SECTION 404/NEPA MERGER PROJECT TEAM MEETING AGREEMENT
CONCURRENCE POINT 4A
AVOIDANCE AND MINIMIZATION
ASHEVILLE I-26 CONNECTOR

T.I.P. No. I-2513
WBS No. 34165.1.2
Federal-Aid Project No. NHF 26-1 (53)
NCDOT Division 13

INTRODUCTION

The purpose of this meeting is to achieve Merger Team Concurrence on Concurrence Point (CP) 4A (Avoidance and Minimization) for the proposed I-26 Connector.

A Draft Environmental Impact Statement (DEIS) for the project was published in October 2015, and a Corridor Public Hearing held in November 2016. Based on the approved DEIS and comments received, Section C: Alternative F-1, Section A: Widening Alternative, and Section B: Alternative 4-B were selected as the preferred alternatives in May 2016.

Project Study Area

The project study area extends from the western terminus of I-26 southwest of the City of Asheville around the western side of Asheville to existing US 19-23-70 north of Asheville, and is shown on **Figure 1**.

Purpose of Proposed Action

The purpose of the proposed improvements to I-26 is to upgrade the corridor, provide an improved system linkage, increase capacity of existing I-240, reduce traffic delays, and reduce traffic on the Captain Jeff Bowen Bridge.

Project Description and Proposed Improvements

The proposed I-26 Connector spans approximately 7 miles and is located on the west side of Asheville, North Carolina and improves the existing I-240 and US 19-23 corridors from the I-26/I-40/I-240 interchange to the US 19-23-70 interchange with SR 1781 (Broadway). The project improvements are defined in three separate sections, Section A, B and C that must be combined to comprise the entire project. The preferred alternatives from each section are described below.

Section C

The selected alternative in this section, Alternative F-1 (**Figure 2**), maintains the existing I-26/I-40/I-240 interchange configuration and adds a loop and a ramp (highlighted in orange) to provide all ramp movements. Alternative F-1 also includes the reconstruction of I-40/US 19-23-74A (Smoky Park Highway) interchange. The two collector/distributor (C/D) roadways proposed in the 2015 DEIS designs north and south of I-40 from west of I-26/I-40/I-240 interchange to within the I-40/US 19-23-74A (Smoky Park Highway) interchange have been eliminated.

Section A

The preferred alternative in Section A, the I-240 Widening Alternative, includes a best-fit alignment for the widening and reconstruction of existing I-240 from a four-lane freeway to a six-lane freeway (**Figure 3**), includes reconstruction of the I-26/I-240 and NC 191 (Brevard Road) and SR 3556 (Amboy Road) interchanges, and upgrades the existing I-26/I-240 and US 19-23 Business (Haywood Road) interchange to a tight urban diamond interchange (TUDI) configuration.

Section B

The preferred alternative in Section B, Alternative 4-B (**Figure 4**) includes the modification of the existing interchange of I-240 with US 19-23-74A/Patton Avenue and the extension of I-26 on new location across the French Broad River to US 19-23-70. This alternative creates three new crossings over the French Broad River: two bridges carrying I-240 traffic, and the third carrying I-26. Alternative 4-B separates I-240 traffic from Patton Avenue traffic across the Captain Jeff Bowen Bridges and includes construction on I-240 east of the French Broad River.

The flyover bridges would span the Norfolk Southern Railway, SR 1338 (Emma Road), the Norfolk Southern Railway Craggy spur line and SR 1477 (Riverside Drive). Once I-26 crosses over the French Broad River on new location, it combines with US 19-23-70 approximately 2,700 feet south of the SR 1781 (Broadway) interchange. I-26 westbound traffic would not be able to access US 19-23-70 in the southbound direction, and northbound US 19-23-70 will not be able to access I-26 eastbound.

AGENDA ISSUES

This meeting is being held to:

- review the proposed improvements for the Least Environmentally Damaging Practicable Alternative (LEDPA)/Preferred Alternative,
- summarize the impacts as disclosed in the Final Environmental Impact Statement,
- discuss proposed measures to Avoid and Minimize the impacts of the proposed action, and
- reach concurrence on Avoidance and Minimization of the project.

PREVIOUS MERGER TEAM MEETINGS

CP 1, CP 2

The Merger team reached concurrence on the Purpose and Need (CP1) Alternatives to be Studied in Detail (CP2) on December 8, 2004.

CP 2 Revisited and CP 2A (2006)

The September 7, 2006 Merger Team meeting revisited CP2 by adding Alternative F-1 as a DSA and also included the presentation of preliminary designs and bridging recommendations for the project alternatives. The DSAs at this meeting were Section A, Section B (Alternatives 2, 3, 4, and 5) and Section C (Alternatives A2, C2, D1 and F1).

CP 2 Revisited (2007)

The July 24, 2007 CP2 Revisited Merger Meeting resulted with Alternative 5 of Section B being eliminated from further study due to traffic operation and safety issues.

CP2 and CP2A Revisited (2009)

The December 15, 2009, CP2 and CP2A Revisited Merger Meeting resulted with Alternative 2 of Section B being eliminated and Alternative 4B of Section B being added as a DSA. Additionally, the preliminary design alignment and major bridging recommendations for Alternative 4B were presented for review/comment and were ultimately approved.

CP 2A Revisited (April 2015)

CP 2A was revisited and concurrence achieved on April 2, 2015. The Merger Team requested further evaluation of avoidance and minimization options to Smith Mill Creek for Alternatives 3 and 3C, as well as investigation for the potential to realign the ramps in Alternatives A-2 and D-1 to reduce impacts.

CP 3

CP 3, Least Environmentally Damaging Practicable Alternative (LEDPA)/Preferred Alternative was achieved on May 18, 2016. The LEDPA for each section was as follows:

- Section C: Alternative F-1
- Section A: Widening Alternative
- Section B: Alternative 4-B

TYPICAL SECTIONS

The preferred alternative requires a minimum of four and a maximum of eight basic freeway lanes on I-26 to meet the capacity need presented in the purpose and need for the proposed project.

I-26 south of the I-40 interchange

This segment included the use of three typical sections. South of the I-40 interchange, I-26 is a basic 8-lane section with 12 foot travel lanes, 12 foot paved shoulders, and a varying median width; I-26 is divided by barriers and a retaining wall. In this area of the project, I-26 is transitioning to tie to the I-4400/I-4700 project. See **Figure 5**.

I-26 through I-40 interchange

Throughout the I-40 interchange, I-26 utilizes a basic four-lane typical section with a bifurcated median; the design includes 12 foot travel lanes and 12 foot paved shoulders. The median allows for up to approximately 460 foot separating eastbound and westbound traffic. This portion of the project uses standard cut and fill slopes to tie construction to existing ground. See **Figure 6**.

I-26 from I-40 interchange to Patton Avenue

North of the I-40 interchange, I-26 transitions to a six-lane basic freeway section separated by a 35 foot median and a 41-foot concrete barrier with planter. I-26 is designed with 12-foot travel lanes and 12-foot paved shoulders. This portion of the project uses standard cut and fill slopes to tie construction to existing ground. See **Figure 7**.

I-26 north of the I-40 interchange to SR 1781 (Broadway)

The median narrows to 26 feet over the French Broad River bridges, where it transitions to an eight-lane typical section from US 19-23-70 to SR 1781. I-26 is designed with 12-foot travel lanes and 12-foot paved shoulders. See **Figure 8**.

HYDRAULIC STRUCTURES

Major hydraulic structures are those with a contributing drainage area requiring a conveyance greater than a 72-inch pipe. Thirty-one (31) sites were identified within the study area that meets this requirement. **Tables 1 through 3** present structures identified as potential major hydraulic structures and the recommended actions for the Preferred Alternative. The locations of these crossings are shown on **Figures 9 through 11**.

Table 1: Major Hydraulic Structures for Preferred Alternative-Section C

SITE NUMBER	ROUTE	STATION	EAST	NORTH	STREAM NAME	FEMA STUDY TYPE	DRAINAGE AREA (Mi^2)	EXISTING STRUCTURE	Minimum Recommended Structure
								Number, Size, Structure Type	Number, Size, Structure Type
1	I-40 East of I-26	133+78.09	931644.60	678033.15	French Broad River	Detailed	695	(2) bridges: 356 (I-40 WBL) - 576' bridge 352 (I-40 EBL) - 576' bridge	(1) 574' bridge
2A	I-40	121+87.65	930689.46	677336.45	Hominy Creek	Detailed	94.7	(2) bridges: 347 (I-40 WBL) - 350' bridge 344 (I-40 EBL) - 355' bridge	(1) 375' bridge
2B	Ramp 3A	20+34.84	930542.98	677529.31	Hominy Creek	Detailed	94.7	none	(1) 360' bridge
3B	Ramp 2D	24+05.14	927506.88	676503.52	Hominy Creek	Detailed	94.7	(1) 180' bridge	(1) 180' bridge
3D	Ramp 2A	28+28.30	927528.29	677012.70	Hominy Creek	Detailed	94.7	(1) 172' bridge	(1) 172' bridge
4A	I-26 NB	84+78.93	927290.16	677974.91	Hominy Creek	Detailed	94.7	(2) 198' bridges WBL & EBL	(1) 230' bridge
4C	I-26 SB	34+50	927187.07	678087.67	Hominy Creek	Detailed	94.7	none	(1) 253' bridge
5	SR 3412	20+95.55	924376.20	677407.98	Ragsdale Creek	Detailed	4.3	(2) 8x8 RCBC	extend existing / raise headwall
6	I-26	95+87.60	928297.29	678435.40	Unnamed tributary to Hominy Creek	none	0.063	(1) 48-inch CMP	extend existing
21	Ramp 2B	42+39.13	925460.11	676947.41	Unnamed Tributary to Ragsdale Creek	none	0.38	(1) 6x9 RCBC - 571'	extend existing

SITE NUMBER	ROUTE	STATION	EAST	NORTH	STREAM NAME	FEMA STUDY TYPE	DRAINAGE AREA (Mi^2)	EXISTING STRUCTURE	Minimum Recommended Structure
								Number, Size, Structure Type	Number, Size, Structure Type
28	I-40 / Ramp 1B & 1C	32+64.14	917274.47	678445.80	Ragsdale Creek	Limited Detail	3.14	(3) 7x9 RCBC	extend existing
29	I-40 / Ramp 1A &1D	54+12.56	919399.55	678083.84	Ragsdale Creek	Limited Detail	3.14	(3) 8x8 RCBC	extend existing
30	I-40	39+28.20	922566.12	677327.91	UT	none	0.077	(1) 48-inch RCP	extend existing
31[a]	US 19/23 / Ramp 1D	19+96.31	917789.14	677869.11	Ragsdale Creek	Limited Detail	1.16	(3)-7x8 RCBC	retain existing
32[a]	I-26 / I-240	28+67.95	926825.51	674928.47	UT to Hominy Creek	Detailed Study - Outlet End	1.68	(1) 60" CMP	retain existing

[a]: These sites were assessed as a part of the Hydraulic Aspects Report Addendum (AECOM 2018b).

Sources: Hydraulic Technical Report for I-2513 the I-26 Asheville Connector (TGS Engineers 2010); Final Hydraulic Aspects Report Addendum to the I-2513 Hydraulic Technical Report (URS 2015d). Hydraulic Aspects Report Addendum to I-2513 Hydraulic Technical Report (April 2010 and August 2015) (AECOM 2018b).

Table 2: Major Hydraulic Structures for Preferred Alternative-Section A

SITE NUMBER	ROUTE	STATION	EAST	NORTH	STREAM NAME	FEMA STUDY TYPE	DRAINAGE AREA (Mi^2)	EXISTING STRUCTURE	Minimum Recommended Structure
								Number, Size, Structure Type	Number, Size, Structure Type
8	I-26 / Ramp 4B / Ramp 4C	28+18.74	930382.59	679112.47	Hominy Creek	Detailed	94.7	(2) 311' bridge	(1) 454' bridge
18	I-26 / Ramp 45 / Ramp 54	47+40.02	932173.58	679803.95	Unnamed tributary to French Broad River	none	0.19	(1) 48" CMP - 344'	(2) 66" pipe
19	I-26	86+37.52	934481.49	682646.66	Moore Branch	none	0.17	(1) 66" CMP - 271'	(2) 60" pipe
26	I-26	46+63.80	932076.23	679530.25	French Broad River	none	0.28	none	fill into floodplain right of I-26

Sources: Hydraulic Technical Report for I-2513 the I-26 Asheville Connector (TGS Engineers 2010); Final Hydraulic Aspects Report Addendum to the I-2513 Hydraulic Technical Report (URS 2015d). Hydraulic Aspects Report Addendum to I-2513 Hydraulic Technical Report (April 2010 and August 2015) (AECOM 2018b).

Table 3: Major Hydraulic Structures for Preferred Alternative-Section B

SITE NUMBER	ROUTE	STATION	EAST	NORTH	STREAM NAME	FEMA STUDY TYPE	DRAINAGE AREA (Mi^2)	EXISTING STRUCTURE	Minimum Recommended Structure
								Number, Size, Structure Type	Number, Size, Structure Type
10	I-26 / I-240, Ramps D & DD	56+34.80	936618.13	689856.85	Smith Mill Creek	Detailed	5.4	none	(1) 2,216' bridge
11	I-240 EB	25+48.95	937298.15	691318.19	French Broad River	Detailed	945	none	(1) 2,216' bridge
12	I-240 WB	45+34.98	937170.12	691940.63	French Broad River	Detailed	94.7	none	(1) 2,216' bridge
13	Y7 EB & WB	56+10.86	938105.44	689003.46	French Broad River	Detailed	94.7	(2) existing bridges - 322 & 323	retain existing bridges
14	I-26	74+95.12	936618.13	689856.85	Smith Mill Creek	Detailed	945	none	(1) 2,216' bridge
16	Y36	28+28.30	937938.57	697889.83	Reed Creek	Detailed	3.9	(4) 8x9 RCBC	retain existing
17	Y24	23+32.28	935506.13	688614.94	Smith Mill Creek	Detailed	5.2	(3) 8x11 RCBC	extend existing
23	I-26	56+34.80	936618.13	689856.85	Unnamed tributary to Smith Creek	Detailed	94.7	none	(1) 2,216' bridge
24	I-240 WB & EB, US 23 SB	43+11.70	938890.29	690931.13	Tributary to French Broad River	Detailed	4.3	(1) 8x8 RCBC	retain existing
25	Y31	14+71.40	939247.45	690638.90	Tributary to French Broad River	Detailed	4.3	(1) 84" CMP	retain existing

SITE NUMBER	ROUTE	STATION	EAST	NORTH	STREAM NAME	FEMA STUDY TYPE	DRAINAGE AREA (Mi^2)	EXISTING STRUCTURE	Minimum Recommended Structure
								Number, Size, Structure Type	Number, Size, Structure Type
33[a]	I-40 / US 19	30+99.02	937892.77	692005.75	UT to French Broad River	none	0.13	(1) 66" CMP	retain existing
99[a]	Y32	23+58.88	939296.24	690709.05	UT to French Broad River	none	0.13	(1) 60" CMP	(1) 72" RCP

[a]: These sites were assessed as a part of the Hydraulic Aspects Report Addendum (AECOM 2018b).

Sources: Hydraulic Technical Report for I-2513 the I-26 Asheville Connector (TGS Engineers 2010); Final Hydraulic Aspects Report Addendum to the I-2513 Hydraulic Technical Report (URS 2015d). Hydraulic Aspects Report Addendum to I-2513 Hydraulic Technical Report (April 2010 and August 2015) (AECOM 2018b).

SUMMARY OF IMPACTS FROM THE DEIS

Table 4 includes a summary of the impacts for the preferred alternative as presented in the DEIS. Impacts were calculated using slope stakes limits plus 25 feet for natural systems.

Table 4: Summary of Preferred Alternative Impacts Presented in the DEIS

	Section C (I-26/I-40/I-240 Interchange)	Section A	Section B (New Location across French Broad)
Resource	**Alternative F-1**	**I-240 Widening**	**Alternative 4-B**
Project Features			
Length (miles)			
I-26	2.2	2.0	2.5
I-40/I-240	2.8	0.0	1.5
Total Length	5.0	2.0	4.0
Interchanges	3	3	3
Railroad Crossings	2	0	5
Navigable Waterway Crossings	1	0	4
Construction Cost	$203,300,000	$105,700,000	$291,300,000
Right-of-Way Cost	$17,100,000	$29,400,000	$36,800,000
Utilities Cost	$2,100,000	$3,400,000	$3,900,000
Total Cost	$222,500,000	$138,500,000	$332,000,000
Socioeconomic Features			
Residential	31	81	33
Business	5	17	34
Nonprofit	0	1	1
Total	**36**	**99**	**68**
Schools Relocated	0	1	0
Churches Relocated	1	1	1
Parks and Recreational Areas Impacted	1	2	0
Cemeteries Impacted	0	0	0
Physical Environment			
Noise Impacts (No-Build)	193	181	243
Noise Impacts (before abatement)	304	198	224
Noise Impacts (after abatement)	274	94	89
Hazardous Material Sites (moderate or high) Impacted	1	0	1
Floodplain Impacts (acres)	16.63	8.36	3.91
Floodway Impacts (acres)	2.00	1.94	0.38
Land Use Impacts by Zoning Category (acres)			
Residential Single-Family Districts	12.5	8.4	7.5
Residential Multifamily Districts	16.0	26.5	17.0
Neighborhood Business District	0	0	0.1
Community Business Districts	0.0	4.9	0.0
Industrial	0	0	0.4
Institutional District	34.5	13.6	0.4
Office	0.0	0.0	0.0

	Section C (I-26/I-40/I-240 Interchange)	Section A	Section B (New Location across French Broad)
Resource	**Alternative F-1**	**I-240 Widening**	**Alternative 4-B**
Project Features			
Highway Business District	7.8	1.9	14.3
Regional Business District	27.1	0.0	10.5
Central Business District	0.0	0.4	0.3
Commercial	24.8	2.7	0.0
Resort District	0.0	0.0	19.6
River District	0.0	6.3	22.3
Haywood Road	--	--	--
Total	**122.6**	**64.7**	**92.5**
Cultural Resources			
Historic Properties – Section 106 Effects	0	1 Adverse Effect	1 Adverse Effect
Historic Properties Impacted	1	2	2
Archeological Sites Impacted	6	2	0
Natural Environment			
Biotic Resources (acres)			
Maintained/ disturbed	171.93	91.08	124.82
Mesic Mixed Forest	111.26	47.41	40.67
Alluvial Hardwood Forest	6.55	1.50	3.88
Open Water	0.17	0	0.00
Total	**289.90**	**139.99**	**169.37**
Impervious Surface Increase (acres)	57.12	27.45	40.45
Stream Impacts (#)	12	4	7
Stream Impacts (linear feet)	1,984	798	2,128
Wetland Impacts (#)	12	1	2
Wetland Impacts (acres)	1.86	0.01	0.10
Pond Impacts(#)	0	0	0
Pond Impacts(acres)	0	0	0
Protected Species Adversely Affected	0	0	0

[a] Stream, wetland, and pond impacts calculated using design slope stakes plus 25-foot buffer.

AVOIDANCE AND MINIMIZATION

At CP 3, NCDOT committed to “reevaluate design details such as the reevaluation of the project typical sections (number of lanes), and additional avoidance and minimization efforts will be considered and implemented into the refinement of preliminary designs for the LEDPA based on a new traffic forecast (which will be developed from current FBRMPO Model). Should the impacts increase from those presented within the 2015 DEIS, Merger Team will be informed and will determine if CP3 needs to be revisited."

Following the publication of the DEIS and selection of the preferred alternative, the FBRMPO revised their Travel Demand Model. This revised model was used to revise the traffic forecast and capacity analysis, and allowed the design team to incorporate several refinements into the project to reduce impacts of the preferred alternative. Additional refinements occurred based on feedback received from the I-26 Connector Working Group, local officials, community associations, and other stakeholders.

DESIGN REFINEMENTS OF THE PREFERRED ALTERNATIVE

Preliminary design for the preferred alternative incorporates horizontal and vertical design, and the estimated retaining wall, bridge, side road, and overpass designs. The current designs incorporate avoidance and minimization measures to the extent practicable to the human and natural environment and are described in the following sections. Further refinements will occur to designs for the remainder of the project and will be presented to the NEPA/Section 404 Merger Team at CP4B- 30% Hydraulic Review and CP4C Permit Drawing Review merger meetings.

Number of Lanes in Section A

Traffic studies used to analyze detailed study alternatives in the DEIS showed the minimum number of lanes required to accommodate the projected traffic volumes would include eight through travel lanes (four in each direction) for the section from I-40 to Patton Avenue (where it is combined with I-240) and six through travel lanes (three in each direction) from Patton Avenue to Broadway.

The results of updated traffic analyses after selection of the preferred alternative resulted in the recommendation of a six-lane typical section for basic freeway lanes on I-26/I-240, from I-40 to US 19-23-70 (**Figure 7**).

I-26 Configuration between Amboy Road and Brevard Road

The 2015 DEIS designs treated the interchanges at NC 191 and Amboy Road as two separate diamond interchanges. For Amboy Road, those designs proposed to extend Amboy Road beginning at Carrier Park and going over the I-26 improvements, curving to south and running parallel to I-26, and then continuing on new location to intersect into NC 191 at the existing Fairfax Road/Shelburne Road Intersection. The designs also included proposed right-in/right-out access to Fairfax Avenue and Virginia Avenue for access to the neighborhoods. For the NC 191 interchange, the earlier designs improved 3 of the 4 existing ramps to meet current design standards, but eliminated the fourth ramp due to geometric constraints.

In March 2017, the project team met with the Fairfax/Virginia Avenue Community to discuss the 2015 DEIS designs and its impact to area residents. Residents expressed concern that allowing right-in/right-out movements from Amboy Road to the neighborhood would cause a significant amount of cut-through traffic. Community members also expressed concerns about the lack of greenway access and connectivity shown on the 2015 DEIS designs. Based on this community input, the interchanges at NC 191 and Amboy road were reconfigured into a split diamond interchange, which allowed one single interchange to fully serve both roads. This type of interchange provides one entrance/exit ramp pair at each crossing roadway (NC 191 and Amboy Road); NC 191 and Amboy Road are then connected with service roads to complete the interior of the diamond. As part of this reconfiguration, roundabouts were added to the ramp pair on Amboy Road, and the orientation of I-26 and Amboy Road was revised so that Amboy road now crosses under I-26.

This reconfiguration in the preferred alternative preliminary designs, when compared to the DEIS designs, functions better from a traffic operations perspective, provide superior multi-modal connectivity, and has less impact on existing traffic patterns. The removal of the Amboy Extension eliminates 11 total takes for single family houses and 4 total takes of multi-unit apartment buildings (estimated to be 12 total units) and reduces the project footprint approximately 8.4 acres on the west side of I-26 between Amboy and Patton Roads.

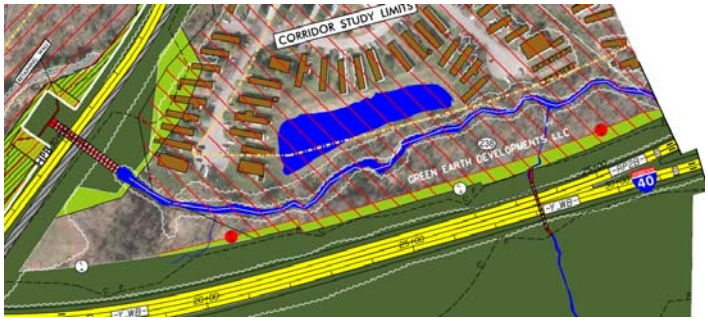
I-40 Collector/Distributor (C/D) Roads

The 2015 DEIS showed two C/D roadways north and south of I-40 from west of the I-26/I-40/I-240 interchange to within the I-40/US 19-23-74A (Smoky Park Highway) interchange.

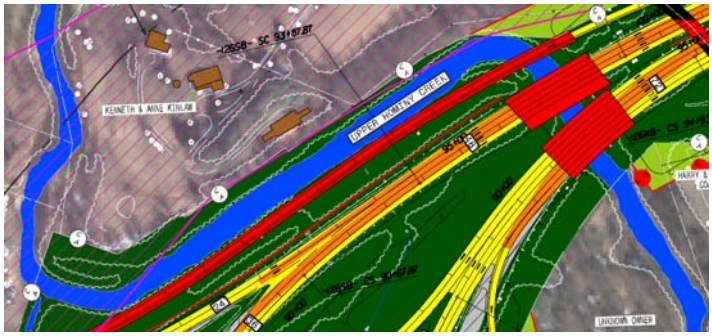
The revised traffic studies used to refine the preferred alternative designs showed traffic volumes were reduced within the project limits along I-40. As a result, the project team was able to eliminate approximately 20,000 feet of C/D roads in Section C of the project. This reduced impacts adjacent to both eastbound and westbound I-40 west of the I-26 interchange.

Removal of the C/D road along I-40 WB reduced impacts to the Asheville School property, eliminated approximately 10 relocations to residential properties along Montgomery Street, and eliminated impacts to two businesses in the northwest quadrant of US 19/23/70 (Smokey Park Highway). Additionally, by removing the westbound C/D road, the refined designs eliminated longitudinal impacts to Upper Hominy Creek and Ragsdale Creek. For the refined designs and due to elimination of this C/D, the ramp from I-26EB to I-40WB has been relocated approximately 65’ closer to the mainline alignments. This relocation took the alignment away its previous location which closely followed the banks of these water bodies and occasionally ran along their flowlines. The figure below gives a graphical representation of the minimizations provided by this refinement.

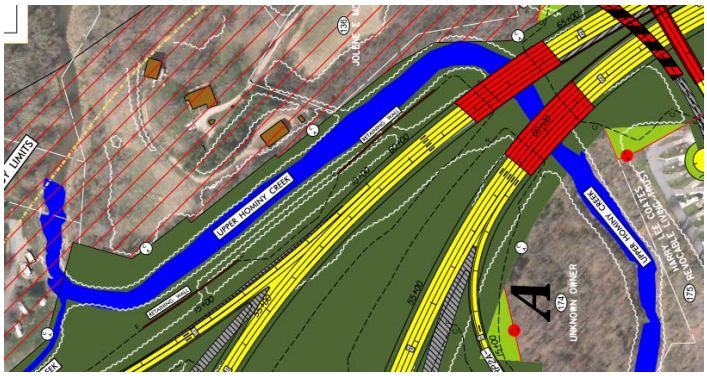
Ragsdale Creek from the DEIS (not to scale)



Ragsdale Creek after Design Refinements (not to scale)



Upper Hominy Creek from the DEIS (not to scale)



Upper Hominy Creek after Design Refinements (not to scale)

Removal of the C/D road along I-40 EB eliminated impacts to at least four businesses in the southwest quadrant of the I-40/Smokey Park Highway interchange, eliminated the extension of an existing RCBC in the southwest quadrant of the I-40/Smokey Park Highway interchange, and reduced residential right of way impacts south of I-40E, eliminating approximately 10 relocations.

Exit 44 Ramp over Railroad

The project team determined that due to the elimination of the westbound C/D road along I-40 in Section C, it was acceptable geometrically to add a new ramp connecting westbound I-40 to northbound Smokey Park Highway at Exit 44 and revise the existing loop to serve only westbound I-40 to southbound Smokey Park Highway traffic.

West Asheville Greenway

The detailed study alternative designs showed the West Asheville Greenway following or using Hazel Mill Road in the southeast quadrant of the I-26/Patton Avenue interchange. The refined designs for the preferred alternative realign the greenway to follow the proposed ramp in the southeast quadrant, which will eliminate right of way impacts, eliminate conflicts between vehicular and greenway traffic, and provide better connectivity of the proposed West Asheville Greenway to Patton Avenue.

HUMAN ENVIRONMENT

Impacts to residences and businesses were minimized to the greatest extent possible, while still allowing for traffic operations. A relocation report is currently being developed by NCDOT, and it is anticipated the number of relocations has been reduced from the designs used to compare alternatives in the DEIS.

Cultural Resources

The DEIS reported the preferred alternatives would require right of way from the following historic properties. It is also noted which determinations the HPO concurred with pursuant to Section 106 of the NHPA.

- Biltmore Estate-No adverse effect
- Asheville School-No adverse effect
- West Asheville/Aycock School Historic District-Adverse effect
- William Worley House-No adverse effect
- Montford Hills Historic District-No adverse effect

Based on the refined designs of the preferred alternative, the project would require permanent incorporation of right of way from only three of these historic architectural resources. The preferred alternative does not require the underground easement at the Montford Hill Historic District as in the previous designs, thereby eliminating all easement impacts. Right-of-way impacts to the Asheville School, West Asheville/Aycock School Historic District, and the William Worley House properties were reduced by the preferred alternative revised designs as shown in **Table 5** and described below. Right of way impacts were eliminated to the Montford Hills Historic District.

Montford Hills Historic District

The proposed mainline median was minimized from a total of 35'to 26'. Additionally, the design team revised the type of barrier used to protect mainline traffic from hitting the retaining wall. The combination of being able to reduce these two elements of the design pulled the retaining wall away from the historic district enough to allow for the elimination of the underground easement.

Asheville School

Due to updated traffic studies, the westbound C/D road was able to be eliminated along I-40 in the updated designs. This change reduced the typical section width of I-40 through the Asheville school, enabling the design team to utilize temporary construction easements in lieu of the proposed right of way displayed in the 2015 designs.

West Asheville/Aycock School

The typical section used to include the West Asheville Greenway into the project design was revised in order to reduce impacts at this resource. The 2015 designs showed the greenway being constructed as a completely separate facility from the on-bound ramp adjacent to the historic resource. In the revised designs, the greenway was incorporated into the updated typical section. This revision put the greenway 12'-30' closer to the I-26 ramp (and away from the school facilities), allowing for this reduction of the overall footprint.

William Worley House

The updated designs revised the type of barrier used to protect mainline traffic from hitting the retaining wall that is proposed in this location. This revision narrowed the mainline total footprint of the interstate and greenway facilities by 2.5'. Additionally, the alignment of the greenway was revised to be approximately 5' closer to the I-26 facility. This additional adjustment allowed for even greater reductions in impacts to this resource.

Table 5: Property Takings (in acres) of Historic Architectural Resources by the Preferred Alternative (Right-of-way/Easement)

Property	Section C		Section A		Section B	
	DEIS	*FEIS*	DEIS	*FEIS*	DEIS	*FEIS*
Asheville School	2.79/0.58	*0.51/1.48*	N/A	N/A	N/A	N/A
West Asheville/Aycock School Historic District and Boundary Increase	N/A	N/A	0.35/0.25	*0.15/0.10*	N/A	N/A
William Worley House	N/A	N/A	N/A	N/A	0.1/0.22	*0.05/0.26*
Montford Hills Historic District	N/A	N/A	N/A	N/A	0/0.03	*0/0*

Parks and Recreational Resources

The DEIS reported that the preferred alternative was 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 to allow the reconnection of Old Amboy Road and provide access to several properties west of Carrier Park along the banks of the French Broad River. Since publication of the DEIS and design refinement of the preferred alternative, the configuration at Amboy Road was realigned and avoided any required reconstruction of the greenway.

The preferred alternative would impact less than one acre of the existing Amboy Road frontage of Carrier 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, and remains even though the city has created additional parking areas within the park. The DEIS reported requiring 0.94 acre of additional right-of-way from this portion of Carrier Park, and has been reduced to 0.22 acre for the refined preferred alternative designs. This reduction was made possible because the revised Amboy Road grades are lower on the western extents of Carrier Park. Additionally, by adding the multi-use path on the south side of Amboy Road, curb and gutter was required. Standard NCDOT practice with curb and gutter facilities is to set right of way at the back of the berm. These two revisions account for the difference in permanent right of way required from Carrier Park as a result of the design revisions.

The preferred alternative would require placing bents in the French Broad River, which is designated by the state as a paddle trail, during construction of bridges over the French Broad River. Paddle accesses, campgrounds, and businesses along the French Broad River will be signed and/or notified by NCDOT prior to and during construction activity. See section entitled "Bridge Construction and River Use" at the end of this document for additional information on how impacts to the French Broad River and its users will be minimized.

NATURAL RESOURCES

Terrestrial Communities

Areas mapped as alluvial hardwood forest and mesic mixed forests are considered to be the only natural areas present within the project study area. Since this project would involve some construction on new location, fragmentation of these forested natural plant communities would be expected; however, refined designs have reduced impacts to the forest communities overall from 211.27 acres to 191.20 acres (**Table 6**).

Table 6: Vegetative Community Impacts of the Preferred Alternative

Vegetative Community	Coverage (acres)					
	Section C		Section A		Section B	
	DEIS	*FEIS*	DEIS	*FEIS*	DEIS	*FEIS*
Maintained/Disturbed	171.93	*157.1*	91.08	*81.3*	124.82	*135.9*
Mesic Mixed Forest	111.26	*105.4*	47.41	*42.7*	40.67	*34.2*
Alluvial Hardwood Forest	6.55	*3.7*	1.50	*1.4*	3.88	*3.8*
Total	289.74	*266.20*	139.99	*125.40*	169.37	*173.90*

Streams and Wetlands

Impacts to streams and wetlands were calculated within the slopes stakes of the current preliminary design plus 25 feet, and are shown on **Figures 12a through 12g**. The reduction in impacts from the designs used in the DEIS to the current designs of the preferred alternative are

shown below. There is an overall reduction of 724 linear feet of stream impacts and reduction of 0.63 acre of wetlands (**Tables 7 and 8**).

Table 7: Stream Impacts of Preferred Alternative

Description	Map ID	Classification [a]	Stream Impacts (linear feet)						Minimization Method
			Section C		Section A		Section B		
			DEIS	FEIS	DEIS	FEIS	DEIS	FEIS	
French Broad River	SA	P	0	*0*					N/A
Lower Hominy Creek	SB	P	0	*0*					N/A
Ragsdale Creek	SV	P	253	*219*					Increase at Y1A/Y1B because Y1 extended; reduction of CD roads, brought in slope stakes (adjacent to RP1A); added a retaining wall at
Trent Branch	SW	P	191	*147*					Retaining wall added; slope increased to pull in slope stakes
Upper Hominy Creek	SX	P	0	*0*					N/A
UT1C to French Broad River	SAB	I	14	*18*					Impact increase due to proximity of stream. Retaining wall added to reduce impacts to greatest extent possible.
UT1C to Lower Hominy Creek	SAC	I	79	*79*					Retaining wall added
UT1C to Ragsdale Creek	SAD	P	236	*109*					Reduced slope stakes; increased side slopes
UT1C to Upper Hominy Creek	SAF	P	43	*0*					Reduced slope stakes; increased side slopes
UT2 to UT 1C to French Broad River	SAG	I	278	*224*					Retaining wall added

Description	Map ID	Classification [a]	Stream Impacts (linear feet)						Minimization Method
			Section C		Section A		Section B		
			DEIS	FEIS	DEIS	FEIS	DEIS	FEIS	
UT2 to UT2C to Upper Hominy Creek	SAI	P	6	*0*					
UT2C To French Broad River	SE	P	22	*20*					Reduced slope stakes; increased side slopes
UT2C to Lower Hominy Creek	SAJ	P	0	*0*					N/A
UT2C to Ragsdale Creek	SAK	I	165	*109*					Increase slopes to pull in slope stakes
UT2C to Upper Hominy Creek	SAL	P	543	*0*					Added retaining wall
UT3C To Ragsdale Creek	SAN	P	154	*102*					Reduction of CD road; narrowed the on-ramp, resulting in a reduction of slope stakes
UT1 to UT1C to Trent Branch	SY	P	-	*82*					Impact increase - RP2C shifted further south to account for LP2C to meet design standards. Retaining wall added to reduce impacts to greatest extent possible.
UT1C to Trent Branch	SAE	P	-	*244*					Impact increase - RP2C shifted further south to account for LP2C to meet design standards. Retaining wall added to reduce impacts to greatest extent possible.

Description	Map ID	Classification [a]	Stream Impacts (linear feet)						Minimization Method
			Section C		Section A		Section B		
			DEIS	FEIS	DEIS	FEIS	DEIS	FEIS	
UT2 to UT1C to Trent Branch	SAH	P	-	*22*					Impact increase - RP2C shifted further south to account for LP2C to meet design standards. Retaining wall added to reduce impacts to greatest extent possible.
UT1A to French Broad River	SD	P			290	*238*			Reduced slope stakes; reduced CD roads
UT2A to French Broad River	SF	P			282	*164*			Roundabouts; pull in slope stakes; retaining wall
UT3C to Lower Hominy Creek	SH	P			6	*7*			N/A
Moore Branch	SC	P			220	*188*			Reduced slope stakes; increased side slopes
Lower Hominy Creek	SB	P			-	*0*			N/A
Smith Mill Creek	SR	P					254	*348*	N/A
UT1B to Smith Mill Creek	SG	I					1,348	*1,355*	Reduced slope stakes, added retaining wall
UT2B to Smith Mill Creek	SU	P					300	*299*	Retaining wall added; re-aligned on-ramp
UT3B to Smith Mill Creek	SS	P					0	*0*	N/A
UT1B to French Broad River	SN	I					0	*0*	N/A
UT2B to French Broad River	SI	I					130	*120*	Reduced slope stakes
UT3B to French Broad River	SO	P					31	*17*	Retaining wall extended

Description	Map ID	Classification [a]	Stream Impacts (linear feet)						Minimization Method
			Section C		Section A		Section B		
			DEIS	FEIS	DEIS	FEIS	DEIS	FEIS	
UT4B to French Broad River	SK	P					65	*32*	Retaining wall added
UT6B to French Broad River	SM	I					0	*0*	N/A
Total			**1,984**	***1,375***	**798**	***640***	**2,128**	***2,171***	

While there was an overall reduction of 724 linear feet of stream impacts, stream impacts at some locations are higher than what was reported in the DEIS.

Stream impacts for the 2018 designs in Section C indicate an increase from 0 linear feet at streams SY, SAE, and SAH to 82, 244, and 22 linear feet, respectively, due to the addition of retaining walls at these locations. The addition of retaining walls at stream SAB caused an increase from 14 linear feet to 18 linear feet of impact to UT1C to French Broad River.

The addition of retaining walls at stream SB caused an increase from 0 linear feet to 43 linear feet of impact to Lower Hominy Creek.

Stream impacts within the design slope stakes in Section B indicate an increase from 2,128 linear feet of impact to 2,171 linear feet of impact. Reported impacts to Smith Mill Creek (stream ID SR) near the I-240/Patton Avenue interchange increased from 254 of linear feet as reported in the DEIS to 348 linear feet of impact for the revised designs. This increase was due to how the stream impacts were calculated at this location for the DEIS designs, which should have included an additional 94 linear feet. This was accounted for in the stream impacts for the FEIS; therefore, technically the impacts at this location are the same. Impacts to UT1B to Smith Mill Creek (stream ID SG) increased from 1,348 linear feet to 1,355 linear feet due to the addition of a retaining wall. It should be noted that the interchange configuration at I-26/I-240/Patton Avenue in the 2018 FEIS designs are currently being reconfigured, which may further reduce stream impacts at these locations.

Table 8: Wetland impacts of Preferred Alternative

Wetland ID	NCDWR Rating [a]	Wetland Impacts (acres)						Minimization Method
		Section C		Section A		Section B		
		DEIS	FEIS	DEIS	FEIS	DEIS	FEIS	
WL	35	0.01	*0.02*					Brought in slope stake lines; increased side slopes
WK	35	0.03	*0.01*					Brought in slope stake lines; increased side slopes
WH	71	0.74	*0.59*					Brought in slope stake lines; increased side slopes

Wetland ID	NCDWR Rating [a]	Wetland Impacts (acres)						Minimization Method
		Section C		Section A		Section B		
		DEIS	FEIS	DEIS	FEIS	DEIS	FEIS	
WI	71	0.6	*0.6*					No Change
WAC	59	0.33	*0*					Removed C/D roads
WX	46	0.06	*0.01*					Reduced slope stakes; retaining road added
WZ	40	0.05	*0*					Brought in slope stake lines; increased side slopes
WJ	43	0.04	*0.04*					Retaining wall added
WAF	39	<0.01	*0*					Reduced project limits
WAG	39	0.01	*0*					Reduced project limits
WV	54	<0.01	*0*					Reduced slope stake lines
WQ	Unknown	0	*0*					N/A
WY	40	<0.01	*0*					Retaining wall added
WA	40			0.01	*0.01*			No Change
WC	43					0.06	0	Reduced study area
WF	29					0.04	0.04	No Change
WD	33					0	0	No Change
WG	20					0	0	No Change
Total	**N/A**	**1.86**	***1.29***	**0.01**	***0.01***	**0.1**	***0.04***	***N/A***

[a] Wetland rating procedure from A Field Guide to North Carolina Wetlands (NCDNR 1996). Wetlands are rated on a scale of 1 to 100, with 100 indicating the highest quality.

Overall there was a reduction in impacts to wetlands from what was reported in the DEIS to revised impacts for the 2018 designs. One wetland, wetland WL, increased from 0.01 to 0.02 acre of impact due to an increase in side slopes that were necessary to the wetland system associated with UT2C to French Broad River.

Protected Species

Gray Bat

The 2015 DEIS presented the biological conclusion of "unresolved" for the federally-endangered gray bat (*Myotis grisescens*). However, gray bats have been detected in multiple locations in Buncombe County since 2015.

Surveys are currently underway to investigate the presence of roosting and foraging habitat for gray bat. All bridges/overpasses and culverts that met minimum size requirements (5 feet by 200 feet) within the project study area are being checked for evidence of bat use. This included checks of bridges that span the French Broad River including the I-40 dual bridges, and bridges on Amboy Road, Haywood Road, and Pearson Bridge Road, among others. Only one structure, a culvert, showed evidence of bat use. In September 2017, NCWRC and USFWS identified a gray bat inside of the culvert. In December 2017, CALYX Engineers and Consultants, Inc. determined

that no gray bats were present, but staining was found on the vertical surfaces of the culvert. Based on the staining patterns, it was determined that the bats are likely roosting at scattered locations along the entire length of the culvert. An acoustic detector has been deployed at the culvert entrance since fall of 2017 to monitor bat activity. Emergence counts and trapping will be conducted multiple times in 2018 to determine the number, age, and reproductive status of bats using the culvert. This information will aid in determining whether the culvert is being used as a maternity roost.

The culvert is within the proposed roadway construction limits of the I-26 project, it was inspected for structural integrity in February 2018. The culvert was deemed sufficient for hydraulic capacity and in structurally "fair-good" condition.

Additional surveys will be conducted in spring and summer 2018 throughout the project study area, which may include emergence counts, acoustic surveys, and/or roost surveys to continue to gather data. NCDOT will continue to coordinate with NCWRC and USFWS regarding avoidance and minimization for the gray bat per Section 7 of the ESA of 1973, as amended (16 U.S.C. 1531 et seq.). Section 7 compliance will be sought and secured prior to signing the ROD.

Appalachian elktoe

The 2015 DEIS presented the biological conclusion of "may affect-not likely to adversely affect" for the Appalachian elktoe (*Alasmidonta raveneliana*). The Freshwater Mussel Survey Report evaluated the presence of freshwater mussels within the project study area and noted the Appalachian elktoe was not found at any sites within the project study area (Three Oaks Engineering 2018). The study did indicate, however, that Appalachian elktoe are present in the mainstream French Broad River upstream of surveyed sites, approximately 1.5 river miles from the project study area boundary. Based on this information, NCDOT is assuming presence and will comply with Section 7 of the ESA of 1973, as amended (16 U.S.C. 1531 et seq.) and information will be sought and secured prior to signing the ROD. Therefore, the biological conclusion will be "may affect- likely to adversely affect".

Tan riffleshell

The 2015 DEIS presented the biological conclusion of "may affect-not likely to adversely affect" for the Tan riffleshell (*Epioblasma florentina walkeri*). The Freshwater Mussel Survey report completed in January 2018 noted the species was not found at any sites within the project study area, and records of this species in this portion of the French Broad River Basin are historic. Based on these survey results, the updated biological conclusion of the tan riffleshell is "no effect."

SUMMARY OF BRIDGE CONSTRUCTION EVALUATION, RIVER USE, AND SECTION 7 CONSULTATION

The project includes the addition of new location bridges for I-26 and I-240 over the French Broad River, the replacement of bridges on I-40 over the French Broad River, and replacement of bridges on I-240 over Hominy Creek. Two federally protected species have been identified as occurring within the project study area, therefore NCDOT is evaluating constraints associated with construction of these bridges as part of securing Section 7 compliance for the gray bat and Appalachian elktoe prior to issuance of the Record of Decision (ROD). Preliminary coordination has begun with the US Army Corps of Engineers (USACE), US Fish and Wildlife Service (USFWS), the Federal Highway Administration (FHWA), and the NC Department of Water Resources (NCDWR) to determine potential impacts on protected species to assist in preparation of a Biological Assessment (BA) and subsequent Biological Opinion (BO).

The outcome of this evaluation will include a report entitled *I-26 Connector Proposed Bridge Construction* (bridge report), which will be used to develop guidance and provisions on activities associated with the I-2513 project in the BO that will be carried forward to the design-build team contract. The bridge report will include the following elements:

- Bridge Construction Evaluation
- River User Safety Plan
- River User Communication Plan

A summary of what is to be included in the final bridge report is included below. It is anticipated some aspects of this bridge report will be determined prior to signing of the ROD, with design-build provisions finalized during final design and before NCDOT submits the Section 404 permit application to USACE.

Bridge Construction Evaluation

The bridge construction evaluation portion of the bridge report will include documentation of how NCDOT proposes to manage hydraulic flow of the French Broad River during normal conditions and storm events, the effects of causeways and/or work bridges used during construction on water elevation, and proposed measures to avoid or minimize adverse effects from the causeways to upstream and downstream areas such as scouring of river banks and flooding. A range of sizes, with a focus on worst-case scenarios, for work bridges and/or causeways will be included in the evaluation, as well as a minimum allowable percentage of the river that will remain free-flowing while these are in use by the design-build contractor. Impacts of placing causeways in the river will be modeled if necessary to determine changes in the flow rate of the river and risk of inundation of properties within the 100-year floodplain.

As part of this evaluation, NCDOT will also provide a work plan for consideration of the time of day when construction occurs. It is anticipated the construction of causeways, deck concrete pouring, and beam setting, etc. may occur at night; therefore, constrained night work will need to be considered due to the use by bats of the corridor for foraging. Due to night work and presence of bats, NCDOT will also prescribe the amount and type of lighting used.

A timeline and phasing/staging of bridge construction will be detailed in this section of the bridge report.

The construction evaluation will also include a plan to address remediation measures for any streambank instability as soon as possible after a high water event, or in the case of a destabilizing issue that arises for some other reason related to the causeways - e.g., debris caught on the causeways, etc. Cross-sections at a number of locations will be used to monitor upstream and downstream of the causeways in preconstruction, during construction, and post construction. The bridge report will indicate the number of cross sections, locations, and what issues are being monitored such as bank stability/erosion and flooding.

Design Standards for Sensitive Waters (DSSW) will be used to mitigate the amount of sediment and erosion material that enters the French Broad River. A Sediment and Erosion Control (SEC) plan will be in place prior to any ground disturbance.

As part of this bridge report, a liaison will be identified between the design-build team, NCDOT, and the environmental and regulatory resource agencies to ensure effective communication and that the adherence to the bridge construction plan by the contractor is maintained.

River User Safety

This area of the French Broad River is actively used for recreation; therefore, it is not reasonable to close this portion of the river during construction of the bridges. The document will detail the efforts NCDOT will commit to for ensuring that river users are sufficiently notified of construction activity, as well as options to navigate the construction area or include takeouts to evacuate the area. Signage will be used upstream and downstream of the construction zone to effectively notify users.

It is anticipated certain activities, such as setting girders, will require temporary river closure to ensure the safety of river users. Most of these activities are anticipated to occur at night and/or in the winter, when river use is minimal. River closures will not occur during active use periods during holidays such as Memorial Day, Fourth of July, and Labor Day.

River User Communication Plan

NCDOT will prepare a plan that details how NCDOT will inform river users of the hazards during construction, such as closures, safety, etc. and to ensure effective public notification of the hazards, project progress, and temporary closures.

It is anticipated NCDOT will hold small group meetings before and during construction to determine the most effective ways to place signage upstream of the construction zone at river input and notify users through various outlets the construction schedules, closures, and other pertinent information. This outreach will be coordinated with the City of Asheville, Buncombe County, the NC Department of Parks and Recreation, Riverlink, and others. Target audiences will include property owners along the river, river outfitters, paddling/tubing/fishing businesses, local government officials, and other civic groups such as Riverlink and Mountain True.

SUMMARY OF PREFERRED ALTERNATIVE IMPACTS

Impacts calculated for the DEIS compared to the current designs for the preferred alternative to be presented in the FEIS are in **Table 9**. Both used slope stake limits plus a 25-foot buffer.

Table 9: Overall Comparison of Impacts from DEIS and FEIS

Resource	Section C (I-26/I-40/I-240 Interchange)		Section A		Section B (New Location across French Broad)	
	Draft EIS	Final EIS	Draft EIS	Final EIS	Draft EIS	Final EIS
	Alternative F-1		I-240 Widening		Alternative 4-B	
Project Features						
Length (miles)						
I-26	2.2	2.2	2.0	2.0	2.5	2.5
I-40/I-240	2.8	2.8	0.0	0.0	1.5	1.5
Total Length	5.0	5.0	2.0	2.0	4.0	4.0
Interchanges	3	3	3	3	3	3
Railroad Crossings	2	2	0	0	5	5
Navigable Waterway Crossings	1	1	0	0	4	4
Construction Cost	$203,300,000	*TBD*	$105,700,000	*TBD*	$291,300,000	*TBD*
Right-of-Way Cost	$17,100,000	*TBD*	$29,400,000	*TBD*	$36,800,000	*TBD*
Utilities Cost	$2,100,000	*TBD*	$3,400,000	*TBD*	$3,900,000	*TBD*
Total Cost	$222,500,000	*TBD*	$138,500,000	*TBD*	$332,000,000	*TBD*
Socioeconomic Features						
Relocations						
Residential	31	*TBD*	81	*TBD*	33	*TBD*
Business	5	*TBD*	17	*TBD*	34	*TBD*
Nonprofit	0	*TBD*	1	*TBD*	1	*TBD*
Total	**36**	*TBD*	**99**	*TBD*	**68**	*TBD*
Schools Relocated	0	*0*	1	*0*	0	*0*
Churches Relocated	1	*1*	1	*0*	1	*2*
Parks and Recreational Areas Impacted	1	*0*	2	*1*	0	*0*
Cemeteries Impacted	0	*0*	0	*0*	0	*0*
Physical Environment						
Noise Impacts (No-Build)	193	*TBD*	181	*TBD*	243	*TBD*
Noise Impacts (before abatement)	304	*TBD*	198	*TBD*	224	*TBD*
Noise Impacts (after abatement)	274	*TBD*	94	*TBD*	89	*TBD*
Hazardous Material Sites (moderate or high) Impacted	1	*1*	0	*0*	1	*1*

Resource	Section C (I-26/I-40/I-240 Interchange)		Section A		Section B (New Location across French Broad)	
	Draft EIS	Final EIS	Draft EIS	Final EIS	Draft EIS	Final EIS
	Alternative F-1		I-240 Widening		Alternative 4-B	
Floodplain Impacts (acres)	16.63	*14.23*	8.36	*6.75*	3.91	*2.57*
Floodway Impacts (acres)	2.00	*1.72*	1.94	*1.02*	0.38	*0.36*
Land Use Impacts by Zoning Category (acres)						
Residential Single-Family Districts	12.5	*5.4*	8.4	*3.5*	7.5	*3.9*
Residential Multifamily Districts	16.0	*5.4*	26.5	*16.8*	17.0	*8.9*
Neighborhood Business District	0	*0.0*	0	*0.1*	0.1	*0.1*
Community Business Districts	0.0	*0.0*	4.9	*0.0*	0.0	*0.0*
Industrial	0	*0.0*	0	*0.0*	0.4	*0.4*
Institutional District	34.5	*9.5*	13.6	*4.1*	0.4	*0.1*
Office	0.0	*0.0*	0.0	*0.0*	0.0	*0.0*
Highway Business District	7.8	*0.1*	1.9	*2.0*	14.3	*2.0*
Regional Business District	27.1	*0.3*	0.0	*0.0*	10.5	*6.9*
Central Business District	0.0	*0.0*	0.4	*0.0*	0.3	*0.1*
Commercial	24.8	*4.9*	2.7	*1.8*	0.0	*0.0*
Resort District	0.0	*0.0*	0.0	*0.0*	19.6	*16.9*
River District	0.0	*0.0*	6.3	*3.2*	22.3	*15.3*
Haywood Road	--	*0.0*	--	*4.8*	--	*0.0*
Total	**122.6**	***25.7***	**64.7**	***36.1***	**92.5**	***54.5***
Cultural Resources						
Historic Properties – Section 106 Effects	0	*0*	1 Adverse Effect	*1 Adverse Effect*	1 Adverse Effect	*1 Adverse Effect*
Historic Properties Impacted	1	*1*	2	*1*	2	*1*
Archeological Sites Impacted	6	*4*	2	*2*	0	*0*
Natural Environment						
Biotic Resources (acres)						
Maintained/ disturbed	171.93	*157.1*	91.08	*81.3*	124.82	*121.17*
Mesic Mixed Forest	111.26	*105.4*	47.41	*42.7*	40.67	*32.71*
Alluvial Hardwood Forest	6.55	*3.7*	1.50	*1.4*	3.88	*3.8*
Open Water	0.17	*0.20*	0	*0*	0.00	*0*
Total	**289.90**	*266.40*	**139.99**	*125.40*	**169.37**	*157.68*

Resource	Section C (I-26/I-40/I-240 Interchange)		Section A		Section B (New Location across French Broad)	
	Draft EIS	Final EIS	Draft EIS	Final EIS	Draft EIS	Final EIS
	Alternative F-1		I-240 Widening		Alternative 4-B	
Impervious Surface Increase (acres)	57.12		27.45		40.45	
Stream Impacts (#)	12	*15*	4	*5*	7	*8*
Stream Impacts (linear feet)	1,984	*1,376*	798	*640*	2,128	*2,171*
Wetland Impacts (#)	12	*6*	1	*1*	2	*1*
Wetland Impacts (acres)	1.86	*1.27*	0.01	*0.01*	0.10	*0.04*
Pond Impacts(#)	0	*0*	0	*0*	0	*0*
Pond Impacts(acres)	0	*0*	0	*0*	0	*0*
Protected Species Adversely Affected	2	*2*	2	*2*	2	*2*

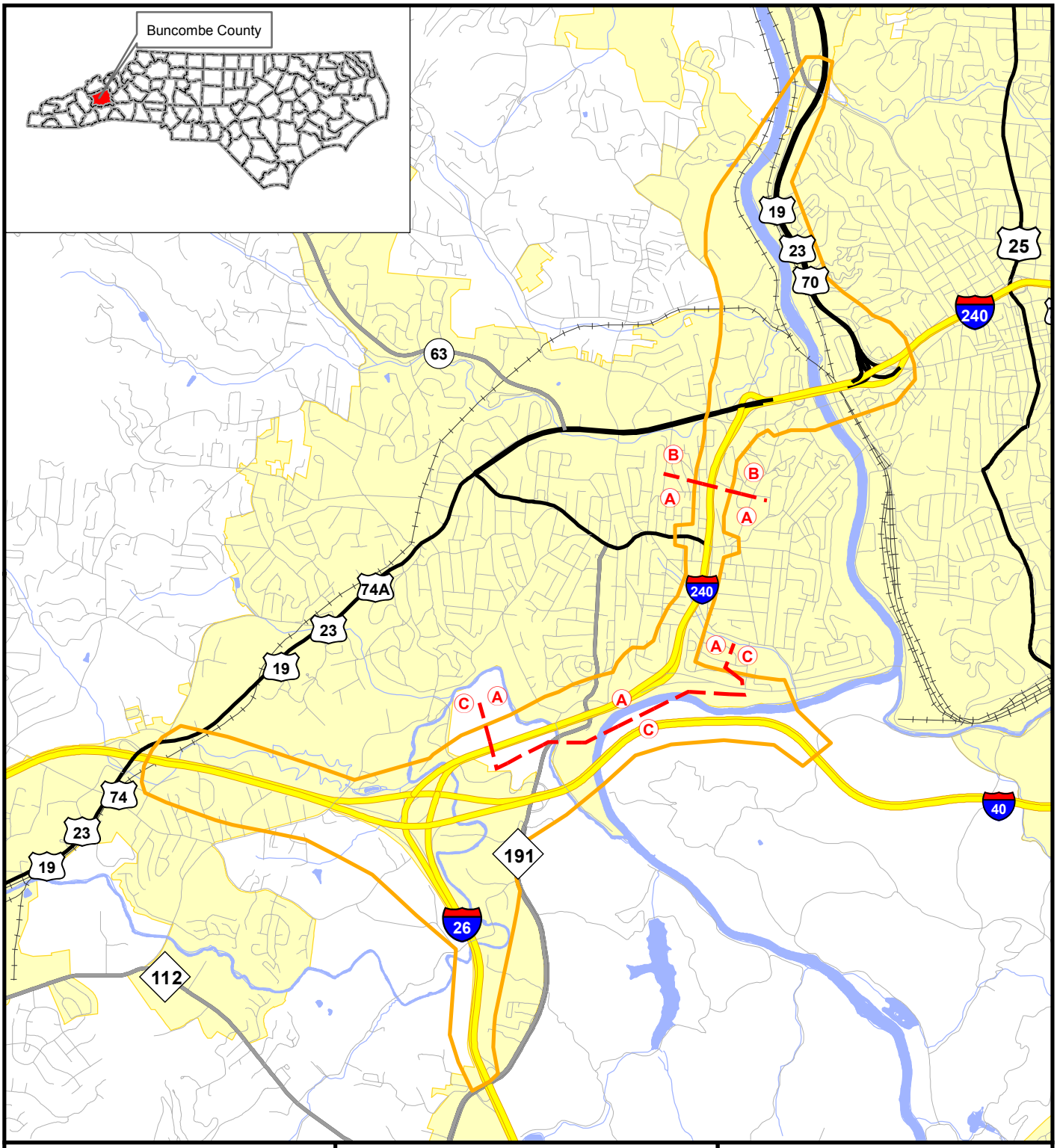
SUMMARY OF RECENT PUBLIC AND AGENCY INVOLVEMENT

NCDOT published the DEIS in October 2015 and subsequently had a Corridor Design Public Hearing in November 2015. Since that time, NCDOT and the project team have participated in periodic meetings with the City of Asheville, local organizations, adjacent neighborhoods, and historic property owners in order to better understand concerns and to obtain input on how the project could be refined to better fit within the context of Asheville while meeting local and regional needs.

In addition, NCDOT and the City of Asheville established the I-26 Connector Working Group, which initiated a series of meetings between members of the City of Asheville City Council, the Asheville Design Center, Buncombe County, FHWA, the FBRMPO, NCDOT, and other stakeholders. The purpose of these working group meetings was to discuss methodologies for various technical aspects of the project, discuss FHWA and NCDOT policies that factor into designs of the various project alternatives, receive feedback from local officials and public citizens on various aspects of the project, discuss bicycle and pedestrian accommodations, among other topics. The I-26 Connector Working Group will continue to coordinate with NCDOT throughout development of the project and into final design.

SCHEDULE

Mid 2018:	Final Environmental Impact Statement
Fall 2018:	Hold Local Officials Meeting, Pre-Hearing Open House, and Design Public Hearing
Late 2018:	Record of Decision
2020:	Section C and B ROW Acquisition and Construction
Future Years:	Section A ROW Acquisition and Construction



North Carolina Department of Transportation

Legend

- Original Project Study Area
- Interstate
- US Highway
- State Highway
- State Route
- Local Road
- Railroad
- Streams (non-delineated)
- Water
- Municipal Boundary

Date: May 2018

N W E S

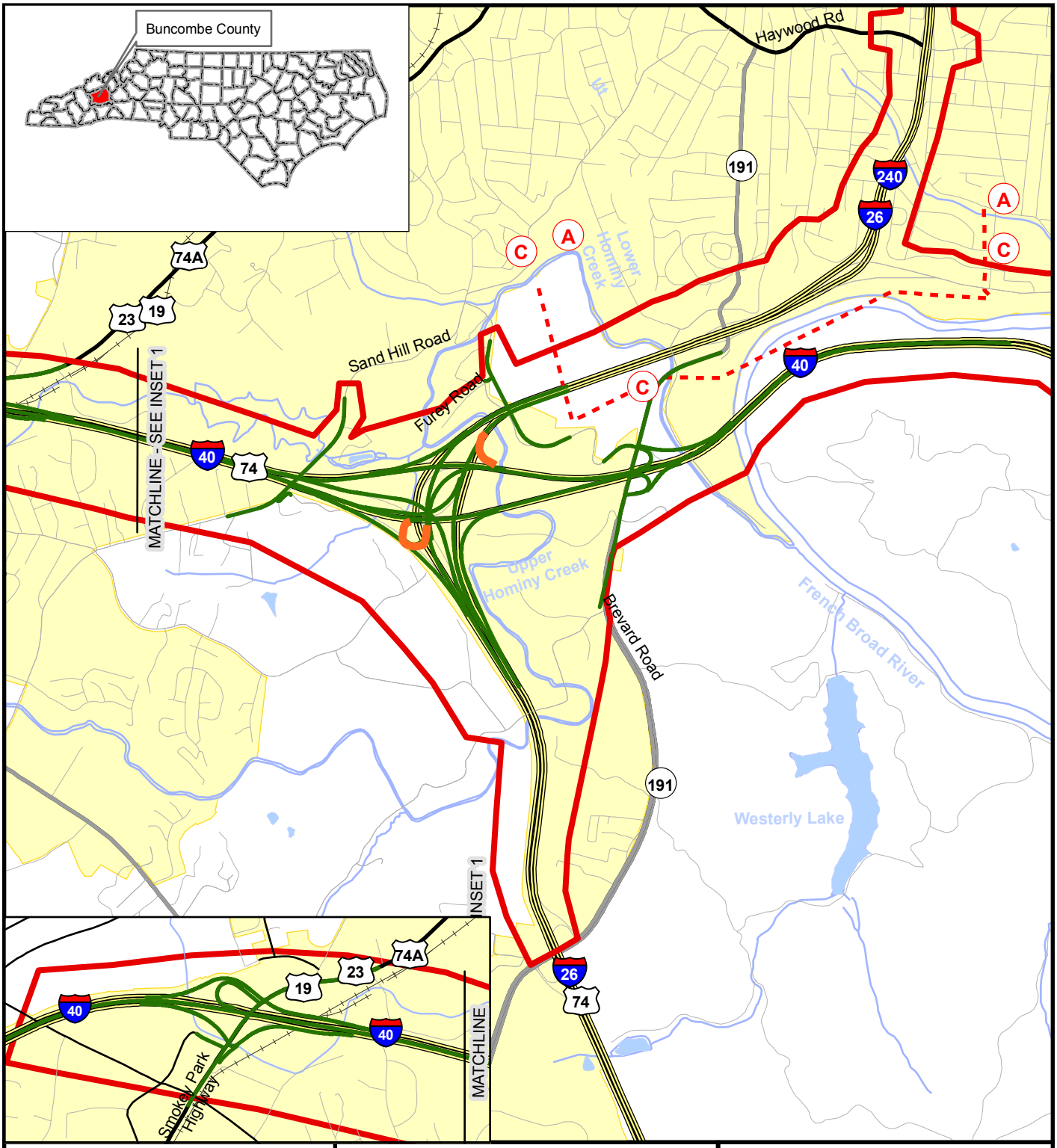
0 0.5 1 Miles

I-26 Asheville Connector
Buncombe County

STIP Project No. I-2513

Figure 1

Project Study Area and Sections



North Carolina Department of Transportation

Legend

- Section Boundaries
- Project Study Area
- Detailed Study Alternative
- Interstate
- US Highway
- State Highway
- State Route
- Local Road
- Railroad
- Streams (non-delineated)
- Water
- Municipal Boundary

Date: May 2018

N W E S

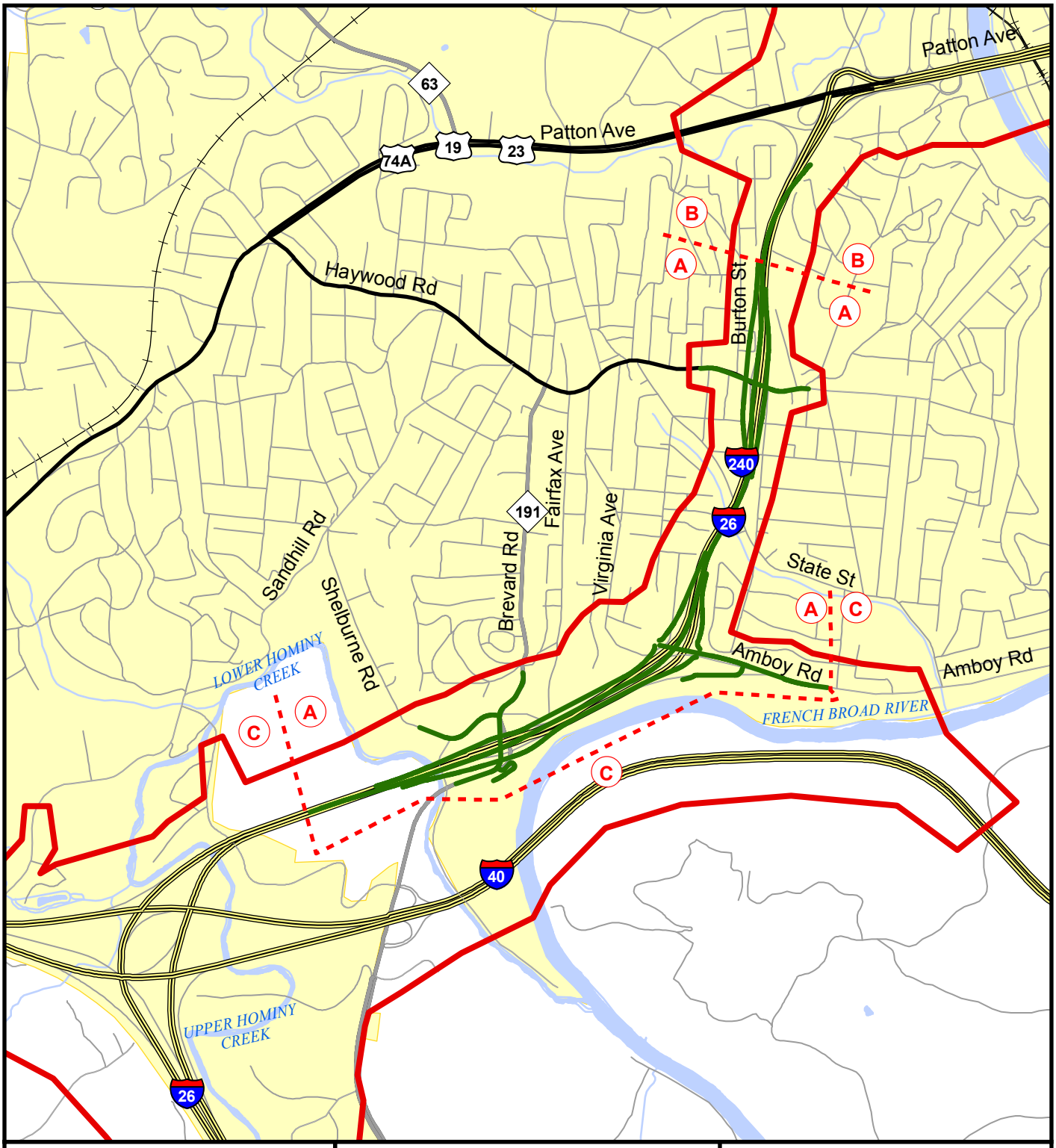
0 0.25 0.5 Miles

I-26 Asheville Connector
Buncombe County

STIP Project No. I-2513

Figure 2

Section C
Preferred Alternative



North Carolina Department of Transportation

Legend

- Section Boundaries
- Project Study Area
- Detailed Study Alternative
- Interstate
- US Highway
- State Highway
- State Route
- Local Road
- Railroad
- Streams (non-delineated)
- Water
- Municipal Boundaries

Date: May 2018

N
W E
S

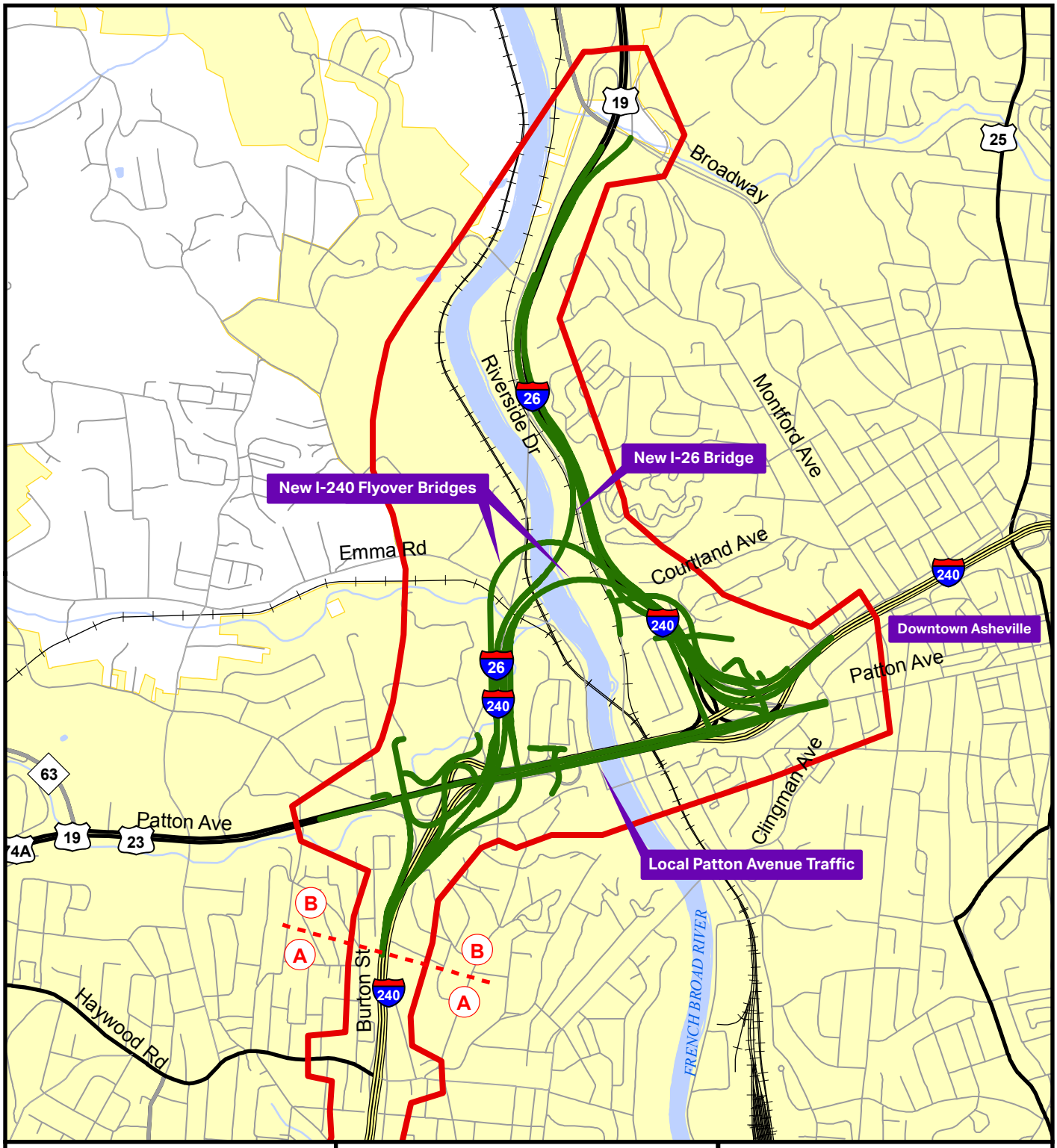
0 0.25 0.5 Miles

I-26 Asheville Connector
Buncombe County

STIP Project No. I-2513

Figure 3

Section A
Preferred Alternative



North Carolina Department of Transportation

Legend

- Section Boundaries
- Project Study Area
- Detailed Study Alternative
- Interstate
- US Highway
- State Highway
- State Route
- Local Road
- Railroad
- Streams (non-delineated)
- Water
- Municipal Boundaries

Date: May 2018

0 0.25 0.5 Miles

I-26 Asheville Connector
Buncombe County

STIP Project No. I-2513

Figure 4

Section B
Preferred Alternative

Figure 5: I-26 South of I-40 Interchange

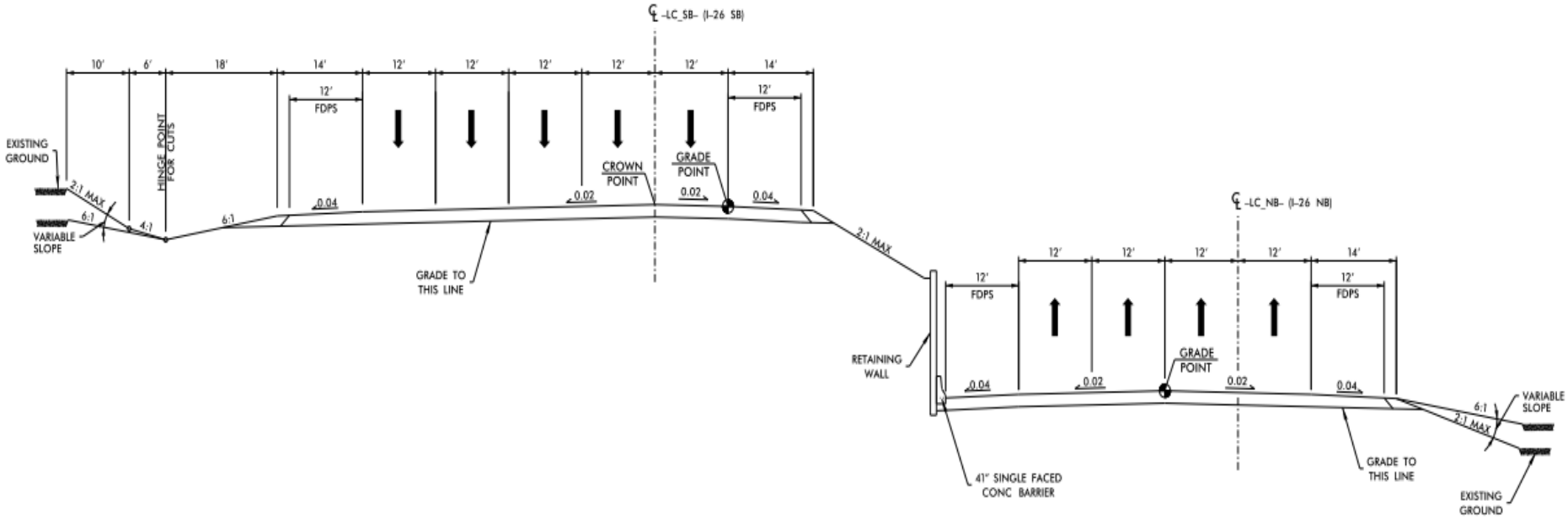


Figure 6: I-26 through I-40 Interchange

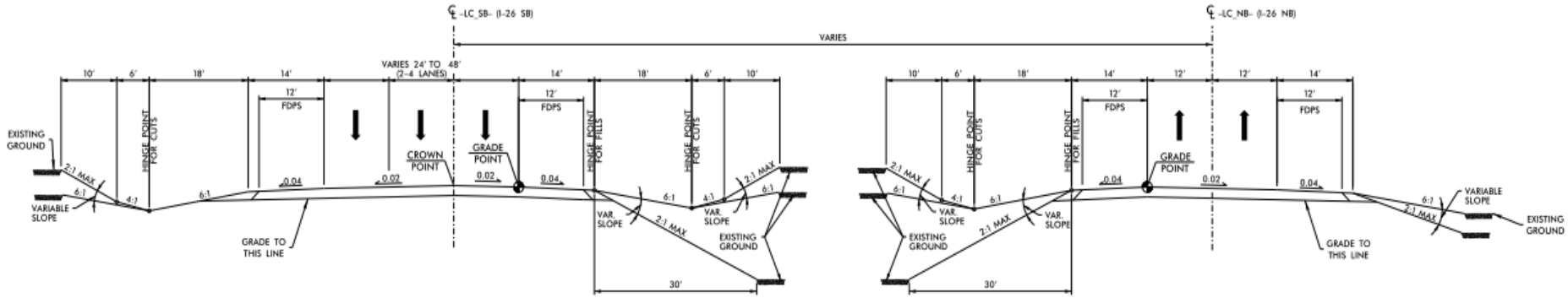


Figure 7: I-26 from I-40 Interchange to Patton Avenue

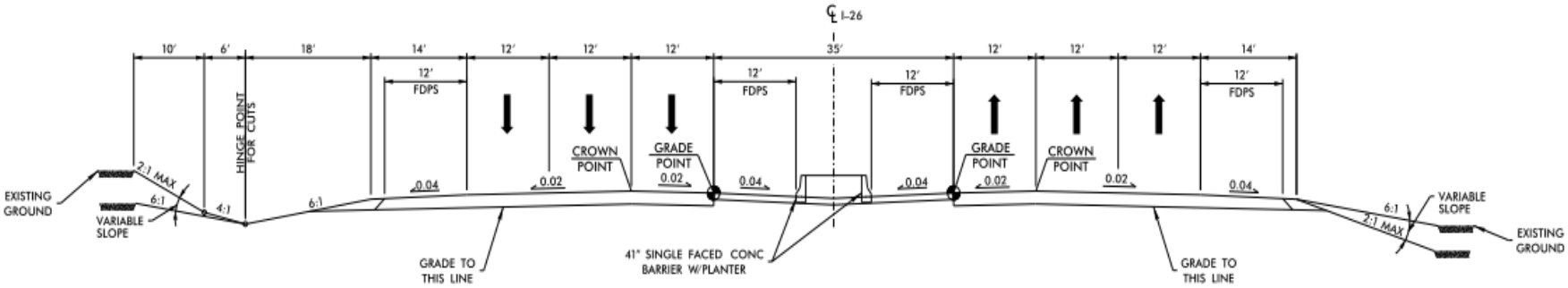
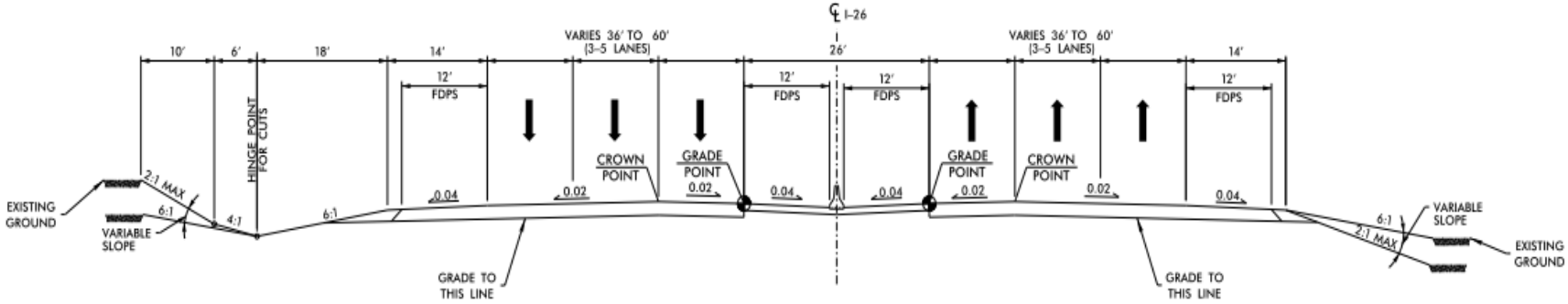
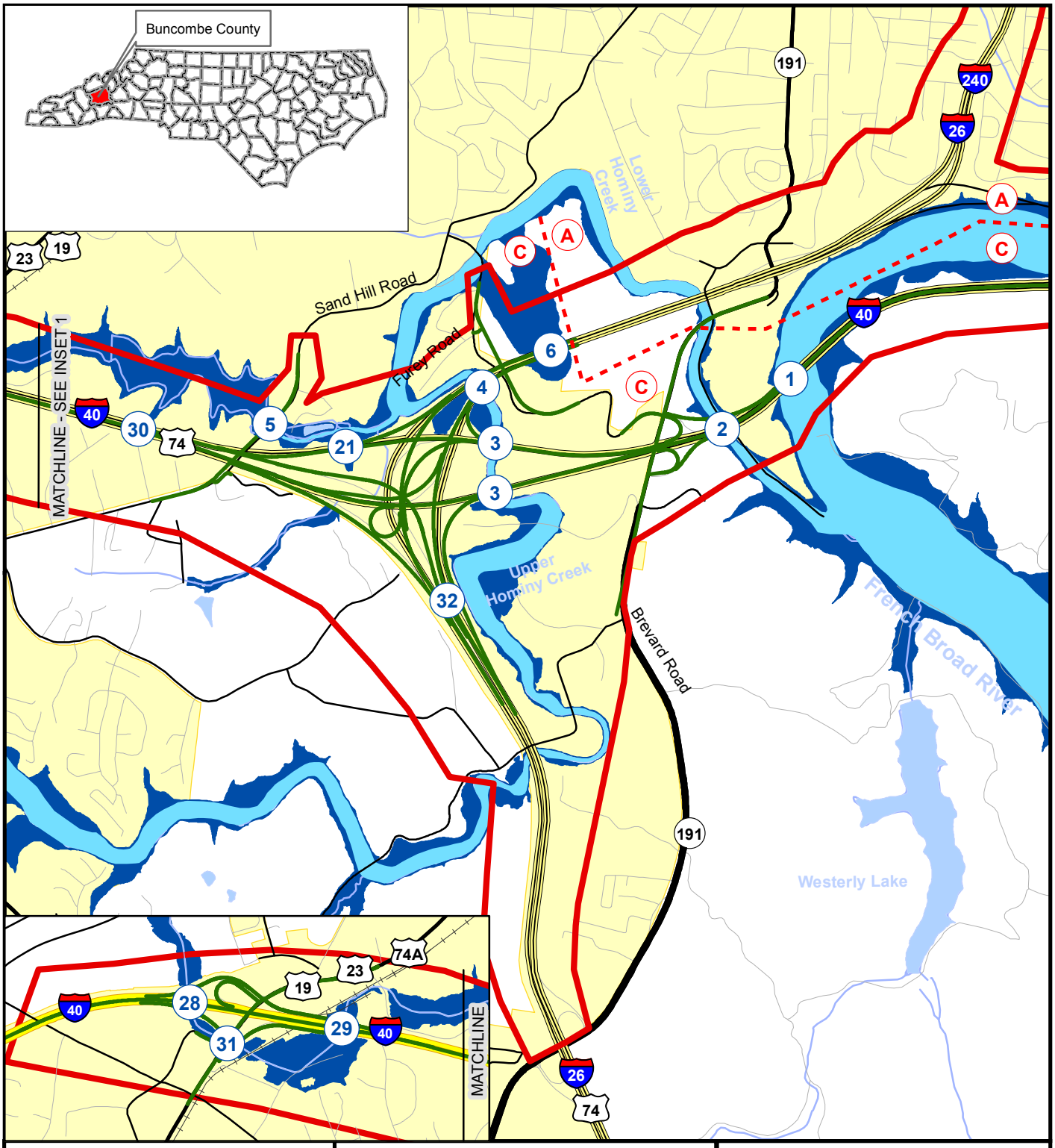


Figure 8: I-26 from Patton Avenue to Broadway





North Carolina Department of Transportation

Legend

- Proposed Roadway Alignment
- Section Boundaries
- Interstate
- US Highway
- State Highway
- State Route
- Local Roads
- Railroad
- Streams (non-delineat...
- Water
- Floodway
- 100 Year Floodplain
- Project Study Area
- Municipal Boundary
- (7) Crossing Site Number

Date: April 2018

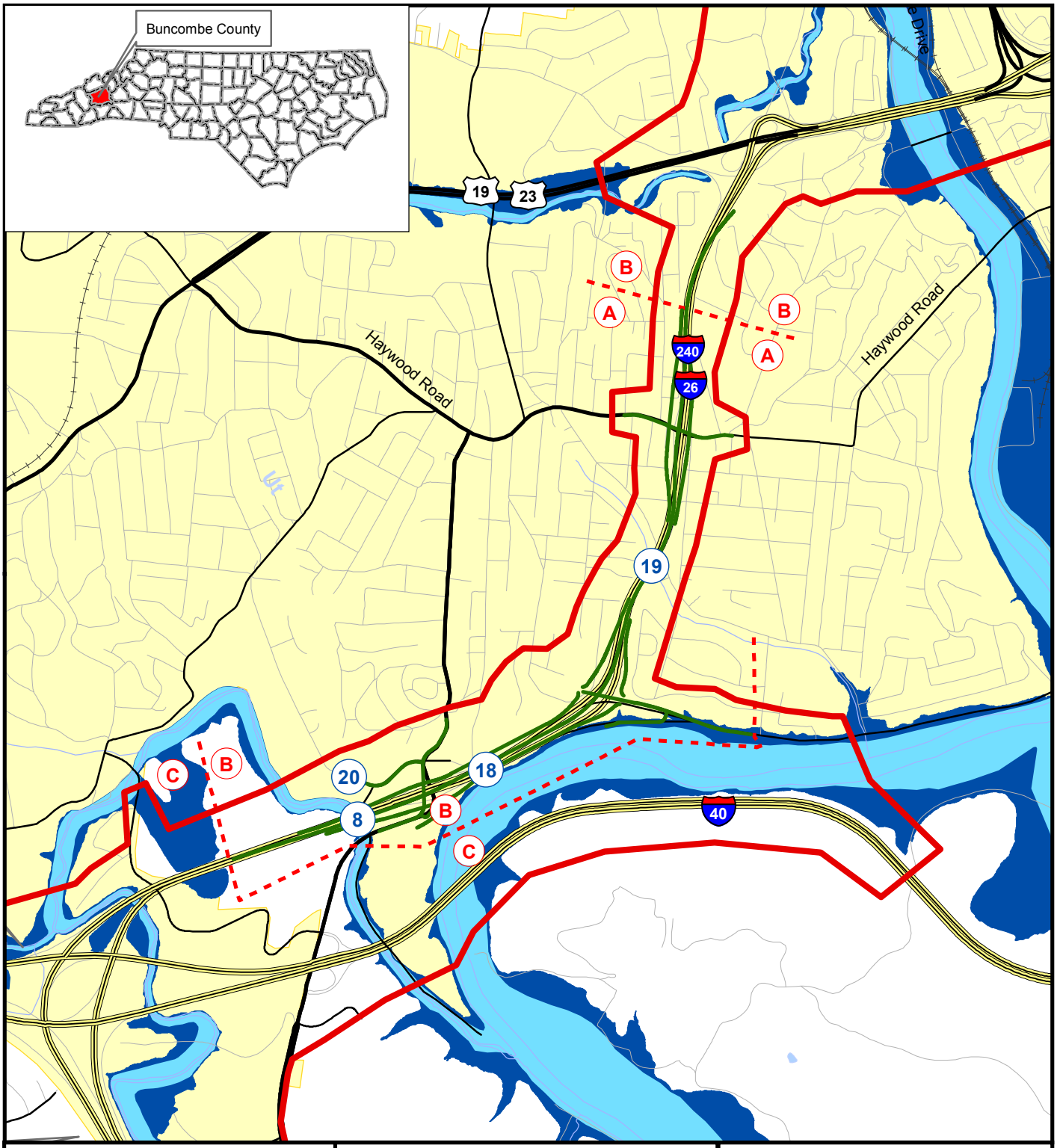
0 1,000 2,000 3,000 Feet

I-26 Asheville Connector
Buncombe County

STIP Project No. I-2513

Figure 9

Section C
Proposed Hydraulic Crossings



North Carolina
Department of Transportation

Legend

- Proposed Roadway Alignment
- Section Boundaries
- Interstate
- US Highway
- State Highway
- State Route
- Local Roads
- Railroad
- Streams (non-delineat...
- Water
- Floodway
- 100 Year Floodplain
- Project Study Area
- Municipal Boundary
- (7) Crossing Site Number

Date: May 2018

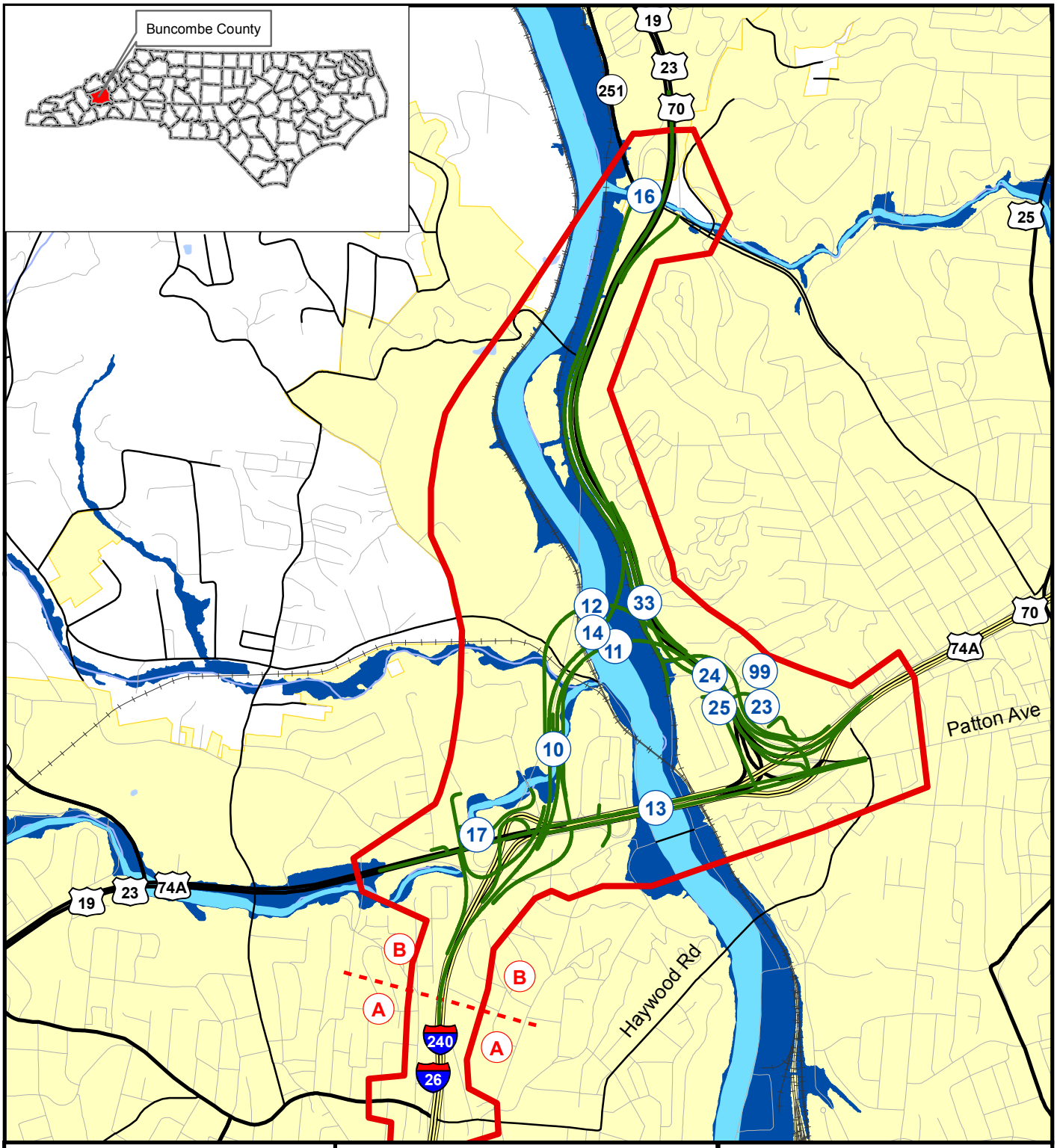
0 0.25 0.5 Miles

I-26 Asheville Connector
Buncombe County

STIP Project No. I-2513

Figure 10

Section A
Proposed Hydraulic Crossings



North Carolina Department of Transportation

Legend

- Proposed Roadway Alignment
- Section Boundaries
- Interstate
- US Highway
- State Highway
- State Route
- Local Roads
- Railroad
- Streams (non-delineat...
- Water
- Floodway
- 100 Year Floodplain
- Project Study Area
- Municipal Boundary
- (7) Crossing Site Number

Date: May 2018

N W E S

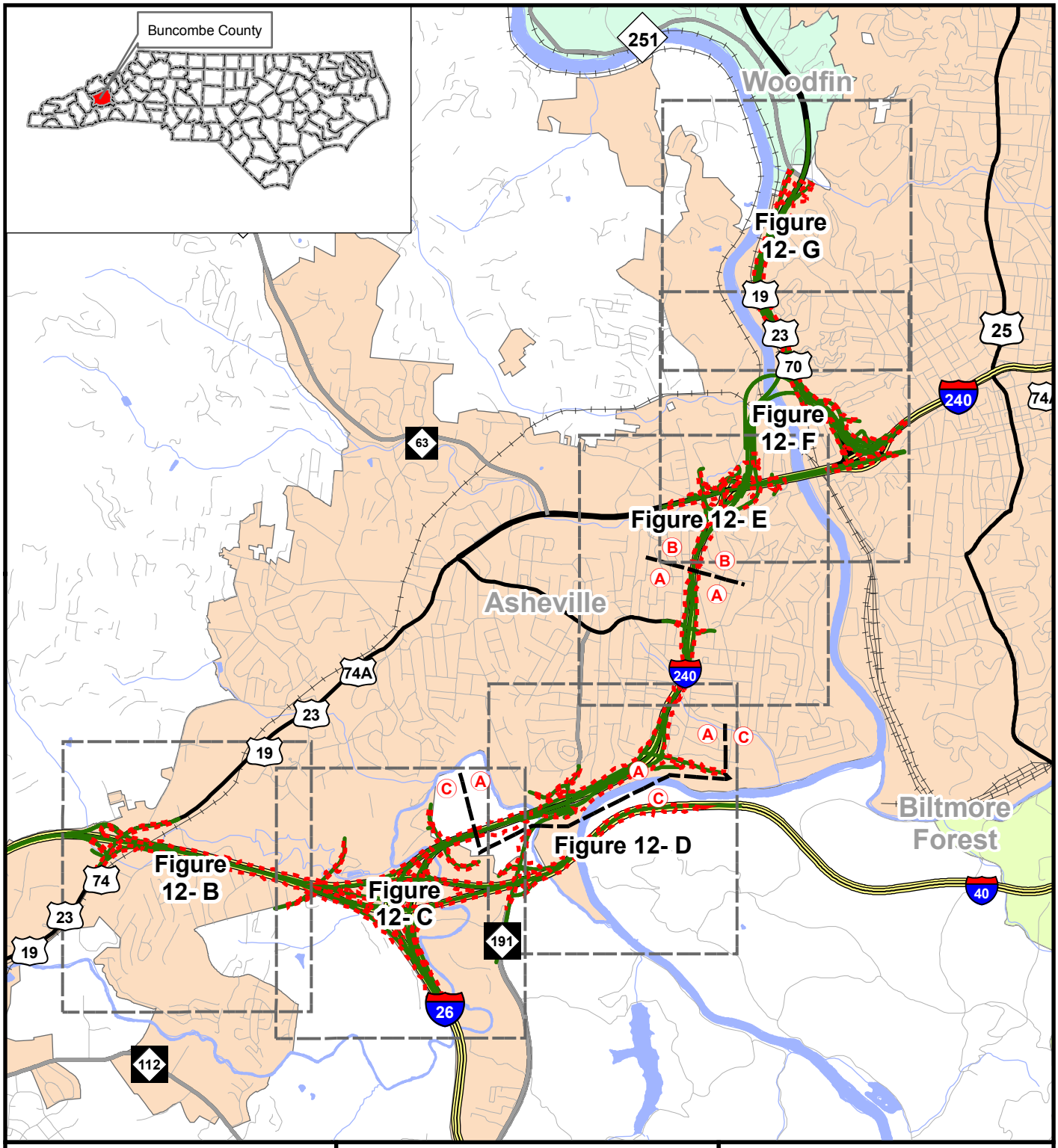
0 0.25 0.5 Miles

I-26 Asheville Connector
Buncombe County

STIP Project No. I-2513

Figure 11

Section C
Proposed Hydraulic Crossings



North Carolina
Department of Transportation

Legend

- Figure Key
- Section Boundaries
- Slope Stake Limits
- Proposed Roadway Alignment
- Interstate
- US Highway
- NC Highway
- Local Road
- Railroad
- Streams (non-delineated)
- Water
- Asheville
- Biltmore Forest
- Weaverville
- Woodfin

Date: May 2018

N W E S

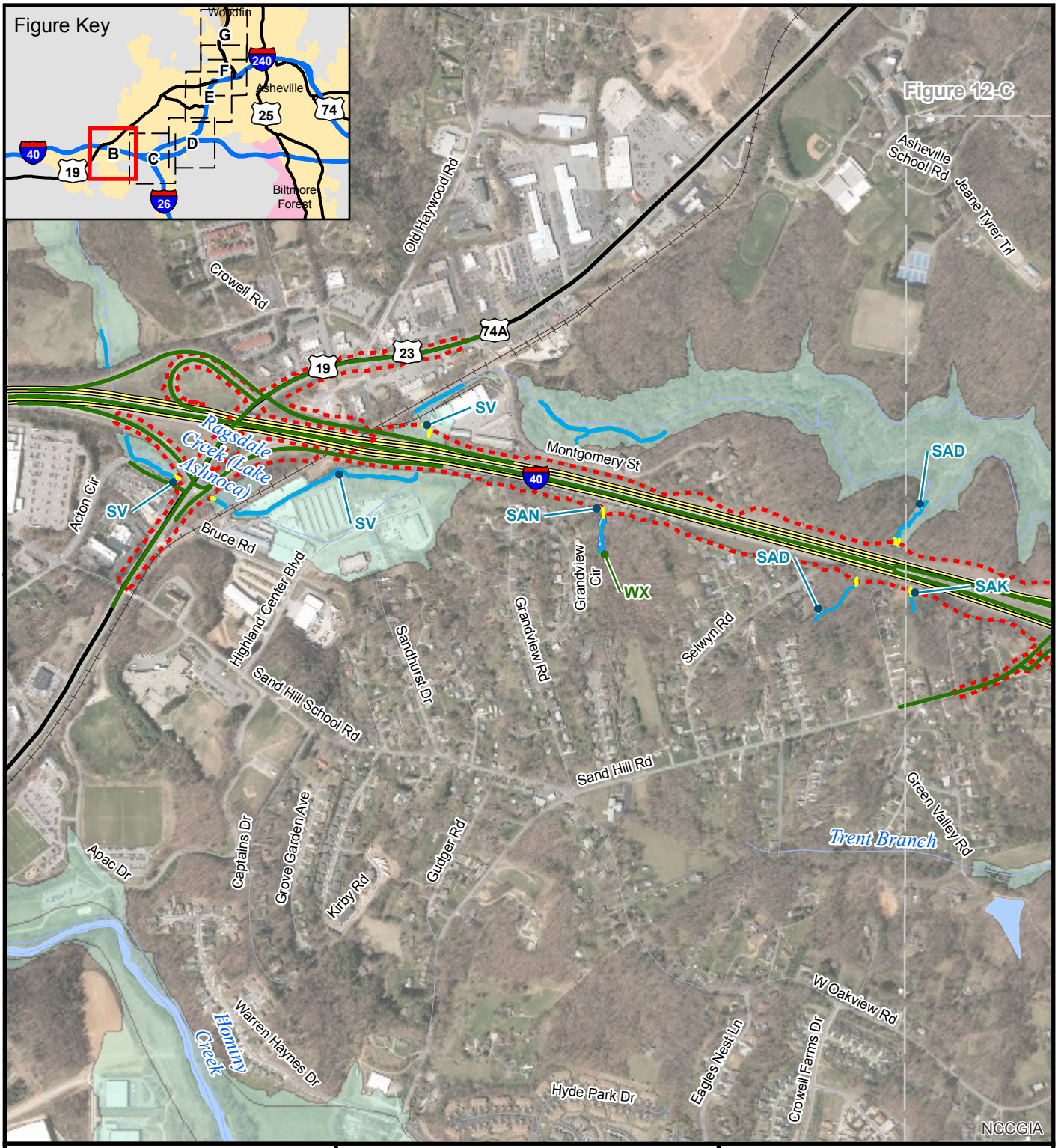
0 0.5 1 Miles

I-26 Asheville Connector
Buncombe County

STIP Project No. I-2513

Figure 12-A

Stream and Wetland Impacts



North Carolina Department of Transportation

Legend

- SS Stream Impact
- SS Wetland Impact
- Delineated Stream
- Delineated Wetland
- Slope Stake Limits
- Proposed Roadway Alignment
- Section Boundaries
- Interstate
- US Highway
- NC Highway
- Local Roads
- Railroad
- Streams (non-delineated)
- Water
- Municipal Boundary
- 100 Year Floodplain
- Matchline

Date: May 2018

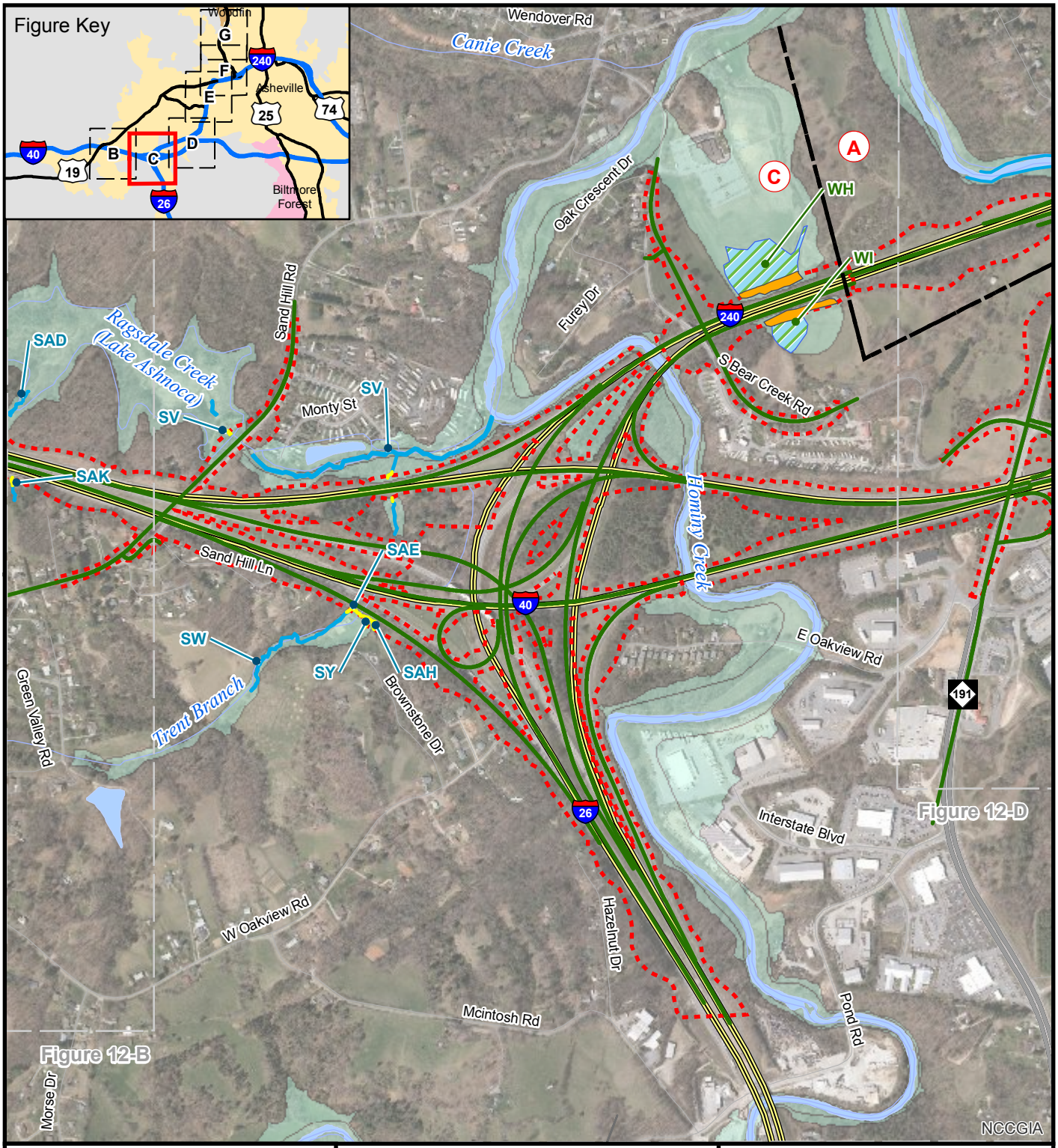
0 0.25 Miles

I-26 Asheville Connector
Buncombe County

STIP Project No. I-2513

Figure 12-B

Stream and Wetland Impacts



North Carolina Department of Transportation

Legend

- SS Stream Impact
- SS Wetland Impact
- Delineated Stream
- Delineated Wetland
- Slope Stake Limits
- Proposed Roadway Alignment
- Section Boundaries
- Interstate
- US Highway
- NC Highway
- Local Roads
- Railroad
- Streams (non-delineated)
- Water
- Municipal Boundary
- 100 Year Floodplain
- Matchline

Date: May 2018

N W E S

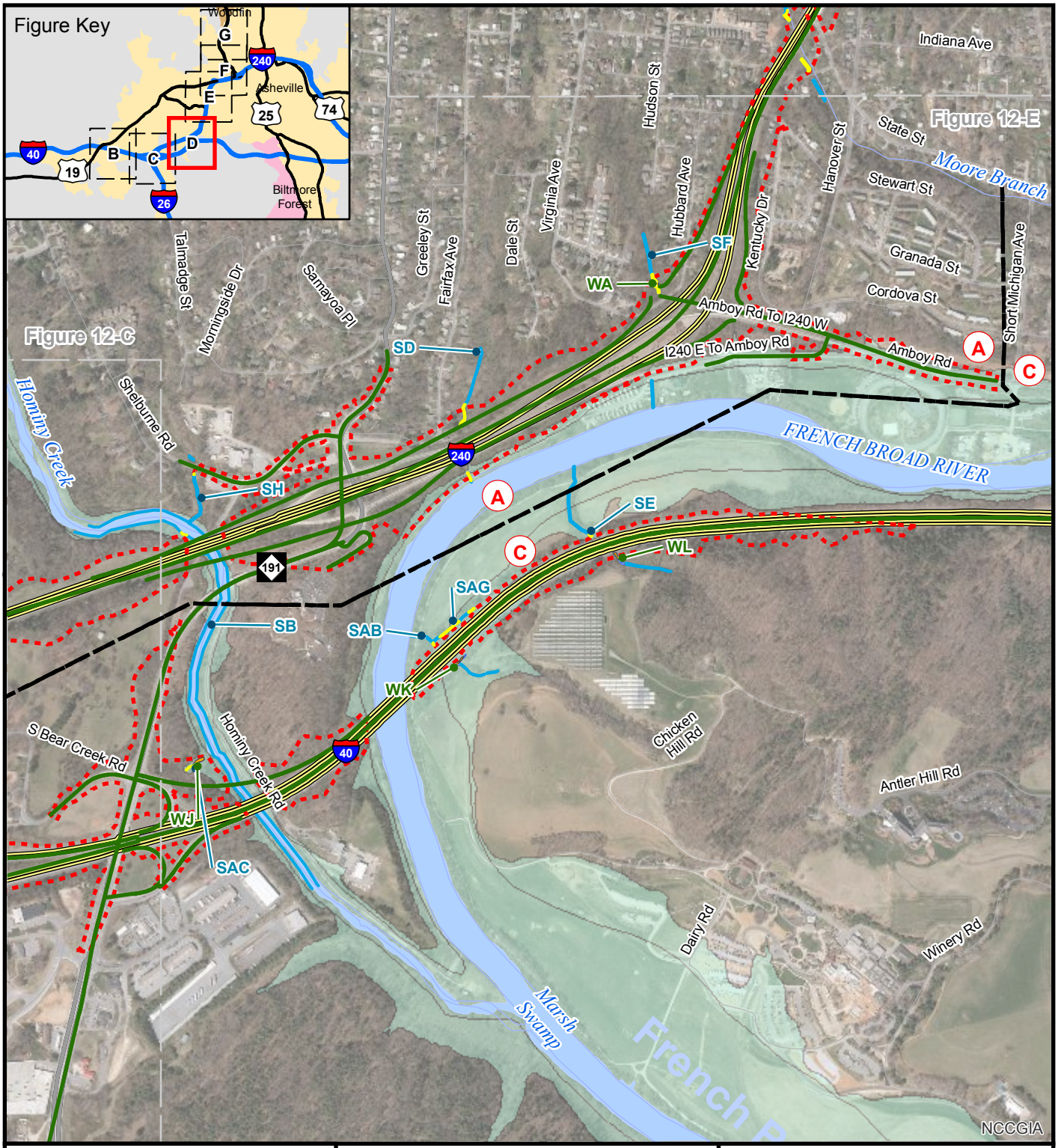
0 0.25 Miles

I-26 Asheville Connector
Buncombe County

STIP Project No. I-2513

Figure 12-C

Stream and Wetland Impacts



North Carolina Department of Transportation

Legend

- SS Stream Impact
- SS Wetland Impact
- Delineated Stream
- Delineated Wetland
- Slope Stake Limits
- Proposed Roadway Alignment
- Section Boundaries
- Interstate
- US Highway
- NC Highway
- Local Roads
- Railroad
- Streams (non-delineated)
- Water
- Municipal Boundary
- 100 Year Floodplain
- Matchline

Date: May 2018

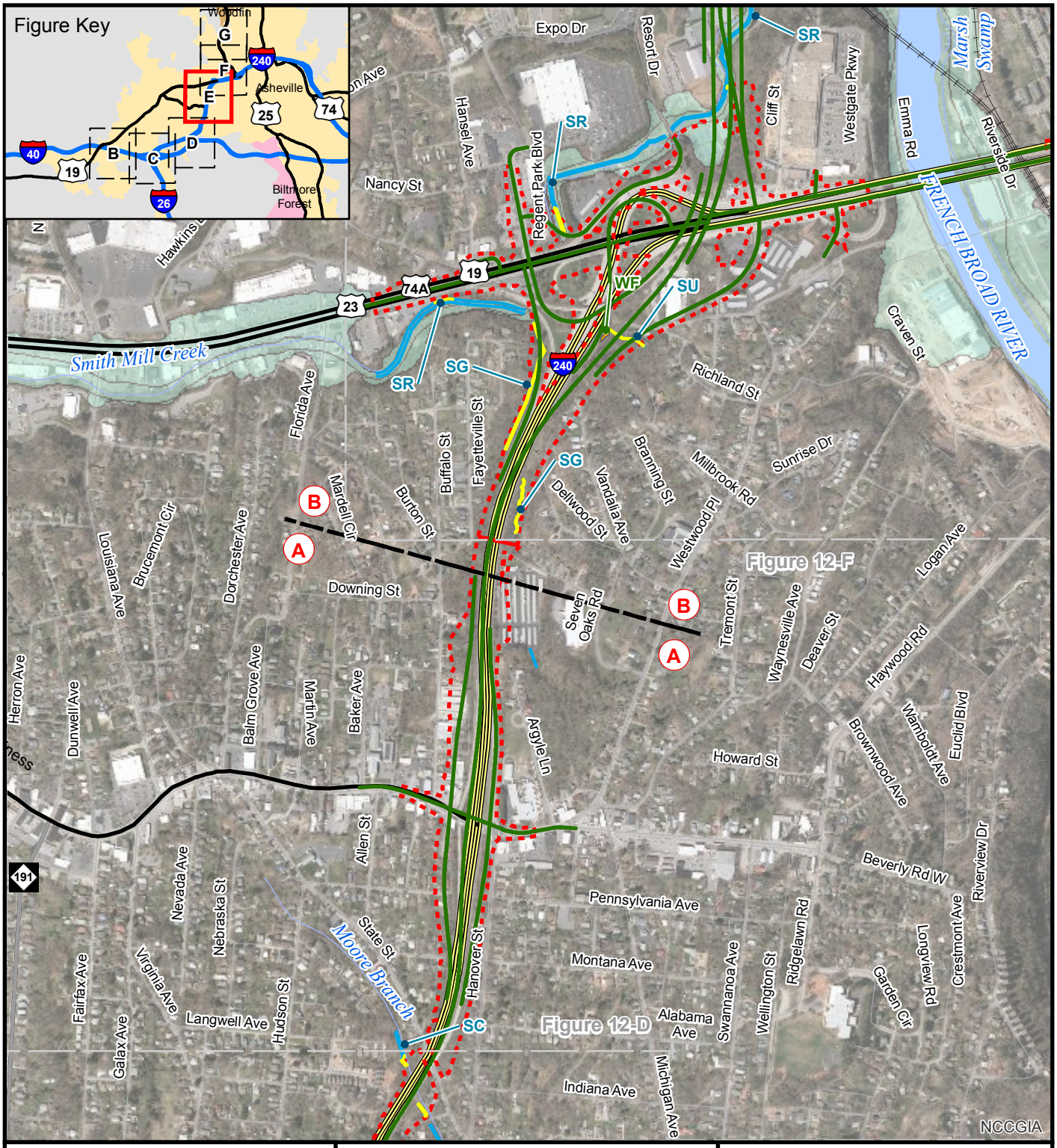
0 0.25 Miles

I-26 Asheville Connector
Buncombe County

STIP Project No. I-2513

Figure 12-D

Stream and Wetland Impacts



North Carolina Department of Transportation

Legend

- SS Stream Impact
- SS Wetland Impact
- Delineated Stream
- Delineated Wetland
- Slope Stake Limits
- Proposed Roadway Alignment
- Section Boundaries
- Interstate
- US Highway
- NC Highway
- Local Roads
- Railroad
- Streams (non-delineated)
- Water
- Municipal Boundary
- 100 Year Floodplain
- Matchline

Date: May 2018

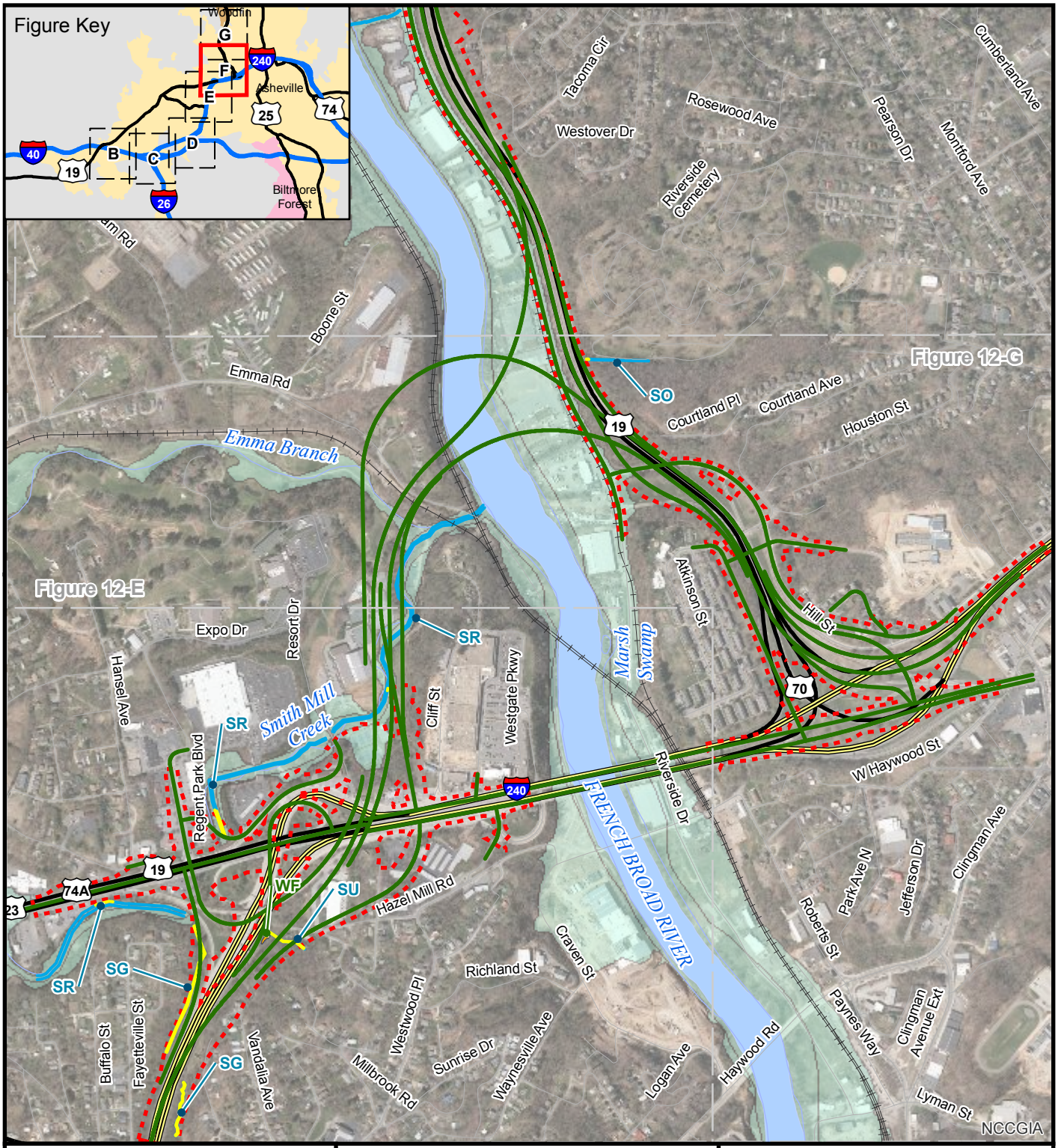
0 0.25 Miles

I-26 Asheville Connector
Buncombe County

STIP Project No. I-2513

Figure 12-E

Stream and Wetland Impacts



North Carolina Department of Transportation

Legend

- SS Stream Impact
- SS Wetland Impact
- Delineated Stream
- Delineated Wetland
- Slope Stake Limits
- Proposed Roadway Alignment
- Section Boundaries
- Interstate
- US Highway
- NC Highway
- Local Roads
- Railroad
- Streams (non-delineated)
- Water
- Municipal Boundary
- 100 Year Floodplain
- Matchline

Date: May 2018

N W E S

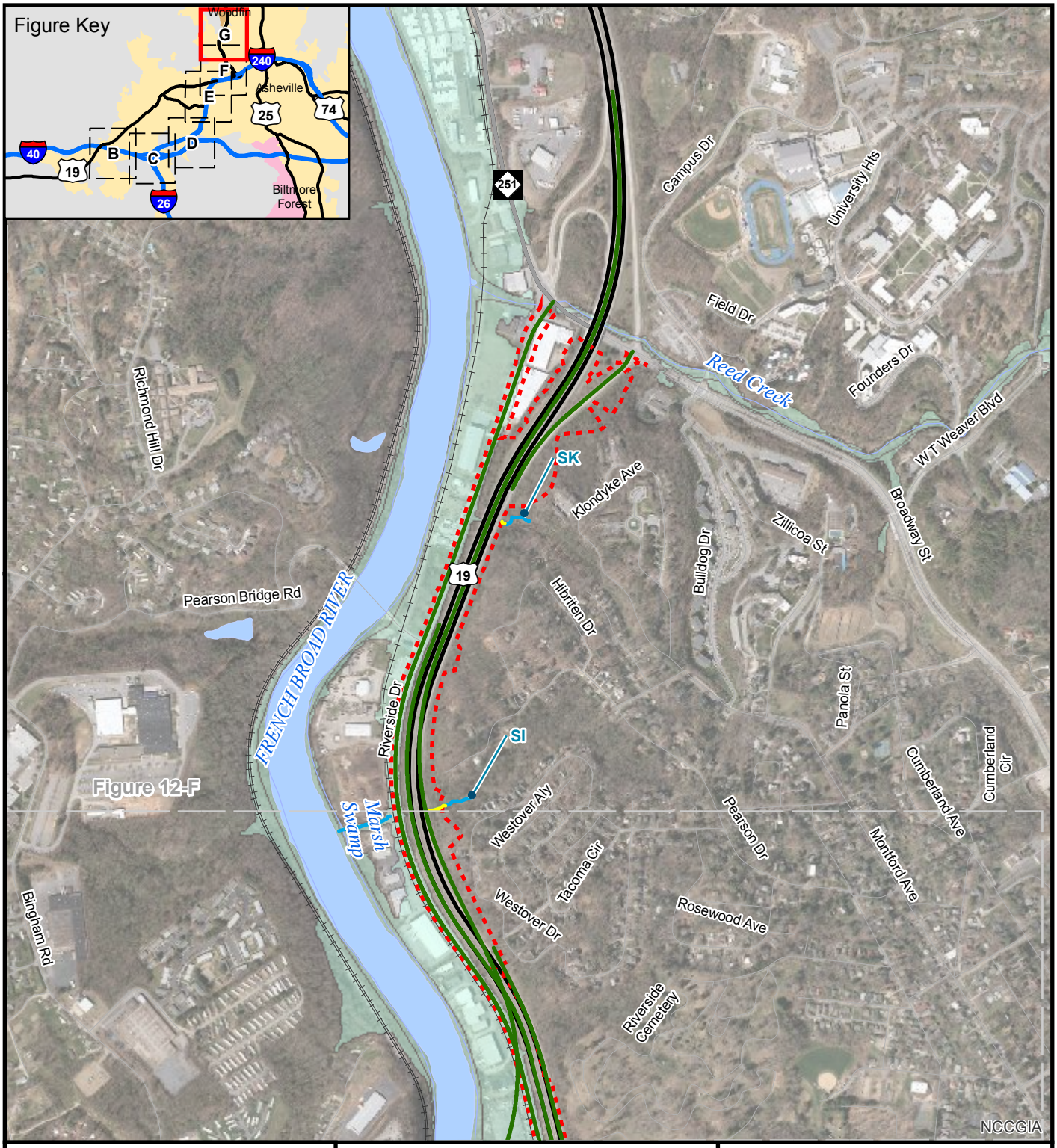
0 0.25 Miles

I-26 Asheville Connector
Buncombe County

STIP Project No. I-2513

Figure 12-F

Stream and Wetland Impacts



North Carolina Department of Transportation

Legend

- SS Stream Impact
- SS Wetland Impact
- Delineated Stream
- Delineated Wetland
- Slope Stake Limits
- Proposed Roadway Alignment
- Section Boundaries
- Interstate
- US Highway
- NC Highway
- Local Roads
- Railroad
- Streams (non-delineated)
- Water
- Municipal Boundary
- 100 Year Floodplain
- Matchline

Date: May 2018

N W E S

0 0.25 Miles

I-26 Asheville Connector
Buncombe County

STIP Project No. I-2513

Figure 12-G

Stream and Wetland Impacts