

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 22. This cross section is used to attempt to stay within the existing right-of-way through Bardwell. Where possible the urban right-of-way could be increased to provide additional buffer area. In addition, in areas with side slope problems, retaining walls may be required.

A rural typical section is to be used just south of town where Alternative 2D begins. This will include two 12 foot lanes and 10 foot shoulders. The proposed minimum right-of-way is approximately 80 feet, but much more may be required in some 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 typical section also provides for sidewalks for pedestrians in the corridor 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. 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 the high priority elements of Alternative 3 are constructed first, improvements to US 51 are to be implemented in three phases. The essentials of each phase are as follows:

Phase 1 – Spot Improvements and Reconstruct US 51 in Town

Improving US 51 through town has been identified as the highest priority of proposed improvements in the study area. The removal of the traffic signal at US 51 and Jennings Street and the widening of the intersection corners of US 51 and KY 123 are low cost projects that involve minimal construction. As such, these two projects are recommended for completion first. Alternative 2A will require more extensive construction than Alternatives 2B and 2C, but less than the complete reconstruction of US 51 through town. Alternative 2A should therefore follow 2B and 2C. The complete

reconstruction of US 51 through town should follow as funding allows. (Each piece of this phase should be done with the other pieces in mind.)

Phase 2 – Improvements to Curve and Hill

Phase 2 consists of Alternatives 2D Curve and Hill combined to form one project extending from the church south past the fire station. Realigning the curve and lowering the hill leading into the curve is likely to be a complex construction project. Due to the associated cost and maintenance of traffic issues, Alternatives 2D Curve and Hill have been separated into a new project that is independent of the reconstruction of US 51 in town.

Phase 3 – Improvements to US 51 South of Town

The improvements to the curves and hills south of town are the lowest priority of all proposed projects since there is no immediate concern with traffic flow or high crash sections (though there was one fatal crash at a curve on US 51 in this area). These improvements have been proposed as general safety improvements and are proposed as part of the third, and final, phase of construction.

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 extent possible, impacts to the identified National Register 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) 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

A public announcement regarding the recommendation for improvements to US 51 through Bardwell is the next step. Following the announcement, Alternatives 2B and 2C could be undertaken as soon as possible since they involve minimal construction and cost. Design plans will need to be developed for the remainder of Phase 1 as well as Phases 2 and 3. A provision to begin design for these phases is the suggested next step in addition to the implementation of Alternatives 2B and 2C.