Hillsborough TPO
Transportation
Planning Organization

PLANT CITY

PLANT CITY
CANAL TRAIL FEASIBILITY STUDY

Alternatives Assessment

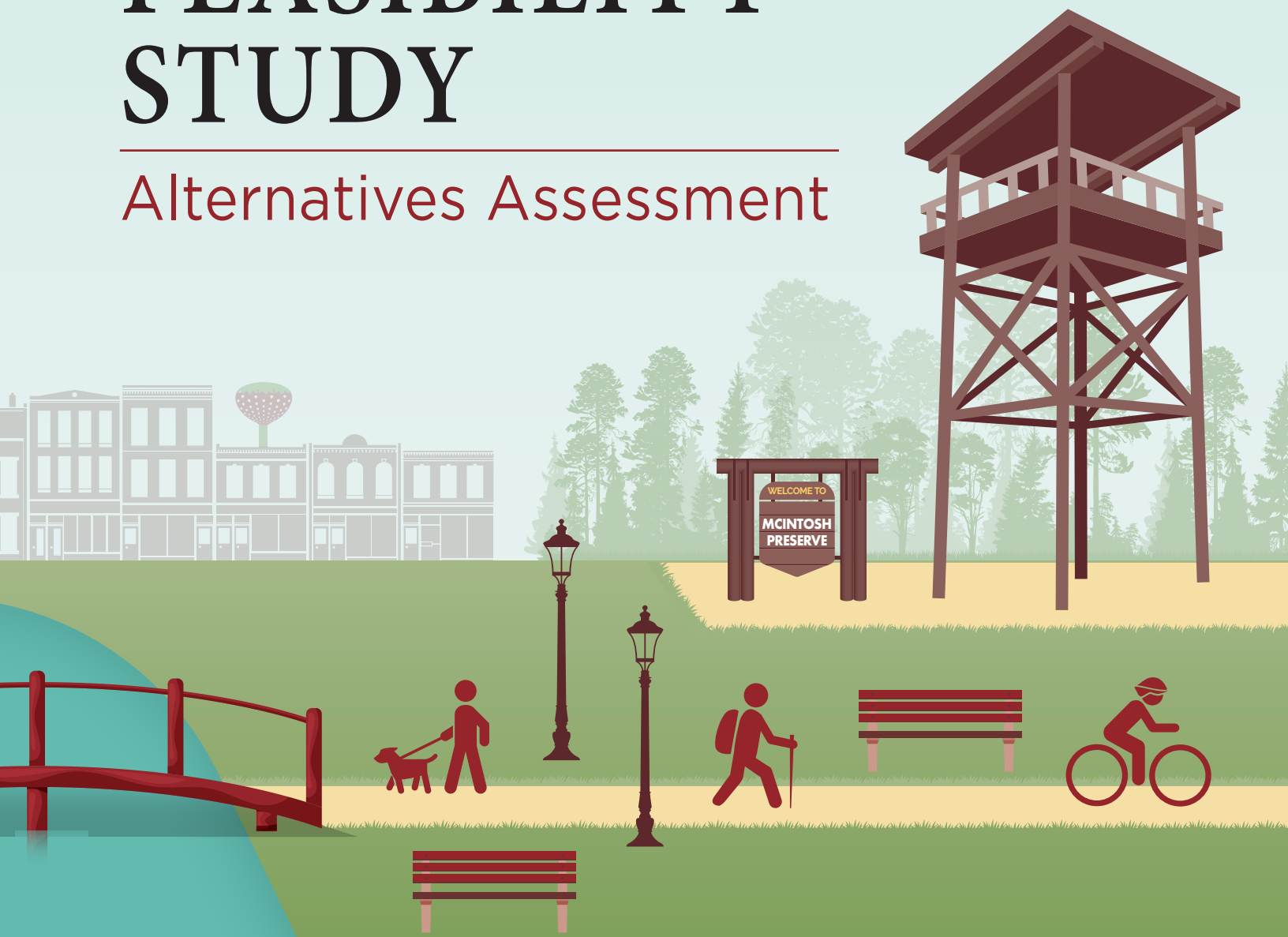

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Table of Contents

Appendices

Appendix A: Alternatives Benefits Quality Matrix

Appendix B: Alternatives Comparative Ranking Matrix

List of Figures

1

Trail Alternatives Development

1.1 Development of Alternative Alignments

1.1.1 Universe of Alternatives

The objective of the alternative development and analysis process was to identify technical, sustainable, and equitable alternatives that address the project's intent. The results of the alternatives development and analysis are presented in this report. The project team worked with the Hillsborough County Transportation Planning Organization (TPO) and Plant City to develop 24 alternative alignments to evaluate as a part of this screening phase. The alternative alignments are intended to minimize the impacts on private property and the environment. They maximize access and connectivity to parks, public facilities, and services, resulting in a north-south trail "spine" through the City of Plant City (City). A set of selection criteria and comparative analysis identified the best viable alternatives to be advanced for further evaluation. This final stage evaluation will use input from the stakeholders and community outreach efforts. The input received will be applied and the reevaluation of the study recommendations contained in this interim document will be reviewed and modified if the input supports that decision. The consultant project team hosted a work session with the Hillsborough TPO Project Manager to develop the universe of potential alternatives that were to be considered in the evaluation. Alternatives were developed that minimize the impacts on private property owners and the environment, maximize access and connectivity to parks, public facilities, and services, and would provide continuity in route location forming a north-south trail "spine" through the City. Emphasis was placed on assuring that underserved communities were considered and that their needs for multimodal transportation were included in the decision-making process. In this work session, a review of aerial imagery and street-level imagery was conducted in conjunction with the application of data from the existing conditions evaluation, including parcel lines, demographic data, locations of community features, and development plans, among others. This information informed the generation of set of alternative alignments within the study area to be evaluated. This initial set of alternatives was shared with City staff, and adjustments to the set of alternatives were incorporated based on staff input.

In developing the universe of alternatives, the study area was separated into four distinct zones:

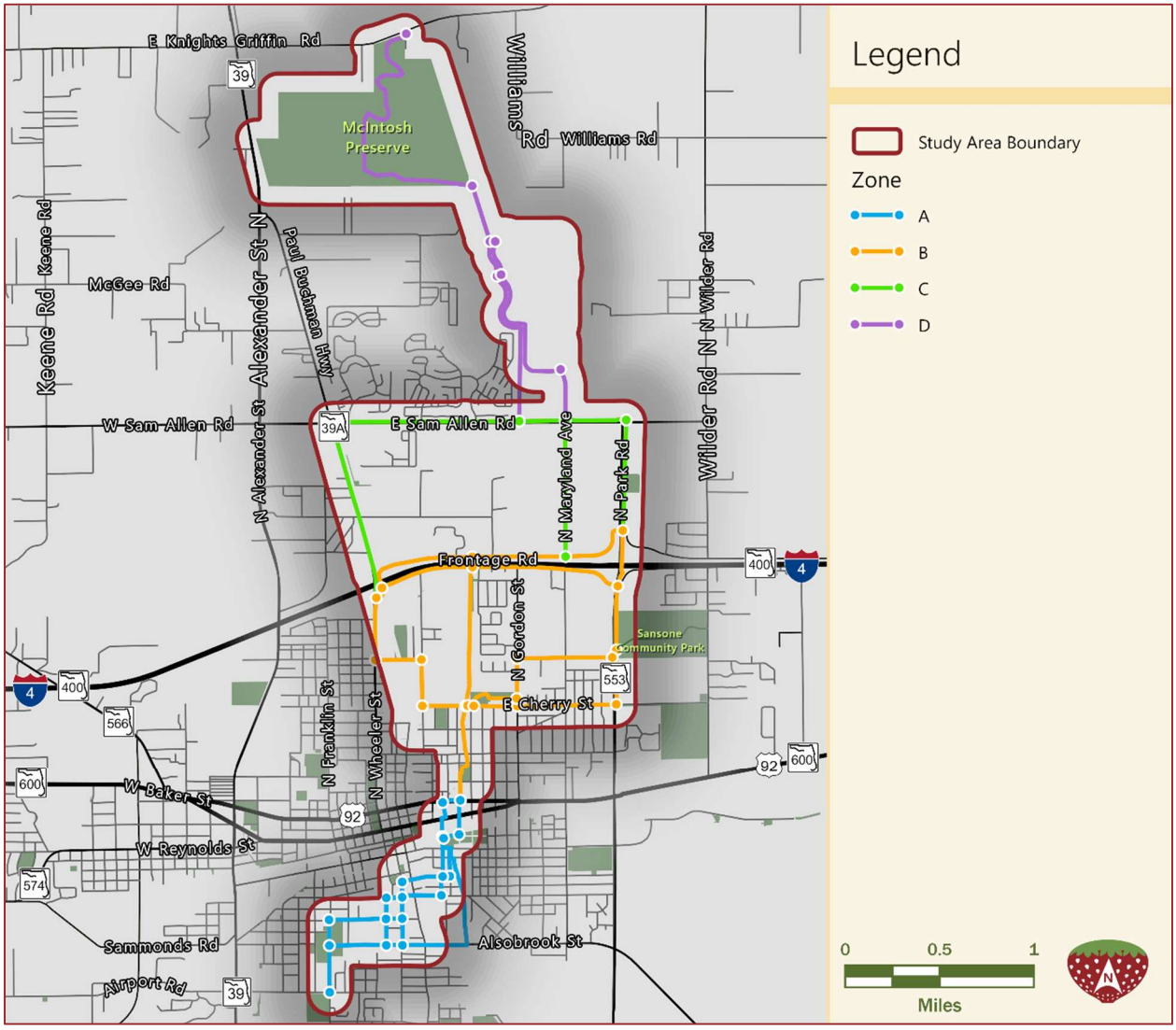
- Zone A is the southernmost portion of the study area south of US 92. It includes 11 alternatives.
- Zone B is between US 92 and I-4. It includes 6 alternatives.
- Zone C is between I-4 and Sam Allen Road. It includes 5 alternatives.
- Zone D is the northernmost portion of the study area, north of Sam Allen Road. It includes four (4 alternatives.

An initial screening exercise was conducted to identify a preliminary set of alternatives for each Zone. These alternatives and a cursory comparative analysis were presented to City staff for feedback. The project team also conducted a field review of potential segments on June 22, 2022. Attendees included the Hillsborough TPO Project Manager, Consultant Project Manager, Project Engineer, and Project Planner.

A series of 24 alternative alignments were developed from field review observations, feedback from staff, and spatial analysis. These alternatives utilize various roadways, canals easements or right-of-way, and public properties such as parks or other lands. Zone A had 11 alternatives identified; Zone B had 6; Zone C had 5; and Zone D had 4. The zones and accompanying alignments are depicted in **Figure 1.1-1** Alternative Alignments.

The overall alternative development and evaluation process that was applied to this group of alternatives by study area zone are presented in the following sections of this document.

Figure 1.1-1 Alternative Alignments



1.1.2 Description of Alternative Alignments

1.1.2.1 Zone A Alternatives

Zone A was added to the original scope of study at the request of Plant City to provide linkage from the communities north of US 92 to the city ball fields and Dr. Hal & Lynn Brewer Park and the existing trail connecting these two community facilities. Both are high-quality recreational facilities open to the public (See picture inserts below). Overall, the Zone A alignment area is relatively narrow in width (east to west) but includes the area known as Midtown, a targeted redevelopment section of the city and one where considerable investment has been made in public infrastructure (See picture inserts below) and connecting to Samuel W. Cooper Park just south of East Reynolds Street, east of South Collins Street.

This Zone consists of the most densely residential demographic, the highest level of underserved communities, and minimal bicycle and pedestrian infrastructure. It has a higher density of public lands and parks within the study area.

Figure 1.1-2 Brewer Park

Figure 1.1-3 Brewer Park to Alsobrook Connection

Figure 1.1-4 Burney Elementary School from Alsobrook Street

Figure 1.1-5 Midtown Redevelopment Area

Figure 1.1-6 Bicyclist on Wheeler Street Sidewalk

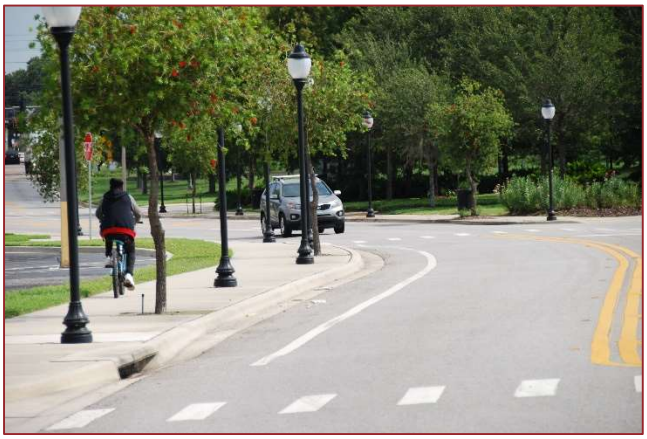


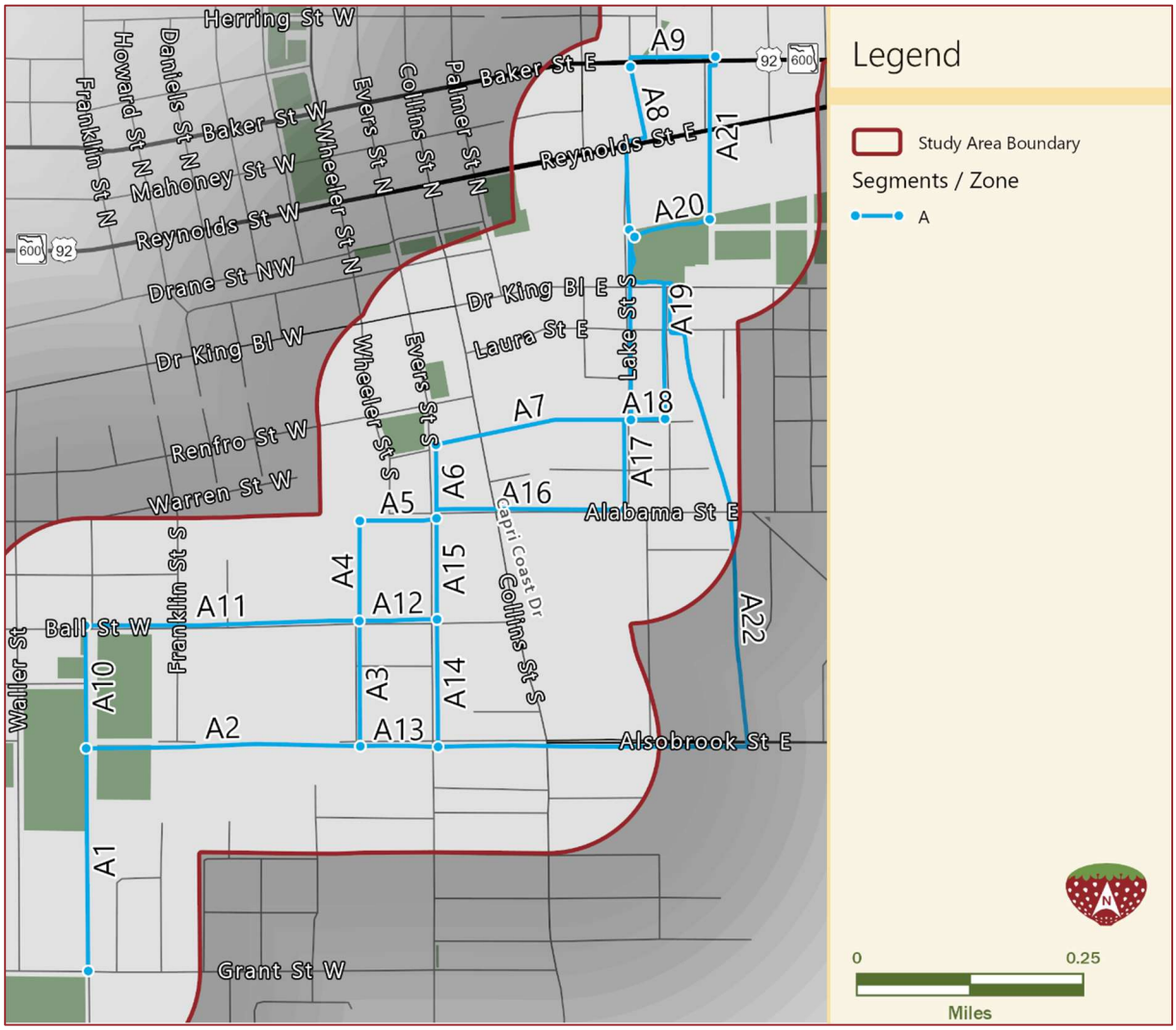
Figure 1.1-7 Cooper Park

Figure 1.1-8 Cherry Street Canal crossing under Baker Street

Figure 1.1-9 on the following page shows the various alternate roadway segments and canal easements/right-of-way that were evaluated in forming the Alternatives and involved in the comparative analysis.

It should be noted that the segments identified as A19 & A22 were requested to be added by the City after the initial study area (shown by the "bubble") was defined. These segments use another existing canal corridor that appears viable but would significantly reduce the connectivity to some targeted locations such as Midtown and the Village Green.

Figure 1.1-9: Zone A Alternative Alignments



1.1.2.2 Zone B Alternatives

Zone B includes much of the heart of Plant City. It begins at US 92 near the county circuit courthouse and extends northward to encompass Gilcrest Park, Plant City Dog Park, Cherry Street Park, Hillsborough Community College Plant City Campus, Mike E. Sansone Community Park, Otis M. Andrews Sports Complex, and the Ellis Methvin Park. This was the initial southern zone for the study. This area is generally residential with the exception of the area near the circuit court along US 92 and then along Park Road North, These areas offer a mix of commercial, institutional, and industrial uses. The northern limit of Zone B is Interstate 4 (I-4) and South Frontage Road, which parallels the highway and connects North Wheeler Road and North Park Road between their interchanges with I-4. The Cherry Street Canal is located in the central portion of Zone B and extends from the Plant City Dog Park to and under I-4 (in a culvert). This canal and its maintenance berm were evaluated as one of the potentially high-quality trail segments. The issues associated with crossing I-4 and extending along the high-traffic frontage roads with limited right-of-way presented obstacles that raised the question of its feasibility. The segment should however, continue to be considered through the next stage of the study process.

Figure 1.1-10 Cherry Street Canal (at Gilchrist Park)

Figure 1.1-11 Gilchrist Park

Figure 1.1-12 Gilchrist Dog Park

Figure 1.1-13 Cherry Street Canal, looking north

Figure 1.1-14 Cherry Street Park

Figure 1.1-15 Cherry Street west of Park Road N

Figure 1.1-16 Spencer Street west of Maryland Avenue, looking west

Figure 1.1-17 Sansone Park Entrance on Park Road N

Figure 1.1-18 Park Road N looking south

Figure 1.1-19 I-4 interchange at Park Road N

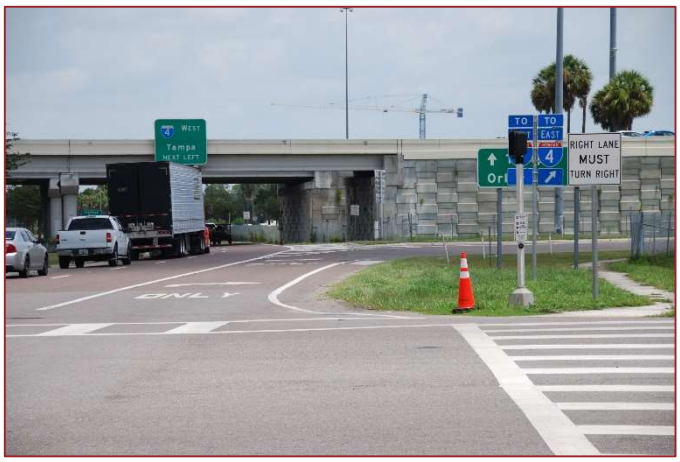
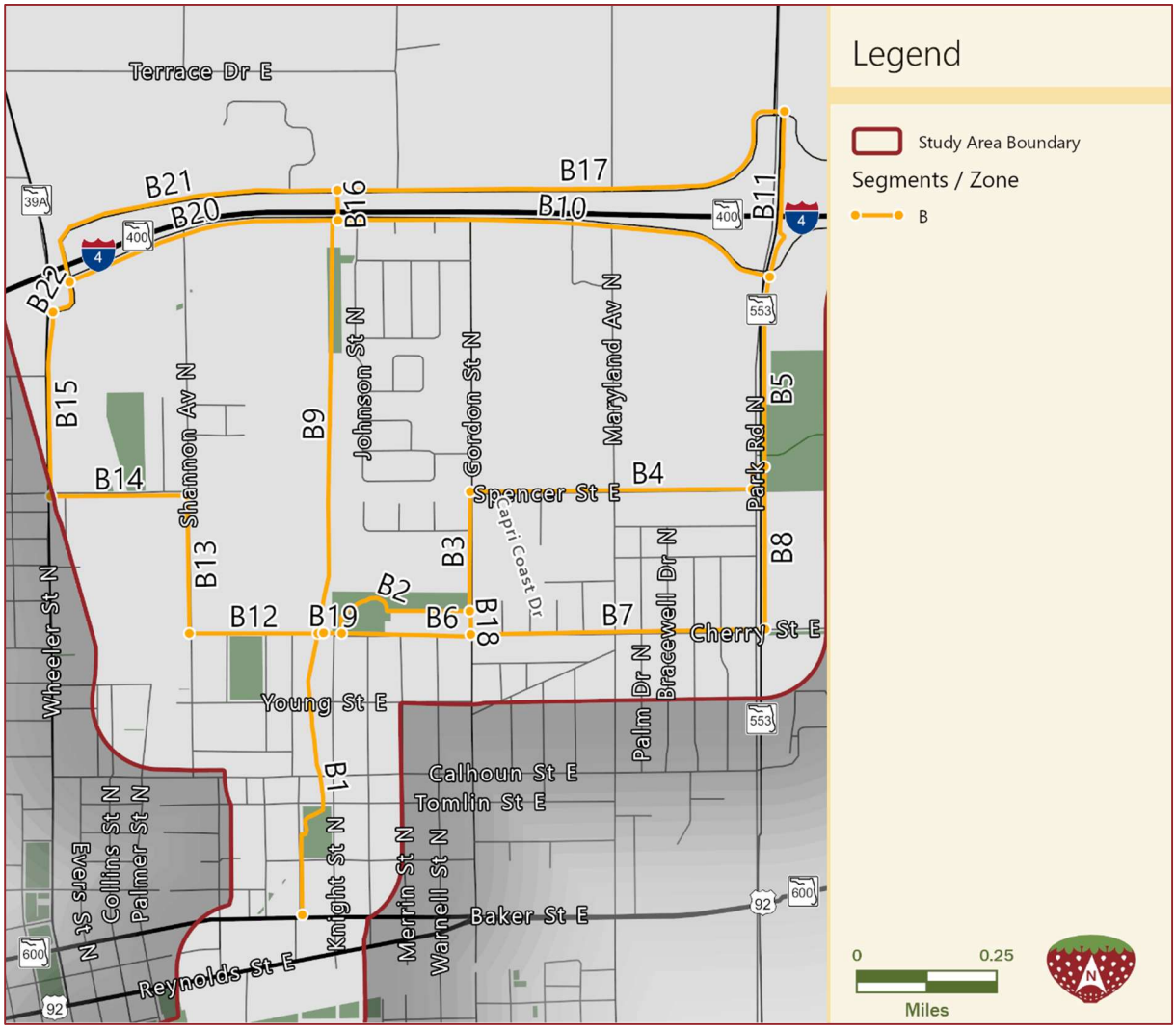


Figure 1.1-20 shows the various alternate roadway segments and canal easements/right-of-way that were evaluated in forming the Alternatives and involved in the comparative analysis.

Figure 1.1-20: Zone B Alternative Alignments



1.1.2.3 Zone C Alternatives

Zone C extends immediately north of I-4 between Paul Buckman Highway and Park Road North, ending at East Sam Allen Road approximately 4,000 feet north of I-4. The southern limit of this Zone would be where an I-4 overpass would be located, extending across the highway from the Cherry Street Canal and touching down to the west of Procchi Street and east of North Frontage Park Place. This area includes existing stormwater treatment facilities and would require extensive right-of-way acquisition to make any overpass connection.

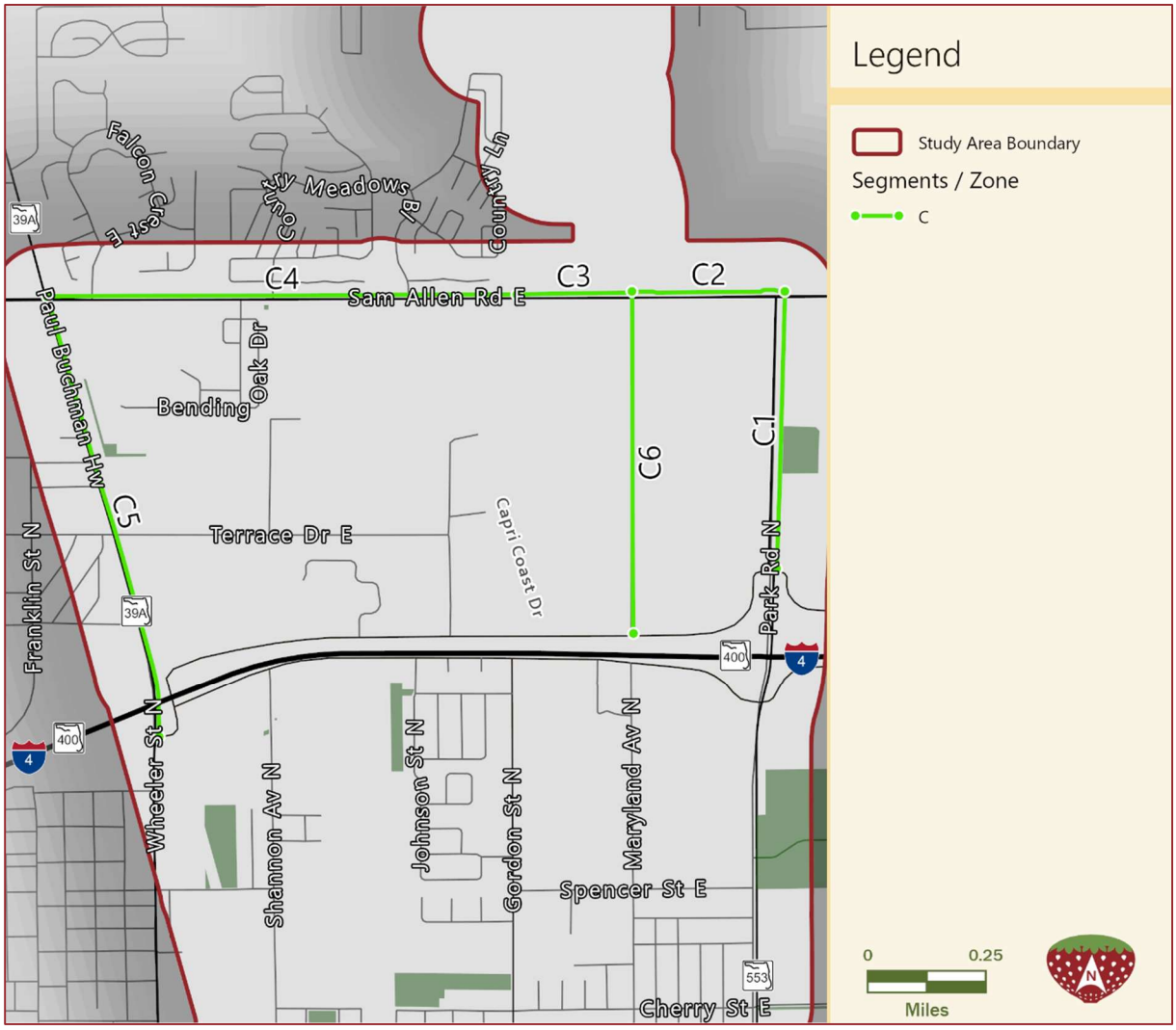
The area within Zone C is largely rural transitioning lands with a mixture of residential, agricultural, industrial, and institutional zoning. The new BayCare Hospital is under construction in the southeast quadrant of Park Road North and East Sam Allen Road. The Kingdom Hall of Jehovah's Witness is located on the north end of Maryland Avenue, just south of East Sam Allen Road. As indicated by Plant City, this area is involved in multiple planning and development proposals for new residential subdivisions. Connectivity to and through those projects was a consideration in the alternative evaluation process.

Figure 1.1-21 Park Road N at BayCare Hospital

Figure 1.1-22 E Sam Allen Road at Park Road N

Figure 1.1-23 shows the various alternate roadway segments and/or public easements/right-of-way that were evaluated in forming the Alternatives and involved in the comparative analysis.

Figure 1.1-23: Zone C Alternative Alignments



1.1.2.4 Zone D Alternatives

The limits for this study zone are relatively narrow as the directive for the connecting alignment from East Sam Allen Road to the northern terminus of the trail at/within the McIntosh Preserve was indicated by the city as through the North Park Isle development. This residential community is under construction, and most of the public infrastructure is completed. Based on the development's construction documents and field

evaluation, a 5-foot sidewalk has been constructed on one side of the roadway (this was initially identified as a trail facility) to serve the non-motorized traffic through the project. This sidewalk route was assessed as an alternative alignment but scored poorly based on its width and the lack of design continuity with the proposed trail in the other zones. An alignment located on the development project's west side and extending from East Sam Allen Road between the platted subdivision lots and the stormwater management ponds along the western boundary of the project, was hence added to the study for evaluation.

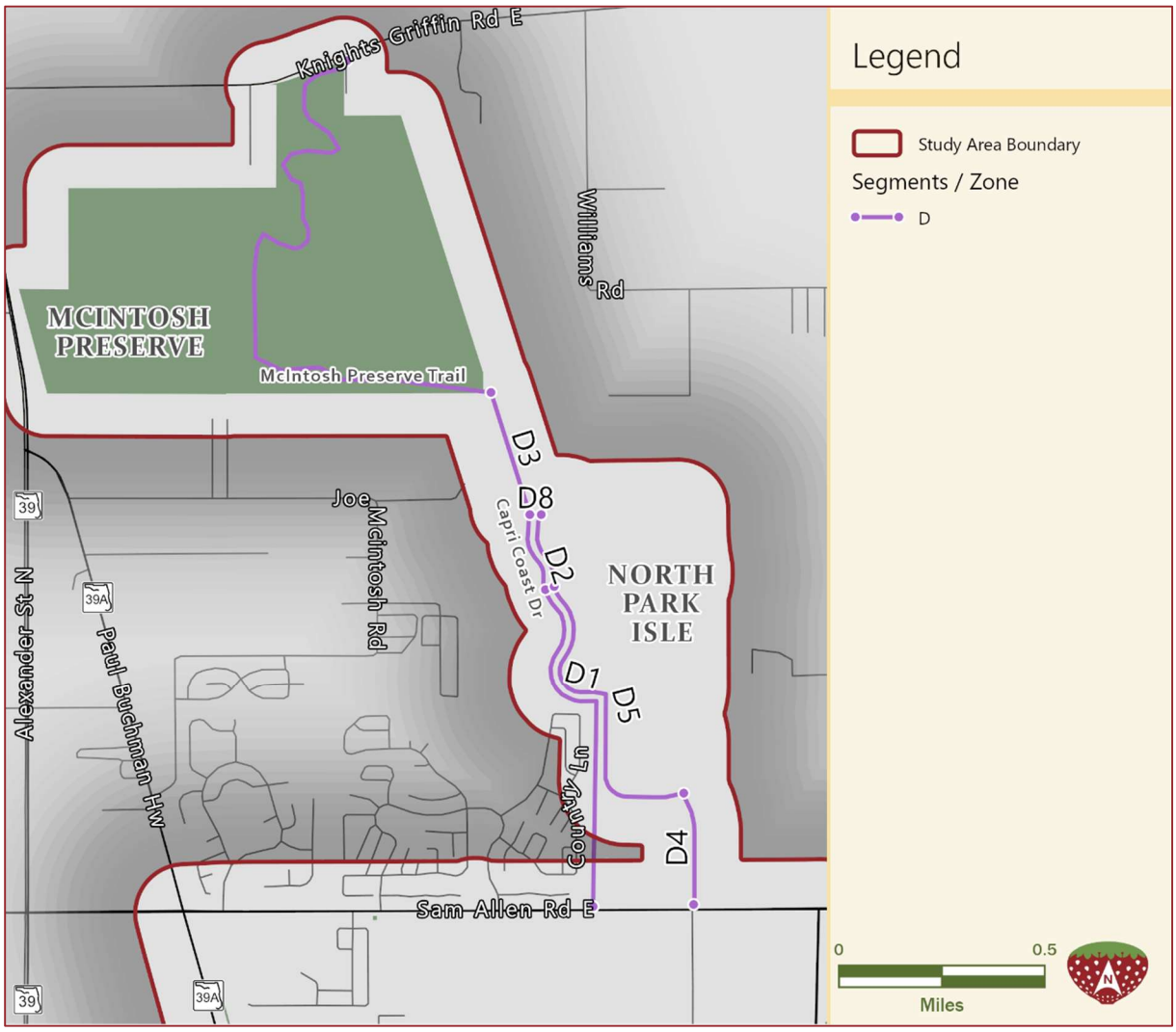
Figure 1.1-24 North Park Isle Sidewalk Connector

Figure 1.1-25 North Park Isle Storm Water Management

Figure 1.1-26 North Park Isle Kneewall

Figure 1.1-27 on the following page shows the various alternate roadway segments and drainage easements/right-of-way that were evaluated in forming the Alternatives and involved in the comparative analysis.

Figure 1.1-27: Zone D Alternative Alignments



1.2 Multimodal Typical Sections

Five potential design concepts were developed based on the types of corridors and existing land uses within the study area. Those concepts include:

- Sidepath on Local/Collector (Flush Shoulder Roadway - e.g., Cherry Street, Maryland Avenue)
- Sidepath on Arterial (Curbed Roadway - e.g., Park Road North)
- Independent Trail Facility (on public lands)
- Independent Trail Facility Adjacent to Canal
- Independent Trail Facility on Boardwalk

Based on the observed field conditions within the corridors identified as viable alternative alignments, one or more of these typical sections were applied to each Alternative to evaluate the implementation needs and the estimated costs. These typical sections were developed to be consistent with the latest guidance in the FDOT Design Manual. The conceptual typical sections are presented in the following figures.

Figure 1.2-1: Typical Section for Sidepath on Local/Collector (Flush Shoulder)

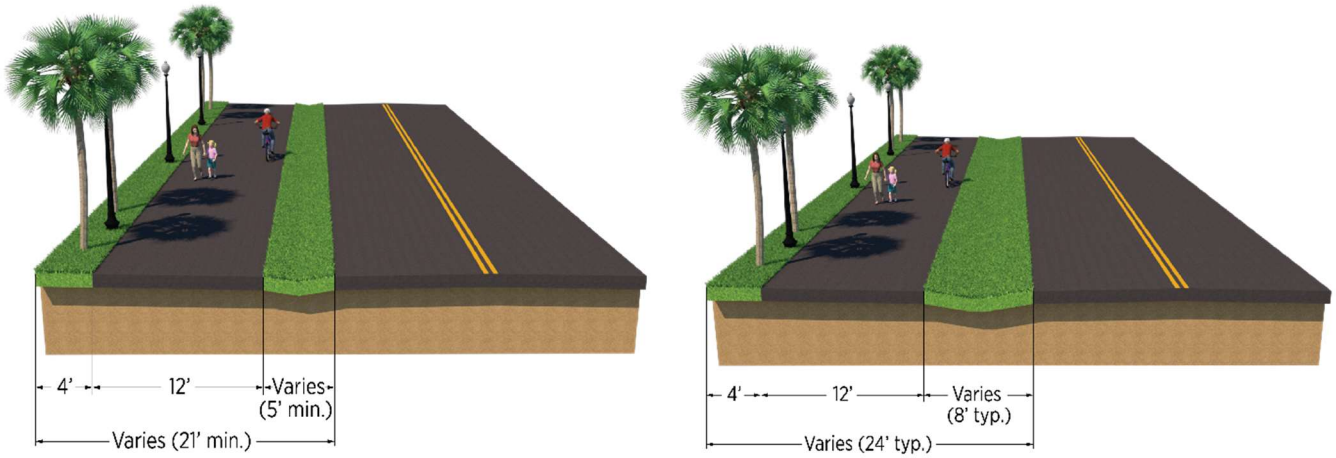


Figure 1.2-2: Typical Section for Sidepath on Arterial (Curbed)

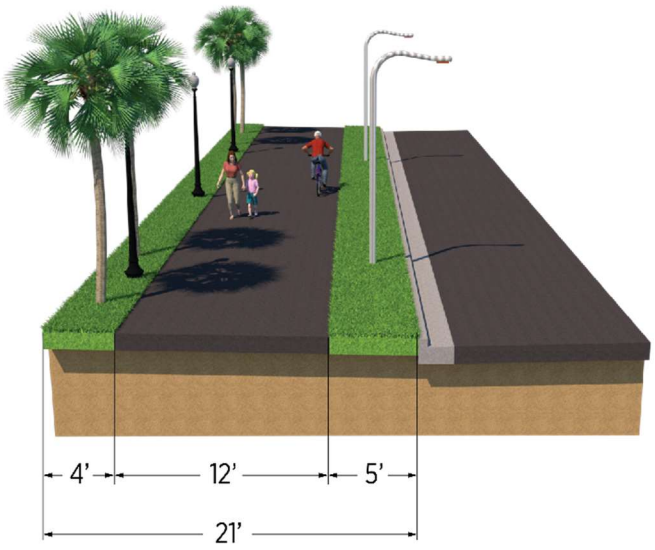


Figure 1.2-3: Typical Section for Independent Trail Facility

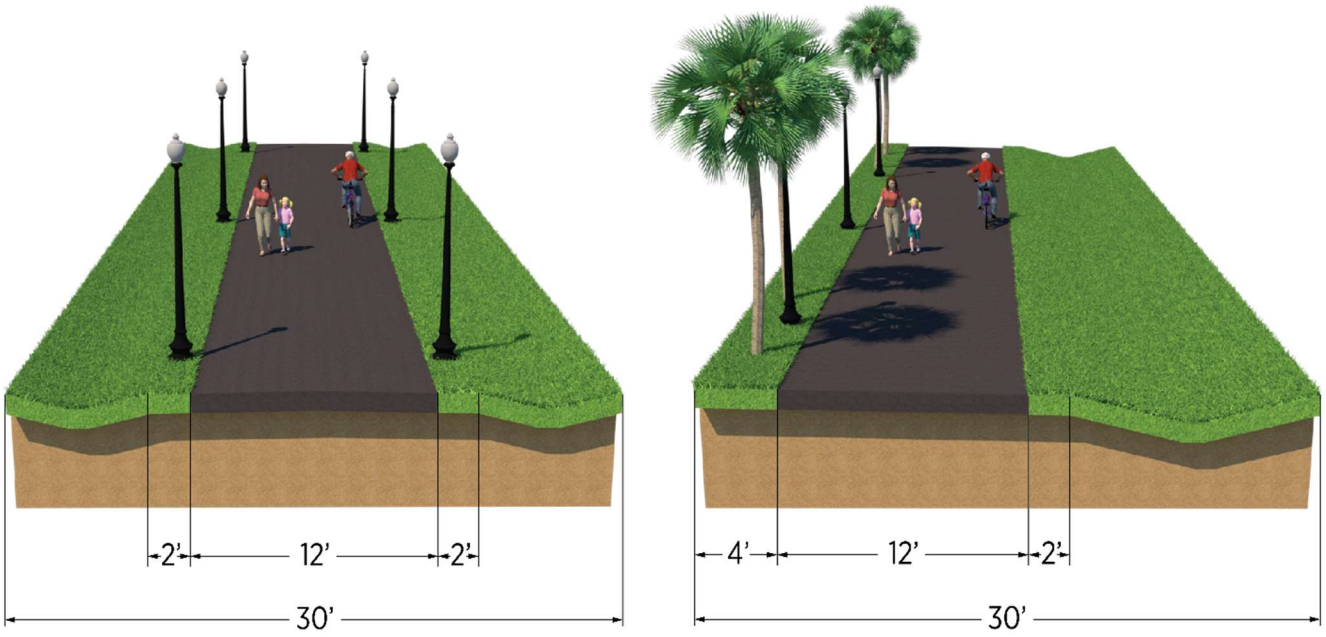


Figure 1.2-4: Typical Section for Independent Trail Facility Adjacent to Canal (without & with railing)

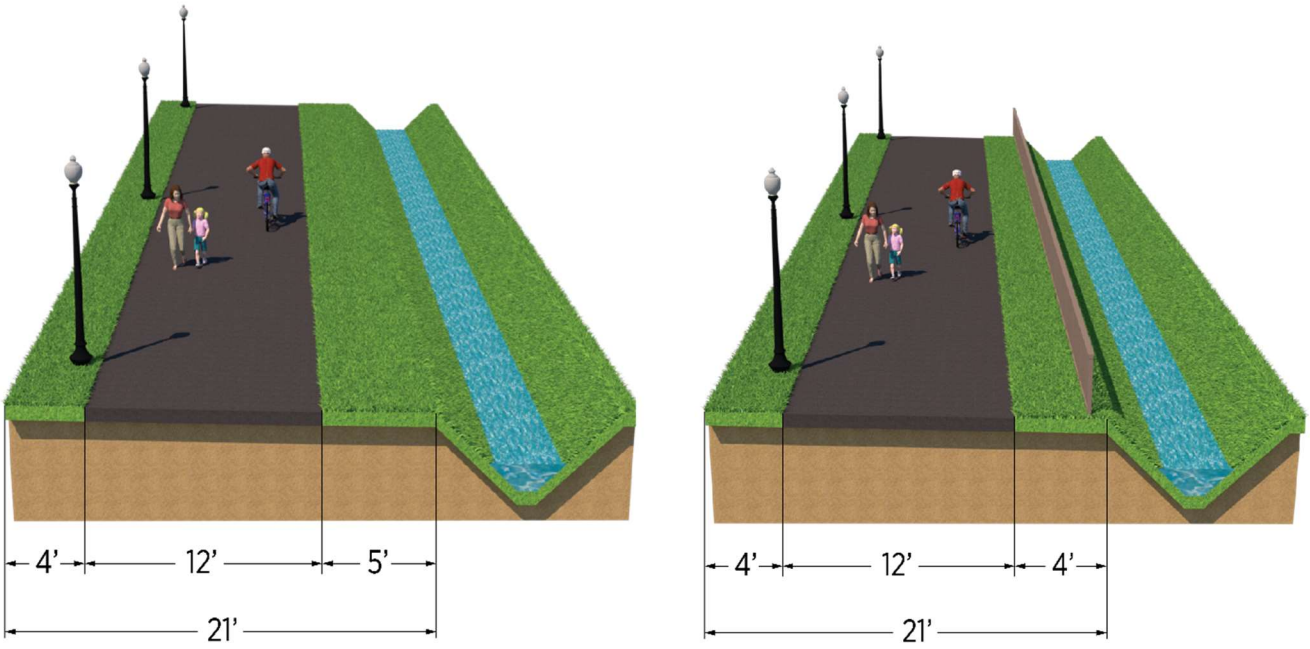
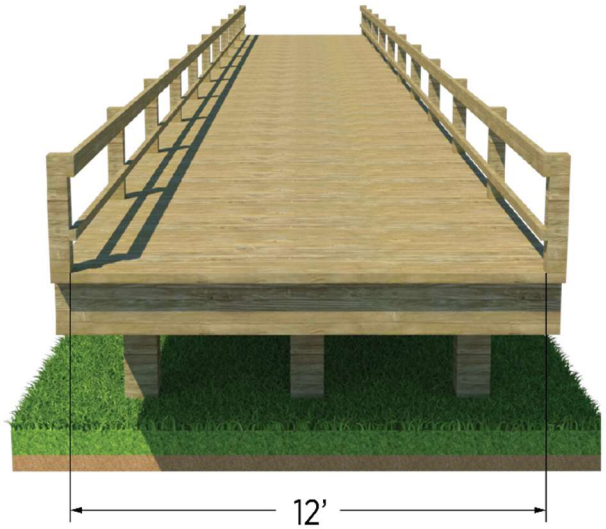


Figure 1.2-5: Typical Section for Independent Trail Facility on Boardwalk



2

Evaluation of Alternative Alignments

Each of the study area zones and alternative alignments previously described were first evaluated to identify the logical locations where connections would benefit the community and offer safe travel ways. A second factor in selection was to take advantage of the investments in multimodal infrastructure that have already been made by the city. Key destinations include parks and recreation facilities, public service buildings, employment and redevelopment centers, cultural and community centers, and institutional and educational properties. Within each Zone, multiple alignments were considered, many using some or most of another alignment roadway or trail/pathway segments but ultimately creating a series of different overall options to traverse through each Zone and make meaningful connections to the adjacent Zone.

The following sections describe the process, the applied methodology, and the findings of the comparative evaluation of the alternatives, resulting in the recommendations for a select number of candidates that will be presented to the stakeholders for input before the final evaluation and determination of a "preferred" alignment for advancement to the next planning and design phases. Within each Zone, two "best" potential alignments were identified (the best score and a second-best) to offer options for stakeholder input. In some cases, the differences in alternative scoring were somewhat minor but professional judgement was able to determine the most viable alternative based on issues such as cost, network continuity, priorities identified by the city and minimized negative impacts.

2.1.1 Evaluation Methodology

The evaluation consisted of a three-step process. First, eight key goal areas were produced in collaboration with TPO staff, and a series of evaluation criteria were developed for each goal. Geospatial data for these criteria were collected, compiled in a GIS environment, analyzed, and mapped. The geospatial data, recent aerial imagery, and site visit observations were referenced against each of the alternative alignments described in Chapter 1. Each alternative was assigned a score for each evaluation criterion based on a predetermined scoring weight. Weights were added up to create an overall score. This score was used to identify the alternatives that will advance into the next screening stage of the feasibility study.

The following section describes these goal areas, evaluation criteria, and the process used to assign scores and their weights. It goes on to present the findings and recommends two alternative alignments from each zone to advance.

2.1.2 Evaluation Criteria

Evaluation criteria were established to provide a holistic understanding of the various alignments. They were developed around eight key goal areas: safety, equity, environment, social/cultural, economic development, connectivity, buildability, and cost. These goal areas and associated evaluation criteria are below.

2.1.2.1 Safety

The Safety goal area focused on the extent to which the alternative avoids or reduces vehicle and trail user conflicts. To determine this, four metrics were considered:

- Number of driveway crossings
- Number of intersection crossings (signalized v. stop-controlled)
- Number of midblock crossings
- Traffic volumes and speeds

2.1.2.2 Equity

The Equity goal area was based around two criteria. The first was the extent to which the alternative limits negative impacts to traditionally underserved communities, based on the parcel impacts in those communities. The second being a positive impact regarding the extent to which the alternative connects traditionally underserved populations to services, employment centers, and educational, cultural, and recreational opportunities which was measured based on proximity to:

- Underserved communities
- Services
- Employment centers
- Schools, colleges
- Community assets (parks, libraries, etc.)

2.1.2.3 Environment

The Environment goal area looked at the alternatives impact on natural resources and how the natural and built environments contribution to the trail. This was measured based on three metrics:

- Impacts to wetlands
- Potential involvement of contamination sites
- Aesthetic quality of surrounding environs

2.1.2.4 Social/Cultural

The Social/Cultural goal area was based on the extent to which the alternative limits impact to cultural resources and the extent to which it enhances connectivity to them. This was measured based on proximity and parcel impacts on social/cultural sites.

2.1.2.5 Economic Development

The Economic Development goal area looked at the extent to which the alternative supports economic development based on proximity to target redevelopment or growth areas such as Midtown.

2.1.2.6 Connectivity

The Connectivity goal area focused on the extent to which the alternative connects existing and planned pedestrian/bike networks as well as services, employment centers, educational, cultural, and recreational opportunities. This was measured based on four metrics:

- Connections to existing or planned facilities
- Proximity to employment centers
- Proximity to schools, colleges
- Proximity to community assets (parks, libraries, public services, etc.)

2.1.2.7 Constructability

The Constructability goal area was based around three criteria. The first criteria was ease of implementation and partnerships which was measured through the required permits coordination with other agencies. The second, the extent to which the alternative limits impact to drainage, utilities, and other physical obstructions present and presenting constraints. Finally, the extent to which the alternative impacts private property:

- Clips and total takings of residential properties
- Clips and total takings of commercial properties
- Impacts to structures, fences, landscaping

2.1.2.8 Cost

The Cost goal area looked at the probable cost to implement the alternative based on general levels of potential (high, moderate, or low) construction and right-of-way costs. In the next stage of study, the cost estimates for each remaining viable alternative will be developed for use in the final comparison.

2.1.3 Scoring

Each alternative within the 4 different study area zones were assessed using the described criteria. Each alternative was assigned a quality designation of "high," "medium," or "low" for each goal area. The "high" designation was equivalent to 5 points, "medium" equivalent to 3 points, and "low" equivalent to 1 point. These qualitative designations indicated how well the alternative met the different criteria goals, or in some cases, when those goals were not well served by the alternative.

Each goal's metrics were also assigned a "weight" based on professional judgment and multiple discussions of priorities with the TPO Project Manager. Initially, some of the criteria were assigned a factor of 1, meaning of lesser importance than most others. However, the discussions of each goal produced a consensus among the project team that each factor had inherent value and should generally not be judged against the others,

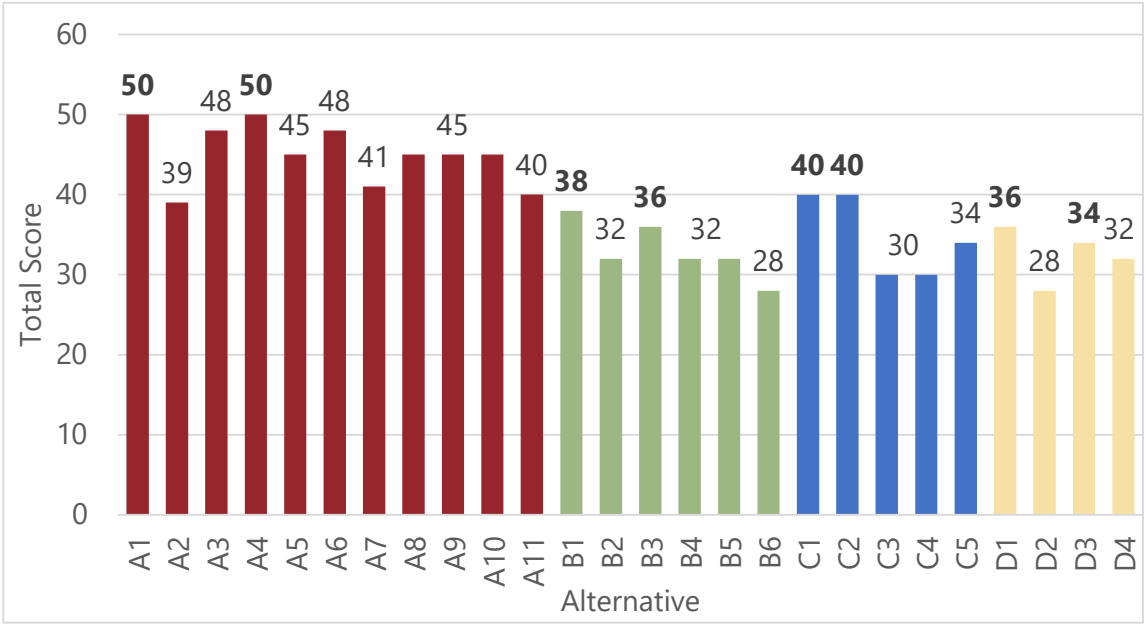
and that there were 3 that should be weighted slightly higher than all others. The analysis and rationale used to assign "high," "medium," or "low" designations is reflected in **Appendix A**, Alternatives Benefits Quality Matrix. The goals and the assigned weights are outlined below:

- Safety 2
- Equity 3
- Environment (natural) 2
- Social/Cultural 2
- Economic Development 2
- Connectivity 2
- Constructability 3
- Cost 3

2.2 Evaluation of Results

The sum of each goal's assigned points and the goal weight is the total score used to conduct the comparative analysis and develop a numerical ranking of alternative preferences. The scoring results and associated qualitative rankings are shown in the matrix in **Appendix B**. These scores represent the cumulative consideration of spatial analysis, planning judgement, physical conditions and corridor context and project goals and priorities applied across the 8 key goal areas. The higher the score, the more preferred and/or viable the alternative. In some cases, one alternative may have received preference based on the obvious better connectivity between zones while another may have received a reduced "score" based on an identified cost prohibitive constraint that the alternative would present. The results of this scoring of all alternatives are displayed in **Figure 2.2-1**. The top two scoring alternatives for each Zone were advanced to the next stage of study evaluation. As can be seen, the score separation between alternatives is relatively minor in Zone A but much more pronounced in Zones B, C and D. While the detailed evaluation presented in the next section of this memorandum does focus on the top two alternatives in each zone, public and stakeholder input will be used to inform the final decisions and one of the other (A3 or A6) alternatives from Zone A could rise in consideration and would have minimal impact on the projects goals or cost associated with their implementation. It may be less likely that different alternatives will be suggested for Zones B, C or D.

Figure 2.2-1 Alternative Total Scores



These alternatives are listed below and are presented in the following section.

Zone A	Zone B	Zone C	Zone D
Alternatives A1 & A4	**Alternatives B1 & B3**	**Alternatives C1 & C2**	**Alternatives D1 & D3**

2.3 Alternatives to Advance

The alternatives that are recommended to advance to the final screening stage of evaluation, where stakeholder input and public comment will be appropriately included into the decision process, were identified based on both qualitative and quantitative factors. The analysis shows that the alternatives in Zone A reflect high benefits in 4 of 8 categories for both Alternative A1 and A4. They both rank medium level benefits in the other categories. In Zone B both Alternatives B1 and B3 have one high benefit ranking but Alternative B1 also has medium benefits in 6 of the remaining 7 categories, while B3 has medium benefits in 5 of the remaining 7.

In Zone C, the quality rankings for the two best alternatives are equal in every case as there are minimal differences in the alignment and selected roadway segments that are followed for the trail location. Zone D results are similar with only one quality benefit category showing a difference between high and medium, that being the safety factor.

Figures 2.3-1 through **2.3-4** reflect a diagram of the general alignment on each segment for the identified preferred alternatives within each zone. The alignments are displayed in the maps show the recommended side of the roadway or canal for the alignment, the locations where street crossings would occur, and the transition through open areas such as undeveloped properties and public parks.

These exhibits are intended for use by the Hillsborough TPO in the public outreach efforts that are planned prior to the final selection of a recommended alternative and alignment for the entire study area. The input that will be most valuable will be the determination of preferences for one of the two options for alternative alignment in each zone. However, input on any different alignment will be of interest as well. The associated order of magnitude cost estimates will be used in this final selection stage and will support the design and implementation phasing.

Figure 2.3-1 Zone A Selected Alternatives

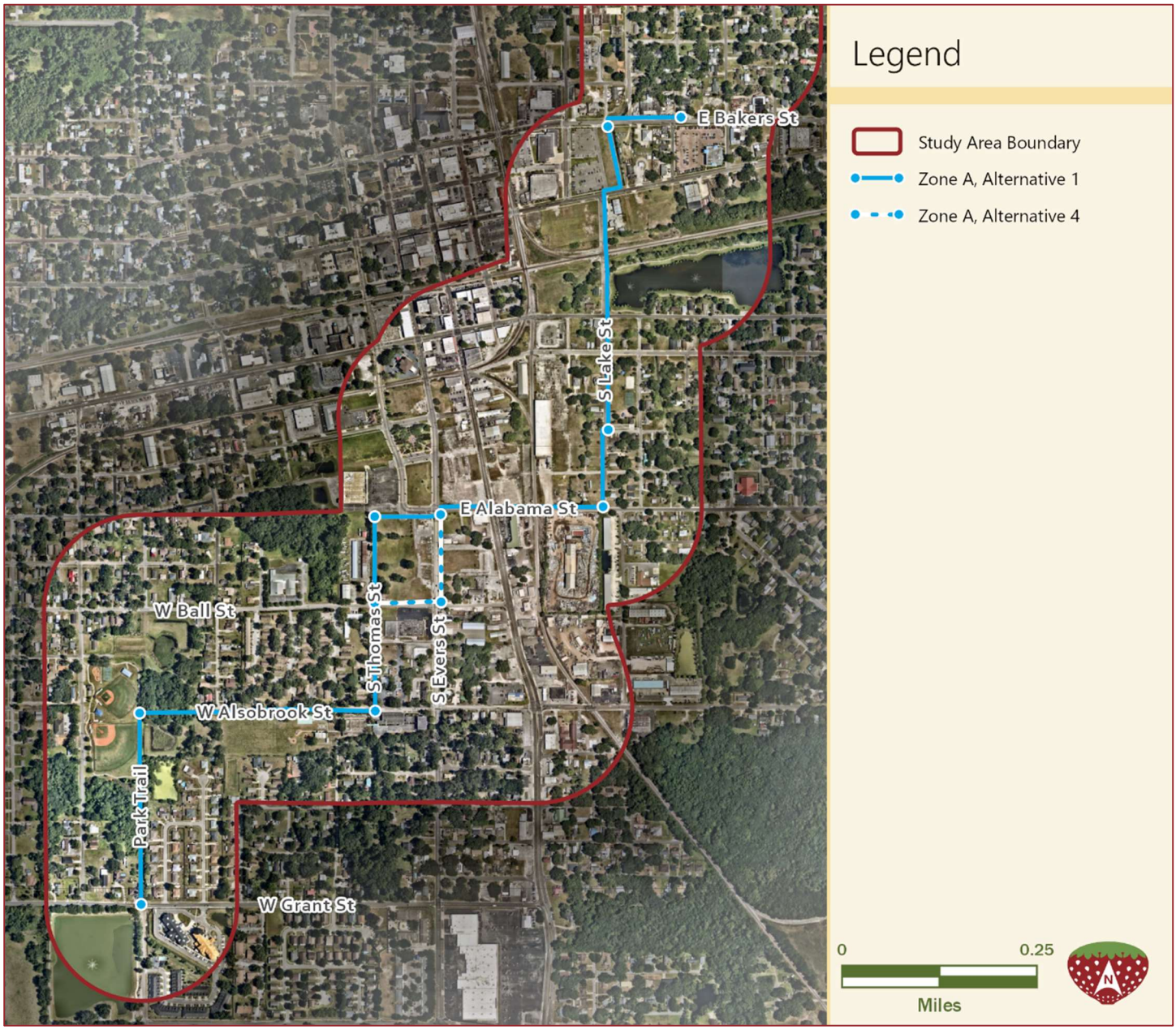


Figure 2.3-2 Zone B Selected Alternatives

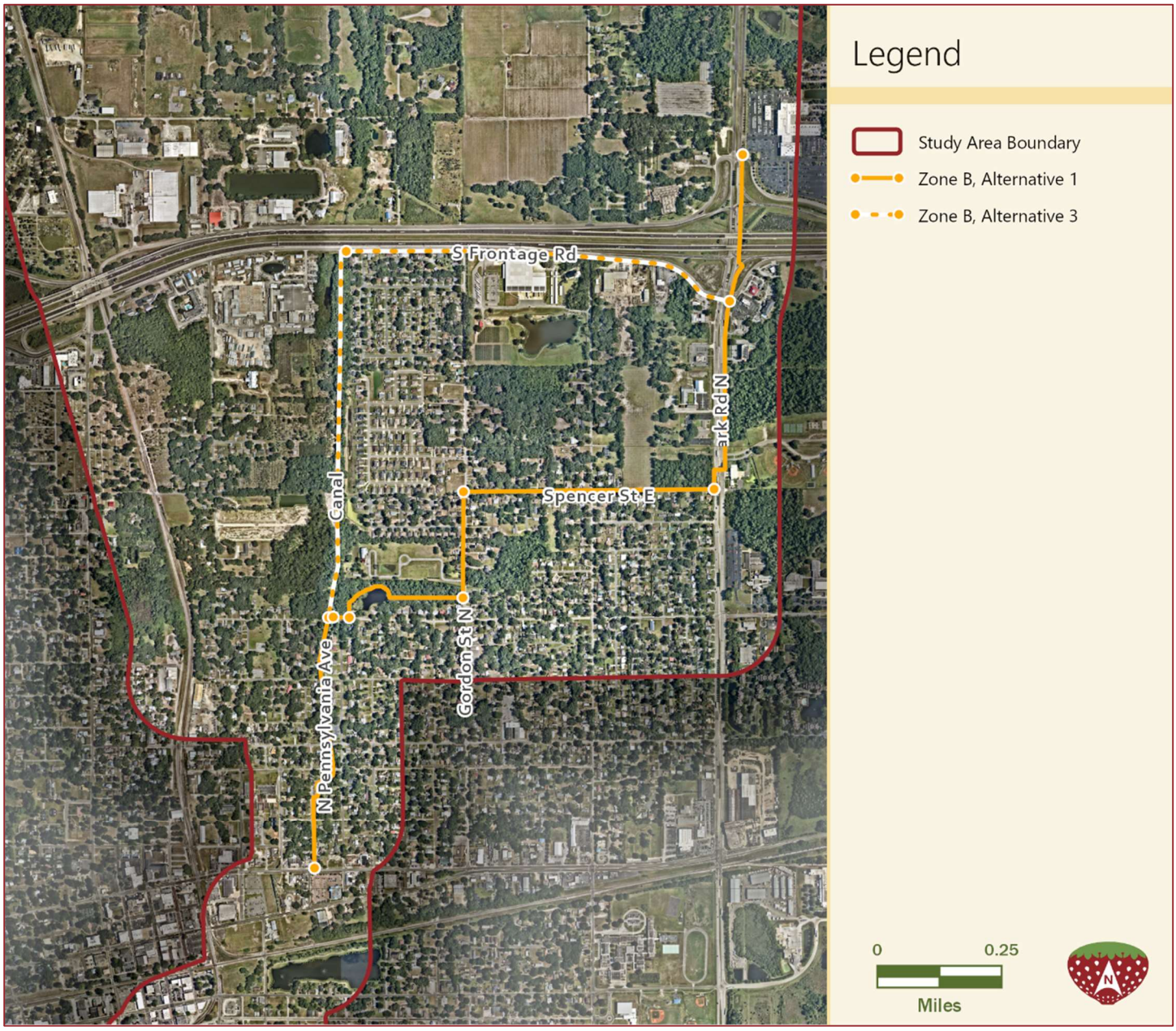


Figure 2.3-3 Zone C Selected Alternatives

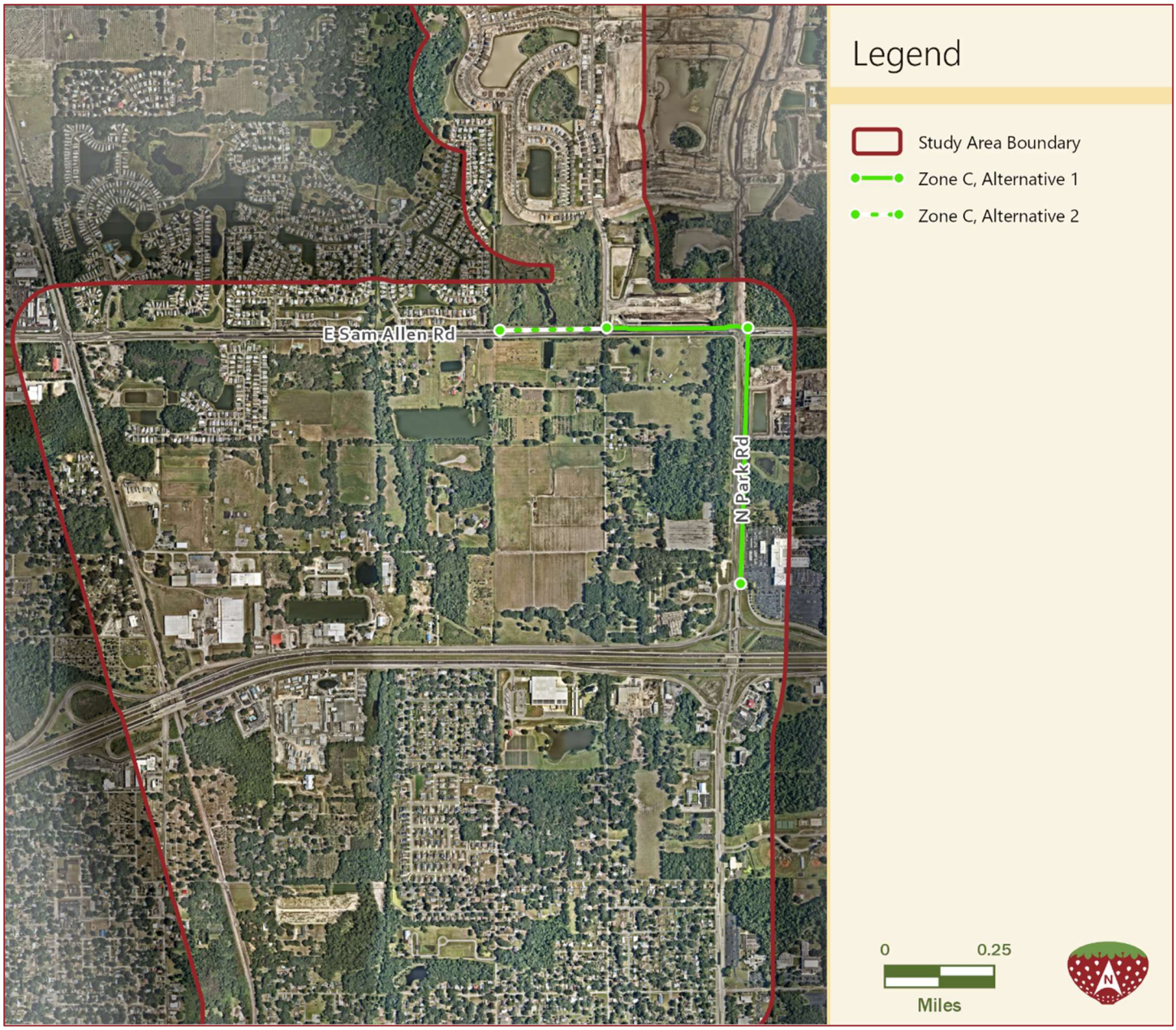
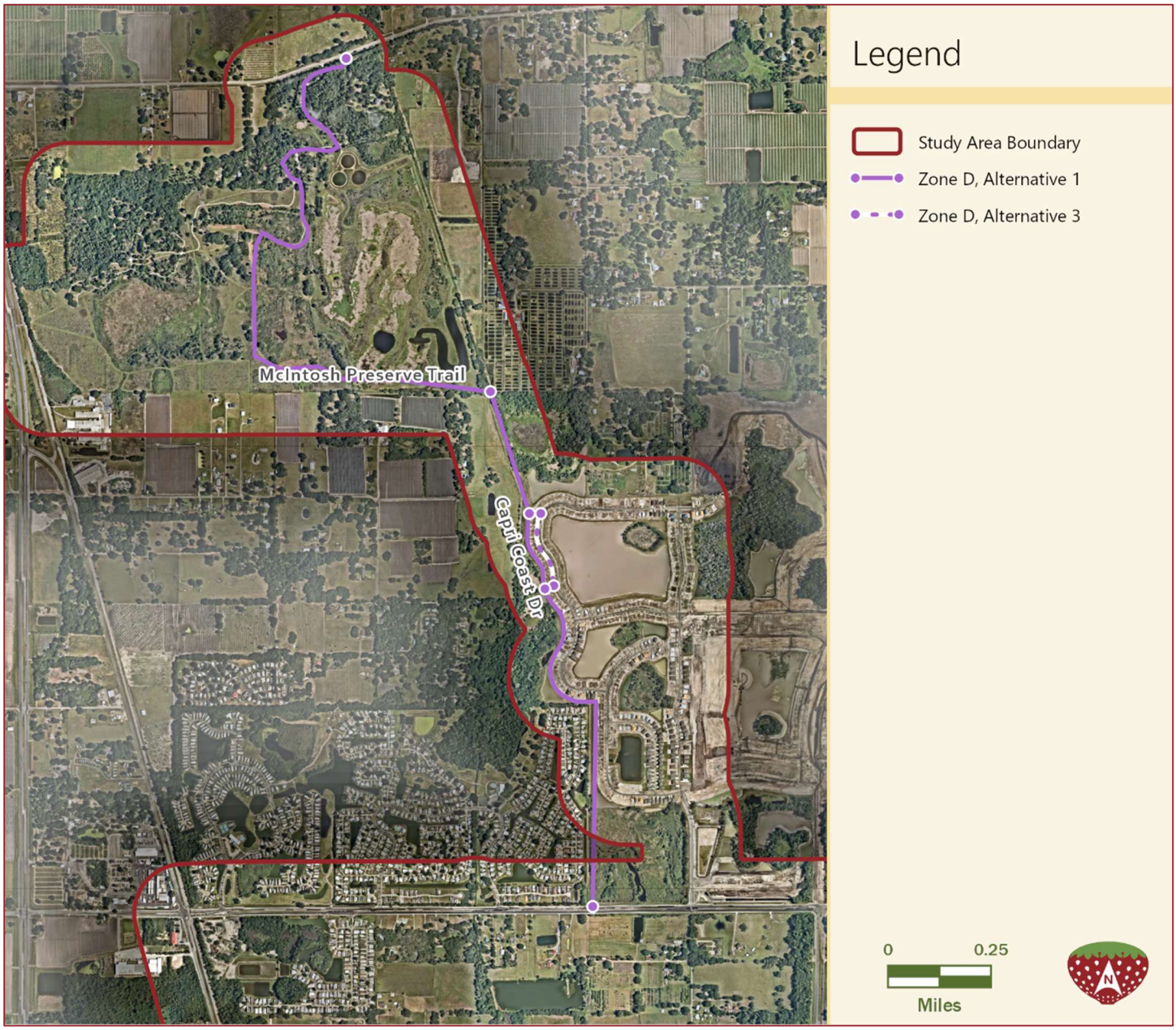


Figure 2.3-4 Zone D Selected Alternatives



Appendix A

Alternatives Benefits Quality Matrix

Goal	Weight	Criteria	Metrics	Zone A											Zone B						Zone C					Zone D			
				Alternative A1	Alternative A2	Alternative A3	Alternative A4	Alternative A5	Alternative A6	Alternative A7	Alternative A8	Alternative A9	Alternative A10	Alternative A11 (new)	Alternative B1	Alternative B2	Alternative B3	Alternative B4	Alternative B5	Alternative B6 (New)	Alternative C1	Alternative C2	Alternative C3	Alternative C4	Alternative C5	Alternative D1	Alternative D2	Alternative D3	Alternative D4
Safety	3	Extent to which the alternative limits vehicle/trail user conflicts	Driveway crossings	Very few driveways	Only segment with decent amount of driveways is A11	Driveways on A14	Very few driveways	Very few driveways	Driveways on A14	Very few driveways	Very few driveways	Very few driveways	Very few driveways, some on Ball St	Few driveways on Alsobrook St	A lot of driveways	A lot of driveways on Gordon St and Spencer St (B3/B4)	A lot of driveways on Cherry St (B7)	Very few driveways	A lot of driveways on B13 and B14	Few driveways, but several are large-truck driveway	A few very large driveways	A few very large driveways	A few very large driveways	A few very large driveways	A lot of residential driveways	No driveways	A lot of residential driveways	Small section of driveways on D7	A lot of residential driveways
			Intersection crossings (signalized v. stop-controlled)	9 Stop-controlled, 1 Signal	8 Stop-controlled, 2 signalized	8 Stop-controlled, 1 Signal	9 Stop-controlled, 1 Signal	9 Stop-controlled, 0 Signals	8 Stop-controlled, 1 Signal	9 Stop-controlled, 1 Signal	8 Stop-controlled, 1 Signal	9 Stop-controlled, 0 Signal	9 Stop-controlled, 1 Signal	9 Stop-controlled, 1 Signal	12 Stop-controlled, 2 signals	17 Stop-controlled, 3 Signal	8 Stop-controlled, 1 Signal	6 Stop-controlled, 0 Signal	10 Stop-controlled, 1 Signal	6 Stop-controlled, 0 Signals	8 Stop-controlled, 0 Signal	1 Stop-controlled, 0 Signal	1 Signalized	1 Signalized	1 Stop-controlled	Zero	1 Stop-controlled	Zero	1 Stop-controlled
			Midblock crossings	1	1	1	1	1	1	0	1	1	1	4	3	2	2	2	2	2	0	0	0	0	0	0	0	0	0
			Volumes and speeds of traffic if adjacent to roadway	All low speed roadways	All low speed roadways	All low speed roadways	All low speed roadways	All low speed roadways	All low speed roadways	All low speed roadways	All low speed roadways	All low speed roadways	All low speed roadways	Mostly off-roadway, low speed where adjacent	Mostly low speed except Park Rd and I-4 crossings	Mostly low speed except Park Rd and I-4 crossings	Mostly low speed except segment on Park Rd, and S Frontage Rd	Mostly low speed except for N Frontage Rd	Mostly low speed except for N Frontage Rd	High speed along Frontage roads	All high speed roadways	All high speed roadways	All high speed roadways	All high speed roadways	Lower speed roadway	Not against roadway	Low speed residential road	Mostly off-roadway, when it is on-roadway it is low speed residential	Low speed residential
			Rating	**Medium**	**Medium**	**Medium**	**High**	**Medium**	**Medium**	**High**	**Medium**	**Medium**	**Medium**	**High**	**Medium**	**Low**	**Medium**	**High**	**Medium**	**Low**	**High**	**High**	**Medium**	**Medium**	**Low**	**High**	**Low**	**Medium**	**Low**
Equity	3	Extent to which the alternative connects traditionally underserved populations to services, employment centers, and educational, cultural, and recreational opportunities.	Proximity to underserved communities	All in underserved communities	All in underserved communities	All in underserved communities	All in underserved communities	All in underserved communities	All in underserved communities	All in underserved communities	All in underserved communities	All in underserved communities	All in underserved communities	All in underserved communities	Zone B does not contain underserved communities	Zone B does not contain underserved communities	Zone B does not contain underserved communities	Zone B does not contain underserved communities	Zone B does not contain underserved communities	Zone B does not contain underserved communities	Zone C does not contain underserved communities	Zone C does not contain underserved communities	Zone C does not contain underserved communities	Zone C does not contain underserved communities	Zone D does not contain underserved communities	Zone D does not contain underserved communities	Zone D does not contain underserved communities	Zone D does not contain underserved communities
			Proximity to services	3 government buildings on Michigan Ave	Zero	3 government buildings on Michigan Ave	3 government buildings on Michigan Ave	3 government buildings on Michigan Ave	3 government buildings on Michigan Ave	Zero	3 government buildings on Michigan Ave	3 government buildings on Michigan Ave	3 government buildings on Michigan Ave	Zero	Does not connect underserved communities to services	Vocational Rehabilitation program on HCC campus	Does not connect underserved communities to services	Does not connect underserved communities to services	Does not connect underserved communities to services	Does not connect underserved communities to services	Does not connect underserved communities to services	Does not connect underserved communities to services	Does not connect underserved communities to services	Does not connect underserved communities to services	Does not connect underserved communities to services	Does not connect underserved communities to services	Does not connect underserved communities to services	Does not connect underserved communities to services
			Proximity to employment centers	Connects to Midtown	Connects to Midtown	Connects to Midtown	Connects to Midtown	Connects to Midtown	Connects to Midtown	Connects to Midtown	Connects to Midtown	Connects to Midtown	Connects to Midtown	Does not connect to midtown as well as other alternatives	Does not connect underserved communities to employment	Does not connect underserved communities to employment	Does not connect underserved communities to employment	Does not connect underserved communities to employment	Does not connect underserved communities to employment	Does not connect underserved communities to employment	Does not connect underserved communities to employment	Does not connect underserved communities to employment	Does not connect underserved communities to employment	Does not connect underserved communities to employment	Does not connect underserved communities to employment	Does not connect underserved communities to employment	Does not connect underserved communities to employment	Does not connect underserved communities to employment
			Proximity to schools, colleges	1	0	1	1	0	1	0	0	0	0	1	Does not connect underserved communities to schools	Does not connect underserved communities to colleges	Does not connect underserved communities to colleges	Does not connect underserved communities to colleges	Does not connect underserved communities to colleges	Does not connect underserved communities to colleges	Does not connect underserved communities to colleges	Does not connect underserved communities to colleges	Does not connect underserved communities to colleges	Does not connect underserved communities to colleges	Does not connect underserved communities to colleges	Does not connect underserved communities to colleges	Does not connect underserved communities to colleges	Does not connect underserved communities to colleges	Does not connect underserved communities to colleges
			Proximity to community assets (parks, libraries, etc.)	5 parks, Boys & Girls Club	5 parks, Boys & Girls Club	5 parks, Boys & Girls Club	5 parks, Boys & Girls Club	5 parks, Boys & Girls Club	5 parks, Boys & Girls Club	5 parks, Boys & Girls Club	5 parks, Boys & Girls Club	5 parks, Boys & Girls Club	5 parks, Boys & Girls Club	5 parks, Boys & Girls Club	Does not connect underserved communities to park/community centers	Does not connect underserved communities to park/community centers	Does not connect underserved communities to park/community centers	Does not connect underserved communities to park/community centers	Does not connect underserved communities to park/community centers	Does not connect underserved communities to park/community centers	Does not connect underserved communities to park/community centers	Does not connect underserved communities to park/community centers	Does not connect underserved communities to park/community centers	Does not connect underserved communities to park/community centers	Does not connect underserved communities to park/community centers	Does not connect underserved communities to park/community centers	Does not connect underserved communities to park/community centers	Does not connect underserved communities to park/community centers
			Extent to which the alternative limits negative impacts to traditionally underserved communities	Parcel impacts in underserved communities	No negative impacts	No negative impacts	No negative impacts	No negative impacts	No negative impacts	No negative impacts	No negative impacts	No negative impacts	No negative impacts	No negative impacts	No negative impacts	No negative impacts	No negative impacts	No negative impacts	No negative impacts	No negative impacts	No negative impacts	No negative impacts	No negative impacts	No negative impacts	No negative impacts	No negative impacts	No negative impacts	No negative impacts
			Rating	**High**	**Low**	**High**	**High**	**Medium**	**High**	**Low**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**
Environment	2	Extent to which the alternative limits impacts to natural resources	Impacts to wetlands	No alternatives go through wetlands	No alternatives go through wetlands	No alternatives go through wetlands	No alternatives go through wetlands	No alternatives go through wetlands	No alternatives go through wetlands	No alternatives go through wetlands	No alternatives go through wetlands	No alternatives go through wetlands	No alternatives go through wetlands	Crosses through wetland to connect to Alsobrook St	Does not go through wetlands	Does not go through wetlands	Goes through wetlands along canal north of Cherry St	Goes through wetlands along canal north of Cherry St	Does not go through wetlands	Goes through wetlands along canal north of Cherry St	Does not go through wetlands	Does not go through wetlands	Does not go through wetlands	Does not go through wetlands	Does not go through wetlands	Goes beside drainage ditch/wetlands	Does not go through wetlands	Goes beside drainage ditch/wetlands	Goes beside drainage ditch/wetlands
			Potential involvement of contamination sites	Goes through brownfield sites in Midtown	Goes through brownfield sites in Midtown	Goes through brownfield sites in Midtown	Goes through brownfield sites in Midtown	Goes through brownfield sites in Midtown	Goes through brownfield sites in Midtown	Goes through brownfield sites in Midtown	Goes through brownfield sites in Midtown	Goes through brownfield sites in Midtown	Goes through brownfield sites in Midtown	Goes through brownfield sites in Midtown	No contamination sites	No contamination sites	No contamination sites	No contamination sites	Near petroleum DEP site	Near petroleum DEP site	Brownfield site on Park Rd	Brownfield site on Park Rd	No contamination sites	No contamination sites	No contamination sites	No contamination sites	No contamination sites	No contamination sites	No contamination sites
			Extent to which the built/natural environment contributes to trail aesthetics	Aesthetic quality of surrounding environs	Mixed natural and urban	Mixed, more natural	Mixed, more natural	Mixed	More urban	Mixed	More urban	Mixed	Mixed	Mixed, more natural	Very Natural	Fronts 553 for small part	Fronts 553 for large part	Fronts I4 south side, along canal	Fronts I4 north side, along canal	Fronts I4 north side	Very Low Quality	Fronts 553 for most	Fronts 553 for most	Fronts 39A for most	Fronts 39A for most	More natural frontage than other C alts	All similar in Zone D	All similar in Zone D	All similar in Zone D	All similar in Zone D
			Rating	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**High**	**High**	**Medium**	**Medium**	**Medium**	**Medium**	**Low**	**Medium**	**Medium**	**High**	**High**	**High**	**Medium**	**High**	**Medium**	**Medium**
Social/Cultural	2	Extent to which the alternative limits impacts to cultural resources	Parcel impacts to social/cultural sites (4f)	No impacts to cultural sites	No impacts to cultural sites	No impacts to cultural sites	No impacts to cultural sites	No impacts to cultural sites	No impacts to cultural sites	No impacts to cultural sites	No impacts to cultural sites	No impacts to cultural sites	No impacts to cultural sites	No impacts to cultural sites	No impacts to cultural sites	No impacts to cultural sites	No impacts to cultural sites	No impacts to cultural sites	Would cut into cemetary	No impacts to cultural sites	No impacts to cultural sites	No impacts to cultural sites	No impacts to cultural sites	No impacts to cultural sites	No impacts to cultural sites	No impacts to cultural sites	No impacts to cultural sites	No impacts to cultural sites
			Extent to which the alternative enhances connectivity to cultural resources	Proximity to social/cultural sites	No sites in area	No sites in area	No sites in area	No sites in area	No sites in area	No sites in area	No sites in area	No sites in area	No sites in area	No sites in area	HCC considered cultural site in area	HCC considered cultural site in area	HCC considered cultural site in area	HCC considered cultural site in area	HCC considered cultural site in area	None	None	No cultural sites in area	No cultural sites in area	No cultural sites in area	No cultural sites in area	No cultural sites in area	No cultural sites in area	No cultural sites in area	No cultural sites in area	No cultural sites in area
			Rating	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Low**	**High**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**
Economic Development	2	Extent to which the alternative supports economic development	Proximity to targeted redevelopment or growth areas	Goes through redeveloping Midtown district	Goes through redeveloping Midtown district	Goes through redeveloping Midtown district	Goes through redeveloping Midtown district	Goes through redeveloping Midtown district	Goes through redeveloping Midtown district	Goes through redeveloping Midtown district	Goes through redeveloping Midtown district	Goes through redeveloping Midtown district	Goes through redeveloping Midtown district	Does not connect to midtown as well as other alternatives	No alternative goes through underdeveloped community	No alternative goes through underdeveloped community	Some underdeveloped area along west side of canal, would need crossing	No alternative goes through underdeveloped community	No alternative goes through underdeveloped community	No alternative goes through underdeveloped community	Area along Park Rd could become further developed	Area along Park Rd could become further developed	Limited opportunity for redevelopment due to railroad	Limited opportunity for redevelopment due to railroad	Limited opportunity for redevelopment, residential	Area immediately adjacent to trail already developed	Area immediately adjacent to trail already developed	Area immediately adjacent to trail already developed	Area immediately adjacent to trail already developed
			Rating	**High**	**High**	**High**	**High**	**High**	**High**	**High**	**High**	**High**	**High**	**Medium**	**Low**	**Low**	**Medium**	**Low**	**Low**	**Low**	**Medium**	**Medium**	**Low**	**Low**	**Low**	**Low**	**Low**	**Low**	**Low**
Connectivity	2	Extent to which the alternative connects existing and planned pedestrian/bike networks	Connections to existing or planned facilities	Uses existing connection between Brewer and Snowden park	Uses existing connection between Brewer and Snowden park; Sidewalk in Cooper Park	Uses existing connection between Brewer and Snowden park	Uses existing connection between Brewer and Snowden park	Uses existing connection between Brewer and Snowden park	Uses existing connection between Brewer and Snowden park	Uses existing connection between Brewer and Snowden park, Sidewalk in Cooper Park	Uses existing connection between Brewer and Snowden park	Uses existing connection between Brewer and Snowden park	Uses existing connection between Brewer and Snowden park	Uses existing connection between Brewer and Snowden park, Sidewalk in Cooper Park	Goes through Gilcrist and Cherry St park	Goes through Gilcrist and Cherry St park	Goes through Gilcrist Park	Goes through Gilcrist and Cherry St park	Goes through Gilcrist Park	Goes through Gilcrist Park	Does not use existing facility besides sidewalks on Park Rd and Sam Allen Rd	Does not use existing facility besides sidewalks on Park Rd and Sam Allen Rd	Does not use existing facility besides sidewalk on Sam Allen Rd	Does not use existing facility besides sidewalk on Sam Allen Rd	Does not use existing facility	Does not use existing facility	Does not use existing facility	Does not use existing facility	Does not use existing facility
			Extent to which the alternative connects services, employment centers, and educational, cultural, and recreational opportunities.	Proximity to employment centers	Connects to Midtown	Connects to Midtown	Connects to Midtown	Connects to Midtown	Connects to Midtown	Connects to Midtown	Connects to Midtown	Connects to Midtown	Connects to Midtown	Not as well connected as other alternatives	2 Employment centers	2 Employment centers	1 Employment Center	1 Employment Center	1 Employment Center	1 Employment Center	None, However new advent health site being built	None, However new advent health site being built	1 Employment Center	1 Employment Center	Zero	Zero	Zero	Zero	Zero
			Proximity to schools, colleges	1	0	1	1	1	0	0	0	0	0	1	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0
			Proximity to community assets (parks, libraries, etc.)	5 parks, Boys & Girls Club	5 parks, Boys & Girls Club	5 parks, Boys & Girls Club	5 parks, Boys & Girls Club	5 parks, Boys & Girls Club	5 parks, Boys & Girls Club	5 parks, Boys & Girls Club	5 parks, Boys & Girls Club	5 parks, Boys & Girls Club	5 parks, Boys & Girls Club	5 parks, Boys & Girls Club	4 Parks	4 parks, HCC garden/event space	3 Parks	3 Parks	3 Parks	3 Parks	Advent Health Site	Advent Health Site	No parks	No parks	No parks	No parks	No parks	No parks	No parks
			Rating	**High**	**High**	**High**	**High**	**Medium**	**High**	**High**	**Medium**	**Medium**	**Medium**	**Low**	**Medium**	**High**	**Low**	**Medium**	**Low**	**Medium**	**Medium**	**Medium**	**Low**	**Low**	**Low**	**Low**	**Low**	**Low**	**Low**
Buildability	3	Ease of implementation and partnerships	Required permits coordination with other agencies	SWFWMD (Canal)	CSX (New crossing)	SWFWMD (Canal)	SWFWMD (Canal)	SWFWMD (Canal)	SWFWMD (Canal)	CSX (New crossing)	SWFWMD (Canal)	SWFWMD (Canal)	SWFWMD (Canal)	CSX (1 existing and 1 new crossing), SWFWMD (Canal)	SWFWMD (Canal)	SWFWMD (Canal)	SWFWMD (Canal)	SWFWMD (Canal), FDOT	SWFWMD (Canal)	SWFWMD (Canal), FDOT	None	None	CSX	CSX	None	Neighborhood HOA	Neighborhood HOA	Neighborhood HOA	Neighborhood HOA
			Extent to which the alternative limits impacts to drainage, utilities, and other physical obstructions	Presence of physical obstructions	Utility poles on Alsobrook St, Thomas St, Evers St, and Lake St (though its park property).	Drainage structures on Ball St. Utility poles on Ball St, Evers St, and Lake St (though its park property). Crosses railroad tracks not at existing road.	Utility poles on Alsobrook St, Thomas St, Evers St, and Lake St (though its park property).	Utility poles on Alsobrook St, Thomas St, Evers St, and Lake St (though its park property).	Drainage structures on Ball St, Utility poles on Ball St, Evers St, Lake St (though its park property).	Utility poles on Alsobrook St, Thomas St, Evers St, and Lake St (though its park property).	Drainage structures on Ball St. Utility poles on Ball St, Evers St, Lake St (though its park property). Crosses railroad tracks not at existing road.	Utility poles on Ball St, Evers St, Lake St (though its park property).	Utility poles on Ball St, Evers St, Lake St (though its park property).	Utility poles on Ball St, Evers St, and Lake St (though its park property).	Limited obstructions (gaurdrails and few utility poles) along canal.	Utility poles on Pennsylvania St. Canal crossing on gordon st. Utility poles on spencer east of maryland.	Utility poles on Pennsylvania St and cherry St. Drainage ditch on cherry st east of maryland	Utility poles on S Frontage Rd.	Drainage ditch on cherry st,	Lightpoles/Utility poles on N Frontage Rd. Crossing over I-4.	Drainage structure at Tomlin and Knight St	None on Park Rd, unsure about Sam Allen	None on Park Rd, unsure about Sam Allen	None on Paul Buchman, unsure about Sam Allen since its not completed	None on Paul Buchman, unsure about Sam Allen since its not completed	None	Drainage Area outside neighborhood	Unknown what obstructions will be in neighborhood	Drainage Area outside neighborhood	Drainage Area outside neighborhood
			Extent to which the alternative impacts private property	Clips and total takings of parcels excluding government parcels	19 parcels/ 1.25 ac	23 parcels/0.81 ac	23 parcels/1.48 ac	20 parcels/1.22 ac	26 parcels/0.95 ac	23 parcels/1.48 ac	22 parcels/0.85 ac	27 parcels/0.91 ac	26 parcels/0.95 ac	27 parcels/0.89 ac	25 parcels, .5 acres	40 parcels/0.63 ac	39 parcels/0.64 ac	29 parcels/2.56 ac	24 parcels/2.53 ac	34 parcel/1.08 ac	25 parcels, 2.58 ac					68 parcels/0.60 ac	96 parcels/1.67 ac	69 parcels/0.89 ac	
			Impacts to structures, fences, landscaping																										
			Rating	**Medium**	**Low**	**Medium**	**Medium**	**Medium**	**Medium**	**Low**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**High**	**Low**	**High**	**Low**	**High**	**High**	**Low**	**Low**	**High**	**High**	**Low**	**Medium**	**Medium**
Cost	3	Probable cost to implement alternative	Construction and ROW cost estimate															Largest factor crossing over I4		Largest factor crossing over I4									
			Rating	**Medium**	**Low**	**Medium**	**Medium**	**Medium**	**Medium**	**Low**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**High**	**Low**	**High**	**Low**	**High**	**High**	**Low**	**Low**	**High**	**High**	**Low**	**Medium**	**Medium**

Appendix B

Alternatives Comparative Ranking Matrix

Goal	Weight	Criteria	Metrics	Zone A											Zone B						Zone C					Zone D			
				Alternative A1	Alternative A2	Alternative A3	Alternative A4	Alternative A5	Alternative A6	Alternative A7	Alternative A8	Alternative A9	Alternative A10	Alternative A11	Alternative B1	Alternative B2	Alternative B3	Alternative B4	Alternative B5	Alternative B6	Alternative C1	Alternative C2	Alternative C3	Alternative C4	Alternative C5	Alternative D1	Alternative D2	Alternative D3	Alternative D4
Safety	2	Extent to which the alternative limits vehicle/trail user conflicts	Driveway crossings	Medium	Medium	Medium	High	Medium	Medium	High	Medium	Medium	Medium	High	Medium	Low	Medium	High	Medium	Low	High	High	Medium	Medium	Low	High	Low	Medium	Low
			Intersection crossings (signalized v. stop-controlled)																									
			Midblock crossings																									
			Volumes and speeds of traffic if adjacent to roadway																									
Equity	3	Extent to which the alternative connects traditionally underserved populations to services, employment centers, and educational, cultural, and recreational opportunities.	Proximity to underserved communities	High	Low	High	High	Medium	High	Low	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium
			Proximity to services																									
			Proximity to employment centers																									
			Proximity to schools, colleges																									
			Proximity to community assets (parks, libraries, etc.)																									
		Extent to which the alternative limits negative impacts to traditionally underserved communities	Parcel impacts in underserved communities																									
Environment	2	Extent to which the alternative limits impacts to natural resources	Impacts to wetlands	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	High	High	Medium	Medium	Medium	Medium	Low	Medium	Medium	High	High	High	Medium	High	Medium	Medium
			Potential involvement of contamination sites																									
		Extent to which the built/natural environment contributes to trail aesthetics	Aesthetic quality of surrounding environs																									
Social/Cultural	2	Extent to which the alternative limits impacts to cultural resources	Parcel impacts to social/cultural sites (4f)	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Low	High	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium
		Extent to which the alternative enhances connectivity to cultural resources	Proximity to social/cultural sites																									
Economic Development	2	Extent to which the alternative supports economic development	Proximity to targeted redevelopment or growth areas	High	High	High	High	High	High	High	High	High	High	Medium	Low	Low	Medium	Low	Low	Low	Medium	Medium	Low	Low	Low	Low	Low	Low	Low
Connectivity	2	Extent to which the alternative connects existing and planned pedestrian/bike networks	Connections to existing or planned facilities	High	High	High	High	Medium	High	High	Medium	Medium	Medium	Low	Medium	High	Low	Medium	Low	Medium	Medium	Medium	Low	Low	Low	Low	Low	Low	Low
		Extent to which the alternative connects services, employment centers, and educational, cultural, and recreational opportunities.	Proximity to employment centers																									
			Proximity to schools, colleges																									
			Proximity to community assets (parks, libraries, etc.)																									
Buildability	3	Ease of implementation and partnerships	Required permits coordination with other agencies	Medium	Low	Medium	Medium	Medium	Medium	Low	Medium	Medium	Medium	Medium	Medium	Medium	High	Low	High	Low	High	High	Low	Low	HIgh	High	Low	Medium	Medium
		Extent to which the alternative limits impacts to drainage, utilities, and other physical obstructions	Presence of physical obstructions																									
		Extent to which the alternative impacts private property	Clips and total takings of residential properties																									
			Clips and total takings of commercial properties																									
			Impacts to structures, fences, landscaping																									
Cost	3	Probable cost to implement alternative	Construction and ROW cost estimate	Medium	Low	Medium	Medium	Medium	Medium	Low	Medium	Medium	Medium	Medium	Medium	Medium	High	Low	High	Low	High	High	Low	Low	HIgh	High	Low	Medium	Medium
Total Score				**50**	39	48	**50**	45	48	41	45	45	45	40	**38**	32	**36**	32	32	28	**40**	**40**	30	30	34	**36**	28	**34**	32