



Project Narrative

I-40 / I-77 Interchange

Design-Build | TIP Project I-3819B/U-6039

Project Team

- Contractor: Lane Construction
- Lead Designer: WSP USA

Project Extent

I-40/I-77 Interchange (I-3819B) and East Broad Street Improvements (U-6039), Iredell County, Division 12

- I-40 from SR 2003 (Radio Road) to SR 2158 (Old Mocksville Road);
- I-77 from SR 2171 (Jane Sowers Road) to SR 2321 (East Broad Street); and
- SR 2321 (East Broad Street) from Vine Street to SR 2422 (Signal Hill Drive)

Project Overview

The Design-Build Project I-3819B/U-6039 will provide the ultimate I-40/I-77 interchange improvements and access management solutions on SR 2321 (East Broad Street) from Vine Street to SR 2422 (Signal Hill Drive). The project will also 1) provide I-40 collector-distributor roadways between the US 21 and I-77 interchanges, 2) modify the I-77 / East Broad Street interchange, and 3) widen I-77 to eight lanes.

Project Purpose

The primary purpose of this project is to improve traffic flow along the I-40 and I-77 corridors; and improve regional connectivity between Iredell County and points east, west, north, and south within North Carolina and across the Interstate system.

Project Schedule

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|--------------------------------|----------------|
| • Merger CP 4B | March 20, 2019 |
| • Merger CP 4C | June 12, 2019 |
| • Permit Application Submittal | July 10, 2019 |



- Begin Early Work Construction August 5, 2019
- Begin Permit Sites Construction November 7, 2019
- End Construction June 17, 2022

Design Changes

The Design-Build Team has made several design changes as compared to the preliminary plans prepared by the Department, as follows:

- The I-40/I-77 interchange will be a Turbine Interchange. The Department's design included a Four-Level Offset Interchange. This change to interchange type does not result in additional impacts to waters of the U.S.
- I-77 has been shifted slightly to the east eliminating the need for a retaining wall on the westside of the interstate while minimizing impacts to the wetlands in the southwest quadrant of the interchange (Quadrant C).
- The ramps proposed in Quadrant C have been designed to shift the alignments to the perimeter of the wetlands and the Fourth Creek floodplain in this area. This shift minimizes the amount of high and medium quality wetlands (wetland WC and WD) being cleared and shaded from bridging and reduces habitat conversion and fragmentation through this area.
- The I-40 westbound ramp to I-77 (Quadrant A) has been redesigned and shifted to the south as compared to the Department's preliminary design concept. This shift results in avoidance of impacts to wetlands and streams within the NCDOT mitigation site and reduces impacts to the wetland area adjacent to the mitigation site as compared to the Department's preliminary design. To accommodate this ramp shift a relocation of perennial stream SL is proposed.