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# 4

## Section 4(f) Evaluation

This Draft Section 4(f) Evaluation has been prepared to comply with the United States Department of Transportation (USDOT) Act of 1966 (23 U.S.C. § 138 and 49 U.S.C. § 303), hereinafter referred to as “Section 4(f),” and its implementing regulations codified at 23 CFR. Part 774.

This Draft Section 4(f) Evaluation updates prior Section 4(f) Evaluations prepared for the D-O LRT Project. GoTriangle prepared this evaluation using the methodology described in the NEPA documentation for the Previous Design and incorporates by reference all definitions related to Section 4(f) Uses, Temporary Occupancy Exception, *de minimis* Impacts, and Constructive Use.

Additional guidance was obtained from FHWA Technical Advisory T6640.8A (FHWA 1987b) and the revised FHWA Section 4(f) Policy Paper (FHWA 2012).

The Project Description for the Proposed Refinements is provided in section 2.2 of this Supplemental EA.

This chapter describes the potential Section 4(f) uses anticipated with the Proposed Refinements, including changes to the uses evaluated in previous NEPA documentation.

## 4.1 Section 4(f) Properties

Section 4(f) properties include publicly owned parks, recreational areas, wildlife and waterfowl refuges, and public and private historical sites. Section 4(f) requirements apply to all transportation projects that require funding or other approvals by the USDOT. After properties within the study area are identified, it is then determined whether and to what extent the project would use each property.

The Proposed Refinements are located within the same study area as presented in the prior NEPA documentation for the Previous Design. **Table 4-1** presents only those Section 4(f) properties where the Proposed Refinements would result in a use that was not previously identified or where the use may change; these are the only Section 4(f) properties addressed in this Draft Section 4(f) Evaluation. All other Section 4(f) properties are discussed in the NEPA documentation for the Previous Design and are also shown on **Figure 4-1**, which is an overview map illustrating locations of all properties.

While there are no changes anticipated in the Section 4(f) use determinations to parks, recreation areas, or wildlife or waterfowl refuges as a result of the Proposed Refinements, minor changes in impact areas would occur. These are described in Section 4.1.1. Section 4.1.2 describes changes to the Section 4(f) use determinations for two historic sites.

### 4.1.1 Publicly Owned Parks, Recreation Facilities, and Wildlife and Waterfowl Refuges

Park, recreation, open space, and wildlife and waterfowl refuge properties identified in the previous NEPA documentation were assessed to determine if the Proposed Refinements may affect those Section 4(f) properties, and if the effects would differ from what has been previously documented. GoTriangle determined the Proposed Refinements would change Section 4(f) uses at seven properties identified in the NEPA documentation for the Previous Design and require use of one Section 4(f) property not evaluated in the previous NEPA documentation – the Downtown Durham Trail.

#### 4.1.1.1 USACE Jordan Game Lands (Existing)

##### *Section 4(f) Property Description and Function(s) of the Property (Intended, Actual/Current, Planned)*

This multi-parcel natural wooded area covers 570 acres on the eastern side of Durham County and is considered both a wildlife refuge and a recreational property. The Jordan Game Lands contain two separate areas of waterfowl habitat within the project study area, as well as multiple roads and parking lots that serve as public access to the recreational areas.

#### *Ownership*

The Jordan Game Lands are owned by the U.S. Army Corps of Engineers (USACE) and managed by the North Carolina Wildlife Resources Commission (NCWRC). Currently, two existing NCDOT transportation easements occupy a portion of the USACE-owned land; one transportation for NC 54 and one transportation easement for George King Road.

#### *Use of Section 4(f) Property*

The Proposed Refinements would result in minor changes to the effects of the D-O LRT Project on the Jordan Game Lands (**Figure 4-2**).

The light rail alignment parallels the south side of NC-54, within the existing NCDOT transportation easement, then crosses over NC 54 on elevated structure to follow George King Road, also within existing NCDOT transportation easement. The Previous Design required temporary and permanent easements of approximately 3.3 acres within the Jordan Game Lands Section 4(f) property on the western edge of George King Road and the northern edge of NC-54, including areas within existing NCDOT easements.



**Table 4-1: Summary of Impacts of Previous Design and Proposed Refinements**

Section 4(f) Property	Previous Design Permanent Easement (Acres)	Proposed Refinements Permanent Easement (Acres)	Change in Permanent Easement (Acres)	Previous Design Temporary Easement (Acres)	Proposed Refinements Temporary Easement (Acres)	Change in Temporary Easement (Acres)	Permanent Use, <i>De Minimis</i>	No Use	Temporary Occupancy Exception	Change in Section 4(f) Finding?
Jordan Game Lands	1.9	2.1 <sup>1</sup>	+0.2 <sup>1</sup>	1.4	2.0 <sup>1</sup>	+0.6 <sup>1</sup>	●			No
Central Park South (Planned)	0.9	1.9	+1.0	1.1	0.5	-0.6	●			No
Coker Pinetum	0.2	0.4	+0.2	0.0	0.0	--	●			No
UNC Finley Golf Course and Athletic Fields	2.6	2.3	-0.3	0.4	1.5	+1.1	●			No
UNC Open Space	0.8	2.4	+1.6	1.0	0.8	-0.2	●			No
Glenwood Elementary School	0.1	0.2	+0.1	0.1	0.2	+0.1		●		No
New Hope Creek Trail (Planned)	<0.1	<0.1	--	0.0	0.0	--	●			No
Downtown Durham Trail	--	0.0	--	--	0.0	--			●	N/A

N/A = Not applicable because it was not evaluated in review of Previous Design.

<sup>1</sup> The numbers presented here are rounded to the nearest tenth of an acre. See Figures 4-3 and 4-4 for precise acreages.



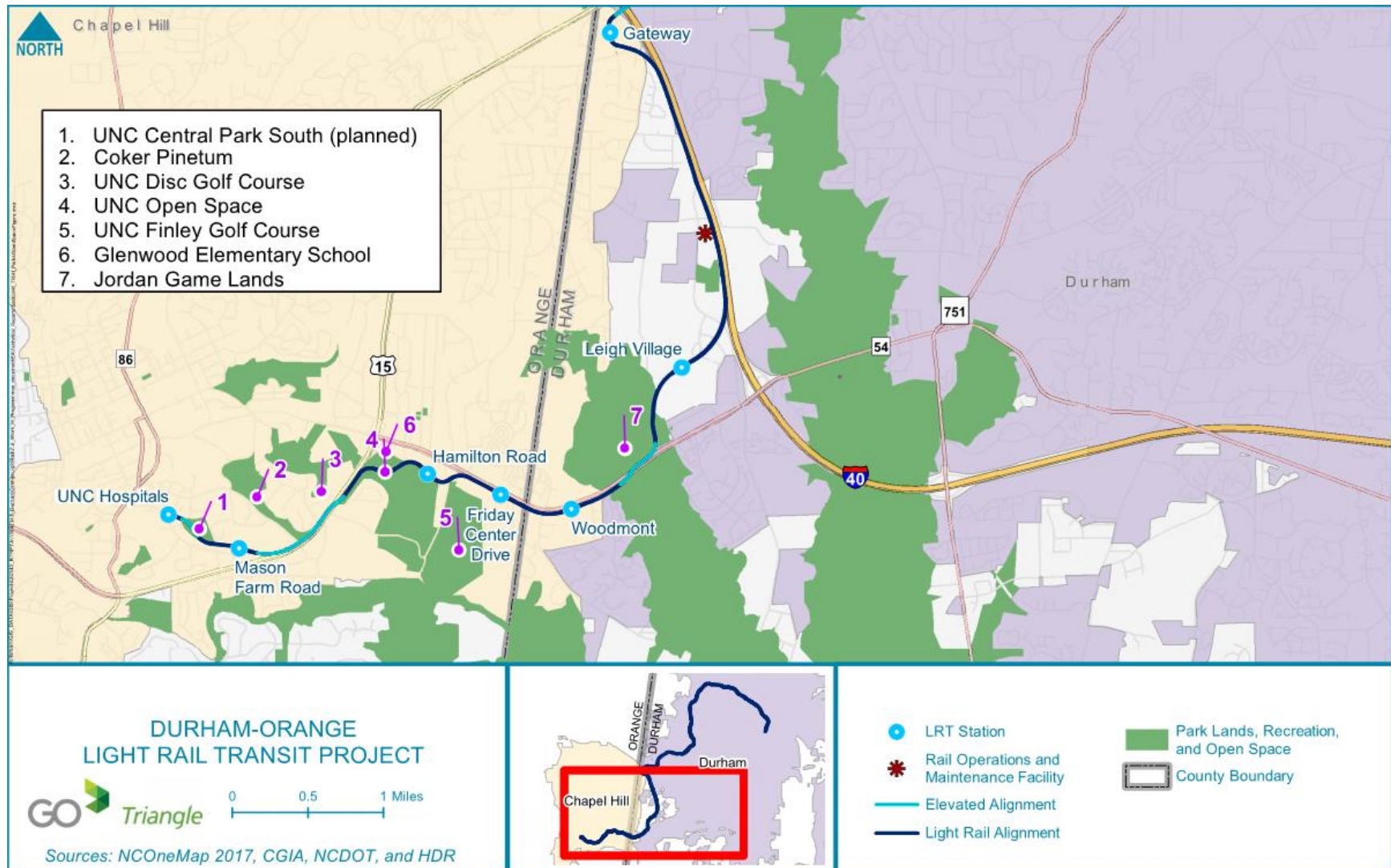
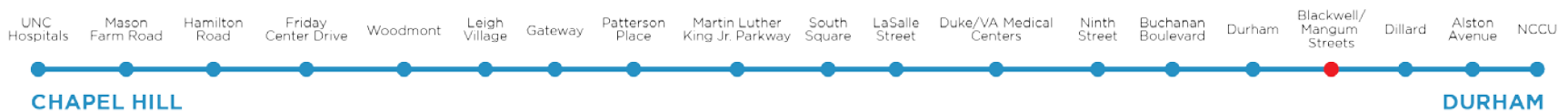


Figure 4-1a: Overview of Property Locations





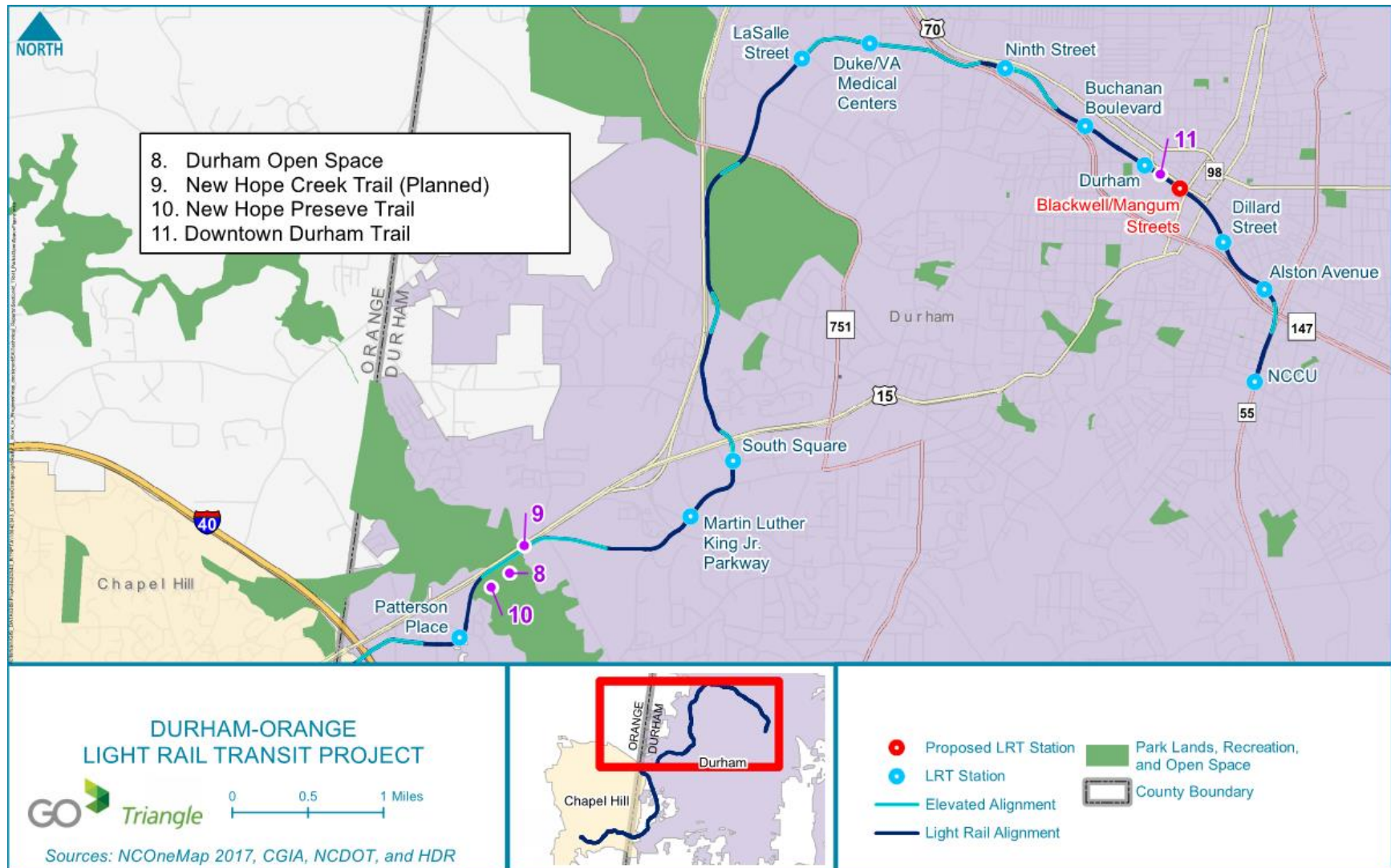
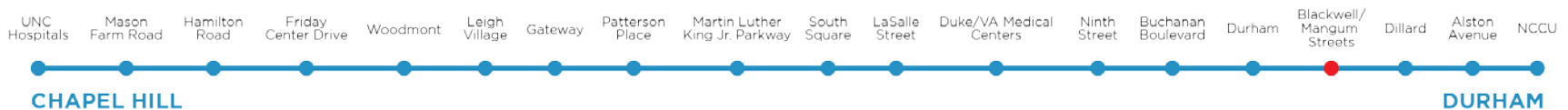


Figure 4-1b: Overview of Property Locations





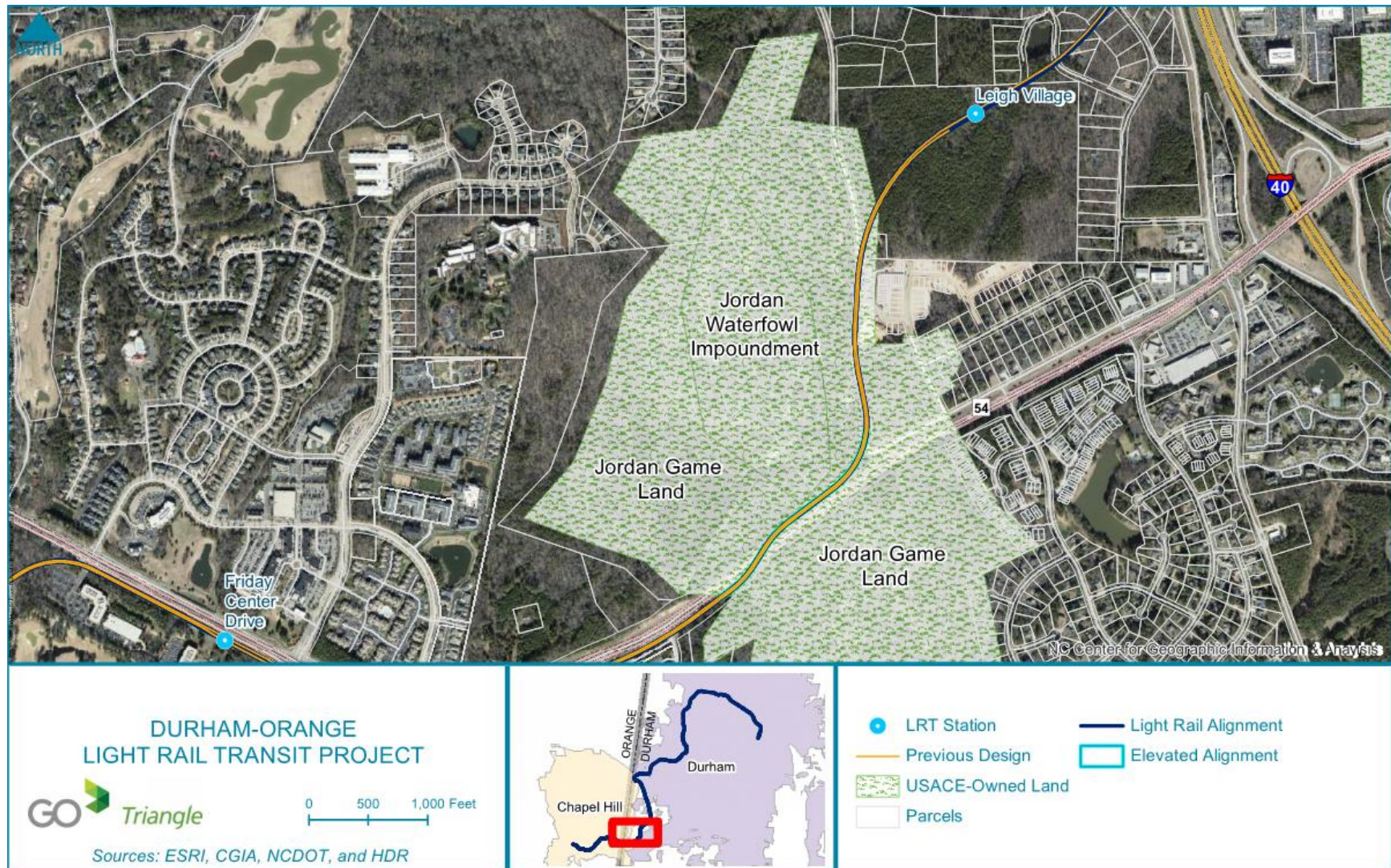
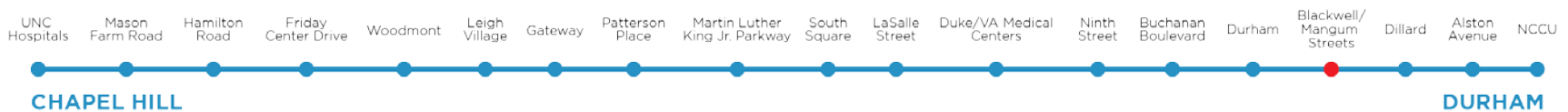


Figure 4-2: US Army Corps of Engineers – Jordan Game Lands





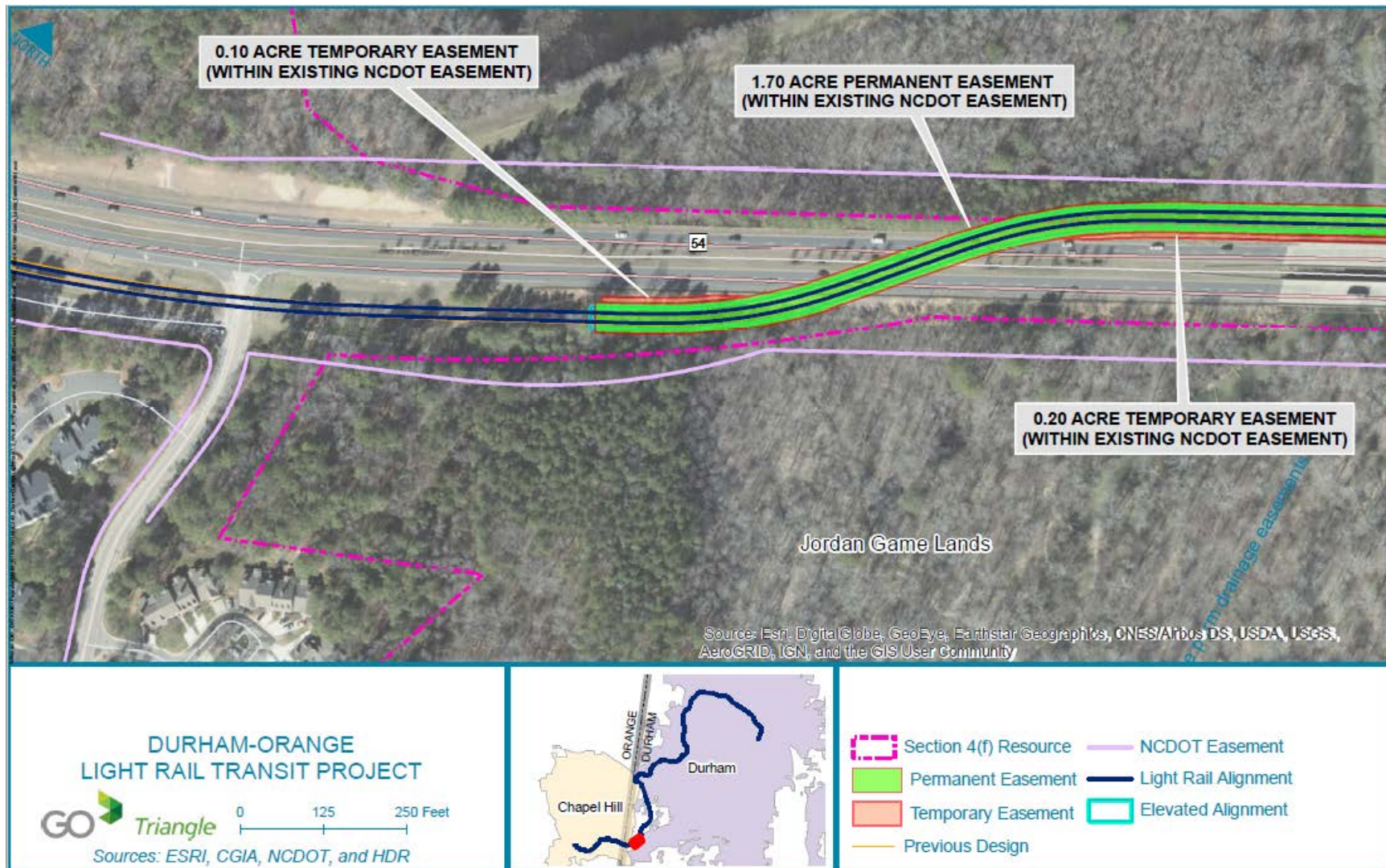
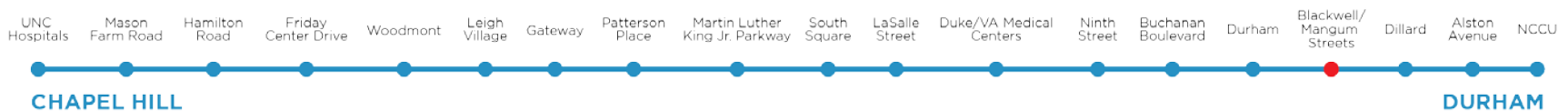


Figure 4-3: Proposed Easements at Jordan Game Lands (1 of 2)





Increased easements also would be needed along George King Road to accommodate stormwater pipes, discharge locations, and an increase in separation from 13.5 feet to 16 feet from the center line of the track (**Figure 4-4**). This right-of-way width increase will better accommodate construction vehicles along this stretch of the alignment.

Under the Proposed Refinements, the permanent easement constituting a Section 4(f) use would increase to approximately 2.1 acres. Of the permanent easement required, 1.7 acres is within the existing NCDOT transportation easement and the remaining 0.4 acre is outside of the NCDOT transportation easement but still within the Jordan Game Lands.

The Previous Design required a temporary construction easement of 1.4 acres. With the Proposed Refinements, the temporary construction easement requirement would increase to 2.0 acres. Of the temporary easement required, 0.3 acre is within the existing NCDOT transportation easement on the Jordan Game Lands. The temporary easement would be needed the construction along George King Road.

Temporary occupancy of the Jordan Game Lands would not be needed for the entire duration of the D-O LRT Project, but rather for the time needed to construct the portion of the Project along George King Road. Occupancy would not result in a change in ownership of the property and would result in minimal impacts to recreational features that qualify the

Jordan Game Lands for protection under Section 4(f).

### Coordination

Coordination with USACE, the official with jurisdiction over the Jordan Game Lands, has been on-going to identify the long term and short term effects of the Proposed Refinements. After meeting with USACE on March 12, 2018 and June 26, 2018 on the subject of permitting and license requirements, at the request of USACE and in lieu of another meeting, GoTriangle sent an initial letter of concurrence to USACE on September 17, 2018. The letter described advancements in design and the anticipated effects of the Proposed Refinements on the Jordan Game Lands, the efforts to minimize and mitigate project-related effects, and the FTA's preliminary determination that the Proposed Refinements will have a *de minimis* impact on the Section 4(f) resource.

GoTriangle and the USACE held a consultation meeting on October 15, 2018 to review the anticipated effects on Jordan Game Lands. Based on additional Proposed Refinements, GoTriangle sent a revised letter to USACE on October 18, 2018. The letter described the anticipated effects of the Proposed Refinements on the Section 4(f) resource, the efforts to minimize and mitigate project-related effects, and the preliminary determination that the Proposed Refinements will be a temporary occupancy exception of the Section 4(f) resource. The letter also requested

concurrence from the USACE with the draft determination.

GoTriangle will also coordinate with USACE to obtain a Section 408 Non-Recreational Land Outgrant license and a Section 404 permit. A non-recreational land outgrant is required for use of government-owned land (i.e. USACE-owned property). A Section 404 permit will be required for effects to jurisdictional waters located throughout the project.

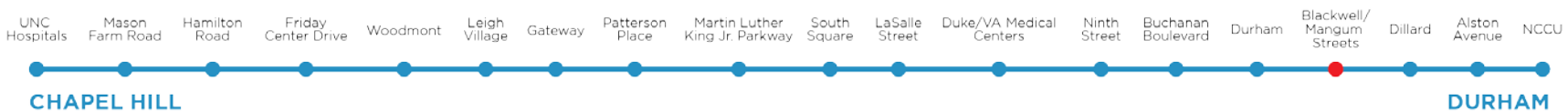
### Minimization and Mitigation

GoTriangle will continue to work with the USACE to identify appropriate compensatory storage to replace, through excavation, any storage volume lost by placement of fill above an elevation of 245 feet above mean sea level.

Mitigation commitment #PRA01 in the Amended ROD would remain applicable to the Proposed Refinements.

### Preliminary Determination

The FTA's preliminary determination, pursuant to 23 CFR § 774.3, regarding the use of the Jordan Game Lands, including any measures to minimize harm (such as avoidance, minimization, mitigation, or enhancement measures) committed to by GoTriangle, is that the project with Proposed Refinements will have a *de minimis* impact (as defined in 23 CFR § 774.17) on the property. This preliminary determination updates the *de minimis* determination made in the Final Section 4(f) Evaluation for the Previous Design.



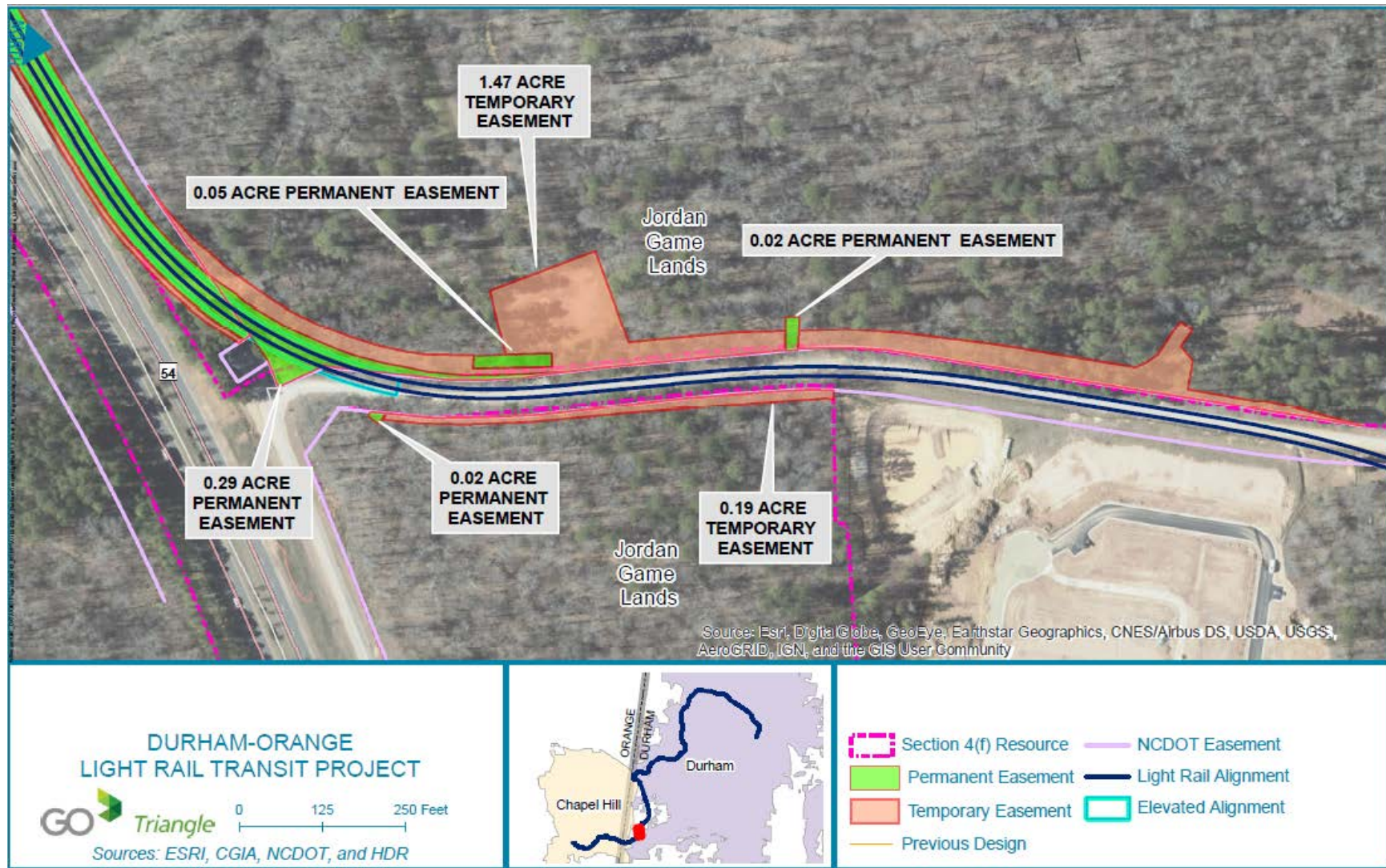
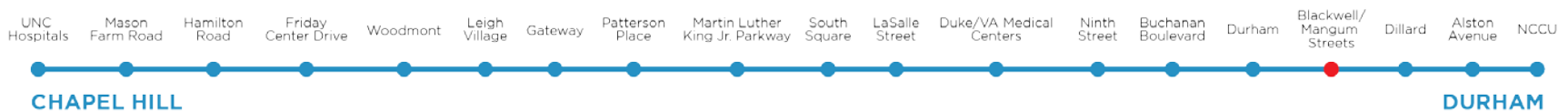


Figure 4-4: Proposed Easements at Jordan Game Lands (2 of 2)



#### 4.1.1.2 UNC Central Park South (Planned)

##### *Section 4(f) Property Description and Function(s) of the Property (Intended, Actual/Current, Planned)*

This resource is a planned 13.7-acre open space recreation area that would be developed on the UNC campus.

##### *Ownership*

The planned park would be constructed by UNC on land owned by UNC.

##### *Use of Section 4(f) Property*

The Proposed Refinements include a track shift 10 feet to the northeast within the planned UNC Central Park South (**Figure 4-5**). The Proposed Refinements would require a permanent easement of approximately 1.9 acres of land from the planned UNC Central Park South property, which represents an increase of approximately 1.0 acre from the estimated easement requirement of the Previous Design (**Figure 4-5**). The track alignment in this section transitions between at-grade and elevated, which affects parking spaces on Hibbard Drive. The changes in easement needs are associated with replacement parking provisions and roadway design changes in this area. There is also a slight increase in the width of the permanent easement needed from the track centerline. The proposed temporary easement needed

during construction would decrease from 1.1 acres to 0.5 acre.

The Proposed Refinements would not result in substantial changes to the Previous Design that would preclude the development of Central Park South, nor would the future park access be affected by the project. Access within the park would be possible beneath the elevated section of the track alignment that would traverse most of the planned park area.

##### *Coordination*

Coordination with UNC, the official with jurisdiction over this property, has been ongoing throughout the project. Pursuant to 23 C.F.R. Part 774, GoTriangle met with UNC on April 13, 2018 to discuss the long-term and short-term effects of the Proposed Refinements on the planned Central Park South Section 4(f) resource.

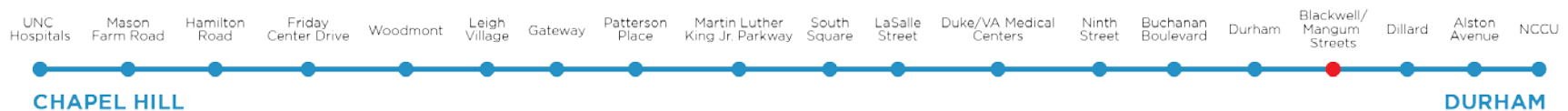
GoTriangle sent a letter to UNC on July 12, 2018. The letter described the anticipated effects of the Proposed Refinements on the Section 4(f) resource, the efforts to minimize and mitigate project-related effects, and the preliminary determination that the Proposed Refinements will have a *de minimis* impact on the Section 4(f) resource. The letter also requested concurrence from UNC with the draft determination (see coordination letter in **appendix M**).

##### *Minimization and Mitigation*

Mitigation commitment #PRA01 in the Amended ROD would remain applicable to the Proposed Refinements.

##### *Preliminary Determination*

The FTA's preliminary determination, pursuant to 23 CFR § 774.3, regarding the use of the planned UNC Central Park South, including any measures to minimize harm committed to by GoTriangle, is that the project with Proposed Refinements will have a *de minimis* impact (as defined in 23 CFR § 774.17) on the property. This preliminary determination updates the *de minimis* determination made in the Final Section 4(f) Evaluation.





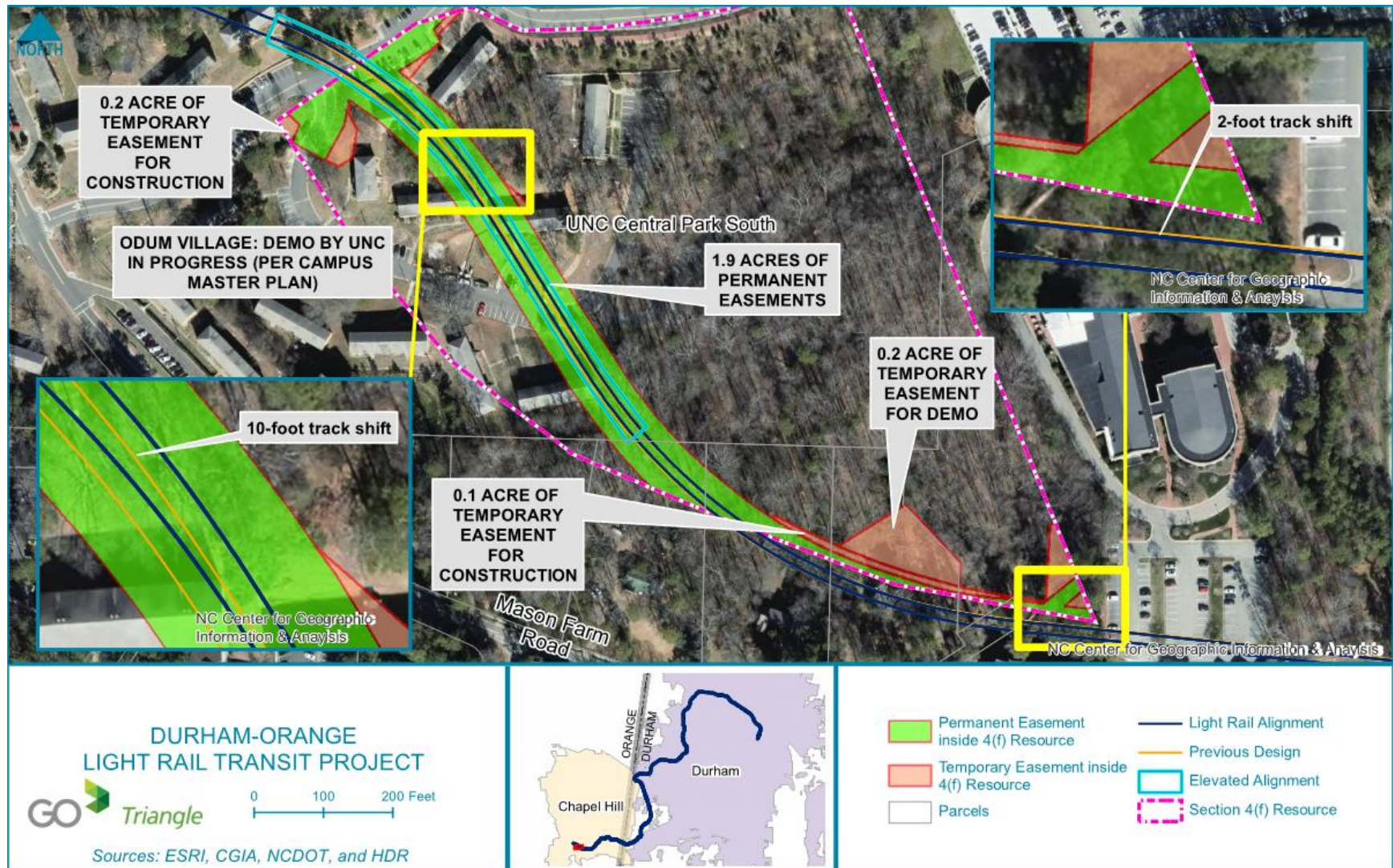
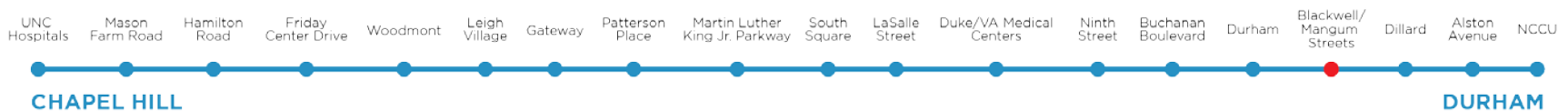


Figure 4-5: UNC Central Park South (Planned)



### 4.1.1.3 UNC Coker Pinetum (Existing)

#### *Section 4(f) Property Description and Function(s) of the Property (Intended, Actual/Current, Planned)*

The Coker Pinetum is a 25-acre natural wooded area near the UNC campus. The park includes a nature trail that connects the UNC Botanical Gardens with the UNC campus and provides bicycle/pedestrian access from multiple access points.

#### *Ownership*

The Coker Pinetum is owned by UNC; OWASA currently holds a utility easement within the property.

#### *Use of Section 4(f) Property*

The Proposed Refinements include a track shift 8 feet to the south (for the westbound track only), which would result in minor changes in impacts to the UNC Coker Pinetum relative to the Previous Design. The Previous Design requires a permanent easement of 0.2 acre of land from the Coker Pinetum, which would constitute use of Section 4(f) property (see **Figure 4-6**). The Proposed Refinements would follow the same general alignment but would require a permanent easement of 0.4 acre from the Coker Pinetum. The track shift is due to advanced engineering design and slight increase in easement is due to more accurate property boundary survey mapping:

the analysis of the Previous Design used less accurate GIS-based mapping to calculate impacts.

The Proposed Refinements would have similar impacts on the recreational uses of Coker Pinetum as the Previous Design and would not result in substantial changes to the user's experience of the property, as discussed in the NEPA documentation and Section 4(f) Evaluation for the Previous Design.

#### *Coordination*

Coordination with UNC, the official with jurisdiction over this property, has been ongoing throughout the project. Pursuant to 23 C.F.R. Part 774, GoTriangle met with UNC on April 13, 2018 to discuss the long-term and short-term effects of the Proposed Refinements on the Coker Pinetum Section 4(f) resource. GoTriangle sent a letter to UNC on July 12, 2018. The letter described the anticipated effects of the Proposed Refinements on the Section 4(f) resource, the efforts to minimize and mitigate project-related effects, and the preliminary determination that the Proposed Refinements will have a *de minimis* impact on the Section 4(f) resource. The letter also requested concurrence from UNC with the draft determination (see coordination letter in **appendix M**).

#### *Minimization and Mitigation*

Mitigation commitment #PRA01 in the Amended ROD would remain applicable to the Proposed Refinements.

#### *Preliminary Determination*

The FTA's preliminary determination, pursuant to 23 CFR § 774.3, for the project with Proposed Refinements is that the use of the UNC Coker Pinetum, including any measures to minimize harm committed to by GoTriangle, will have a *de minimis* impact (as defined in 23 CFR § 774.17) on the property. This preliminary determination updates the *de minimis* determination made in the Final Section 4(f) Evaluation.





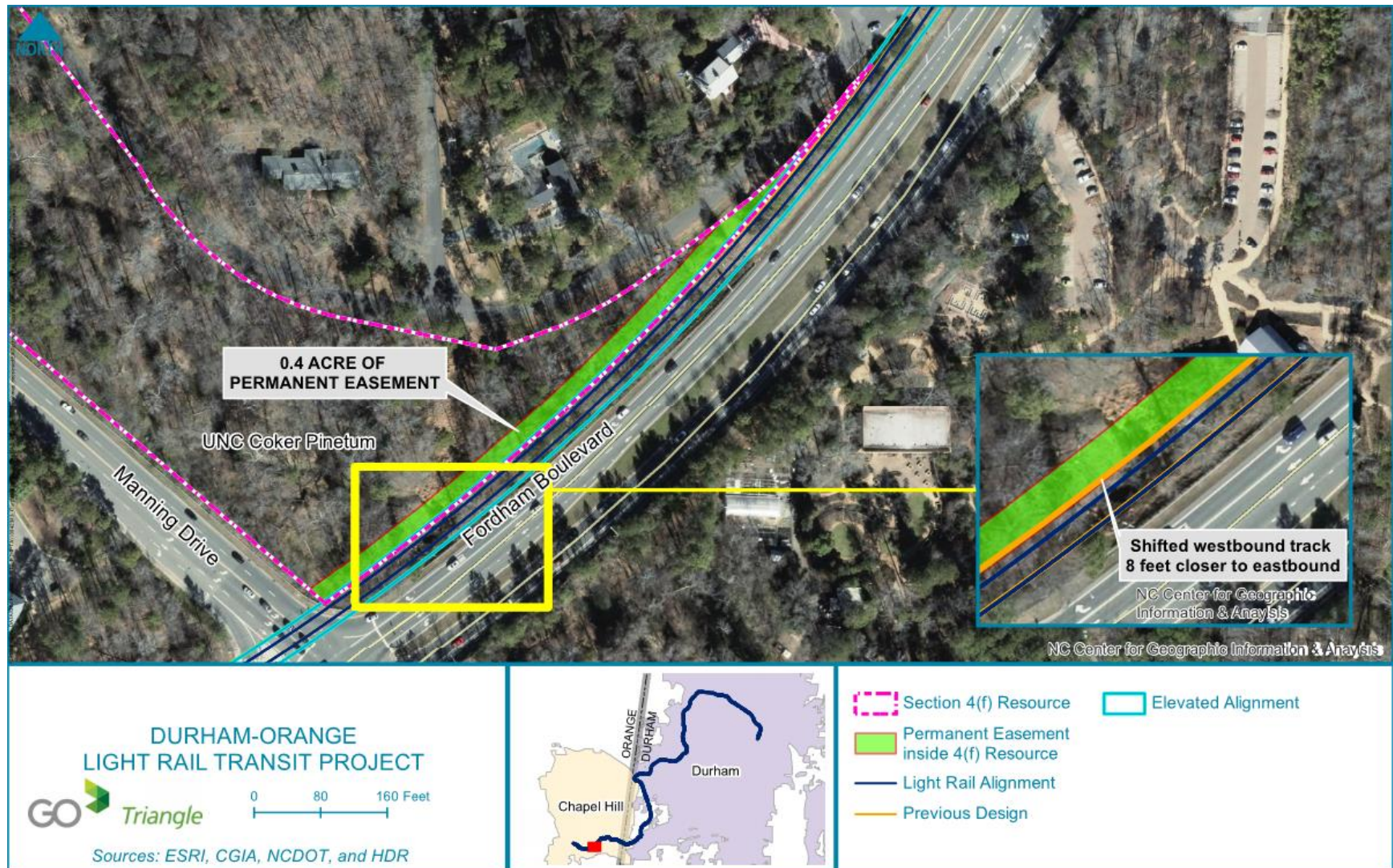
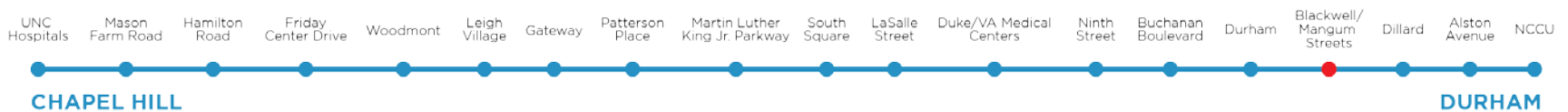


Figure 4-6: UNC Coker Pinetum





#### 4.1.1.4 UNC Finley Golf Course and Athletic Fields (Existing)

##### *Section 4(f) Property Description and Function(s) of the Property (Intended, Actual/Current, Planned)*

The Finley Golf Course and Athletic Fields is a 256-acre facility located along Finley Golf Course Road near the UNC campus. The facility grounds contain a golf course, various athletic fields, and pedestrian trails.

##### *Ownership*

The golf course and athletic fields are owned by UNC.

##### *Use of Section 4(f) Property*

The Proposed Refinements would add a sidewalk and multi-use path in the vicinity of the Hamilton Road Station, resulting in slightly different impacts to the UNC Finley Golf Course and Athletic Fields. The Previous Design requires approximately 2.6 acres of permanent easement from the UNC Finley Golf Course and Athletic Fields, which constitutes a use of Section 4(f) property (**Figure 4-7**); construction will require cart paths and tee boxes to be relocated. The Proposed Refinements would require approximately 2.3 acres of permanent easement from the UNC Finley Golf Course and Athletic Fields, representing a slight reduction (0.3 acre) in the permanent easement area. The slight decrease in easement is due to more accurate property

boundary survey mapping: the analysis of the Previous Design used less accurate GIS-based mapping to calculate impacts.

The Previous Design requires a 0.4-acre temporary construction easement. With the sidewalk and multi-use path included in the Proposed Refinements, a temporary construction easement of approximately 1.5 acres would be required, representing a 1.1-acre increase from the Previous Design.

Permanent impacts to the UNC Finley Golf Course and Athletic Fields would be reduced under the Proposed Refinements, but temporary use to accommodate construction needs would increase. The temporary construction easement, while larger in area, would be needed for a duration less than the time needed to construct the entire project, would not result in change in ownership of the property, and would result in minimal impacts to the recreational features of the golf course that qualify it for protection under Section 4(f).

##### *Coordination*

Coordination with UNC, the official with jurisdiction over this property, has been ongoing throughout the project. Pursuant to 23 C.F.R. Part 774, GoTriangle met with UNC on April 13, 2018 to discuss the long-term and short-term effects of the Proposed Refinements on the UNC Finley Golf Course and Athletic Fields Section 4(f) resources.

GoTriangle sent a letter to UNC on July 12, 2018. The letter described the anticipated

effects of the Proposed Refinements on the Section 4(f) resource, the efforts to minimize and mitigate project-related effects, and the preliminary determination that the Proposed Refinements will have a *de minimis* impact on the Section 4(f) resource. The letter also requested concurrence from UNC with the draft determination (see coordination letter in **appendix M**).

##### *Minimization and Mitigation*

The area used in the temporary construction easement would be restored to pre-construction conditions or better. Therefore, the temporary occupancy would not contribute to the Section 4(f) use, per 23 CFR 774.13(d).

Mitigation commitment #PRA01 in the Amended ROD would remain applicable to the Proposed Refinements.

##### *Preliminary Determination*

The FTA's preliminary determination, pursuant to 23 CFR § 774.3, regarding the Proposed Refinements is that the use of the UNC Finley Golf Course and Athletic Fields, including any measures to minimize harm committed to by GoTriangle, will have a *de minimis* impact (as defined in 23 CFR § 774.17) on the property. This preliminary determination updates the *de minimis* determination made in the Final Section 4(f) Evaluation.



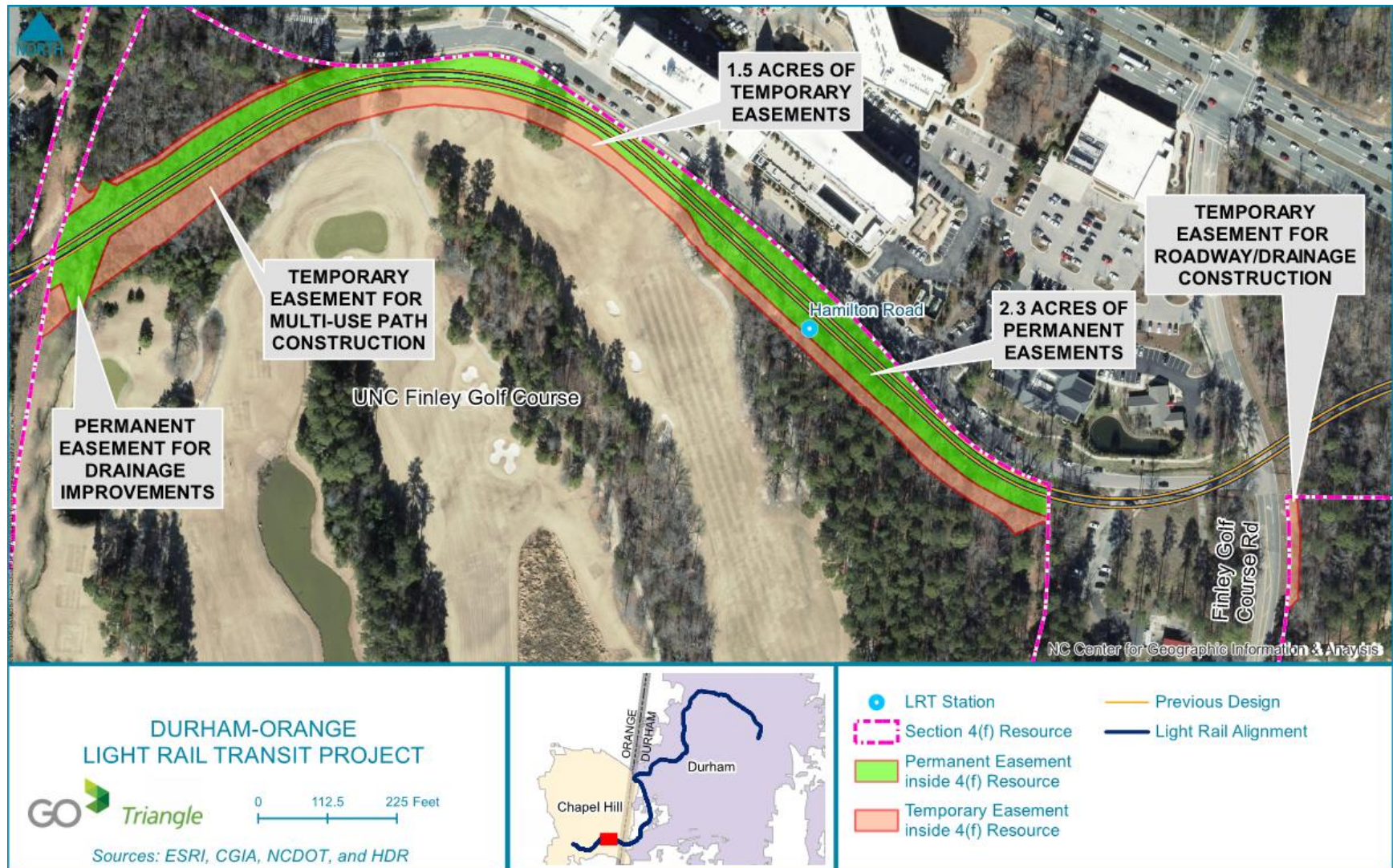
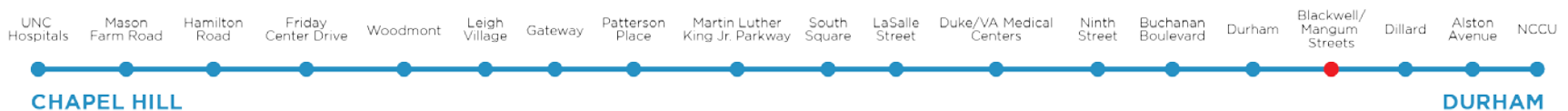


Figure 4-7: UNC Finley Golf Course and Athletic Fields





#### 4.1.1.5 UNC Open Space (Existing)

##### *Section 4(f) Property Description and Function(s) of the Property (Intended, Actual/Current, Planned)*

The UNC Open Space property is a 120-acre undeveloped wooded land adjacent to the UNC Finley Golf Course. The area is open to the general public and can be accessed via multiple bicycle/pedestrian access points.

##### *Ownership*

The open space property is owned by UNC.

##### *Use of Section 4(f) Property*

The Proposed Refinements include minor changes in the impacts to the UNC Open Space property relative to the Previous Design. The Proposed Refinements would cross the UNC Open Space along an alignment very similar to the Previous Design, but would require a larger permanent easement due to the widening of walkways, drainage improvements, and the addition of a multi-use path. The proposed multi-use path is part of a mitigation commitment to enhance bicycle and pedestrian connectivity and access in the vicinity of the light rail stations (**Figure 4-8**). The Proposed Refinements would also require the relocation of portions of the UNC Athletics cross-country trail. In total, the permanent easement requirement would increase from approximately 0.8 acre for the Previous Design to approximately 2.4 acres

for the Proposed Refinements (an increase of 1.6 acres).

Temporary construction easement requirements for the Proposed Refinements (0.8 acre) would be slightly less than the Previous Design (1.0 acre). The temporary construction easement needed would be slightly reduced from that of the Previous Design, would be of a duration less than the total time needed to construct the entire project, would not result in a change of ownership of the property, and would result in minimal impacts to the recreational features that qualify the UNC Open Space for protection under Section 4(f).

##### *Coordination*

Coordination with UNC, the official with jurisdiction over this property, has been ongoing throughout the project. Pursuant to 23 C.F.R. Part 774, GoTriangle met with UNC on April 13, 2018 to discuss the long-term and short-term effects of the Proposed Refinements on the UNC Open Space Section 4(f) resource. GoTriangle sent a letter to UNC on July 12, 2018. The letter described the anticipated effects of the Proposed Refinements on the Section 4(f) resource, the efforts to minimize and mitigate project-related effects, and the preliminary determination that the Proposed Refinements will have a *de minimis* impact on the Section 4(f) resource. The letter also requested concurrence from UNC with the draft determination (see coordination letter in **appendix M**).

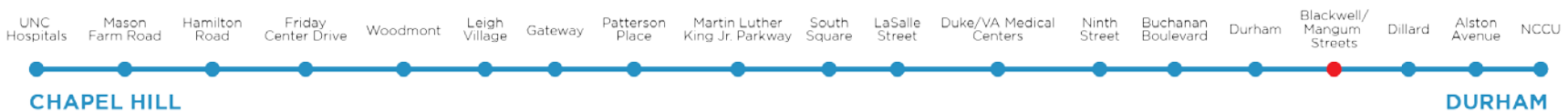
##### *Minimization and Mitigation*

The area used for the temporary construction easement would be restored to preconstruction conditions or better. Therefore, the temporary occupancy would not contribute to the Section 4(f) use of UNC Open Space, per 23 CFR 774.13(d).

Mitigation commitment #PRA01 in the Amended ROD would remain applicable to the Proposed Refinements.

##### *Preliminary Determination*

The FTA's preliminary determination, pursuant to 23 CFR § 774.3, regarding the Proposed Refinements is that the use of the UNC Open Space, including any measures to minimize harm committed to by GoTriangle, will have a *de minimis* impact (as defined in 23 CFR § 774.17) on the property. This preliminary determination updates the *de minimis* determination made in the Final Section 4(f) Evaluation.





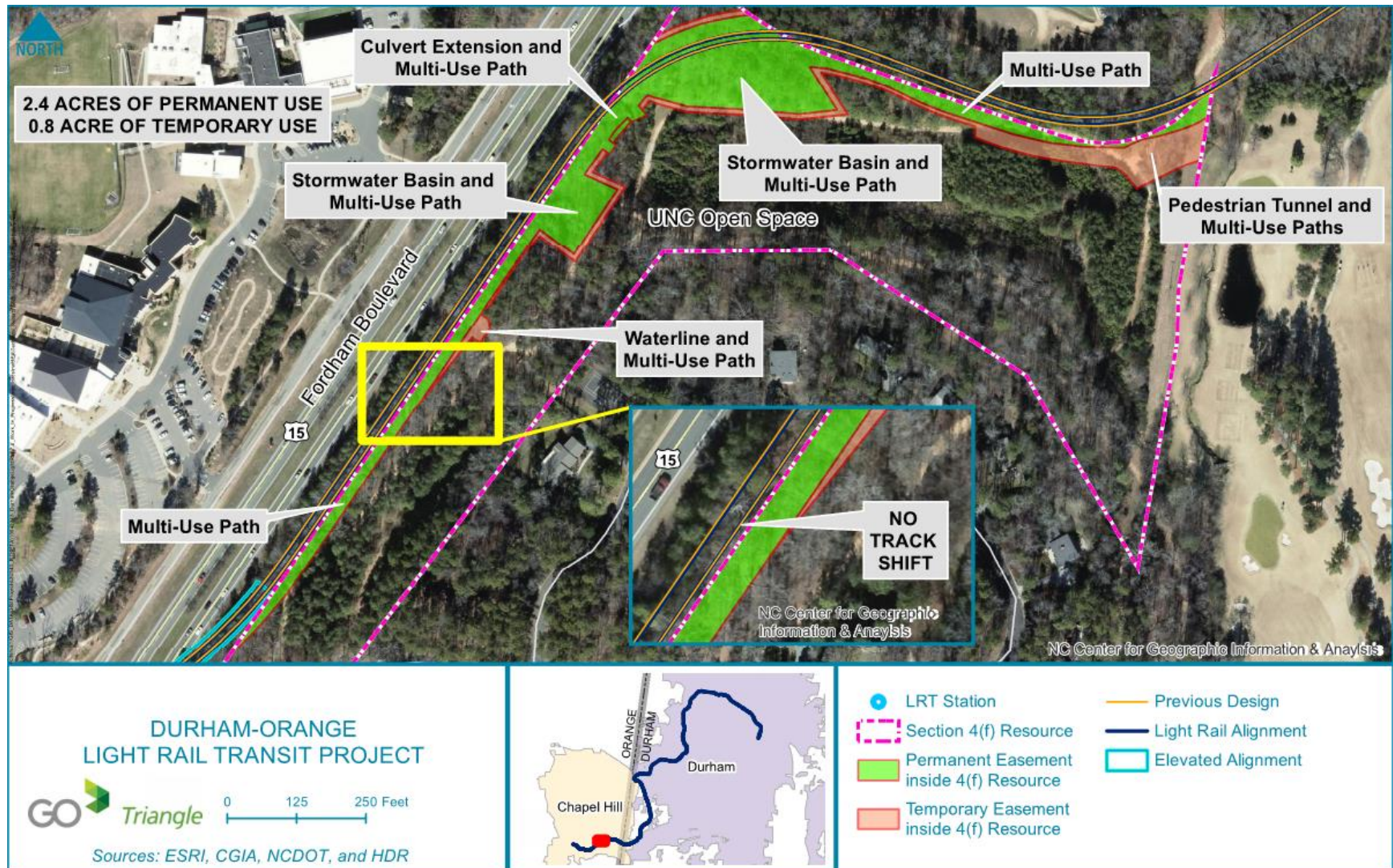
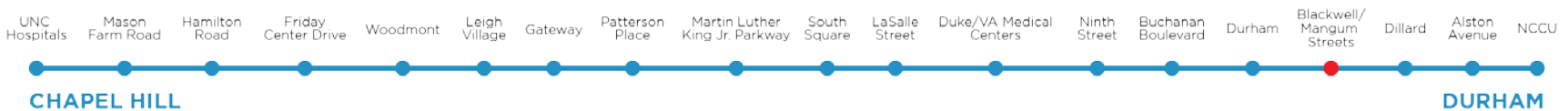


Figure 4-8: UNC Open Space



#### 4.1.1.6 Chapel Hill/Carrboro City School District: Glenwood Elementary School (Existing)

##### *Section 4(f) Property Description and Function(s) of the Property (Intended, Actual/Current, Planned)*

Glenwood Elementary School is located at 2 Prestwick Road in the Town of Chapel Hill. The public has access to the school's facilities outside of normal school hours. The school's Section 4(f) protection qualifying features consist of basketball courts, playgrounds, and a dirt running track.

##### *Ownership*

The school is owned by the Chapel Hill/Carrboro City School District.

##### *Use of Section 4(f) Property*

The Previous Design requires a permanent easement of approximately 0.1 acre of

undeveloped land in the southeast corner of the school's property and a temporary construction easement of 0.1 acre. The Proposed Refinements would add a multi-use path along the southern and southeast boundary of the school property. An additional temporary construction easement of 0.1 acre and an additional permanent easement of 0.1 acre would be required to accommodate the multi-use path (**Figure 4-9**). As with the Previous Design, the easements would not be in an area of the school property that is developed or used for recreational purposes; therefore, no use would occur as a result of the Proposed Refinements.

##### *Coordination*

Pursuant to 23 C.F.R. Part 774, coordination with the Chapel Hill/Carrboro City School District, the official with jurisdiction over this property, has been on-going to identify the long-term and short-term effects to the Glenwood Elementary School property.

##### *Minimization and Mitigation*

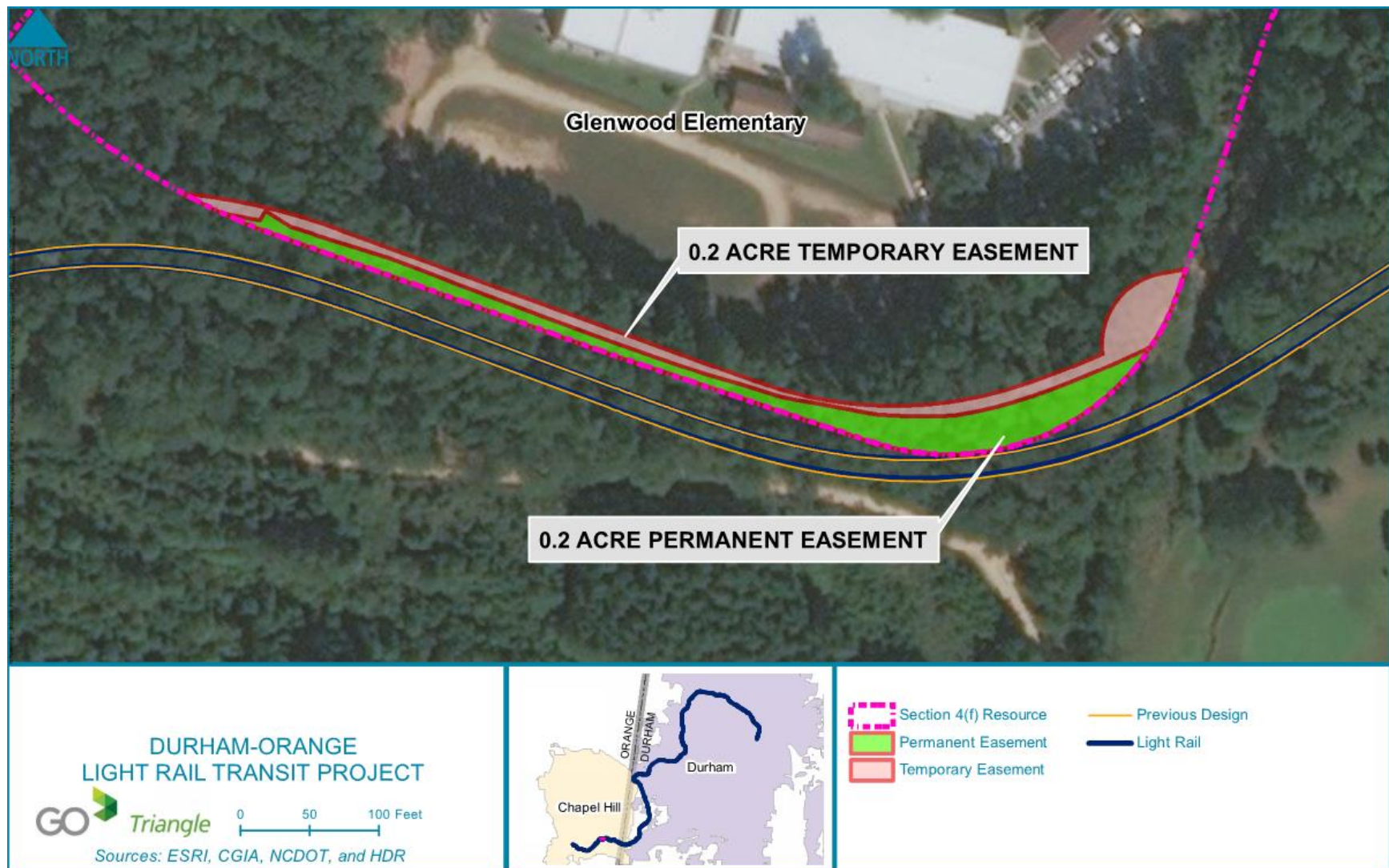
The design refinements continue to accommodate and improve upon the proposed pedestrian underpass/culvert under the light rail, providing connectivity to the proposed multi-use path and the existing UNC cross-country trail.

##### *Preliminary Determination*

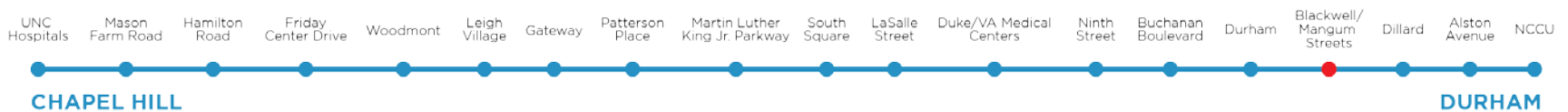
The FTA's preliminary determination, pursuant to 23 CFR § 774.3, for the Proposed Refinements is that no use would occur. The proximity impacts from construction and operation of the Project and Proposed Refinements would not substantially impair "the protected activities, features, or attributes that qualify the property for protection under Section 4(f)" This preliminary determination updates the no use determination made in the Final Section 4(f) Evaluation.







**Figure 4-9: Glenwood Elementary School**





#### 4.1.1.7 New Hope Creek Trail (Planned)

##### *Section 4(f) Property Description and Function(s) of the Property (Intended, Actual/Current, Planned)*

Two segments of the planned New Hope Creek Trail are located within the study area. The first segment of the planned New Hope Creek Trail within the D-O Corridor would provide a link between Old Chapel Hill Road and NC 54. The second segment is planned to provide a connection through the New Hope Creek corridor (and Jordan Game Lands) across US 15-501 to the Orange County boundary. The existing portion of the New Hope Creek Trail lies within the Durham Open Space property which is adjacent to the light rail alignment.

##### *Ownership*

Portions of the trail are planned to be constructed on land owned by the County of Durham.

##### *Use of Section 4(f) Property*

The Previous Design would have a <0.1-acre *de minimis* impact to the planned New Hope Creek Trail because the alignment crosses over the proposed trail parallel to US 15-501 on double-track elevated structures. The Proposed Refinements would use a single-track structure at this crossing of the planned New Hope Creek Trail. The change to a single-track structure

would reduce the permanent impact to the resource. The Proposed Refinements would result in a <0.1-acre *de minimis* impact (**Figure 4-10**). As with the Previous Design, the Proposed Refinements avoid impacts to the Durham Open Space property.

##### *Coordination*

Coordination with Durham County, the official with jurisdiction over this property, has been on-going throughout the project. Pursuant to 23 C.F.R. Part 774, GoTriangle met with Durham County on May 8, 2018 to discuss the long-term and short-term effects of the Proposed Refinements on the New Hope Creek Trail (Planned) Section 4(f) resource.

GoTriangle sent a letter to Durham County on September 17, 2018. The letter described the anticipated effects of the Proposed Refinements on the Section 4(f) resource, the efforts to minimize and mitigate project-related effects, and the preliminary determination that the Proposed Refinements will have a *de minimis* impact on the Section 4(f) resource. The letter also requested concurrence from Durham County with the draft determination (see coordination letter in **appendix M**).

##### *Minimization and Mitigation*

The same mitigation commitments from the Amended ROD would remain applicable to the Proposed Refinements.

##### *Preliminary Determination*

The FTA's preliminary determination, pursuant to 23 CFR § 774.3, for the Proposed Refinements is that the use of the planned New Hope Creek Trail, including any measures to minimize harm committed to by GoTriangle, will have a *de minimis* impact (as defined in 23 CFR § 774.17) on the property. This preliminary determination updates the *de minimis* determination made in the Final Section 4(f) Evaluation



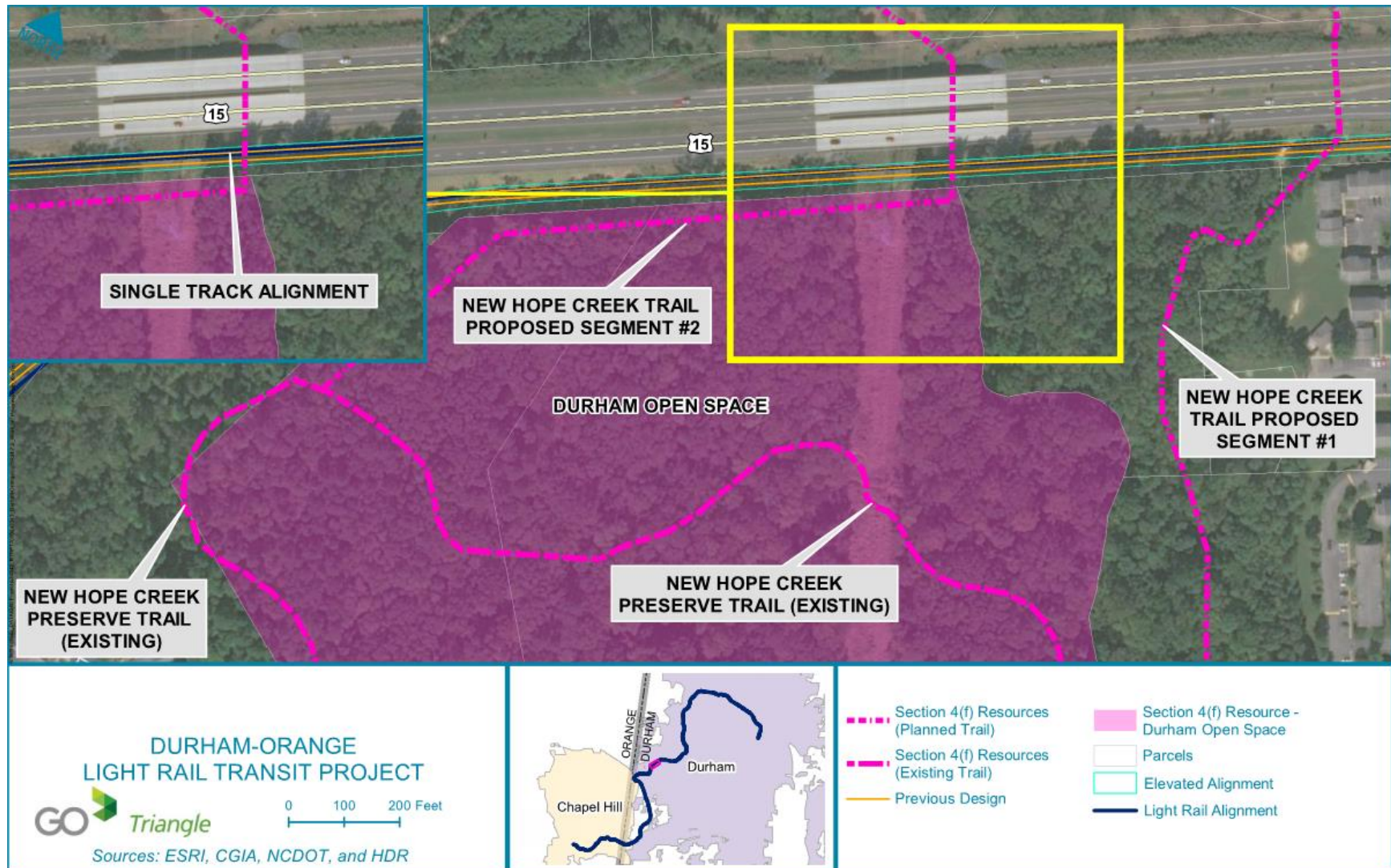
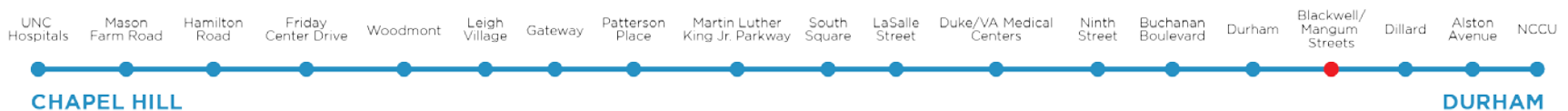


Figure 4-10: Durham New Hope Creek Trail (Planned)



#### 4.1.1.8 Downtown Durham Trail (Existing)

##### *Section 4(f) Property Description and Function(s) of the Property (Intended, Actual/Current, Planned)*

The Downtown Durham Trail is a 1.9-mile paved trail that runs on sidewalks through the middle of downtown Durham.

##### *Ownership*

The Downtown Durham Trail is part of the East Coast Greenway and is owned and managed by the City of Durham as part of its trails and greenway system. The sidewalk is maintained as part of the street system.

##### *Use of Section 4(f) Property*

The Downtown Durham Trail was not included in the NEPA documentation for the Previous Design. With the proposed addition of the Blackwell/Mangum Street Station and the associated light rail alignment along Pettigrew Street, the Proposed Refinements would affect the Downtown Durham Trail. The Trail uses existing north-south sidewalk along Blackwell Street/Corcoran Street through downtown Durham.

As part of the engineering design of light rail track in this location, GoTriangle examined the roadway configurations relative to the NCCR rail line and the planned light rail line crossings. GoTriangle determined that, to accommodate vehicles on Blackwell Street/Corcoran Street for a safer crossing

of both rail lines, Pettigrew Street would need to be raised at Blackwell Street. Raising Pettigrew Street at this location would require the addition of several large retaining walls, which would adversely affect historic resources, including a National Historic Landmark. To minimize impacts to these resources and improve safety, the Proposed Refinements include closure of Blackwell Street to vehicle, pedestrian, and bicycle access between Pettigrew and Ramseur streets.

The street closure would require the construction of a signature civic space approximately mid-block between Blackwell Street and Mangum Street. Construction of the light rail alignment along Pettigrew Street and the signature civic space would temporarily affect a 0.12-mile segment of the Downtown Durham Trail between W. Main Street and Vivian Street (**Figure 4-11**).

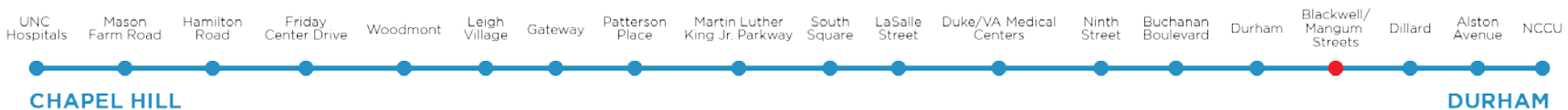
The connectivity of the trail would be maintained during construction by providing a signed detour route. The Trail would permanently be maintained with the proposed signature civic space. The Proposed Refinements would not adversely affect the activities, features, or attributes qualifying the trail for protection under Section 4(f). The area occupied during construction would be temporary in duration and would be restored at the completion of construction; therefore, the Proposed Refinements would be a temporary occupancy exception for the Downtown Durham Trail.

##### *Minimization and Mitigation*

Temporary detours and access accommodations would be needed during construction but would be of duration less than the total time needed to construct the entire project. South Mangum Street runs parallel to Blackwell Street and is the closest available pedestrian detour. The utilization of this route would require a pedestrian to walk an additional 0.18-mile to join the existing trail at West Main Street. GoTriangle will coordinate with the City Parks and Recreation Department to develop the aesthetic design of the signature civic space using community input through an open public process.

##### *Coordination*

Coordination with the City of Durham, the official with jurisdiction over this property, has been on-going throughout the project. Pursuant to 23 CFR Part 774, GoTriangle met with the City of Durham on May 24, 2018, to discuss the long-term and short-term effects of the Proposed Refinements on the Downtown Durham Trail (Existing) Section 4(f) resource and sent an initial letter of concurrence on July 12, 2018. Subsequently, GoTriangle incorporated additional refinements to the design of Pettigrew Street, including the closure of Blackwell Street and maintaining the Downtown Durham Trail on a signature civic space approximately mid-block between Blackwell Street and Mangum Street. GoTriangle met with the City of Durham on





October 2, 2018 to discuss the additional Proposed Refinements.

GoTriangle sent a revised letter to the City of Durham on October 11, 2018. The letter described the anticipated effects of the Proposed Refinements on the Section 4(f) resource, the efforts to minimize and mitigate project-related effects, and the preliminary determination that the Proposed Refinements will be a temporary occupancy exception of the Section 4(f) resource. The letter also requested concurrence from the City of Durham with the draft determination.

#### *Preliminary Determination*

The FTA has made a preliminary determination related to construction activities, pursuant to 23 CFR Part 774, that the Proposed Refinements would be a temporary occupancy exception for the Downtown Durham Trail.



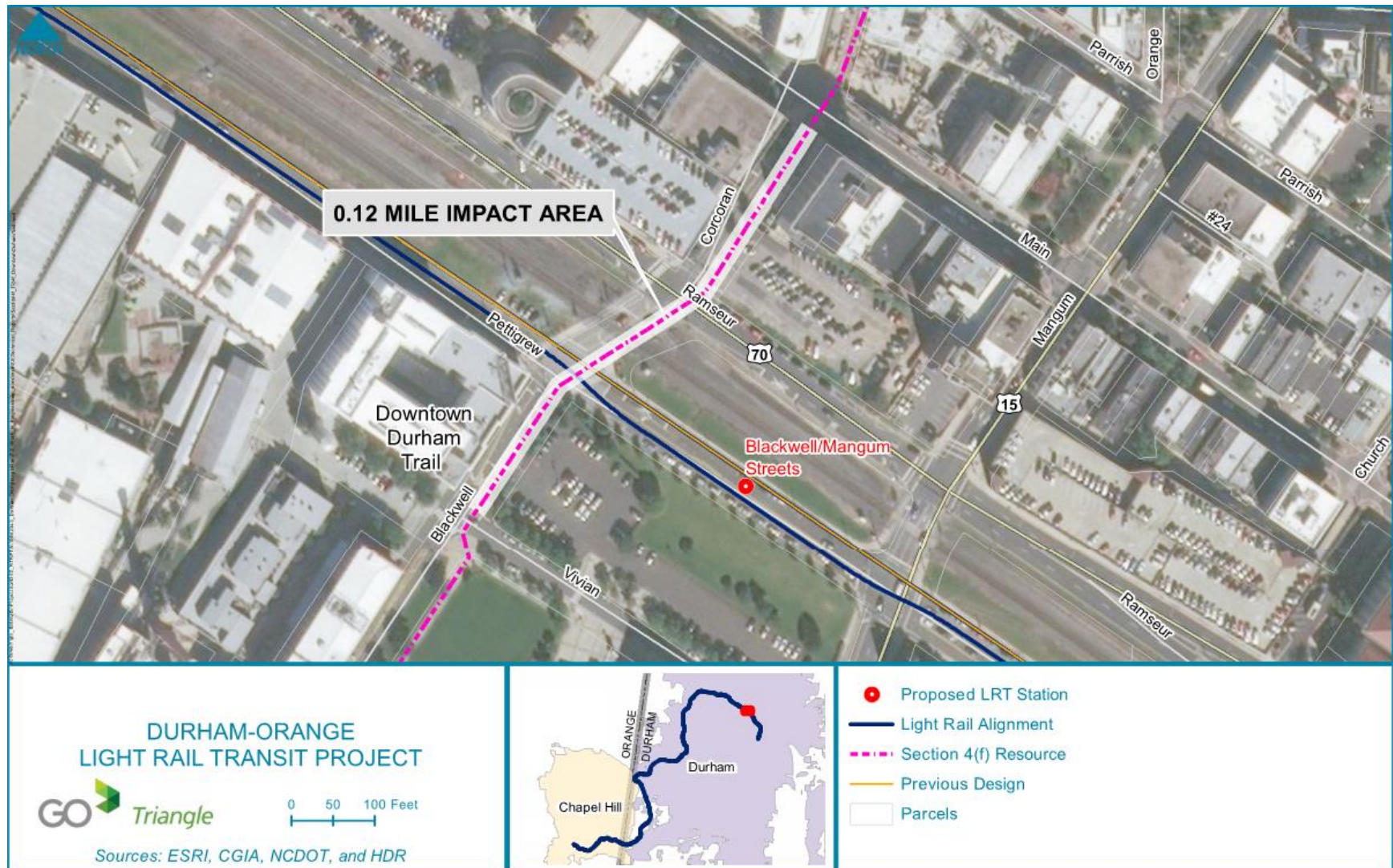
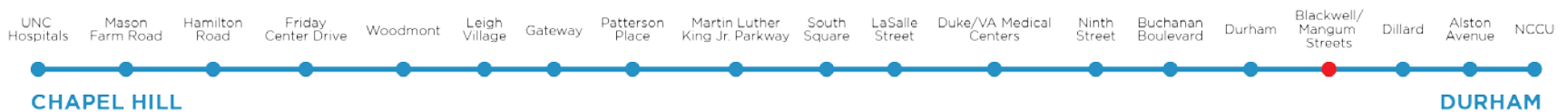


Figure 4-11: Downtown Durham Trail





## 4.1.2 Historic Sites

Historic properties that are listed or eligible for listing in the National Register of Historic Places (NRHP) qualify for protection under Section 4(f). Historic properties that qualify as Section 4(f) properties are shown in **Table 4-2**.

Changes to any potential Section 4(f) uses of historic properties were evaluated by (1) identifying if the Proposed Refinements would permanently incorporate land from the property, and (2) reviewing the effects on the property, including potential proximity impacts, as documented during the National Historic Preservation Act Section 106 process.

- If the project would permanently incorporate land from the property or result in an adverse temporary occupancy and would also result in an “adverse effect,” this impact may constitute a Section 4(f) use.
- If the project would permanently incorporate land from the property or result in an adverse temporary occupancy but have “no adverse effect,” the impact was evaluated to determine if it would be *de minimis* impact to the property.
- If the project would not permanently incorporate land from the property but would result in an adverse effect determination under Section 106, the impact was evaluated to determine if the

Proposed Refinements would result in a substantial impairment to the features that qualify the property for protection under Section 4(f) resulting in a constructive use of the property.

The FTA has made a preliminary determination in consultation with the SHPO that the Proposed Refinements would have no adverse effect on several historic properties that were evaluated in the Final Section 4(f) Evaluation for the Previous Design (see section 3.5.2.1). The Proposed Refinements could, however, require permanent incorporation of land or result in an adverse temporary occupancy of two of those properties: Duke Memorial United Methodist Church (DH-1253) and American Tobacco Company Manufacturing Plant (DH-1872 and DH-10).

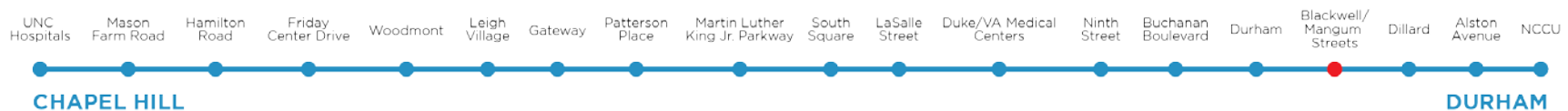
The Section 106 assessment of effects is under review at the time of this Supplemental EA.

Pending the final assessment of effects determination, the anticipated use finding for both the Duke Memorial United Methodist Church and the American Tobacco Company Manufacturing Plant with the Proposed Refinements is that the project would have a *de minimis* impact. A final determination will be in the Final Section 4(f) Evaluation included as part of an anticipated Amended ROD. Those properties and preliminary determinations of are shown in **Table 4-2**.

Coordination letters related to the consultation process are included in **appendix M**.

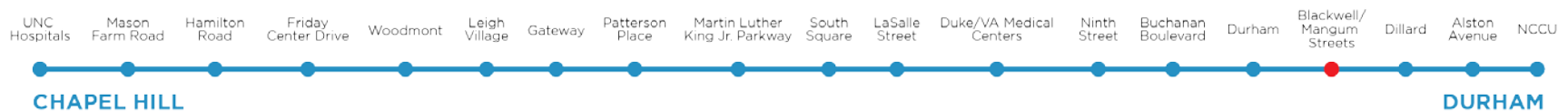
Two historic properties that were not included in the Final Section 4(f) Evaluation, but could be affected by the Proposed Refinements are: the Asbury Temple United Methodist Church and the Glenview/Woodstock Neighborhood. Evaluations of the properties’ NRHP eligibility and the Proposed Refinements effects on the properties are on-going. For the purposes of this Draft Section 4(f) Evaluation, both are considered eligible for the NHRP. Additional details about the eligibility of these historic resources are included in chapter 3 of this Supplemental EA.

The Asbury Temple United Methodist Church was constructed in 1947 and is located at 1120 East Lawson Street (in Durham County). The Glenview/Woodstock Neighborhood was constructed in the 1950s and is located along the north and south sides of Lawson Street between South Alston Street and Wabash Street, as well as parts of Rosewood Street in Durham County.



**Table 4-2: Previously Recorded Historic Properties**

Name North Carolina State Historic Preservation Office (SHPO) Survey Number	Previous Design Section 4(f) Determination	Proposed Refinements - Preliminary Section 4(f) Determination
Dr. Robert Jack Shankle House (OR-2771)	No Use	No Use
H.G. Baity House (OR-2772)	No Use	No Use
Bowers-Nelson House (OR-1465)	No Use	No Use
Rocky Ridge Farm Historic District (OR-303 and OR-1748)	No Use	No Use
Highland Woods Historic District (OR-1460)	No Use	No Use
Dubose Tenant Farm Complex (OR-335 to OR-339 and OR-1250)	No Use	No Use
Meadowmont (DH-1708)	No Use	No Use
Walter Curtis Hudson Farm (DH-2373)	No Use	No Use
Ruth-Sizemore Store (DH-2561)	No Use	No Use
West Durham Historic District (DH-1134 and DH-1178)	No Use	No Use
Powe House (DH-1224 and DH-1225)	No Use	No Use
Trinity College East Campus Historic District (DH-1821)	No Use	No Use
Smith Warehouse (DH-89)	No Use	No Use
Trinity Historic District (DH-927)	No Use	No Use
Watts and Yuille Tobacco Warehouses (DH-87)	No Use	No Use
Duke Memorial United Methodist Church (DH-1253)	No Use	<i>De minimis</i>
North Carolina Mutual Building (DH-2477)	No Use	No Use
Bright Leaf Historic District (DH-71)	No Use	No Use
Downtown Durham Historic District (DH-1692)	No Use	No Use
American Tobacco Company Manufacturing Plant (DH-1872 and DH-10)	No Use	<i>De minimis</i>
Southern Railway Bridge (Seaboard Coastline Railroad Overpass) (DH-2504 and DH-1067)	No Use	No Use





**Table 4-2 (Cont'd): Previously Recorded Historic Properties**

Name (NC Historic Preservation Office (HPO) Survey Number)	Previous Design Section 4(f) Determination	Proposed Refinements - Preliminary Section 4(f) Determination
Venable Tobacco Company Warehouse (DH-97)	No Use	No Use
Venable Tobacco Company Prizery and Receiving Room (DH-2560)	No Use	No Use
Durham Water Tower and Valve House (DH-3508)	No Use	No Use
East Durham Historic District (DH-2418)	No Use	No Use
Russell Memorial CME Church (DH-3663)	No Use	No Use

These two properties have received findings of no adverse effect. The Proposed Refinements would have no use of these historic sites, per 23 CFR 774.17. A final determination of de minimis impact has been made in the Section 4(f) Evaluation.

## 4.2 Next Steps and Coordination

As part of the previous NEPA documentation environmental review efforts, GoTriangle and FTA consulted with representatives of the federal, state, regional, and local agencies with jurisdiction over Section 4(f) resources. As part of this Supplemental EA, GoTriangle consulted with UNC, Durham County, the City of Durham, the USACE, and the SHPO to discuss the long-term and short-term effects of the Proposed Refinements. Summaries of coordination meetings held to date, along with letters to the agencies with jurisdiction, are included in

**appendix M.** GoTriangle and the FTA will continue to consult with agencies with jurisdiction to identify measures to further minimize and mitigate the anticipated impacts of the Proposed Refinements on the Section 4(f) resources.

The FTA has made a preliminary determination that the Proposed Refinements would not substantially impact the criteria for listing the resources on the National Register of Historic Places or that qualify the properties for Section 4(f) protection. Consistent with 49 U.S.C. § 303 and 23 C.F.R. Part 774, this Updated Draft Section 4(f) evaluation will be provided for coordination and comment to officials/agencies with jurisdiction over Section 4(f) resources, other appropriate parties, and the public for a 30-day comment period coinciding with the comment period for this Supplemental Environmental Assessment. Following consideration of

public and agency comments, a final Updated Section 4(f) Evaluation will be included as part of the final agency action.

