

Appendix C

Environmental Overview



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TRANSPORTATION CABINET

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TO: Tom Clouse, P.E.
TEBM – Planning
District 8

FROM: Cathi Blair
District Environmental Coordinator
District 8

DATE: May 23, 2007

SUBJECT: Environmental Overview
KY 76 proposed roadway improvement scoping study
Russell and Adair Counties
Item # 8-8302

As requested, I have conducted an environmental overview for the above referenced project. The overview consisted of file review, database reviews and windshield surveys of the project area. Based on the above reviews, I have noted the following:

Project Goals

Safety improvement has been listed as the primary goal of this scoping study. Ky 76, a rural minor collector, is a narrow two-lane roadway with curves and grades that do not meet current guidelines or provide adequate sight distances for on-coming vehicles. Shoulder width along the route ranges from three feet to none along the route. The route is used as a "cut-thru" for traffic going to the areas of Green River Lake and Campbellsville or Columbia.

Threatened and Endangered Species

Federally listed species for Russell and Adair Counties include:

Adair County

Myotis grisescens (gray bat)

Myotis sodalis (Indiana bat)

Cyprogenia stegaria (fanshell mussel)

Russell County

Myotis sodalis (Indiana bat)

Villosa trabilis (Cumberland bean pearly mussel)

Epioblasma brevidens (Cumberlandian combshell)

Cyprogenia stegaria (fanshell mussel)

Ptychobranchus subtentum (fluted kidneyshell mussel)

Plethosbasus cooperianus (orangefoot pimpleback mussel)

Epioblasma capsaeiformis (oyster mussel)

Lampsilis abrupta (pink mucket mussel)

Obovaria retusa (ring pink mussel)

Pleurobema plenum (rough pinktoe mussel)

Habitat for the Indiana bat is present along the project corridor. Once an alignment has been selected for this project, the habitat impacts will need to be reevaluated. If IB habitat is present in the selected alignment area, then the Cabinet will need to decide whether to 1) Conduct a Biological Assessment (BA); 2) Assume presence and accept tree cutting restrictions; or 3) pay funds into the Indiana Bat Conservation Fund at a rate of approximately \$440/acre of impacted habitat.

Foraging habitat is also present for the gray bat along the corridor. Foraging habitat includes streams or ponds/lakes that are bordered by forest or an intact riparian zone. Gray bats have been consistently captured during BAs in Adair County for the last several years. The Cabinet should probably assume presence of the gray bat and agree to mitigation measures which would include the use of good erosion control during construction and possibly a requirement of construction only during the day.

Habitat assessments will need to be conducted for the mussel species once an alignment has been selected. There are streams that cross the project area that will need to be evaluated. One particular area that will need special attention is near the northern terminus of the project just south of Ky 76's intersection with Ky 206. Ky 76 crosses the headwaters of an unnamed tributary to Green River in the Busby Hollow area (see map). This tributary has been designated as an Outstanding Resource Water (EXCEPTIONAL WATER and a REFERENCE REACH STREAM) due to its high water quality. Streams with this designation could be potential habitat for certain mussel species.

Streams and Wetlands

As mentioned above, an unnamed tributary to Green River near the northern terminus of the project has been designated as an Outstanding

Resource Water. Potential impacts to this resource need to be considered during the design process.

Approximately 5 blue-line streams were noted along the corridor. A field survey will be required to determine if there are any jurisdictional intermittent/ephemeral streams that will need to be considered during the permitting process.

Several small wetlands are scattered along the project corridor. There is one palustrine, forested wetland that is already bisected by the current Ky 76. Any improvements to this section of road will impact that wetland. (See map) The improvements could be designed in a way to miss the majority of the other designated wetlands.

Permits

If any blue-line stream or wetland is impacted on this project, a 401 Water Quality certification from the Kentucky Division of Water and a 404 permit from the US Army Corps of Engineers will be required. A determination on the type of permits (individual vs. general) will be made during the design phase of the project.

Cultural-Historic

A review of the current Kentucky Heritage Council listing of sites that have been reviewed by KHC for National Register determination did not indicate any structures or sites in the immediate project area. There are some eligible sites north and east of the project but they will not be impacted by this project. **Several** structures along the corridor appear to be 50 years or older and will need to be evaluated for NR eligibility once a preferred alignment has been selected.

Please note that if the project becomes a federally funded project, then the alignment must be evaluated for 4(f) impacts as well as Section 106 impacts. If the project remains a state-funded project, then the NR eligibility determinations will only need to comply with Section 106 which means that only structures within the Corps of Engineers jurisdictional area will be considered for mitigation.

Archaeology

According to Mr. Carl Shield, DEA archaeologist, no known archaeological sites have been documented along this project corridor. Mr. Shields does believe that there is some potential for arch sites to be present in the more level areas along the corridor. Once the preferred improvements have been selected, an archaeological survey will need to be completed within the Corps jurisdictional areas.

Noise

Because this project would only be a widening project, no increases in traffic or noise is expected to occur. A noise analysis will not be required.

Air Quality

Neither county (Adair or Russell) is located in a nonattainment or maintenance area. If signalized intersections at either US 127 or Ky 206 are constructed, then the Division of Environmental Analysis would need to review and clear the project for Air Quality concerns.

Hazardous Materials

The following potential hazardous materials/wastes sites were observed in the corridor:

- 1) Abrells Market – This is a former gas station/grocery store that is no longer operating. Five aboveground storage tanks (ASTs) were observed on the site. These tanks held diesel fuel (2), gasoline (2) and heating oil (1). I did not observe any vent pipes or fill spouts to indicate that underground storage tanks (USTs) were still located on-site.
- 2) Giles Market – This is an operational grocery store that also sells gasoline. Again I did not observe any vent pipes or fill spouts which would indicate the presence of USTs. Two ASTs were observed behind the building.
- 3) Small “junkyard” – This is located just east of the Ky 76/Ky 206 intersection. It appears to be more of a single family operation rather than a business but the potential for surface contamination from petroleum products does exist.
- 4) Home heating oil tanks – Although no tanks were observed, the possibility exists that some heating oil tanks will be impacted. Environmental impacts from home heating oil tanks are usually very minimal and often limited to surface contamination.

Socioeconomic Issues

Although some relocations may be required in this project, it appears that the project can be constructed without any disproportionate impact to minorities or disadvantaged persons (environmental justice).

No publicly owned parks, recreation areas, or wildlife and wildfowl refuges were noted in the project corridor.

Community cohesion and travel patterns will not be permanently affected by this project. While the Ky 206 area of Adair County does have some

Mennonite communities, the local authorities and highway maintenance superintendents indicate that Ky 76 does not receive very much traffic from that community (horse/carts).

Three churches are located in the corridor area. In Russell County, the churches are the Faith General Baptist Church which is located just west of the Ky 76/US 127 intersection and the Good Tidings Baptist Church which also has a cemetery on its property. In the Millerfield area of Adair County, the Millerfield Brethern in Christ Church and cemetery is located on Ky 76.

It is also important to note that there is a Russell Springs water tower located adjacent to the Faith General Baptist Church.

CB

Cc: File
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U.S. Fish & Wildlife Service
Kentucky Ecological Services Field Office

U.S. Fish & Wildlife Service
3761 Georgetown Rd.
Frankfort, KY 40601
Phone: 502-695-0468
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Endangered, Threatened, & Candidate

Species in RUSSEL County, KY

Group	Species	Common name	Legal* Status	Known** Potential	Special Comments
Mammals	<i>Myotis sodalis</i>	Indiana bat	E	P	
Mussels	<i>Villosa trabilis</i>	Cumberland bean pearlymussel	E	K	
	<i>Epioblasma brevidens</i>	Cumberlandian combshell	E	K	
	<i>Cyprogenia stegaria</i>	fanshell	E	K	
	<i>Ptychobranchius subtentum</i>	fluted kidneyshell	C	K	
	<i>Plethobasus cooperianus</i>	orangefoot pimpleback	E	K	
	<i>Epioblasma capsaeiformis</i>	oyster mussel	E	K	
	<i>Lampsilis abrupta</i>	pink mucket	E	K	
	<i>Obovaria retusa</i>	ring pink	E	K	
	<i>Pleurobema plenum</i>	rough pigtoe	E	K	

NOTES:

* Key to notations: E = Endangered, T = Threatened, C = Candidate, CH = Critical Habitat

**Key to notations: K = Known occurrence record within the county, P = Potential for the species to occur within the county based upon historic range, proximity to known occurrence records, biological, and physiographic characteristics.



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Endangered, Threatened, & Candidate
Species in ADAI County, KY

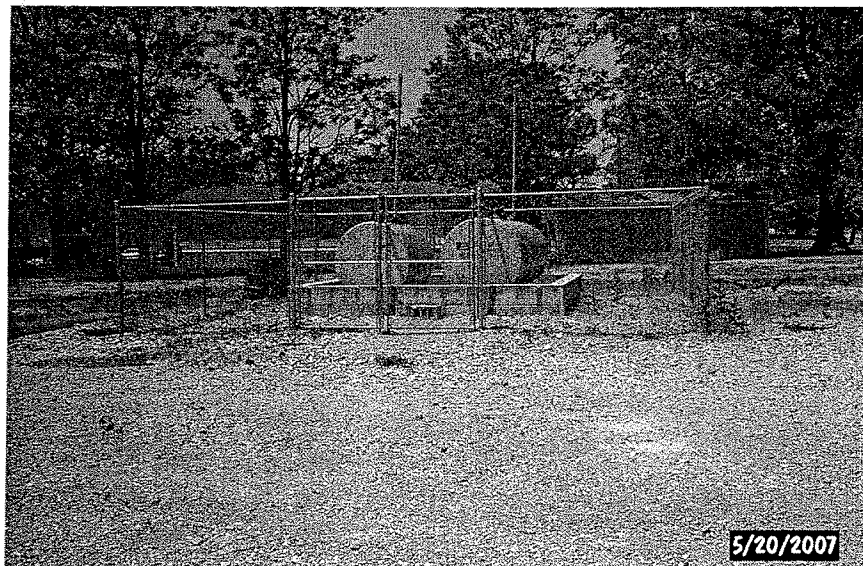
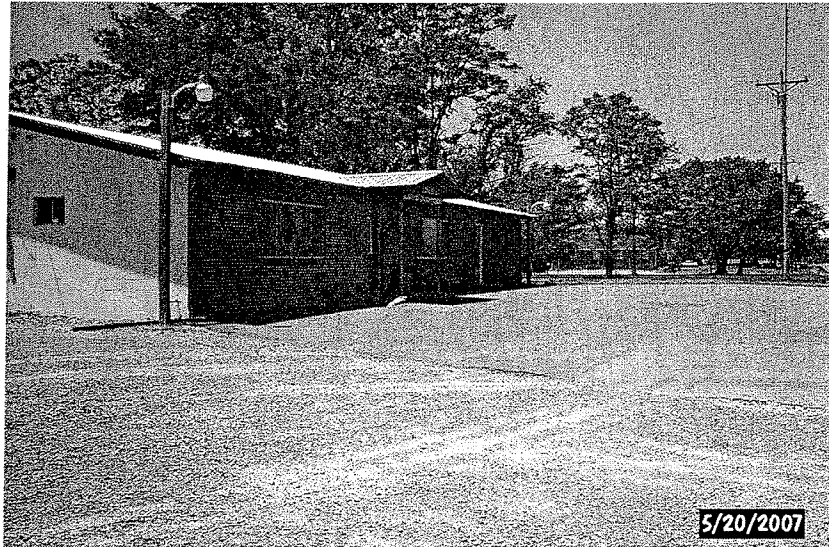
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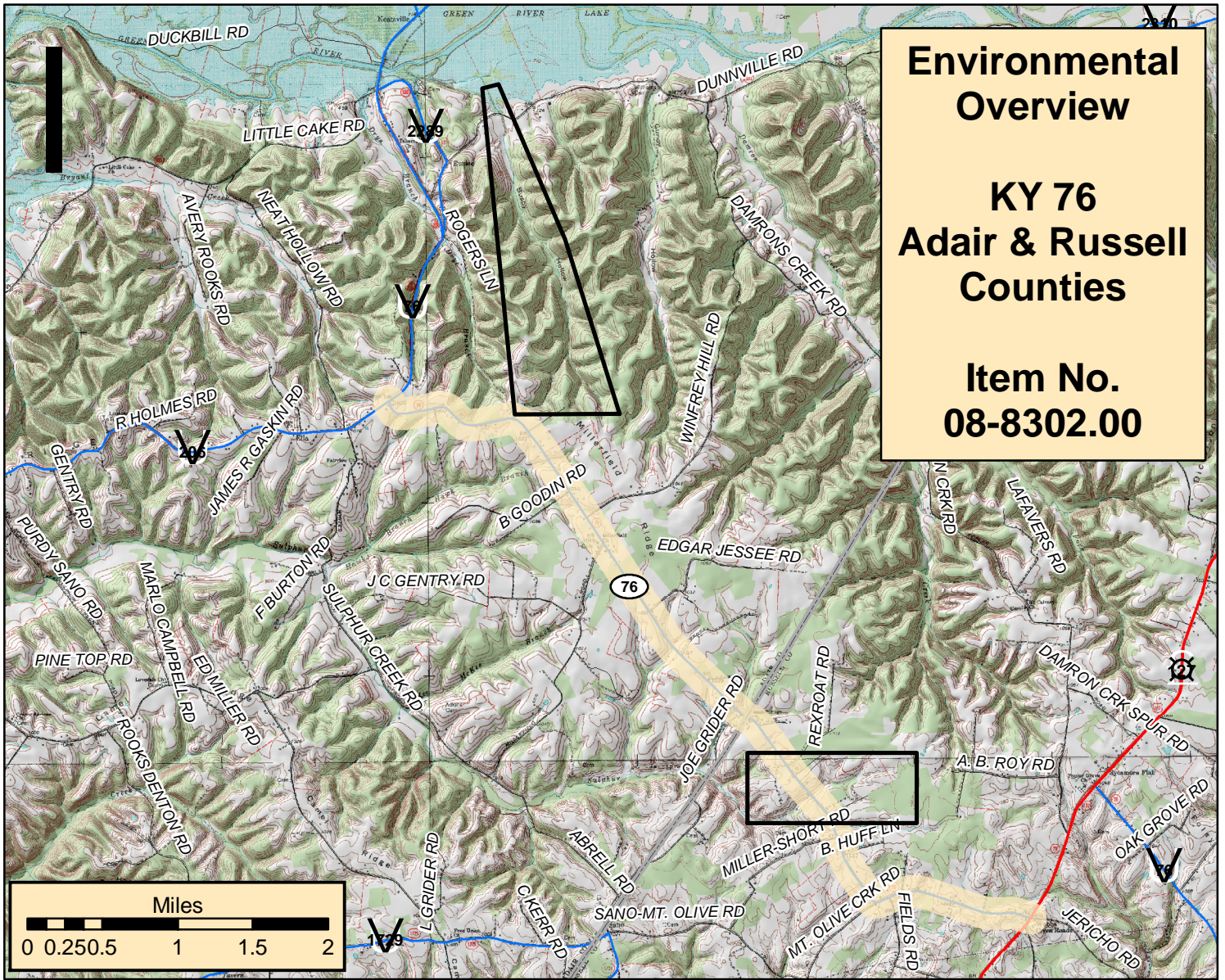
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**Abrell's Market
Ky 76 Scoping Study
Adair/Russell Counties
Item # 8-8302.00**

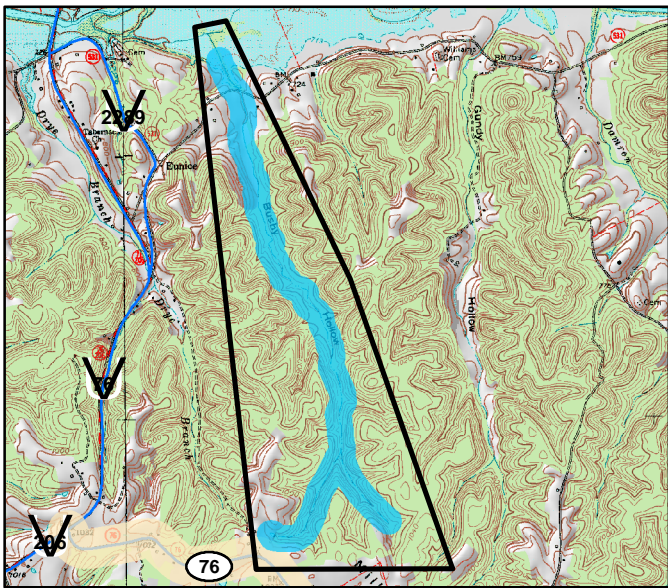




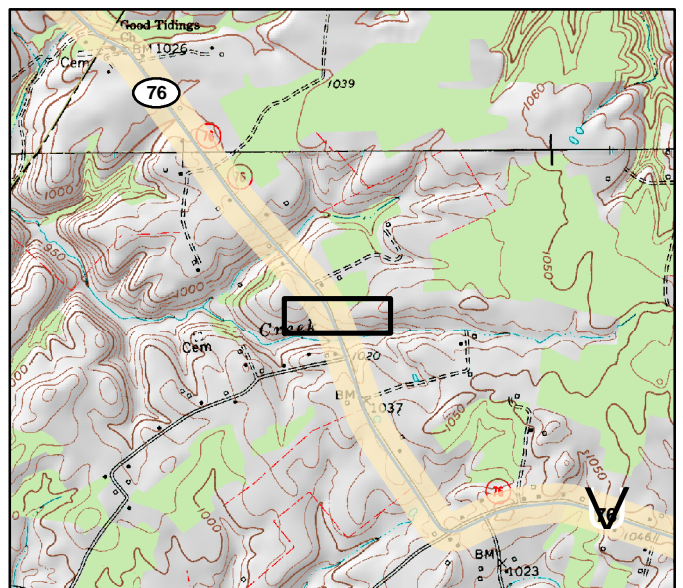
**Environmental
Overview**

**KY 76
Adair & Russell
Counties**

**Item No.
08-8302.00**



**Special Use Water Designation
(Busby Hollow)**



Forested Wetland

