I-40 Westbound Ramps and US 19/23 (City Exhibit 8-H) (City Exhibit 8-B)

Using the Highway Capacity Software, which analyzes intersections as isolated intersections, the consultant estimated that during the PM peak hour, this signalized intersection currently operates at LOS C and will operate at LOS C at full build-out. However, anecdotal evidence from citizens and the NC DOT indicate that traffic frequently backs up on the westbound off-ramp to the I-40 bridge. The consultant conducted an additional analysis using different computer software that allowed all four intersections on US 19/23 to be analyzed together. Based on this analysis, the consultant recommended the coordinated signal system discussed earlier in this report. This alternative analysis method resulted in LOS C for this intersection. In addition, the analysis shows that if the coordinated signal system is installed, there will be sufficient storage on the I-40 westbound off-ramp.