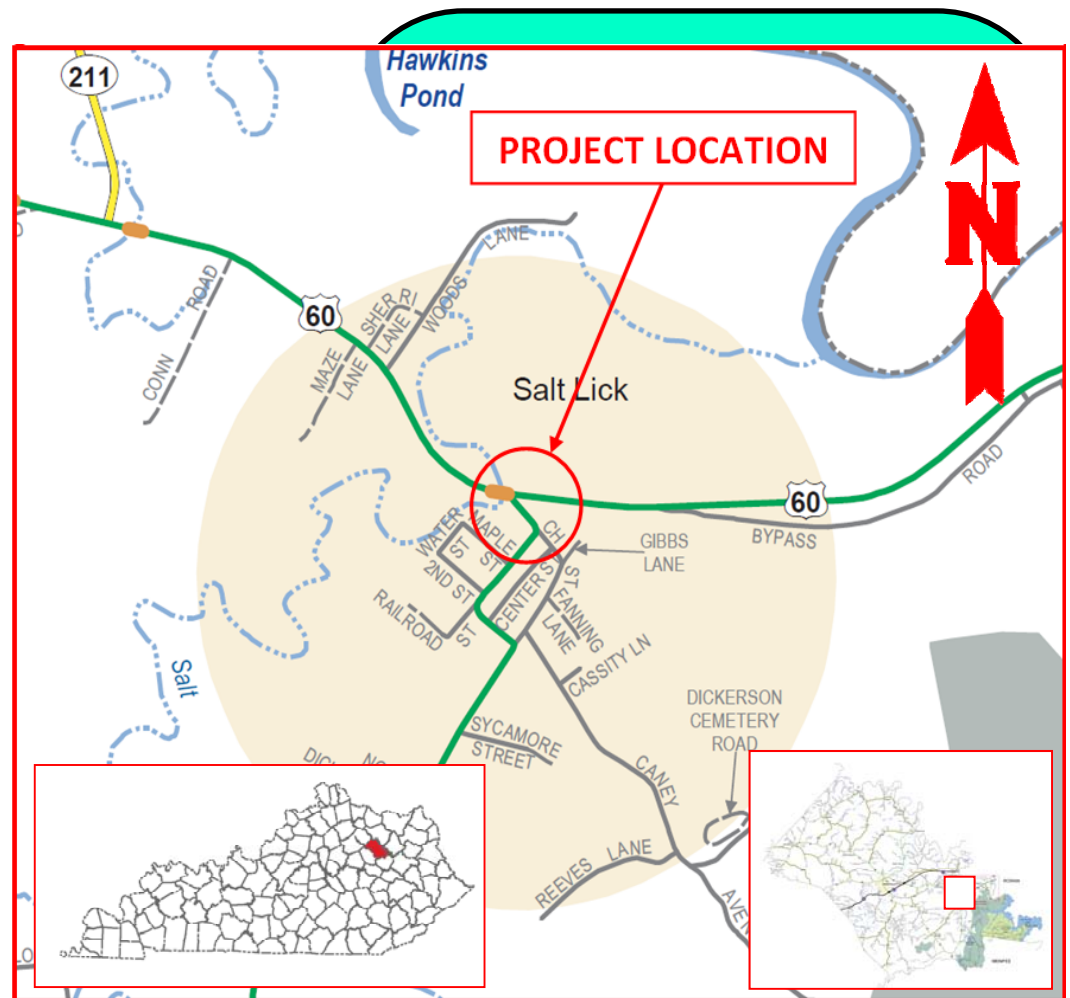


Data Needs Analysis



KY 211 and US 60 in Salt Lick
Bath County
Intersection Improvement
Item No. 09-8813.00

Prepared by KYTC
District 9 Design Staff

October 2014



I. PRELIMINARY PROJECT INFORMATION

County:	Bath	Item No.:	09-8813.00		
Route Number(s):	KY 211 and US 60	Road Name:			
Program No.:	8942701D	UPN:	FD04	006	0060 016-017
Federal Project No.:		Type of Work:	Intersection Reconstruction		

2014 Highway Plan Project Description:

INTERSECTION IMPROVEMENT AT KY 211 AND US 60 IN SALT LICK.

Beginning MP:	16.300	Ending MP:	16.500	Project Length:	0.200
Functional Class.:	<input type="checkbox"/> Urban <input checked="" type="checkbox"/> Rural Collector ▼	State Class.:	<input checked="" type="checkbox"/> Primary <input type="checkbox"/> Secondary		
MPO Area:	Not Applicable	Route is on:	<input type="checkbox"/> NHS <input type="checkbox"/> NN <input type="checkbox"/> Ext Wt		
In TIP:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Truck Class.:	AAA ▼		
ADT (current):	2993 2013	% Trucks:			
Access Control:	<input type="checkbox"/> None <input checked="" type="checkbox"/> Permit <input type="checkbox"/> Fully Controlled	Terrain:	Level ▼		
Median Type:	<input checked="" type="checkbox"/> Undivided <input type="checkbox"/> Divided (Type):	Spacing:			
Existing Bike Accommodations:	Shared Lane ▼	Ped:	<input checked="" type="checkbox"/> Sidewalk		
Posted Speed:	<input checked="" type="checkbox"/> 35 mph (US 60) <input type="checkbox"/> 45 mph <input type="checkbox"/> 55 mph	Other (Specify):	25 (KY 211)		
KYTC Guidelines Preliminarily Based on :	25 MPH Proposed Design Speed				

COMMON GEOMETRIC

Roadway Data:	EXISTING	PRACTICES*	
No. of Lanes	2	2	Existing Rdwy. Plans available? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Lane Width	12	12	
Shoulder Width	Curb&Gutter	6'	Year of Plans: 1977/1930
Max. Superelevation**	None	8%	<input type="checkbox"/> Traffic Forecast Requested
Minimum Radius**	65'	170'	Date Requested:
Maximum Grade	3.8%	7%	<input type="checkbox"/> Mapping/Survey Requested
Minimum Sight Dist.	150'	155	Date Requested:
Sidewalk Width(urban)	4'	4'	Type: ▼
Clear-zone***	Minimal	12'-14'	

Project Notes/Design Exceptions?:

*Based on proposed Design Speed, **AASHTO's A Policy on Geometric Design of Highways and Streets, ***AASHTO's Roadside Design Guide

Bridge No.*:	(Bridge #1)	(Bridge #2)	
Sufficiency Rating			Existing Geotech data available? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Total Length			
Width, curb to curb			
Span Lengths			Detour Length(s):
Year Built			
Posted Weight Limit			
Structurally Deficient?			
Functionally Obsolete?			
Existing Bridge Type			

*If more than two bridges are located on the project, include additions sheets.

II. PROJECT PURPOSE AND NEED

A. Legislation

The following funding was listed in the 2014 Highway Plan.

<i>Funding</i>	<i>Phase</i>	<i>Year</i>	<i>Amount</i>	
STP	D	2015	\$325,000	\$325,000
STP	R	2015	\$350,000	\$350,000
STP	U	2015	\$300,000	\$300,000
STP	C	2016	\$1,000,000	\$1,000,000

B. Project Status

Design funds were authorized in July, 2014. The project will be advertised to consultants. Funding for Right-of-Way, Utilities, and Construction is available but not yet authorized.

C. System Linkage

US 60 and KY 211 are both classified as Rural Major Collectors. US 60 connects the community of Salt Lick and surrounding areas to I-64 and Owingsville to the west and Morehead to the east.

D. Modal Interrelationships

N/A

E. Social Demands & Economic Development

While US 60 brings traffic to and from the community of Salt Lick, KY 211 serves as the community's Main Street and only direct access point to US 60. This means that the only way to bring goods or visitors to Salt Lick is through this intersection.

II. PROJECT PURPOSE AND NEED (cont.)

F. Transportation Demand

The last traffic count on US 60 west of the intersection with KY 211 was 2993 VPD and was performed in 2013. The last traffic count on US 60 east of the intersection was 3859 VPD and was performed in 2013. The last traffic count on KY 211 south of the intersection with US 60 was 1850 VPD and was performed in 2011.

G. Capacity

The intersection capacity is sufficient for current traffic volumes. However, the current intersection alignment and partially obstructed sight distance can make turning movements difficult.

H. Safety

US 60 has a Critical Rate Factor of 0.4540 for M.P. 16.288 to 17.288, in which the KY 211 intersections lies, but there have been no recorded fatal accidents at the intersection in the past 14 years. The Critical Rate for all collisions is 0.644 for M.P. 15.992 to 16.992.

I. Roadway Deficiencies

KY 211 has a total width of 19.5', excluding gutters, near the US 60 intersection. The intersection itself brings KY 211 into US 60 at an approximate 45 degree angle immediately adjacent to the end of a bridge on US 60 over Salt Lick Creek. This impairs sight distance to the west and makes turning movements to and from the east difficult.

III. PRELIMINARY ENVIRONMENTAL OVERVIEW

A. Air Quality

Project is in: ☒ Attainment area ☐ Nonattainment or Maintenance Area ☐ PM 2.5 County

STIP Pg. #: FY 2015-2018; Section A-5; pg. 2 of 112

TIP Pg. #:

B. Archeology/Historic Resources

☐ Known Archeological or Historic Resources are present

There are no National Register of Historic Places (NRHP) listed properties or districts within the limits of the project. However, several buildings within and surrounding Salt Lick and the project area appear to be potentially eligible for the NRHP. It should also be mentioned that Salt Lick could possibly be considered a historic district. Archaeology sites are unknown at this time. However, there is some potential for the project area to contain historic archaeology sites at locations where buildings and home sites have been removed. Because federal STP funds are programmed for the project, Section 4(f) would apply.

C. Threatened and Endangered Species

Six freshwater mussel species (snuffbox, fanshell, Northern riffleshell, pink mucket, sheepnose, and clubshell), 3 bat species (Indiana bat, gray bat, Virginia big-eared bat), running buffalo clover and the bald eagle are on the federally threatened or endangered species list for Bath County. Because no streams are expected to be effected by the project, it is likely that a No Effect could be processed for the freshwater mussel species. However, Salt Lick Creek is nearby and if any impacts to that stream occur, it is likely that a mussel survey will be required. A Habitat Assessment would be required to determine if habitat for running buffalo clover or the bald eagle exists within the project limits. It is likely that an assumed presence Biological Assessment would be written for the listed bat species and that the Indiana Bat Programmatic Agreement would be used to compensate for impacts to potential Indiana bat habitat. The project area is located within a known maternity summer habitat polygon. Additionally, there is potential karst nearby which might indicate that a 1 km portal survey is warranted to determine the presence of winter habitat.

D. Hazardous Materials

☒ Potentially Contaminated Sites are present ☐ Potential Bridge or Structure Demolition

A garage and car lot are located at the KY 211/US 60 intersection. Additionally, another garage is located along KY 211 in the vicinity of where the project would start. A Phase II ESA could be performed for those areas if warranted after impacts to them are more fully known.

E. Permitting

Check all that may apply: ☐ Waters of the US ☐ MS4 area ☐ Floodplain Impacts ☐ Navigable Waters of the US Impacts

Are 401/404 Permits likely to be required? ☐ Yes ☒ No Impacts to: ☐ Wetlands ☐ Stream/Lake/Pond

☐ ACE LON ☐ ACE NW ☐ ACE IP ☐ DOW IWQC ☐ Special Use Waters

If the intersection is relocated further east along US 60 as expected, there will be no streams or jurisdictional wetlands impacted as part of the project.

F. Noise

Are existing or planned noise sensitive receptors adjacent to the proposed project? ☒ Yes ☐ No

Is this considered a "Type I Project" according to the [KYTC Noise Analysis and Abatement Policy?](#) ☒ Yes ☐ No

If the intersection is relocated further east along US 60 as expected, KY 211 will be move closer to one home by more than half of the distance from its current location. The KYTC Noise Analysis and Abatement Policy requires that a noise analysis would be required in this case. It is likely that the noise analysis could be completed by DEA personnel.

G. Socioeconomic

Check all that may apply: ☒ Low Income/Minority Populations affected ☒ Relocations ☐ Local Land Use Plan available

It is likely that at least one residential and one business relocation might be necessary as a result of this project. It is possible that low income populations might be affected. Prior to the completion of the CE Level 1 document, Environmental Justice will be more fully evaluated to determine if the project would have a disproportionate and adverse effect.

H. Section 4(f) or 6(f) Resources

The following are present on the project: ☐ Section 4(f) Resources ☐ Section 6(f) Resources

The Salt Lick Park which is anticipated to be outside of the project limits received Land and Water Conservation Funds. Therefore, if impacts to the Park occur as part of the project, Section 6(f) would apply. Additionally, since the Park could be considered a publicly owned recreation area, Section 4(f) would also apply. It is unlikely that the Park will be affected by the project.

Anticipated Environmental Document:

CE Level 1



IV. PROJECT SCOPING, NEEDS & PURPOSE

A. Scoping & Need:

This project is necessary due to the poor intersection alignment, poor sight distance/angles, and fairly high traffic volume found in an intersection that provides the primary access for the community of Salt Lick. Due to the current intersection angle, the close proximity of the bridge on US 60, and the number of affected businesses along existing KY 211, an in-place solution would be very difficult and expensive, especially where Right of Way is concerned. The obvious solution would be to relocate KY 211 away from the current intersection to a different location farther east along US 60 while taking care to limit right of way impacts as much as possible.

B. Draft Project Purpose:

The purpose of this project is to reconstruct the KY 211 and US 60 intersection and approaches as necessary to achieve adequate sight distance, proper sight angles, increased throughput, and to provide better access and increased safety for the Salt Lick community.

V. PROJECT ESTIMATE & METHODOLOGY

Estimate Methodology:

The current estimate is based on a relocation of the intersection between 325 and 400 ft east of it's current location. The method used to accomplish this was the extension of the current tangent section of KY 211 at approximate mile point 6.87 to the northeast and introducing a short horizontal curve to bring the roadway into US 60 in a perpendicular alignment.

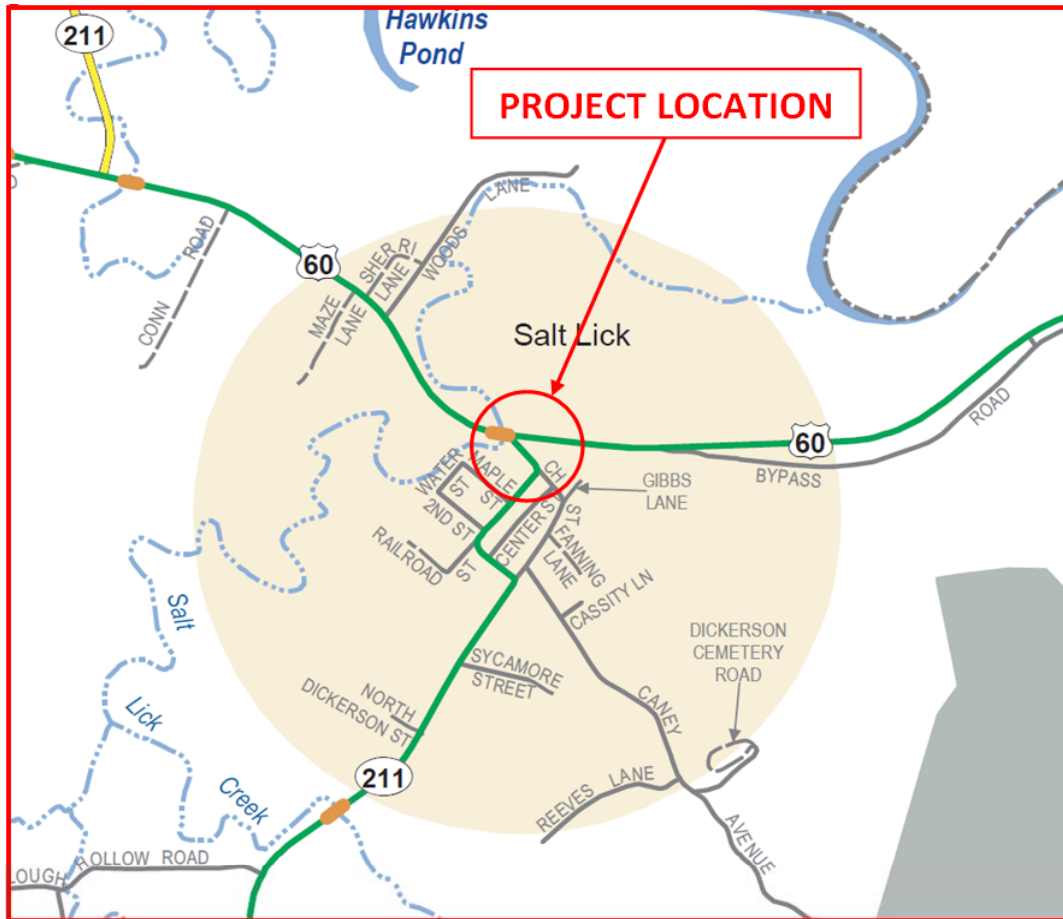
Current Estimate

Phase	Estimate
Planning	
Design	\$325,000
R/W	\$350,000
Utilites	\$300,000
Const	\$1,000,000
Total	\$1,975,000

VI. UTILITIES POTENTIALLY AFFECTED - CONTACT INFORMATION

Company Name -	Bath County Water District
Contact -	Kenny Barber
Address -	
Phone No. -	606-683-6363
Company Name -	Delta Gas Inc.
Contact -	Mike Downs
Address -	
Phone No. -	606-674-2213
Company Name -	Windstream Communications
Contact -	Chris Barker
Address -	
Phone No. -	606-784-4140
Company Name -	Kentucky Utilities
Contact -	George Argo
Address -	
Phone No. -	859-588-0035
Company Name -	AT&T
Contact -	Jack Salyers
Address -	
Phone No. -	606-874-2715
Company Name -	Time Warner Cable
Contact -	Elbert Lamb
Address -	
Phone No. -	859-624-6974

VIII. TABLES AND EXHIBITS



US 60 Looking East

VIII. TABLES AND EXHIBITS (cont.)

