

CHAPTER III: TRAILHEADS AND WAYFINDING

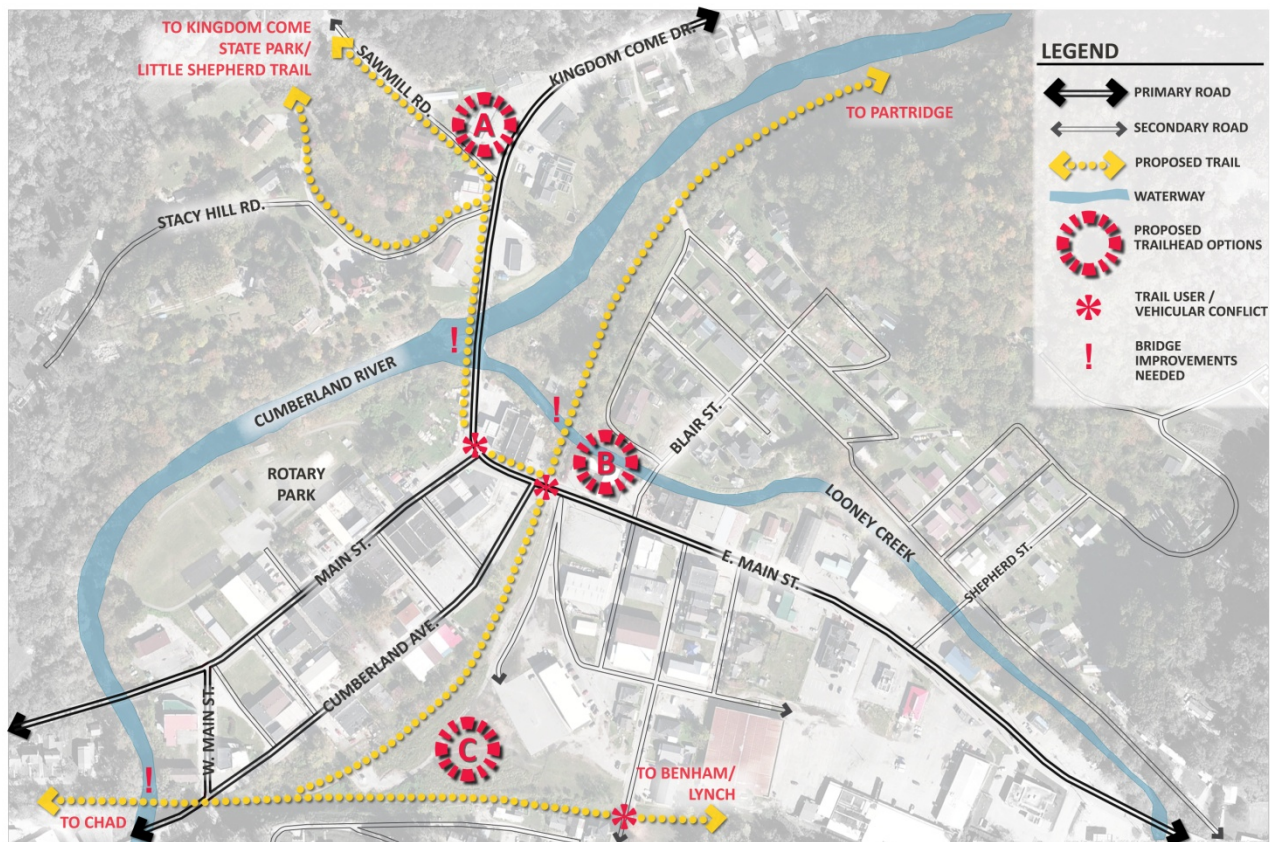
CHAPTER III Trailheads and Wayfinding

INTRODUCTION

Trailheads should be appropriately located within the context of the site, taking into consideration, trail routes, circulation patterns, town centers, and adjacencies to resources and amenities. The trailheads should be located within the proposed wayfinding network, allowing for maximum pedestrian navigability to and from each trailhead.

TRAILHEAD ANALYSIS

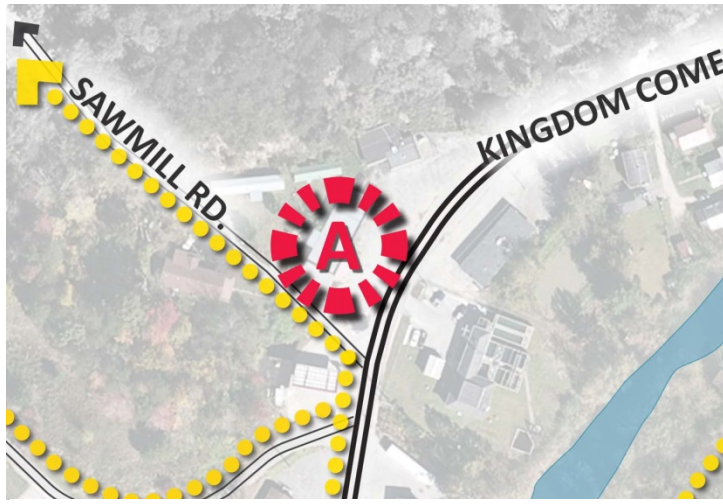
The trailhead analysis seeks to evaluate potential trailhead facility sites within the town of Cumberland. The team's Trailhead Analysis considered three locations. Each location was evaluated based upon ease of access, proximity to the town and trails, and available space for trailhead development. Based on these criteria, the location labeled 'B' in the Trailhead Analysis presents the most opportunity for a Main Trailhead with amenities. Locations 'A' and 'C' provide opportunities for secondary Trailhead facilities. A field survey, environmental assessment, and geotechnical exploration would be required for each of the preferred locations.



TRAILHEAD ANALYSIS DIAGRAM

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PROPOSED TRAILHEAD LOCATION 'A'



TRAILHEAD 'A' ENLARGEMENT

Trailhead 'A' provides direct access to the Kingdom Come State Park connector trail(s). Its location is separated from each of the other trails by the Cumberland River and is not immediately adjacent to the town center. From this trailhead, hikers would proceed along Sawmill Hollow Road, while equestrian users would proceed along Stacy Hill Road which is less steeply graded.

The area available on-site appears adequate for a small parking area to include vehicular parking and horse trailers. The property is privately owned and the City would be required to purchase the property or provide a permanent easement to install trailhead facilities. Existing buildings are located at the site and could be adapted to provide restroom or storage facilities. A survey and an environmental assessment would be needed to determine suitability for the site's adaptive reuse. Potable water service is likely available at this location.

RECOMMENDATION

We recommend that Trailhead 'A' be a secondary trailhead that includes trailhead information signage located within a kiosk. A hitching post with a water spigot and basin would be provided for equestrian users. The existing structures and pavement that are not used will be removed to provide open green space.

Opportunities

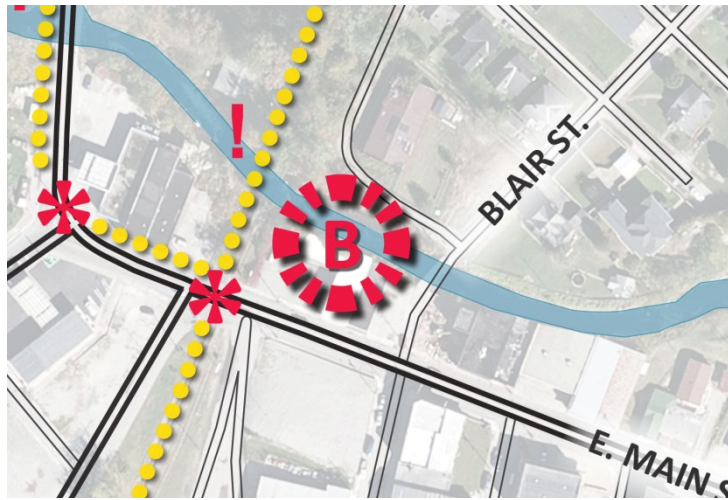
- Nearest to the Kingdom Come State Park Connector Trail.
- Adequate area and level lot to provide full trailhead facilities including vehicular parking, horse trailer parking and restroom facilities.
- Existing buildings could be reused for trailhead facilities.
- Existing utility services available.
- A restaurant and snow cone shop are within easy walking distance from the proposed trailhead.
- A private entrepreneur proposes to open a tack shop and feed store across the street from the site.

Constraints

- Property is privately owned.
- Existing buildings may need to be removed.
- Located across the Cumberland River from the town center.
- A new bridge crossing over the Cumberland River is necessary to provide connectivity to town and additional trails.
- Unknown environmental conditions.

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PROPOSED TRAILHEAD LOCATION 'B'



TRAILHEAD 'B' ENLARGEMENT

Trailhead 'B' is centrally located among the proposed Cumberland trails and is closely located to the town center. The City acquired the property and the USACE cleared existing buildings from the site. Flooding from Looney Creek is a concern and facilities will need to be permitted within the flood plain.

A new flood wall is suggested on the north end of the site to maximize useable space for trailhead development. A restroom and storage structure should be built with a finish

floor elevation 1' above the 100 year flood. Water and sanitary sewer connections in the right of way allow for the provision of restroom facilities and potable water supply for hikers and horses. Care should be taken during trailhead design development to minimize conflicts between trail users and vehicles.

RECOMMENDATION

We recommend that Trailhead 'B' becomes the Main Trailhead. A new retaining wall will maximize usable area for facilities including a restroom and enclosed storage. A trailhead information sign located within a visitor's center or kiosk should be provided, along with hitching posts and potable water sources. A small vehicular surface parking lot could be provided for up to 6 cars. The site is not large enough for horse trailers, however green space with a picnic area is suitable at this location. Schematic design sketches for potential trailhead development are presented later in this chapter.

Opportunities

- Centrally located.
- Easy access.
- City owned property.
- High visibility.
- Existing utility connections available
- Close proximity to other parking options.
- Within easy walking distance from a local restaurant and the downtown area.

Constraints

- Small available area for trailhead development.
- New cast in place, reinforced, flood wall needed.
- Does not allow for horse and trailer parking.
- Located near high traffic volumes.

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PROPOSED TRAILHEAD LOCATION 'C'



TRAILHEAD 'C' ENLARGEMENT

Trailhead 'C' is the southernmost option considered. It is located adjacent to the proposed Benham/Lynch rails-to-trail and it is most removed from the Kingdom Come State Park connector trail(s). Trailhead 'C' does provide the most open flat area for trailhead development. The property is privately owned, therefore the City would need to purchase the property(ies) outright or provide an easement for installation of trailhead facilities.

The existing utility services are not known at this time. A new service and water line would likely need to be provided for potable water. Vehicular access to the site would be from a private access drive located immediately east of the future rails to trail or Central Street. Access to the proposed Benham/Lynch and Cumberland/Partridge rails-to-trails can be accommodated.

RECOMMENDATION

We recommend Trailhead 'C' be used as a secondary trailhead. Potential facilities most suitable for this site include horse trailer parking, hitching posts, and a trailhead information sign located within a kiosk. Vehicular access to the site could be provided via the existing private drive or Central Street.

Opportunities

- Generous area allows for trailer and vehicular parking.
- Site located at the intersection of proposed Benham/Lynch and Cumberland/Partridge rails-to-trails.
- Flat open area allows the greatest flexibility of trailhead layout and design.
- Easy vehicular access especially for horse trailers.
- Minimal conflicts between trail users and vehicles.

Constraints

- Furthest removed from Kingdom Come State Park connector trail.
- Privately owned parcel(s).
- Utility service would need to be provided.
- Indeterminate time frame to develop Benham/Lynch rails-to-trail.

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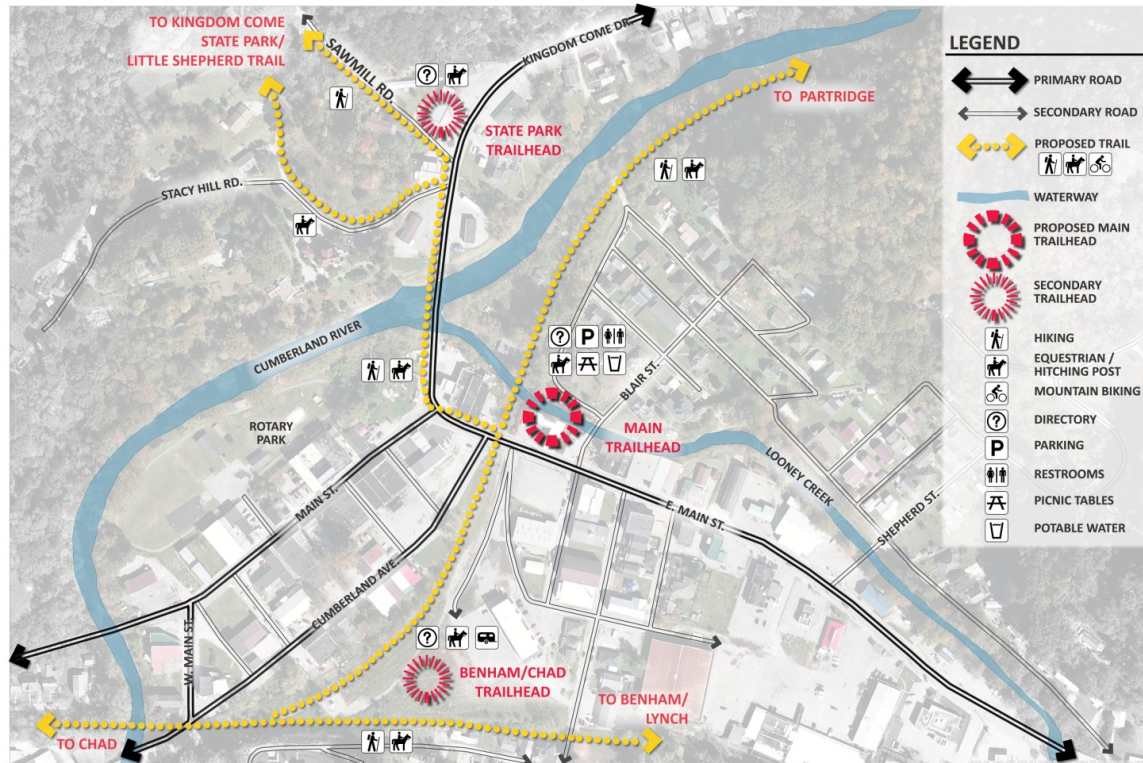
TRAILHEAD ANALYSIS SUMMARY

Location 'B' at the intersection of East Main Street and Blair Street provides a centrally located trailhead suitable for wayfinding, directories, restroom facilities and vehicular parking. Due to the limited area available in this location, we recommend utilizing Trailhead 'C' for horse trailer parking. Trailhead 'A' provides clear wayfinding opportunities to direct users to Kingdom Come State Park and the Little Shepherd Trail. Each trailhead shall include the following wayfinding signage: trailhead information signs, destination signs, trail identification signs, regulatory (usage control) signs, entrance signs, and road crossing signs (when needed).

- Trailhead Option A- Kingdom Come State Park Connector Trailhead
- Trailhead Option B- Main Trailhead for all Cumberland Trails
- Trailhead Option C- Parking for Horse trailers and direct access to Benham / Lynch trail

Pedestrian conflict zones exist in the proposed locations where trails intersect vehicular circulation. Three potential conflict zones are located on the Trailhead Analysis map: The first is at the intersection of East Main Street near Cumberland Avenue, the second is at the three way intersection of East Main Street, Main Street, and Kingdom Come Drive, and the third is along Central Street. Minimizing the trail user and vehicular conflict is a priority. Appropriate wayfinding signage, like road crossing signs, as well as changes in pavement texture and color can help alert both user groups to potential conflict zones. All of the proposed trail routes along the roadway must provide adequate signage. The existing bridge along Kingdom Come Drive must be rehabilitated to allow for equestrian and hiker use.

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PROPOSED CUMBERLAND TRAIL MAP

MAIN TRAILHEAD CONCEPT OPTION

As previously noted, Option 'B' is recommended as the Main Trailhead. The site is outlined in red in the aerial image below. It is located within the floodplain of Looney Creek and at the intersection of East Main Street and Blair Street. The site has high visibility, is central to the proposed trails, and is closely located to the town center's Main Street. Vehicular access can be easily accommodated. The southern portion of the site borders the concrete sidewalk on East Main Street, allowing for pedestrian access.



TRAILHEAD B – AERIAL VIEW

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TRAILHEAD B - VIEWING NORTHEAST AT THE RAILROAD TRACKS



TRAILHEAD B - VIEWING NORTHEAST AT BLAIR STREET



TRAILHEAD B - VIEWING SOUTHWEST

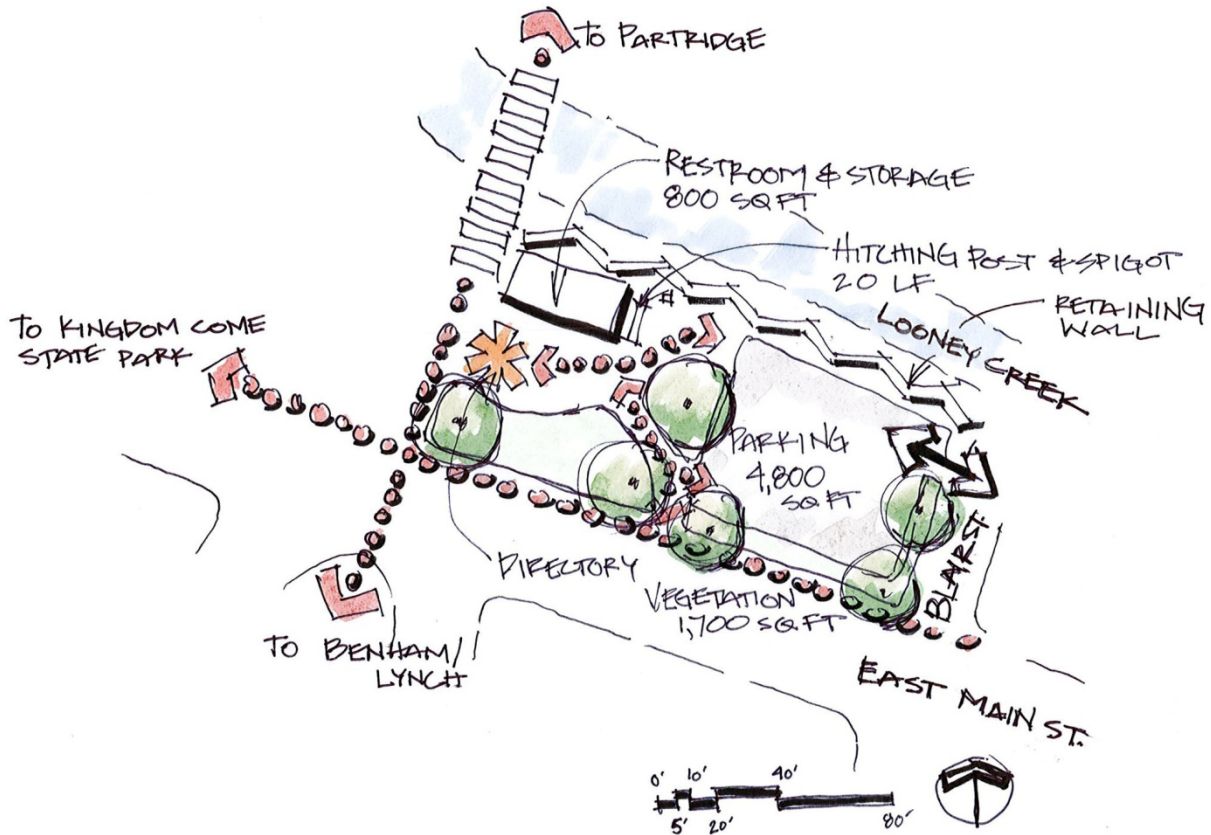
The two existing buildings within the red site boundary shown in the aerial were recently demolished by the USACOE. Existing paved surface lots remain and are divided by a concrete sidewalk and foundation extending north and south through the center of the site. A deteriorating concrete block retaining wall extends east and west forming the northern boundary of the site just south of Looney Creek. Several overhead utilities are parallel to East Main Street and cross over the proposed trailhead site and Looney Creek. It should be assumed that the abandoned utility connections for water and sanitary sewer remain.

TRAILHEAD 'B' CONCEPT OPTIONS

For each of the three options and their design proposals, we recommend the site be surveyed to establish elevation data and locate all utilities and features remaining on the site. From visual inspection only, it appears the existing retaining wall is not suitable to support additional construction activity and should be demolished and replaced with a flood wall. Each option uses the existing north-south concrete sidewalk and grade change along that sidewalk to establish parking on the eastern half of the site and trailhead amenities on the western end of the site near the proposed rails to trail to Partridge.

Additionally, all three design proposals recommend vehicular traffic access to the parking area from Blair Street. This will reduce curb cuts along East Main Street, thereby reducing potential vehicular pedestrian conflicts. The proposed trail is to cross East Main Street and connect southward toward the proposed Benham / Lynch trail. The three concept options are illustrated on the following pages.

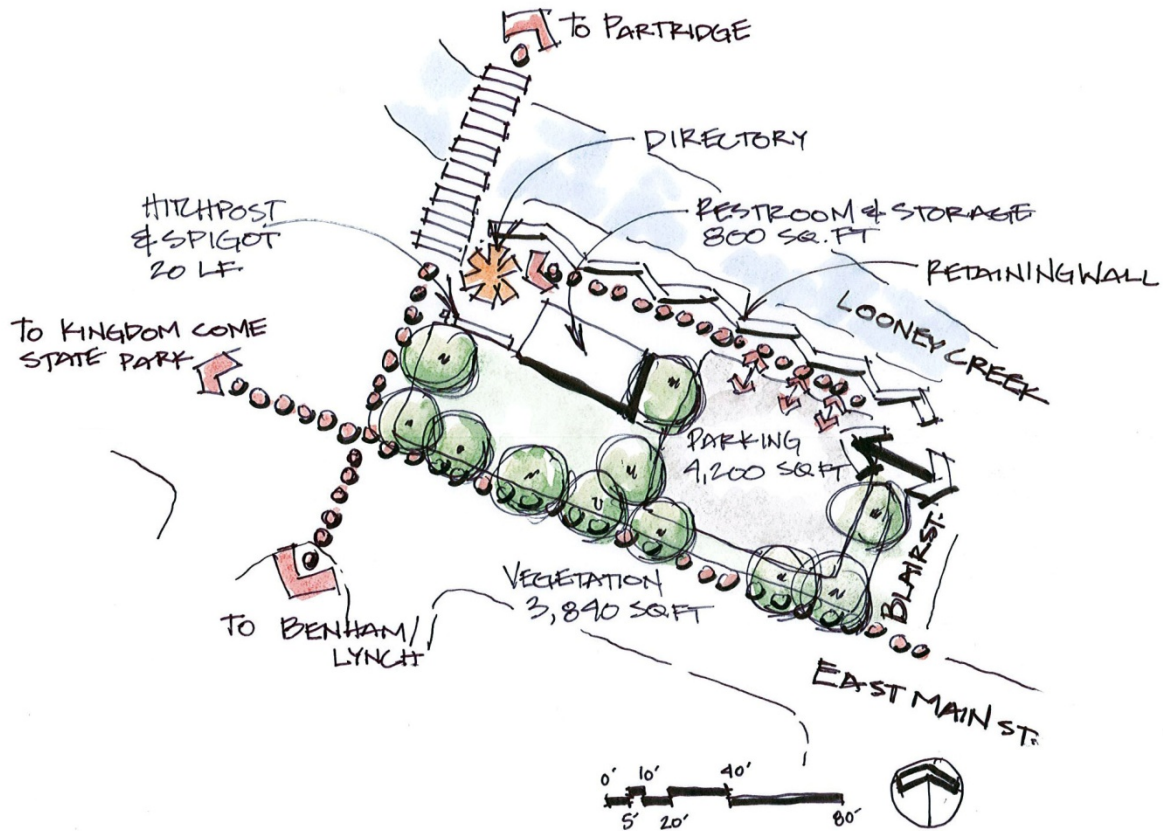
CHAPTER III: TRAILHEADS AND WAYFINDING



Option B-1

The trailhead information sign and directory kiosk as well as the restrooms are located immediately adjacent to the proposed trail, allowing for easy access and trailhead recognition. From the parking area, two pedestrian access points take users through an open space at the entrance to the restroom facility and trail way. Equestrian users accessing the site from the proposed horse trailer parking facility would cross East Main Street. Hitching post(s) and a water basin are provided near Looney Creek. Minimal tree plantings provide optimal views into the site, while providing some delineation between the trailhead site and the public street. A new flood wall is provided to maximize usable space. A small surface parking area is provided which can accommodate up to 6 cars. Vehicular access from Blair Street minimizes vehicular and trail user conflict off East Main Street.

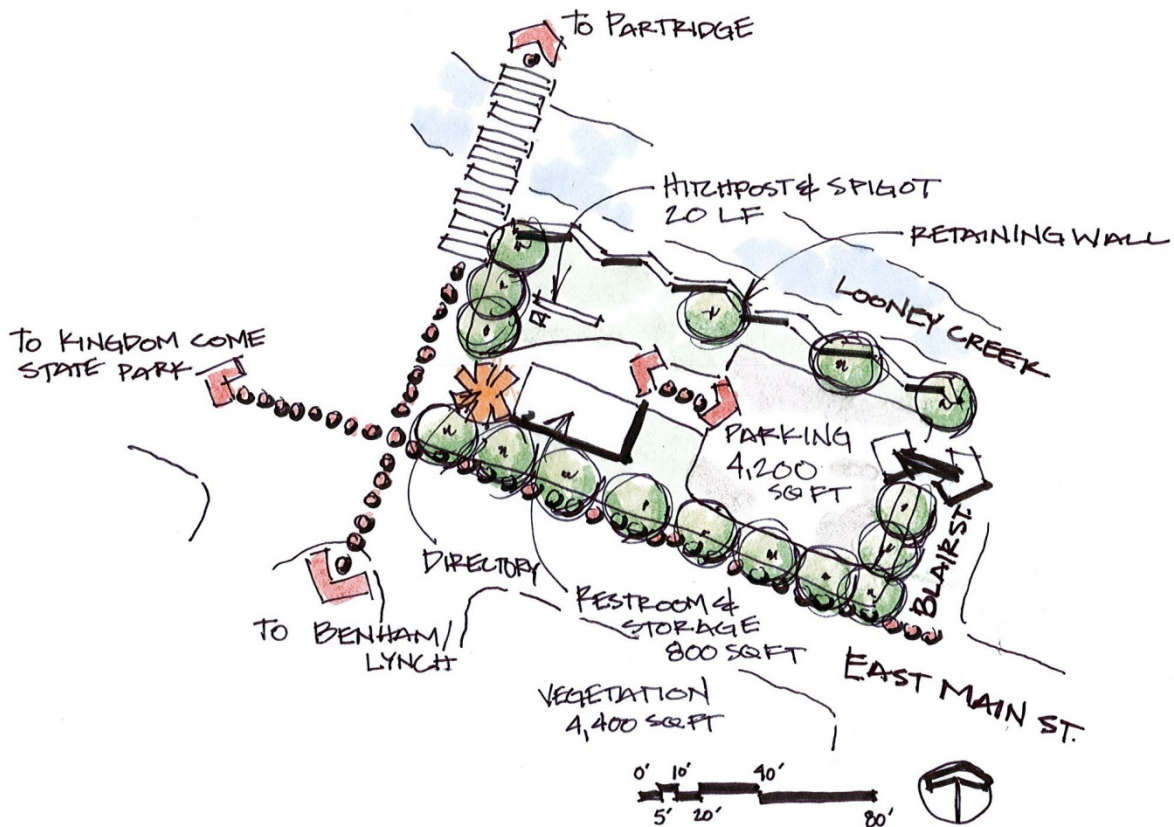
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Option B-2

The trailhead information sign and directory kiosk sits prominently at the proposed rails-to-trail while the restroom facility is centrally located in the open space to allow circulation around the entire building. Visitors from the parking area are directed to the north where a path runs along Looney Creek. The trailhead information sign and directory kiosk located in the northwest corner of the site draws visitors from the parking area. Vegetation alongside the path is minimal, allowing for views across the creek. A hitching post is provided immediately adjacent to the trail to allow for a quick dismount. The restrooms and storage facility provide a buffer between the parking area and hitching post, flanking an open space to the south. Tree plantings along East Main Street and Blair Street provide both shade and a buffer from the public street and the trailhead site.

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Option B-3

The trailhead information sign and directory kiosk as well as the restrooms anchor the south western portion of the site adjacent to the proposed trail. It is prominently located for trail users and provides a visual cue for vehicular users. A hitching post is provided for equestrian users. It is located with generous clearance from other circulation in the northwest corner near Looney Creek. A spigot and basin are provided for water. A direct route from the parking area takes users past the restroom and storage facility to the trail. A trail directory adjacent to the building allows easy access for pedestrians coming from downtown. Street trees line East Main Street and Blair Street announcing the space while providing a buffer to those using the facilities.

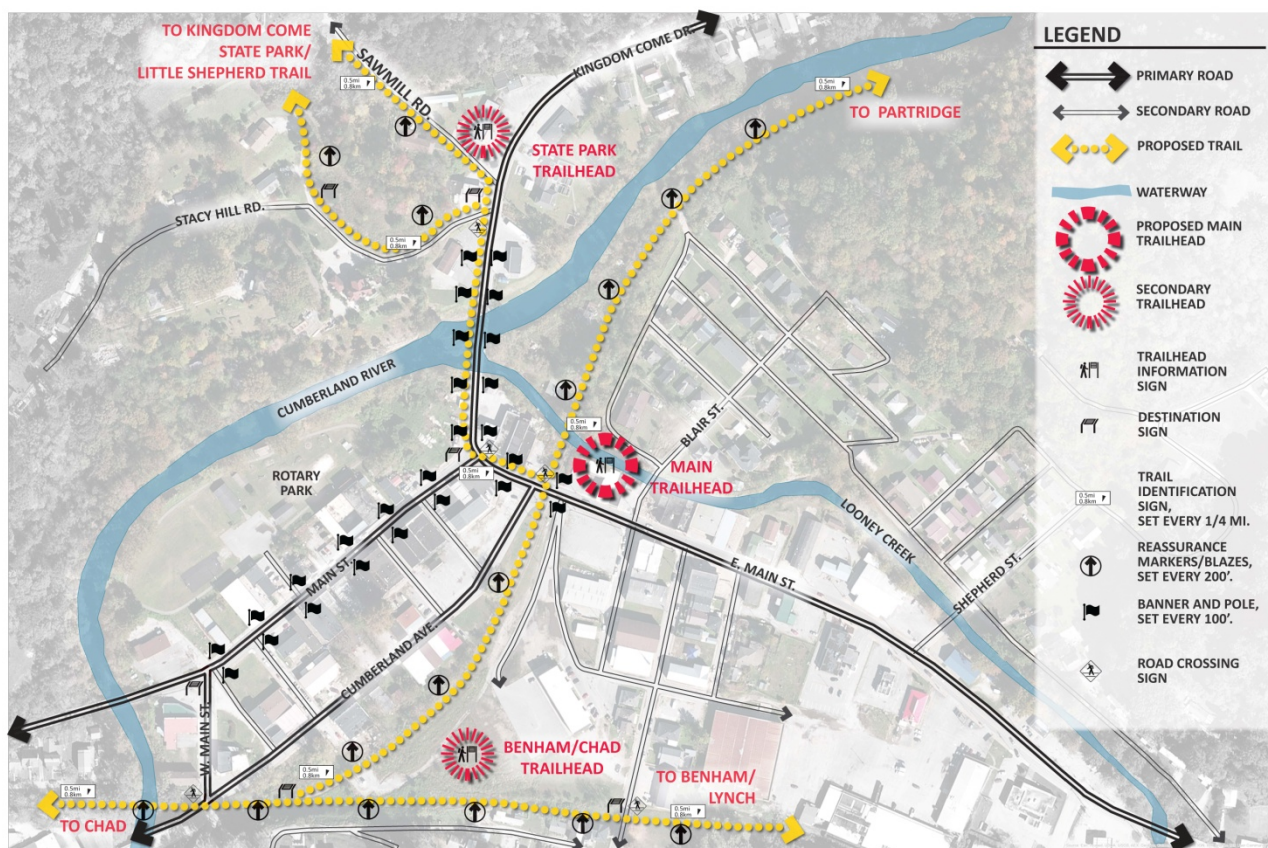
Materials and Amenities for Trailhead 'B' Options

- Asphalt surface for vehicular parking
- Timber frame Restroom / storage facility
- Timber frame Kiosk and Trail Directory
- Wood hitching post
- Tree Planting along the right of way
- Large Boulders along the right of way
- Area lighting
- Stone pier at trailhead
- Cast in place, reinforced flood wall
- Metal Bench and Trash Receptacles
- Water Spigot and Concrete Basin
- Wood fence along Looney Creek.

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WAYFINDING:

The purpose of this wayfinding study is to improve pedestrian navigability in Cumberland and the surrounding areas, while bringing awareness to the region's amenities and resources. The ease to which each trailhead, trail, or attraction can be found and navigated is critical to the success of the overall trail network. The types of wayfinding that are included in this study are trailhead information signs, destination signs, trail identification signs, regulatory (usage control) signs, entrance signs, interpretive signs, road crossing signs, reassurance blaze markers, and banners. In the figure below, the proposed locations of each of these wayfinding types (except for interpretive signs and entrance signs) are identified.



PROPOSED WAYFINDING SIGNAGE MAP

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TRAILHEAD INFORMATION SIGNS:

Trailhead information signage shall be installed at each of the three proposed trailheads. The structure shall be built within 50 feet of where the trail connects to the parking lot. At Trailhead 'B', the proposed main trailhead, the information signage should be included within a visitor's center or trailhead kiosk, distinguishing itself as the primary trailhead map. Trailhead information signage located at Trailheads 'A' and 'C' should be minimal and secondary to the main trailhead, either in smaller kiosks or as a sign, marker, or post identifying the trail route. Information conveyed on trailhead information signs often includes a map, trail rules, regulatory (usage control) signage identifying the desired user groups, trail mileage, trail registers, safety/wildlife alerts, and current events. For newly developed trails, it is a requirement that all trailhead information signs include accessibility information. This information includes, but is not limited to, trail surface type, typical and minimum trail width, typical and maximum trail grade / running slope, and typical and maximum tread cross-slope. All information located on trailhead information signs shall be weather resistant, and regular maintenance shall be provided to help maintain a professional appearance.



MERCER ISLAND, WA



PHOENIX, AZ



HILLSBORO, OR



SHERWOOD, WI



BOULDER, CO



MIAMI, FL

TRAILHEAD INFORMATION EXAMPLES

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DESTINATION SIGNS:

Destination signs show direction and distances to various spots within the trail network. This information shall include directional arrows, distances (to a tenth of a mile) to other trails, town amenities, or environmental attractions found within the area. Destination signs are an important source of information from a wayfinding standpoint, and can serve to increase the use of under-utilized sections of a trail or trail network by informing the user of nearby amenities. Destination signs shall be placed at all major intersections within the Cumberland trail network, including both trails and streets. Destination signs can vary greatly in their design and cost, ranging from small, primitive, low-cost wood signage, to sleek, highly designed signs made of various materials.



SAN FRANCISCO, CA



GLINDFELD, GERMANY



BUENOS AIRES, ARGENTINA



LAKEWAY, TX



GREAT SMOKY MOUNTAINS NATIONAL PARK, TN



OREGON CITY, OR

DESTINATION SIGN EXAMPLES

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TRAIL IDENTIFICATION SIGNS:

Trail identification signs are located on the trails and are used to identify and distinguish trails from one another. The information found on trail identification signs shall include the name of the trail, regulatory (usage control) signage identifying the desired user group(s), a recognizable trail logo, trail distance, and directional markers. Identification signs can also include trail key maps, as well as literature about the trail and trail network. The signs can vary in size and shape, but are commonly 4"x4" wood posts. It is recommended that trail identification signs be installed at .25 mile intervals, providing distance information for the trail user.



BARCELONA, SPAIN



CLACKAMAS, OR



MAMMOTH CAVE, KY



CAROLINA THREAD TRAIL, NC



SAN FRANCISCO, CA



CAROLINA THREAD TRAIL, NC



CAIRNS, AUSTRALIA



LONDON, ENGLAND

TRAIL IDENTIFICATION SIGN EXAMPLES

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REGULATORY (USAGE CONTROL) SIGNS:

Regulatory (usage control) signs are used to display the appropriate uses of each trail located within the trail network. These signs should be located at all trailheads, trail entrances, and road crossings to help promote acceptable trail use. Regulatory signage should be included on trailhead information signs, trail identification signs, and road crossing signs. When appropriate, regulatory signage can also stand alone as its own signage when, installed on carsonite or wood posts. This signage can vary in its size and the detail of information provided, but should at a minimum notify the user of the trail's acceptable use.



DENVER, CO



ASHLAND, WI



BROOKSVILLE, FL



ELSMORE, AUSTRALIA



PHILADELPHIA, PA



SAN DIEGO, CA



PASADENA, CA



MOAB, UT

REGULATORY (USAGE CONTROL) SIGN EXAMPLES

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ENTRANCE SIGNS:

An Entrance Sign should be installed at the corner of US 119 and College Road, just southwest of downtown Cumberland. This proposed location is ideal for an entrance sign due College Road’s function as a primary entry way to Cumberland as well as its high visibility from increased traffic. Preferably, the entrance sign should be two-sided and placed perpendicular to the road, located just off of the right-of-way. This increases the sign’s effectiveness of directing the user to and from Cumberland. Depending on site conditions, however, the entrance sign may be one-sided. If the sign must reside within the right-of-way, a permit and easement must be obtained from the responsible highway department.



NORRIS, TN



MAMMOTH CAVE, KY



SPRINGDALE, UT



LAKE DARLING, IA



ONEIDA, TN

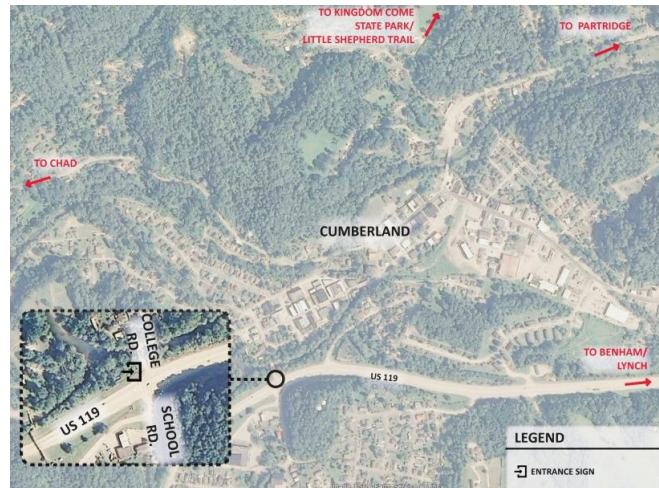


GATLINBURG, TN



WEST GLACIER, MT

ENTRANCE SIGN EXAMPLES



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PROPOSED ENTRANCE SIGN LOCATION

INTERPRETIVE SIGNS:

Interpretive signs explain natural, cultural, and historic features for trail users. They should communicate specific messages to help educate trail users on significant cultural, historical, or ecological landmarks found throughout the trail system. Interpretive signs can vary in size and cost, but typically include graphics and descriptive text that is easily legible for all trail users. The graphics and text are commonly mounted on wood posts/frames and are printed and protected in a way to maintain the quality of the text and images.



KODAK, TN



SCHOODIC PENNINSULA, ME



MARTINEZ, CA



PHILADELPHIA, PA



TARONGA, AUSTRALIA



KNOXVILLE, TN



MEEKER, CO

INTERPRETIVE SIGN EXAMPLES

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ROAD CROSSING SIGNS:

Road crossing signs provide awareness to both hikers and drivers, alerting each to use caution when a trail and road intersect. The signs should be visible enough to draw attention to both the hiker and driver. However, road crossing signage may be discrete if calling attention to the trail is not desirable. Posts should be used at these more discrete locations as well as where the trail crosses other significant trails, maintenance roads, or low speed county roads. Road crossing signs should contain, at a minimum:

1. Trail name and logo.
2. Directional arrows (when needed).
3. Regulatory (usage control) signs.
4. The name of the road being crossed.

At major road crossings, it may be appropriate to add warning lights and/or trail information signs. If used, trail information signs should be installed parallel to the road at the edge of the right-of-way.



ANNAPOLIS, MD



DENVER, CO



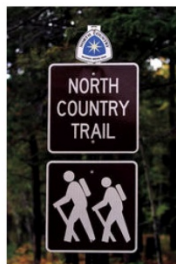
ONTARIO, CANADA



HOT SPRINGS, AR



LEXINGTON, KY



MARQUETTE, MI



ORLANDO, FL



EAST SUSSEX, ENGLAND

ROAD CROSSING SIGN EXAMPLES

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REASSURANCE BLAZE MARKERS:

Reassurance blaze markers are small trail identifiers that are placed on trees or posts to provide navigational reassurance to hikers. There are two types of blaze markers: nail-on and painted. Painted blaze markers are commonly 2"x6" vertical rectangles, while nail-on markers can vary in color and size. The color or pattern found on each blaze marker shall correspond to each trail, distinguishing it from others. They are typically placed at eye level to provide a clear "line of sight" for the trail user. The spacing of one blaze marker every 200' is common, and spacing between blazes should not exceed 300'. The spacing of blaze markers shall be continuous and be as such that the trail user should be able to stand at one blaze marker and see another. However, it is not desirable to have multiple blazes visible in either direction at any one time. Additionally, these blaze markers shall be placed immediately beyond any trail junction or road crossing, even if a trail identification or destination sign exists.



LAUREL, NC



SPRINGER MOUNTAIN, GA



ORANGE, FL



ONTARIO, CANADA



PORTPATRICK, SCOTLAND



WEOGUFKA, AL

REASSURANCE BLAZE MARKER EXAMPLES

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BANNERS:

It is recommended that vinyl banners be located on 10-16' tall pedestrian poles that are spaced evenly along Main Street and Kingdom Come Drive at approximately 100' intervals. The placement of banners along these streets will help highlight Cumberland as a trail town, while providing landmarks for pedestrian orientation. The banners do not exclusively provide wayfinding value, but help to market Cumberland as a unique trail town. Banners can promote Cumberland's adventure-tourism, outdoor recreation, and wilderness landscape. Additionally, banners provide the opportunity to embrace Cumberland's rich industrial past while looking ahead to its future. Currently, pedestrian poles do not exist along Cumberland's streetscape. Both banners and pedestrian poles would need to be installed.



BANNER EXAMPLES