

# MINUTES

## **Final Project Team Meeting KY 32 – Rowan and Elliott Counties – Item 9-192.00**

KYTC Highway District 9 Office

Flemingsburg, Kentucky

May 26, 2009

10:00 a.m.

The final project team meeting for the KY 32 Alternatives Study in Rowan and Elliott Counties was held at 10:00 a.m. on Tuesday, May 26, 2009, at the KYTC Highway District 9 Office in Flemingsburg, Kentucky. The purpose of the meeting was to (1) discuss the input from the second round of resource agency coordination, the second local officials stakeholders meeting, and the second public meeting and (2) review the Level 2 Screening Matrix and the public and resource agency input to determine a recommendation for the KY 32 study corridor. A copy of the agenda is attached.

Participants in the meeting represented the Gateway Area Development District, FIVCO Area Development District, Kentucky Transportation Cabinet (KYTC) District 9 and Central Office, and Wilbur Smith Associates (WSA). Attendees included the following:

Joy Mullins	Gateway Area Development District
Russ Brannon	FIVCO Area Development District
Thomas Witt	KYTC Central Office, Planning
David Martin	KYTC Central Office, Planning
Joseph Carter	KYTC Central Office, Planning
Darrin Eldridge	KYTC District 9, Project Development
Phil Mauney	KYTC District 9, Planning
Karen Mynhier	KYTC District 9, Environmental
Rachel Catchings	KYTC District 9, Design
Ken Sperry	HMB Professional Engineers
Carl D. Dixon	Wilbur Smith Associates
Amanda R. Spencer	Wilbur Smith Associates

A summary of the key components and discussion items for this meeting is provided below, following the agenda outline.

### **1. Welcome and Introductions**

Thomas Witt began the meeting by welcoming the participants. Attendees then introduced themselves.

### **2. Purpose of Meeting**

Thomas Witt briefly explained that the purpose of the meeting was to discuss and develop a recommended alternative for the KY 32 study corridor considering study findings to date.

### **3. Project Update**

Amanda Spencer summarized input from the 19 resource agencies that responded to the second round of coordination. Amanda noted that concerns were expressed by the Division of Water in the Kentucky Environmental and Public Protection Cabinet, Kentuckians for the Commonwealth, and U.S. Army Corps of Engineers-Huntington Division about potential impacts

of both Alternatives 2 and 3 to Big Caney Creek and/or Laurel Creek. The Division of Structural Design, Geotechnical Branch, also cited concerns with Alternative 2 because it could encounter the Olive Hill Clay Bed of Crider. This is semi-flint clay and flint clay that has been extensively stripped and underground mined along Big Caney Creek. The Branch recommended that areas directly on top of and around this bed be avoided.

Amanda then summarized input received from local officials and stakeholders at the December 11, 2008 meetings held in Morehead and Sandy Hook. 19 people attended the meetings and 7 surveys were completed. The surveys indicated that Alternatives 1, 1P, and 2 were the top preference, in that order. The No Build alternative was the least preferred. The most preferred spot improvements were at locations 2a and 9. Proposed spot improvements 1a, 1b, and 7 were the second most preferred. [NOTE: The spot improvement locations were later revised slightly and given a letter designation prior to the public meeting in March 2009.]

Last, Amanda summarized and shared the results of the second public meeting held in Sandy Hook on March 24, 2009. Amanda explained that 68 people signed an attendance sheet at the two-hour public session. Forty-six (67.6%) of the attendees cast votes at the Alternative Preference station, and 36 (52.9%) completed and returned survey forms. At the voting station, Alternatives 1P and 2B tied for the most preferred alternative, and the No Build Alternative was the least preferred alternative. According to points assigned for attendees' preferences submitted on survey forms, Alternative 1P was the most preferred, and Alternative 2B was the second most preferred. Alternatives 3A and the No Build Alternative received the fewest points. The No Build appeared to be the least preferred alternative. For spot improvement locations, the attendees preferred Spot Improvements J, K, and B.

#### **4. Study Recommendations**

Carl Dixon led a discussion regarding the concerns and benefits with each proposed improvement alternative. Carl began by recommending the dismissal of Alternative 3 from further consideration due to a number of concerns. Key discussion points follow.

Connectivity to Existing KY 32: This alternative provides no opportunities for a connection to existing KY 32 between KY 7 and the proposed tie-down on KY 32 just east of KY 173. Therefore, there would no improvement for highway users with origins and destinations along KY 32 for approximately 12 miles (85% of the total project length). Some local roads could be improved or new roads built to provide this connection; however, this would expand the scope of the project, increase the cost, and pose other potential impacts that have not yet been assessed.

Purpose and Need: Alternative 3 is on new alignment and has no connectivity to existing KY 32 for most of its length. While it would meet the purpose and need of improved access and safety for through traffic, the geometric conditions would not be improved so it would be of little benefit to those who live along the existing roadway.

Constructability: Because of the lack of connectivity, there are no opportunities in this 12-mile section to build constructible sections that would have independent utility during the time it would take to complete phased construction.

Stream Impacts: Laurel Creek would likely be impacted if Option B of Alternative 3 is selected. The portion of Laurel Creek that could be impacted is located in the area where Option B separates from Option A in the easternmost portion of the corridor. Up to 35 named and

unnamed streams are located within this corridor, but not all would be crossed. While not a reason by itself, this issue adds additional weight for dismissing this alternative for a combination of factors.

**Known and Potential Archaeological Sites:** There are up to four known archeological sites that could potentially impacted by Alternative 3. Because known sites exist, there is also increased potential for additional sites to exist. While not a reason by itself, this issue adds additional weight for dismissing this alternative for a combination of factors.

**Resource Agency Input:** Concerns were expressed by the Division of Water in the Kentucky Environmental and Public Protection Cabinet, Kentuckians for the Commonwealth, and U.S. Army Corps of Engineers-Huntington Division about potential impacts of both Alternatives 2 and 3 to Big Caney Creek and/or Laurel Creek.

**Public Sentiment:** At the final public meeting, public input was provided in two ways; a voting station and written surveys. At the voting station, Alternative 3A was the least preferred alternative. After combining the written survey results for the two options developed for each numbered corridor, Alternative 3 was the least favored alternative. These combined results showed 47% in favor of Alternative 1 or 1P, 29% for Alternatives 2A or 2B, and 17% for Alternative 3A or 3B. The voting station yielded similar results when totals were combined for 3A and 3B. While not a reason to dismiss by itself, the public input adds additional weight for dismissing this alternative for a combination of factors.

**Decision 1:** Discussion of these points led the group to agree that Alternative 3 should be dismissed.

The group then discussed the first section of Alternative 2 between KY 504 (MP 16.619) and approximately MP 19.9 (just east of Atlee Lowe Road). Key discussion items follow:

**Access:** This alternative would not provide a direct connection to KY 173, which is an important route in the area. At present, the section of existing KY 32 between KY 504 and KY 173 carries an Average Daily Traffic volume of 2,400 vehicles per day (vpd). There is a major traffic split at KY 173, with approximately 40% of the traffic continuing along KY 32 and 60% along KY 173. Although an improvement would result in a slight estimated diversion of about 300 vehicles per day from KY 173 to KY 32, almost half of the traffic would continue to use KY 173. Therefore, the first section of Alternative 2 would not improve access for those who continue to use KY 32.

**Safety:** The construction of the first section of Alternative 2 would not improve safety along existing KY 32 at Hogtown Hill between KY 504 and KY 173. Although the Critical Rate Factor does not indicate a major safety problem in this segment, there was one fatality reported in this section in the study data. More significantly, there was considerable anecdotal data from local officials and the public that there were perceived safety problems by highway users, particularly during snow and ice conditions. From local input, improving this section was considered a major need, especially given that a significant percentage of the traffic would continue to access both KY 173 and, for local residents, this portion of existing KY 32.

**Purpose and Need:** Because this section of Alternative 2 would not improve access and safety for a significant portion of highway users, it does not meet the purpose and need for the project as well as an improvement along the existing route (Alternatives 1 and 1P).

**Geotechnical Issues:** This section of Alternative 2 would pass through the Lee Formation. According to the Geotech Branch of KYTC, the Lee Formation is made up of mostly conglomeritic sandstone and minor amounts of shale that range from 0 to 200 feet in thickness in the study area. Within the Lee Formation is the Olive Hill Clay Bed of Crider, a semiflint clay

and flint clay bed that has been extensively stripped and underground mined along Big Caney Creek. The Geotech Branch recommends that areas directly on top of and around this bed should be avoided. Since an alignment could probably be developed that would avoid the areas of concern, this issue is not a reason by itself to dismiss this section of Alternative 2, but it adds additional weight when combined with other factors.

**Pipeline:** This alternative would cross the Marathon Ashland Pipeline in a new location. This is a major gas pipeline that crosses beneath existing KY 32 just east of KY 504. While any improvement would affect the pipeline, a road on new alignment could possibly result in more additional issues and costs. While this issue is not a reason by itself to dismiss this section of Alternative 2, it adds additional weight for dismissing this section for a combination of factors.

**Decision 2:** This discussion led the group to agree that this section of Alternative 2 should be dismissed.

The group then discussed Alternative 1. Following are the key discussion items.

**Stream Impacts:** Alternative 1 (Improve Existing KY 32) follows the ridge and may have significantly less stream impacts than 2 or 3. Stream impacts to Big Caney Creek and Laurel Creek appear to be the most important environmental issues of concern within the study area.

**Purpose and Need:** Alternative 1 improves access and safety for all highway users, including through traffic and those whose origins and destinations are within the study area. Therefore, the Alternative 1 best meets the purpose and need for the proposed KY 32 project.

**Constructability:** The opportunity for phased construction is much better since connectivity is not an issue. The project could be built in affordable, logical sections, each of which would have independent utility since the improvement would primarily along or in close proximity to the existing roadway.

**Resource Agency Input:** A primary concern from several key resource agencies were the potential impacts to Big Caney Creek and Laurel Creek. Generally, these agencies opposed Alternatives 2 and 3 and preferred Alternative 1.

**Public Input:** At the voting station, Alternatives 1P and 2B tied for the most preferred alternative. Based on the written survey, Alternative 1P was the most preferred alternative and Alternative 2B was second. Combining the written survey results for the two options for each of the numbered alternatives, the written public survey results indicate that Corridor Alternative 1 was the most favored alternative (47% for Alternative 1; 29% for Alternative 2; 17% for Alternative 3; 7% for Spot Improvements Only; and 5% for the No Build Alternative).

**Relocations:** Alternative 1 has the greatest potential number of relocations since many homes and/or other structures are located close to the existing road.

**Maintenance of Traffic:** Maintenance of traffic is an issue of concern; however, this potential problem could be minimized because of the following:

- The relatively low ADT along existing KY 32;
- The availability of detour routes via KY 173 and/or KY 504/KY 649; and
- The likely nature of the reconstruction along this curvy roadway (i.e., much of the improvement will be to reduce curves by building sections on new alignment; so the maintenance of traffic in many cases would only be at the crossing points where the new alignment merges and diverges from the existing KY 32 alignment).

**Stream Impacts:** Although Alternative 1 would have fewer potential impacts than Alternatives 2 and 3, there are still potential impacts just east of KY 173 at the headwaters of Laurel Creek, so,

if Alternative 1 moves forward, care is needed to stay as close to the existing alignment as possible at that location and/or to widen or reconstruct to the north side of the existing roadway.

Cemeteries: There are numerous cemeteries located along or in close proximity to the existing route. If Alternative 1 moves forward, care should be taken in the next phase to avoid or minimize the impacts to these important community resources.

Historic: While there are no historic sites on the National Register of Historic Places in the study area, there are numerous potentially historic structures along the existing route, in addition to the many cemeteries that may have historic importance. Historic sites are likely along existing KY 32 due to the number of older structures that are illustrated on early maps and are no longer extant. If Alternative 1 moves forward, care should be taken in the next phase to identify and to avoid or minimize impacts to these important community resources.

Archaeological Sites: It is possible that archaeological sites will be encountered along KY 32 since this is the area where much of the settlement has taken place over time. The numerous drainages and ridge tops signal a high likelihood for additional unrecorded prehistoric sites within the project area. If Alternative 1 moves forward, care should be taken in the next phase to identify and to avoid or minimize impacts to these important resources, if possible.

Utility Relocation: Several major utilities are located along the existing route. These are likely to be identified for relocation in the next phase.

Pipeline: Existing KY 32 currently crosses the Marathon Ashland Pipeline, and any improvement will need to address this issue.

**Decision 3:** The discussion of these points led the group to agree that Alternative 1 should be recommended for further consideration in the next phase.

The remaining section for discussion was Alternative 2B (excluding the first section of Alternative 2 from KY 504 to MP 19.9, which had been dismissed previously). Because potential issues may arise related to Alternative 1, Carl Dixon asked if the remaining portion of Alternative 2B should move forward in the next phase to allow for more flexibility. Following are key items discussed for this portion of Alternative 2B:

Connectivity and Constructability: Unlike Alternative 3, Alternative 2B would cross the existing roadway in two or three locations, which would make phased construction possible, since this alternative would provide connectivity and independent utility for phased construction.

Reduction of Some Impacts: It would likely reduce some of the potential impacts associated with Alternative 1, including relocations, maintenance of traffic, cemeteries, historic sites, archaeological sites, and utilities.

Stream and Trail Impacts: There is concern about potential impacts to Big Caney Creek to the north (in the middle of the corridor) and to Laurel Creek and the Laurel Gorge Trail to the south (near the eastern end of the corridor). Flexibility would be needed in the next phase to allow the development of an alignment to the outer limits of or possibly just outside the planning study corridor boundary to provide an opportunity to avoid or minimize impacts to these resources.

**Decision 4:** After discussing this corridor alternative, the group decided that Alternative 2 was too close to Big Caney Creek; however, it is desirable to have flexibility for a new alignment in the general area, but closer to existing KY 32. Based on this discussion, the project team decided that Alternative 1 should be modified to provide an opportunity for sections to be constructed off existing KY 32 within a widened Alternative 1 corridor. This was preferred over carrying the remainder of Alternative 2 forward because of the potential impacts Alternatives 2A

and 2B pose to Big Caney Creek, Laurel Creek, and/or the Laurel Gorge Trail. Widening the Alternative 1 corridor offers the same opportunity to go off alignment, if needed, with less potential impact to these sensitive resources.

A map of the recommendation for the Revised Corridor Alternative 1 is attached. [NOTE: WSA created the modified Alternative 1 after the meeting and submitted and received approval from KYTC via e-mail].

### ***Construction Sections***

Carl Dixon explained that spot improvements identified on each end are high priorities (A, B, J, and K), so constructing KY 32 from each end to the middle is recommended to address the highest priority sections first. Carl then presented a map with details on recommended construction sections. The project team concurred with the recommended phasing, as shown on the attached map.

### ***Typical Section***

Carl then engaged the group in a discussion of the typical section for an improved KY 32. The typical section of existing KY 32 includes 9-foot driving lanes and 2-foot combination shoulders. KY 32 is currently a Rural Major Collector. For planning level cost estimates, two potential cross-sections were used, one using full design guidelines and one using a "practical solution" option.

For the full design guidelines, the typical section included 12-foot driving lanes, 8-foot graded shoulders and a 12-foot clear zone. The improvement to KY 32 was assumed to be a two-lane section with turn lanes at major intersections.

The KYTC could elect a practical solution for the KY 32 corridor, so cost estimates were also prepared for this option. For planning purposes only, Alternative 1P, a "practical solution" option was developed for improvement of the existing roadway, which included a typical section with 11-foot driving lanes, 6-foot paved shoulders and no additional graded shoulder. While 98% of KY 32 is geometrically deficient to a 55 mph design speed, Alternative 1P included improvements only to horizontal curves with 25 mph geometrics and below. Alternative 1P also included widening the remaining corridor between those horizontal curves. As stated previously, the assumptions made for Alternative 1P were primarily for cost estimation purposes as one example of a practical solution.

**Decision 5:** While the typical sections developed for the planning study can provide some guidance, flexibility may be needed in the next phase to (1) decide whether full design guidelines should be used or (2) find the best way of applying practical solutions, including variations from the design parameters assumed in the planning phase. Therefore, it was agreed by the project team members that the typical section should be decided during the next phase of project development.

### ***Short-Term Improvements***

Carl Dixon noted that a number of potential short-term improvements had been identified. These improvements are intended to improve access and safety to the maximum extent possible based on the most critical needs. Carl recommended that short-term improvement

priorities be established because transportation funds are limited and availability is unpredictable.

**Decision 6:** Based on highway geometrics, crash history, and public input, the project team decided that the “spot improvements” identified in the study be constructed as funds are available in the following order of priority:

1. B - Reconstruct or realign KY 32 between KY 504 and KY 173, add eastbound and westbound passing lanes just east of KY 504 (includes intersection with Cox Cemetery Road).
2. A - Realign KY 504 at the KY 32 intersection.
3. J - Realign KY 32 (includes western end of Simmons Loop).
4. K - Realign KY 32 (includes eastern end of Simmons Loop).
5. C - Realign KY 32 just east of KY 173.
6. E - Realign KY 32 (includes intersection with Lower Caney Creek Road).
7. F - Realign KY 32 (includes intersection with Alexandra Drive).
8. G - Realign KY 32 (includes intersection with Sand Gap Road).
9. H - Realign KY 32 in/near Dewdrop.
10. I - Realign KY 32 between George Johnson Road and Thornberry Road.
11. D - Realign KY 32 (includes intersections with Fraley Cemetery Road and Adkins Road).

However, the project team also decided that the KYTC would continue to review these spot improvement locations and would have the flexibility to rearrange these priorities in the future, as needed, based on the level of available funds and changing conditions over time. Further, the project team agreed that the design and construction of each spot improvement should be consistent with its incorporation into the KY 32 long-term vision for improvement of the entire segment under study.

## **5. Next Steps/Schedule**

WSA was asked to modify the Alternative 1 corridor in accordance with the discussion of the corridor alternatives and then submit it to the KYTC for final approval, as noted in the discussion of Decision 4 in Section 4 of these minutes.

Once this final corridor is approved, WSA will begin work to develop a draft report for KYTC review by mid to late July, 2009.

## **6. Q & A**

With no further questions, the meeting was adjourned at approximately 11:30 a.m.



## **AGENDA**

### **Final Project Team Meeting**

### **KY 32 Alternatives Study, Rowan and Elliott Counties**

**KYTC Item No. 9-192.00**

**Highway District 9 Conference Room, Flemingsburg, Kentucky**

**10 a.m., May 26, 2009**

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|--|----------------------------------|
| <b>1. Welcome and Introductions</b>                  | <b>KYTC</b>                      |
| <b>2. Purpose of Meeting</b>                         | <b>KYTC</b>                      |
| <b>3. Project Update</b>                             | <b>WSA</b>                       |
| <b>a. Resource Agency Input</b>                      |                                  |
| <b>b. Local Officials/Local Stakeholders Meeting</b> |                                  |
| <b>c. Public Meeting and Survey Input</b>            |                                  |
| <b>4. Study Recommendations</b>                      | <b>WSA/<br/>Group Discussion</b> |
| <b>5. Next Steps</b>                                 | <b>WSA/KYTC</b>                  |
| <b>a. Draft Report</b>                               |                                  |
| <b>6. Q &amp; A</b>                                  | <b>Group Discussion</b>          |
| <b>ADJOURN</b>                                       | <b>KYTC</b>                      |



# KY 32 – Potential Construction Sections

