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Reference: Statew

Statewide Feasibility Studies

Project Number 6.401071(FS-0113B)

Widening of US 19-23 from I-240 to SR 1768 (Old Burnsville Rd.)

Buncombe County

Dear Mr. Lewis:

As requested in your May 21st email, we are transmitting this letter to finalize the referenced project. This project involves the widening of US 19-23 from I-240 (the northern limits of TIP project I-2513) to SR 1768 (Old Burnsville Rd.) in Buncombe County from existing four lanes to six lanes. This widening will be achieved by constructing additional lanes in the existing median with opposing lanes separated by a concrete median barrier. The proposed widening of US 19-23 will have an approximate length of 14 miles. See Figure 1 for a vicinity map showing the project's location.

The design speed for the roadway will remain at the existing design speed of 70 mph. The recommended cross section is a 6 lane roadway designed to interstate standards. The median width for the proposed typical section will be 22 feet for the entire length of the project, therefore, widening will be needed on the outside as well as the median side to achieve the proposed typical section. See Figure 2 for the proposed typical sections.

Because of the proposed widening, all existing bridges on US 19-23 will have to be widened. In addition to the proposed 6 lane typical section the structures should be widened to accommodate an additional lane in both directions for a future eight lane section. The bridges that will need to widened on US 19-23 are at Hill St., SR 1781 (Broadway St.), Lookout Rd., Weaverville Rd., Beaverdam Creek/Creek Rd., US 19 BUS., SR 1839 (Aiken Rd.), SR 1740 (New Stock Rd.), SR 1756 (Jupiter Rd.)/NC 197, and Whitt Rd. Also, the bridges over US 19-23, along the project, will have to rebuilt due to the widening to the outside of the existing pavement. The bridges that will need to be replaced are at Atkinson St., SR 1684 (Elk Mountain Rd.), SR 1720 (Allen Rd.), SR 1725 (Weaver Blvd.)/Garrison Rd., SR 1727 (Monticello Rd.), Clarks Chapel Rd., SR 2207 (Mars Hill Rd.), and SR 2137 (Upper Flat Creek Rd.).

The purpose of this project is to reduce congestion along US 19-23 between l-240 and SR 1768 (Old Burnsville Rd.) in Buncombe County by adding one lane in each direction. These improvements will also address safety concerns for this major route from the city of Ashville north thru Weaverville and ending south of the Madison

county line in North Carolina. The proposed median concrete barrier will eliminate the potential for head on collisions by vehicles passing across the median. Also, the rebuilt bridges over US 19-23 will not have shoulder piers, which will greatly reduce "roadside hazards" along the project. The proposed typical section will also increase the inside paved shoulders on US 19-23 from 4 feet to 10 feet allowing stalled vehicles in the inside lane to completely leave the travel lanes.

It is anticipated that, due to the traffic volumes on this section of US 19-23, this facility can be reduced down to one lane in each direction during construction. This reduction in lanes during construction will help to facilitate the replacement of the existing pavement structure with concrete as recommended by NCDOT's Pavement Design Section.

Maintaining traffic while bridges over US 19-23 are being rebuilt is also required. It is recommended that temporary detour bridges be constructed at SR 1720 (Allen Rd.) and SR 2137 (Upper Flat Creek Rd.). Both of these locations will require construction easements for the temporary bridges. It is also recommended that the existing bridges at Atkinson St. and SR 2207 (Mars Hill Hwy.) be used as detours while the new bridges are built adjacent to the existing structures. This will cause a slight realignment of Atkinson St. and SR 2207, but should not require a change in the design speed of the roadway; however, additional right-of-way will be required at SR 2207.

The total cost for the proposed improvements, including construction and right-of-way, is estimated to be \$160,300,000.

Construction.......\$ 160,000,000 (\$140,000,000 – Asphalt Pavement)

Right-of-way......\$ 300,000

Total Cost......\$ 160,300,000 (\$140,300,000 – Asphalt Pavement)

An exhaustive environmental screening was not conducted for this study. However, the following items were identified as needing more detailed analyses during future planning and/or design phases:

- > Maintenance of existing traffic for all bridge replacements along the project.
- > Future Yadkin Pee Dee River Buffer Rules will have to be implemented.

Thanks again for allowing us to provide you with these services. Please call me if you have any questions.

Very truly yours,

RUMMEL . KLEPPER & KAHL, LLP

B. Keith Skinner, P.E.

Associate

BKS/bks Attachments

cc: JTP BKS

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