

Richlands Walking Trail Extension

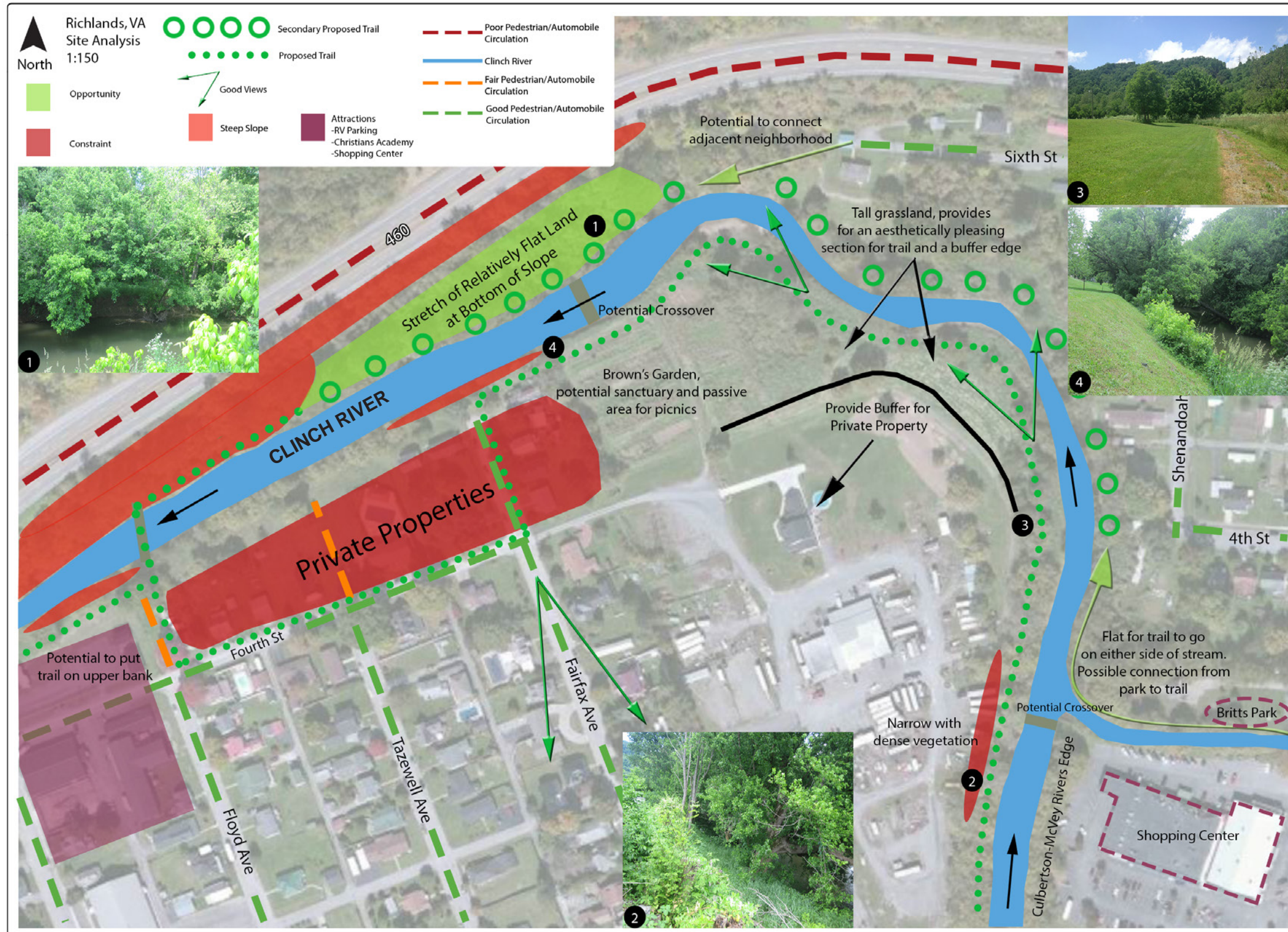
July 11, 2013

Front St Bridge Site Analysis

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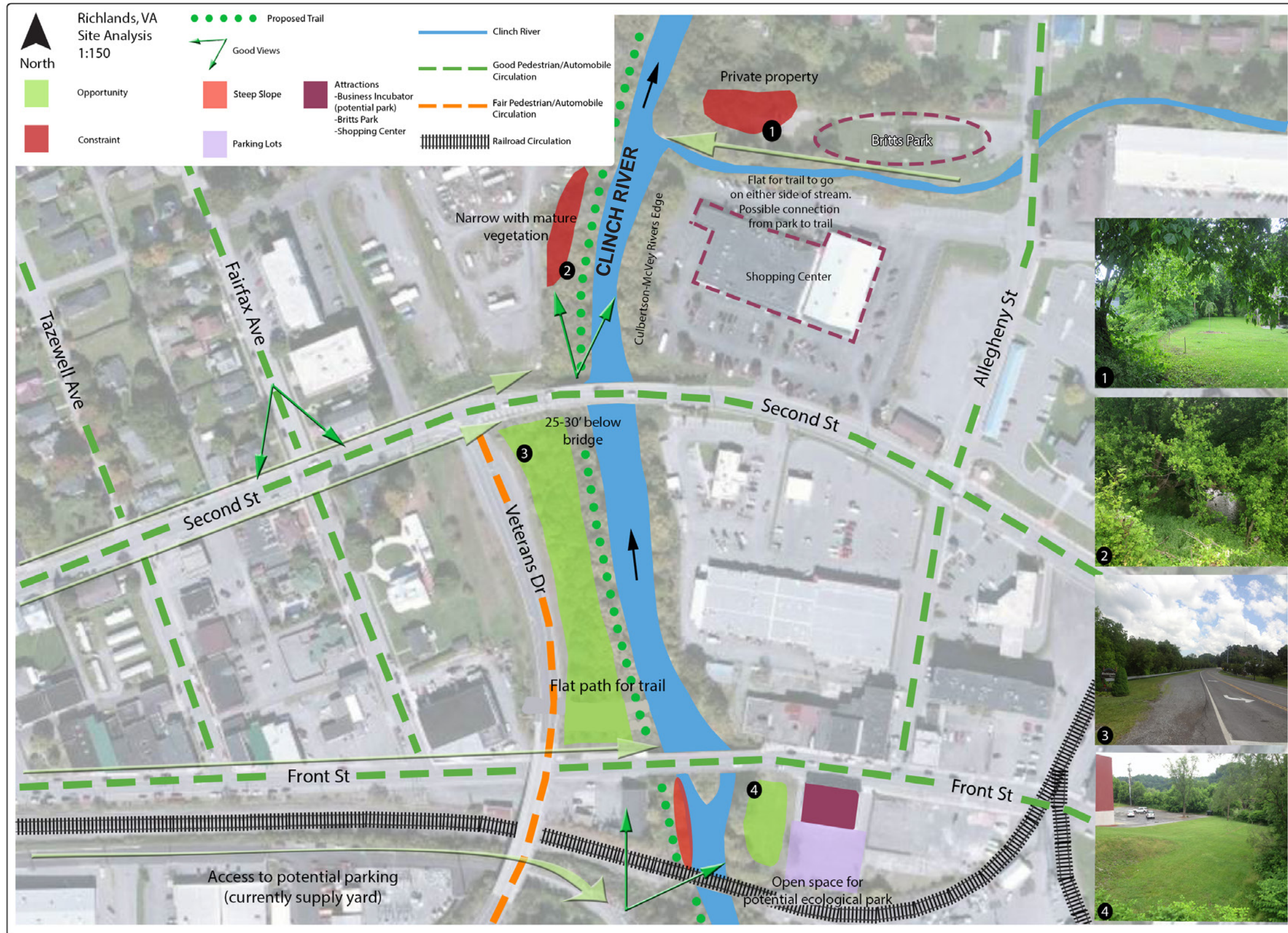


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 Andy's Field Site Analysis

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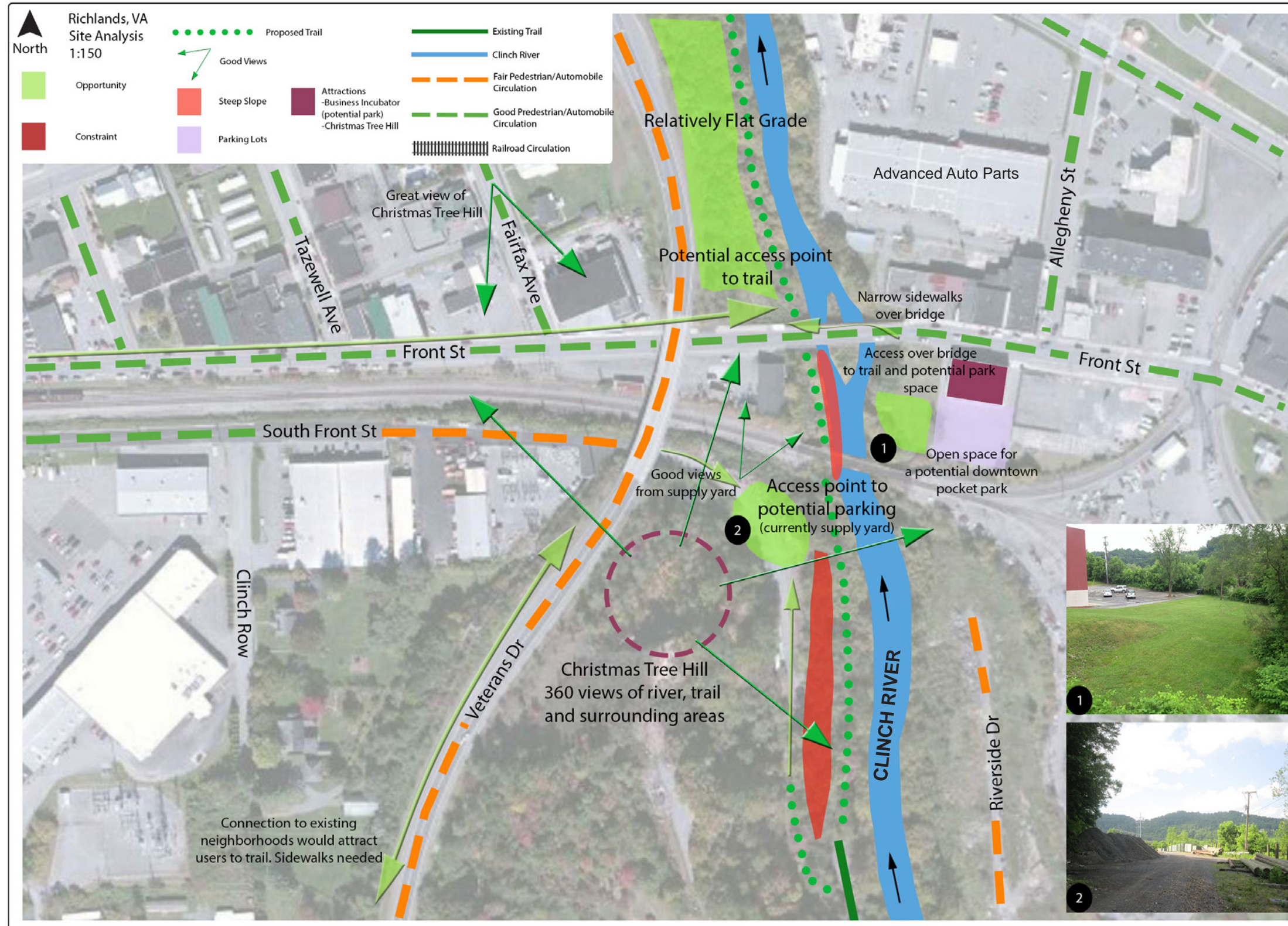
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Second St. Bridge Site Analysis

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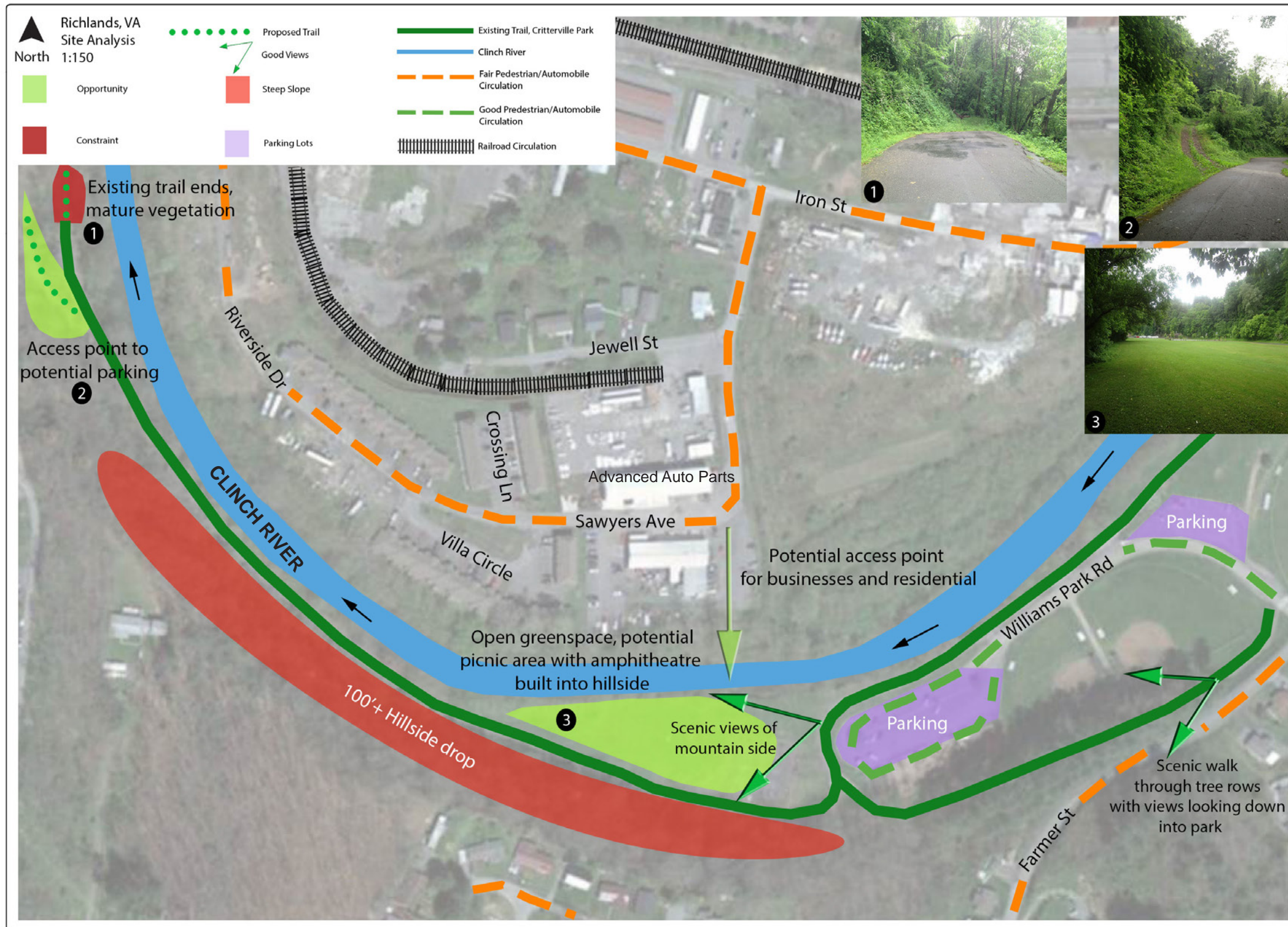
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 Business Incubator and Front St. Bridge Site Analysis

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Richlands Walking Trail Extension

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Critterville Park Site Analysis



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SITE ANALYSIS: ROUTE OPTIONS

Richlands, VA
North Site Analysis

Clinch River

Proposed Trail, Phase 2

Major Condition Issue

- Steep slopes
- Private property
- Heavy traffic

Primary Route Option

Infrastructure

- Improvements Needed

Existing Trail, Critterville

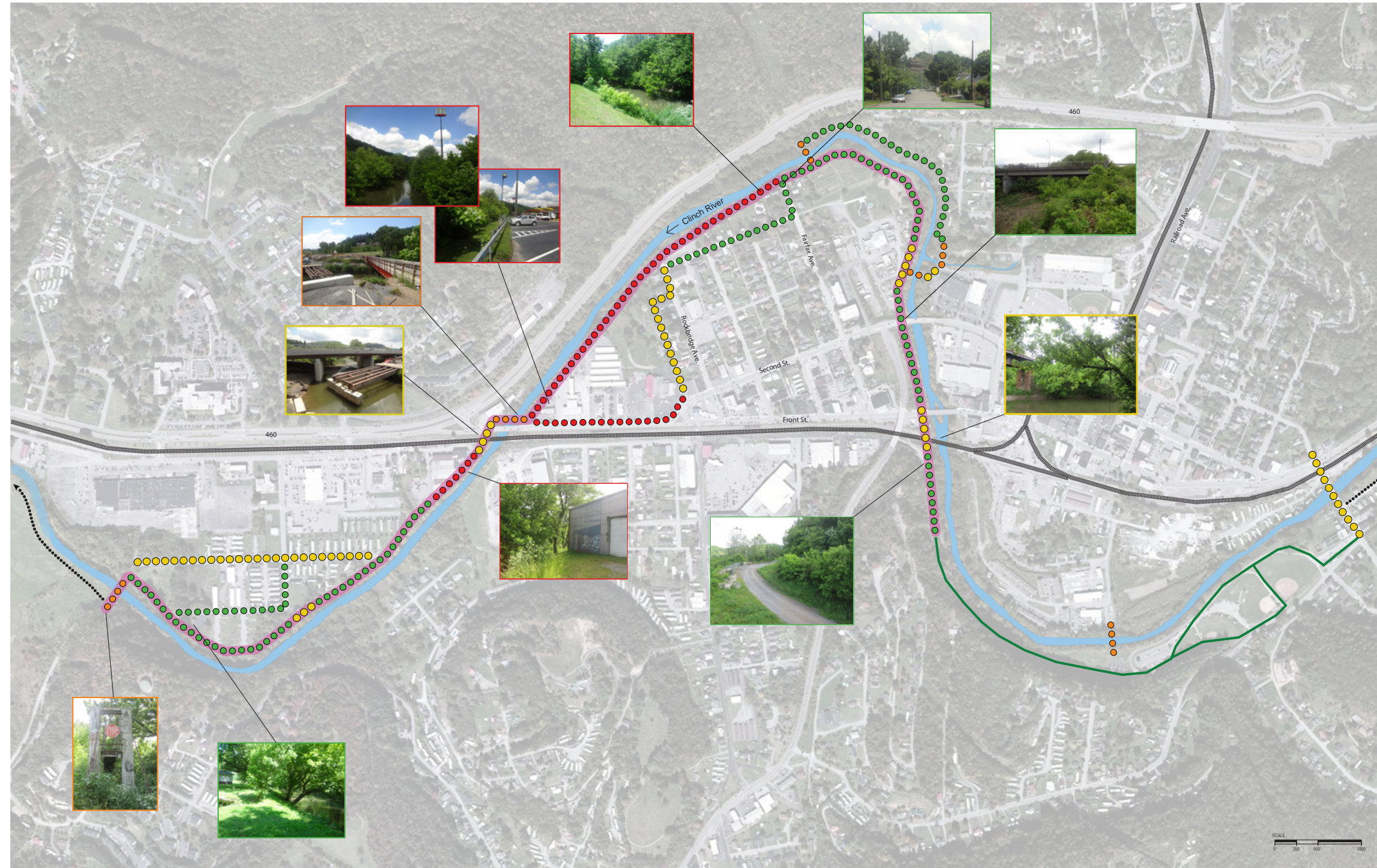
Minor Condition Issue

- No sidewalks
- Narrow space

Railroad Circulation

Few Limitations

- Clear vegetation



Richlands Walking Trail Extension

July 10, 2013

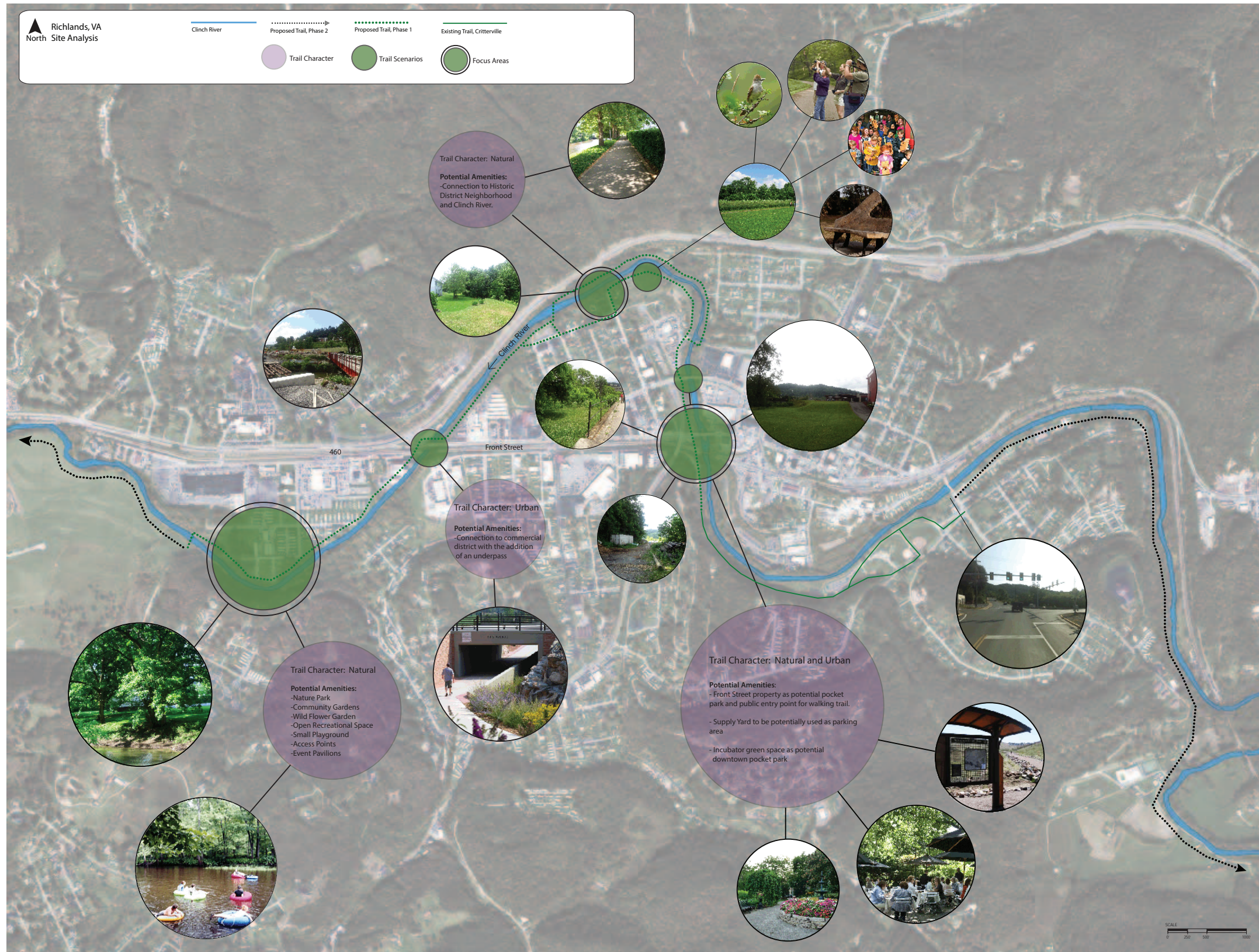
Route Options



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SITE ANALYSIS: POTENTIAL DESIGN AREAS



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Potential Design Areas



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PRELIMINARY DESIGN CONCEPTS

After analyzing potential routes for the greenway, the design team chose to focus on several spaces along the greenway that either provided opportunities for parks and greenspace or offered challenges that needed further attention. These focal areas included Clinch River access points, the greenway along 4th Street, potential greenspace areas along Front Street and near the Business Incubator, and a potential park near the historic swinging bridge. The initial concepts for each of these areas are on the following pages.

Clinch River Access Points

In determining the best locations for access points along the Clinch River, the CDAC team considered multiple factors. First and foremost, topography was important. Access points should be in areas that have a gentle grade leading up to the river to minimize erosion and the need for construction. In addition, the team located potential access points that were or could be on public land. The team also took in consideration whether the access points should be within existing recreational areas or on developed land to prevent damage to riparian corridors. Locating the access points at opposite ends of the greenway would allow for pickup and dropoff locations to increase ease of maintenance.

When implementing the access points, it is recommended that pervious surfaces be used to reduce runoff, thereby protecting soil and controlling erosion. During construction, use erosion and sediment control measures such as silt fences, filter strips, and temporary vegetation cover, to prevent sediment from entering wetlands or open water. When necessary, restore eroding stream/riverbanks adjacent to the river access point. If not addressed, these banks will continue to erode and effect the health of the river and potentially threaten the structural integrity of the access point. After the access points are created, it is recommended that the riparian corridors in these areas be restored. Riparian buffers aid in filtering stormwater runoff, reducing flooding of developed areas, and preventing erosion problems. They also provide shade for streams and help rivers maintain a healthy aquatic life population. Streams lacking shade will suffer from higher water temperatures, thereby negatively impacting aquatic life.

PRELIMINARY DESIGN CONCEPTS

4th Street and River's Edge

Locating the greenway near 4th Street offers a number of challenges. In this area, there are private properties along the river with homes relatively close to the river's edge. In addition, the slope of the river bank is steep on both sides of the river making greenway infrastructure more costly and difficult. In considering options for greenway placement, the team chose to place the greenway at the top of the slope on the residential side of the river, locating it above the steep river bank, but as far away from private residences as possible. In order to give residents more privacy, the design incorporates a strong buffer along this section of the greenway with private entrances for each residence. In addition, a fishing dock and scenic overlook was placed across from the Christian Academy to provide a safe viewing platform for residents and children.

Front Street and Incubator Park

Two greenspaces were identified as potential parks along the greenway near Front Street and the Business Incubator. These greenspaces are located near the heart of downtown and provide the opportunity to strengthen the appeal of downtown for both residents and tourists. In the park next to the Business Incubator, an entry patio provides seating and contains a kiosk with informational signage for Richlands. This signage could consist of a map of downtown featuring important destinations and could allow for events to be posted. Stepping down from the entry plaza, a patio with tables and chairs creates a space for people to have their lunch outside near the river. In addition, a more private resting area is located farther away from Front Street. This patio is well planted with shrubs and shade-trees to create a sense of privacy, yet maintains sightlines into the space for safety. It also provides a shaded nook for reading or resting.

PRELIMINARY DESIGN CONCEPTS

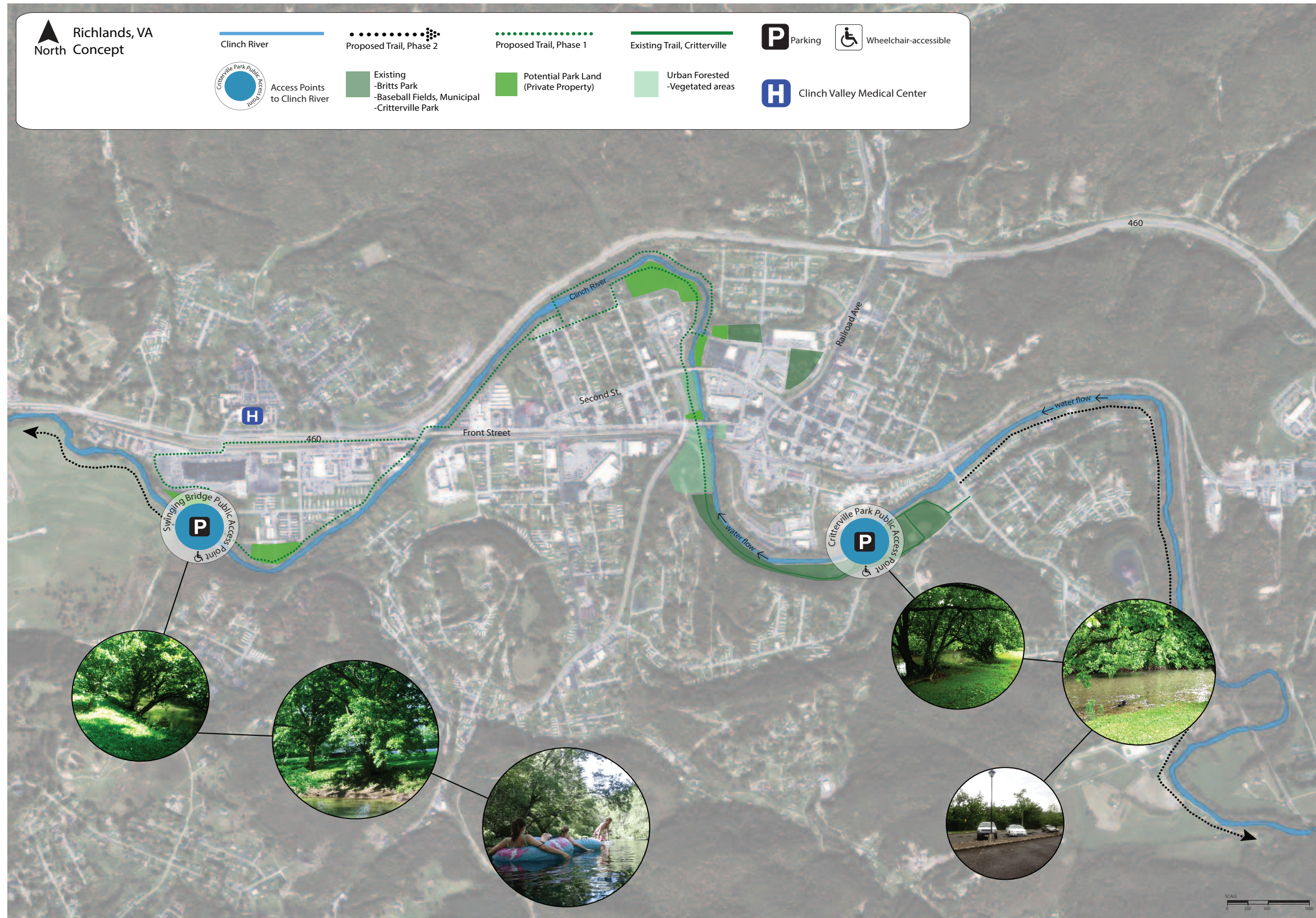
Along Front Street, another pocket park was located after the bridge and before Veterans Drive. This park offers access to the greenway from downtown and provides a potential resting space with views of the river. An information kiosk, providing information on the greenway, is located at the entry to the park. Terraced grass and stone steps lead down to the trail. The steps provide a relaxed atmosphere and a space to lounge in the sun, picnic, and enjoy the trail.

Swinging Bridge Park

A series of greenspaces were identified near the swinging bridge that when joined could create a strong terminus to the greenway and could be used to create a park that offers new amenities to Richlands. A river access point is located on a church property that is currently for sale. The church could be used for restrooms and other services, while its parking lot could be expanded to create additional parking for the park. Other potential amenities in the park could include community gardens, a wildflower garden, a nature-based playground, a dog park, and pavilions with open greenspace for gatherings and family reunions. Additional amenities that could be considered, but are not drawn on the plan, are a concert event space, outdoor fitness equipment, bird houses, a designated fishing spot, and additional resting areas.

PRELIMINARY DESIGN CONCEPTS

Clinch River Access Points



Richlands, VA North Concept

- Clinch River
- Proposed Trail, Phase 2
- Proposed Trail, Phase 1
- Existing Trail, Critterville
- Parking
- Wheelchair-accessible
- Access Points to Clinch River
- Existing - Britts Park, Baseball Fields, Municipal, Critterville Park
- Potential Park Land (Private Property)
- Urban Forested - Vegetated areas
- Clinch Valley Medical Center

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 July 11, 2013
 Clinch River Access Points

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PRELIMINARY DESIGN CONCEPTS

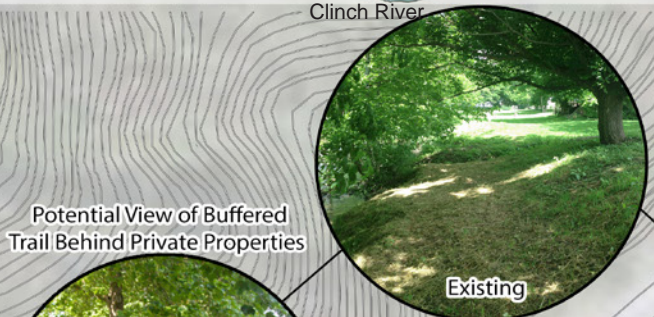
4th Street and River's Edge

Section Drawing
Facing Northeast



Not To Scale

- Civic
-Christians Academy
-Church
- Homes Along Access Points
- Proposed Trail
- Homes Not Along Access Points
- Private Entrances to Trail
- Public Entrances to Trail
- Trail Signage/Kiosks



Richland's Walking Trail Extension
 July 11, 2013
 Concept Diagram: 4th Street and River's Edge

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PRELIMINARY DESIGN CONCEPTS

Front Street and Incubator Park



- Point of Interest
- Buffer
- Dense Vegetation
- Cross Walk
- Attraction, Coffee Station Cafe'
- Water Access Point
- Entry Patio Space
- Automobile Circulation
- Pedestrian Circulation
- Parking
- Wheelchair-accessible

Additional Amenities to Consider:
 Concert Event Space
 Bird Houses
 Designated Fishing Spot and platform

Richlands Walking Trail Extension
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 Concept Diagram: Front St. and Incubator Park

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PRELIMINARY DESIGN CONCEPTS
Swinging Bridge Park



Richlands Walking Trail Extension

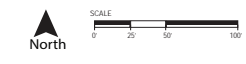
July 11, 2013

Concept Diagram: Swinging Bridge Park

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COMMUNITY MEETING

A community meeting was held in July, 2012 at the Business Incubator. The purpose of this meeting was to present the preliminary conceptual designs and to collaboratively move closer toward a single, final conceptual master plan. Members of the community provided feedback on the greenway route options and each of the focal areas. Based on this feedback, the CDAC team refined the concepts.

Before the final presentation, a group of stakeholders from Richlands came to Virginia Tech to review the drawings and provide additional feedback. Based on the stakeholder's comments and suggestions, the CDAC team further refined the concepts to create a final conceptual master plan.



CDAC team member, Matt Dunn, discusses a design concept with a local community member.



CDAC team member, Lara Browning, introduces the project.



CDAC team member, Alyssa Malobicky, and Richlands Customer Service Representative, Richard Vance, explore greenway route options.

FINAL DESIGN CONCEPTS

Greenway Route Options

At the preliminary conceptual design meeting, the CDAC team was asked to explore different options in the 4th Street area and to consider connecting the greenway to Britts Park. The final conceptual design offers a greenway spur trail that connects the greenway to a fishing area behind Magic City shopping center and Britts Park. The trail travels along the river until a proposed bridge crossing near 4th Street and Floyd Avenue, connecting back to the greenway at Rockbridge Avenue. The greenway along 4th Street was shifted from behind the residences along the river to 4th Street proper. Depending on funds, either one or both of these trails could be implemented. The greenway option following the river crosses private land, and landowners must be willing to consent to a public access easement. All public access easements secured in cooperation with private landowners should be recorded. Easement agreements should include clear terms and guidance related to development activities, maintenance, and routine site monitoring. Each landowner that agrees to grant a public access easement should have a clear and concise understanding of what they are agreeing to provide for the public benefit, and the easement should provide assurance that the site will be appropriately developed, patrolled, and well maintained.

Trail Zones and Identification



Example of color coding a greenway

In addition to the greenway route and master plan, the final master plan included a conceptual plan for trail zones and identification. This plan partitions the greenway extension into five zones: the historic zone, the wildlife zone, the woodland zone, the waters edge zone, and the recreational zone. Each zone is defined by amenities and attributes that reflect the character of that zone and a corresponding color. For example, the historic zone, would have interpretive signs about the history of Richlands and the trail markings could be the color purple. Artwork and details of the trail could incorporate the Richlands brick, coal mining history, and elements of the railroad. For example, lighting could take the form of a coal miner's hat. Not only would this add character and interest to the trail, but also, such elements assist in the ability of people to easily identify their location on the trail. This is important for both general wayfinding and safety and rescue.

FINAL DESIGN CONCEPTS

Front Street and Incubator Park

Front Street and Incubator Park remained very similar to the initial conceptual design. In Front Street park, however, a plaza/stage area was designated at the bottom of the grass terraced steps. This allows the space to be utilized not only for lounging and picnicking, but also for viewing performances and other events.

In addition to the Incubator Park concept, the final design shows an option for creating additional parking and explores how the greenway would pass under the railroad trestle that crosses the river at this point.

Supply Yard Parking Lot

As part of the final design, CDAC developed a concept for an additional focal area: the current Town supply yard. This space, located off of South Front Street, connects to the greenway via an old dinky track, which was a small gauge railroad track used to haul brick with a small locomotive known as a “dinkey”. This area is large and relatively flat and could be used to provide parking for the greenway. The supply yard could also act as a connector to the Christmas Tree Hill spur trail and to communities along Veterans Drive. This area would also be utilized as an EMT access point. As part of the historic zone, railroad ties could be utilized as parking curbs. Amenities could include a bike maintenance station and benches placed on viewing platforms that overlook the Town.

Buffers

As part of the final design, the CDAC team also looked at ways to create buffers for private residences and commercial areas. Three scenarios were developed, including a section through the Wildlife Zone, along 4th Street, and in the commercial district next to Front Street bridge. The section through the Wildlife Zone exhibits how the greenway might look in areas where the greenway is on both sides of the river and near private residences. On the west side of the river, a vegetative

FINAL DESIGN CONCEPTS

buffer provides privacy for the residences. Flat land allows for a paved greenway which tolerates flooding. A riparian buffer is established between the greenway and the river to prevent soil erosion and stabilize the river banks. On the east side of the river, there is a small section where the proximity to private residences and the steep river banks limit the space available for the greenway. In this section, the banks would need to be stabilized and a boardwalk would allow for greenway passage. This boardwalk would be consistent with creating a “wildlife” zone and would allow visitors to be closely connected to the river.

Along 4th Street, several options for addressing the greenway along the road are presented. The first option provides an example of an optimal greenway experience. Pedestrian and cyclists are separated into different lanes. The bike lane is along the street and separated from the trail by a row of street trees. A dense vegetative buffer separates the trail from residential yards. In the second scenario, cyclists and pedestrians are separated by a smaller vegetative buffer with a fence and street trees are combined with the residential buffer. In the third scenario, cyclists and pedestrians are separated by a curb. This scenario requires the least amount of space.

The buffer in the commercial district next to Front Street bridge utilizes artistic panels to create a visual accent along the trail and to separate the greenway from the commercial parking lot. The panels could contain murals and various forms of artwork or could be planted with vegetation to create a living green screen. This type of buffer works well in areas where space is limited.

Swinging Bridge Park

During the initial presentation, members of the community expressed interest in incorporating additional recreational fields into the Swinging Bridge Park. The CDAC team analyzed the space for different types of fields. Baseball and large soccer fields required too much space to be incorporated on the site. The space did allow for a middle school-sized soccer field; however, this was incorporated into the plan as an open field. The wildflower garden, previously in this area, was relocated

FINAL DESIGN CONCEPTS

near the pavilions with grills. A drop-off parking zone was also added along Page Street to provide easier loading and unloading access for people utilizing the pavilions. Lastly, the dog park, playground, and community gardens were further developed.

A plant list for riparian buffer species to be utilized along the river corridor, suggestions for sustainable materials, and information on the effect of greenways on property values can be found at the end of this section. Additional information on the impact of greenways on property values and safety can be found in the Appendix.

The following pages include the final conceptual master plan and route options, final conceptual designs for the focus areas, and supportive drawings and materials.



CDAC team member, Jennifer Jessup, presents final conceptual designs at a community meeting in September 2013.

FINAL DESIGN CONCEPTS
Route Options

Richlands, VA Site Analysis

- Clinch River
- Proposed Crosswalk
- Proposed Trail, Phase 2
- Trail
- Existing Trail, Critterville
- Neighborhood Connections
- Railroad Circulation



Richlands Walking Trail Extension

September 24, 2013

Final Route Options

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