

CHAPTER 5. SECTION 4(F)

According to United States Code (USC) Title 23 in Section 138 (Section 4(f)), the United States Department of Transportation (USDOT):

... shall not approve any program or project...which requires the use of any publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, State or local significance as determined by the Federal, State, or local officials having jurisdiction thereof, or any land from an historic site of national, State or local significance as so determined by such officials unless (1) there is no feasible and prudent alternative to the use of such land, and (2) such program includes all possible planning to minimize harm to such park, recreational area, wildlife and waterfowl refuge, or historic site resulting from such use.

In this section, resources subject to Section 4(f) are identified, potential uses of those resources are discussed, avoidance alternatives and other measures to minimize harm to the resources are assessed, and coordination with the public official having jurisdiction over each resource is documented.

5.1 DESCRIPTION OF SECTION 4(F) RESOURCES

Three types of Section 4(f) resources would be affected by this project: historic sites, archaeological sites, and public parks/recreation areas. Table 5-1 lists the historic sites located within the study area that were evaluated to determine whether the proposed project may result in a use of a Section 4(f) resource. Figure 5-1 shows the resources that are applicable to Section 4(f) due to a potential use by the proposed project.

A description of each Section 4(f) resource potentially affected by the project is provided in this section. According to FHWA, a description of each Section 4(f) resource should include a detailed map, size and location, ownership, function and available activities, existing and planned facilities, access and usage, relationship to similar properties, and applicable clauses affecting ownership. A description of all historic sites in the project area is included in Section 3.4. A description of all parks in the project area is provided in Section 3.1.3.1.

Table 5-1: Section 4(f) Applicability Evaluation

Resource	Section 4(f) Applicable	No. on Figure
Biltmore Estate	Yes	1
Asheville School	Yes	2
Buncombe County Bridge 216	No	N/A
Calvary Baptist Church	No	N/A
Baker Building (formerly Friendly Grocery Store)	No	N/A
French Broad River Greenway	Yes	3
Carrier Park	Yes	4
West Asheville/Aycock School Historic District and Expansion	Yes	5
William Worley House (formerly C.G. Worley House)	Yes	6
Freeman House	No	N/A
Buncombe County Bridge 323 (formerly Great Smoky Mountains Park Bridge)	No	N/A

Resource	Section 4(f) Applicable	No. on Figure
Southern Railroad Bridge	No	N/A
Montford Area Historic District	No	N/A
Montford Hills Historic District	Yes	7
Montford Hills/Hibriten Drive Boundary Expansion	Yes	8
Mrs. Minnie Alexander Cottage	No	N/A
Whiteford G. Smith House	No	N/A
Haywood Street United Methodist Church	No	N/A
Archaeological Site 31BN623	Yes	N/A

5.1.1 HISTORIC SITES

5.1.1.1 Biltmore Estate

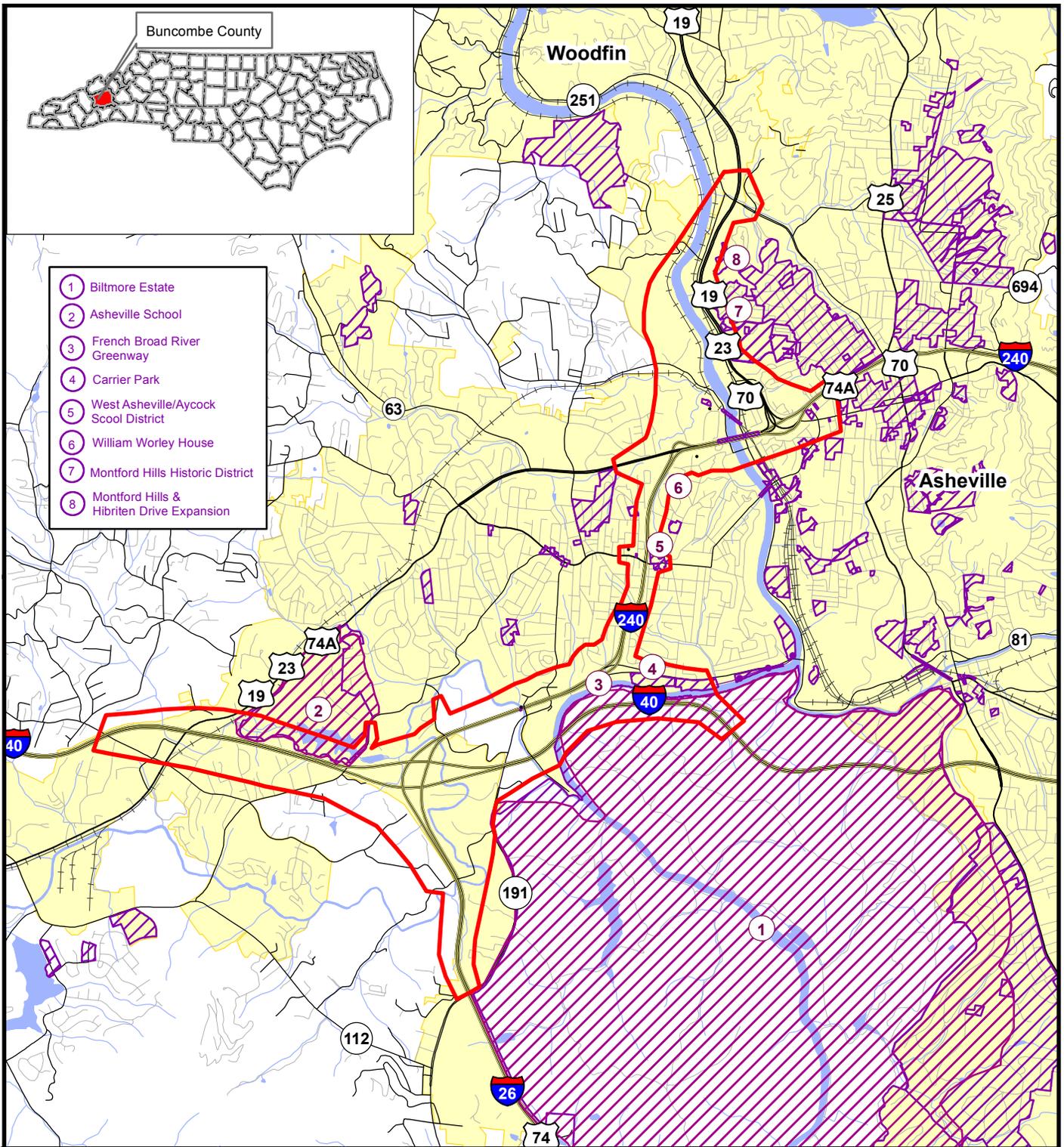
Size	6,949 acres (per revised boundary 2004)
Location	Generally bounded by the Swannanoa and French Broad rivers (north), NC 191 and I-26 (west), the Blue Ridge Parkway (south), and the Town of Biltmore Forest (east)
Ownership	Private
Type	NHL 1963, revised boundaries 2005
Function	Landscape, recreation, culture, forest, museum
Facilities	56 buildings including the Biltmore House and surrounding property
Access	Tourist attraction open daily to public with admission
Use	Historic tourist attraction, winery, farm, hotel
Clauses	A fee simple right-of-way agreement was obtained for I-40

5.1.1.2 Asheville School

Size	280 acres
Location	360 Asheville School Road. East of US 19-23-74A and northwest of the SR 3412 Sand Hill Road grade separation over I-40
Ownership	Private
Type	Listed in the NRHP, 1996
Function	Education, school
Facilities	Academic buildings and surrounding grounds of athletic fields, woods, and a lake bed
Access	Private
Clauses	Fee simple right-of-way agreements were obtained for both SR 3412 (Sand Hill Road) and I-40

5.1.1.3 West Asheville/Aycock School Historic District and Expansion

Size	11.6 acres
Location	Haywood Road between Westwood Place and Michigan Avenue
Ownership	Public and private
Type	Listed in the NRHP, 2006 with an expansion in 2013
Function	Education and commercial
Facilities	Academic buildings and a commercial district
Access	Public and private
Clauses	None identified



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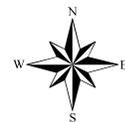
I-26 Asheville Connector
Buncombe County

STIP Project No. I-2513

Legend

- Section 4(f) Resource
- Interstate
- US Highway
- NC Highway
- State Route
- Local Roads
- Railroad
- Streams (non-delineated)
- Project Study Area
- Historic Boundary
- Section 4(f) Resource
- Water
- Municipal Boundary

Date: June 2015



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Figure 5-1

Section 4(f) Resources

5.1.1.4 William Worley House

Size	4.1 acres
Location	1 Worley Place in the Westwood neighborhood
Ownership	Private
Type	Determined eligible for the NRHP, 1999
Function	Private residence
Facilities	Single family home and grounds
Access	Private
Clauses	None identified

5.1.1.5 Montford Hills Historic District

Size	33 acres
Location	North of I-240 between US 19-23-70 and Merrimon Avenue, north of downtown Asheville
Ownership	Public and private
Type	NRHP-eligible
Function	Community planning and development, and architecture
Facilities	Private homes
Access	Public and private
Clauses	None identified

5.1.1.6 Montford Hills/Hibriten Drive Boundary Expansion

Size	15.1 acres
Location	North of I-240 along Hibriten Drive
Ownership	Public and private
Type	NRHP-eligible
Function	Community planning and development, and architecture
Facilities	Private homes
Access	Public and private
Clauses	None identified

5.1.2 ARCHAEOLOGICAL RESOURCES

Site 31BN623, the Lower Hominy Hydroelectric Power Plant site, is recommended NRHP-eligible under Criterion A due to its association with the early hydroelectric and streetcar industries. This site has the potential to be impacted by the construction activities associated with I-2513A. Where impacted, the site boundaries would be identified with iron markers, covered, and buried in the proposed fill for the project.

5.1.3 PUBLIC PARKS AND RECREATION AREAS

Information on public parks and recreation areas in the vicinity of the project was provided by the City of Asheville Parks and Recreation Department (Debbie Ivester, City of Asheville Parks and Recreation Department and Shannon Cox, URS Corporation, personal communication, February 26, 2007).

5.1.3.1 French Broad River Greenway

An existing section of the French Broad River Greenway along Amboy Road (SR 3556) currently connects Carrier Park near the project to the French Broad River Park to the east. The

facility generally follows the northwestern bank of the French Broad River. There are plans to extend this greenway west along the French Broad River to Hominy Creek Park at the mouth of Hominy Creek. As planned, the entire greenway will extend on both sides of the French Broad and Swannanoa rivers and will be comprised of greenway corridors and future park destinations. The greenway is owned by the City of Asheville and is accessible to the public for recreation. Facilities include greenspace, the trail, a wildflower garden, gazebo, picnic tables and grills, observation deck, playground, parking, and a dog park.

5.1.3.2 Carrier Park

Size	31.2 acres
Location	219 Amboy Road in West Asheville (site of the former Asheville Motor Speedway)
Ownership	City of Asheville
Type	Public park
Function	Outdoor recreation
Facilities	Volleyball courts, playground, roller hockey rink, bicycle racing track, basketball court, multi-use track, lawn bowling court, paved trail, unpaved trail, a multi-use sports field for baseball and soccer, a restroom/refreshment facility, lawn bowling, pavilion, wetland interpretive site, fishing pier, and parking lots (City of Asheville 2010b)
Access	Vehicles enter the park via three driveway entrances off of Amboy Road. Pedestrian access via the French Broad River Greenway from the east
Use	Average of 200 visitors per day, year-round
Clauses	There is a restriction that will not allow motor vehicle racing and a conservation easement along the riverfront, as well as various utility easements across the property
Features	This is a relatively level piece of land between Amboy Road and the French Broad River. The banks of the river are mostly steep. The site is mostly open lawn area with mature trees along the riverbank and new plantings in the open level area that has been disturbed over the years. The property is mostly in the floodway. Some of the property by the road is in the flood fringe

5.2 USE OF SECTION 4(F) PROPERTY

According to Section 4(f), a use of land occurs when: “(1) Land from a 4(f) site is permanently incorporated into a transportation facility, (2) there is a temporary occupancy of land that is adverse in terms of the Section 4(f) statute’s preservational purposes (23 CFR 771.135(p)(2)), or (3) When there is a constructive use of land (23 CFR 771.125(p)(2))” (USDOT/FHWA 2005b, 2005c). These three types of uses of Section 4(f) properties are addressed in this section.

5.2.1 PERMANENT INCORPORATION OF PROPERTY

A summary of the property that would be permanently incorporated by the project is provided in Table 5-2 and the following subsections.

Table 5-2: Use of Section 4(f) Properties in Acres (Right-of-way/Easement)

Property	Section C				Section A	Section B			
	A-2	C-2	D-1	F-1		3	3-C	4	4-B
Historic Sites									
Asheville School ^a	2.51/0.59	3.11/0.58	2.55/0.57	2.79/0.58					
Biltmore Estate ^a	0.42/0.02	2.18/0	0/0	0/0					
West Asheville/Aycock School Historic District and Boundary Increase					0.35/0.25				
William Worley House ^a						0.15/0.13	0.15/0.13	0.1/0.08	0.1/0.22
Montford Hills Historic District ^a						0/0	0/0	0/0	0/0.03
Montford Hills/Hibriten Drive Boundary Expansion ^a						0.03/0	0.04/0	0.16/0	0/0
Archaeological Sites									
Archaeological Site 31BN623 ^a					<0.01				
Parks and Recreation Areas									
French Broad River Greenway (as proposed) ^a					316 linear feet				
Carrier Park ^a					0.94/0				

^a Denotes resources with *de minimis* impacts.

5.2.1.1 Biltmore Estate

As proposed, all build alternatives in Section C of the project would include the widening of existing I-40 within the Biltmore Estate property boundaries. The boundaries of the estate include the existing I-40 right-of-way through the estate.

The preliminary plans for Section C – Alternatives A-2 and C-2 would require the permanent incorporation of 0.42 acre and 2.18 acres of additional right-of-way along I-40 from the estate, respectively. These alternatives are not planned to be eliminated, since they could be revised to avoid taking additional right-of-way from the estate with the addition of access modifications and/or retaining walls.

Section C – Alternatives D-1 and F-1 would avoid the permanent incorporation of property from the Biltmore Estate as they would not require additional right-of-way within property boundaries.

5.2.1.2 Asheville School

As proposed, all build alternatives in Section C of the project would include the widening of existing I-40 and the replacement of the SR 3412 (Sand Hill Road) Bridge over I-40 to accommodate the widening. All of the proposed build alternatives would require additional right-of-way from the Asheville School property, which is adjacent to existing I-40 and SR 3412. Each of the alternatives considered would permanently incorporate less than 3 acres from the 280 acre site except for Section C – Alternative C-2, which is expected to incorporate 3.11 acres.

5.2.1.3 West Asheville/Aycock School Historic District

As proposed, Section A – I-240 Widening Alternative would require the permanent incorporation of land within the boundaries of the West Asheville/Aycock School Historic District for right-of-way and construction easements.

5.2.1.4 William Worley House

As proposed, all build alternatives in Section B of the project would require the permanent incorporation of land within the boundaries of the William Worley House property for right-of-way. Impacts to this property would be minimized by the construction of a retaining wall that would limit the amount of property to be disturbed. Each of the Section B alternatives would permanently incorporate less than 0.10 acre from the 4.1-acre property. As indicated in Table 5-2, each alternative would also require an underground easement for anchoring the proposed retaining wall.

5.2.1.5 Montford Hills Historic District

As proposed, Section B – Alternatives 3, 3-C, and 4 would require no permanent right-of-way within the historic boundaries. A permanent construction easement may be necessary on Alternative 4-B, depending on the final design of the retaining wall adjacent to Westover Drive.

5.2.1.6 Montford Hills/Hibriten Drive Boundary Expansion

As proposed, Section B – Alternatives 3, 3-C, and 4 would require the permanent incorporation of land within the boundaries of the Montford Hills/Hibriten Drive Boundary Expansion for right-

of-way only. The construction efforts would require minimal tree removal and would not impact the contributing resources of the historic district.

5.2.1.7 Archaeological Site 31BN623

As proposed, Section A – I-240 Widening Alternative would require the permanent incorporation of less than one acre of archaeological site 31BN623.

5.2.1.8 French Broad River Greenway

As proposed, Section A of the project is expected to require the reconstruction of approximately 316 linear feet of the French Broad River Greenway at the western end of the Carrier Park property. This reconstruction is necessary to allow the reconnection of Old Amboy Road to provide access to several properties west of Carrier Park along the banks of the French Broad River.

The French Broad River Greenway also crosses the existing I-40 right-of-way beneath the I-40 bridge over the French Broad River. At this location, the greenway is located adjacent to the western bank of the French Broad River. Although additional right-of-way would be required along the north side of the existing I-40, all alternatives would be designed to allow the greenway to continue beneath I-40.

5.2.1.9 Carrier Park

As proposed, Section A would permanently incorporate less than an acre of the existing Amboy Road frontage of this 31 acre public park for additional right-of-way and construction easements. The Carrier Park property contains a wide paved shoulder along the existing Amboy Road frontage. This unchannelized wide paved shoulder has provided perpendicular parking for the site since it belonged to the Asheville Motor Speedway. It remains even though the city has created additional parking areas within the park. Almost all of the 0.94 acres of additional right-of-way required from Carrier Park would be from this paved shoulder area. According to the City of Asheville Parks and Recreation officials, future plans for the park call for the removal of this parking (see letter dated September 12, 2007, in Appendix F). The required property contains no park amenities. However, since the proposed project would require the acquisition of right-of-way and construction easements within the boundaries of this public recreational facility, this resource is included in the Section 4(f) evaluation.

5.2.2 TEMPORARY OCCUPANCY OF PROPERTY

According to FHWA guidance, a temporary occupancy will not constitute a use of a Section 4(f) resource if all of the conditions set forth in 23 CFR 771.135(p)(7) are met. Those conditions are that

- (1) Duration (of the occupancy) must be temporary, i.e., less than the time needed for construction of the project, and there should be no change in ownership of the land;
- (2) Scope of the work must be minor, i.e., both the nature and the magnitude of the changes to the 4(f) resources are minimal;
- (3) There are no anticipated permanent adverse physical impacts, nor will there be interference with the activities or purpose of the resource, on either a temporary or permanent basis;
- (4) The land being used must be fully restored, i.e., the resource must be returned to a condition which is at least as good as that which

existed prior to the project; and, (5) There must be documented agreement of the appropriate Federal, State, or local officials having jurisdiction over the resource regarding the above conditions. (USDOT/FHWA 2005b, 2005c)

If a situation exists where Section 4(f)-protected property meets each of these conditions described, then additional coordination with the officials with jurisdiction over the properties will take place to ensure that there is documented agreement of the conditions. If this occurs, documentation will be included in Appendix A of the Final EIS.

5.2.3 CONSTRUCTIVE USE OF PROPERTY

According to FHWA guidance, “Constructive use only occurs in those situations where, including mitigation, the proximity impacts of a project on the 4(f) property are so severe that the activities, features, or attributes that qualify the property or resource for protection under Section 4(f) are substantially impaired” (USDOT/FHWA 2005c). It is not anticipated that there will be a constructive use of any Section 4(f) resource(s) as a result of this project.

5.2.4 SUMMARY OF USE OF SECTION 4(F) PROPERTIES

All uses of Section 4(f) properties related to the project can be categorized as permanent incorporation of property for the project’s right-of-way or easement. A summary of the Section 4(f) resources that would be affected by the permanent incorporation of property for each alternative is provided in Table 5-3. The evaluation of *de minimis* impacts, avoidance alternatives, and measures to minimize harm in the remainder of this chapter focus on these properties and alternatives.

Table 5-3: Summary of Uses of Section 4(f) Properties

Property	Section	Alternative(s)	Type of Use
Historic Sites			
Biltmore Estate	C	A-2, C-2	Permanent Incorporation
Asheville School	C	A-2, C-2, D-1, F-1	Permanent Incorporation
West Asheville/Aycock School Historic District	A	I-240 Widening	Permanent Incorporation
William Worley House	B	3, 3-C, 4, 4-B	Permanent Incorporation
Montford Hills Historic District	B	4-B	Permanent Incorporation
Montford Hills/Hibriten Drive Boundary Expansion	B	3, 3-C, 4	Permanent Incorporation
Archaeological Resources			
Archaeological Site 31BN623	A	I-240 Widening	Permanent Incorporation
Parks and Recreation Areas			
French Broad River Greenway	A	I-240 Widening	Permanent Incorporation
Carrier Park	A	I-240 Widening	Permanent Incorporation

5.3 DE MINIMIS IMPACTS

In Section 6009(a) of SAFETEA LU, Pub. L. 109 59, the existing Section 4(f) legislation, was amended to simplify the processing and approval of projects that have only *de minimis* impacts on lands protected by Section 4(f). According to USDOT, “This revision provides that once the U.S. Department of Transportation (DOT) determines that a transportation use of Section 4(f)

property, after consideration of any impact avoidance, minimization, and mitigation or enhancement measures, results in a *de minimis* impact on that property, an analysis of avoidance alternatives is not required and the Section 4(f) evaluation process is complete” (USDOT/FHWA 2005c).

5.3.1 HISTORIC SITES

According to FHWA’s question and answer document on the implementation of the *de minimis* provision, “De minimis impacts related to historic sites are defined as the determination of either “no adverse effect” or “no historic properties affected” in compliance with Section 106 of the NHPA (USDOT/FHWA 2013). In concurrence forms signed on May 21, 2015 (included in Appendix F), the SHPO concurred that certain alternatives of each section would have “no effect” or “no adverse effect” on the historic resources according to Section 106 of the NHPA. The SHPO was notified in writing on October 3, 2006, (see Appendix A2) of FHWA’s intention to utilize the SHPO concurrence with “no adverse effect” determinations as the basis of *de minimis* findings. Of the six historic properties listed in Table 5-2, five qualified for *de minimis* findings. Those five properties are the Biltmore Estate, Asheville School, the William Worley House, Montford Hills Historic District, and the Montford Hills & Hibriten Drive Expansions. Their *de minimis* applicability is described in the following sections.

5.3.1.1 Biltmore Estate

The SHPO concurred with a Section 106 determination of “no adverse effect” to this historic property for all alternatives of Section C, including Alternatives A-2 and C-2, which would include minimal right-of-way acquisitions, given that taken as a whole, they would not significantly diminish the integrity or historic significance of this property. The *de minimis* provision under Section 4(f) is applicable to Section C – Alternatives A-2 and C-2 for this resource.

5.3.1.2 Asheville School

The proposed right-of-way takings would not be in proximity to the complex of academic buildings and surrounding grounds of this historic property. The SHPO concurred with a Section 106 determination of “no adverse effect” for all alternatives of Section C for this historic property because there would be minimal right-of-way acquisitions and, taken as a whole, they would not significantly diminish the integrity or historic significance of this property. The *de minimis* provision under Section 4(f) is applicable to Section C – Alternatives A-2, C-2, D-1, and F-1 for this resource.

5.3.1.3 William Worley House

The SHPO concurred with a Section 106 determination of “no adverse effect” to this historic property for all alternatives of Section B because there would be minimal right-of-way acquisitions and, taken as a whole, they would not significantly diminish the integrity or historic significance of this property. The *de minimis* provision under Section 4(f) is applicable to Section B – Alternatives 3, 3-C, 4, and 4-B for this resource.

5.3.1.4 Montford Hills Historic District

The SHPO concurred with a Section 106 determination of “no adverse effect” to this historic property for Alternative 4-B in Section B. As proposed, Section B – Alternatives 3, 3-C, and 4

would require no permanent right-of-way within the historic boundaries. The *de minimis* provision under Section 4(f) is applicable to Alternative 4-B, as a permanent construction easement may be necessary depending on the final design of the retaining wall adjacent to Westover Drive.

5.3.1.5 Montford Hills & Hibriten Drive Expansion

Pursuant to Section 106, the SHPO has concurred with NCDOT's determination that Alternatives 3, 3-C, and 4 would have "no adverse effect" on this historic resource given there would be minimal tree removal and the project would not impact any contributing resources. Alternative 4-B was determined to have "no effect" on this historic resource because there would be no physical impacts to the site. The *de minimis* provision under Section 4(f) is applicable to Section B – Alternatives 3, 3-C, and 4 for this resource.

5.3.2 ARCHAEOLOGICAL RESOURCES

The SHPO concurred with a Section 106 determination of "no adverse effect" to Site 31BN623, given that the site boundaries would be identified with iron markers, covered, and buried in the proposed fill for the project. The *de minimis* provision under Section 4(f) is applicable to Section A for this resource.

5.3.3 PARKS AND RECREATION AREAS

De minimis impacts on publicly owned parks, recreation areas, and wildlife and waterfowl refuges are defined as those that do not "adversely affect the activities, features, and attributes" of the Section 4(f) resource" (USDOT/FHWA 2013). Through coordination with the City of Asheville Parks and Recreation Department, revisions (described in Section 5.1.2) were made to the project to minimize impacts to the French Broad River Greenway and Carrier Park. With these revisions, the City of Asheville agreed by letter (dated September 12, 2007, and included in Appendix F) that the project would not adversely affect the activities, features, and attributes of the French Broad River Greenway and Carrier Park. FHWA has notified the City of Asheville Parks and Recreation Department that FHWA intends to utilize their agreement that the project would not adversely affect the activities, features, and attributes of the French Broad River Greenway and Carrier Park as the basis of individual *de minimis* findings. Documentation of this communication is provided in Appendix F.

5.4 AVOIDANCE ALTERNATIVES

According to the FHWA's policy paper addressing Section 4(f), "In order to demonstrate that there is no feasible and prudent alternative to the use of 4(f) land, the evaluation must address both location alternatives and design shifts that totally avoid the 4(f) land." Feasible alternatives are those that are technically possible to be built. An alternative may be rejected as not prudent for any of the following reasons:

- It does not meet the project Purpose and Need
- It involves extraordinary operational or safety problems
- There are unique problems or truly unusual factors present with it
- It results in unacceptable and severe adverse social, economic, or other environmental impacts
- It would cause extraordinary community disruption
- It has additional construction costs of an extraordinary magnitude

- There is an accumulation of factors that collectively, rather than individually, have adverse impacts that present unique problems or reach extraordinary magnitudes (USDOT/FHWA 2005b).

5.4.1 TOTAL AVOIDANCE ALTERNATIVES

Total avoidance of Section 4(f) resources identified as being impacted by each of the project alternatives would require evaluation of a new location alternative for the entire project. Several new location alignments were identified in the *Phase I Environmental Analysis – Asheville Urban Area* (NCDOT 1995) but were not carried forward for analysis in this DEIS because they do not meet the Purpose and Need for the project for the reasons stated in Section 2.5.4.2. Figure 5-2 depicts the avoidance alternatives considered.

5.5 MEASURES TO MINIMIZE HARM

Measures to minimize harm include design modifications that would lessen the impact to Section 4(f) resources and mitigation measures that compensate for impacts. These measures are determined in coordination with the officials with jurisdiction over the resources (USDOT/FHWA 2005c).

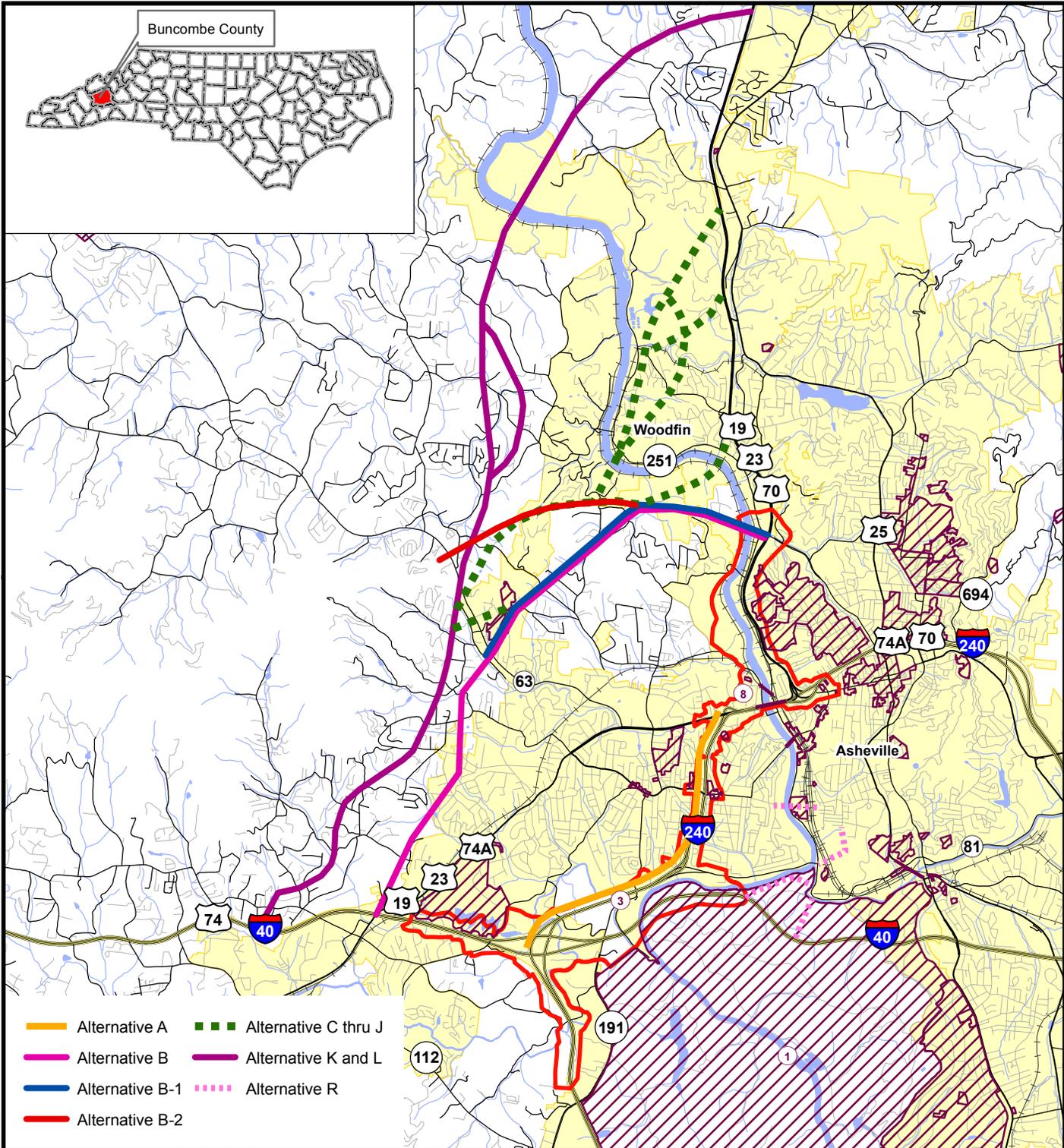
5.5.1 HISTORIC SITES

5.5.1.1 Biltmore Estate

When the I-26/I-40/I-240 interchange improvements were added to the proposed project and it became apparent that the associated improvements to I-40 would extend into the Biltmore Estate, a meeting was held on March 25, 2004, with estate officials to listen to their concerns about possible effects of the project. As a result, the alignments of all four of the Section C alternatives were developed to shift I-40 slightly to the north to avoid damages to the southern side of the right-of-way since most of the improvements on the estate are south of existing I-40. Two alternatives, A-2 and C-2, would require additional right-of-way along existing I-40 from the estate and would be subject to the requirements of Section 4(f). The introduction of retaining walls in the design of this alternative could avoid property outside the existing I-40 right-of-way for Alternative A-2. The Alternative C-2 alignment could be modified to avoid the additional right-of-way from the estate with revisions to the access to NC 191 via I-40. However, the necessary access modifications to avoid the additional right-of-way along existing I-40 would likely affect access to the estate property along NC 191 and may not be desirable to the estate officials.

Estate officials have requested that NCDOT engage a landscape architect who will coordinate activities with an estate representative and ensure that earthen berms, mechanical retainage, and appropriate plantings are employed, where applicable, on the estate and on areas viewed from the estate in order to mitigate visual impact, right-of-way taking, and disturbance during construction. To minimize construction impacts, NCDOT will revegetate all disturbed areas. To determine the type of revegetation, NCDOT will coordinate with the estate to conform as closely as possible to the existing vegetation in the area.

Estate officials have also requested that NCDOT, in consultation with estate representatives, use color additives to exposed concrete surfaces that face Biltmore Estate to mitigate visual impacts.



**North Carolina
Department of Transportation**



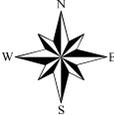
**I-26 Asheville Connector
Buncombe County**

STIP Project No. I-2513

Legend

- Interstate
- US Highway
- NC Highway
- State Route
- Local Roads
- Railroad
- Streams (non-delineated)
- Historic Resources
- Area of Potential Effect
- Water
- Municipal Boundary

Date: May 2015



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Figure 5-2

Avoidance Alternatives

The estate has informed NCDOT that they intend to engage a consultant for advice concerning sound issues. Traffic noise concerns both from construction of the new I-40 facilities as well as from traffic on I-40 may result in the addition of sound buffering in the vicinity during final design.

Estate officials have requested that any architectural features for this project be compatible with the historic architecture of the estate. Stone facade bridges similar to other bridges along I-40 within the boundaries of the estate will be considered for any I-40 bridge within view of the estate's guests. They also requested that any retaining walls, open flumes, culverts, or other supporting structures for the project conform to the architectural features of the estate.

Each of these mitigation requests will be given serious consideration during the final design of this project. After the selection of the preferred alternative, the final design of the project will be closely coordinated with officials of the Biltmore Estate. Such coordination is a project requirement in order to obtain an MOA to satisfy the necessary Section 106 approval for the project.

5.5.1.2 Asheville School

The existing preliminary alternatives in Section C would require less than 3 acres of the 280 acre school property. The required right-of-way is located on the fringe of the property, well away from the main campus. The majority of the required right-of-way is along SR 3412 (Sand Hill Road) to allow the replacement of the crossing over I-40. This replacement structure was placed as close as possible to the existing crossing to avoid damages to this property. The minimal right-of-way acquisitions would not significantly diminish the integrity or historic significance of this property, as evidenced by the Section 106 determination of "no adverse effect" to this property for all project alternatives. Retaining walls will be considered during final design to reduce the necessary right-of-way from this property.

5.5.1.3 West Asheville/Aycock School Historic District

As described in Section 4.1.4, pursuant to Section 106, Section A – I-240 Widening Alternative would adversely impact the West Asheville/Aycock School Historic District. Avoiding the need for additional right-of-way and construction easements within the historic boundaries of the West Asheville/Aycock School Historic District would require the elimination of the I-240/Haywood Road interchange. Given the district is located both on the north and south side of Haywood Road, shifting the proposed alignment of Haywood Road to either the north or south would still result in impacts to the district. Removing the interchange would sever US 19-23 Business that is routed along existing I-240 and Haywood Road and would substantially disrupt the existing travel network, forcing traffic onto other local facilities to access the commercial areas along Haywood Avenue. Such an impact is not considered prudent.

During the preliminary design of Section A, a retaining wall was added along Haywood Road in front of the former Aycock School to minimize the acquisition of right-of-way and construction easements within the historic boundaries of the West Asheville/Aycock School Historic District. The addition of this retaining wall and the preservation of an existing retaining wall has reduced the proposed right-of-way and the proposed construction easement. The addition of the wall would avoid taking several large trees in the front of the school. Further coordination with the HPO to minimize project effects is a project requirement in order to obtain an MOA to satisfy the necessary Section 106 approval for the project.

5.5.1.4 William Worley House

All build alternatives in Section B of the proposed project would require the acquisition of right-of-way within the historic boundaries of the William Worley House property. Retaining walls have been used in the preliminary design of the alternatives to minimize harm and reduce the amount of additional right-of-way necessary. However, due to the necessary height of the retaining walls, geotechnical investigations will be needed and permanent easements will be necessary. Further minimization of the required right-of-way from this property will be considered during the final design of the preferred alternatives. Further coordination with the HPO to minimize project effects is a project requirement in order to obtain an MOA to satisfy the necessary Section 106 approval for the project.

5.5.1.5 Montford Hills Historic District

Section B – Alternative 4-B would require a permanent underground easement of 0.03 acre to accommodate a long retaining wall adjacent to Westover Drive. The minimal right-of-way acquisitions would not significantly diminish the integrity or historic significance of this property, as evidenced by the Section 106 determination of “no adverse effect” to this property for Alternative 4-B. Alternatives 3, 3-C, and 4 were determined to have “no effect” on the property.

5.5.1.6 Montford Hills/Hibriten Drive Boundary Expansions

Section B – Alternatives 3 and 3-C would require less than 0.1 acre of new right-of-way to accommodate cut and fill slopes and the control of access fencing within the historic property. Section B – Alternative 4 would require less than 0.2 acre of new right-of-way to construct and maintain a retaining wall along the western boundary. NCDOT will place the control of access fencing no more than 15 feet from the retaining wall to reduce permanent easements and tree clearing. The minimal right-of-way acquisitions would not significantly diminish the integrity or historic significance of this property, as evidenced by the Section 106 determination of “no adverse effect” to this property for Alternatives 3, 3-C, and 4. Alternative 4-C was determined to have “no effect” on the property.

5.5.2 ARCHAEOLOGICAL RESOURCES

The Section A alternative would require less than 0.1 acre of archaeological site 31BN623, which is believed to represent the remains of the early twentieth century Lower Hominy Creek Hydroelectric Plant, to accommodate the construction and maintenance of fill slopes for the proposed roadway. Where impact cannot be avoided, the site boundaries will be identified with iron markers, covered, and buried in the proposed fill for the project.

5.5.3 PARKS AND RECREATION AREAS

5.5.3.1 Carrier Park

To minimize the impacts to the area of Carrier Park along Amboy Road, the proposed curb and gutter along Amboy Road was extended eastward and an approximately 100 foot long retaining wall was added in front of the existing concession stand to avoid removal of that facility. Also, the proposed entrance to Old Amboy Road that provides access to several properties west of the park has been shifted westward to avoid requiring additional right-of-way from Carrier Park for the reconnection of this roadway. These modifications have reduced the proposed right-of-way and have been coordinated with the City of Asheville Parks and Recreation Department to

ensure the project will not harm the recreational characteristics of the facility. To further mitigate any impacts to Carrier Park, further coordination with City officials will take place during final design to implement landscaping improvements along the improved section of Amboy Road adjacent to Carrier Park.

5.5.3.2 French Broad River Greenway

The initial preliminary design would have required the relocation of approximately 1,000 feet of the French Broad River Greenway. To minimize these impacts, approximately 650 feet of additional retaining wall was added to the preliminary design to contain the fill from the widening of I-240 and the eastbound exit ramp to Amboy Road. In addition, the proposed entrance to Old Amboy Road that provides access to several properties along the bank of the French Broad River west of Carrier Park was shifted westward to avoid crossing the proposed alignment of the greenway. Shifting Old Amboy Road required the introduction of an approximately 200 foot-long retaining wall to avoid the Carrier Park property. This proposed retaining wall would require the relocation of approximately 316 feet of the proposed greenway to avoid two crossings of Old Amboy Road.

Through an agreement with NCDOT, the French Broad River Greenway will also cross the existing I-40 right-of-way beneath the I-40 bridge over the French Broad River. At this location, the greenway is adjacent to the western bank of the French Broad River. All four build alternatives in Section C of the proposed project would be designed to allow the greenway to continue beneath I-40.

5.6 RELATIVE COMPARISON OF SECTION 4(F) IMPACTS

Table 5-4 is provided to identify and differentiate the relative impacts of each alternative studied.

Table 5-4: Relative Comparison of Section 4(f) Impacts

Alternative	Uses Section 4(f) Land?	Relative Net Harm to Section 4(f) Land After Mitigation	Relative Net Harm to other Notable and Environmental Features
Section C			
A-2	Yes	Fewer impacts to Asheville School (2.51 acres) than Alternative C-2 (3.11 acres), Alternative D-1 (2.55 acres), and Alternative F-1 (2.79 acres); fewer impacts to Biltmore Estate (0.42 acre) than Alternative C-2 (2.18 acres), but more than Alternatives D-1 and F-1 (no impact).	N/A(a)
C-2	Yes	Most impacts to Biltmore Estate and Asheville School than all other Section C alternatives.	N/A(a)
D-1	Yes	Fewer impacts to Asheville School (2.55 acres) than Alternative C-2 (3.11 acres) and Alternative F-1 (2.79 acres), but more than Alternative A-2 (2.51 acres); no impact to Biltmore Estate, while Alternative A-2 would impact 0.42 acre and Alternative C-2 would impact 2.18 acres.	Substantially higher costs than Alternative F-1.

Alternative	Uses Section 4(f) Land?	Relative Net Harm to Section 4(f) Land After Mitigation	Relative Net Harm to other Notable and Environmental Features
F-1	Yes	Fewer impacts to Asheville School (2.79 acres) than Alternative C-2 (3.11 acres), but more than Alternative A-2 (2.51 acres) and Alternative D-1 (2.55 acres); no impact to Biltmore Estate, while Alternative A-2 would impact 0.42 acre and Alternative C-2 would impact 2.18 acres.	Substantial cost savings over Alternative D-1
Section A			
I-240 Widening	Yes	I-240 widening used best fit approach to minimize unavoidable impacts to West Asheville/Aycock School Historic District and Boundary Increase (0.19 acre), French Broad River Greenway (316 linear feet), and Carrier Park (0.94 acre). Would impact less than 0.1 acre of archaeological site 318BN623.	N/A ^a
New Location	N/A ^b	N/A	N/A
Section B			
3	Yes	Most impact (0.09 acre) to William Worley House (same as Alternative 3-C) for Section B alternatives; no impact to Montford Hills Historic District while Alternative 4B may require easement; fewer impacts to Montford Hills/Hibriten Drive Boundary Expansion (0.03 acre) than Alternative 3-C (0.04 acre) and Alternative 4 (0.16 acre), but more than Alternative 4B (no impact).	Higher impact to Burton Street minority neighborhood (relocations)
3-C	Yes	Most impact (0.09 acre) to William Worley House (same as Alternative 3) for Section B alternatives; no impact to Montford Hills Historic District while Alternative 4B may require easement; fewer impacts to Montford Hills and Hibriten Drive Expansion (0.04 acre) than Alternative 4 (0.16 acre), but more than Alternative 3 (0.03 acre) and Alternative 4-B (no impact).	Higher impact to Burton Street minority neighborhood (relocations)
4	Yes	Least impact to William Worley House (0.03 acre); no impact to Montford Hills Historic District, while Alternative 4-B may require easement; most impact to Montford Hills/Hibriten Drive Boundary Expansion (0.16 acre) of Section B alternatives.	Less direct impact to Burton Street compared to Alternatives 4 and 4-B
4-B	Yes	Fewer impacts to William Worley House (0.05 acre) than Alternatives 3 and 3-C (0.09 acre), but more impacts than Alternative 4 (0.03 acre); may result in impact to Montford Hills Historic District due to underground easement; no impact to Montford Hills/Hibriten Drive Boundary Expansion (all other alternatives result in impacts to this resource).	Less direct impact to Burton Street compared to Alternatives 4 and 4-B

^a There are no differentiating environmental effects to consider.

^b Does not meet Purpose and Need, could have substantial impacts to human and natural environment.

5.7 LEAST OVERALL HARM

If the analysis of avoidance alternatives concludes that there is no feasible and prudent avoidance alternative, then FHWA may only approve the alternative that causes the least overall harm to the Section 4(f) property. Title 23 CFR Part 774.3(c) includes a list of factors to consider in making this determination of least overall harm. These factors include the ability to mitigate adverse impacts to Section 4(f) property; the relative severity of remaining harm, after mitigation, to Section 4(f) property; and the relative significance of each Section 4(f) property. For instance, will the project alternatives result in edge takes of a park or will they cut through the middle? How will activities, features, or attributes of the 4(f) property be affected by various alternatives and to what degree? If alternatives are determined to cause "substantially equal" harm to Section 4(f) property, then FHWA may choose any one.

Who makes the 4(f) decision for highway projects? The FHWA is ultimately responsible for making all decisions related to Section 4(f) compliance. These include whether Section 4(f) applies to a property, whether a use will occur, whether a *de minimis* impact determination may be made, an assessment of each alternative's impacts to Section 4(f) properties, and a determination of whether the law allows the selection of a particular alternative after consulting with the appropriate officials with jurisdiction.

In the case where each alternative would affect the same Section 4(f) resources, FHWA will conduct a "least harm analysis" considering the relative net harm to other notable environmental resources. Minor differences in the acreage of an impacted Section 4(f) resource land does not necessarily determine that the one with the least impact alternative is the least environmentally damaging or is preferred relative to the other alternatives. It is possible that an alternative with slightly higher Section 4(f) impacts could be selected as the LEDPA provided it has the least overall harm to other notable environmental resources.

Figure 5-2 shows the avoidance alternatives that were developed for this project.

5.8 COORDINATION

Written correspondence was exchanged and meetings were held with officials with jurisdiction over the Section 4(f) resources identified. The correspondence and meetings are briefly summarized in this section. Complete correspondence, meeting summaries, and concurrence forms resulting from those meetings are included in Appendix B2.

- October 3, 2006: NCDOT provided written notice to the SHPO that a finding of no "adverse effect" under Section 106 for the Asheville School (Section C – Alternatives A-2, C-2, D-1, and F-1) and Haywood Street United Methodist Church (Section B – Alternative 5) would be used to make a *de minimis* finding for Section 4(f).
- April 10, 2007: TGS Engineers requested information from the City of Asheville Parks and Recreation Department in an effort to ensure that the project includes all possible planning to minimize harm to Carrier Park and the French Broad River Greenway.
- April 13, 2007: A meeting was held between TGS Engineers and the City of Asheville Parks and Recreation Department to discuss possible impacts of the project on Carrier Park and the French Broad River Greenway.
- April 18, 2007: NCDOT requested by letter that the City of Asheville Parks and Recreation Department provide written concurrence of a *de minimis* affect to Carrier Park and the French Broad River Greenway.

- April 20, 2007: By letter, TGS Engineers followed up the April 13, 2007, meeting with the City of Asheville Parks and Recreation Department and notified the department of the need for future coordination with NCDOT to document a *de minimis* effect of the project on Carrier Park and the French Broad River Greenway.
- May 19, 2015: A meeting was held between NCDOT and the SHPO to discuss the proposed effects determination and reach a concurrence for the assessment of effects based on the 2015 *Historic Architectural Resources Survey Update Report* (Acme Preservation Services, LLC 2015).
- June 30, 2015: A meeting was held between NCDOT and SHPO to discuss the proposed effects determination and reach a concurrence for the assessment of effects for archaeological site 31BN623.