

# Appendix G

## Project Team Meeting Minutes



**MINUTES**  
**Project Team Meeting**  
**KY 1286/KY 998 – McCracken County – Item # 1-153.00**  
KYTC District 1 Office  
Paducah, Kentucky  
February 19, 2013  
10:00 AM Central

A project team meeting for the KY 1286/KY 998 Planning Study in McCracken County was held at 10:00 a.m. CST on Tuesday, February 19th, in Paducah, Kentucky. The purpose of the meeting was to discuss the project purpose and history, the scope of work, the preliminary data collected, relevant project issues, and public input strategies. Participants in the meeting represented the Kentucky Transportation Cabinet (KYTC) District 1 and Central Offices, and the consultant firm, CDM Smith. Meeting attendees included the following persons:

Mike McGregor	KYTC, District 1 Transportation Branch Manager
Kara Wilson	KYTC, District 1 Design
Chris Kuntz	KYTC, District 1 Traffic
Susan Oatman	KYTC, District 1 Design
Harold Gibson	KYTC, District 1 Structures
David Davis	KYTC, District 1 Utilities
Lucas Gilliam	KYTC, District 1 Utilities
Blake Beyer	KYTC, District 1 Environmental
Mikael Pelfrey	KYTC, Central Office Planning
Tonya Higdon	KYTC, Central Office Planning
Jonathan Reynolds*	KYTC, Central Office
Scott Thompson*	KYTC, Central Office
Dorian Brawner*	KYTC, Central Office
Brad Johnson	CDM Smith
Doug Smith	CDM Smith
Len Harper	CDM Smith

*\*Joined by phone.*

A summary of the key discussion items and decisions from this meeting are provided below, following the agenda outline. A copy of the meeting materials, including the agenda, is attached.

**1. Welcome and Introductions**

Mike McGregor, KYTC Project Manager, began the meeting, welcoming attendees and asking for formal introductions from all.

**2. Purpose of the Project**

Brad Johnson, CDM Smith Project Manager, briefly outlined the purpose of the project and the project limits. He noted the original project limits were extended to include KY 1286 between New Holt Road and KY 998 and include KY 998 between KY 1286 and US 60. This project will look at long-term solutions as well as short-term spot improvements. Brad also gave an overview of the two previous studies in the area; the US 60 Scoping Study (2012) and the Paducah-McCracken County Transportation Study (2002).

### **3. Purpose of the Meeting**

Brad Johnson explained that the purpose of the meeting was to discuss the project schedule, preliminary existing conditions findings, and plan for the next steps.

### **4. Project Approach/Schedule**

Referencing the project schedule, Brad shared that CDM Smith has begun existing conditions work and will soon start collecting information for the environmental overview.

He also explained that this kick off meeting was one of three meetings of the project team and explained the schedule and purpose of each of the stakeholder, local official, and public meetings to be held for the project.

### **5. Study Area**

The group agreed that the project termini are US 45 and US 60 and that study area shown in the basemap was adequate for this project. However, it was noted that the "S" curve shown on the basemap between Woodbine Drive and Wood Creek Drive has been straightened/fixed. It was also noted that there could be Indiana Bat Habitat's in the area.

### **6. Project Considerations/Issues**

CDM Smith noted areas of potential project issues (see handout) and the group had an open discussion about these and other project issues, as follows:

- CDM Smith will look at the traffic impacts of the consolidated McCracken County High School. It will serve about 2,000 students and is located on US 60 about 2 miles west of the KY 998 intersection. KYTC will provide CDM Smith with Stantec's Traffic Analysis for the school.
- KYTC will check on the status of the proposed traffic counts.
- CDM Smith will use the traffic counts to do a straight line forecast based on old reports and growth trends. KYTC Central Office will also conduct model runs so future year traffic results can be compared to the straight line forecast. The model will look at traffic results with and without the Paducah Outer Loop.
- Some of the project issues that were discussed were a cemetery near Seneca Lane, the major transmission lines between US 45 and Seneca Lane, potential flooding issues, lane and shoulder widths, lack of turn lanes, and roadside ditches.
- Loan Oak Elementary School should be included as a Stakeholder. Are there consolidation plans for the school?
- A driving force of the project should be safety improvements. CDM Smith will look at the crash analysis further to determine the cause and, if appropriate, potential fix to address high crash spots.
- KY 1286 and KY 998 is a primary route for through traffic traveling between US 45, US 62, and US 60.
- CDM Smith will look at the pavement slouching on the shoulders.
- KY 1286 improvement options likely will not require curb & gutter all the way through.
- The greatest need for pedestrian and bicycle facilities is from US 45 to US 62.
- There were improvements to the US 62 intersection last fall. This likely reduced the number of accidents at this location.
- The goal is to have a 45 mph design speed throughout, but CDM Smith will also look at practical solutions with reduced design speeds at deficient curves.

- CDM Smith will look at off alignment solutions to fix deficient horizontal curves.
- The Project Team will develop both short term spot improvements and long-term improvements. In addition to the No-Build, widening to three lanes and improving the existing two-lane facility will be considered. These alternatives will be considered with and without the Paducah Outer Loop. Other alternatives may be developed as the project progresses. CDM Smith will work with the Project Team to prioritize both the short term spot improvements and long-term improvements.
- KYTC will work with CDM Smith to develop Design, Construction, Right-of-Way, and Utilities cost estimates for the proposed alternatives. The methodology will likely incorporate per mile cost estimates from similar projects.
- KYTC needs a recommended alternative and cost estimate by August 1<sup>st</sup> if they want to include it in the Six-Year Highway Plan. This provides time for the District office to rank this project relative to other District 1 needs and provide their three tiers of ranked projects and overall top 30 project ranking by the August 15<sup>th</sup> deadline.

## **7. Next Steps**

Referencing the project schedule, Brad explained that the next steps were to complete the existing conditions analysis and the environmental overview. Maps showing results will be distributed to the team via email for review and comment.

CDM Smith will also begin preparing for the first stakeholder meeting. The second project team meeting will be held in the morning with the stakeholder meeting in the afternoon. A tentative date of March 28<sup>th</sup> was mentioned. Brad will work with Mike McGregor to develop a stakeholder contact list from the US 60 project list and finalize a meeting date. KYTC central office will send out the stakeholder meeting notice (usually sent 3 week prior to meeting date). Both meetings will be at the KYTC District 1 office.

## **8. Q&A**

With no further questions, the meeting was adjourned around 11:30 a.m. C.ST.

**MINUTES**  
**Project Team Meeting #2**  
**KY 1286/KY 998 – McCracken County – Item # 1-153.00**  
KYTC District 1 Office  
Paducah, Kentucky  
April 22, 2013  
10:00 AM CDT

A Project Team Meeting for the KY 1286/KY 998 Planning Study in McCracken County was held from 10:00 to 10:30 a.m. and 12:00 to 1:00 p.m. CDT on Monday, April 22nd, in Paducah, Kentucky. The purpose of the meeting was to discuss the purpose and need of the project, environmental overview, roadway condition, and improvement options. The following project team members were in attendance:

Mike McGregor	KYTC, District 1 Transportation Branch Manager
Jessica Herring	KYTC, District 1 Planning
Kara Wilson	KYTC, District 1 Design
Susan Oatman	KYTC, District 1 Design
David Davis	KYTC, District 1 Utilities
Steve Ross	KYTC, Central Office Planning
Mikael Pelfrey	KYTC, Central Office Planning
Tonya Higdon	KYTC, Central Office Planning
Shane McKenzie	KYTC, Central Office Planning
Dorian Brawner	KYTC, Central Office Planning
Stacey Courtney	Purchase Area Development District
Brad Johnson	CDM Smith
Len Harper	CDM Smith

A summary of the key discussion items and decisions from this meeting are provided below, following the agenda outline.

**1. Welcome and Introductions**

Mike McGregor, KYTC Project Manager, began the meeting, welcoming attendees and asking for formal introductions from all.

**2. Project Approach/Schedule**

Brad Johnson, CDM Smith Project Manager, outlined the project schedule and approach. This project will look at long-term solutions as well as short-term spot improvements along KY 1286 and KY 998. Preliminary Alternatives will be presented at the Stakeholder Meeting #2 and Public Meeting in June. Based on input from those meetings and the evaluation process, a preferred alternative will be selected in August. The Final Report is due in October.

**3. Purpose and Need**

Brad Johnson outlined the Draft Purpose and Need of the proposed KY 1286/KY 998 project. The purpose is to improve safety and traffic operations along the route between US 45 and US 60. Improving safety was identified as the top priority/need for the project.

### **3. Roadway Condition**

Brad Johnson gave an overview of the existing roadway condition. There are between 3,700 and 8,900 vehicles along KY 1286. Traffic analysis shows that a 2 lane facility provides adequate capacity for existing traffic. Traffic could become an issue in the future if major developments are built along the corridor. The Traffic Forecast is ongoing, which will look at future traffic needs. The new consolidated McCracken County High School was noted as a potential traffic generator. Once the traffic forecast is established, a capacity analysis will be conducted to determine the number of lanes needed along the route. A level of service (LOS) analysis will also be conducted at the major intersections. Additional turn lanes may be needed at the US 45, Hew Holt Road, and KY 998 intersections.

The existing roadway geometrics were evaluated based on current design standards. This analysis found five deficient horizontal curves and one vertical curve with deficient headlight sight distance. Most all of KY 1286 and KY 998 have driving lanes and shoulders that are too narrow.

Crash records were collected from KYTC for the project area over a four year period (October 2008 – October 2012). KY 1286 between US 45 and US 62 has a Critical Rate Factor (CRF) greater than 1.0. There are also seven spot locations with a CRF greater than 1.0. This highest CRF is at the deficient curve at Seneca Lane. There were 44 crashes at this location between 2008 and 2012, 15 of those resulted in injuries. The second highest CRF is at the US 62 intersection. Brad noted there was an intersection improvement project at this location in 2012, which likely fixed the safety issues.

### **4. Improvement Options**

Brad explained that long-term solutions as well as short-term spot improvements will be looked at as part of this project. As of now the long-term improvement options include; (1) improve the two-lane cross section and (2) widen to three lanes. CDM Smith presented aerial graphics showing the 2-lane and 3-lane corridor improvement options and gave an overview of the potential issues. The graphics included improvement options where the horizontal alignment is deficient based on current design standards.

The project team discussed the need for different typical sections along the route. A urban typical section is needed between US 45 and US 62. A rural typical section is likely appropriate everywhere else.

Short-term spot improvements were also discussed. Locations were presented which were based on the crash analysis, geometric analysis, traffic analysis, and previous studies. Input from stakeholders, public, and project team members will be needed to prioritize these improvements.

### **5. Discussion & Next Steps**

Referencing the project schedule, Brad explained that the next step was to complete the traffic analysis and further develop the initial alternatives for Stakeholder Meeting #2 and the Public Meeting in June. Brad then reiterated potential project issues and asked for feedback from the group. The following is a list of comments received:

- The Traffic Study for the new consolidated McCracken County High School did not look at KY 1286. CDM Smith will work with the Superintendent and make sure the additional traffic is included in the traffic forecast.
- As part of the 2012 intersection improvements at US 62, a design exception was used for the deficient radius along KY 1286. Because this is a signalized intersection, the 40 mph radius is ok.

The intersection improvement likely fixed the safety issues. The group agreed to remove this intersection from the list of spot improvements.

- The project team should look at realignment options for KY 1286 through the unutilized portion of Mount Kenton Cemetery. CDM Smith will look at this option in more detail.
- Look at realigning KY 1286 at the US 45 intersection. The realignment will likely require some improvements to KY 1286 south of US 45.
- Segment 1 is the most important segment. This segment should be the top priority. It should include curb & gutter and pedestrian and bicycle facilities where feasible. The rest of the route likely does not need curb & gutter or pedestrian facilities.
- Are there Section 4(f) issues with using cemetery or church right-of-way? CDM Smith will look into this.
- The group discussed what types of exhibits are needed for the Public Meeting. What was presented to the project team is mostly adequate. Need to add the realignments discussed today and consider showing blow-ups of the major intersection improvements. Also include the typical sections on the exhibits and highlight the impacts of each improvement option.
- CDM Smith will create a survey for the next Stakeholder and Public Meetings so participants can select a preferred Long Term Improvement Option and prioritize the Spot Improvements.
- CDM Smith will field check the environmental maps and look at cultural resources and historic structures.
- Cost estimates may be needed for the initial alternatives. CDM Smith will work with KYTC on this.

With no further questions, the meeting was adjourned around 1:00 p.m. CDT.



**MINUTES**  
**Project Team Meeting #3**  
**KY 1286/KY 998 Planning Study**  
**McCracken County**  
**Item # 1-153.00**

KYTC District 1 Office  
Paducah, Kentucky  
August 26, 2013  
11:00 AM Central

A Project Team Meeting for the KY 1286/KY 998 Planning Study in McCracken County was held from 11:00 a.m. to 12:30 p.m. CDT on Monday, August 26<sup>th</sup>, in Paducah, Kentucky. The purpose of the meeting was to discuss all the agency/stakeholder/public input received to date and project team improvement recommendations. The following project team members were in attendance:

Mike McGregor	KYTC, District 1 Transportation Branch Manager
Jessica Herring	KYTC, District 1 Planning
Blake Beyer	KYTC, District 1 Environmental
Susan Oatman	KYTC, District 1 Design
David Davis	KYTC, District 1 Utilities
Randy Williams	KYTC, District 1 PD&P
Steve Ross	KYTC, Central Office Planning
Mikael Pelfrey	KYTC, Central Office Planning
Tonya Higdon	KYTC, Central Office Planning
Shane McKenzie	KYTC, Central Office Planning
Brad Johnson	CDM Smith
Len Harper	CDM Smith

A summary of the key discussion items and decisions from this meeting are provided below, following the agenda outline.

**1. Welcome and Introductions**

Mike McGregor, KYTC Project Manager, began the meeting, welcoming attendees.

**2. Purpose of the Meeting**

Brad Johnson, CDM Smith Project Manager, gave a brief overview of the purpose of the meeting. The purpose is to discuss the project findings and Project Team recommendations. At 1:30 pm CDT there will be a second Stakeholder Meeting to get their input and recommendations.

Brad also presented the schedule. Project Team Meeting #3 is one month behind the schedule noted in the 2012 Contract Documents. CDM Smith will work with District 1 and Central Office to submit a revised schedule. CDM Smith has a good start on the Draft Report and hopes to have that submitted by the end of September. In the mean time District 1 requested project sheets with design, right-of-way, utility, and construction costs for the recommended improvements so that information can be inserted into the Project Identification Forms (PIF's) and the Six Year Highway Plan (SYP) as needed.

### **3. Agency/Stakeholder/Public Input Summary**

Brad presented an overview of all the KY 1286/KY 998 coordination efforts to date; (1) one meeting with stakeholders and local officials, (2) one public meeting and (3) an agency coordination mailing. There will also be a second Stakeholder Meeting today at 1:30 p.m. CDT.

There were 21 surveys returned from the Public Meeting. This is a low amount and the survey results should be weighed accordingly. The following are some key results from the surveys:

- 100% of respondents indicated the route should be improved.
- 67% of respondents preferred the 3-Lane Widening Alternative.
- Improvements to Segment 1 were the top priority.
- 70% of the respondents do not think bicycle/pedestrian facilities should be included along the corridor.
- Spot Improvements D and E were most often selected as the top priority spot improvements.

Tonya Higdon, KYTC Central Office, is reviewing the Environmental Justice report submitted by the Purchase ADD. A final report should be ready soon.

Mikael Pelfrey, KYTC Central Office, said the Geotechnical Overview Report should be ready the first week of September.

Mike McGregor, KYTC Project Manager, is working with the newspapers to reissue the tear sheets for the Public Meeting. The originals were lost in the mail.

### **3. Spot Improvement Recommendations**

Brad presented a map of the Spot Improvements, **Figure 6-1** in the attached map. The following recommendations were made:

- Mike McGregor recommended the following and the Project Team agreed:
  - Combine Spot Improvements B and C.
  - Construct Spot Improvement F.
  - Remove Spot Improvements D, E, and G. These should be improved with the Long-Term Improvement Option.
  - Existing traffic does not justify the turn lanes at Spot Improvement A. This should be recommended as a future improvement as traffic grows. The Project Team agreed.
- Mike McGregor requested Project Sheets for Spot Improvement A, combined Spot Improvements B & C, and Spot Improvement F. A project description along with design, right-of-way, utility, and construction costs should be included for each recommended spot improvement.

### **4. Long-Term Improvement Recommendations**

Brad presented the three-lane widening segment map as well as the 8 1/2 x 11 layout sheets that will be included in the final report. Although the 3-lane widening option is being shown, this is only the worst case scenario. All segments likely don't need to be 3 lanes wide. All the long-term improvement options discussed below are shown in **Figure 6-2** through **Figure 6-7** in the attached maps. The following recommendations were made:

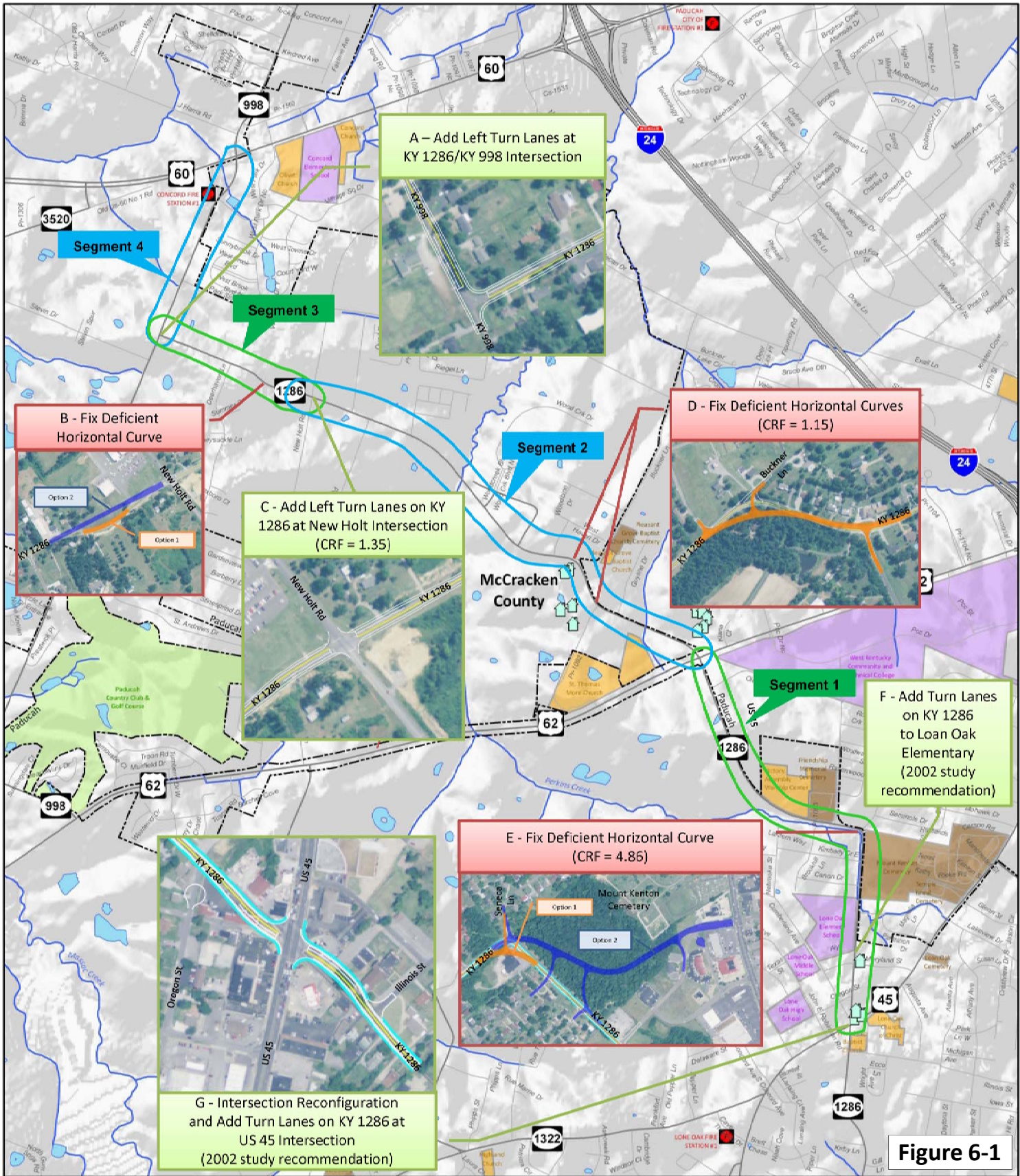
- Segment 1 (KY 1286 from US 45 to US 62):
  1. The project team agreed this was the priority segment and fixing the curve at Seneca Lane was the priority improvement.
  2. The Project Team agreed that this segment should be an Urban Three-Lane Typical Section. Bicycle and pedestrian facilities are preferred but this will have to be studied further in the next phase of the project.
  3. Alternate 1E:
    - The Project Team dismissed the alternative because it does not improve the curve at Seneca.
  4. Alternate 1F:
    - The Project Team wants this alternate to move forward to the next phase of the project.
  5. Alternate 1G:
    - The Project Team wants this alternate to move forward to the next phase of the project.
    - Steve Ross asked if going through the cemetery was a 4(f) issue. It is not.
  6. Alternate 1H:
    - The Project Team dismissed the alternative because of the cost and impacts.
  7. Overall the Project Team recommends that both Alternate 1F and 1G be looked at in the next phase of the project. A more detailed traffic analysis and design is needed to compare the two alternatives.
- Segment 2 (KY 1286 from US 62 to New Holt Road):
  1. The Project Team agreed this was the second priority segment.
  2. Removing the reverse curves near Buckner Lane (Spot Improvement D) should be considered in the design phase of the project. This option will be added in the Final Report.
  3. The Project Team agreed that this segment should be a Rural Two-Lane Typical Section, although the urban section from Segment 1 could be considered in the eastern portion of the segment to narrow the typical section. This would reduce impacts to property through the Buckler Lane reverse curves. Pedestrian Facilities are not needed but Bicycle Facilities should be considered in the next phase of the project.
- Segment 3 (KY 1286 from New Holt Road to KY 998):
  1. The Project Team agreed this was the third priority segment.
  2. The Project Team agreed that this segment should be a Rural Two-Lane Typical Section. Pedestrian Facilities are not needed but Bicycle Facilities should be considered in the next phase of the project.
- Segment 4 (KY 998 from KY 1286 to US 60):
  1. The Project Team agreed this was the fourth priority segment.
  2. The Project Team agreed that this segment should be a Rural Two-Lane Typical Section. Pedestrian Facilities are not needed but Bicycle Facilities should be considered in the next phase of the project.
- Mike McGregor requested Project Sheets for each Segment. A project description along with design, right-of-way, utility, and construction costs should be included for each recommended spot improvement.
- Overall the Project Team Priorities are as follows:

1. Segment 1: Both Alternate 1F and Alternate 1G should be considered. An Urban Three-Lane Typical Section is recommended. Bicycle and Pedestrian Facilities are preferred and should be studied further in the next phase of the project.
  2. Combined Spot Improvement B and Spot Improvement C
  3. Spot Improvement F
  4. Segment 2: Alternate 2B with improved curves at Buckner Lane including a potential new alignment which removes the reverse curves. A Rural Two-Lane Typical Section is recommended. Pedestrian Facilities are not needed but Bicycle Facilities should be considered in the next phase of the project.
  5. Segment 3: Alternate 3C with an improved curve near Hew Holt Road. A Rural Two-Lane Typical Section is recommended. Pedestrian Facilities are not needed but Bicycle Facilities should be considered in the next phase of the project.
  6. Segment 4: Alternate 4A with a Rural Two-Lane Typical Section is recommended. Pedestrian Facilities are not needed but Bicycle Facilities should be considered in the next phase of the project.
  7. Spot Improvement A: Although existing traffic does not justify turn lanes at this time, this should be looked at as a future improvement as traffic grows.
- KYTC will create PIF's for the top four recommendations. CDM Smith will provide information and assist, as needed, to complete the PIFs.

## **5. Next Steps**

Referencing the project schedule, Brad explained that the next step was to complete the draft report. CDM Smith will provide the Project Sheets prior to submission of the Draft Report so KYTC will have them for the PIFs and meetings to discuss the next Six Year Plan.

With no further questions, the meeting was adjourned around 12:30 PM CDT.



**Figure 6-1**

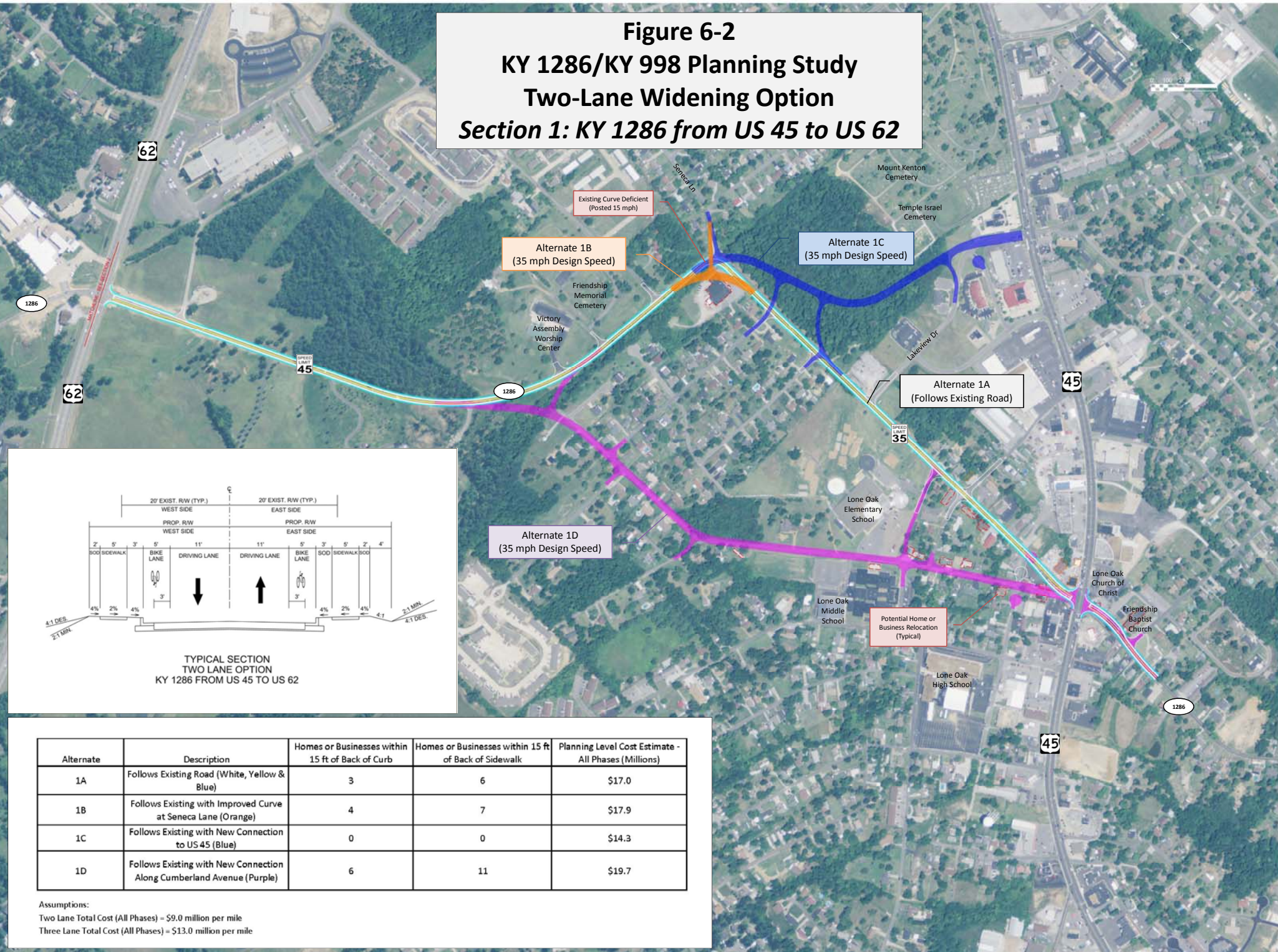
**Proposed Spot Improvements**  
 KY 1286/KY 998 Planning Study  
 McCracken County, KY  
 Item # 1-153.00



- Fix Horizontal Curve
- Intersection Improvement



**Figure 6-2**  
**KY 1286/KY 998 Planning Study**  
**Two-Lane Widening Option**  
**Section 1: KY 1286 from US 45 to US 62**



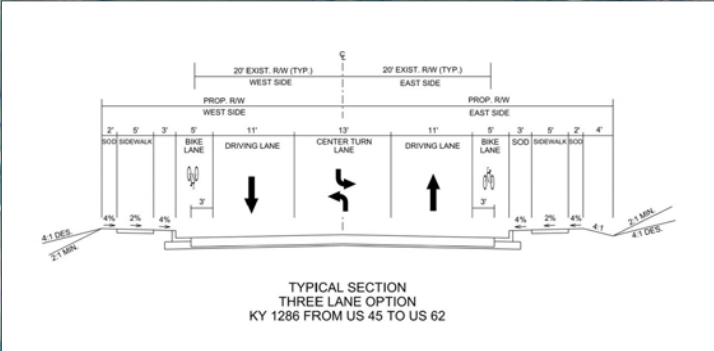
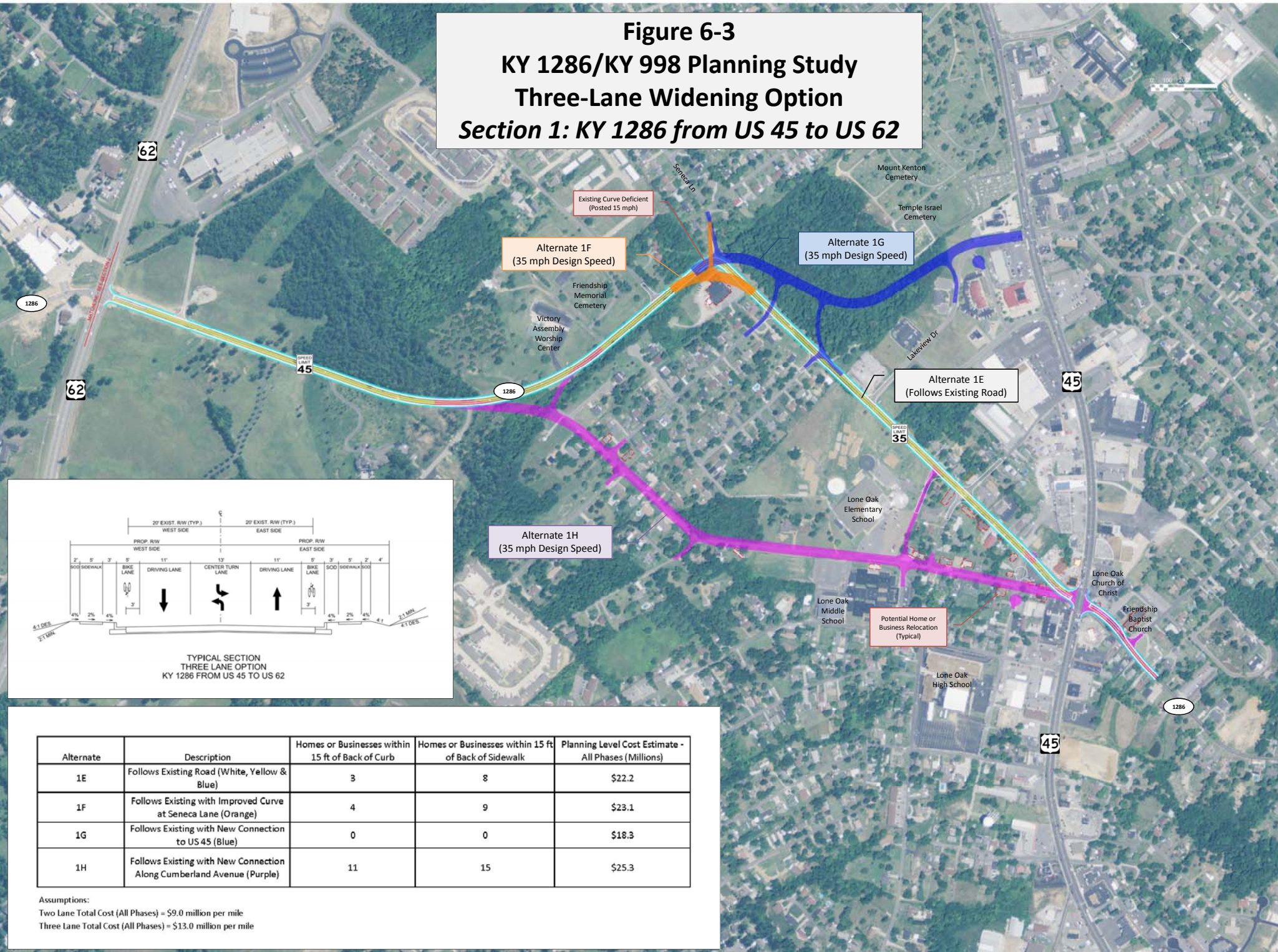
TYPICAL SECTION  
 TWO LANE OPTION  
 KY 1286 FROM US 45 TO US 62

Alternate	Description	Homes or Businesses within 15 ft of Back of Curb	Homes or Businesses within 15 ft of Back of Sidewalk	Planning Level Cost Estimate - All Phases (Millions)
1A	Follows Existing Road (White, Yellow & Blue)	3	6	\$17.0
1B	Follows Existing with Improved Curve at Seneca Lane (Orange)	4	7	\$17.9
1C	Follows Existing with New Connection to US 45 (Blue)	0	0	\$14.3
1D	Follows Existing with New Connection Along Cumberland Avenue (Purple)	6	11	\$19.7

Assumptions:  
 Two Lane Total Cost (All Phases) = \$9.0 million per mile  
 Three Lane Total Cost (All Phases) = \$13.0 million per mile



**Figure 6-3**  
**KY 1286/KY 998 Planning Study**  
**Three-Lane Widening Option**  
**Section 1: KY 1286 from US 45 to US 62**

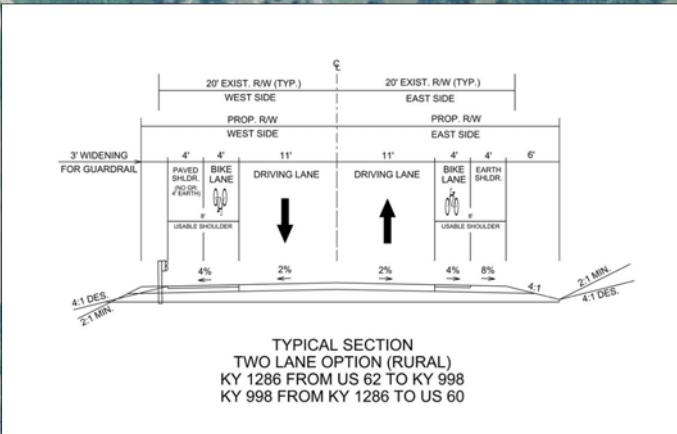
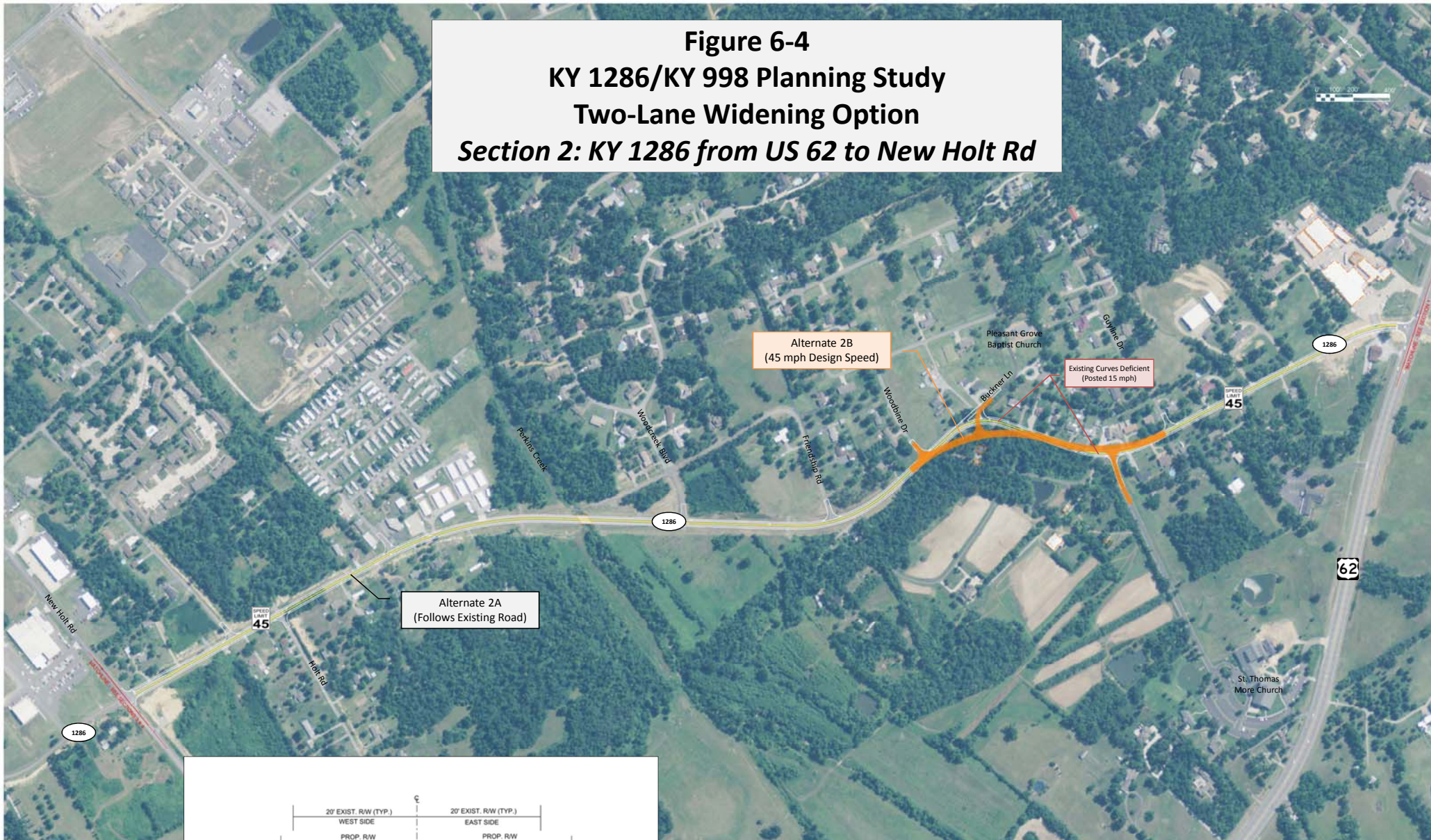


Alternate	Description	Homes or Businesses within 15 ft of Back of Curb	Homes or Businesses within 15 ft of Back of Sidewalk	Planning Level Cost Estimate - All Phases (Millions)
1E	Follows Existing Road (White, Yellow & Blue)	3	8	\$22.2
1F	Follows Existing with Improved Curve at Seneca Lane (Orange)	4	9	\$23.1
1G	Follows Existing with New Connection to US 45 (Blue)	0	0	\$18.3
1H	Follows Existing with New Connection Along Cumberland Avenue (Purple)	11	15	\$25.3

Assumptions:  
 Two Lane Total Cost (All Phases) = \$9.0 million per mile  
 Three Lane Total Cost (All Phases) = \$13.0 million per mile



**Figure 6-4**  
**KY 1286/KY 998 Planning Study**  
**Two-Lane Widening Option**  
**Section 2: KY 1286 from US 62 to New Holt Rd**

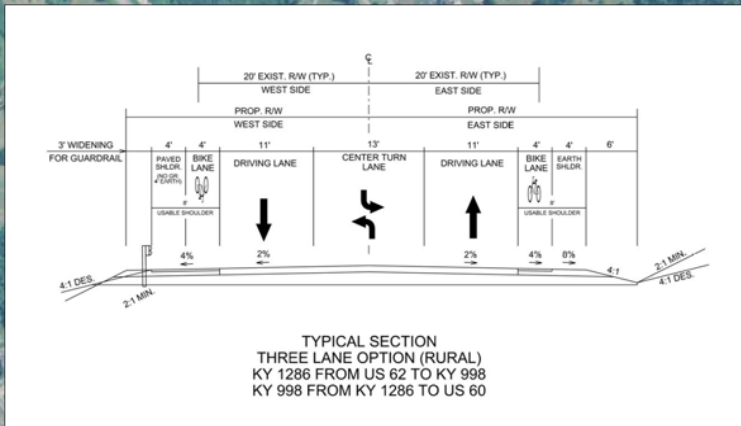
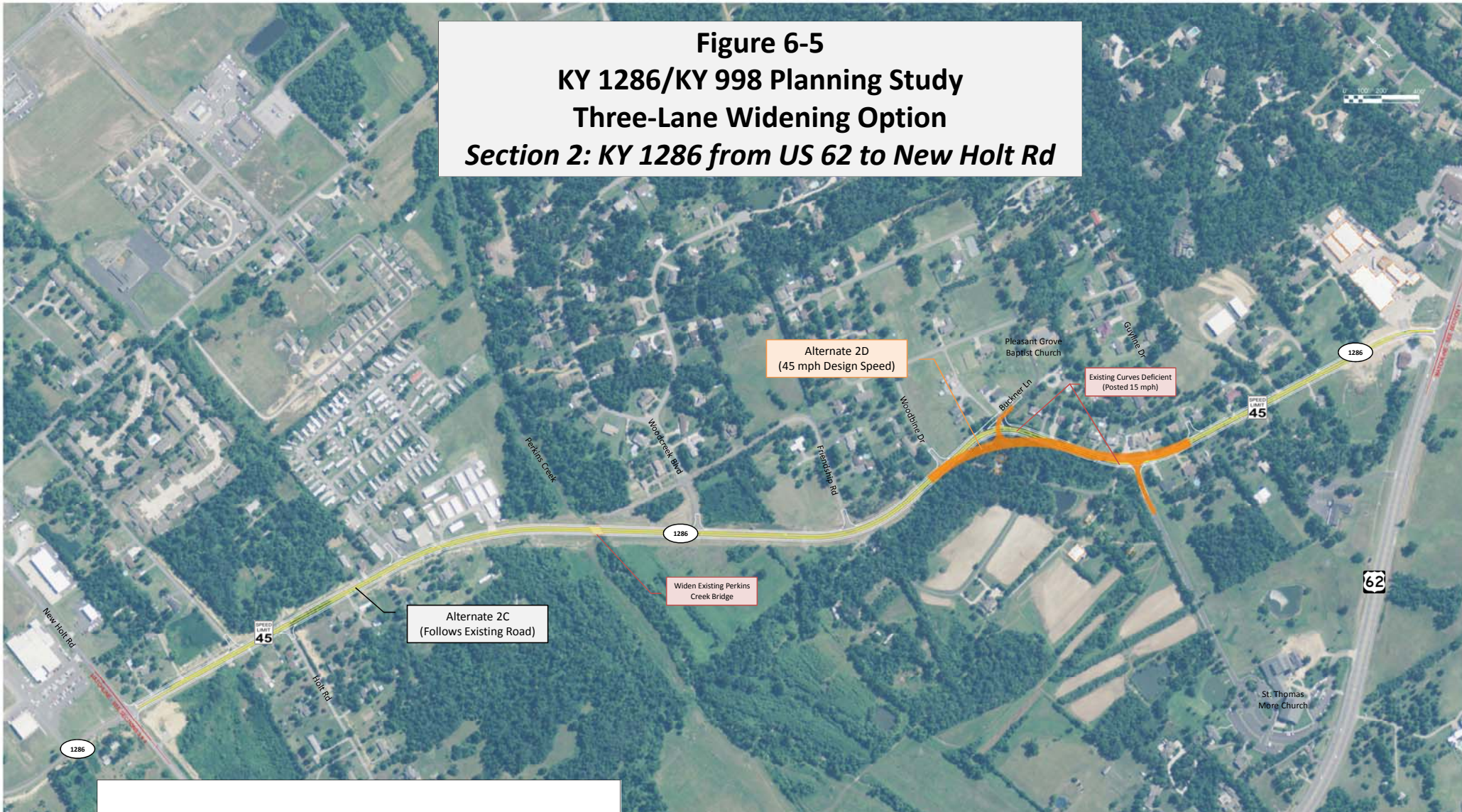


Alternate	Description	Homes or Businesses within 15 ft of Back of Shoulder	Planning Level Cost Estimate - All Phases (Millions)
2A	Follows Existing Road (White & Yellow)	0	\$15.2
2B	Follows Existing with Improved Curves at Buckner Lane (Orange)	0	\$17.0

Assumptions:  
 Two Lane Total Cost (All Phases) = \$9.0 million per mile  
 Three Lane Total Cost (All Phases) = \$13.0 million per mile



**Figure 6-5**  
**KY 1286/KY 998 Planning Study**  
**Three-Lane Widening Option**  
**Section 2: KY 1286 from US 62 to New Holt Rd**

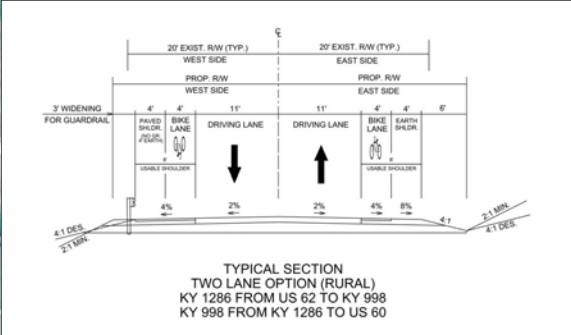
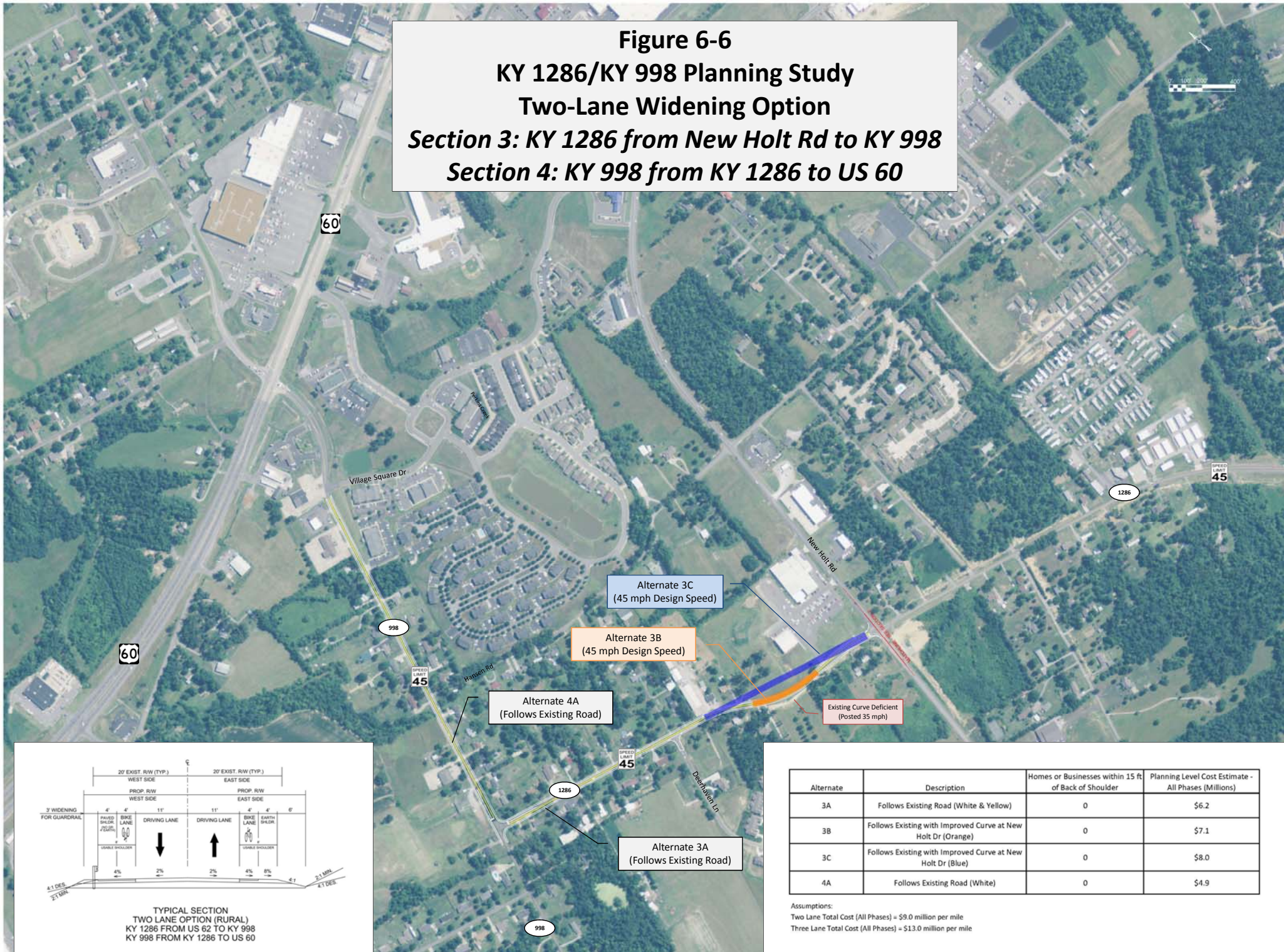


Alternate	Description	Homes or Businesses within 15 ft of Back of Shoulder	Planning Level Cost Estimate - All Phases (Millions)
2C	Follows Existing Road (White & Yellow)	0	\$20.0
2D	Follows Existing with Improved Curves at Buckner Lane (Orange)	0	\$22.2

Assumptions:  
 Two Lane Total Cost (All Phases) = \$9.0 million per mile  
 Three Lane Total Cost (All Phases) = \$13.0 million per mile



**Figure 6-6**  
**KY 1286/KY 998 Planning Study**  
**Two-Lane Widening Option**  
**Section 3: KY 1286 from New Holt Rd to KY 998**  
**Section 4: KY 998 from KY 1286 to US 60**

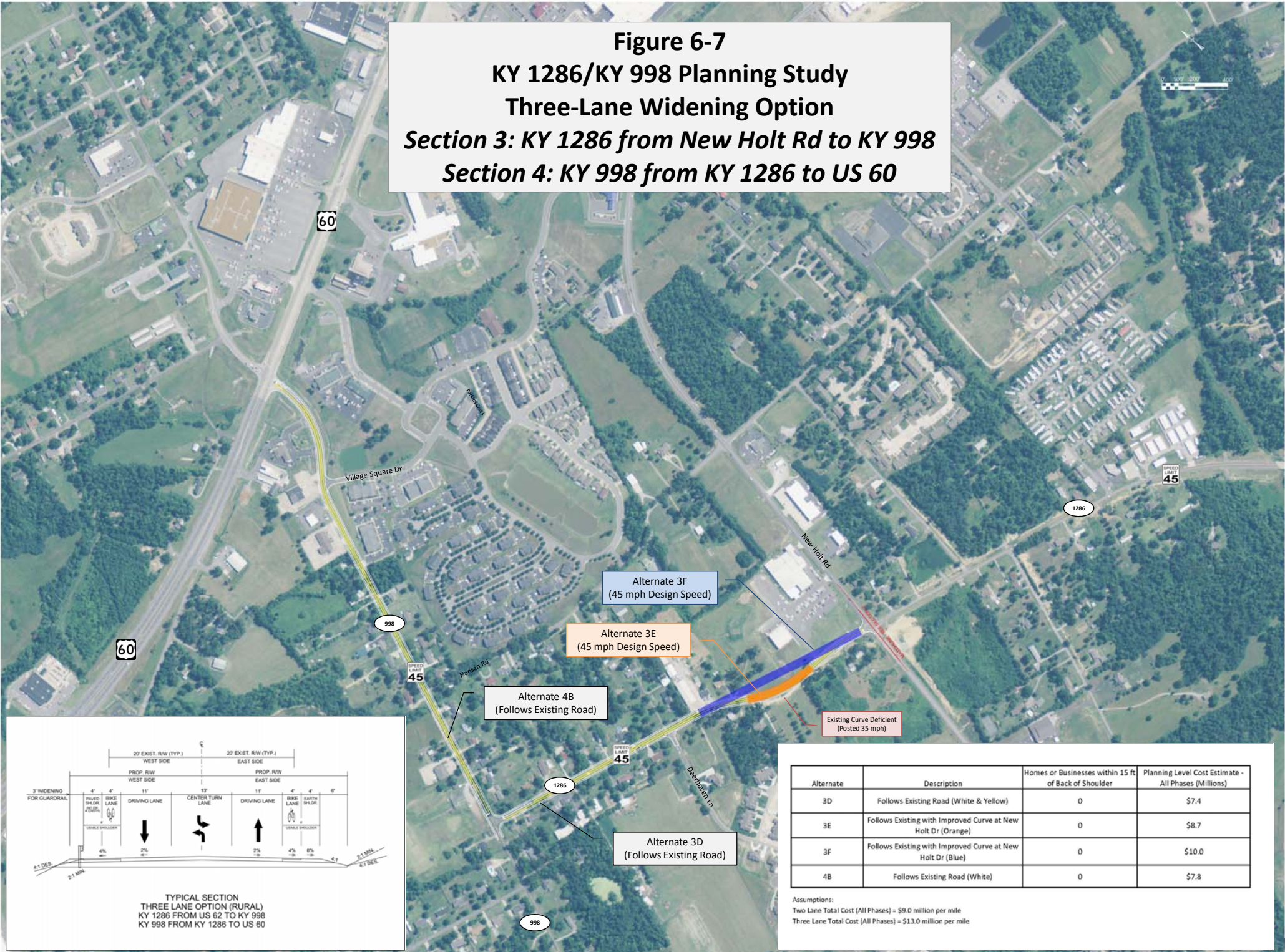


Alternate	Description	Homes or Businesses within 15 ft. of Back of Shoulder	Planning Level Cost Estimate - All Phases (Millions)
3A	Follows Existing Road (White & Yellow)	0	\$6.2
3B	Follows Existing with Improved Curve at New Holt Dr (Orange)	0	\$7.1
3C	Follows Existing with Improved Curve at New Holt Dr (Blue)	0	\$8.0
4A	Follows Existing Road (White)	0	\$4.9

Assumptions:  
 Two Lane Total Cost (All Phases) = \$9.0 million per mile  
 Three Lane Total Cost (All Phases) = \$13.0 million per mile



**Figure 6-7**  
**KY 1286/KY 998 Planning Study**  
**Three-Lane Widening Option**  
**Section 3: KY 1286 from New Holt Rd to KY 998**  
**Section 4: KY 998 from KY 1286 to US 60**



Alternate	Description	Homes or Businesses within 15 ft of Back of Shoulder	Planning Level Cost Estimate - All Phases (Millions)
3D	Follows Existing Road (White & Yellow)	0	\$7.4
3E	Follows Existing with Improved Curve at New Holt Dr (Orange)	0	\$8.7
3F	Follows Existing with Improved Curve at New Holt Dr (Blue)	0	\$10.0
4B	Follows Existing Road (White)	0	\$7.8

Assumptions:  
 Two Lane Total Cost (All Phases) = \$9.0 million per mile  
 Three Lane Total Cost (All Phases) = \$13.0 million per mile