

Document Type: EA-Administrative Record
Index Field: Finding of No Significant Impact (FONSI)
Project Name: TDOT Interchange Modification
Project Number: 2020-11

**ENVIRONMENTAL ASSESSMENT ADOPTION AND
FINDING OF NO SIGNIFICANT IMPACT
TENNESSEE VALLEY AUTHORITY
PROPOSED I-75 AT I-24 INTERCHANGE MODIFICATION**

The Tennessee Department of Transportation (TDOT) seeks the United States Army Corps of Engineers (USACE) approval and the Tennessee Valley Authority (TVA) Section 26a approval for the proposed modification and reconstruction of the existing Interstate 75 (I-75) and Interstate 24 (I-24) interchanges in Chattanooga and East Ridge, Hamilton County, Tennessee. The proposed project limits extend along I-75 and I-24 from west of Spring Creek Road to just west of the I-75 bridge over the CSX Railroad, and south along I-75 to the Tennessee-Georgia state line. TDOT proposes to modify and reconstruct the existing I-75/I-24 interchange by adding an additional lane in all directions throughout the project limits. The I-75/I-24 ramps will be widened to three lanes and the radii increased to allow for 50 miles per hour (mph) design speed. I-75 will be realigned through the project to be the primary travel flow. The I-24 ramps would be reconfigured to go over I-75. The project would also modify the traffic circulation patterns of the existing Welcome Center by reconfiguring the entrance and exit to eliminate the weaving condition along northbound I-75. The modification would realign the ramp to the west of the existing Welcome Center and merge with I-75 north of the existing Welcome Center. Traffic along the proposed ramp traveling northbound on I-75 would use a ramp parallel to the existing northbound ramp and vehicles traveling to I-24 westbound would diverge onto the I-24 flyover ramp. The project scope also includes required utility line relocations and all associated drainage improvements. The estimated timeline for completing this project is approximately three years.

In order to facilitate the project, TDOT proposes structural bridge improvements, including the widening of the I-75 bridge over South Chickamauga Creek (STR-3) and the removal and replacement of the I-75 bridges over Spring Creek (STR-2). Permanent discharge of fill material is proposed within South Chickamauga Creek and seven (7) unnamed wetlands. A total of 0.082 acre of South Chickamauga Creek and 9.38 acres of wetlands would be permanently impacted by the proposed discharge of fill material related to the highway improvements. A total of up to 0.142 acre (475 linear feet) of South Chickamauga Creek and Spring Creek would be temporarily impacted during construction, to facilitate removal of the existing bridges over Spring Creek, construction of new bridges over Spring Creek, construction of a widened bridge over South Chickamauga Creek, and to facilitate Erosion Prevention and Sediment Control (EPSC). A total of 2.23 acres of wetlands would be temporarily impacted, then restored, concurrently with construction of the road project. Additionally, the proposal includes the discharge of temporary fill material into wetlands and streams associated with EPSC.

The United State Army Corps of Engineers (USACE) completed an environmental assessment (EA) for the proposed modification and reconstruction of the existing interchanges. USACE finalized the EA and Finding of No Significant Impact (FONSI) on February 7, 2020. TVA has independently reviewed the USACE EA and found it to adequately meet the requirements for document adoption. TVA is therefore adopting the USACE EA for the proposed I-75/I-24 modification and reconstruction as part of the environmental review for the Section 26a permit request.

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Consultation

TDOT consulted with the United States Fish and Wildlife Service (USFWS) on potential effects to species covered under the ESA. On September 20, 2017, USFWS concurred with the TDOT determination that the proposed action would not likely adversely affect Indiana bat, gray bat, northern long-eared bat, and large-flowered skullcap. USFWS additionally concurred with the determination of “not likely to adversely affect” for the federally threatened snail darter. In an email dated 08/30/2019 from USFWS to TVA, USFWS stated that all ESA requirements had been met by TDOT and TVA’s action of granting a Section 26a permit would not require new Section 7 consultation. TVA concurs with the findings and requirements of the USFWS for this project based on review of the TVA natural heritage database.

TDOT performed an archaeological/architectural survey of I-75 at I-24 Interchange Area of Potential Effects (APE) titled "Federal Highway Administration Archaeological Assessment, I-75 Interchange to I-24, Unincorporated Hamilton County, TN" (2000). According to the TN State Historic Preservation Office project concurrence letter for archaeology dated March 29, 2014, no archaeological deposits or artifacts were identified within the APE. The SHPO concurrence letter for architecture dated October 23, 2014, identified two National Register of Historic Places eligible resources within the project area (Anna B. Lacey School and Belvoir Historic District), but found the project will not adversely affect these resources. TVA contracted with Alexander Archaeological Consultants to perform an archaeological survey for the "East Ridge Flood Control Project" and also for a greenway survey that both intersect the TDOT APE. Both Alexander surveys found no archaeological sites within the direct APE. TVA concurs with these findings and finds these SHPO letters and the Alexander reports provide a reliable basis for concluding that the project will have no adverse impacts to the APE or its viewshed. Based on TVA’s review of the proposed project, TVA concurs with the SHPO’s findings.

The project would involve cut, fill, bridge replacements, and culverts in portions of the floodplains of South Chickamauga Creek, Spring Creek, and West Chickamauga Creek. Consistent with EO 11988, roads and associated infrastructure are considered to be repetitive actions in the 100 year floodplain that should result in minor impacts. Portions of the project would be constructed within the floodways of these streams. The cities of Chattanooga and East Ridge participate in the National Flood Insurance Program (NFIP), and any development must be consistent with their floodplain ordinances. Based on information provided by the applicant, TDOT is working with the communities toward that end, and therefore the project would comply with the NFIP. TVA Flood Risk has no objection to the proposed 26a permit, provided TDOT contacts the local floodplain administrators to ensure the project would comply with local floodplain ordinances.

As per conditions of the USACE 404 permit and the Tennessee Department of Environment and Conservation Aquatic Resources Alteration Permit, wetland impacts will be offset via the purchase of mitigation credits. TVA agrees with TDOT’s wetland mitigation approach; wetland impacts associated with this project will be insignificant with required mitigation.

Alternatives

The USACE EA evaluated the potential environmental consequences under seven alternatives, including a No Action Alternative. USACE sets criterion for evaluating alternatives – operational capacity, design and speed, roadway safety and aquatic resource impacts.

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The No Action Alternative would include no expansion and improvements of the existing highway and shoulders, no alignment modifications and no safety improvements. This alternative includes less acres of wetland impacts and the same length of the of stream impacts as the preferred alternative. This alternative would not satisfy all of the site selection/screening criteria, nor would it achieve the overall project purpose as determined by the Corps in their EA.

Alternative 1 would widen the existing system to system ramps through the I-75/I-24 Interchange to three lanes and would widen I-75 NB and SB north of the South Chickamauga Creek to the northern project limits. This alternative includes less acres of wetland impacts and the same length of stream impacts as the preferred alternative. This alternative would not satisfy all of the site selection/screening criteria, nor would it achieve the overall project purpose as determined by the Corps in their EA.

Alternative 2 would widen the existing I-75 NB to I-24 WB, I-24 EB to I-75 NB, and I-75 SB to I-24 WB system to system ramps to three lanes following the existing alignments. This alternative includes more acres of wetland impacts and more linear feet of stream impacts than the preferred alternative. This alternative would not satisfy all of the site selection/screening criteria, nor would it achieve the overall project purpose as determined by the Corps in their EA.

Alternative 3 is similar in concept to Alternative 2; however, would realign I-75 NB and SB from the Welcome Center to Spring Creek to the west, outside existing TDOT right-of-way. This alternative includes more acres of wetland impacts and more linear feet of stream impacts than the preferred alternative. This alternative would not satisfy all of the site selection/screening criteria, nor would it achieve the overall project purpose as determined by the Corps in their EA.

Alternative 4 would widen the existing ramps to the three lands and the radii of each alignment would be increased to a minimum 1200 feet to allow for a design speed of 55 mph. This alternative includes less acres of wetland impacts and more linear feet of stream impacts than the preferred alternative. This alternative would not satisfy all of the site selection/screening criteria, nor would it achieve the overall project purpose as determined by the Corps in their EA.

Alternative 5 is similar to some of the other alternatives, but would also shift the system to system ramps to the west to improve ramp geometry. Under this alternative, impacts to environmental resources would be significant and right-of-way acquisition would be necessary. This alternative would not satisfy all of the site selection/screening criteria, nor would it achieve the overall project purpose as determined by the Corps in their EA.

With Alternative 6, the I-75 SB to I-24 WB the I-24 EB to I-75 NB system to system ramps would be widened to three lanes along their current alignments. While this alternative satisfies all of the site selection/screening criteria, and would achieve the overall project purpose as determined by the Corps, it includes more acres of wetland impacts and more linear feet of stream impacts than the preferred alternative. In total, Alternative 6 would result in approximately 14.23 acres of wetland impacts, 400 linear feet of stream impacts, and would require right-of-way acquisition to implement.

The current Alternative 7, the applicant's preferred alternative, was revised after the 2012 Interchange Access Request (IAR). In addition to the original Alternative 7, the preferred alternative would also include widening the interstate by adding an additional lane in all directions throughout the project limits.

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This would shift the Ringgold Road/Welcome Center ramp (Ramp D) to the I-24 WB ramp approximately 150 feet north of the location shown in the 2012 IAR. This change reduces the amount of fill material required and provides motorists additional time before having to choose between I-24 West and I-75 North. The modification will also minimize impacts to the travelling public during construction. Placing I-75 on-grade would also reduce impacts to the wetlands throughout the project corridor due to reduced slopes, because the ramps going over I-75 are narrower than the I-75 mainline. The preferred alternative includes permanent wetland impacts totaling 9.38 acres and permanent stream impacts totaling 0 linear feet.

Public Participation

A public meeting was held on October 16, 2014 at the East Ridge Community Center in the City of East Ridge, Tennessee. The NEPA review led to the development of environmental commitments specific to protection of Federal and State-listed threatened and endangered species, noise abatement measures, and protection of Department of Transportation Act Section 4(f) resources. These commitments have all been implemented throughout project development, included on project plans, and will be carried out through construction of the project.

Conclusion and Findings

TVA independently reviewed the draft USACE EA and found it to be adequate. Based on the analysis in the EA and the findings documented above, TVA concludes that adopting this EA and issuing a Section 26a permit to TDOT under the proposed action would not be a major federal action significantly affecting the environment. Accordingly, an environmental impact statement is not required.



March 10, 2020

Dawn Booker
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Date Signed