

16.0 PROPOSED DESIGN / MITIGATION AND NEXT STEPS

16.1 Design Elements

The reconstruction of US 51 through town will have an urban section with a minimum 50-foot right-of-way (ROW) cross-section as shown in Figure 21. This cross section is used to attempt to stay within the existing right-of-way through Clinton. Where possible, the urban ROW could be increased to provide additional buffer area. In addition, in areas with side slope problems, retaining walls may be required.

The two-lane urban section will transition to the two-lane urban with a center two-way left turn lane just south of town, which will continue to just south of the development near Martin Road.

A rural typical section is to be used south of where the center turn-lane ends (near Martin Road). This will include two 12-foot lanes and 10-foot shoulders. The proposed minimum ROW is approximately 100 feet, but much more will likely be required in most areas to achieve acceptable grades and side slopes.

16.2 Bicycle / Pedestrian Facilities

The reconstruction of US 51 through town specifies lane widths of 13 feet. The increased lane width provides a slightly wider curb lane for bicycle use on US 51 through town. The conceptual rural cross section to be applied to the improvements south of town has shoulders with sufficient paved width to support bicycling at all operating speeds and with high truck volumes. Care should be taken in the placement of shoulder rumble strips to avoid conflicts with the travel way for cyclists.

The typical section also provides for sidewalks for pedestrians in the corridor through town. At the intersection of US 51 and KY 123 / KY 58 (Clay Street), pedestrians have also been provided for through the proposed installation of sidewalks on the north and east sides of the courthouse along with the possible installation of pedestrian signal heads as part of the new traffic signal. These bicycle and pedestrian provisions have been incorporated in keeping with the recently adopted KYTC Pedestrian and Bicycle Travel Policy (July 2002).

16.3 Intelligent Transportation Systems (ITS)

No intelligent transportation systems have been included in the proposed recommendations.

16.4 Phasing and Funding

In order to defer construction costs and ensure that higher priority elements are constructed first, the Alternative 3 improvements have been divided into four phases:

Phase 1

Phase 1 includes the recommended Alternative 2B and 2C spot improvements. Based on the traffic analysis, improvements at US 51 / KY 58 (Mayfield Road) may be warranted by 2010 and therefore Alternative 2C should be among the first improvements considered for the area. Part of this project would be to monitor the intersection to determine when (or if) a flashing beacon or signal is warranted. Alternative 2C is projected to be needed before 2020 from a capacity standpoint, but the near term improvements to the geometrics and the signal installation would be beneficial now. Therefore, it is recommended that at least the initial stages of this spot improvement also be completed by 2010 if feasible.

Phase 2

Phase 2 would include reconstructing US 51 through town to widen the lanes, improve sight lines (i.e. Alternative 2A at Cresap Street), replace curbs and sidewalks, improve drainage, and make any other necessary improvements. This would also include finishing Alternative 2B (if not done already). These later phases are not needed immediately.

Phase 3

Phase 3 consists of constructing the two-way left turn lane beginning from just south of town to just south of the development near Martin Road. This is a good stand-alone project due to the extensive construction work and the associated traffic delays.

Phase 4

The final phase is the reconstruction of US 51 south to the Bayou de Chien. This is the longest construction portion of Alternative 3.

16.5 Commitment Action Plan

KYTC is committed to incorporating appropriate pedestrian and bicycle facilities into the proposed highway projects. KYTC is also committed to working with KHC/SHPO as the project progresses to avoid, to the greatest extent possible, impacts to any identified National Register of Historic Places eligible properties. KYTC also received agency coordination letters from other agencies including the National Park Service (regarding the Trail of Tears and reviewing cultural resource reports), the Kentucky State Nature Preserves Commission (regarding potential impacts to the relict darter population in the Bayou de Chien), and the US Department of Fish and Wildlife (regarding potential impacts to Indiana Bat habitat). It is not expected that upgrading the existing highway will impact these resources. However, as the project progresses additional coordination efforts should be pursued with these agencies as necessary.

16.6 Next Steps / Implementation

The next step would be to allocate funding for the design and implementation of Alternative 3. Based on the proposed project phasing plan, Alternatives 2B and 2C would be undertaken first, as they involve the least construction and cost. They are also needed sooner than the other improvements. After this first phase is underway, it would be appropriate for KYTC to review the traffic count data on US 51 to verify the scope and phasing of the remainder of the proposed project elements. Subsequently, funding could be allocated for the design and implementation of the remaining phases.