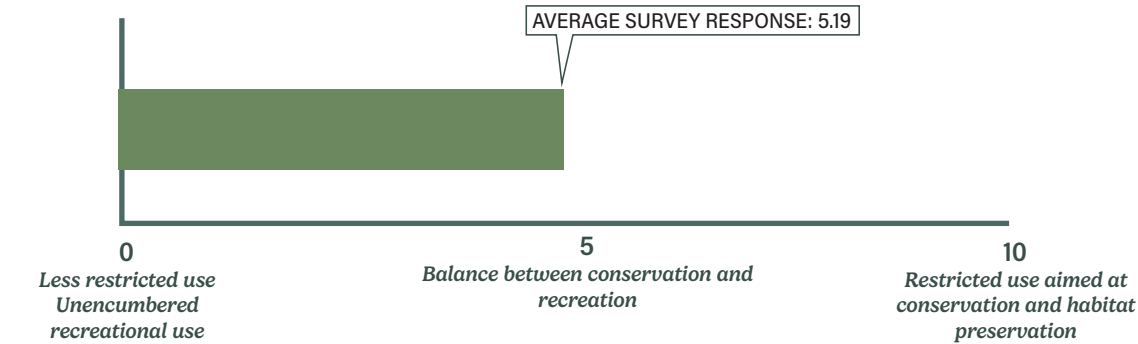
The team also created two online surveys for community members to fill out and provide feedback, a survey after the first town-wide meeting, which received 932 responses, and a follow-up survey after our second meeting, which received 92 responses. The feedback from the community meetings and online survey results aligned in many ways.

Select takeaways from the online survey responses:

90% live within Douglas County

63% of the above live in Castle Rock

Survey respondents were asked to indicate their preferred balance between less restricted recreational uses vs. restricted uses aimed at conservation and habitat protection. A majority of respondents felt that their should be an **equal balance** of some recreational uses with necessary restrictions to protect and preserve the site.

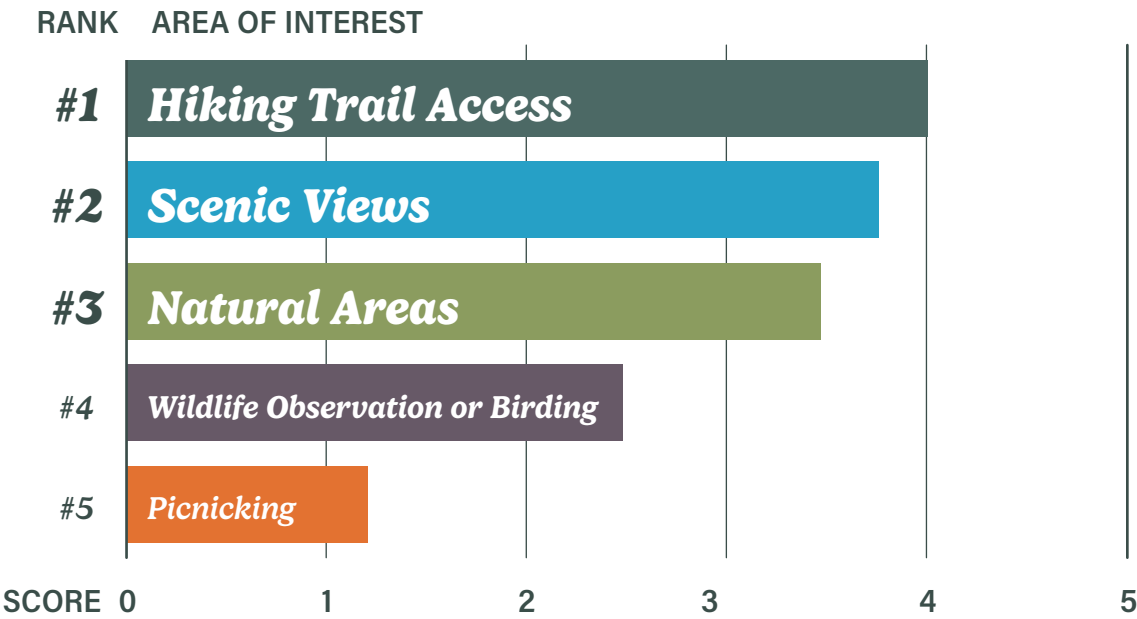


Note: Reference community feedback results in the appendix for more information.

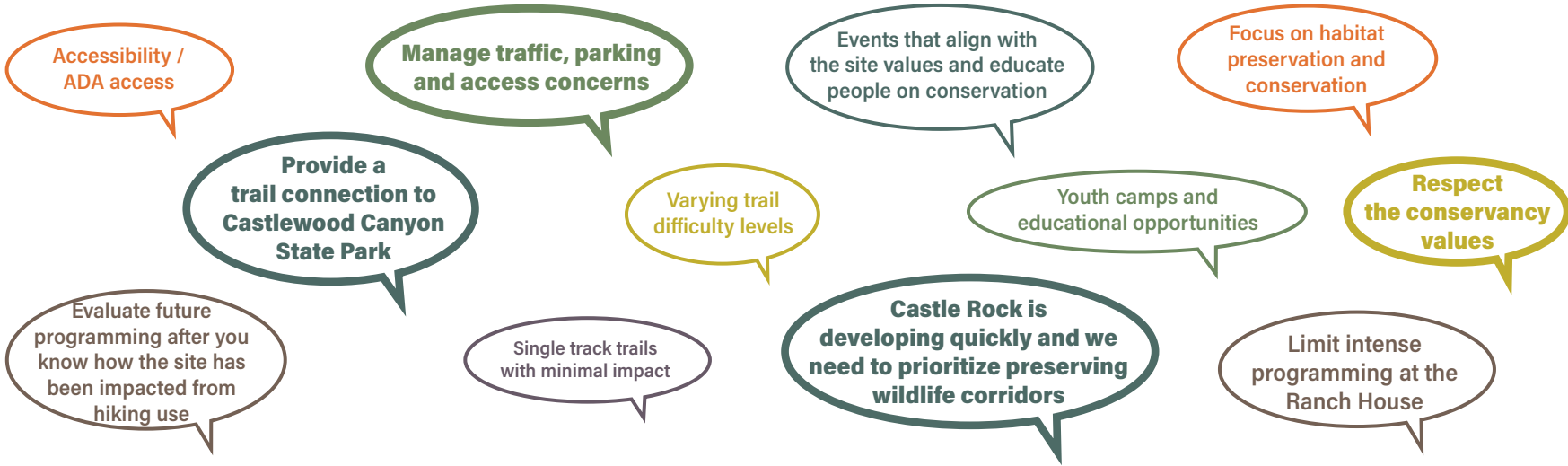


Survey respondents were asked to rank the following areas of interest as to the primary reason they would visit Lost Canyon Ranch Open Space.

49% ranked hiking trail access as their primary reason for interest



Other Feedback* We Heard



*Feedback gathered through comment cards at our community meetings and write in comment responses on our survey.

Trails Plan

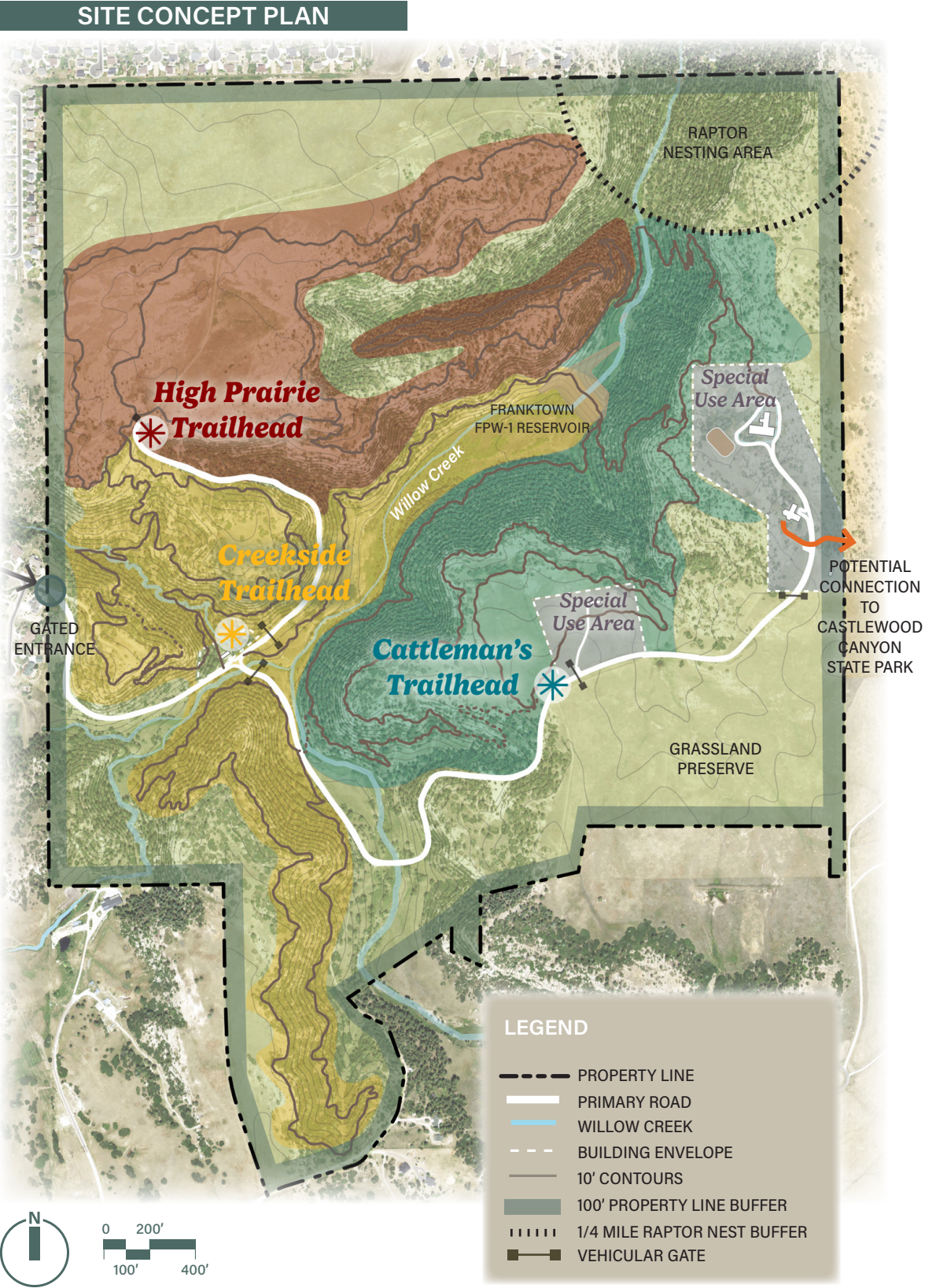
The **proposed trail network** at Lost Canyon Ranch has been developed through a comprehensive process of site analysis, site visits, and the walking of proposed trail locations. Through this process the proposed trail network identifies trails that minimize environmental impact and maintain trail stability, while maximizing the natural beauty and accessibility of the landscape. The goal of the trail network is to allow visitors to experience a variety of different landscapes and opportunities not found elsewhere in Castle Rock.

The proposed trail network includes roughly 16 miles of trails and 3 trailheads. It is recommended that trails be hiking access only. Restricting access to hikers ensures that Lost Canyon Ranch remains a protected natural area while offering safe and sustainable recreation. Prohibiting dogs and other domesticated animals, as well as bikes, aligns with the conservation easement's goal of habitat preservation, reduces resource damage, prevents user conflicts, and maintains the area's ecological integrity.

The trails include stacked loop trails, as well as out-and-back trails. All trails can be accessed at any trailhead and all trails connect together. The trails traverse varying landscape typologies and will have a variety of difficulty levels. Trails may have the following design elements to navigate grade and existing conditions:

- Single track trails
- Switchbacks
- Rock steps
- Cables and other steel features to assist with access to rock surfaces with a slope greater than 50%
- Creek crossings / bridges
- Chain holds at steep portions
- Trails built into existing grade benches along hillsides

Potential accessible trails are being explored where grades allow. Any potential areas are to be evaluated for conformance US Forest Service Accessible Trail Guidelines.



Note: Trails are conceptually shown and locations are subject to change.

TRAIL PRECEDENTS

30" wide single-track trails



Soft surface accessible trail



TOTAL TRAILS: +-16 Miles

- Creekside Trailhead Area
- Cattleman's Trailhead Area
- High Prairie Trailhead Area
- Special Use Area

Creekside Trailhead

The **Creekside Trailhead**, situated on the western portion of the property, is the most accessible trailhead from the gated entry at Lost Canyon Ranch Road. Due to this, it will serve as the primary trailhead and it is recommended that it be constructed first. Proposed trails in the Creekside Trailhead wind through both forested and canyon environments and provide access along Willow Creek to the existing flood control dam and wetlands. There are four trails, as well as the path to the trailhead picnic area, at this trailhead:

- Turkey Track Loop (1.5 miles)
- Gobbler's Pass Loop (1 mile)
- Rustler's Ridge Loop (2.6 miles)
- Willow Creek Path (0.7 miles, one-way)
- Picnic Way Path (0.1 mile)

The Willow Creek Path is planned to be an accessible route, pending full evaluation that the trail meets US Forest Service Accessible Trail Guidelines where applicable. The proposed trailhead features include parking spaces, a vault or composting toilet, picnic tables, and a shade shelter.

Refer to the western building envelope page for trailhead parking concepts and layout

KEY MAP



LEGEND

PROPOSED TRAILS

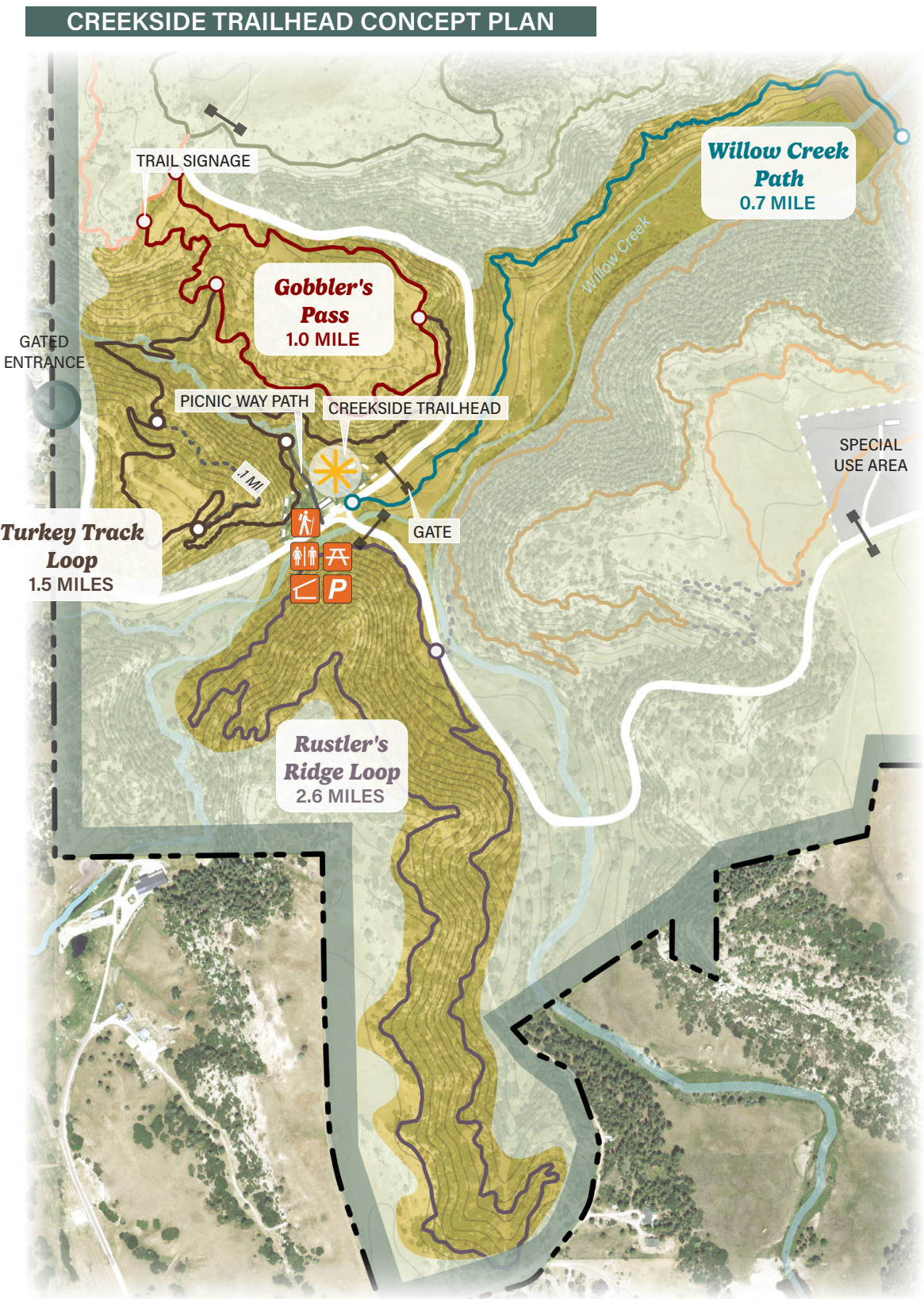
- TURKEY TRACK
- GOBBLER'S PASS
- RUSTLER'S RIDGE
- WILLOW CREEK
- CUT THROUGH

TRAILHEAD AMENITIES

INITIAL	FUTURE

MAP BASE

- PROPERTY LINE
- PRIMARY ROAD
- WILLOW CREEK
- BUILDING ENVELOPE
- 10' CONTOURS
- 100' PROPERTY LINE BUFFER
- VEHICULAR GATE



Note: Trails are conceptually shown and locations are subject to change. Trail signage is conceptually shown at trail intersections. Additional markers may be added for trail safety. See trail signage page for more information.

Turkey Track Loop
SCENIC VIEW



Willow Creek Path
SCENIC VIEW



Rustlers Ridge Loop
SCENIC VIEW



Cattleman's Trailhead

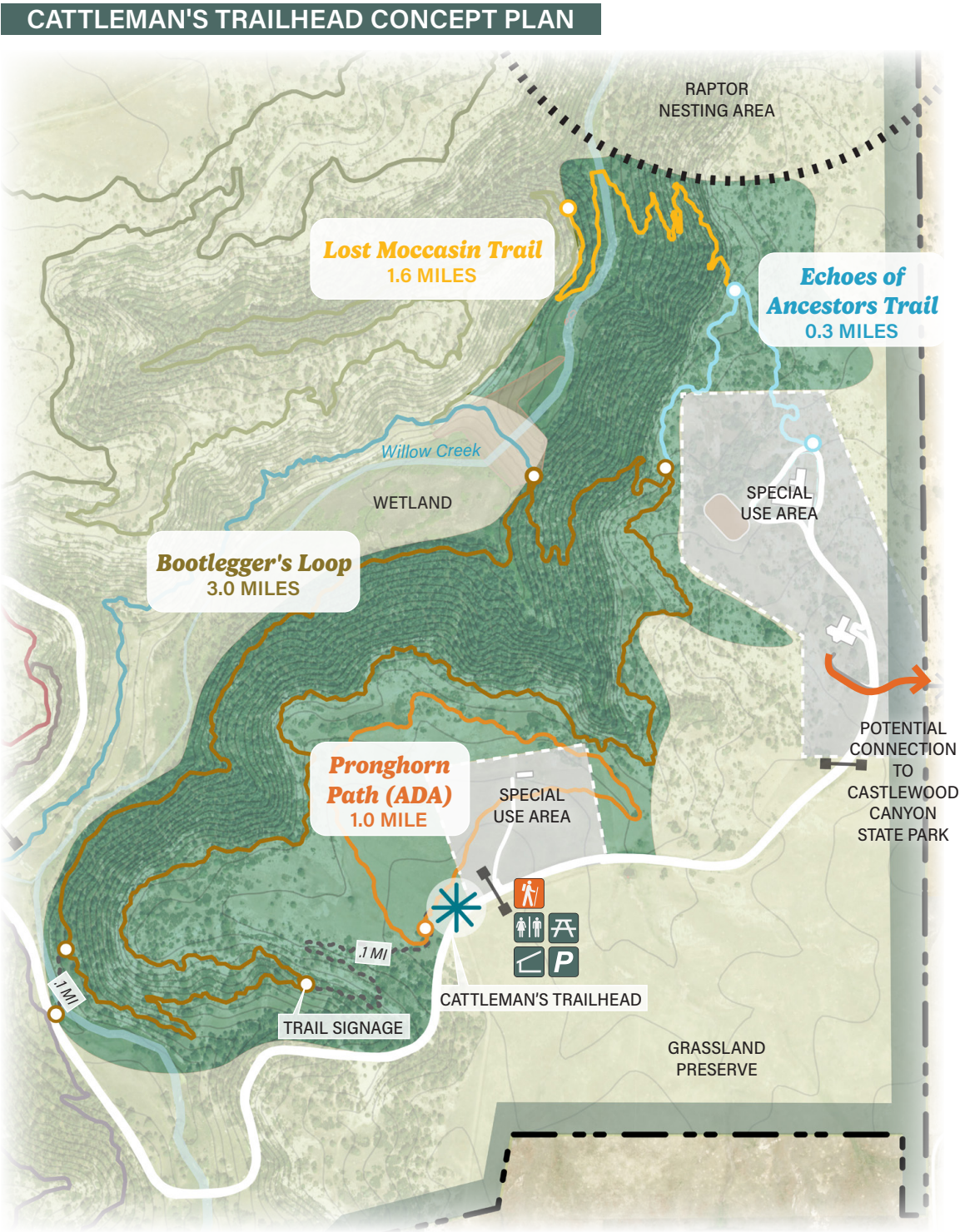
The **Cattleman's Trailhead** is situated southeast of the property's center along the main gravel road. Proposed trails at this trailhead feature expansive open prairie, dense mature forests, rocky outcroppings, and canyon cliffs. There are four trails associated with this trailhead:

- Lost Moccasin Trail (1.6 miles)
- Bootlegger's Loop (3 miles)
- Pronghorn Path (1 mile)
- Echoes of Ancestors Trail (0.3 miles, one-way)

The Pronghorn Path is planned to be an accessible route, pending full evaluation that the trail meets US Forest Service Accessible Trails guidelines where applicable.

For initial phases of the project, this trailhead would be walking access only. Several gates along the road prohibit car access. At a later date, additional parking and amenities, similar to the Creekside Trailhead, are planned for this trailhead.

KEY MAP



Bootlegger's Loop
SCENIC VIEW



Lost Moccasin Trail
SCENIC VIEW



Pronghorn Path
SCENIC VIEW



Echoes of Ancestor's Trail
SCENIC VIEW



LEGEND		TRAILHEAD AMENITIES		MAP BASE	
PROPOSED TRAILS		INITIAL	FUTURE		
	BOOTLEGGER'S				PROPERTY LINE
	PRONGHORN (ADA)				PRIMARY ROAD
	LOST MOCCASIN				WILLOW CREEK
	ECHOES OF ANCESTORS				BUILDING ENVELOPE
	CUT THROUGH				10' CONTOURS
					100' PROPERTY LINE BUFFER
					1/4 MILE RAPTOR NEST BUFFER
					VEHICULAR GATE

High Prairie Trailhead

The **High Prairie Trailhead** is located northeast of the property's center. Proposed trails offer dramatic views of the canyon rims and allow visitors to experience the unique cap rock ecosystem. While this trailhead is located closest to existing neighborhoods, topography and existing vegetation around the trailhead provides ample screening from nearby neighborhoods for a trailhead and parking. There are three trails associated with this trailhead:

- Prairie Vista Loop (1 mile)
- Golden Eagle Loop (2 miles)
- Big Bear Hollow Trail (1.1 miles, one way)

This trailhead has the best opportunity of the three trailheads to provide ADA access to locations with scenic views of the canyon. There is potential for a portion of the Golden Eagle Loop to be improved in the future to make it an accessible trail to the canyon rim.

For initial phases of the project, this trailhead would be walking access only. Several gates along the road prohibit car access. A gate is proposed beyond the trailhead to protect the property and raptor nesting habitat from unauthorized access. At a later date, additional parking and amenities, similar to the Creekside Trailhead, are planned for this trailhead. Additional improvements to the roadway can be evaluated to bring parking and vehicular access to this trailhead.



Note: Trails are conceptually shown and locations are subject to change. Trail signage is conceptually shown at trail intersections. Additional markers may be added for trail safety. See trail signage page for more information.

Prairie Vista Loop
SCENIC VIEW



Golden Eagle Loop
SCENIC VIEW



Big Bear Hollow Trail
SCENIC VIEW



Big Bear Hollow Trail
SCENIC VIEW



KEY MAP



Trailhead Features

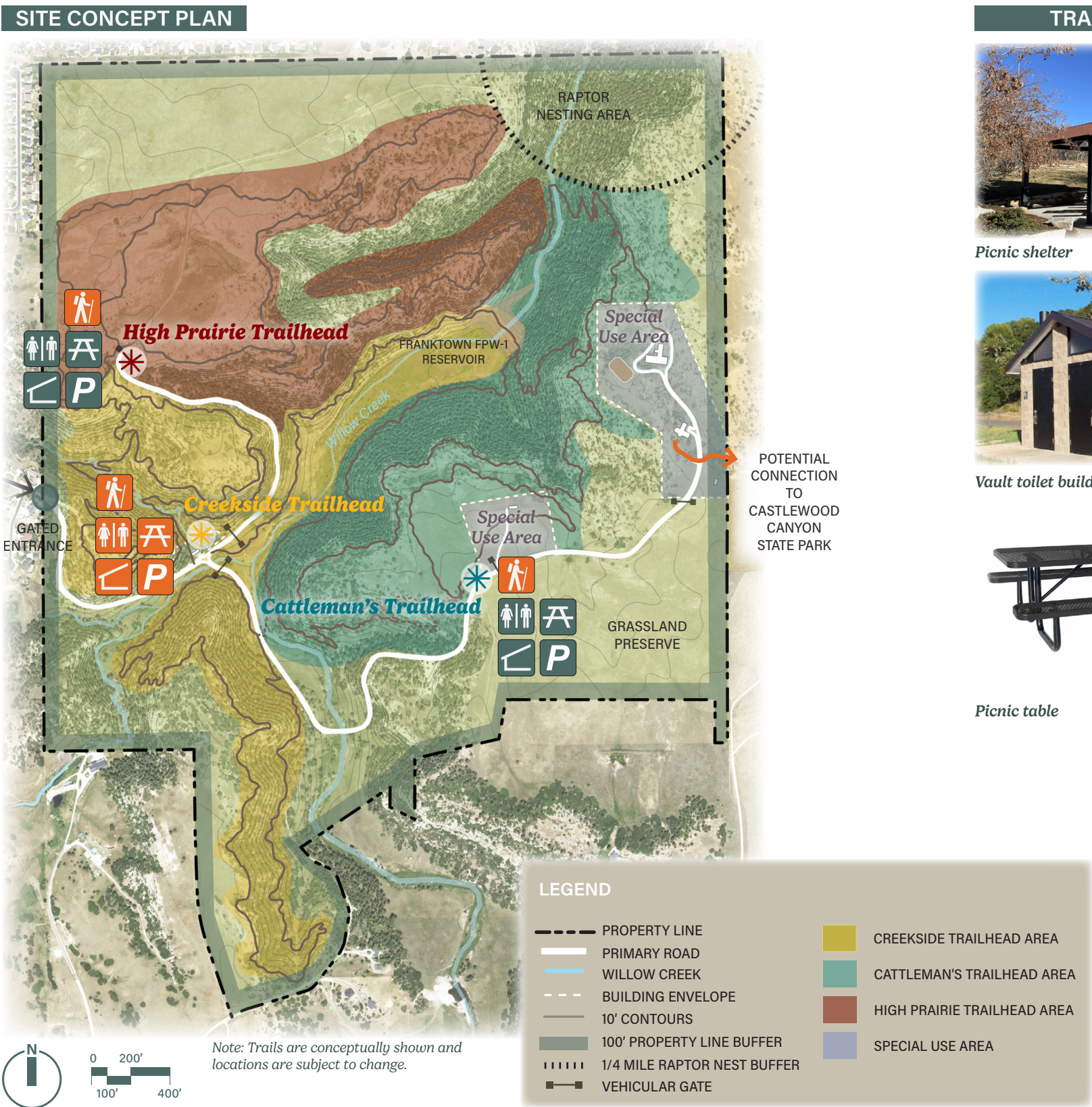
The trailheads throughout the property have been designed to have a minimal impact on the surrounding site, while providing needed amenities for visitors.

The trailheads are to use Town of Castle Rock standards and/or preferred products for the following amenities:

- Picnic shelters
- Picnic tables
- Restrooms (vault and/or composting toilet, or restroom enclosure with port-o-let)
- Benches
- Bear proof trash cans
- Signage related to rules, regulations, and trail maps
- Parking lots

Additional amenities may be added as needed.

It is recommended that the trailheads be phased. Proposed initial trailhead improvements will be focused on the Creekside Trailhead and it will serve as the main trailhead and initially will be the only one with vehicular access. All trailheads are proposed to have signage in the initial phases. Once the property is open, town staff will continue to monitor visitation and determine the timeline for providing additional parking and amenities at the Cattleman's and High Prairie Trailheads.



TRAILHEAD FEATURE PRECEDENTS



Picnic shelter



Gravel parking lot



Vault toilet building



Port-o-let enclosure



Picnic table



Bear-proof trash can

INITIAL	FUTURE
	RESTROOM
	PICNIC TABLES
	SHELTER
	PARKING LOTS
	HIKING TRAIL

Site Entrance

Lost Canyon Ranch is currently accessed via a gated entry off of Lost Canyon Ranch Road. The current gate is set back roughly 155 feet from the main road making it difficult for those unfamiliar with the site to see the entrance. To improve visibility and facilitate easier site access, the following entry improvements are recommended to be evaluated:

- Install a new 24 foot wide, vehicular access gate closer to the turn off for the property (final gate placement based on engineering recommendations).
- Install asphalt paving up to the new gate.
- Install curb and gutter to the gate.
- Install a new v-pan to direct drainage from Lost Canyon Ranch Road.
- Provide fencing along the north edge of the road to deter visitors from driving around the gate when the property is closed.
- Install a new entry monument sign in front of the gate to assist with wayfinding.
- Existing gate walls are to remain to keep the entry narrow and slow down traffic.
- Install a security pole with a camera behind the gate to enhance site monitoring and safety.

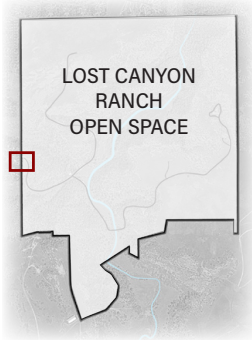
The gate will remain open from dawn to dusk, with the exception of special events, and remain closed at all other times. The potential to pave the drive from the entry to the Creekside Trailhead is currently being evaluated for feasibility.

NEW ENTRY GATE CONCEPT



Note: Conceptual rendering to communicate design intent only. The final design may vary from shown.

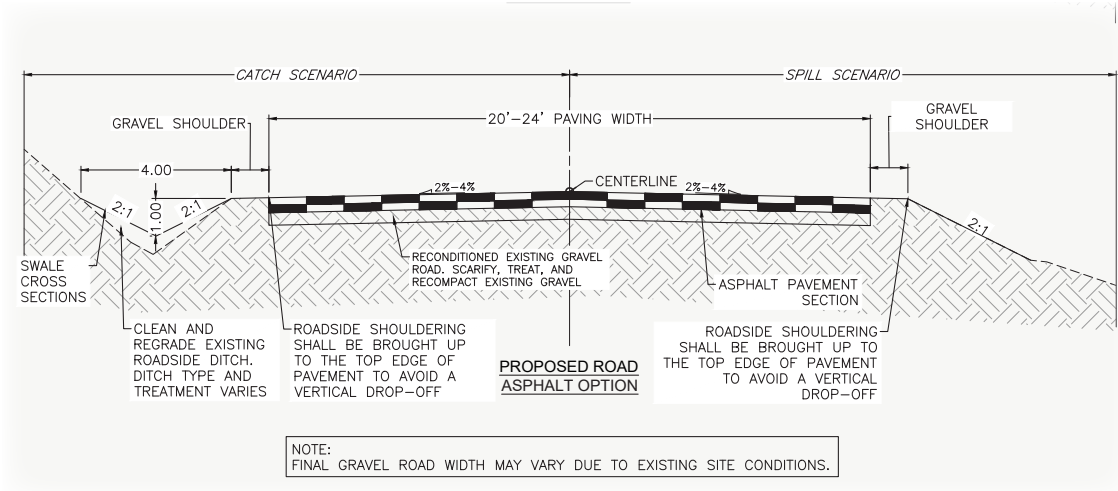
KEY MAP



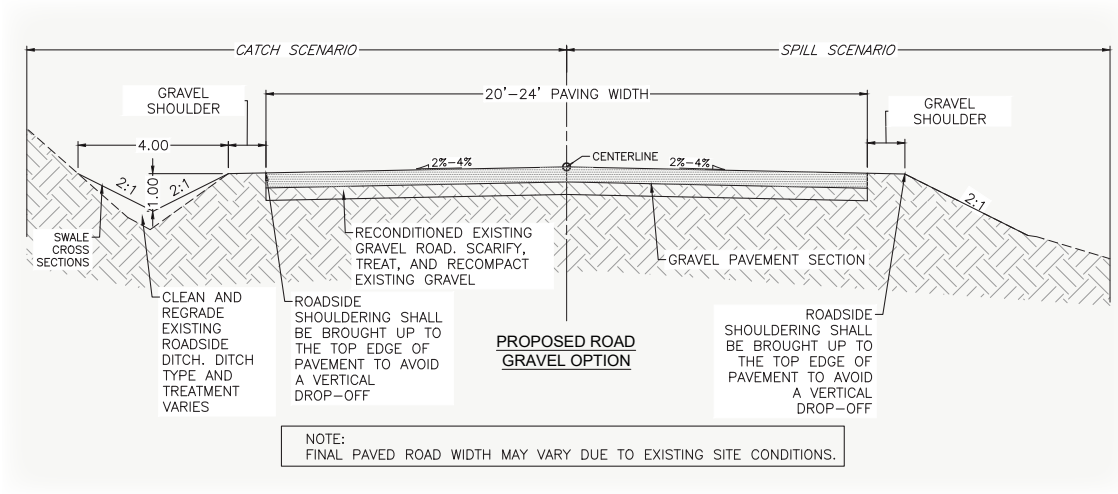
Proposed Entry Signage Concept
(See Wayfinding & Signage page for park signage.)

Roadway & Drainage Improvements

Roadway conditions are currently being evaluated to provide a 24'-wide, 2-way road to the first trailhead. Slopes and existing vegetation constrict the road in several locations. Most widening improvements would occur to the north of the road. The existing drainage ditch that runs along the north side of the road may be realigned to the toe of the slope as needed to accommodate the widening of the road. Additional safety measures such as a pull-off area and traffic barriers may be added along the road pending a roadway survey and engineering recommendations. It is recommended that drainage continue to be captured in roadside ditches and utilize the existing culverts that daylight south of the road. Measures to slow down water in the ditches, such as rip rap and check dams, may be utilized. In addition, improvements for stormwater conveyance include an additional culvert to the west of the future parking lot at the western building envelope.

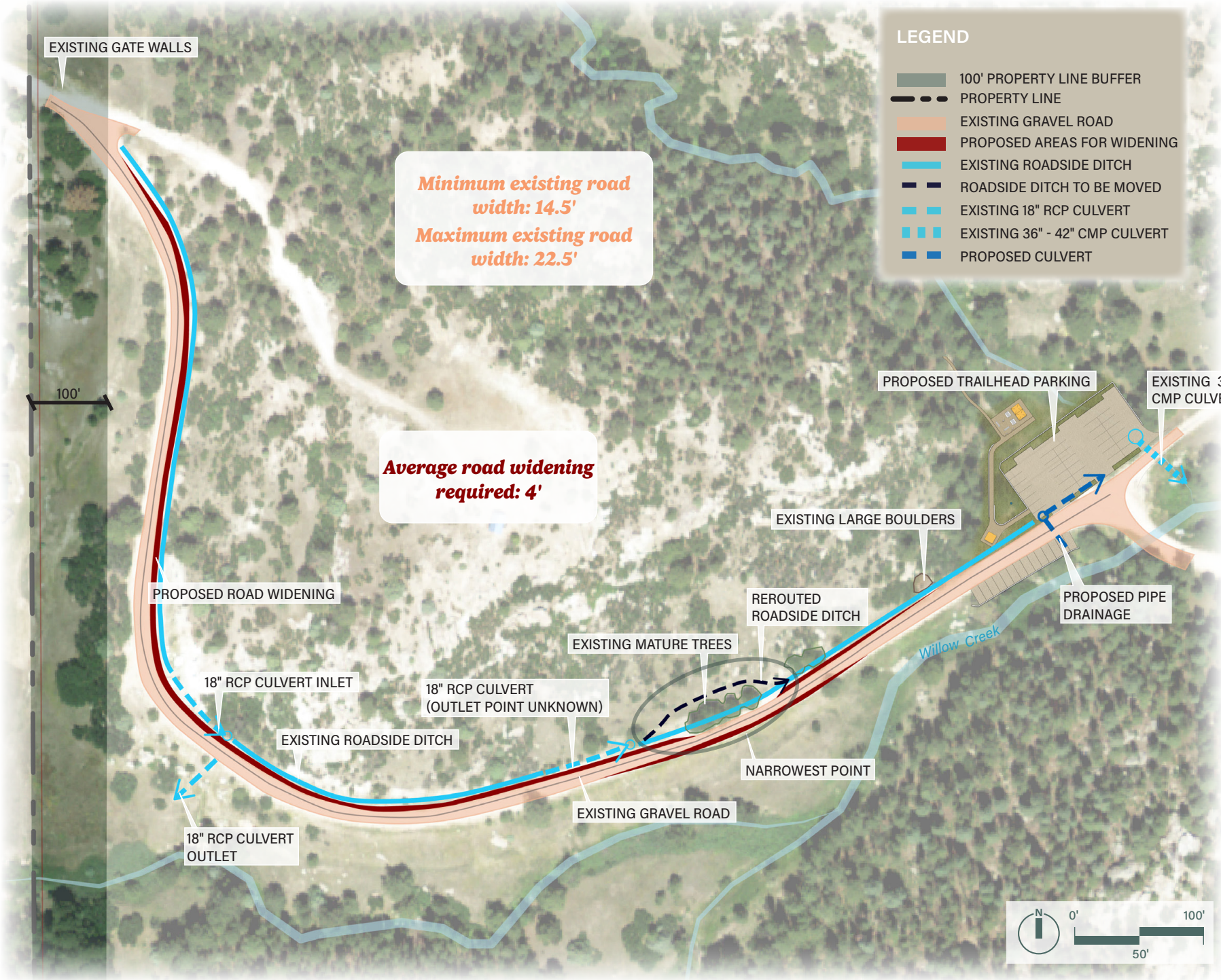


Proposed roadway section option 1: Asphalt



Proposed roadway section option 2: Gravel

Note: Reference Typical Roadway Sections in the appendix for more information.



Wayfinding and Signage

Signage and wayfinding are crucial to the safety of visitors to the site and the property itself. It is recommended that a variety of site signage be installed to help direct and inform users on the property. These preliminary sign concepts draw inspiration from Lost Canyon Ranch's natural surroundings, through the representation of the canyon's edge and the use of stone and warm-toned metals. The following signs are proposed at trailheads and along the trails as needed:

- A rules and regulations sign with a trail map of the property
- 1/4-mi, 1/2-mi, and mile markers along the trail as needed
- Directional signs at key points to guide users

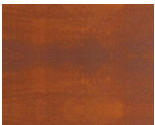
Each trail will have a unique color and potentially a symbol to distinguish trails. Mile markers, directional signs, and other signs will correspond to those colors to facilitate easier identification.

All signs are to be installed with in-ground footings, except for signs located in areas with cap rock, which will require a surface mount.

Interpretive signage will be located throughout the site to highlight cultural and natural resources and the history of the site.

These signs are preliminary concepts, additional signs may be added as needed.

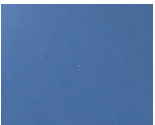
MATERIALS PALETTE



Corten Steel



Stone



Steel with powder coat finish

*Sign colors to be keyed to trail colors and will vary

▲ TRAILHEAD KIOSK SIGN



Kiosk signs will include a site map, rules and regulations, and has space to accommodate additional information if needed.

* ENTRY & RANCH HOUSE SIGN

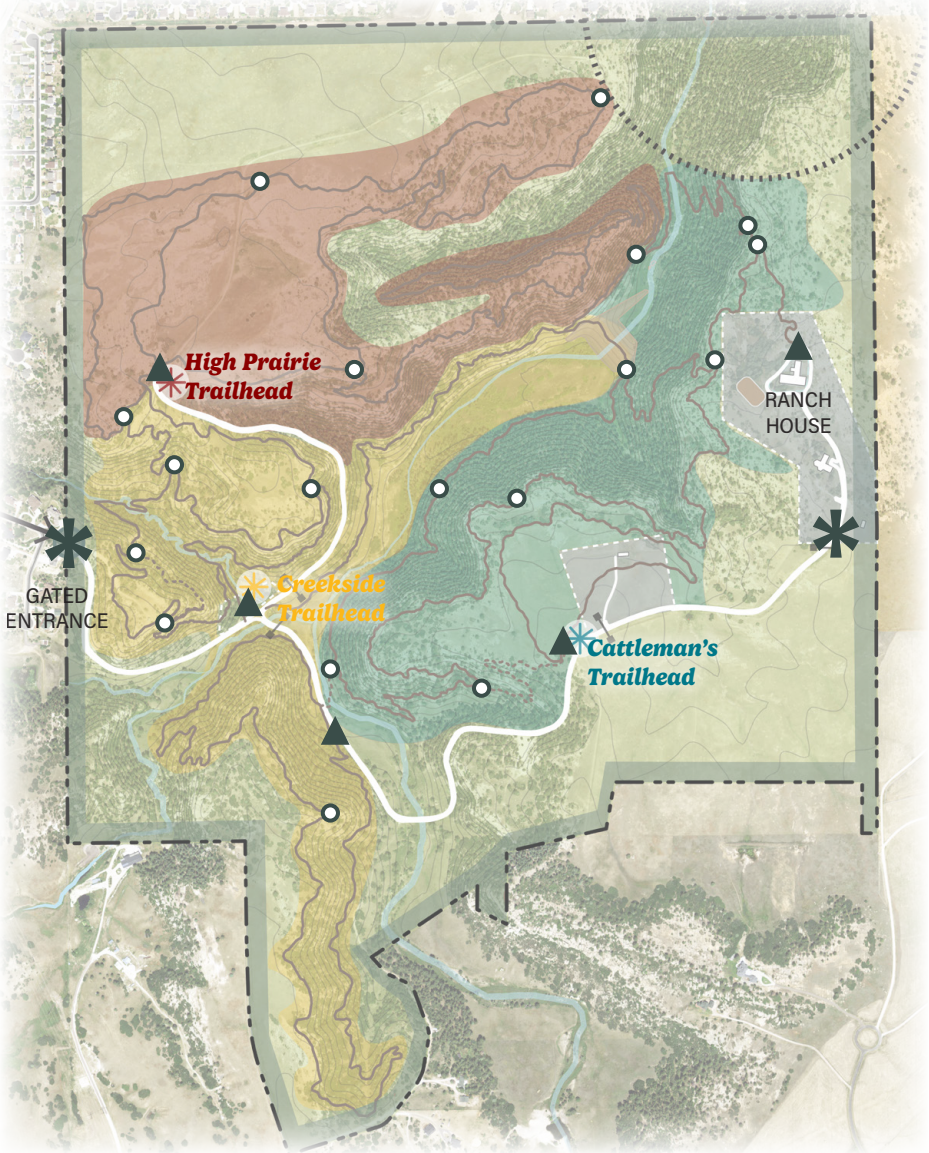


○ TRAIL DIRECTIONAL AND MILE MARKER SIGNS



The larger trail directional signage includes a site map and has room to accommodate additional information. The colored top ties to the trails plan and indicates which trail the visitor is on. Additional wayfinding signage can be included in areas where it may be hard to delineate the trail, such as on top of caprock.

PROPOSED SIGN LOCATIONS



Note: Trail signage is shown conceptually. Additional signage may be included dependent on final trail layout and conditions.

INTERPRETIVE SIGNAGE PRECEDENT



Fencing and Access Plan

Existing fencing can be found along the property line and at several locations within the property. The condition of fencing varies across the site. It is recommended that existing fences be reinforced or replaced at key points along the property line where houses are closest and where there is known trespassing onto the property. Existing interior fencing in the northwestern and southwestern parts of the property should be removed as to not restrict wildlife movement.

It is recommended that fencing be installed surrounding the Ranch House building envelope to prevent access to the house and other structures in the first phases of the project. It will be determined at a later date if fencing is still needed once the area is opened for programming.

Several gates are proposed along the roadway to restrict vehicular access to the entire property. Prior to the property's opening, five gates, not including the entry gate, are to be installed along the drives. These include:

- Two at the Creekside Trailhead to prevent vehicular access to the north and south
- One at the Ranch House building envelope
- One at the northern edge of the road at the High Prairie Trailhead. This gate will likely be permanent to prevent access to raptor nesting areas and crucial habitat.
- One at the Cattleman's Trailhead to prevent vehicular access past the future trailhead parking lot.

Gates are to be reevaluated as additional parking is provided at the Cattleman's and High Prairie trailheads. Any proposed gates must maintain a privately held access easement through the site.

It is recommended that traffic barriers, such as wood bollards, fencing, or boulders be installed along the road where the existing grade drops quickly off the side of the road. One location has been identified on the map but other locations may be added pending a roadway survey.

EXISTING FENCING



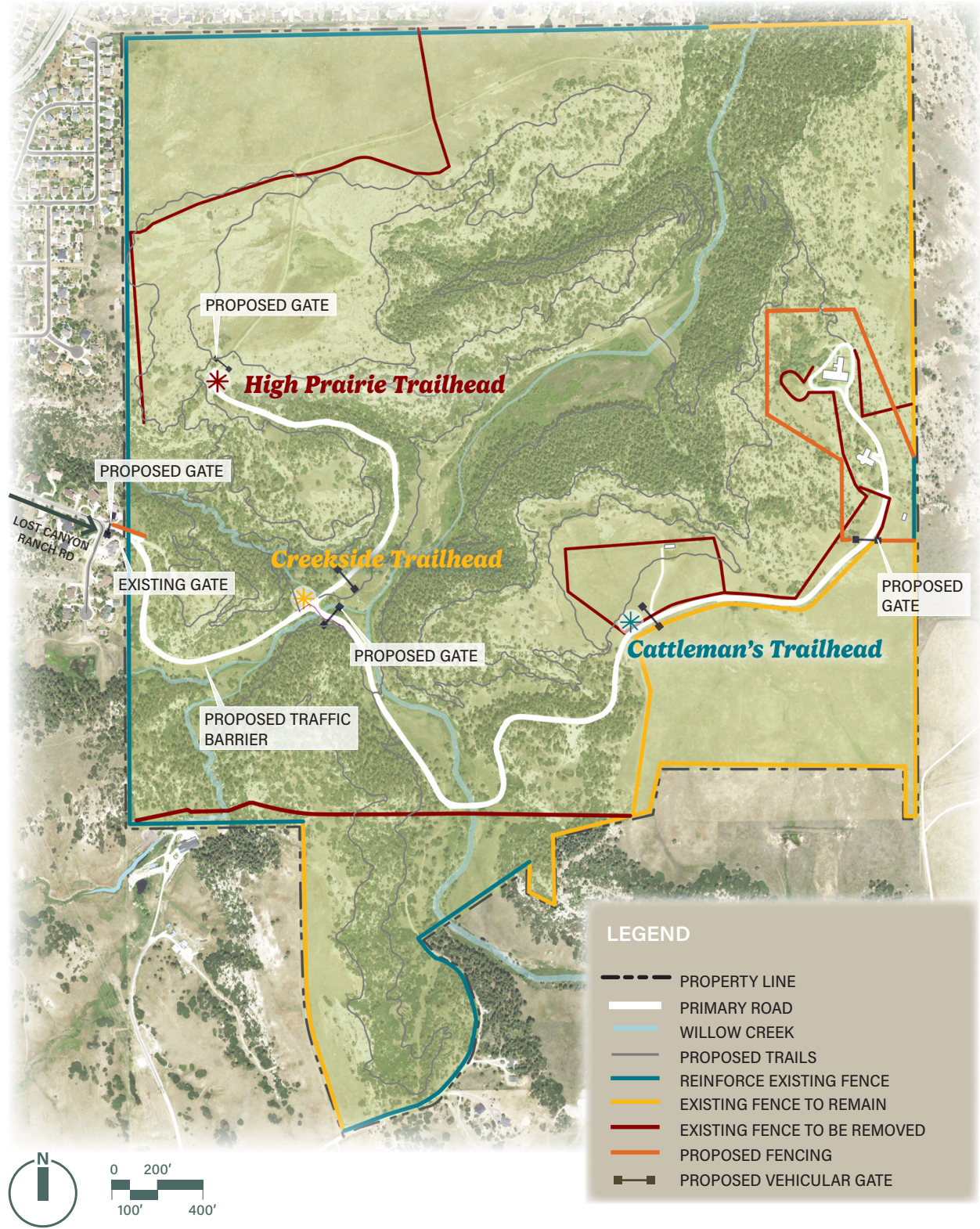
GATE PRECEDENT



PEDESTRIAN TURNSTYLE ENTRY



SITE CONCEPT PLAN



Special Use Zones | *The Ranch House*

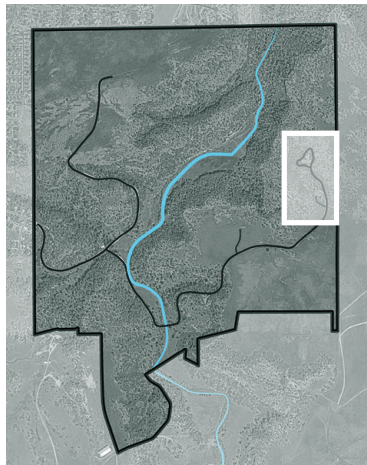
Existing Conditions

The Ranch House, located at the central eastern edge of the site, is a 20-acre building envelope with a single family residence, stables and indoor riding arena, outdoor arena, and an agricultural wood outbuilding. The buildings are in varying conditions with the single family home in relatively good condition, however building improvements including utility upgrades will be needed to utilize the existing structure. The home has a flagstone patio on the western edge of the house in good condition that could be used for a variety of programming. The stables and riding arena are in a state of disrepair and would require significant repairs and renovations before they could be utilized for any programming. Similarly to the stables, the outdoor riding arena and wood outbuilding would need significant repairs. A future analysis will be needed to determined whether structures will be re-purposed, removed, or replaced.

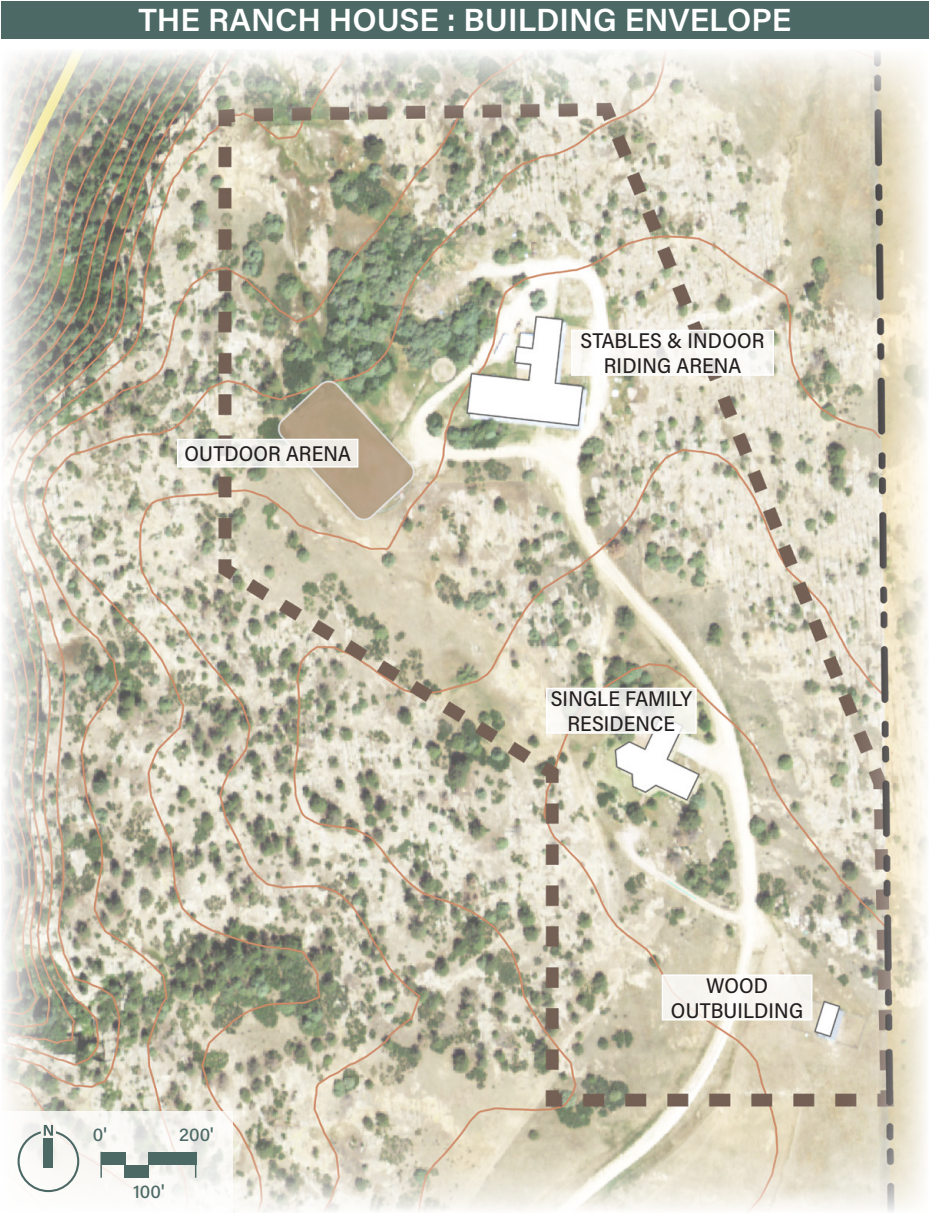
This building envelope has incredible views in nearly every direction- the mountains to the west, the canyon edge to the north, and the plains to the east and south.

There are opportunities for varied programming and associated parking.

KEY MAP



The indoor riding arena and stables are large buildings with a sizeable amount of space for potential programming. The buildings are in poor condition and would need renovations to the structures prior to any programming.



Flagstone steps lead to the front entry of the home. There is a variety of existing trees and shrubs surviving on no supplemental irrigation.



The flagstone patio faces west with incredible views of the mountains. Mature existing vegetation and large boulders frame the space.

The existing patio is made up of flagstone pavers with large boulders embedded in the edges. The existing fountain is not operable and would need to be removed or re-purposed. The patio is in good condition and would require few improvements..



The fencing and surfacing of the outdoor riding arena are in poor condition. However, it is one of the only flat areas without cap-rock within the building envelope.



Special Use Zones | *The Ranch House*

The Ranch House Area Concept Plan

This concept focuses on flexible spaces that can be used for a variety of events and programming while also providing a vision for future uses that would require additional renovation and funding sources. Many proposed program elements could be achieved with no or minimal improvements to the existing site, such as astronomy programs, educational camps, educational classes, beekeeping, or renting out the back patio for gatherings.

The programming focuses on uses that fit in with the existing site, while re-envisioning the spaces and the unique opportunities they present. Any future programming should reinforce and uphold the project goals and conservation values of the site.

PROGRAM AREAS AND OPPORTUNITIES

1 : The Front Porch

- Demonstration Garden
- Beekeeping
- Education Agriculture / Gardening Programming
- Community Gathering Space

2 : The Ranch House

- Day Camps
- Hiker Base Camp
- Art Classes & Education Programming
- Rentable Event Space
- Artist / Writing Retreats
- Nature Center
- Manager's Residence
- Office Space

3 : The Back Patio

- Hiker Base Camp
- Community Gathering Space
- Rentable Event Space

4 : The Waysides

- Overlooks
- Picnic Areas

5 : The Outdoor Arena

- Astronomy
- Outdoor Event Space

6 : The Stables and Indoor Riding Arena

- Nature Center
- Indoor Rentable Space
- Equine / Animal Therapy

7 : The Thicket

- Outdoor Classroom / Amphitheater
- Bird Blinds

8 : The Plain

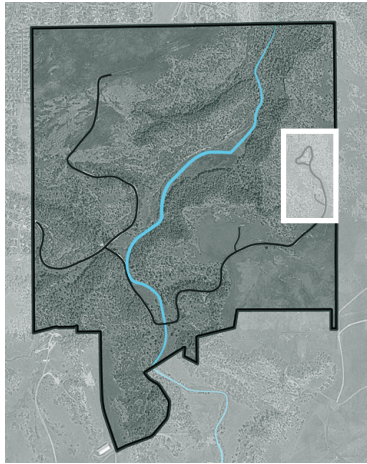
- Platform Tents
- Astronomy

9 : The Barn

- Astronomy
- Community Gathering Space
- Event Space

10 : Parking

KEY MAP



THE RANCH HOUSE : CONCEPT PLAN



PRECEDENT IMAGERY



Note: Programming shown here is a sampling of potential uses. All structures will need to be evaluated prior to use.

Special Use Zones | *Feed Barn & Cattle Pens*

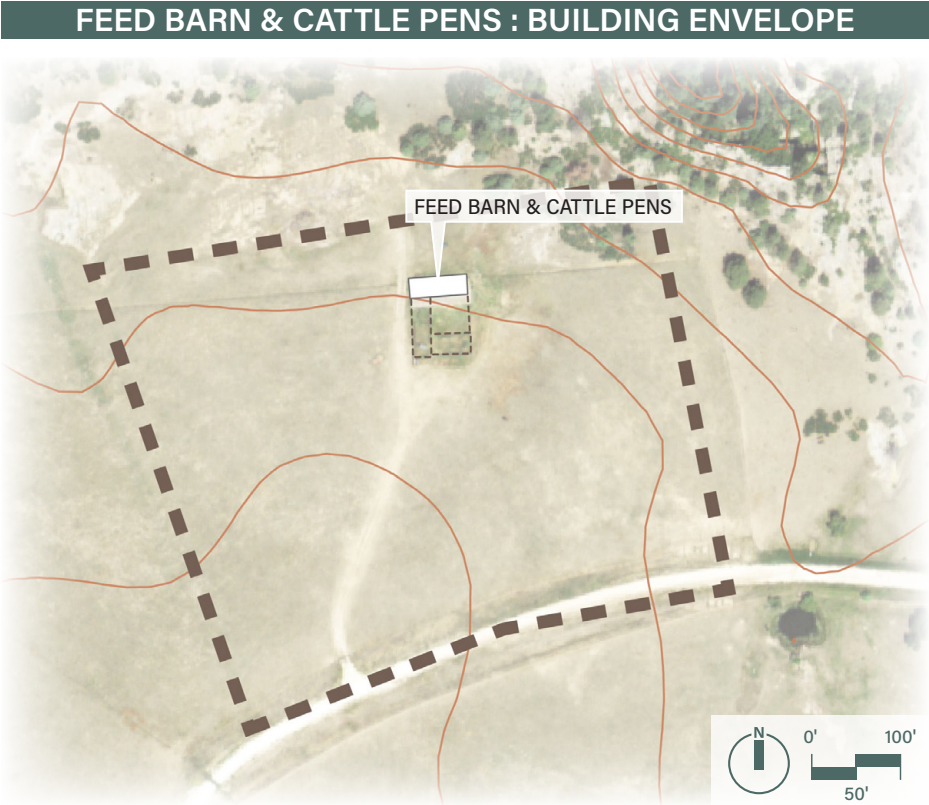
Existing Conditions

The **feed barn and cattle pens** is a 7.5-acre building envelope located in the southeastern portion of the site. It has views of the mountains and canyon rim to the north and west. The area was once used for cattle and horse grazing and has a small wooden barn and livestock pens. The building is intact but would require renovation and repairs prior to any programming. The existing pens would need to be removed for any programming at the barn. This is the only building envelope that does not have dense, existing overhead vegetation, cap rock, or large slopes, making it a potential parking area for larger events.

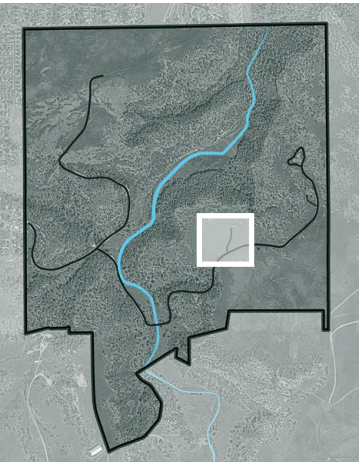
The Cattleman's trailhead is located within this building envelope.

Potential Program

- » Picnic Area
- » Restrooms
- » Parking Areas
- » Overlook
- » Special Events



KEY MAP



The front of the feed barn and cattle pens. The roof of the barn would likely need repairs, but the structure is intact.



This building envelope has 360-degree views- the forested areas to the north and west, the mountains to the west, and the prairie to the east and south.



The fencing and cattle pens are in varying states of disrepair. Fencing would need to be removed prior to programming, however fencing in good condition could be re purposed elsewhere for other uses or to help guide circulation.



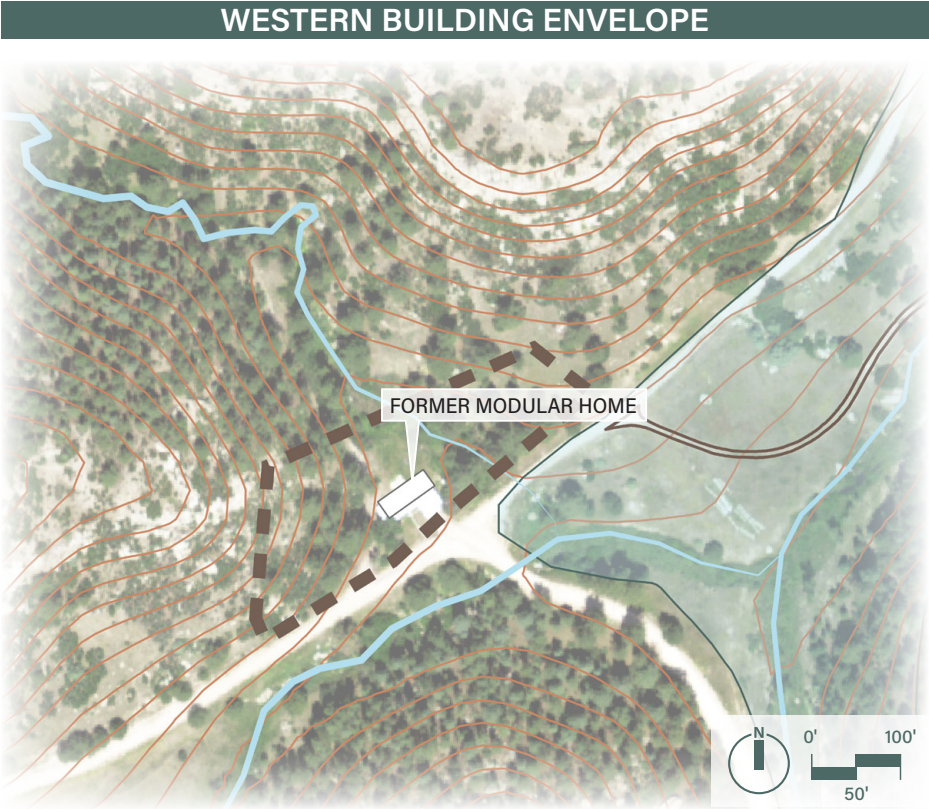
The back side of the barn. The structure is in relatively good condition for its location in an exposed area of the site, high up on the canyon edge.

Special Use Zones / *Western Building Envelope*

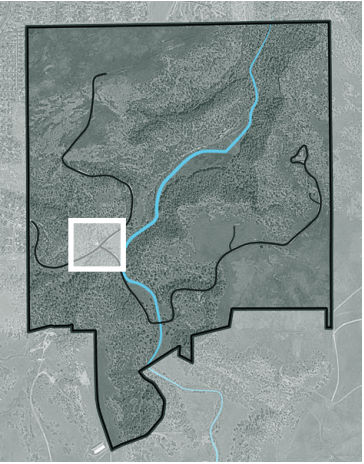
Existing Conditions

The **western building envelope** is a 1.2-acre area located in the eastern part of the site where the gravel road bisects to the north and south. The modular home was the previous caretaker's residence and is in a state of disrepair. The location of the building envelope is an important access point for visitors to the site. This building envelope is the location of the primary trailhead and parking lot, the Creekside Trailhead. The existing home will be demolished to create the trailhead. Several site constraints and opportunities must be considered for this building envelope:

- An existing well tap is located to the southwest of the home. The tap is to be protected and remain in place.
- A tributary of Willow Creek drains through this building envelope and under the road via a corrugated metal pipe (CMP) to Willow Creek. Several large boulders have crushed the CMP at the outflow, impeding drainage.
- Any updates to this area will likely require the CMP to be replaced with a longer pipe to insure drainage at the inflow as well replace the crushed pipe at the outflow. All revisions to the drainage area will follow engineering recommendations.



KEY MAP



A view of the former modular home from the back yard. The modular home sits 3'-4' above the grade of the driveway which will create separation between the future parking lot and picnic areas.



A front view of the former modular home. The home will be demolished and a gravel parking lot will be located here for the Creekside Trailhead.

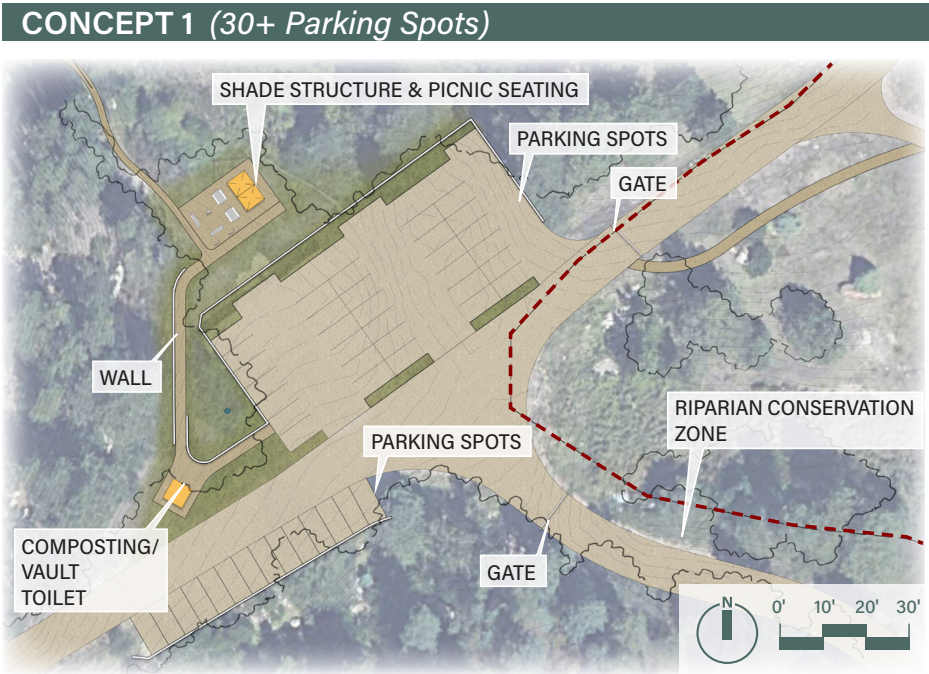


Another view of the backyard. The existing path way to the left of the fence will be a trail connection to the Turkey Track Loop and Gobbler's Pass trails.

Special Use Zones | *Western Building Envelope*

Concept Plans

Several parking concepts were studied as part of the master plan process for the western building envelope. The following concepts highlight three alternative layouts for the parking and trailhead amenities. Each concept has pros and cons, as well as varying levels of demolition required within the building envelope. Concept 1 is the recommended concept. Due to the fact that this parking lot and trailhead will serve as the only lot initially, and the building envelope has been previously developed, it is recommended that parking be maximized to accommodate visitation. Final layout, parking counts, and drainage improvements are pending site survey and engineering recommendations.

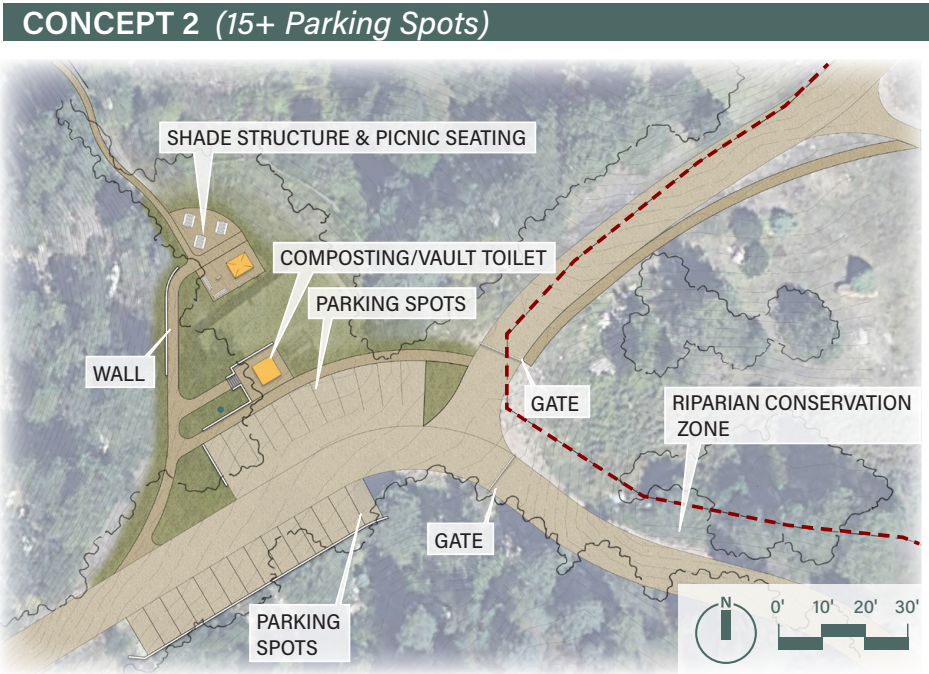


Pros

- Provides the most parking. This is significant as it is anticipated to be the only initial trailhead
- Parking lot is designed so visitors do not have to back up into the road
- Restroom facilities are located furthest from the picnic area while remaining close to the drive for maintenance
- Least amount of vehicular traffic conflicts along the drive

Cons

- Design requires several walls, some of them 4'-5' tall
- Will require improvements to the existing Willow Creek drainage pattern
- 3'-4' of fill will be required to level the parking lot

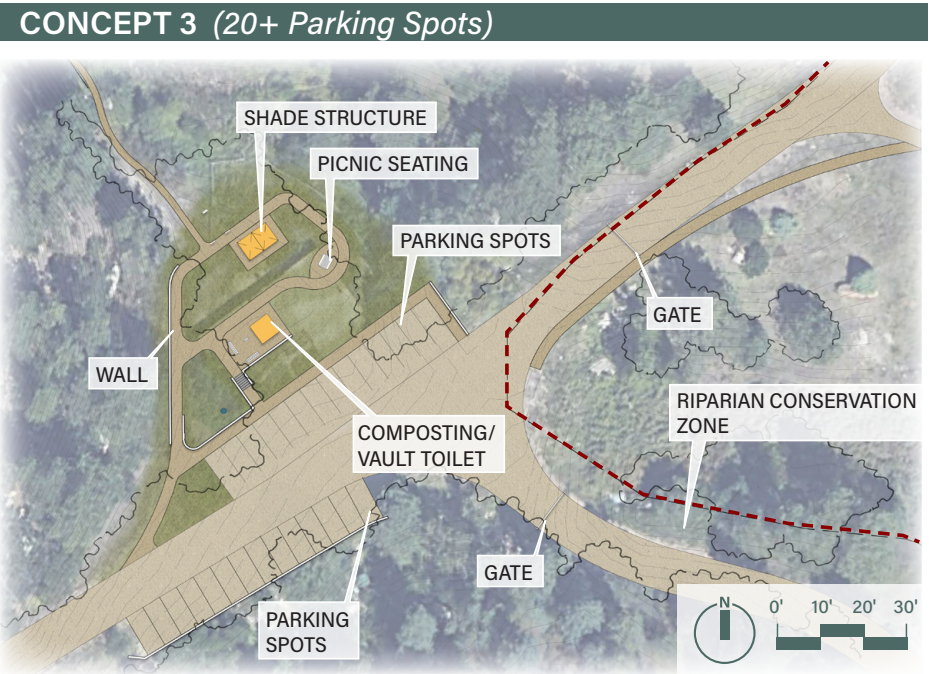


Pros

- Fewer walls are required
- Circulation of main gravel road is rerouted to deter visitors from turning onto the secondary road
- Restroom facilities are located far from the picnic area
- Existing drainage pattern of the stream is maintained
- Disturbs less of the existing vegetation

Cons

- Fewest parking spots
- Layout requires vehicles to back up directly on to the roadway
- If lot is full vehicles have to turn around on to the road
- Fewer spots encourages cars to park along the roadway
- Restroom facilities may be blocked by cars preventing maintenance



Pros

- Fewer walls are required
- Circulation of main gravel road is rerouted to deter visitors from turning onto the secondary road
- Existing drainage pattern of the stream is maintained
- Disturbs less of the existing vegetation

Cons

- Fewer parking spots
- Restroom facilities and picnic areas are closer to each other than in Concepts 1 and 2.
- Layout requires vehicles to back up directly on to the roadway
- If lot is full vehicles have to turn around on to the road
- Fewer spots encourages cars to park along the roadway
- Restroom facilities may be blocked by cars preventing maintenance

Next Steps

The following are recommended next steps for the development of Lost Canyon Ranch:

- Begin construction documents for roadway improvements up to the Creekside Trailhead.
- Construct trails and signage and wayfinding prior to the property opening, with a priority to trails near the Creekside Trailhead
- The Creekside Trailhead and parking lot should be constructed to serve initial trails on the property.
- Identify funding sources for future improvements.
 - Douglas County Shareback Grant Program
 - Great Outdoors Colorado (GOCO)
 - Castle Rock Parks and Trails Foundation
- Develop a site-wide management plan and submit for approval.





Appendix



Memorandum

Date: December 13, 2024
To: Tyler Kiggins, Wenk Associates
From: Nick Vanderkwaak and Maggie Ostwald, Fehr & Peers
Subject: **Lost Canyon Ranch Open Space: Traffic Calming Recommendations**

DN24-0836

Introduction

This memorandum identifies and develops recommendations for appropriate traffic calming strategies to consider on Lost Canyon Ranch Road as part of the Town of Castle Rock Lost Canyon Ranch Master Plan. Lost Canyon Ranch Road is the only road access point to the Open Space. When the open space is opened for public use, the existing residential cul-de-sac will experience more traffic destined for the open space and may also experience higher than desired speeds from vehicles not familiar with the area. This analysis is focused on developing a toolbox of traffic calming strategies to manage the influx of new traffic through this neighborhood. The primary study area is a quarter of a mile long, from the intersection with Killen Avenue to the entrance of Lost Canyon Ranch Open Space. The memo is organized into the following sections:

- Existing Conditions
- Traffic Calming Toolbox
- Recommended Treatments
- Next Steps



Existing Conditions

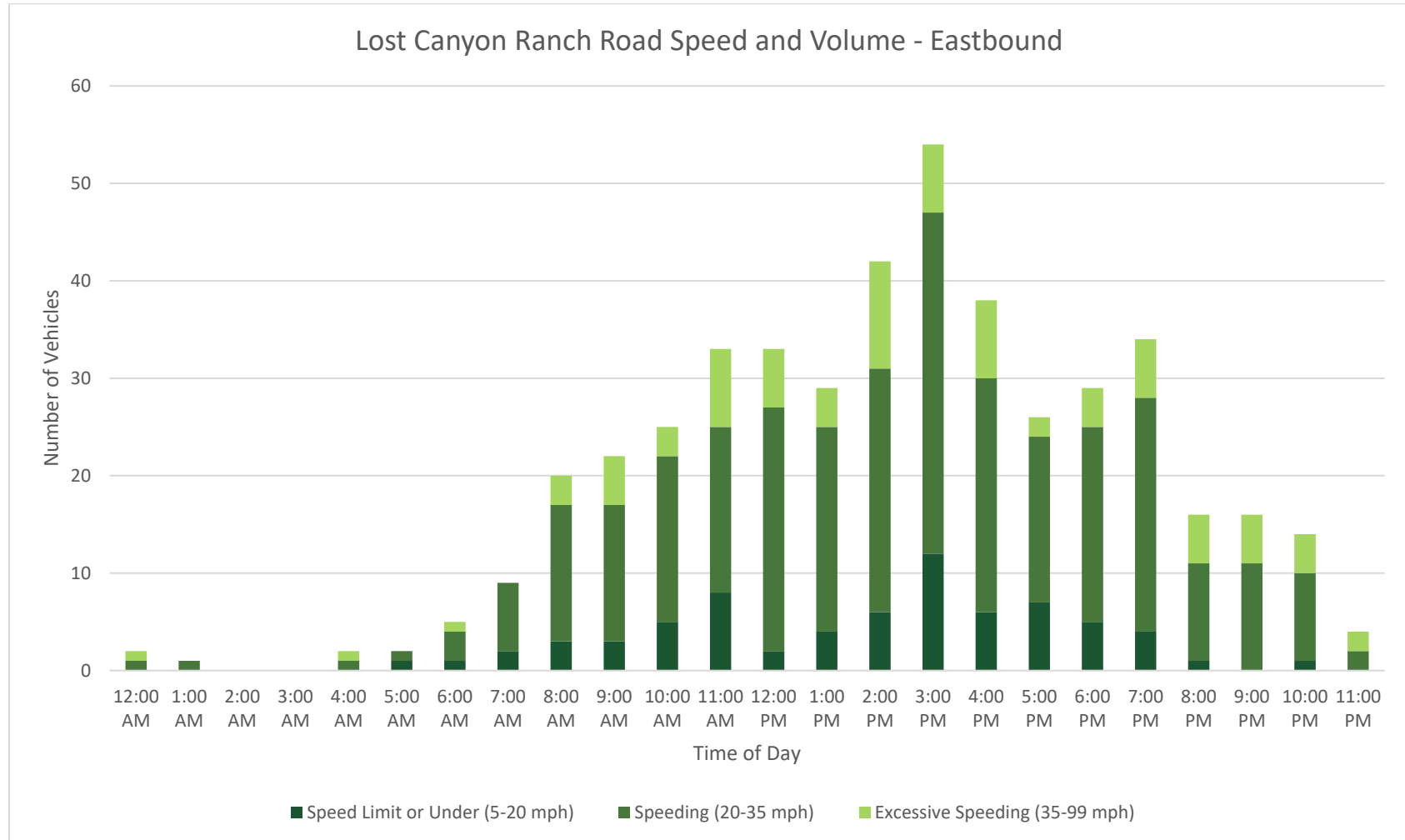
Lost Canyon Ranch Road is a residential dead-end street with 18 single-family housing units in eastern Castle Rock. Eleven of the residences are located along the segment of Lost Canyon Ranch Road expected to have increases in traffic due to the Open Space and the other seven residences are located between the open space entrance and the cul-de-sac. Lost Canyon Ranch Road has a notable sharp turn where the residential street continues to the right and the entrance to the open space is straight ahead. There is a notable downhill slope towards the open space entrance which may contribute towards higher speeds. The paved roadway is generally 24 feet wide with an additional three feet of curb and gutter on either side of the road. The road is not striped, but it is used as a typical local road with one travel lane in each direction. Parking is allowed on both sides, although rarely utilized. The posted speed limit is 20 MPH.

Traffic volumes and speeds were collected for an 8-day period between Tuesday October 22nd, 2024 and Tuesday October 29th, 2024 to establish a baseline for residential use prior to the open space being open. Tube counters located approximately 300 feet east of the intersection with Killen Avenue were used to collect both vehicular volumes and speeds. October 22nd included atypical travel patterns due to a public meeting held at the future open space that evening, so this date was excluded from the analysis.

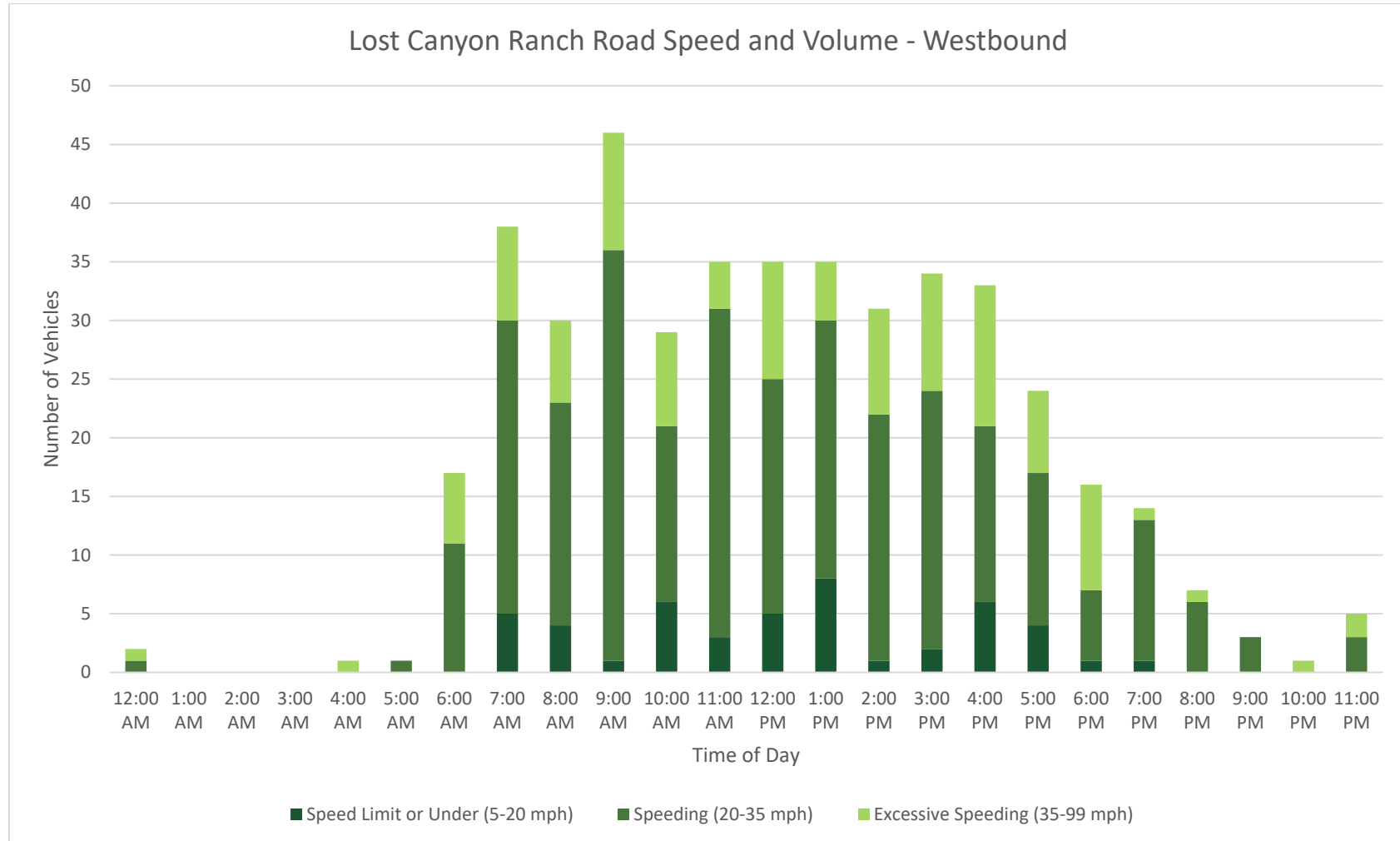
Over the one-week period, there were an average of 128 vehicle trips per day, and the average 85th percentile speed of each day was 37 MPH. Other relevant data summaries are listed below:

- Highest daily vehicle count of 147, on Tuesday October 29th
- Lowest daily vehicle count of 103, on Saturday and Sunday
- 87% of vehicles exceeded the posted speed (20 MPH)
- 11% of vehicles exceeded 40 MPH

The speed and volume trends in each direction for the total traffic during the 7-day data collection are shown below. The westbound traffic peaks in the morning between 9 and 10 AM while the eastbound traffic peaks in the evening between 3 and 4 PM. This expected pattern reflects residents leaving the neighborhood, likely for work, and later returning to their homes.



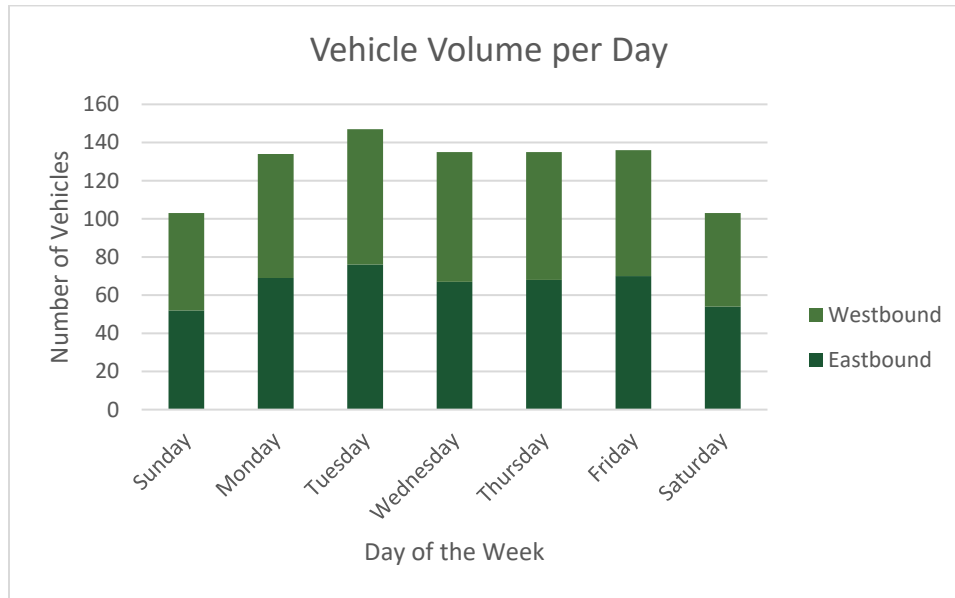
Source: Ridgeview Data Collection, Fehr & Peers



Source: Ridgeview Data Collection, Fehr & Peers



The chart below shows how traffic levels vary depending on the day of the week. Volumes are generally lower on the weekends than on weekdays. This is likely attributable to residents commuting to work.



Source: Ridgeview Data Collection, Fehr & Peers

Establishing this baseline traffic condition will allow a future comparison to be made in the future after the open space is operational to determine if changing conditions require additional traffic calming interventions.

Traffic Calming Toolbox

Based on the expected increase in vehicles and the already higher than posted speeds, a toolkit was assembled to identify and evaluate potential traffic calming treatments to impact the observed and planned speeding. To select the most effective traffic calming techniques for this location, several methods of traffic calming are defined and evaluated.

Traffic Circle

A miniature neighborhood traffic circle could be installed at the intersection of Lost Canyon Ranch Road and Killen Avenue. This treatment would encourage drivers to slow down as they drive through the neighborhood and as they approach the downhill segment of Lost Canyon Ranch Road. This treatment can be installed using low-cost quick build materials or with more permanent mountable infrastructure.



Source: NYC Street Design Manual



Curb Extensions

Curb extensions, or bulbouts, could be installed on the southeast and southwest corners of the intersection of Lost Canyon Ranch Road and Killen Avenue. Curb extensions visually narrow the roadway and reduce the turn radius, encouraging drivers to slow down before making a turn. They reduce the size of intersections, thereby reducing crossing distance for pedestrians and reducing the size of conflict zones. Due to the nature of the three-leg intersection and the driveway on the north side of the street, curb extensions are not feasible on the north side of the intersection. In this context, extensions could be constructed using permanent infrastructure such as concrete curbs and gutters and landscaping.



Source: Wikipedia Commons

Speed Limit Setting

The current posted speed limit on Lost Canyon Ranch Road is 20 MPH. This is lower than is standard for a residential street in Castle Rock. Increasing the posted speed limit to 25 MPH could increase compliance by being more in line with operating speeds and being more appropriate for the context.



Speed Feedback Display

A speed feedback display sign could be installed below the speed limit sign to display the speed at which vehicles are traveling when they pass the sign. This could increase compliance with the posted speed limit and encourage vehicles to slow down as they approach the downhill segment of Lost Canyon Ranch Road. Some locations with this treatment see an initial decrease in speeds, but over time compliance with the speed limits is less effective.



Source: GP Roadway Solutions

Chicanes

Chicanes can be installed to physically meander the horizontal alignment of the travel lanes and visually narrow the road, encouraging vehicles to slow down to more safely navigate the curves. Typically, two extensions of the curb into the roadway are installed on opposite sides of the road and offset from one another, creating a horizontal curve in the travel lane. Chicanes should be installed using permanent infrastructure in this context to improve visibility.



Source: NACTO



Speed Tables

Speed tables are sections of raised asphalt in the roadway that are longer and less severe than common speed bumps. Speed tables recently installed in Castle Rock in similar neighborhood contexts rise by three inches over a six-foot length. With a typical design speed of about 28 MPH, speed tables encourage drivers to reduce speeds without hindering access for emergency vehicles or bicycles. They could be installed singularly or in sequence along Lost Canyon Ranch Road to slow traffic in both directions. They are marked with signs to warn drivers of the upcoming feature. Speed tables have been installed recently in very similar contexts in the Town of Castle Rock. Castle Rock has a standard design for speed humps that are 4.5 inches tall and twelve feet long. The FHWA has a standard design for speed tables that are only three inches high and the change in grade still occurs over twelve feet but there are an additional twelve feet in length to include a flat space in the middle of the hump. This alternative can be more accommodating for low-clearance vehicles while still slowing traffic speeds.



Source: Google Maps 2024

Lane Striping

While neighborhood lanes typically do not require striping, striping the centerline and edge line of a roadway in certain contexts can help to visually narrow the roadway and increase awareness. Lanes in this context could be striped with an eleven-foot width and the leftover roadway width could be designated as a shoulder on one or both sides.



Source: Blue Water Healthy Living



Stop-Control

A stop-controlled intersection encourages vehicles to come to a stop at an intersection and proceed when traffic is clear. At the location where the open space entrance intersects with the sharp turn in Lost Canyon Ranch Road, a stop sign could be installed for the traffic exiting the Open Space so that the traffic on Lost Canyon Ranch Road is not impeded by the traffic coming from the Open Space. A stop sign at this location would also create awareness as drivers reenter the neighborhood.



Source: Google Maps 2024

Open Space Entrance Gate

Installing a gate or large sign at the entrance to the Open Space could help visitors find their destination and mitigate vehicles turning around in the cul-de-sac, making a U-turn in the road, or turning around in a private driveway. Douglas County typically installs an overhead gate at Open Space entrances.



Source: Google Maps 2024, Fehr & Peers



Parking Restrictions

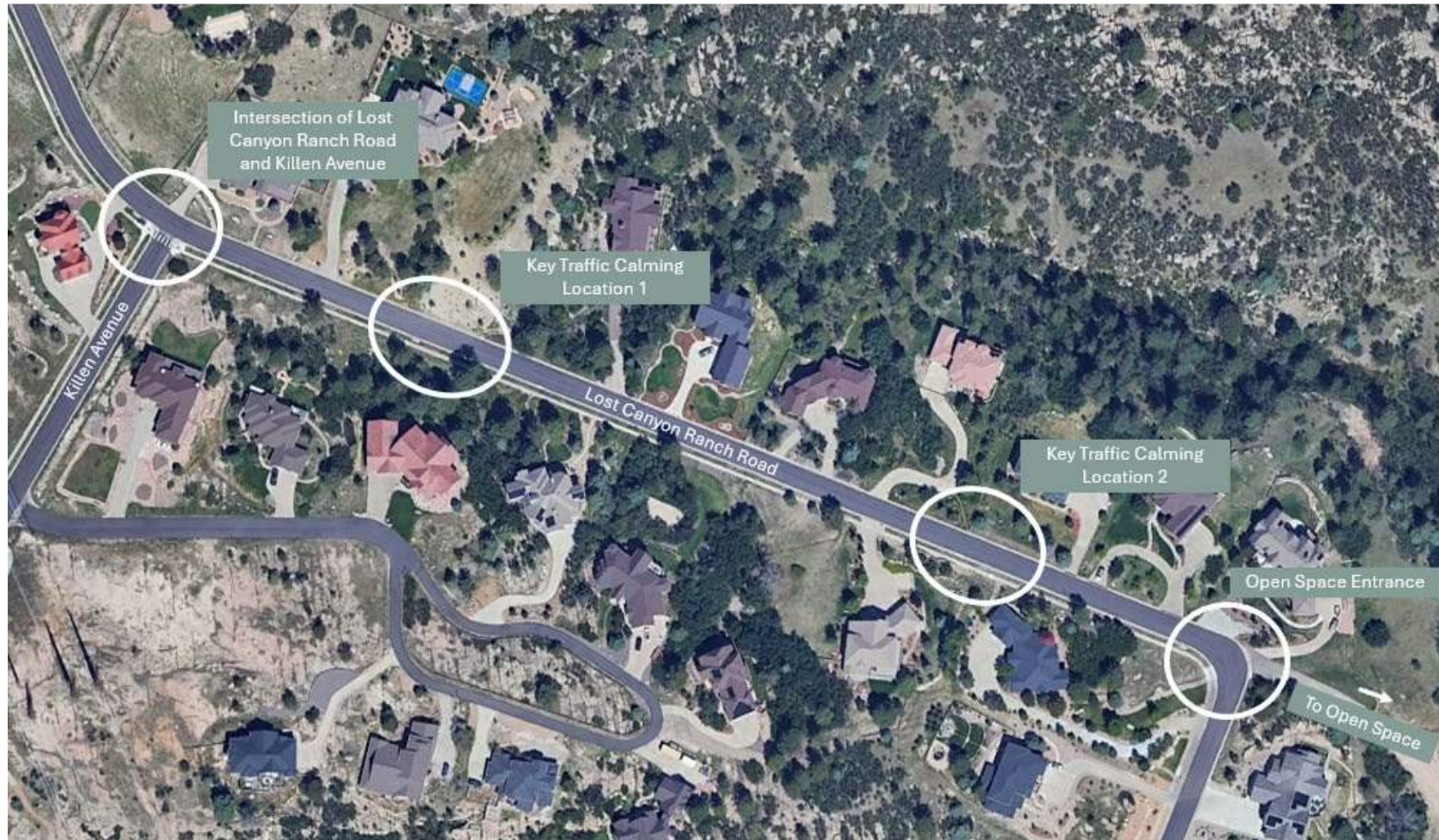
Parking restrictions could be implemented to reduce impacts of the Open Space on the local neighborhood. There are several types of restrictions that could be suitable in this context but ideally the restriction should prevent Open Space visitors from parking on Lost Canyon Ranch Road and should allow those who live on Lost Canyon Ranch Road and those who are visiting or working at a residence to park. The Town of Castle Rock has recently created a resident parking permit system that could be considered in this context.

Recommended Treatments

Based on an assessment of the potential effectiveness of treatments in this context and feedback obtained from residents and the public, recommendations for the types and locations of traffic calming devices were developed. These recommendations are not all necessary to be implemented by opening day, but they could be implemented depending upon traffic level increases from open space visitors. Traffic calming treatments are recommended at four primary locations. They are:

- At the intersection of Lost Canyon Ranch Road and Killen Avenue
- At two key calming locations along Lost Canyon Ranch Road
- At the entrance to the Open Space

Two key calming locations were identified based on distance from each other, distance from other traffic calming locations, and critical roadway elements. These two key locations are extended segments of roadway with unobstructed curbs, and one of the locations is the downhill section, where vehicles are likely to accelerate. The four primary locations are shown in the map below.



Source: Google Maps 2024, Fehr & Peers

These recommendations were developed with feedback from citizens and feasibility input from the Town Public Works staff to determine the most effective tools that are minimally disruptive to the neighborhood. The recommendations are not required for initial operation but could be installed as triggered by changing traffic conditions and neighborhood desires. Further information on implementation phasing is provided later in this memorandum.



Intersection of Lost Canyon Ranch Road and Killen Avenue

A miniature mountable traffic circle is recommended at the intersection with Killen Avenue. This would encourage vehicles to slow down as they enter the neighborhood and approach the downhill segment of the road.

The speed limit sign is posted just east of the intersection. It is recommended to change the speed limit to 25 MPH to match higher operating speeds and be consistent with local road posted speed standards. A solar speed feedback display sign is also recommended to remind drivers of the posted speed. The efficacy of the speed feedback display sign should be monitored over time to evaluate whether further strategies are needed, as this treatment sometimes decreases in effectiveness over time.

Key Traffic Calming Locations

The two key traffic calming locations are located approximately 600 feet from each other and 350 feet from either end of the primary study area, where other traffic calming treatments are recommended.

At these locations, speed tables are recommended installed to reduce vehicle speeds. Additionally, the roadway is recommended to be striped with centerlines and edge lines from Lantern Circle to the sharp turn at the entrance to the Open Space.

Entrance to the Open Space

At the entrance to the Open Space, a stop sign is recommended to control traffic exiting the Open Space. MUTCD-compliant wayfinding signage is recommended to guide drivers to the Open Space entrance. Additionally, standard signage could be installed at the gate to the Open Space to communicate that the Open Space is closed if the gate is closed. Finally, standard signage could be used to instruct vehicles exiting the Open Space to yield to vehicles entering. The gate is only wide enough for one vehicle to pass through at a time and there is more space for vehicles to pull over and yield to oncoming traffic on the east side of the gate.

Next Steps

Treatments are recommended in the following phases to be in alignment with the opening of the Open Space.

Phase 1: Before the Open Space is Open to the Public

- Update the posted speed limit to 25 MPH
- Install a speed feedback display sign (either permanently or temporarily)
- Install wayfinding to the open space
- Install a stop sign at the exit of the open space
- Install closure signage on the entrance gate
- Install “yield to oncoming traffic” sign on the east side of the gate

Phase 2: After Public Opening and a Need for Additional Traffic Calming is Established

- Install speed humps at the two key traffic calming locations
- Install physical traffic calming at the intersection with Killen Avenue

Phase 3: As Needed

- Consider parking restrictions (no parking or time limited parking), if visitor parking becomes a concern in front of residents on Lost Canyon Ranch Road

If traffic volumes increase to 500 vehicles per day or more, which is not anticipated, Lost Canyon Ranch Road could qualify for the Neighborhood Traffic Calming program in the Town of Castle Rock, and these strategies should then be reevaluated in accordance with that program.

Memorandum

Date: April 14, 2024
To: Tyler Kiggins, Wenk Associates
From: Nick Vanderkwaak and Maeve Christlieb, Fehr & Peers
Subject: **Lost Canyon Ranch Open Space: Analysis of Existing Parks**

DN24-0836

Introduction

To assist in planning the new Town of Castle Rock Lost Canyon Open Space, this memorandum documents the analysis of identified peer existing parks and open spaces in Douglas County. Peer comparisons help to develop a baseline of potential demand at Lost Canyon Ranch Open Space, which will aid in proactively addressing current and future traffic and parking demand. The memorandum is organized into the following sections.

- Lost Canyon Ranch Overview
- Identification of Peer Locations
- Peer Location Visitation Analysis
- Conclusion & Recommendations



Lost Canyon Ranch Overview

Lost Canyon Ranch Open Space, a newly acquired 681-acres area, is planned for trails, recreational activities, and will offer the sights and sounds of wildlife, scenic views, and wildlife restoration and protection. The Town of Castle Rock, the Conservation Fund, Great Outdoors Colorado, and Douglas County partnered together to acquire the property with the Town's largest one-time acquisition of open space. The property lies on Castle Rock's southeastern border, surrounded to the north and west by residential neighborhoods, and to the south by large-acreage estate lots. It shares a 0.75-mile boundary with Castlewood Canyon State Park to the northeast. This site provides a wealth of potential trail connections with existing hiking and biking trails throughout Castle Rock and Castlewood Canyon State Park.

The property has several diverse habitats from open grasslands and ponderosa forests to cliff outcroppings and Willow Creek. Within the ranch lies two houses, several outbuildings, and a horse arena. The goal of this purchase is to solidify the permanent protection of the habitat and wildlife and to create further recreation and preservation opportunities for the community.

Lost Canyon Ranch will be accessible through one entrance on Lost Canyon Ranch Road, located on the western side of the property. Lost Canyon Ranch Road includes 18 single-family residential properties on a dead-end road, so the new open space access point will increase the level of activity on the street. While trail connections to Castlewood Canyon State Park may be present, there will be no connection via road. Estimating the number of expected visitors is important to plan for parking needs and the potential traffic impact on the residential street.



Identification of Peer Locations

To accurately plan the future transportation demand for Lost Canyon Ranch Open Space, the project team and Town of Castle Rock staff identified similar peer open space areas within Douglas County. These peer open spaces can help forecast the number of visitors Lost Canyon Ranch Open Space may have, which activities may influence the number of visitors, and how access to the open space will best serve the community. Seven sites were selected for comparison, including Castlewood Canyon State Park¹, Dawson Butte Ranch Open Space, Gateway Mesa Open Space, Metzler Family Open Space, Ridgeline Open Space, Philip S. Miller Park, and Sandstone Ranch Open Space. Six of the seven locations either have trail counters, vehicle counters, or a combination of both, where visitation data can be collected. Data sources include Trafx, Douglas County Open Space & Natural Resources, Colorado Parks and Wildlife, and the Town of Castle Rock.

Castlewood Canyon State Park

Castlewood Canyon is a 2,628-acre state park within the Black Forest region, managed by the Colorado Parks and Wildlife, with 14 trails totaling 12 miles. Park amenities include a 60-foot rock climbing wall, an amphitheater, three shelters available for rent, and the Bridge Canyon Overlook which can be rented for special ceremonies. Flush restrooms are available at the Visitor Center, and vault toilets are available at the West entrance.



Source: Colorado Parks and Wildlife

Dogs are allowed on leash. Biking is only allowed on roads and the Cherry Creek Regional Trail. In 2023, the total estimated number of visitors to the park was 170,000, which amounts to an average of 481 daily visitors. The park is accessible via two entrances: the Main (East) entrance off Highway 83, and the West entrance off Highway 86. Within the park there are four paved parking lots.

¹ Castlewood Canyon State Park only had estimated 2023 visitation numbers, which was 170,000 visitors (CO Parks and Wildlife)



Dawson Butte Open Space

Located north of Larkspur, Dawson Butte Open Space is a 828-acre open space with two trails totaling 7.7 miles, including a 5-mile loop and 2.7 miles of horse paths with over 60 jumps. The space has one large gravel parking lot with room with 15 horse trailers. Hiking, biking, horseback riding, and snowshoeing are allowed. Pets must be leashed. No motorized vehicles are allowed on trails. In 2023, the average number of daily visitors to the site was 82, while the month with the highest number of visitors was July with 3,992 visitors. The daily average number of visitors to the site on weekends in 2023 was 133 people Saturdays on average, and slightly more visitors on Sundays with 143 people on average.



Source: Douglas County

Gateway Mesa Open Space

Overlooking Franktown and the Cherry Creek Valley, Gateway Mesa offers expansive views of the Rocky Mountains along steep, rock-capped cliffs. While short in the length of trails offered, this open space consists of 276 acres containing 2 unpaved trails (Chuck's Loop and Legacy Trail). There is one dirt parking lot available at the trailhead. The park is accessible via trail connection to Mitchell Creek Canyon trail. Due to conservation efforts at the site, mountain biking and horseback riding are prohibited. Dogs are allowed



Source: Douglas County

on leash. The average daily trail traffic of Legacy Trail is 41. Gateway Mesa is located off Colorado 86 in Eastern Castle Rock, across the road from Hidden Mesa Open Space.



Metzler Family Open Space

Located just off I-25 in northern Castle Rock, Metzler Family Open Space (MFOS) contains a 5-mile unpaved trail divided into loops and connectors running through a historic homestead of the original settlers of Castle Rock, the Metzler family. The site is 109 acres with a conservation easement in place, held by the Douglas Land Conservancy to ensure the property and buildings are managed properly. One paved parking lot is located at the trailhead, with additional spots at the end of Montana Vista. Dogs are allowed on leash. Biking is allowed on trails, but not recommended on Rancher's Ridge or Stanchion Steps. The site is surrounded by a mix of retail and residential buildings. The average daily traffic for MFOS is 60 vehicles, and the average daily trail count is 34.



Source: Town of Castle Rock Parks and Recreation

Ridgeline Open Space

Located at the intersection of Coachline Road and Wolfensberger Road, Ridgeline Open Space offers 357 acres and 13.5 miles in paved and unpaved trails, with pedestrian connections to nearby neighborhoods and parks, including The Meadows and Red Hawk subdivisions, and Philip S. Miller Park. Based at the



southern end of Castle Rock, the space borders suburban developments while still offering views of the Front Range to the

Source: Town of Castle Rock Parks and Recreation

west and the Town of Castle Rock below. The trail system consists of four interconnected, colored loops on a single-track unpaved trail. Parking and portable restrooms are available at the nearby Bison Park, along with a 32-space paved parking lot available at the trailhead off Coachline Road. Biking and dogs on leash are allowed.



Philip S. Miller Park

Philip S. Miller Park (PSM) is a 320-acre multi-use park managed by the Town of Castle Rock with 11.5 miles of paved and unpaved trails. PSM also has an amphitheater, plaza, splash pad, synthetic turf fields, adventure course with a zipline, the Millhouse, and the Miller Activity Complex (MAC). Within the park there are numerous facilities for use, including picnic tables, gas fire



Challenge Hill at PSM, source: Town of Castle Rock Parks and Recreation

pits, and outdoor shelters. One of the trails, Challenge Hill, has 200 steps that climb 178 feet in elevation. PSM has trail counters on Challenge Hill and Gold Loop, a counter at the MAC, and a vehicle counter for cars. The average daily traffic for PSM is 1,094 vehicles, and the average daily trail count for Challenge Hill was 673.1, and for Gold Loop Trail it was 58.1.

Sandstone Ranch Open Space

Located just south of Perry Park and west of Larkspur, Sandstone Ranch is a 2,038-acre ranch that shares 3.5 miles of border with the Pike National Forest, and features diverse vegetation and wildlife habitat, historic buildings, and a historic ranch operation. Visitors come to experience the spectacular views of expansive hay meadows and red rock formations. Within the open space park there is a picnic shelter, portable restrooms, and ample amounts of car and horse trailer parking in the gravel lot located at the trail head.



Source: Douglas County

Hikers, cyclists, horseback riders, cross-country skiers, snowshoers, and leashed dogs are all allowed on the 12-mile natural surfaced trail that runs through the park. No motorized vehicles are allowed on the trail. In 2023 the average daily trail count was 87, totaling 31,671 annual visitors. The month with the most visitors was July with 4,891 visitors. The number of visitors to the site was much higher on weekends than weekdays in 2023, with 145 average daily visitors on Saturdays, and nearly 162 daily visitors on Sundays.



Peer Location Visitation Analysis

For identified parks or open spaces with count data available, an analysis and comparison was conducted to capture the Average Daily Vehicle Traffic (ADVT), Average Daily Trail Count (ADTC), seasonality trends, and daily patterns. The locations of the peer locations including their major roads and entrances are shown in **Figure 1**, **Table 1**, and **Table 2**. The average daily and annual vehicle and trail counts where available are included in **Table 3**.

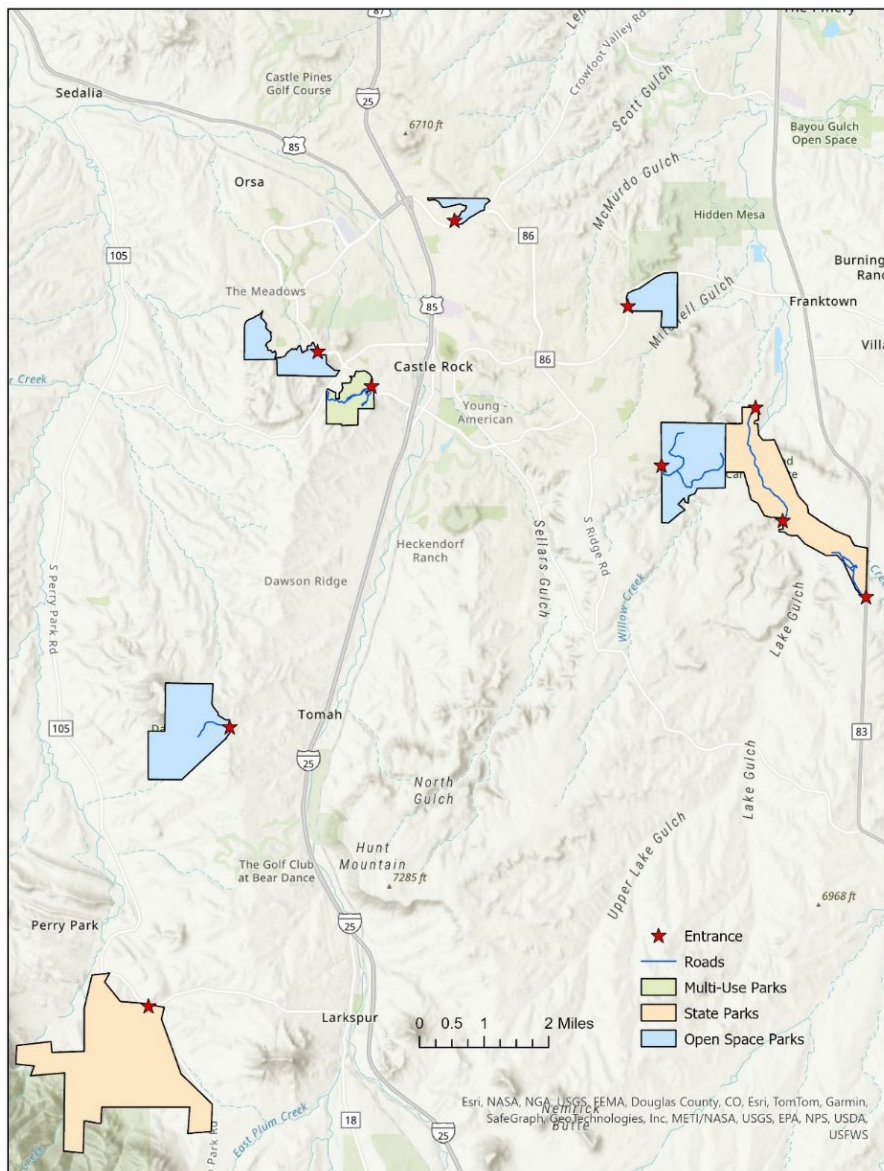


Figure 1: Map of Existing Parks and Open Spaces



Table 1: Peer Location Amenities and Characteristics

Park / Open Space	Size (acres)	Managing Agency	Trails (miles)	Parking	Park Type
Castlewood Canyon	2,628	CO Parks and Wildlife	12	4 paved/gravel lots	State Park
Dawson Butte	828	Douglas County	7.7	1 gravel lot	Open Space
Gateway Mesa	276	Town of Castle Rock	3.6	1 paved lot	Open Space
Metzler Family	109	Town of Castle Rock	5	1 paved lot	Open Space
Philip S. Miller	320	Town of Castle Rock	11.6	4 paved, 1 gravel	Multi-use
Ridgeline	367	Town of Castle Rock	13.5	1 paved lot	Open Space
Sandstone Ranch	2,038	Douglas County	12	1 gravel lot	Open Space
Lost Canyon Ranch	681	Town of Castle Rock	TBD	TBD	Open Space

Source: Trafex, Douglas County, Colorado Parks and Wildlife, Town of Castle Rock

Table 2: Peer Location Amenities and Characteristics (continued)

Park / Open Space	Number of Trails	Biking Allowed	Dogs Allowed	Horseback Riding	Picnic Shelter	Amphitheater	Restrooms
Castlewood Canyon	15	Only on Cherry Creek Trail and roads	Yes	Only on Cherry Creek Trail	Yes	Yes	Yes (West and East entrance)
Dawson Butte	2	Yes	Yes	Yes	No	No	Yes
Gateway Mesa	4	No	Yes	No	No	No	Yes
Metzler Family	11	Yes	Yes	No	No	No	No
Philip S. Miller	8	Yes	Yes	No	Yes	Yes	Yes
Ridgeline	4	Yes	Yes	No	No	No	Yes
Sandstone Ranch	1	Yes	Yes	Yes	Yes	No	Yes
Lost Canyon Ranch	TBD	No	No	TBD	No	No	Yes

Source: Trafex, Douglas County, Colorado Parks and Wildlife, Town of Castle Rock



Figure 2 visualizes the factors used to compare similarities between sites: average daily vehicle traffic, average daily trail count, and park/open space size. The average weekday trail count and weekend trail count are visualized with and park/open space size is shown in Figure 3.

Table 3: Average Daily and Annual Vehicle and Trail Counts

Park / Open Space	Average Daily Vehicle Traffic	Average Daily Trail Count	Annual Vehicle Traffic	Annual Trail Count
Castlewood Canyon	n/a	466	n/a	170,00
Dawson Butte	n/a	82	n/a	30,075
Gateway Mesa	n/a	41	n/a	14,965
Metzler Family	60	34	21,900	12,410
Philip S. Miller	1,094	731	399,310	266,815
Ridgeline	n/a	184	n/a	67,160
Sandstone Ranch	n/a	87	n/a	31,671
Lost Canyon Ranch	TBD	TBD	TBD	TBD

Source: TrafX , Douglas County and Colorado Parks and Wildlife

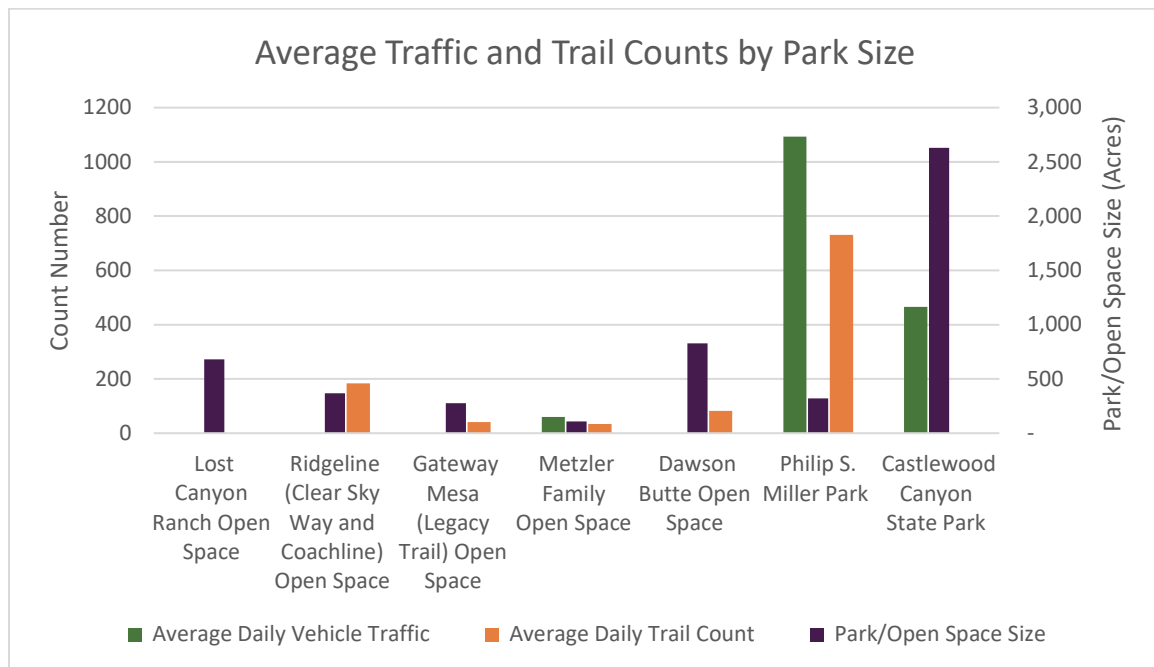


Figure 2: Comparison of Trail and Vehicle Counts

Source: TrafX, Douglas County, Town of Castle Rock, and Colorado Parks and Wildlife

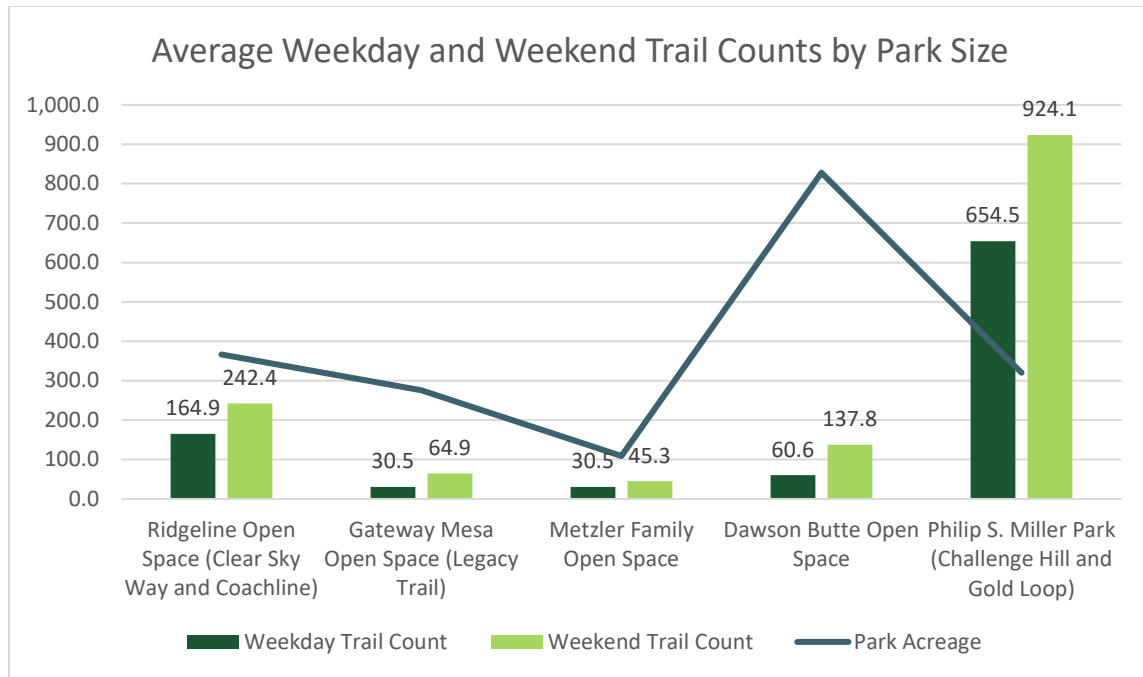


Figure 3: Comparison of Average Weekday and Weekend Trail Count by Park Size

Source: Trafx, Douglas County, Azira Pinnacle, and Town of Castle Rock



Day Type and Time of Day

Using data collected from Azira Pinnacle, visitation trends by time of day and day of the week for Castlewood Canyon State Park were analyzed as it's expected that Lost Canyon Ranch will experience similar time of day visitation due to the proximity and similarity of the landscape. As part of another project, the dataset from Azira Pinnacle provides human movement data based on location information derived from smartphones in Castlewood Canyon. The study period for this dataset was January – December 2023.

Visitation trends by hour to Castlewood Canyon State Park are shown in **Figure 4**. On average, 5 pm is the peak visitation time at Castlewood Canyon State Park on both weekends and weekdays. Weekend visitation is more highly concentrated during the daytime, with many visitors between 10 am and 5 pm. Weekdays have a higher percentage of visitors from 6-9 am and 5-10 pm. Visitation to the park drastically falls after 6 pm.

The average length of stay at Castlewood Canyon State Park is shown **Figure 5**. Visitors spend the most time at the park on Fridays, averaging 125 minutes per visit, while visitors spend the least amount of time on average at the park on Tuesdays, averaging 115 minutes per visit.

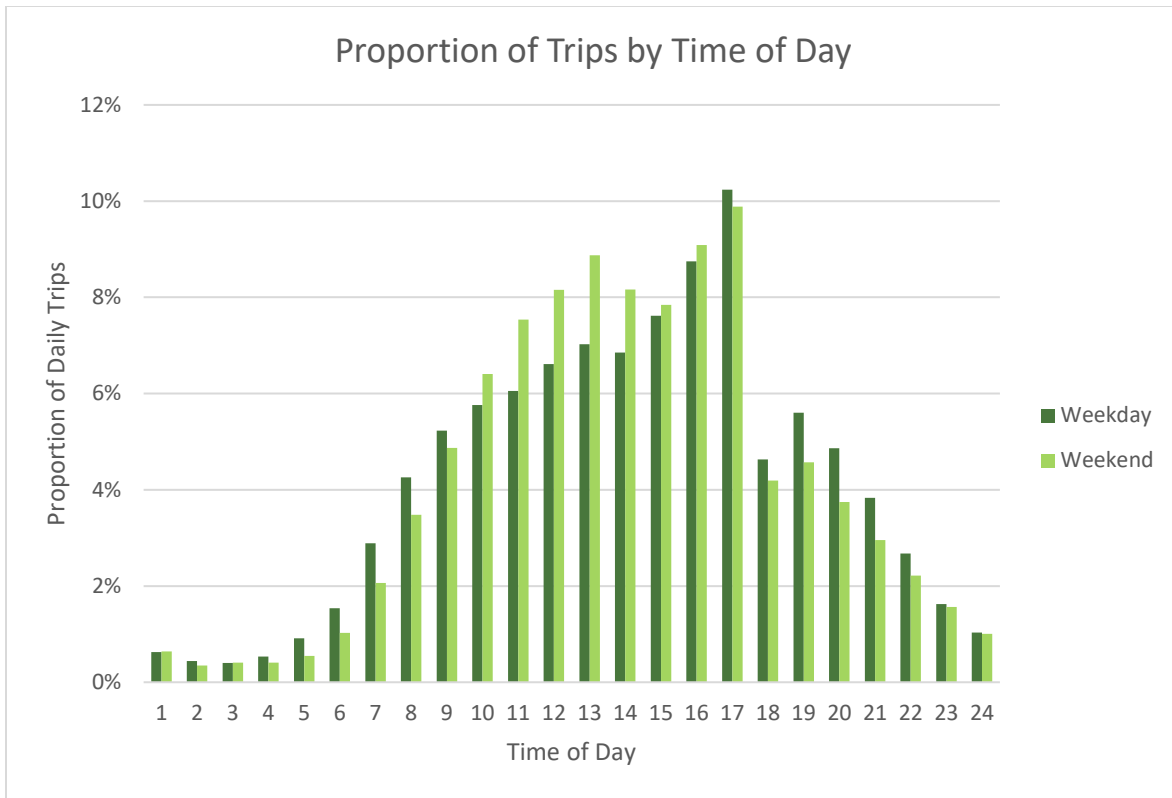


Figure 4: Castlewood Canyon Proportion of Trips by Time of Day

Source: Azira Pinnacle

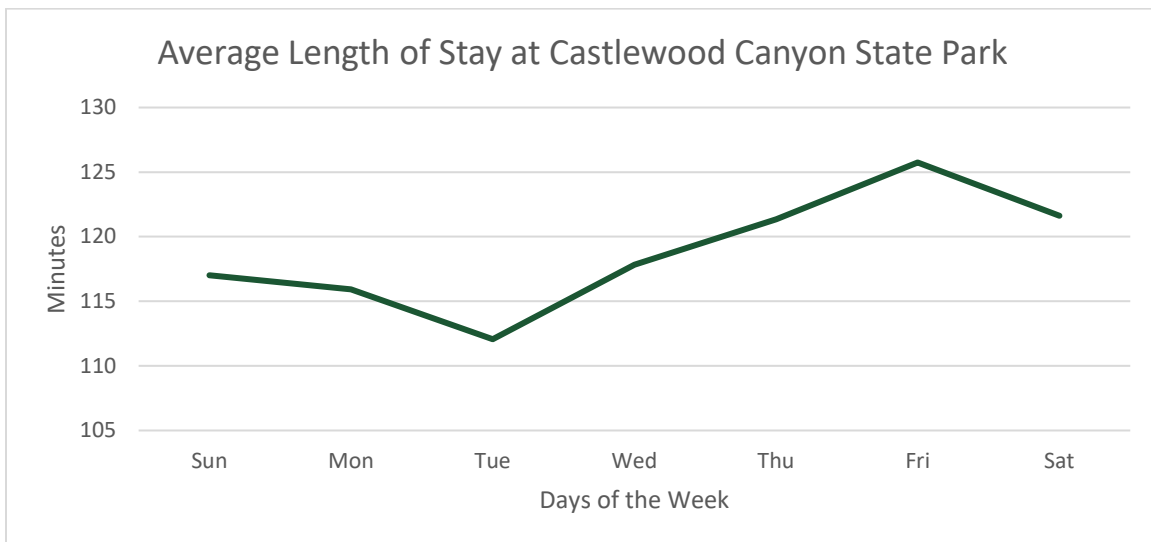


Figure 5: Castlewood Canyon Average Length of Stay

Source: Azira Pinnacle



Conclusion & Recommendations

The Lost Canyon Ranch Open Space shares many similarities to Dawson Butte Open Space and Ridgeline Open Space, primarily due to a focus on preserving open space and protecting wildlife, with limited areas designated for visitor-accessible trails. Dawson Butte, with its 828 acres and two trails (a 5-mile trail for hiking and a 2.7-mile-long horse jumping trail), is most comparable in size and trail availability. Ridgeline Open Space shares similar surrounding land uses, as both are adjacent to residential neighborhoods yet situated in relatively rural areas. Other evaluated open space areas do not share as many similarities but were still a useful benchmark to consider as far as number of vehicles and trail users. This assessment forecasted visitor volumes for Lost Canyon Ranch are primarily on Dawson Butte Open Space and Ridgeline Open Space. Due to the proximity of Castlewood Canyon state park and the detailed data source available identifying time of day visitation, the distribution of weekday and weekend visitors (not volume) was assumed to be similar for Lost Canyon Ranch Open Space.

Both Lost Canyon Ranch and Ridgeline will connect to other parks, but Lost Canyon Ranch is only accessible through a single entrance in a residential neighborhood, whereas Ridgeline has multiple access points. Given Lost Canyon Ranch's proximity to a neighborhood, higher trail usage is expected compared to Dawson Butte, especially once connections to existing trails are established. Dawson Butte is in a more rural part of Douglas County, with nearby residential properties operating primarily as farms.

Based on these trends from similar open spaces and the assumption that Lost Canyon Ranch will open with one or more designated trailheads. It is estimated that each trailhead will attract up to 100-150 weekday visitors per day and 200-250 weekend visitors per day, with actual visitation fluctuating based on seasonal trail accessibility. This estimation is based on Ridgeline and Dawson Butte visitation numbers, as shown in **Figure 6**. These estimations are slightly higher than current visitation at Dawson Butte, due to proximity to nearby neighborhoods and trail connections to Castlewood Canyon, but lower than Ridgeline as it has connections to Philip S. Miller Park, which is a major park that hosts sporting events, has a recreation center, and many other outdoor activities that could lead to higher visitation at Ridgeline as a byproduct. Many of the open spaces discussed are in rural areas of Douglas County, further from residents, while Lost Canyon Ranch is within the Town of Castle Rock near residents.

Using the Proportion of Trips by Time of Day for Castlewood Canyon State Park, combined with the weekday and weekend visitation numbers at Ridgeline Open Space and Dawson Butte Open Space, projections for the average number of visitors at Lost Canyon Ranch by weekday and weekend were identified, as shown in **Figure 6**. These estimates assume a single trailhead at Lost



Canyon Ranch Open Space. With additional future trailheads additional parking beyond these estimates will be required to accommodate the greater trail demand.



Figure 6: Open Space Averages and Projections

Source: Azira Pinnacle, TrafX, and Fehr & Peers

Lost Canyon Ranch is forecasted to experience many of the same weekday and weekend time of day trends as Castlewood Canyon State Park. Using the proportion of trips by time of day from Castlewood Canyon State Park, the forecasted visitation numbers by hour for Lost Canyon Ranch were estimated in **Figure 7**.

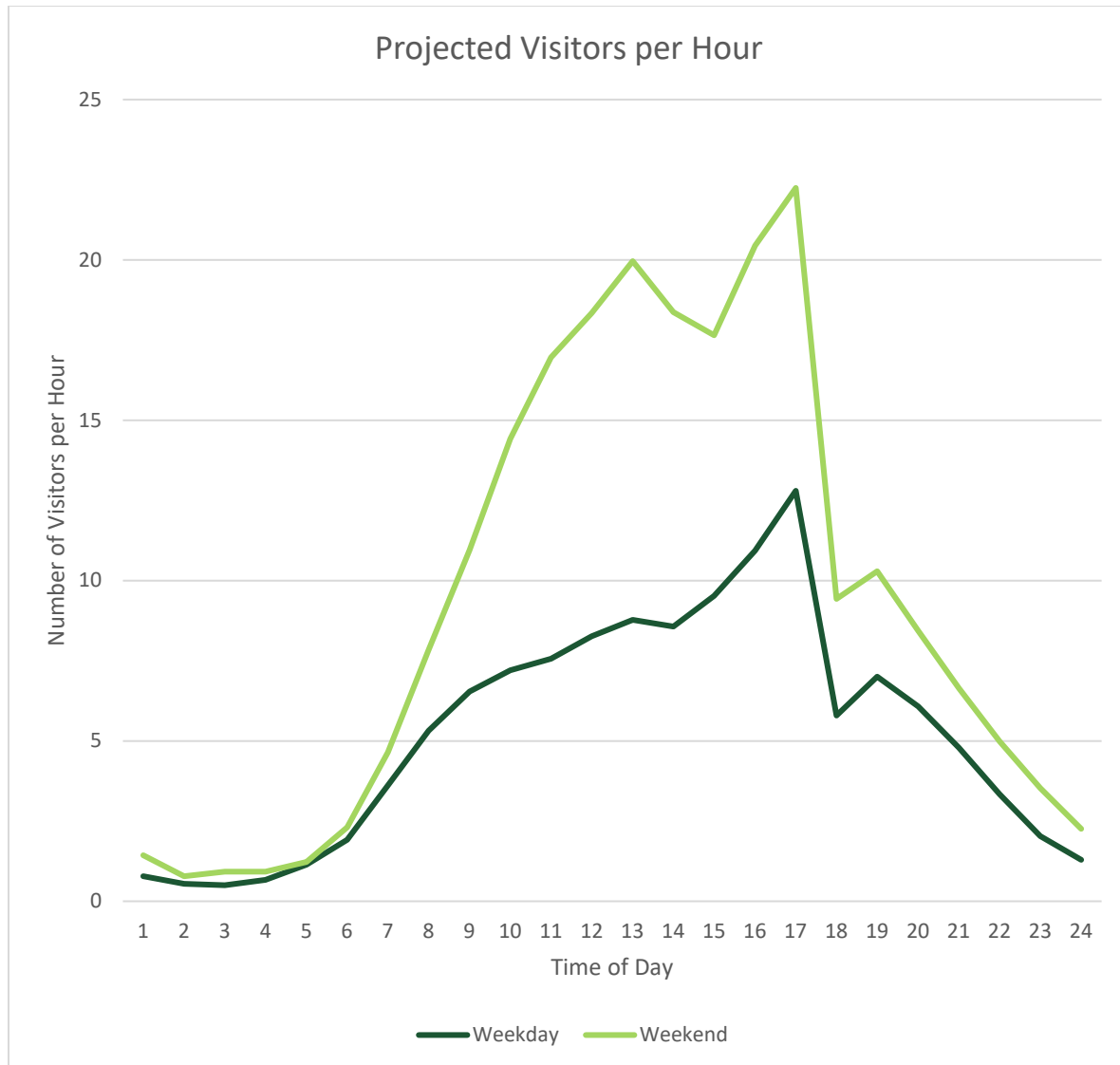


Figure 7: Lost Canyon Ranch Forecasted Number of Visitors per Hour

Source: Azira Pinnacle, Fehr & Peers

It is expected that most visitors will arrive in vehicles while some will bike or walk in, and that on average each vehicle will include 1.5 visitors. This assumption combined with average users spending an estimated 2 hours at the open space, the number of needed parking spaces can be estimated. Assuming that 95% of visitors will arrive via car and with the busiest 2-hour period being afternoon weekends with approximately 20 to 22 visitors per hour, this equates to approximately 19 to 21 visitors arriving by car per hour (95%). Using these numbers $(19+21)/1.5$ (vehicle occupancy rate), 27 parking spaces are needed per trailhead. For planning purposes, this



number is rounded to 30 to allow for a 10% buffer in parking supply to accommodate peak usage.

Parking could be accommodated in one or more formalized locations within the open space. An initial first phase location considered for parking included the flat area just inside the gate that could be connected to future trails with a spur and the planned trailhead location about a half mile in. The location just inside the gate would minimize the impact of vehicles on the open space and would eliminate the need for people to drive down the gravel access road. It was decided during the master planning process not to include parking in this location.

Another considered location included the area near the old trailer home which will be the main future trailhead. The location at the planned trailhead has limited physical space to accommodate parking, so the design of the location should focus on maximizing the number of parking spaces (beyond 30 if possible) especially if this is initially the only parking area for the open space. Additional parking areas further in could be evaluated after the Open Space is operational to more accurately measure open space visitors and observe parking patterns.

To manage peak visitation times and natural patterns of weekday versus weekend traffic, overflow parking along the road is also recommended to be signed where allowed and feasible. Providing adequate parking within the open space will reduce the risk that visitors park outside of the gate on the residential Lost Canyon Ranch Road. To accommodate pedestrians walking along the road, a separate pedestrian walkway could also be considered along the access road to better serve pedestrians during peak times. This connection could also be considered as a separate trail connecting the upper parking lot just inside the gate to other locations.

Ongoing vehicle counts and trail counts are extremely helpful as future capacity and parking considerations are considered. A vehicle counter is recommended at the entrance gate and trail counters are recommended at every trailhead. This will provide the Town with essential data to support informed future parking, circulation, and traffic calming decisions. Before opening constructing additional parking areas, the visitation data should be evaluated to determine visitor response to new trails and size future parking areas appropriately.

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Lost Canyon Ranch Open Space

Master plan questionnaire and public engagement summary

Executive Summary

The Lost Canyon Ranch Open Space (LCROS) master planning process seeks to define the goals and strategies for land use within LCROS. Given the challenge of determining appropriate levels of recreation access while preserving conservation values, and opening the property in a timely manner for public access, a questionnaire was launched to gather community feedback. The questionnaire aimed to gauge perspectives on conservation versus recreational access, understand the community's interest in visiting the site and assess overall demographics of community members interested and engaged in this and other open space properties in Castle Rock.

The questionnaire was open for 32 days and received 932 responses. Key findings include:

- **Conservation vs. recreation balance** – Respondents were asked to indicate their preferred balance between “less restricted use aimed at unencumbered recreational access, such as mountain biking, rock climbing, and pet allowance” (scoring a 0) and “more restricted use aimed at wildlife preservation and sensitive habitat protection” (scoring a 10). The average result was 5.19.
- **Interest in access** – 45% of respondents expressed interest in activities that allow access to the property while protecting its conservation values, supporting a phased opening approach.
- **Community engagement with open space** – 72% believe the access they receive to Castle Rock's open spaces and trails is a good value, and 87% strongly agree that open space, parks and trails are important factors when choosing where to live.
- **Preferred activities** – Hiking ranked as the top reason respondents would visit LCROS, followed by scenic views, wildlife observation and picnicking.

Full results of the questionnaire are available on page 3. This feedback continues to guide Town staff and land planning firm Wenk and Associates through the master planning process, ensuring that public input informs decisions on access, conservation and future site use.

Background

Master planning process

In fall 2024 the Town contracted with land planning firm Wenk and Associates to begin the master planning process, which seeks to define the vision, goals and strategies for the use and management of LCROS and ensure alignment with the conservation values outlined in the conservation easement. The master plan aims to achieve the following goals:

- Protect and preserve the site's natural habitat and cultural resources
- Provide public access to the site for passive outdoor recreation and education
- Integrate the site into the Town's existing open space and trails network
- Provide a buffer from expanding development pressures
- Find a balance between conservation and recreational access

Considerations

Balancing recreational interests with conservation needs is a key consideration of the project. The property's sensitive canyon areas and single access point through a residential street require thoughtful design to minimize environmental and community impacts. While recreational access may be limited to protect the landscape for future generations, the Town manages over 4,000 acres of open space outside Lost Canyon Ranch that currently provide extensive opportunities for biking and dog walking. By focusing on low-impact trail designs, the Town aims to preserve this space while offering a meaningful experience for visitors. There are additional features of the property that require careful consideration during the master planning process.

Access considerations:

- Property access is limited to one entrance off residential street Lost Canyon Ranch Road
- Exploration of potential traffic calming and directional signage on Lost Canyon Ranch Road
- Evaluation of existing vehicular gate at Lost Canyon Ranch Road
- Assessment of fencing along residential boundaries

Conservation considerations:

- Preservation of open space, habitats, sensitive wildlife areas and historical artifacts
- Prioritization of protection and conservation through limiting recreational activities, including bike and dog access
- Implementation of a phased opening through guided tours based on environmental considerations

Design considerations:

- Evaluation of existing building structures and conceptual design for amenities and their future uses
- Design of parking areas within designated areas
- Trail planning that avoids sensitive areas and works with slope and habitat
- Design of signage, wayfinding and interpretive signs

Public engagement prior to questionnaire launch

Prior to launching the questionnaire, efforts were made to connect with and obtain feedback from neighboring residents impacted by the longer term plan of Lost Canyon Ranch. Specifically:

- Neighbors living on Lost Canyon Ranch Road and Lost Canyon Ranch Court were invited to a meet and greet at the former Lost Canyon Ranch residence on Sept. 12 via a mailed postcard. The planning team and Town staff shared information and answered questions about the upcoming process, with the focus on neighbors whose streets may be affected once the property opens for public use. Roughly 23 postcards were mailed and eight to ten households were represented at the meeting.
- Neighbors bordering Lost Canyon Ranch Open Space were invited to a meet and greet at the former Lost Canyon Ranch residence on Oct. 22 via a mailed postcard. Again, the planning team and Town staff shared information and answered questions about the upcoming process. Just over 100 postcards were mailed and roughly 40 households were represented at the meeting.
- An open house was held on Nov. 12 for the community, at which the planning team and Town staff shared information, listened to attendee's thoughts and ideas and answered questions

about the master plan process and the property. The event, open to the public, was advertised via a news release, a direct email to those registered to receive updates, social media posts and website updates. Around 90 community members attended the open house.

Questionnaire analysis

To help shape the future of Lost Canyon Ranch Open Space, a questionnaire was made available for community feedback, which is essential to the master planning process. Below is a detailed summary of questionnaire findings.

Questionnaire findings

[Full results are available for review using this link](#), which allows for an interactive view of question summaries, data trends and individual responses.

[View questionnaire results](#)

Each of the 17 questions employed serves a specific purpose.

- Questions 1 through 4 are intended to collect demographic information.
 - Response highlights:
 - **63%** of respondents were from Castle Rock, with other significant locations being “Other,” Parker, Highlands Ranch, and unincorporated Douglas County.
 - The Meadows was the most common neighborhood represented, followed by Castlewood Ranch.
- Questions 5 through 10 are intended to better understand respondents’ use and perception of existing open space in Castle Rock.
 - Response highlights:
 - **72%** of respondents believe the access they receive to open space and trails in Castle Rock is a good value.
 - **87%** strongly agree that open space, parks and trails are important factors when choosing where to live.
- Questions 11 through 16 are specific to Lost Canyon Ranch Open Space and the master planning process.
 - Response highlights:
 - **Question 11** asked respondents to indicate their preferred balance between “less restricted use aimed at unencumbered recreational access, such as mountain biking, rock climbing, and pet allowance” (scoring a 0) and “more restricted use aimed at wildlife preservation and sensitive habitat protection” (scoring a 10). The average result was **5.19**.
 - **Question 13** asked respondents to rank reasons of interest for visiting LCROS. Hiking trail access was ranked first, followed by scenic views, natural areas, wildlife observation/birding then picnicking.
 - **45%** expressed interest in activities that allow access to the property while protecting its conservation values, supporting a phased opening approach.

Filtered findings

In addition to full results from the questionnaire, results are also available through a filtered view of responses from two specific groups with nuanced interest in the project:

- **7.5%** of respondents (54) identified their property as bordering LCROS. [View results filtered to these respondents only](#). (Note that there is discrepancy in respondents' identification of where they live on questions 3 and 4. It is believed that not all 54 respondents actually border LCROS).
- **6%** of respondents (43) identified that potential future traffic may impact their residential street. [View results filtered to these respondents only](#).

Background information and project context

Because the public was asked to weigh in on considerations of the property, detailed information was available on the project webpage and its subpages in order to help questionnaire respondents enter into the questionnaire with a deeper understanding of challenges presented. Respondents and webpage visitors were encouraged to familiarize themselves with these considerations and site factors prior to completing the questionnaire. The project landing page, CRgov.com/LostCanyonRanch, offered six subpages to detail project considerations:

- **Location:** this subpage described balancing public access while addressing traffic impacts and limited entry points due to surrounding residential areas and private land constraints.
- **Property overview:** this subpage highlighted the site's cultural significance, wildlife diversity, and varied geology and landscapes, emphasizing the need for protection and conservation while also inspiring interest and engagement.
- **Conservation considerations:** this subpage detailed requirements of the conservation easement and the challenges presented by ensuring limited disturbance on the site while also allowing recreational access.
- **Site understanding:** this subpage highlighted impact of the varied and dramatic site topography and landscape communities, and their impact in determining trail alignment that minimizes environmental impact and ensures trail sustainability.
- **Trail opportunity areas:** this subpage walked viewers through three distinct areas being evaluated for potential trail development.
- **Building envelopes:** this subpage detailed the three building envelopes found on the site, highlighting size, landscape and potential use of each, within given conservation easement considerations.

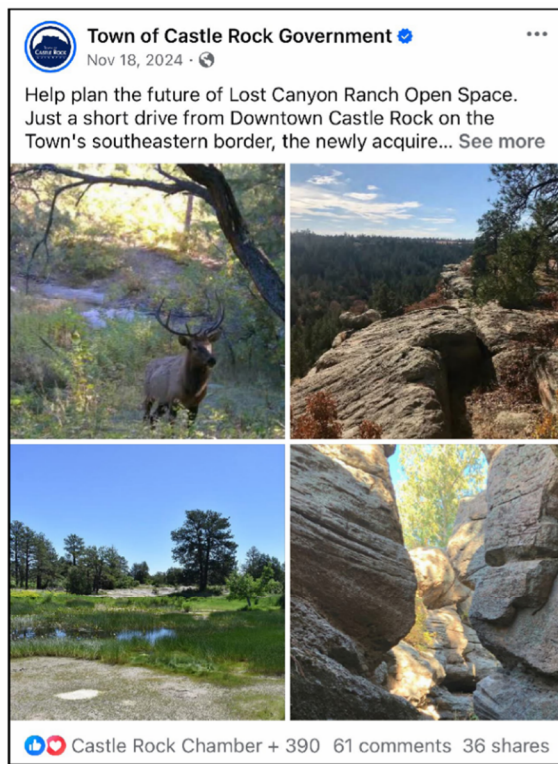
Questionnaire availability and outreach

The questionnaire was launched in conjunction with the Nov. 12 open house, and was open for 32 days, closing Dec. 13. During this time, 932 questionnaire responses were submitted, with the average respondent spending just over 5 minutes on their submission.


Through each of the means below, the community was encouraged to participate in the questionnaire and learn more about project considerations.


- **Webpage views:** CRgov.com/LostCanyonRanch saw 1,715 page views from Nov. 12 through Dec. 13, with the six subpages seeing 207 collective views.
- **News release:** A news release promoting the upcoming open house and questionnaire was published on Oct. 25. Town news releases are emailed to subscribers; this news release had 4,396 sends, a 54.8% open rate and 4.5% click rate.


- Email: In addition to the news release emailed to subscribers, three additional emails were sent via Constant Contact:
 - Oct. 29: An email was sent to recipients who had subscribed via the project webpage to receive emailed project updates. This email had 241 sends, an 81% open rate and 9% click rate.
 - Nov. 1: Information on the open house and questionnaire were included in the Parks and Recreation Department's monthly newsletter. This email had 26,157 sends, a 59% open rate and 3% click rate. 130 recipients clicked on LCROS-specific content.
 - Nov. 26: Similar to the email on Oct. 29, this email was sent to recipients who had subscribed via the project webpage to receive emailed project updates. This email had 261 sends, reflecting growth in project interest, a 72% open rate and 21% click rate.
- Social media: The following posts were made on Town social media channels:



Nov. 18


 52K reach
592 engagements


 1.6K reach
88 engagements


 3,385 reach
4 engagements




Dec. 9

 2.2K reach
12 engagements

 2K reach
42 engagements

 3,096 reach
5 engagements

 858 impressions
2 engagements

Follow up questionnaire

Background information

The draft master plan was prepared and published following the first round of public feedback collection through the questionnaire and resulting data above. Coinciding with the released draft master plan and second public open house, a second questionnaire was launched on March 11 and open for 20 days, collecting 97 responses.

Questionnaire goals

Unlike the initial round of public engagement, which focused on broad input regarding site use and priorities, this second phase specifically sought feedback on the proposed master plan that was presented at the March 11 open house and subsequently made available online at CRgov.com/LostCanyonRanch. Webpage updates reflected key elements of the draft plan, including considerations for access, conservation and site design.

In this questionnaire, a single open-ended question was asked: Please share your feedback on the draft master plan for Lost Canyon Ranch Open Space.

Questionnaire findings

Full results for the follow up questionnaire are available for review using [this link](#), which allows for an interactive view of individual responses.

[View follow up questionnaire results](#)

SurveyMonkey's sentiment analysis revealed that among the 97 comments received, 35% expressed a negative sentiment, 25% were neutral and 40% conveyed a positive sentiment.

In an effort to summarize all 97 comments, four areas of analysis were completed, including: main themes/recurring topics, top concerns, top areas of approval and trends/patterns.

Main themes or recurring topics:

1. Balancing conservation and access: Many respondents discuss the importance of protecting the natural environment while also wanting some level of public access.
2. Types of recreation desired: There are differing opinions on the types of activities that should be allowed, including hiking, biking and dog access.
3. Traffic and neighborhood impacts: Concerns about increased traffic and potential congestion near residential areas appear frequently.
4. Interest in educational and guided experiences: Some respondents express interest in guided tours, nature programs and limited-access events that align with conservation values.
5. Facilities and infrastructure: There are varied perspectives on whether the existing structures (house, riding arena) should be used for programming, special events or other purposes.

Top three concerns:

1. Traffic and neighborhood disruption: Many respondents worry about increased traffic and the impact on residents near the access point.
2. Preservation of wildlife and natural habitat: There is strong sentiment for limiting human impact to protect wildlife and sensitive environmental areas.

3. Potential overuse and mismanagement: Some respondents fear that allowing too much recreation could lead to degradation of the site, similar to what they've seen at other open spaces.

Top three aspects respondents are pleased with:

1. The Town's effort to gather public input: Many respondents appreciate being asked for feedback and value the transparency in planning.
2. Plans for a phased opening and controlled access: Respondents like the idea of a gradual opening, especially through guided tours or limited access activities.
3. The unique and natural beauty of the property: People express excitement about the opportunity to experience the site's scenic views, wildlife and natural landscape.

Notable patterns or trends:

1. Diverging opinions on access: While some respondents advocate for mountain biking and dog access, others strongly oppose these uses due to conservation concerns.
2. High value placed on conservation: Even respondents who support recreation tend to agree that conservation should be the priority.
3. Strong support for passive recreation: Activities such as hiking, wildlife viewing and nature education receive the most positive feedback.
4. Skepticism about event uses: Some respondents are cautious about using the residential house and riding arena for events, expressing concerns about noise and increased visitation.

Opinion of Probable Construction Costs - Lost Canyon Ranch						
April/21/2025		PHASE 1				
General Costing Assumptions:						
This cost opinion is preliminary and based on limited information from the design concept.						
ITEM NO.	CONSTRUCTION ITEMS		UNIT	UNIT COST		TOTAL COST
General Requirements and Demolition						
1	Mobilization/General Conditions - see below	1	LS	\$	-	-
2	Subgrade Preparation (Grading/Site Preparation/Subbase (Fill))	0.4	MI	\$	150,000	\$ 60,000
3	Erosion and Sedimentation Control	1	LS	\$	52,000	\$ 52,000
4	Site Surveying	1	LS	\$	20,000.0	\$ 20,000
5	Landscape Removal, Clear & Grub	0.75	AC	\$	2,500.0	\$ 1,875
6	Tree Protection Fencing	600	LF	\$	7.0	\$ 4,200
7	Topsoil Excavate, Stockpile, and Replace (6" depth)	50	CY	\$	12	\$ 600
8	Remove Existing 18" RCP Culverts	110	LF	\$	76	\$ 8,360
9	Traffic Control	1	EA	\$	10,000	\$ 10,000
				Subtotal	\$	157,035
Utilities - Storm						
10	Stormwater Culvert, 18" Diameter 75' Length	75	LS	\$	118.0	\$ 8,850
11	Stormwater Culvert, 18" Diameter 35' Length	35	LF	\$	118.0	\$ 4,130
12	Stormwater Culvert, 18" Diameter 35' Length	70	LF	\$	118.0	\$ 8,260
13	Stormwater Culvert, 36" Diameter Remove and Replace	1	LS	\$	25,000.0	\$ 25,000
14	Flared End Section, 36" Diameter	2	EA	\$	1,500.0	\$ 3,000
15	Flared End Section, 18" Diameter	3	EA	\$	1,600.0	\$ 4,800
				Subtotal	\$	54,040
Utilities - Site Electrical						
16	Entry Gate Lighting and Power	1	EA	\$	4,000.0	\$ 4,000
17	Entry Gate Security Camera	1	EA	\$	10,000.0	\$ 10,000
18	Site Electrical Service	1	LS	\$	20,000.0	\$ 20,000
				Subtotal	\$	34,000
Lighting						
19	No lighting improvements in Phase 1		EA	\$	-	-
				Subtotal	\$	-
Pavements & Walls						
20	Concrete Paving - Broom Finish, 6" Thick	1080	SF	\$	10.5	\$ 11,340
21	Concrete Curb and Gutter - 6" curb, 1' wide gutter	125	LF	\$	35.0	\$ 4,375
22	Concrete V-Pan - 2' wide	60	LF	\$	35.0	\$ 2,100
23	Riprap V-Pan - 4' wide VL Riprap	315	LF	\$	76.0	\$ 23,940
24	Roadway Improvements Alternative 1 - Asphalt Paving	0	TONS	\$	115.0	\$ -
25	Roadway Improvements Alternative 2 - Gravel Paving	50400	SF	\$	5.0	\$ 252,000
26	Gravel Paving Parking Lot - 6" depth	200	CY	\$	205.0	\$ 41,000
27	Crusher Fines - stabilized	2400	SF	\$	6.5	\$ 15,600
28	Gravity Block Wall 4' Tall	560	LF	\$	650.0	\$ 364,000
29	Aggregate base course, 6"	935	CY	\$	60.0	\$ 56,100
30	Stone Veneer Column	2	EA	\$	6,000.0	\$ 12,000
31	Trail Construction	1	LS	\$	560,997.1	\$ 560,997
				Subtotal	\$	1,343,452
Landscape						
32	Soil Amendment (3cy/1000sf) tilled to a depth of 6"	17000	SF	\$	1.0	\$ 17,000
33	Native Seed for the area around the trailhead and roadway improvements	17000	SF	\$	0.4	\$ 6,800
34	Trees - Deciduous, 2.5" Caliper	2	EA	\$	1,200.0	\$ 2,400
35	Trees - Deciduous, 5' Tall	6	EA	\$	1,000.0	\$ 6,000
36	Trees - Evergreen 10'	7	EA	\$	1,200.0	\$ 8,400
37	Wood Mulch, 4"	4	CY	\$	222.0	\$ 888
				Subtotal	\$	41,488
Irrigation						
38	No irrigation improvements in Phase 1		SF	\$	-	-
				Subtotal	\$	-
Site Furnishings						
39	Trash Receptacles	3	EA	\$	3,000.00	\$ 9,000
40	Stone Barrier at Parking	15	EA	\$	500.0	\$ 7,500
41	Benches	6	EA	\$	2,000.0	\$ 12,000
42	Picnic Tables	4	EA	\$	3,000.0	\$ 12,000
44	Aluminum Surface Mount Trail Sign - Caprock Attachment Sign (Trail Marker Sign Surface Mount)	200	EA	\$	20.0	\$ 4,000
45	Corten Trailhead Kiosk Sign	3	EA	\$	10,000.0	\$ 30,000
46	Corten Trail Intersection Directional Sign	21	EA	\$	7,700.0	\$ 161,700
47	Flexible Carsonite Post with base	200	EA	\$	55.0	\$ 11,000
48	Monument Sign At Site Entrance	1	EA	\$	44,000.0	\$ 44,000
49	Interpretive Signage	6	EA	\$	1,250.0	\$ 7,500
50	Security Camera Pole at Site Entrance	1	EA	\$	10,000.0	\$ 10,000
51	Fencing - Round Split Rail at Site Entrance	117	LF	\$	30.0	\$ 3,510
52	Metal Picket Vehicular Entrance Gate	1	EA	\$	20,000.0	\$ 20,000
53	Ranch Gate (2 panels + 2 posts per location)	3	EA	\$	3,500.0	\$ 10,500
				Subtotal	\$	342,710
Structures						
54	Shade Shelter	1	EA	\$	75,000.0	\$ 75,000
55	Restroom Facility Alternative 1 - Compost Toilet	0	EA			\$ -
56	Restroom Facility Alternative 2 - Vault Toilet	1	EA	\$	200,000.0	\$ 200,000
				Subtotal	\$	275,000
Hard Costs Subtotal					\$	2,247,725
Mobilization & General Conditions (10%)		1	LS	\$224,772.51		\$224,772.51
						\$2,472,497.57
Contingency - 30%		1	LS	\$674,317.52		\$674,318.52
Grand Total						\$3,146,816.08