

**MEMORANDUM**

**TO:** BILL GULICK, P.E.  
DIRECTOR, DIVISION OF HIGHWAY DESIGN

**ATTENTION:** WENDY SOUTHWORTH, P.E.  
LOCATION ENGINEER

**FROM:** JOE PLUNK, P.E.  
T.E.B.M. FOR PROJECT DEVELOPMENT, DISTRICT 3

**BY:** STEWART LICH, P.E.  
DESIGN SECTION, DISTRICT 3

**DATE:** December 17, 2015

**SUBJECT:** 3-8818.00/3-8852.00, WARREN COUNTY  
Three Springs Road (KY 884) Widening  
EMARS No. 8962901D (3-8818.00), emars no. 8963101D (3-8852.00)  
Project ID No. 114 0884 007-009 (3-8818.00), 114 0884 005-008 (3-8852.00)

A Preliminary Line & Grade Meeting was held on December 17, 2015 at the District 3 Office in Bowling Green. A list of attendees and discussion topics are listed below.

Attendance:

Name:	Organization/Section:
Wendy Southworth	Central Office - Design
Greg Meredith	District 3 - CDE
Tim Sharp	District 3 – PD&P 1
Joe Plunk	District 3 – PD
Andrew Stewart	District 3 - Design
Stewart Lich	District 3 – Design
Renee Slaughter	District 3 – Environmental Coordinator
Mike Russell	District 3 – R/W
Deneatra Henderson	District 3 – Planning
Jon Whitaker	District 3 - Traffic
Patrick Blevins	District 3 - Utilities
Wes Watt	District 3 – PIO

The following is the meeting agenda with meeting comments and discussion added in red text which will serve as the meeting minutes.

1. Introductions
2. Meeting Objective:
  - a. Review the preferred alternative and determine if there are any changes or adjustments that need to be made before continuing to Final Design.

3. Project Timeline/Funding:

a. Projects added to the 2014 Highway Plan

- **3-8818.00** Three Springs Road Extension from Flealand to the Natcher Parkway including bridge over Parkway

			SYP	PL&G
			<u>Estimate</u>	<u>Estimate</u>
SPP	R	2015	\$ 4,000,000	\$ 2,100,000
SPP	U	2016	\$ 2,800,000	\$ 2,885,000
SPP	C	2017	<u>\$ 6,700,000</u>	<u>\$ 7,931,400</u>
Total			\$13,500,000	\$12,916,400

- **3-8852.00** Reconstruct KY-884 from Long Road to the Natcher Parkway including a bridge over the Natcher Parkway. Even though the Highway Plan description includes the overpass in this section, the bridge's construction will be included under 3-8818.00 only. Springfield Boulevard is considered the end of 3-8852.00 and the beginning of 3-8818.00.

			SYP	PL&G
			<u>Estimate</u>	<u>Estimate</u>
SPP	R	2017	\$1,000,000	\$ 1,850,000
SPP	U	2018	\$2,000,000	\$ 4,340,000
SPP	C	2019	<u>\$5,300,000</u>	<u>\$ 8,130,000</u>
Total			\$8,300,000	\$14,320,000

- b. Design funds authorized Aug. 22, 2014
- c. Mapping requested Sept. 23, 2014
- d. Mapping received Jan. 30, 2015
- e. Traffic Forecast requested Feb. 3, 2015
- f. Alternate Review Meeting held April 14, 2015
- g. Public Meeting held October 20, 2015

4. Purpose and Need:

KY 884 (Three Springs Road) is a narrow two-lane roadway which serves as a major urban collector for the expanding residential areas in the Three Springs neighborhood of southern Bowling Green. KY 884 provides the primary connection from those residential developments to the major commercial activity centers along US 231 (Scottsville Road) and to the I-65 interchange with US 231. The section of the corridor from Long Road to the entrance to Flealand also provides direct access to the Griffin Park recreation activities and the Aviation Heritage Park, and indirect access to the Jody Richards Elementary School. With the mix of recreational opportunities in the area and the residential development, there is an interest in expanding the existing mobility opportunities for pedestrians and bicyclists. The increasing traffic volumes and the geometric and capacity limitations of the existing roadway impede the mobility and safety along the corridor. The purpose of this project is to increase the safety and mobility for motorists, pedestrians, and bicyclists along the KY 884 (Three Springs Road) Corridor from Long Road to the entrance to Flealand.

5. Review/Discuss Public Meeting Comments

Response Type	Quantity	People Represented	Preferred Alternate	No Build Alternate
Survey Questionnaire	49	55	43	6

On October 20, 2015, an open house style public information meeting was held at the Holy Spirit Catholic Church from 4:00pm to 6:00pm, CDT. Large display exhibits of the preferred alignment including typical sections were on display for the 97 meeting attendees. Project handouts were provided as well as survey questionnaires. Upon the expiration of the public comment period on November 3, 2015, there were 49 survey questionnaires received from the public. As can be seen the chart above the survey questionnaires from the public meeting show more support for Preferred Alternate than the No Build Alternate. All public responses said there was a dire need for major road improvement in the project area. Five of the six questionnaires that support the No Build option are residents that front Three Springs Road whose front yards will be impacted the most by the road widening.

**Existing Road Concerns:**

- Safety
- Capacity/Congestion
- Narrow driving lanes
- Shoulder Drop-offs

**General Comments from Questionnaires that Favor the Preferred Alternate:**

- Fastest growing area in Warren County, increased congestion.
- High traffic volumes, congestion, future growth.
- Project is needed to improve traffic flow. Road use has outgrown original design due to residential development.
- No longer a rural area.
- Difficult to pull out from driveways and approach roads.
- Construct 5 lanes past Natcher Parkway.
- Add traffic signal at Smallhouse Road.
- Significant speeding needs to be addressed in this area.

**General Comments from Questionnaires that Agree the Project is Needed but did not select the Preferred Alternate or No Build Alternate:**

- If built it should continue to KY 242.
- Widening will put the new road/sidewalks very close to their homes.
- Do not see the need for sidewalks all the way to Long Road. Construct sidewalks only in residential areas.
- Construct 4 lanes past Natcher Parkway for future growth.
- Stop light at Smallhouse Road.
- Noise pollution.
- Excessive Speeding.
- Need ramps from Three Springs Road to Natcher Parkway.
- Safety concerns about widening the road and putting traffic closer to homes.

**General Comments from Questionnaires that Favor the No Build Alternate:**

- The proposed widening should stop at Flea Land.
- Widening the road closer to homes will deflate property value.
- Traffic flows smoothly except during morning and afternoon peak hours, it is fine the way it is.
- Sidewalks on both sides of roadway excessive.
- A wider road will result in increased speeds.
- KYTC has over estimated traffic. Traffic is not as heavy as the report suggests.
- Nobody currently walks along Three Springs Road so sidewalks are not needed.

6. Typical Sections as established at the Alternate Review Meeting:

- a. 2 Lane Rural (11' Travel Lane, 6' Shoulders)
- b. 3 Lane Urban (11' Travel Lane, 12' TWLT Lane, Curb & Gutter, 2-5' Sidewalks)
- c. ~~4 Lane Urban (11' Travel Lane, 12' TWLT Lane, Curb & Gutter, 2-5' Sidewalks)~~
- d. ~~5 Lane Urban (12' Travel Lane, 14' Turning Lane, Curb & Gutter, 2-5' Sidewalks)~~

During the alternate discussion it was decided that the 4 & 5 Lane Urban Typical Sections should be eliminated for consideration. See Item 8 for further discussion.

7. Design Criteria as established at the Alternate Review Meeting:
  - a. Design Speed=45 MPH
  - b. Number of Lanes=3 – 5 depending on area of the project
  - c. Pavement Width=22' (2-Lane Rural), 34' (3-Lane Urban), 45' (4-Lane Urban), 62' (5-Lane Urban)
  - d. Bridge Width=34' (Driving Width), 50' (Out to Out)
  - e. Max. Superelevation=4%
  - f. Min. Vertical Clearance=17.5' (Over Natcher Parkway)
  - g. Sidewalk Width=5' (Located on Both Sides of the Road)

8. Review of Preferred Alternate:

Section 1	Section 2	Section 3	Section 4	Section 5
247+00 - 265+00	265+00 - 350+00	350+00 - 382+00	382+00 - 393+34	393+34 - 417+00
Widen Symmetrically	Widen Symmetrically	Widen to the South	Widen to the South	Widen to the North
2 Lane Rural	3 Lane Urban	3 Lane Urban	<del>3</del> -4 Lane Urban	<del>3</del> -5 Lane Urban

Section 2 Discussion/Comments:

- Re-design/relocate the drainage basin located at Sta. 255+00 to approximately Sta. 262+00 so that it is an elongated basin that does not interfere with the crop irrigation system currently used on the property. It was also discussed as to whether or not the existing drainage basin located right of Station 256+00 (which appears to be a subdivision drainage basin) could be used for storage instead of constructing a new basin. It was determined that utilizing the existing drainage basin would not be preferable and a new basin would need to be constructed.
- Add a right turn lane for the Christian Academy. Due to the schools single entrance and parking layout, traffic queues currently extend onto the highway.

Section 3 Discussion/Comments:

- The widening at approximately right Sta. 370+00 in front of Parcel 92 will require the proposed curb/gutter and sidewalk to be constructed through an existing lake. Due to constructability issues a portion of the lake will need to be drained. It was recommended that the owner (Mr. Danny Goad) be contacted and have a discussion as to what he would prefer to what extent the lake would be drained and where the proposed dam/berm would be constructed that will determine the future lake limits and easement areas.

Section 4 Discussion/Comments:

- Reduce typical section width to a 3 Lane section from Sta. 382+00 to Sta. 410+00. This will eliminate the 4 & 5 Lane typical section from this project. The

main reasoning for this was the discussion of the current lane drop that is currently shown at Smallhouse Road. The design team agreed that the lane drop at an intersection is not desirable and the most logical place to eliminate the extra lane was after the future Three Springs Connector. After that was determined the conclusion was made that if we were not going to carry the 5 lane section through the Three Springs Connector there was not a need for 5 lanes on this project.

- It was recommended that if the 4 lane section was reduced to 3 lanes at Silver Springs Avenue to add a right turn lane.

## 9. Discussion of key issues and impacts of each alternative

### a. Utilities Issues

- It was noted that the AT&T switching station at Left Sta. 305+75 must be avoided. The PL&G plans show that the station is outside of the proposed disturb limits and will not be impacted by the project.
- Another major utility within the project corridor is a 20" WCWD water main that feeds the water tower located by the Christian Academy.

### b. Environmental Issues

- Three Springs
- Basil Griffin Park (6F Park)

### c. Right of Way Issues

- 93 Residential Parcels
- 6 Agricultural Parcels
- 7 Future Residential Parcels
- 1 Public Park Parcel
- 1 Church Parcel
- 1 School Parcel
- 4 Commercial Parcel
- 1 KYTC Parcel
- 7 Dedicated R/W Parcels

### d. Construction Issues

- Lake at KOA Campground (See Item 8)
- Right turn lanes are only being proposed where existing right turn lanes exist with a few exceptions where right of way for a turn lane will not create major impacts.

## 10. Future Steps

### a. Complete Design Executive Summary

### b. Advertise Phase 2 Design for Consultant (First Quarter 2016)

- It is District 3's intent to advertise both projects (3-8818.00 & 3-8852.00) to be designed by the same consultant.