US Army Corps
of Engineers
Wilmington District

PUBLIC NOTICE

Issue Date: September 2, 2021
Comment Deadline: October 4, 2021
Corps Action ID #: SAW-2021-01535
STIP Project No. HE-0001

The Wilmington District, Corps of Engineers (Corps) has received an application from the North Carolina Department of Transportation (NCDOT) regarding a potential future requirement for Department of the Army (DA) authorization to discharge dredged or fill material into waters of the United States associated with the construction of a new interchange on Interstate 26 (I-26) to provide access to I-26 and improve east-west connectivity within the project vicinity to accommodate current and planned growth in Buncombe County, North Carolina (STIP Project No. HE-0001). The proposed project also includes construction of a 2-lane roadway that would connect the proposed interchange to a road that is currently under construction by a private developer (Frederick Law Olmsted Way East). Once road construction is completed by the private developer, Frederick Law Olmsted Way East will connect to NC 191.

Specific project and location information is described below and shown on the attached figures. This Public Notice and attachments are also available on the Wilmington District Web Site at http://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Public-Notices/

The Public may also review maps, visualizations, and informational videos about this project at https://www.publicinput.com/I26-exit35-buncombe

Applicant: North Carolina Department of Transportation
Division 13
McCray Coates, PE, Division Project Manager
55 Orange Street
Asheville, North Carolina 28802

Authority

The Corps will evaluate this application to compare alternatives that have been carried forward for detailed study pursuant to applicable procedures of Section 404 of the Clean Water Act (33 U.S.C. 1344).

The Federal Highway Administration (FHWA) is the lead federal agency for this project and anticipates completion of a National Environmental Policy Act (NEPA) Type III Categorical Exclusion (CE) in Spring 2022.

This project is being reviewed through the interagency Merger Process.

In order to fully integrate Section 404 permit requirements with NEPA, and to determine that the project is not contrary to the public interest and complies with the 404(b)(1) Guidelines, the Corps is soliciting public comment on the merits of this proposal and on the alternatives presented herein. At the close of this public notice comment period, the District Commander will evaluate and consider the comments received as well as the expected adverse and beneficial effects of the proposed project to select the least environmentally damaging practicable alternative (LEDPA). The District Commander is not authorizing construction of the proposed project at this time. Authorization for this project (i.e., a DA Individual Permit or verification letter for the use of a General Permit) may be issued only after our review process is complete, impacts to the aquatic environment have been minimized to the maximum extent practicable, and a compensatory mitigation plan for unavoidable impacts has been approved.

Location

Nearest Town: Asheville
Nearest Waterway: French Broad River
River Basin: French Broad
Latitude and Longitude: 35.50378, -82.57796

The approximately 210-acre project study area (PSA) for this project is located approximately 6 miles south of Asheville along and west of I-26 and north of the Blue Ridge Parkway (BRP). Due to the French Broad River's meandering/sinuous channel in the project vicinity, the proposed project is located to the south, east, and north of the river (see Figures 1 and 2).

The I-40 system interchange is located approximately 4 miles to the north of the PSA and the Asheville Regional Airport is located approximately 5 miles to the south. As shown on Figure 1, the PSA is located in between the BRP and the French Broad River to avoid impacts to both features (inclusive of the bridge infrastructure associated with both) and to account for proposed interchange ramp length requirements.

The Biltmore Estate property is located east of I-26 at the site of the proposed interchange (Exit 35).

NC 191 (Brevard Road) is a north-south roadway connecting Hendersonville in Henderson County to Asheville in Buncombe County. NC 191 generally parallels I-26 south of Asheville and interchanges with I-26 (Exit 33) approximately 3 miles north of the project area. NC 146 (Long Shoals Road) is an east-west roadway connecting NC 191 to US 25 (Hendersonville Road), with an I-26 interchange (Exit 37) approximately 2 miles south of the project area (see Figure 4).

Existing Site Conditions

I-26 is an east-west freeway facility connecting Charleston, South Carolina to Kingsport, Tennessee. In North Carolina, I-26 is included in the NC Strategic Transportation Corridors (STC) Network as Corridor C (I-26/US 23). This section of I-26 also carries the US 74 designation. The portion of I-26 that is located in the PSA for the proposed project is currently under construction for widening to eight lanes (four lanes in each direction of travel) and includes the widening/replacement of the I-26 bridges over the French Broad River and the replacement of the Blue Ridge Parkway (BRP) bridge on new alignment under the NCDOT STIP No. I-4400/4700 project. Note that the BRP has a grade separated crossing but no direct access to I-26.

Land use in the project vicinity is mixed and includes manufacturing/distribution facilities, single- and multi-family residential neighborhoods, open space, and commercial and recreational uses. North of the Clayton Road (SR 3501) intersection, the NC 191 corridor is characterized by preserved open space in proximity to the French Broad River, Pisgah National Forest, and the BRP. The BRP crosses over NC 191 and is accessible via an entrance/exit at the signalized intersection (Frederick Law Olmstead Way) at the west end of the proposed project. The NC Arboretum is also accessible via this intersection.

The Biltmore Estate National Historic Landmark (NHL) east of I-26, the BRP bridge (currently being replaced by NCDOT and the National Park Service [NPS] under NCDOT STIP Project Nos. I-4400/I-4700), and the French Broad River are among the major resources in this area of the County which NCDOT considered when defining the HE-0001 PSA. Considerations included the avoidance and minimization of potential impacts to these major resources.

The PSA contains mature Hardwood Forest, I-26 right-of-way, a portion of the Biltmore Estate NHL, and a portion of the Biltmore Farms LLC's planned Biltmore Park West mixed-use development that will consist of industrial, institutional, commercial, and residential land uses (see Figure 3). Adjacent to the PSA, approximately 100 acres is currently being developed by Pratt & Whitney (P&W) as a one million square-foot advanced manufacturing center; this manufacturing center is part of the Biltmore Park West mixed-use development. This P&W

aircraft engine manufacturing facility is planned to begin manufacturing operations by the end of 2022. The Biltmore Park West property will be accessed via NC 191 at a new fourth leg to the existing Frederick Law Olmstead Way intersection (i.e., location of the five-lane bridge). As with many private development projects where NCDOT anticipates accepting ownership, NCDOT has reviewed and approved all preliminary plans for the privately developed French Broad River bridge and roadway (Frederick Law Olmsted Way East) and has an inspector on-site to confirm that the privately built transportation infrastructure is constructed to NCDOT standards. NCDOT anticipates accepting the bridge and roadway currently under construction (not part of NCDOT TIP No. HE-0001) into the State highway system within a few months following completion.

Water Resources

Water resources in the PSA are part of the Bent Creek–French Broad River Basin (USGS Hydrologic Unit 060101050705). The PSA was delineated by the applicant to determine the presence or absence of jurisdictional waters of the U.S. on July 13-15, 2021. The jurisdictional waters in the portion of the I-4400/I-4700 study area that lie within the PSA of the HE-0001 project were not re-delineated for the proposed project; however, these jurisdictional features were spot checked to ensure that the delineation for those waters was still accurate, as recorded in the previous jurisdictional determination for the I-4400/I-4700 project. Field delineation resulted in the identification of one Section 10 water (the French Broad River) totaling 300 linear feet, fifteen (15) tributaries (streams) totaling 10,970 linear feet, and twenty-one (21) non-tidal wetlands totaling 2.362 acres (102,953 sq.ft.) in the PSA (see Figure 5). The Corps conducted a field review of the delineated waters on August 27, 2021 and concurred with the delineation for this project.

There are no designated anadromous fish waters or Primary Nursery Areas (PNA) present in the project study area. There are no Outstanding Resource Waters (ORW), High Quality Waters (HQW), or water supply watersheds. The PSA adjacent to the French Broad River (Class B, SEC 10/404) is located within a designated mountain trout watershed (Tr). The North Carolina 2020 Final 303(d) list of impaired waters identifies the French Broad River from Mud Creek to NC 146 for fecal coliform (recreation). The PSA is not located within any North Carolina Buffer Rule River Basins.

A Federal Emergency Management Agency (FEMA) floodway is located along the French Broad River terraces north of the PSA. The PSA does include some of these FEMA floodway features and therefore could potentially impact these features (see Table 2).

PSA Development

To address the lack of network connectivity between NC 191 and I-26 in southern Buncombe County, and to accommodate current and planned growth, NCDOT proposes to construct a new interchange (Exit 35) on I-26 in the PSA. This new interchange would ultimately connect to NC 191 via a road that is currently under construction by a private developer (Frederick Law Olmsted Way East) but will later become a State road. The proposed interchange would be constructed primarily within the existing right-of-way of I-26 which currently is under construction to be widened as part of NCDOT TIP No. I-4400/4700.

The PSA extends along Frederick Law Olmsted Way East which is currently under construction by a private developer (see Figure 3). This road includes a 5-lane bridge over the French Broad River that will connect to NC 191. The construction corridor for Frederick Law Olmsted Way East is approximately 300 feet wide, as it was graded for a 4-lane roadway but is being constructed as a 2-lane roadway.

When considering the lack of network connectivity between NC 191 and I-26 in southern Buncombe County, NCDOT looked at potential interstate access locations along the approximately 4.5-mile section of I-26 between Exit 33 (NC 191/Brevard Road) and Exit 37 (NC 146/Long Shoals Road) (see Figure 4). Traffic operation considerations included FHWA and NCDOT interchange spacing guidance for interstate access which requires a minimum of one (1) mile between interchanges to permit safe traffic flow on the interstate facility (e.g., weaving patterns for traffic entering and exiting the interstate). This interstate access review concluded that the distance between the BRP bridge piers and Exit 37 (approximately 1 mile) would not meet FHWA's spacing requirements. Further, the French Broad River is approximately 500 feet west of I-26 and roughly parallels this section of the interstate. There are approximately 1-¾-miles between Exit 33 (NC 191) and the I-26 bridge over the French Broad River; however, an east-west roadway connection to NC 191 would conflict with existing residential and existing commercial properties along Ferry Road and NC 191, in addition to incurring impacts to the Biltmore Estate NHL and potentially exacerbating traffic issues on NC 191. Based on this information, the locations along I-26 north of the French Broad River and south of the BRP would not meet the project's purpose to accommodate current and planned growth and are therefore not included in the project's study area.

In the area south of the French Broad River and north of the BRP, NCDOT attempted to avoid impacts to known resources to the extent practical during development of the PSA based upon engineering judgement and topographic constraints. Conceptual design review showed the proximity to the French Broad

River north of the PSA creates unreasonable engineering constraints for interchange ramp design making the encroachment within the French Broad River floodplain an impractical design solution. Also, due to topography west of I-26 in addition to ongoing and planned developments and roadway geometry considerations associated with the approach to the roundabout on Frederick Law Olmsted Way East, conceptual design review determined the most reasonable roadway tie in this area would remain on the east side of the jurisdictional stream (blue-line) bisecting the property. Therefore, the PSA was refined along its northern side to avoid these resources.

The Merger CP 1 meeting for this project was held on July 15, 2021 and the interagency Merger Team concurred on the Purpose and Need and Study Area. The NC Wildlife Resources Commission (WRC) abstained.

Applicant's Stated Need and Purpose

- Applicant's stated need:

The proposed project is needed to address the lack of network connectivity between NC 191 and I-26 in southern Buncombe County to accommodate current and planned growth.

- Applicant's stated purpose:

The purpose of the proposed project is to provide access to I-26 and improve east-west connectivity within the project vicinity to accommodate current and planned growth.

Project Description

To address the lack of network connectivity between NC 191 and I-26 in southern Buncombe County, and to accommodate current and planned growth, NCDOT proposes to construct a new interchange on I-26 in the project study area (PSA). This new interchange would connect to NC 191 via a road that is currently under construction by a private developer but will later become a State Maintained roadway upon acceptance (Figure 1).

Detailed Study Alternatives (DSAs)/Build Alternatives

The Merger CP 2 meeting for this project was held on July 15, 2021 and the interagency Merger Team concurred on the DSAs to be carried forward. The WRC abstained. Note that the DSAs are the "Build Alternatives". The No Build Alternative is also being carried forward as a baseline for comparison.

To meet the stated purpose of the project and to address the transportation needs, NCDOT is evaluating three (3) build alternatives, or DSAs, that involve constructing a new interchange and roadway extension in different configurations. NCDOT is evaluating modified diamond and diverging diamond interchange (DDI) configurations to minimize the interchange footprint and meet design requirements. NCDOT will continue to refine the traffic operations of the interchange configurations to meet design standards, address safety needs, and avoid and/or minimize impacts to resources.

NCDOT is evaluating the location of the proposed interchange within the I-26 bifurcated section (i.e., where the interstate lanes are separated). The placement of the interchange within the bifurcated section is constrained by ramp length requirements, existing infrastructure associated with the I-4400/I-4700 widening project of I-26, and proximity to the I-26 bridge over the French Broad River to the north and the BRP bridge piers to the south. The presence of the FEMA floodway and jurisdictional features southeast of the I-26 bridge over the French Broad River bridge were also considered. A central interchange location within the bifurcated section is closer to the BRP and could cause greater impacts to the bifurcated section; however, this location avoids the FEMA floodway and jurisdictional features along the south or west bank of the French Broad River. A northern interchange location within the bifurcated section is closer to the French Broad River and further from the BRP and could reduce the overall impact to the bifurcated section.

NCDOT is also evaluating a left-exit scenario in addition to a traditional right-exit scenario as an option to avoid impacts to the Biltmore Estate NHL. NCDOT does not recommend a right-exit scenario at the north end of the I-26 bifurcated section due to impacts to the FEMA regulated floodway, associated floodplains, and known wetland resources.

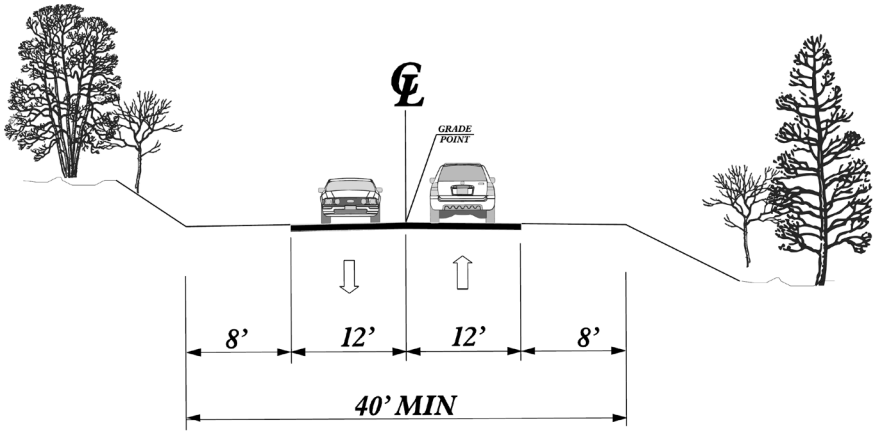
Based on these considerations, NCDOT is evaluating three (3) Detailed Study Alternatives (DSA) (see Table 1 below).

Table 1. Detailed Study Alternatives Description	
Detailed Study Alternative (DSA)	Description
DSA 1	• left exit/entrance ramp • Diamond configuration • center of the I-26 bifurcated section
DSA 2	• right-exit/entrance ramp • Diverging diamond (DDI) configuration • center of the I-26 bifurcated section
DSA 3	• left exit/entrance ramp • Diamond configuration • North end of the I-26 bifurcated section

Under each DSA, NCDOT would construct an interchange on I-26 and a roadway from the interchange to Frederick Law Olmsted Way East, which is currently under construction by private developers. Once construction is complete by the private developers, Frederick Law Olmsted Way East will connect to NC 191.

As depicted below, the roadway for the proposed project would include two 12-foot travel lanes and 8-foot shoulders on each side (4 feet of each shoulder would be paved, with 4 feet of grass shoulder beyond the pavement) (see Exhibit 1).

Exhibit 1. Proposed Roadway Typical Section



The proposed typical section of the interstate bridge in DSA 1 and DSA 3 would maintain the two 12-foot lanes with 8-foot shoulders (see Exhibit 2). DSA 2 would also include 12-foot lanes and 8-foot shoulders but would require a slightly wider bridge to accommodate a concrete median barrier to separate traffic in the DDI configuration as depicted in Exhibit 3. Auxiliary lanes (e.g., turn lanes, slip lanes) will be evaluated and included in preliminary designs for the proposed intersections to facilitate traffic operations.

Exhibit 2. Proposed Bridge Typical Section (DSA 1 and DSA 3)

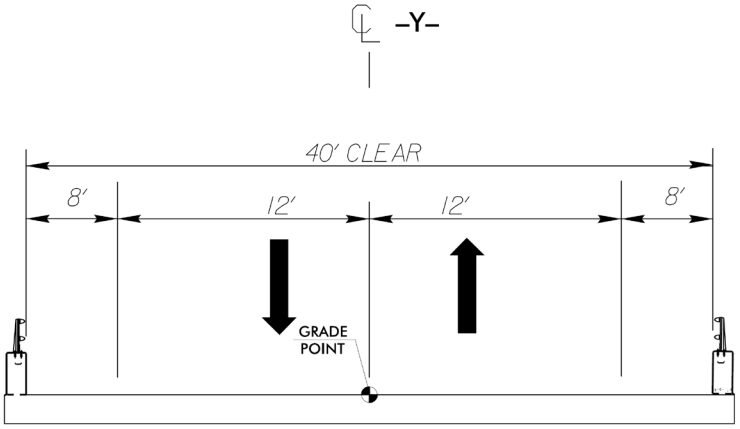
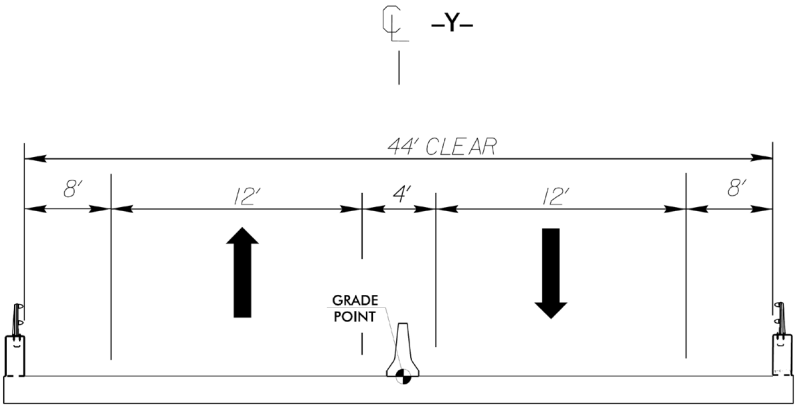


Exhibit 3. Proposed Bridge Typical Section (DSA 2)



DSA 1 and DSA 3 are similar in concept (i.e., modified diamond interchange) and operation, differing in their location within the I-26 bifurcated section. DSA 1 is located centrally within the bifurcated section and DSA 3 is located towards the northern end of the I-26 bifurcated section. Operationally, both include left lane exits and entrances onto and off of I-26 westbound (Asheville-bound) travel lanes. In both DSAs, traffic would reach a proposed signalized intersection at the end of the I-26 westbound off-ramp where they may turn left, cross eastbound I-26 (Hendersonville-bound) on a proposed bridge and continue to the west via the proposed roadway which would tie to the roadway currently under construction by a private developer (Frederick Law Olmstead Way East) which connects to NC 191. Westbound I-26 traffic originating west of I-26 (e.g., NC 191) would use Frederick Law Olmsted Way East to connect to the proposed project and would cross the I-26 eastbound travel lanes on the proposed bridge and make a left at a proposed signal to merge onto I-26 westbound on the left side of the interstate. Eastbound I-26 traffic would exit and enter the proposed interchange via traditional right lane exit and entrance ramps and would intersect the proposed roadway at a proposed traffic signal.

As a proposed DDI, DSA 2 would differ from DSA 1 and 3 operationally. While DSA 2 includes traditional right lane exits and entrances in both directions of I-26 travel, traffic would intersect the proposed roadway differently. When driving through a DDI, motorists proceed through a proposed traffic signal at the entrance to the interchange and simply follow their lane to the opposite side of the roadway. Motorists accessing the interstate have two options: (1) before they cross to the other side at the traffic signal, drivers may go right to reach the on-ramp; or (2) after they have crossed to the other side, drivers may simply turn left, without having to stop or wait for any oncoming traffic, to reach the on-ramp to go in the other direction. Pavement markings and signals direct motorists to where they need to go. A concrete barrier would separate traffic across the proposed bridge over I-26. The I-26 interchange with NC 280 is a local example of the DDI. For more information about the DDI, you may visit NCDOT’s website:

www.ncdot.gov/initiatives-policies/Transportation/safety-mobility/diverging-diamond-interchanges/Pages/default.aspx

As noted earlier in this public notice, you may also review maps, visualizations, and informational videos about this project at https://www.publicinput.com/I26-exit35-buncombe

Impacts to waters of the U.S.:

Impacts to waters of the U.S. for the three (3) DSAs range from approximately 1,400 linear feet to 2,300 linear feet of streams and between 0.1 acre and 0.3 acre of wetlands. Table 2 compares the potential impacts to known environmental features for each DSA, including the two-lane proposed roadway extension that is part of the proposed project. Potential impacts are calculated based on conceptual design slope stake limits plus 40 feet to cover potential utility and erosion control footprints.

Table 2. Detailed Study Alternative Comparison

		DSA 1	DSA 2	DSA 3
	Refer to Figures	**6 & 9**	**7 & 10**	**8 & 11**
Jurisdictional Waters	Stream Total (ft)	2,300	2,200	1,400
	Wetland Total (acre)	0.3	0.2	0.1
FEMA	100-yr Floodplain (acre)	< 0.1	0.2	0
	500-yr Floodplain (acre)	< 0.1	0.4	0
	Floodway (acre)	0	0	0
Cultural Resource	Biltmore Estate NHL (acre)	0	6.8	0

The three build alternatives/DSAs under consideration would meet the purpose of the proposed project.

No-Build Alternative

Under the No-build Alternative, the proposed project would not be constructed. Access to the Biltmore Park West would be limited to NC 191. The No-Build Alternative would not incur right-of-way or construction costs. There would be no impacts to streams, wetlands, or other natural and cultural resources because of the project. The No-Build Alternative would not improve access and connectivity, reduce travel times and distances, or improve safety within the project vicinity. In addition to the three Build Alternatives discussed above, the No-Build Alternative is retained as a baseline against which the benefits, costs and impacts of the Build Alternatives can be compared. The FHWA and NCDOT have determined that the No-Build Alternative would not meet the project's purpose.

Safety Concerns

While NCDOT did not identify safety as a need for the project, NCDOT conducted a crash analysis for portions of I-26, NC 146 (Long Shoals Road), and NC 191 (Brevard Road) in the project vicinity for the five-year period from April 1, 2016, to March 31, 2021. The analysis determined that rear end, slow, or stop crashes were the primary crash types on I-26, NC 191, and NC 146; sideswipe, same direction crashes were also prevalent on the arterial roadways (i.e., NC 191 and NC 146). On an interstate and/or arterial facility, it is reasonable to assume that these rear end, slow, or stop crashes are congestion-related crashes caused by over and/or near capacity conditions at intersections and interchanges. Common causes of sideswipe, same direction crashes are distracted divers, drivers failing to perform lane changes safely, and poor road conditions.

In the vicinity of the proposed project, I-26 is currently being widened to an 8-lane facility (4 lanes in each direction) under STIP I-4700 (of the larger I-4400/I-4700 project) which should increase the capacity of the facility and lessen the propensity for rear end, slow, or stop crash type on I-26. Further, the analysis of the proposed project interchange and proposed roadway shows that there would be minimal queuing at the ramp junctions and it would not be expected to increase the risk of this crash type, while improving traffic volume conditions of arterial roads and their interchanges with I-26. NCDOT expects that the proposed project (HE-0001) would reduce the volume of traffic on NC 191 and NC 146 in the 2045 Build scenario compared to the 2045 No Build scenario. The proposed project would not change traveler access to, or facility (road) design of NC 191 or NC 146 in the area around the existing I-26 interchanges. As such, NCDOT notes that the proposed project would not be expected to increase the risk of these crash types.

The proposed project would provide additional safety benefits which include secondary emergency ingress/egress to current and planned development in Biltmore Park West; provision for an alternate route to divert traffic around potential incidents and crashes along I-26 or NC 191 and reduce the response times for fire and emergency responders to incidents along I-26, and; improved emergency response time to the NC Arboretum, BRP, and adjacent points.

Avoidance and Minimization

NCDOT provided the following information in support of efforts to avoid and/or minimize impacts to the aquatic environment:

Through development of the preliminary designs within the Build Alternatives/DSAs, NCDOT has attempted to avoid impacts to streams and wetlands to the greatest practicable extent. This has included developing alignments for the DSAs that avoided these resources as much as possible, while also minimizing impacts to other resources. NCDOT will continue to seek ways to avoid and minimize impacts in further design efforts for whichever alternative is selected as the LEDPA.

Compensatory Mitigation

The purpose of compensatory mitigation is to offset unavoidable functional losses to the aquatic environment resulting from project impacts to waters of the U.S. NCDOT will investigate potential on-site compensatory mitigation opportunities for whichever alternative is selected as the LEDPA. If on-site compensatory mitigation is not feasible, or if a sufficient amount of mitigation is not available on-site, mitigation will be provided by the NC Division of Mitigation Services (NCDMS). All permanent losses of waters of the U.S. would be mitigated at a 2:1 compensatory mitigation ratio unless NCDOT provides justification for a lower ratio by submitting NC Stream Assessment Worksheets (for streams) or NC Wetland Assessment Worksheets (for wetlands).

Essential Fish Habitat

The Corps' initial determination is that the proposed project would not affect Essential Fish Habitat or associated fisheries managed by the South Atlantic or Mid-Atlantic Fishery Management Councils or the National Marine Fisheries Service.

Cultural Resources

The FHWA is the lead federal agency for compliance with Section 106 of the National Historic Preservation Act (NHPA) for this project.

To facilitate compliance with Section 106, a Programmatic Agreement (PA) was executed between the FHWA, Corps, NC State Historic Preservation Office (NC SHPO), NCDOT, and the Advisory Council on Historic Preservation (ACHP) in 2020 to redefine NCDOT's internal review of transportation projects in North Carolina. Specifically, the PA stipulates the authority of NCDOT's Archaeology and Historic Architecture and Landscapes groups in identifying and evaluating historic properties and assessing effects on historic properties in conjunction with transportation projects. If it is determined that the PA is not appropriate to use for this project, consultation will be performed in the traditional manner.

As detailed below, Section 106 activities for this project (e.g., surveys, assessments, etc.) are on-going and effects are unresolved at this time.

Compliance with the requirements of NHPA Section 106 consultation must be completed prior to issuance of any authorization to impact waters of the U.S.

Architectural Resources

NCDOT's architectural historian reviewed the proposed project in June 2021. This included reviewing previous historic architecture surveys for NCDOT TIP Nos. U-3403B (Improvements to NC 191), I-4400/I-4700 (Improvements to I-26), and the Biltmore Park West development (Project Ranger). Due to the comprehensive surveys and consultation conducted for these three recent projects, it was determined, in accordance with the 2020 PA, that no additional survey to identify unknown historic structures or landscapes is required for the proposed project (HE-0001). As such, and if it is ultimately determined that these resources are located within the HE-0001 area of potential effect (APE), the NCDOT architectural historian recommended that an effects assessment be undertaken for the following National Register (NR)-eligible or listed properties: BN1835 Biltmore Estate (NHL), NC0001 Blue Ridge Parkway (Determined NR eligible; NHL pending), BN6468 French Broad River Gaging Station (Determined NR eligible), and BN0898 Bent Creek Campus (NR listed).

NCDOT will assess the proposed project's potential to cause effects to these properties through consultation with FHWA, NC-HPO, federally-recognized and interested tribes, and other consulting parties.

Archaeological Resources

An intensive archaeological survey and evaluation for the proposed project is currently underway. Any identified archaeological sites within the HE-0001 archaeological APE will be evaluated for eligibility for listing in the NR in accordance with federal and state guidelines. Should NR eligible archaeological resources be located within the APE, NCDOT will assess the potential for effects to these properties caused by HE-0001 through consultation with FHWA, the NC-HPO, federally-recognized and interested tribes, and other consulting parties.

Section 4(f) of the Department of Transportation Act of 1966

Section 4(f) provides protection to historic properties, public parks, and recreation areas. DSA 2 could result in the Section 4(f) use of the Biltmore Estate NHL. Should DSA 2 be selected as the least environmentally damaging practical alternative (LEDPA), NCDOT and FHWA would coordinate the proposed use of

the NHL with the National Park Service (NPS), the official with jurisdiction over this property.

Endangered Species

The FHWA is the lead federal agency for this project and is the federal agency responsible for making determinations and requesting concurrence with these determinations (if other than a "no effect") from the U.S. Fish and Wildlife Service (USFWS), in accordance with Section 7(a)(2) of the Endangered Species Act (ESA).

The following table contains the federally listed threatened and endangered species for Buncombe County. It also includes the FHWA's determinations of effect to these species that would result from implementation of the DSAs. For a species where the biological conclusion/determination is "Unresolved", the FHWA has not yet made a determination of effect for that species and is gathering additional information. If the determination for an "Unresolved" species is anything other than "No effect", the FHWA will consult with the USFWS.

The PSA was evaluated for potential habitat for federally Threatened (T) or Endangered (E) species known to have ranges extending into Buncombe County (17 June 2021 USFWS list / USFWS IPaC planning tool, USFWS T&E Species List letter dated July 28, 2021, included in Appendix B). As of June 17, 2021, the USFWS lists 12 federally protected species, under the ESA for Buncombe County (see Table 3). Records held by the North Carolina Natural Heritage Program (NCNHP) were reviewed to determine if any of these species have been recorded in or within 1 mile of the PSA. For each species, a discussion of the presence or absence of habitat is included below along with the Biological Conclusion rendered based on survey results in the study area.

Table 3. ESA federally-listed species in Buncombe County.

Scientific name	Common Name	Federal Status	Habitat Present	Biological Conclusion
Alasmidonta raveneliana	Appalachian elktoe	E	No	Unresolved
Solidago spithamaea	Blue Ridge goldenrod	T	No	NE
Glyptemys muhlenbergii	bog turtle	T(S/A)	No	Not Required
Glaucomys sabrinus coloratus	Carolina Northern flying squirrel	E	No	NE
Myotis grisescens	gray bat	E	Yes	Unresolved

Sarracenia rubra ssp. jonesii	mountain sweet pitcher plant	E	No	NE
Myotis septentrionalis	Northern long-eared bat	T	Yes	Unresolved
Gymnoderma lineare	rock gnome lichen	E	No	NE
Hedyotis purpurea var. montana	Roan Mountain bluet	E	No	NE
Geum radiatum	spreading avens	E	No	NE
Microhexura montivaga	spruce-fir moss spider	E	No	NE
Spiraea virginiana	Virginia spiraea	T*	No	Not Required

[1] USFWS County List dated June 17, 2021, IPaC countywide data checked on July 28, 2021
E - Endangered
T - Threatened
T(S/A) - Threatened due to similarity of appearance.
MA-NLAA - May Affect – Not Likely to Adversely Affect
MA-LAA - May Affect – Likely to Adversely Affect
NE - No Effect
* - Historical record (the species was last observed in the county more than 50 years ago) per previous USFWS County list dated July 17, 2020

Appalachian elktoe:

USFWS Recommended Survey Window: March 1–November 1 (optimal)

Biological Conclusion: Unresolved
A review of NHP records on July 28, 2021, indicates one known occurrence within 1.0 mile of the study area (EO ID 21150, last observed September 29, 2019).

Blue Ridge goldenrod:

USFWS Recommended Survey Window: July-September

Biological Conclusion: No effect
Suitable habitat for the Blue Ridge goldenrod in the form of High Elevation Rocky Summit natural community generally at or above elevations of 4,600 feet above mean sea level does not exist within the study area. Elevations in the study area do not exceed 2,220 feet above mean sea level. A review of NHP records on July 28, 2021, indicates no known occurrences within 1.0 mile of the study area.

Bog turtle:

USFWS Recommended Survey Window: April 1-October 1 (visual surveys); April 1- June 15 (optimal for breeding/nesting); May 1-June 30 (trapping surveys)

Biological Conclusion: Not required
The southern population of bog turtle is listed as Threatened due to similarity of appearance with the northern bog turtle population. The southern population of the species is not subject to section seven consultations requirements under the ESA. Therefore, surveys for this species were not performed.

No suitable habitat for the bog turtle was observed within the study area. No individuals of this species were observed within the study area. The wetlands in the study area, although some are partially located within the Rosman soil type, are not graminoid-dominated and had partial to closed canopy that shaded the majority of each wetland. Therefore, no suitable habitat is present for bog turtles within the study area wetlands. A review of NHP records on July 28, 2021, indicates two known occurrences within 1.0 mile of the study area (EO ID 3427, last observed May 5, 2008, and EO 6227, last observed September 27, 2017).

Carolina Northern flying squirrel:

USFWS Recommended Survey Window: May-October; coldest days in coldest winter months (nest box surveys)

Biological Conclusion: No effect
Suitable habitat for the Carolina Northern flying squirrel in the form of the ecotone between spruce-fir and birch forests above 4,500 feet elevation above mean sea level does not exist within the study area. Elevations in the study area do not exceed 2,220 feet above mean sea level. A review of NHP records on July 28, 2021, indicates no known occurrences within 1.0 mile of the study area.

Gray bat:
USFWS Recommended Survey Window: Structure Checks: May 15-August 15. Mist netting and/or acoustic bat surveys are dependent on results of bat structure checks or USFWS requirements. Mist Netting Surveys: June 1-August 15, Acoustic Surveys: May 15-August 15.

Biological Conclusion: Unresolved
NCDOT Biological Surveys Group (BSG) is coordinating with USFWS to address Northern long-eared bat, gray bat and Appalachian elktoe. The potential project-related effects to these species will be considered under separate cover. A review of NHP records on July 28, 2021, indicates two known occurrences within

1.0 mile of the study area. EO ID 39015 was last observed July 18, 2018, and EO 40722 was last observed in 2019. EO 40722 falls within the boundaries of the National Park Service, Blue Ridge Parkway.

Mountain sweet pitcher plant:

USFWS Optimal Survey Window: April-October

Biological Conclusion: No effect
No suitable habitat in the form of stream bank and bog habitats situated along intermittently exposed to intermittently flooded level depressions associated with valley floodplains. No Toxaway or Hatboro soils are present in the study area. A review of NHP records on July 28, 2021, indicates no known occurrences within 1.0 mile of the study area.

Northern long-eared bat:

USFWS Recommended Survey Window: Structure Checks: May 15-August 15. Mist netting and/or acoustic bat surveys are dependent on results of bat structure checks or USFWS requirements. Mist Netting Surveys: June 1-August 15, Acoustic Surveys: May 15-August 15.

Biological Conclusion: Unresolved
NCDOT Biological Surveys Group (BSG) is coordinating with USFWS to address Northern long-eared bat, gray bat and Appalachian elktoe. The potential project-related effects to these species will be considered under separate cover. A review of NHP records on July 28, 2021, indicates no known occurrences within 1.0 mile of the study area.

Roan Mountain bluet:

USFWS Optimal Survey Window: June-July

Biological Conclusion: No effect
Suitable habitat for the Roan Mountain bluet (elevations of 4,200-6,300 feet above mean sea level) does not exist within the study area. Elevations in the study area do not exceed 2,220 feet above mean sea level. A review of NHP records on July 28, 2021 indicates no known occurrences within 1.0 mile of the study area.

Rock gnome lichen:

USFWS Optimal Survey Window: year round

Biological Conclusion: No effect
Suitable habitat for the rock gnome lichen does not exist within the study area. There are no rocky outcrops or cliff habitats with a great deal of humidity and seepage that flows only during wet periods, nor elevations above 5,000 feet above mean sea level. Elevations in the study area do not exceed 2,220 feet above mean sea level. A review of NHP records on July 28, 2021, indicates no known occurrences within 1.0 mile of the study area.

Spreading avens:

USFWS Optimal Survey Window: June-September

Biological Conclusion: No effect
There is no suitable habitat for spreading avens within the study area. No areas of exposed to full sunlight at or above 4,200 feet above mean sea level within the study area were found. Elevations in the study area do not exceed 2,220 feet above mean sea level. A review of NHP records on July 28, 2021, indicates no known occurrences within 1.0 mile of the study area.

Spruce-fir moss spider:

USFWS Recommended Survey Window: May-August

Biological Conclusion: No effect
Suitable habitat for the spruce-fir moss spider (high elevation spruce-fir forests) does not exist within the study area. Elevations in the study area do not exceed 2,220 feet above mean sea level. A review of NHP records on July 28, 2021, indicates no known occurrences within 1.0 mile of the study area.

Virginia spiraea:

USFWS Optimal Survey Window: May-early July

Biological Conclusion: Not required
Suitable habitat for Virginia spiraea does not exist within the study area. The reach of the French Broad River that occurs within the study area is currently part of an active construction area where some vegetation management has occurred, and the riverbanks are eroded and nearly vertical. There are no rocky banks that receive enough high velocity scouring to eliminate competition of

other woody species. A review of NHP records on July 28, 2021, indicates no known occurrences within 1.0 mile of the study area. USFWS does not require surveys, a biological conclusion, or consultation for species with a historic record status.

Golden / Bald Eagle:

Habitat for the bald eagle primarily consists of mature forest in proximity to large bodies of open water for foraging. Large dominant trees are utilized for nesting sites, typically within 1.0 mile of open water. A desktop-GIS assessment of the project action area, as well as the area within a 1-mile radius of the project limits, was performed on July 13, 2021, using 2017 color aerials. Suitable habitat for the bald eagle exists in the project action area, especially along the French Broad River. A field survey of the project action area and the area within 660 feet of the project limits was also conducted on July 13-25, 2021, to assess foraging habitat. None was found. A review of NCNHP records, updated April 2021, indicates no known bald eagle or golden eagle occurrences within 1.0 mile of the PSA. Due to the lack of habitat, known occurrences, and the minimal impact anticipated for this project; it has been determined that this project will not affect this species.

Compliance with the requirements of ESA Section 7 consultation must be completed prior to issuance of any authorization to impact waters of the U.S.

Evaluation

The decision whether to issue a permit or verification letter for the use of a general permit for this project will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity to determine whether or not the project is contrary to the public interest and does or does not comply with the 404(b)(1) Guidelines. Those decisions will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values (in accordance with Executive Order 11988), land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people.

Commenting Information

The Corps of Engineers is soliciting comments from the public; Federal, State, and local agencies and officials, including any consolidated State Viewpoint or written position of the Governor; Indian Tribes and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to select the least environmentally damaging practicable alternative (LEDPA) for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects and the other public interest factors listed above. All comments received will also be evaluated and used in the determination of whether to (1) process this project under an Individual Permit, in which case the Corps will prepare a project specific Environmental Assessment (EA) and/or an Environmental Impact Statement (EIS) pursuant to NEPA, or (2) verify that this project meets the terms and conditions for use of Regional General Permit (RGP) 31 or RGP 50. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Written comments pertinent to the proposed work, as outlined above, will be received by the Corps of Engineers, Wilmington District, until 5 pm, October 4, 2021. Comments should be submitted to Monte Matthews by email at Monte.K.Matthews@usace.army.mil or by mail to U.S. Army Corps of Engineers, 3331 Heritage Trade Drive, Suite 105, Wake Forest, NC 27587, (919) 554-4884, ext. 31.