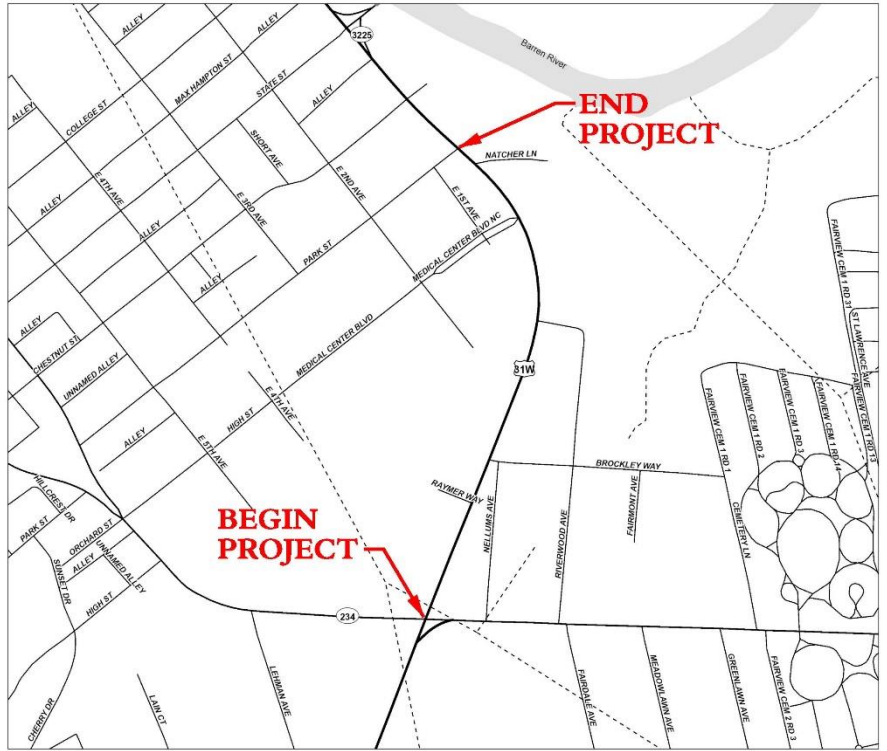
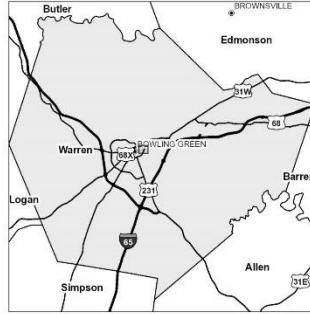
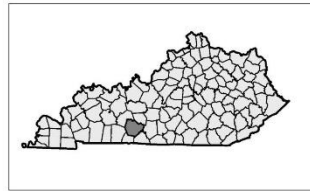


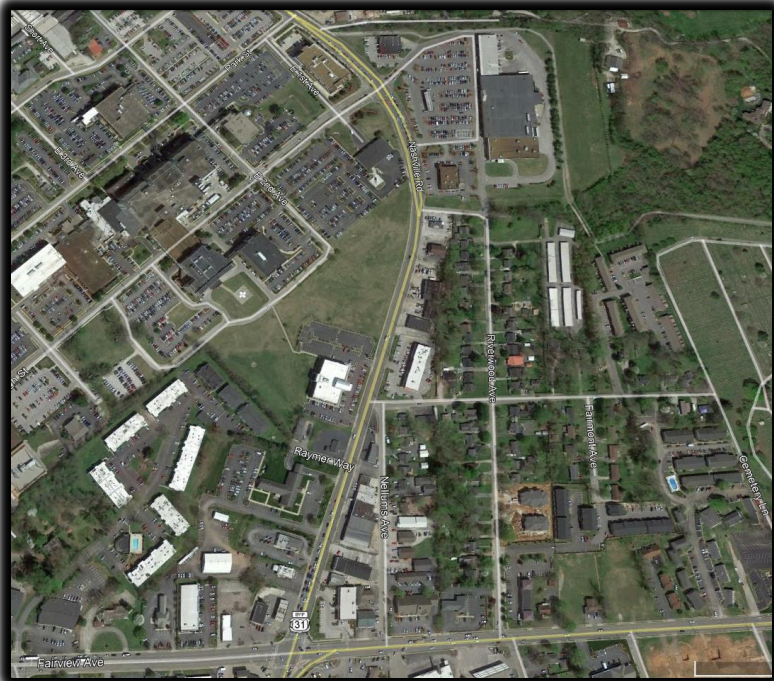
Data

Needs

Analysis



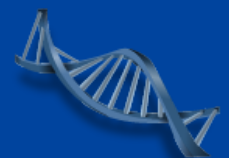
Scoping Study



US-31W Bypass
Warren County
Item No. 3-8904.10

Prepared by the
KYTC District 3

August 2018



I. PRELIMINARY PROJECT INFORMATION			
County:	Warren	Item No.:	3-8904.1
Route Number(s)*:	US-31W	Road Name:	US-31W Bypass
Program No.:		UPN:	FD52 114 0031 013-015
Federal Project No.:		Type of Work:	Widening
2018 Highway Plan Project Description:			
Widen US-31W from Fairview Avenue to Park Street (MP 13.7-14.25)			
Beginning MP:	13.7	Ending MP:	14.25
		Project Length:	0.55
In TIP:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Reconcile Project Information in Clearview	
State Class.:	<input type="checkbox"/> Primary <input checked="" type="checkbox"/> Secondary	Route is on:	<input type="checkbox"/> NHS <input checked="" type="checkbox"/> NN <input type="checkbox"/> Ext Wt
Functional Class.:	<input checked="" type="checkbox"/> Urban <input type="checkbox"/> Rural Arterial	Truck Class.:	AAA % Trucks: 3.70%
MPO Area:	Bowling Green	Terrain:	Level
ADT (current):	21613 2011		
Access Control:	<input type="checkbox"/> None <input checked="" type="checkbox"/> Permit <input type="checkbox"/> Fully Controlled <input type="checkbox"/> Partial	Spacing:	
Median Type:	<input checked="" type="checkbox"/> Undivided <input type="checkbox"/> Divided (Type):		
Existing Bike Accommodations:	Shared Lane	Ped:	<input checked="" type="checkbox"/> Sidewalk
Posted Speed:	<input checked="" type="checkbox"/> 35 mph <input type="checkbox"/> 45 mph <input type="checkbox"/> 55 mph <input type="checkbox"/> Other (Specify):		
KYTC Guidelines Preliminarily Based on :	35 MPH Proposed Design Speed		
COMMON GEOMETRIC PRACTICES**			
Roadway Data:	EXISTING	PRACTICES**	
No. of Lanes	4	5	Existing Rdwy. Plans available? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Lane Width	10'	11'	
Shoulder Width	0-2'	Standard Curb & Gutter	Year of Plans: 1997
Max. Superelevation***	N/A	Match Existing	<input type="checkbox"/> Traffic Forecast Requested
Minimum Radius***	N/A	Match Existing	Date Requested:
Maximum Grade	N/A	7%	<input checked="" type="checkbox"/> Mapping/Survey Requested
Minimum Sight Dist.	N/A	250	Date Requested: 2014
Sidewalk Width(urban)	N/A	5'	Type:
Clear-zone [†]	N/A	14'-16'	
Project Notes/Design Exceptions?	N/A		
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			
Year Built			
Posted Weight Limit			Detour Length(s): N/A
Structurally Deficient?			
Functionally Obsolete?			
Existing Bridge Type			
*If more than one road is included in the project, include additional sheets. **Based on proposed Design Speed ***AASHTO's A Policy on Geometric Design of Highways and Streets †AASHTO's Roadside Design Guide †If more than two bridges are located on the project, include additional sheets.			

II. PROJECT PURPOSE AND NEED

A. Legislation

The following funding is listed in the 2018 General Assembly's Enacted Highway Plan.

<i>Funding</i>	<i>Phase</i>	<i>Year</i>	<i>Amount</i>
STP	D	2019	\$500,000
STP	R	2020	\$1,500,000
STP	U	2020	\$1,750,000
STP	C	2021	\$4,500,000

B. Project Status

The design funds will be available for this project in FY 2019, and the Bowling Green MPO has approved it to be added to the TIP. Currently, there are not any authorizations for this project.

C. System Linkage

This section of US-31W is federally functionally classified as an Urban Arterial that connects US-68 to US-231. It is the primary route that connects the residents of Warren County to the local hospital, The Medical Center, along with other commercial centers of Bowling Green.

D. Modal Interrelationships

As previously mentioned, this section of US-31W is the primary route that provides access to The Medical Center. It is included in a fixed route transit service, GO bg Transit, and their mobility should be considered. Sidewalks for pedestrians are also present on this route.

E. Social Demands & Economic Development

This highway provides the primary connection for residents of Warren County to The Medical Center and other services - business, school, government, and recreational activity - of Bowling Green.

II. PROJECT PURPOSE AND NEED (cont.)

F. Transportation Demand

The last actual traffic count (2017) for US-31W between MP 13.698 and MP 14.423 was 21,613 AADT. These counts have remained fairly consistent over the past two decades, but truck traffic has increased from 3.7% to 4.5%. Counts should increase in the future due to the anticipated growth from the University of Kentucky College of Medicine establishing a four-year regional campus in Bowling Green.

G. Capacity

This section of US-31W does experience some congestion issues, especially during the peak travel periods in the morning and afternoon.

H. Safety

In the last three years (2015-2018), there have been 130 crashes on US-31W between MP 13.7 and MP 14.25. Most of these crashes were rear end, sideswipe, and angle collisions. Twenty-one of those 130 crashes resulted in injury. The critical rate factor for this segment is 1.28.

I. Roadway Deficiencies

Lane widths are 10', a foot smaller than recommendations in the Green Book. KYTC's Access Management Principles and Techniques should be considered in design.

III. PRELIMINARY ENVIRONMENTAL OVERVIEW

A. Air Quality

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

STIP Pg.#: STIP Mod 2016.183

TIP Pg.#:

B. Archeology/Historic Resources

Known Archeological or Historic Resources are present

There are no known Archaeological sites listed in this area. There is potential for archaeological sites near undisturbed sinkhole areas.

C. Threatened and Endangered Species

Gray Bat, Indiana Bat, Northern Long-eared Bat, Clubshell, Fanshell, Pink Mucket, Rabbitsfoot, Ring Pink (Mussel), Rough Pigtoe, Sheepnose Mussel, Snuffbox Mussel, Spectaclecase Mussel, Kentucky Cave Shrimp and Price's Potato-bean. I feel the listed mussel species will be a "No Effect" due to the lack of streams present within the project footprint. The Kentucky Cave Shrimp will also be a "No Effect" due to the project being outside the critical habitat.

D. Hazardous Materials

Potentially Contaminated Sites are present Potential Bridge or Structure Demolition

There is a Shell gas station located at the intersection of Fairview Avenue and US 31W. Underground storage tanks are present.

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

Project is located in a MS4 area.

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 [KYTC Noise Analysis and Abatement Policy?](#) Yes No

This project is located in an area that has various businesses, and a hospital.

G. Socioeconomic

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

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

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

There are no 4(f) or 6(f) resources within the direct impact areas.

Anticipated Environmental Document:

CE Level 1

IV. PROJECT NEED, PURPOSE & SCOPE

A. Need:

The corridor is experiencing a higher crash rate than other similar type facilities in Kentucky, and growth is anticipated in this area from the establishment of the University of Kentucky College of Medicine's regional campus.

B. Purpose:

The purpose of this project is to improve the safety and mobility for motorists along US-31W by improving the connection between US-68 and US-231.

C. Scope:

This section of US-31W is an urban arterial route that provides a connection to two major US routes, US-68 and US-231. Widening this corridor and improving access would improve safety and mobility.

V. PROJECT ESTIMATE & METHODOLOGY

Estimate Methodology:	Current Estimate	
The following estimate is listed in the 2018 General Assembly's Enacted Highway Plan.	<u>Phase</u>	<u>Estimate</u>
	Planning	
	Design	\$500,000
	R/W	\$1,500,000
	Utilities	\$1,750,000
	Const	\$4,500,000
	Total	\$8,250,000

VI. UTILITIES POTENTIALLY AFFECTED - CONTACT INFORMATION

Company Name -	Bowling Green Municipal Utilities Electric
Contact -	Chad Spencer, Superintendent
Address -	801 Center St, Bowling Green, KY 42102
Phone No. -	270-782-4333
Company Name -	BGMU General Services (Cable)
Contact -	Teresa Newman, Manager
Address -	801 Center St, Bowling Green, KY 42102
Phone No. -	270-782-4542
Company Name -	BGMU Water and Sewer
Contact -	Emmet Wood, Superintendent
Address -	801 Center St, Bowling Green, KY 42102
Phone No. -	270-782-4309
Company Name -	Atmos Energy Corporation
Contact -	Ronnie Benningfield, Operations Manager
Address -	2850 Russellville Rd, Bowling Green, KY 42101
Phone No. -	270-901-1705
Company Name -	AT&T
Contact -	Travis Parsley, GEO Manager
Address -	1150 State St, Bowling Green, KY 42101
Phone No. -	270-846-3196
Company Name -	Spectrum Cable
Contact -	Benny Burch, Construction Coordinator
Address -	515 Double Springs Rd, Bowling Green, KY 42102
Phone No. -	270-782-0903

VII. TABLES AND EXHIBITS

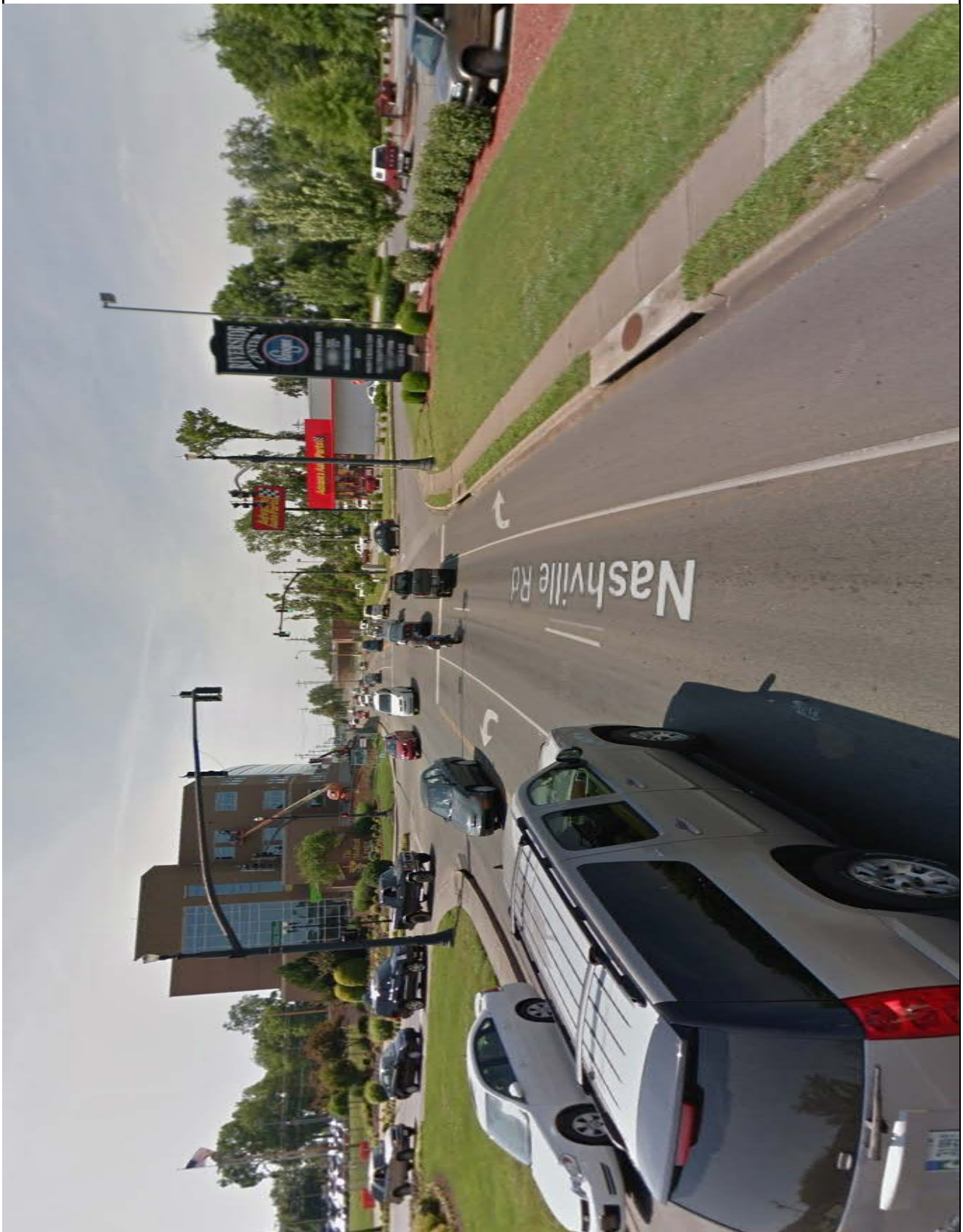


Photo 1: Project area facing north toward US-68, including the intersection with High Street (Hospital)

VII. TABLES AND EXHIBITS (cont.)

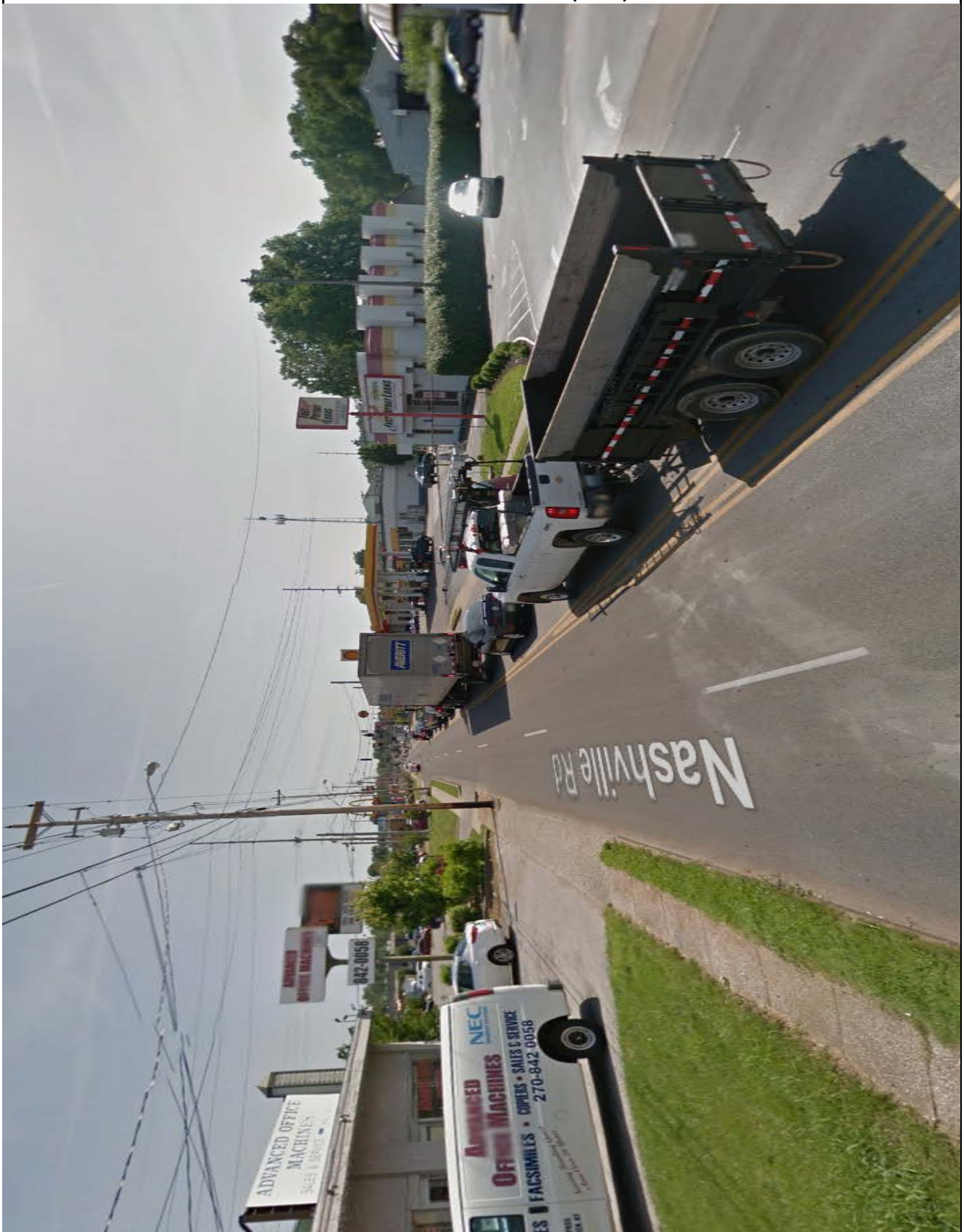


Photo 2: Project area facing south toward US-231, including the intersection with KY-234