# APPENDIX C TEAM AND STAKEHOLDERS MEETING MINUTES



Engineering

Construction

Project: KY 1501/Hands Pike, Kenton County

Item No: 6-8307.00

Purpose: Local Officials Meeting #1

Place: District-6, Covington, Kentucky

Meeting Date: October 3, 2007, 1:30 PM

Prepared By: Tom H. Springer

In Attendance:

Tom Schomaker KYTC, District 6 Executive Director

Lt. Ron Wilson City of Taylor Mill Police

Tom Logan City of Covington

Charles Meyer Kenton County Public Works

Joe Murphy Kenton County Public Works

Jim Wilson KYTC, Division of Planning

Mike Bezold KYTC, District 6, Planning

Rob Hans KYTC, District 6, Planning

Tony Blau KYTC, District 6, Utilities

Albert Zimmerman Qk4

Bruce Siria Qk4

Tom Springer Qk4

The project is an Alternatives Study of KY 1501/Hands Pike in Kenton County between KY 17 and KY 16. The objective of the meeting was to initiate the planning project, review existing conditions, and discuss the project with local officials to solicit their input regarding project issues.

Following a welcoming and introductions by Mike Bezold, Tom Springer facilitated the meeting by first describing the handouts, which included an agenda, a USGS map, an aerial photograph, a 3D map, H.I.S. data, crash data, the scope of work, and the public involvement plan.

KY 1501/Hands Pike Alternatives Planning Study October 3, 2007 Local Officials Meeting Minutes Page 2 of 3

The PowerPoint presentation included a map of the study area, an overview of the scope of work, the project schedule, a photo tour of the study area, a review of the H.I.S. data, the Environmental Overview, a summary of the preliminary project goals identified at the morning meeting of the Cabinet's project team, a broad overview of possible alternative concepts, and next steps in the planning process. Key points noted were the high traffic volumes in the western section of the corridor, which are over 10,000 ADT, and the entire corridor has a high critical rate factor, ranging from 1.15 to 2.77.

The majority of the meeting focused around the identification of project goals, alternative concepts to be considered, and the concerns of local officials.

#### Project Goals

For the preliminary project goals, the Project Team, in its morning meeting, had identified the following:

- Improve safety conditions of KY-1501
- Improve access for local traffic

It was discussed, but decided not to be goal of the project, to provide an east-west connector for regional cut through traffic between KY 16 and KY 17. Instead, the goal to improve access for local traffic was selected. The Local Officials concurred with these project goals.

# Alternative Concepts

Alternative concepts were discussed throughout the meeting. Following are items that had been mentioned in the morning project team meeting that could be considered as part of this study:

- Improved cross drains on the Hands Pike Hill to address runoff, which results in a frozen surface in the winter
- Cutting back hills and vegetation to improve sight distance and ability to read warning signs
- Two-lane spot improvements that would correct a small horizontal or vertical deficiency and tie back into the existing road as soon as possible
- Traffic calming concepts, such as roundabouts
- Extension of turning lanes into subdivisions
- An ultimate three-lane section from the top of Hands Pike Hill (at Crystal Lake Drive) east to KY 16 with a 35-MPH design speed. This could be divided into two sections at Otter Court.
- Striped bicycle lanes and sidewalks from the top of Hands Pike Hill east to KY 16. (KY 16 will have bicycle facilities.)
- For Hands Pike Hill, an ultimate two-lane section from the top of Crystal Lake Drive west to KY 17 with a 45-MPH design speed. Various new alternative route locations should be considered for this section.
- An interim spot improvement to correct a reverse curve just west of Crystal Lake Drive

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# Issues Raised by Local Officials

The following issues were of particular concern to local officials:

- Traffic volumes may be higher than what was shown. Rob Hans confirmed that information shown matched KYTC count data, although it was noted that there was only one count station between KY 17 and Tripoli Lane/Tamarack Drive (though that one station is located between Wayman Branch Road and KY 17 and hence should reflect the highest volumes on that segment).
- KY 1501 is perceived to be used as a "cut-through" for traffic northbound on KY 16 destined for westbound I-275 (and one attendee confirmed his own usage in this manner); future construction on KY 16 between KY 1501 and I-275 is forecast to increase use of KY 1501 as a "cut-through" route.
- It was suggested that spot improvements on the hill west of Crystal Lake Drive would be difficult since this problem area is a mile-long segment rather than a spot.
- That segment between Crystal Lake Drive and KY 17 appears to be the priority issue for local officials.
- Concern was expressed about the safety aspect of providing bicycle lanes, particularly west of Crystal Lake Drive. It was stated that there should be fewer safety problems from Crystal Lake Drive east to KY 16.
- The provision of sidewalks is important.

**End of Minutes** 

cc: attendants



Architecture

Engineering

Construction

# **MEETING MINUTES**

Project: KY 1501/Hands Pike, Kenton County

Item No: 6-8307.00

Purpose: Local Officials Meeting #2

Place: District-6, Covington, Kentucky

Meeting Date: April 29, 2008

Prepared By: Bruce Siria

In Attendance:

Jim Wilson KYTC, Division of Planning

Mike Bezold KYTC, District 6, Planning

Rob Hans KYTC, District 6, Planning

Tony Blau KYTC, District 6, Utilities

Keith Logsdon Northern Kentucky Area Planning Commission

Caitlin Douglas Northern Kentucky Area Development District

Jill Bailey City of Taylor Mill

Bob Haake City of Taylor Mill

Mark Kreimborg City of Taylor Mill

Tom Logan City of Covington

Suzann Gettys City of Covington

Albert Zimmerman Qk4

Tom Springer Qk4

Steve Kurowsky Qk4

Bruce Siria Qk4

The project is an Alternatives Study of KY 1501/Hands Pike in Kenton County between KY 17 and KY 16. The objective of the meeting was to review the status of the study and present the preferred alternative(s) and priorities identified by KYTC at the morning project team meeting.

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Following introductions, Tom Springer facilitated the meeting using handouts and a PowerPoint presentation which reviewed corridor segments, alternative options, comments received at the public meeting, and KYTC preferences and priorities. Because of little overlap between attendees at this meeting and the previous local officials meeting in October, 2007, Mr. Springer provided additional project background information beyond what was included in the presentation materials.

Respondents to the survey form distributed at the public meeting held in February, 2008 felt Section One (defined below) had the most important improvement need. Within that section, respondents felt the Hands Pike Hill spot improvements were the preferred improvements.

The discussion then moved to the alternate analysis sections.

# Section One: From KY 17 (MP 0.0) to near Crystal Lake Drive (MP 0.91) (Hands Pike Hill)

Two short-term and six long-term improvement options were reviewed:

- Short-Term Options:
  - o Hands Pike Hill Spot Improvements #1: \$4.5 million
  - o Hands Pike Hill Spot Improvements #2: \$0.5 million
- Long-Term Options
  - o Alternate 1.0 (Upgrade Existing Hands Pike): \$5 million
  - O Alternate 1.1 (New Corridor from KY 17 @ Madison Pike to existing Hands Pike near MP 0.65): \$5 million
  - O Alternate 1.2 (New Corridor from KY 17 @ Madison Pike to existing Hands Pike near MP 0.95): \$8 million
  - O Alternate 1.3 (New Corridor from KY 17 approximately 0.75 miles south of current KY 17/Hands Pike junction to existing Hands Pike near Crystal Lake Drive. This alternate would have a vertical grade of less than 5%, or about one-half of each of the other long-term options): \$16 million
  - O Alternate 1.4 (Partial new corridor east of existing Hands Pike from approximately MP 0.4 to approximately MP 0.9.): \$21 million
  - O Alternate 1.5 (Partial new construction south and west of existing Hands Pike from near existing Hands Pike junction with KY 3035 to approximately MP 0.9.): \$8 million

KYTC prefers that Spot Improvement #2 be constructed as soon as possible, and that full improvements in Section 1 be constructed ultimately. Both Alternate 1.0 and 1.1 will be carried to Design phase of project development where a final decision would be made; six-foot wide paved shoulders are to be included in this rural cross-section as a provision for bicyclists.

## Section Two: From Near Crystal Lake Drive (MP 0.91) to Near Otter Court (MP 1.47)

A three-lane urban section (curb and gutter) was considered based on a planning assumption that the roadway centerline would remain as is (actual centerline alignment was assessed to be a design detail that

could be better addressed in subsequent project development phases). More than 60% of survey respondents favored this approach. Nearly <sup>3</sup>/<sub>4</sub> of these same respondents favored elevating the sag curve between MP 1.2 and 1.3. Almost two in three respondents preferred sidewalks on each side, but less than 43% favored bicycle lanes. A continuous left-turn lane was felt best due to the several offset side street intersections. The estimated cost of this improvement is \$3.8 million. This concept would include improving the sag curve between MP 1.2 and 1.3. An additional improvement considered within this section was the construction of a roundabout at the intersection of Tripoli Lane/Tanarack Drive. This additional feature was estimated to cost almost as much (\$3.5 million) as the section improvement itself, and would bring the total section improvement cost to \$7.3 million. Only 30% of respondents favored inclusion of this improvement feature. KYTC prefers that this section be upgraded to three lanes with a center two-way left-turn lane including improving the sag curve, with a conventional sidewalk provided on one side of the road and a wider sidewalk provided as a multi-use bicycle/pedestrian path on the other, and no roundabout.

# Section Three: From Near Otter Court (MP 1.47) to East of Edwin Drive (MP 2.17)

Sixty percent of survey respondents favored three lanes with a center two-way left-turn lane. 2/3 favored sidewalks, but only slightly more than one in three favored bicycle lanes. Two alternative locations for improvements were considered:

- Alternate A: A new corridor south and west of existing Hands Pike from near the intersection with Otter Court (MP 1.47) to the vicinity of MP 2.17. This alternate is estimated to cost \$7.8 million. Nearly 2/3 of survey respondents favored this alternate.
- Alternate B: Improve the existing corridor. This alternative is estimated to cost more than \$11 million. Less than thirty percent of respondents favored this alternate.

KYTC prefers that the new corridor be constructed with two lanes including a conventional sidewalk on one side of the road and a wider sidewalk provided as a multi-use bicycle/pedestrian path on the other.

# Section Four: From East of Edwin Drive (MP 2.17) to KY 16 (MP 2.52)

A portion of this eastern-most section (east of approximately MP 2.4) is planned for improvement in conjunction with the KY 16 improvement project. Nearly seventy percent of survey respondents favored three lanes with a center two-way left-turn lane west of that point. Almost two in three respondents preferred sidewalks on each side, but less than 45% favored bicycle lanes. Such an improvement was estimated to cost nearly \$1.5 million. KYTC prefers that the new corridor be constructed with two lanes including a conventional sidewalk on one side of the road and a wider sidewalk provided as a multi-use bicycle/pedestrian path on the other.

The KYTC project team preferred that these priorities be reflected in the study's final report:

- 1. Spot Improvement #2 in Section 1: \$1 million (Note: cost estimates included in this portion of the meeting minutes reflect revisions made by KYTC subsequent to the meeting.)
- 2. Full Improvements in Section 1: \$8-9 million depending upon the alternate chosen in Design phase and the extent to which spot improvements ultimately can be integrated into final improvements.

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- 3. Construct 3-Lane Urban Section w/ Center Left-Turn Lane in Section 2: \$4.5 million
- 4. Construct 2-Lane Urban Section 3 on New Alignment: \$11 million.
- 5. Construct 2-Lane Urban Section w/ Center Left-Turn Lane in Section 4: \$2 million

The total revised estimated cost of these prioritized improvements is \$26 million.

# Discussion:

The local officials then engaged in some discussion concerning the recommendations and the priorities for implementation thereof. Particular issues raised in this discussion included:

- Concern that implementation of short-term improvements to Hands Pike Hill would preclude consideration of full improvements to that section. KYTC responded that, due primarily to funding shortfalls, long-term improvements were not likely to be implemented in the near term, but that funding of short-term improvements were possible;
- A preference for Alternate 1.2 over Alternate 1.0 or 1.1 in Section 1 due to the elimination of more horizontal curvature. KYTC responded that either Alternate 1.0 or 1.1 would be designed to eliminate substandard horizontal curvature, and that Alternate 1.2 was significantly more costly than either Alternate 1.0 or 1.1.
- Concern that traffic volumes on the eastern portion of Hands Pike might increase vis-à-vis the western end with improvements to KY 16 and whether the recommended improvements would accommodate this. The consultant believes that the recommended improvements would accommodate this to the extent that it would occur.

The consultant will submit a draft final report to KYTC for their review and comment in June.

**End of Minutes** 



Engineering

Construction

Project: KY 1501/Hands Pike, Kenton County

Item No: 6-8307.00

Purpose: Project Team Meeting #1

Place: District-6, Covington, Kentucky

Meeting Date: October 3, 2007

Prepared By: Tom H. Springer

In Attendance:

Jim Wilson KYTC, Division of Planning

Mike Bezold KYTC, District 6, Planning

Rob Hans KYTC, District 6, Planning

Tony Blau KYTC, District 6, Utilities

Mike Yeager KYTC, District 6, Traffic

Jason Weathers KYTC, District 6, Utilities

Andy Yeager KYTC, District 6, Maintenance

Rick Davis KYTC, District 6, Construction

Jim Brannon KYTC, District 6, Preconstruction

Bill Madden KYTC, District 6, Traffic

Brad Eldridge KYTC, Central Office, Design

Albert Zimmerman Qk4

Bruce Siria Qk4

Tom Springer Qk4

The project is an Alternatives Study of KY 1501/Hands Pike in Kenton County between KY 17 and KY 16. The objective of the meeting was to initiate the planning project, review existing conditions, and plan for the Local Officials Meeting to be held at 1:00 p.m. the same day.

Following a welcoming and introductions by Mike Bezold, Tom Springer facilitated the meeting by first describing the handouts, which included an agenda, a United States Geological Survey (USGS) map, an aerial photograph, a 3D map, Highway Information System (H.I.S.) data, crash data, the scope of work, the public involvement plan, and the 2002 Programming Study.

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The PowerPoint presentation included a map of the study area, an overview of the scope of work, the project schedule, a photo tour of the study area, a review of the H.I.S. data, the Environmental Overview, a blank slide for discussion of project goals, overview of possible alternative concepts, and next steps in the planning process. Key points noted were the high traffic volumes in the western section of the corridor, which are over 10,000 average daily traffic (ADT), and the entire corridor has a high critical rate factor, ranging from 1.15 to 2.77.

The majority of the meeting focused around the identification of project goals and alternative concepts.

#### Project Goals

For the project goals, the Project Team identified the following:

- Improve safety conditions of KY-1501
- Improve access for local traffic

It was discussed, but decided not to be goal of the project, to provide an east-west connector for regional cut through traffic between KY 16 and KY 17. Instead, the goal to improve access for local traffic was selected.

### **Alternative Concepts**

Alternative concepts were discussed throughout the meeting. Following are items mentioned that could be considered as part of this study:

- Improved cross drains on the Hands Pike Hill to address runoff, which results in a frozen surface in the winter
- Cutting back hills and vegetation to improve sight distance and the ability to read warning signs
- Two-lane spot improvements that would correct a small horizontal or vertical deficiency and tie back into the existing road as soon as possible
- Traffic calming concepts, such as roundabouts
- Extension of turning lanes into subdivisions
- An ultimate three-lane section from the top of Hands Pike Hill (at Crystal Lake Drive) east to KY 16 with a 35-MPH design speed. This could be divided into two sections at Otter Court.
- Striped bicycle lanes and sidewalks from the top of Hands Pike Hill east to KY 16. (KY 16 will have bicycle facilities.)
- For Hands Pike Hill, an ultimate two-lane section from the top of Crystal Lake Drive west to KY 17 with a 45-MPH design speed. Various new alternative route locations should be considered for this section.
- An interim spot improvement to correct a reverse curve just west of Crystal Lake Drive

#### Other Items

• It was agreed to consider inviting Ohio-Kentucky-Indiana Regional Council of Governments (OKI), Northern Kentucky Planning Commission (NKPC), and Northern Kentucky Area Development District (NKADD) to the Project Team.

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- NKPC has a significant amount of Geographic Information System (GIS) data available that we could use for this project. If necessary, District-6 could obtain this for Qk4.
- It was requested to take the study area boundary off the map for the displays at the public meeting.

## **End of Minutes**

cc: attendants



Engineering

Construction

Project: KY 1501/Hands Pike, Kenton County

Item No: 6-8307.00

Purpose: Project Team Meeting #2

Place: District-6, Covington, Kentucky

Meeting Date: December 20, 2007

Prepared By: Bruce Siria

In Attendance:

Jim Wilson KYTC, Division of Planning

Mike Bezold KYTC, District 6, Planning

Tony Blau KYTC, District 6, Utilities

Mike Yeager KYTC, District 6, Traffic

Jason Weathers KYTC, District 6, Utilities

Andy Yeager KYTC, District 6, Maintenance

Mike Lorenz KYTC, District 6, Traffic

Stacee Hans KYTC, District 6 Environmental

Brad Eldridge KYTC, Central Office, Design

Albert Zimmerman Qk4

Bruce Siria Qk4

Tom Springer Qk4

Steve Kurowsky Qk4

The project is an Alternatives Study of KY 1501/Hands Pike in Kenton County between KY 17 and KY 16. The objective of the meeting was to review the status of the study, discuss alternative options, and plan for the public meeting on the project to be scheduled in the next six weeks.

Following introductions, Bruce Siria and Steve Kurowsky facilitated the meeting using a notebook for each attendee and a PowerPoint presentation which focused on alternative options. Discussion concerning each alternative option is summarized below:

KY 1501/Hands Pike Alternatives Planning Study December 20, 2007 Meeting Minutes Page 2 of 6

# Short-Term Solution to the Hill between Milepoints 0.4 and 0.9 (Hands Pike Hill Spot Improvements):

The Project Team members expressed concern that the short-term option did not address the high crash area of Curve 1 (see attachment). Qk4 responded that the cause of crashes was disproportionately wet weather related, and that the proposed improvements to Curve 3 would improve the safety of the roadway segment. The Project Team requested that the Short-Term Solution (which the Project Team asked be called Hands Pike Hill Spot Improvements) include addressing the horizontal curvature at Curve 1. While the current curve barely meets horizontal curve standards for a 35 mph speed, the Project Team asked that the Spot Improvements option look at a horizontal curvature radius that would satisfy, at a minimum, 45 mph design criteria and possibly 55 mph design criteria. Although it was acknowledged as a design detail, the Project Team requested that a two-foot shoulder be added to the "down slope" side of the proposed Spot Improvements in addition to the "up slope" side, as well as using a twelve-foot driving lane, and that the cost estimate be modified to reflect this. The Project Team asked that Qk4 double-check to insure that correcting super elevation deficiencies at Curve 1 was included in the cost estimate. The Project Team also requested the inclusion of raised pavement markers in this alternate.

#### Rural Section 1, Alternate 0:

The Project Team requested that Qk4 revise this Alternate so that both horizontal and vertical curvature satisfy, at a minimum, 45 mph design criteria and possibly 55 mph design criteria. The Project Team requested that Qk4 consider a revised Alternative 0 that would modify the intersection with Wayman Branch Road and avoid impacts to Historic Properties.

### Rural Section 1, Alternate 5:

The Project Team requested that this alternate be eliminated from further consideration.

#### Urban Section 2, Alternates L, M, and R:

The Project Team requested that Qk4 present only Alternate M on mapping prepared for the upcoming public meeting and that a range of potential impacts reflecting Alternates L, M, and R be shown at that public meeting.

#### Urban Section 2, Roundabout at Tripoli Lane/Tamarack Drive:

After some discussion, the Project Team agreed to show this Alternate at the public meeting.

# <u>Urban Section 3, Alternate A and B:</u>

The Project Team expressed concern that these alternates do little to address the project goals of improving safety conditions on KY 1501 and improving access for local traffic. There was also some discussion

KY 1501/Hands Pike Alternatives Planning Study December 20, 2007 Meeting Minutes Page 3 of 6

about modifications to the western part of Alternates A and B to reduce impacts on the estimated eleven required residential relocations. Qk4 pointed out an overhead transmission tower that essentially eliminates Alternate B. In consideration of these factors, the Project Team agreed to take Alternate A but not Alternate B to the public meeting, to relabel what had been Alternate C as Alternate B for presentation consistency and take that alternate to the public meeting, and to show Alternate A as is without modifications to the western portion thereof. The Project Team requested that Qk4 check with the Northern Kentucky Area Planning Commission concerning proposed development in the area of Alternate A.

#### <u>Urban Section 3, Alternate C:</u>

This segment will now be lettered as Urban Section 3, Alternate B.

# **Urban Section 4, Alternate O:**

The Project Team suggested that this be relabeled simply as Section 4.

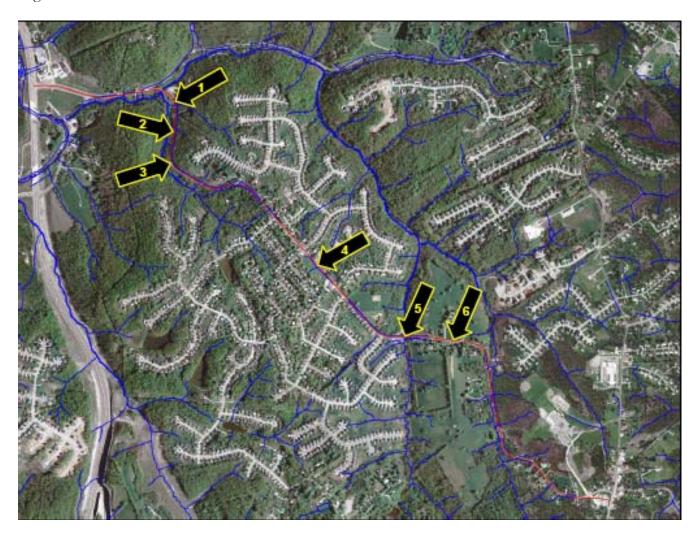
## **General Comments:**

The Project Team suggested that \$50/square yard rather than \$30 be used for pavement cost, that \$40,000/acre be used for Right-of-Way costs for the Spot Improvement and Rural Section Alternatives, that \$75,000/acre be used for Urban Section Alternatives, and that \$300,000 per residence be used. The Project Team requested that a range of costs from high to low be shown at the public meeting. (Note: After incorporating all discussion items at the project team meeting, the estimated costs range from \$14.4 million to \$37.2 million, not including the Spot Improvement Option.) In order to simplify the public meeting presentation, the Project Team requested only one or two maps per analysis section for a total of five or six maps. These boards should include key facts and figures on each board with ranges of impacts. Typical sections will be shown on separate boards. Qk4 will e-mail Mike Bezold a copy of these boards at least a week before the public meeting for his review and suggested revisions. Given the necessity to contact the school district, currently on Christmas break, about having the public meeting at the Taylor Mill Elementary School, the Project Team indicated the public meeting would likely be held on or after February 7. The Project Team asked about a comparative geotechnical analysis among the proposed alternates. Qk4 will develop a questionnaire proposed for use at the public meeting and e-mail to KYTC staff at least one week prior to the public meeting for review and comment. Qk4 will also develop a draft flyer advertising the public meeting as soon as the date and location are finalized.

**End of Minutes** 

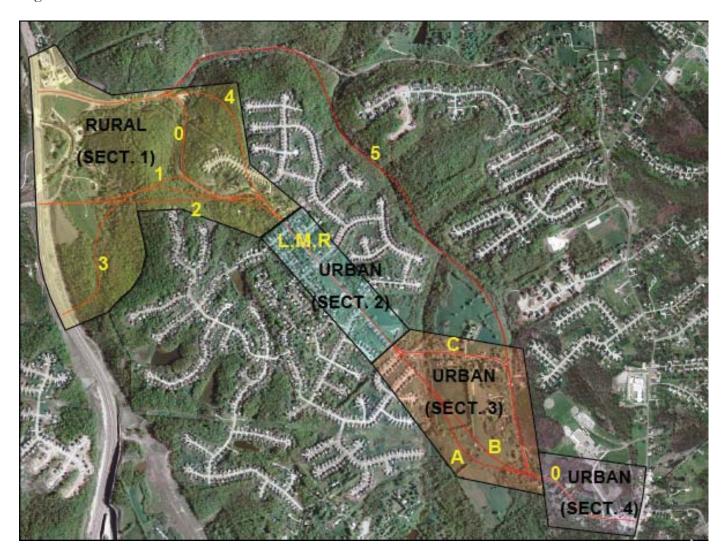
cc: attendees

KY 1501/Hands Pike Alternatives Planning Study December 20, 2007 Meeting Minutes Page 4 of 6





KY 1501/Hands Pike Alternatives Planning Study December 20, 2007 Meeting Minutes Page 6 of 6





Engineering

Construction

Project: KY 1501/Hands Pike, Kenton County

Item No: 6-8307.00

Purpose: Project Team Meeting #3

Place: District-6, Covington, Kentucky

Meeting Date: April 29, 2008

Prepared By: Bruce Siria

In Attendance:

Jim Wilson KYTC, Division of Planning

Mike Bezold KYTC, District 6, Planning

Tony Blau KYTC, District 6, Utilities

Mike Yeager KYTC, District 6, Traffic

Jason Weathers KYTC, District 6, Utilities

Andy Yeager KYTC, District 6, Maintenance

Stacee Hans KYTC, District 6 Environmental

Tom Schomaker KYTC, District 6 Executive Director

Hank Germann KYTC, District 6, Right-of-Way

Rick Davis KYTC, District 6, Traffic

Rob Hans KYTC, District 6, Planning

Jim Brannon KYTC, District 6, Preconstruction

Albert Zimmerman Qk4

Tom Springer Qk4

Steve Kurowsky Qk4

Bruce Siria Qk4

The project is an Alternatives Study of KY 1501/Hands Pike in Kenton County between KY 17 and KY 16. The objective of the meeting was to review the status of the study, present the consultant's recommendations and priorities, discuss those recommendations and priorities, and conclude with KYTC identifying its preferred alternative(s) and priorities.

KY 1501/Hands Pike Alternatives Planning Study April 29, 2008 Meeting Minutes Page 2 of 5

Following introductions, Bruce Siria facilitated the meeting using handouts and a PowerPoint presentation which reviewed corridor segments, alternative options, comments received at the public meeting, consultant recommendations, and satisfaction of project goals.

Respondents to the survey form distributed at the public meeting felt Section One (defined below) had the most important improvement need. Within that section, respondents felt the Hands Pike Hill spot improvements were the preferred improvements.

The discussion then moved to the alternate analysis sections.

#### Section One: From KY 17 (MP 0.0) to near Crystal Lake Drive (MP 0.91) (Hands Pike Hill)

Two short-term and six long-term improvement options were reviewed:

- Short-Term Options:
  - o Hands Pike Hill Spot Improvements #1: \$4.5 million
  - o Hands Pike Hill Spot Improvements #2: \$0.5 million
- Long-Term Options
  - o Alternate 1.0 (Upgrade Existing Hands Pike): \$5 million
  - O Alternate 1.1 (New Corridor from KY 17 @ Madison Pike to existing Hands Pike near MP 0.65): \$5 million
  - o Alternate 1.2 (New Corridor from KY 17 @ Madison Pike to existing Hands Pike near MP 0.95): \$8 million
  - O Alternate 1.3 (New Corridor from KY 17 approximately 0.75 miles south of current KY 17/Hands Pike junction to existing Hands Pike near Crystal Lake Drive. This alternate would have a vertical grade of less than 5%, or about one-half of each of the other long-term options): \$16 million
  - O Alternate 1.4 (Partial new corridor east of existing Hands Pike from approximately MP 0.4 to approximately MP 0.9.): \$21 million
  - o Alternate 1.5 (Partial new construction south and west of existing Hands Pike from near existing Hands Pike junction with KY 3035 to approximately MP 0.9.): \$8 million

The consultant recommended that Spot Improvement #2 be constructed as soon as possible, and that Alternate 1.0 be constructed ultimately. These recommendations were felt to provide good satisfaction of the project goals.

# Section Two: From Near Crystal Lake Drive (MP 0.91) to Near Otter Court (MP 1.47)

A three-lane urban section (curb and gutter) was considered based on a planning assumption that the roadway centerline would remain as is (actual centerline alignment was assessed to be a design detail that could be better addressed in subsequent project development phases). More than 60% of survey respondents favored this approach. Nearly 3/4 of these same respondents favored elevating the sag curve between MP 1.2 and 1.3. Almost two in three respondents preferred sidewalks on each side, but less than 43% favored bicycle lanes. A continuous left-turn lane was felt best due to the several offset side street intersections. The estimated cost of this improvement is \$3.8 million. This concept would include

KY 1501/Hands Pike Alternatives Planning Study April 29, 2008 Meeting Minutes Page 3 of 5

improving the sag curve between MP 1.2 and 1.3. An additional improvement considered within this section was the construction of a roundabout at the intersection of Tripoli Lane/Tanarack Drive. This additional feature was estimated to cost almost as much (\$3.5 million) as the section improvement itself, and would bring the total section improvement cost to \$7.3 million. Only 30% of respondents favored inclusion of this improvement feature. The consultant recommended that this section be upgraded to three lanes with a center two-way left-turn lane including improving the sag curve, sidewalks on each side, no bicycle lanes, and no roundabout. These recommendations were felt to provide good satisfaction of the project goals.

# Section Three: From Near Otter Court (MP 1.47) to East of Edwin Drive (MP 2.17)

Sixty percent of survey respondents favored three lanes with a center two-way left-turn lane. 2/3 favored sidewalks, but only slightly more than one in three favored bicycle lanes. Two alternative locations for improvements were considered:

- Alternate A: A new corridor south and west of existing Hands Pike from near the intersection with Otter Court (MP 1.47) to the vicinity of MP 2.17. This alternate is estimated to cost \$7.8 million. Nearly 2/3 of survey respondents favored this alternate.
- Alternate B: Improve the existing corridor. This alternative is estimated to cost more than \$11 million. Less than thirty percent of respondents favored this alternate.

The consultant recommended that the new corridor be constructed with three lanes and a center two-way left-turn lane including sidewalks on each side and no bicycle lanes. These recommendations were felt to provide good satisfaction of the project goals.

#### Section Four: From East of Edwin Drive (MP 2.17) to KY 16 (MP 2.52)

A portion of this eastern-most section (from approximately MP 2.4 east) is planned for improvement in conjunction with the KY 16 reconstruction project. Nearly seventy percent of survey respondents favored three lanes with a center two-way left-turn lane west of that point. Almost two in three respondents preferred sidewalks on each side, but less than 45% favored bicycle lanes. Such an improvement was estimated to cost nearly \$1.5 million. The consultant recommended that alternate, but included both sidewalks and bicycle lanes since both were being provided on Hands Pike near KY 16 as part of that project. These recommendations were felt to provide good satisfaction of the project goals.

The consultant recommended this set of priorities for these improvements:

- 1. Spot Improvement #2 in Section 1: \$0.5 million
- 2. Construct Alternate 1.0 in Section 1, incorporating Spot Improvements in Item 1: \$4.5 million
- 3. Construct 3-Lane w/ Center Left-Turn Lane in Section 2: \$3.8 million
- 4. Construct 3-Lane w/ Center Left-Turn Lane in Section 3 on New Alignment: \$7.8 million
- 5. Construct 3-Lane w/ Center Left-Turn Lane in Section 4: \$1.5 million

The total estimated cost of these recommended improvements is \$18.1 million.

KY 1501/Hands Pike Alternatives Planning Study April 29, 2008 Meeting Minutes Page 4 of 5

#### Discussion:

The project team then engaged in significant discussion concerning the recommendations and the priorities for implementation thereof. Particular issues raised in this discussion included:

- The efficacy of recommending both short- and long-term improvements on Section One;
- The accommodation, or lack thereof, of bicyclists;
- The recommended cross-section in Section Three;
- How the likely timing of improvements in Section Three might affect the ultimate recommendation

In conclusion, the project team preferred that these projects and priorities should be reflected in the study's final report:

- 1. Spot Improvement #2 in Section 1: \$1 million (Note: cost estimates included in this portion of the meeting minutes reflect revisions made by KYTC subsequent to the meeting.)
- 2. Full Improvements in Section 1: Both Alternate 1.0 and 1.1 are to be carried to Design phase of project development where a final decision would be made; six-foot wide paved shoulders are to be included in this rural cross-section as a provision for bicyclists: \$8-9 million depending upon the alternate chosen in Design phase and the extent to which spot improvements ultimately can be integrated into final improvements.
- 3. Construct 3-Lane Urban Section w/ Center Left-Turn Lane in Section 2; a conventional sidewalk would be provided on one side of the road and a wider sidewalk would be provided as a multi-use bicycle/pedestrian path on the other: \$4.5 million
- 4. Construct 2-Lane Urban Section 3 on New Alignment: a conventional sidewalk would be provided on one side of the road and a wider sidewalk would be provided as a multi-use bicycle/pedestrian path on the other: \$11 million. It was noted that, since implementation of improvements in this section is not expected in the near-term, ultimately improvements might instead be made to the existing roadway due to potential development which may occur in the corridor of the proposed new roadway.
- 5. Construct 2-Lane Urban Section w/ Center Left-Turn Lane in Section 4: a conventional sidewalk would be provided on one side of the road and a wider sidewalk would be provided as a multi-use bicycle/pedestrian path on the other: \$2 million

The total revised estimated cost of these preferred improvements is \$26 million.

#### **General Comments:**

During the project team meeting, the consultant was provided copies of all responses to the Resource Agency Coordination letter sent out by KYTC. KYTC indicated they would check during the afternoon local officials meeting on the status of the Environmental Justice review being prepared by the Northern Kentucky Area Development District. (Note: During that latter meeting, NKADD advised KYTC that the review was not yet complete.) The consultant will review these items and summarize them, and the significant impacts identified therein, in the draft final report for this study.

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The revised cost estimates provided subsequent to the meeting were based on revisions to the recommended improvements and on the following revisions to the estimated unit costs:

- Addition of estimated costs for guardrail in Section one;
- Increased in estimated pavement cost from \$50/yard<sup>2</sup> to \$60/yard<sup>2</sup>;
- Increased the area of pavement used in the Hands Pike Hill Spot Improvement 2 to include pavement for half the width of the roadway. This would be enough pavement to widen the roadway to 12' lanes, shoulders, correct the super elevation, widen to the inside of the curves, and surface the entire area;
- Added shoulder to the width of pavement;
- Increased the estimated cost of excavation from \$3.50/yard³ to \$6/yard³;
- Increased the estimated cost of embankment from \$6.00/yard<sup>3</sup> to \$8.00/ yard<sup>3</sup>;
- Increased the R/W cost to \$40,000/lot;
- Increased the miscellaneous cost factor to 0.7 to account for drainage, erosion control, striping, etc.

The project team expressed a preference that cost estimates be portrayed with no more than two significant numbers. The consultant will submit a draft final report to KYTC for their review and comment in June.

**End of Minutes**