APPENDIX B

Overview of Environmental Assessment

REDWING ECOLOGICAL SERVICES, INC. 129 South Sixth Street • Louisville, Kentucky 40202 • Phone 502.625.3009 • Fax 502.625.3077

October 17, 2005

Mr. Raymond G. Robison, Jr., P.E.
Skees Engineering, Inc.
400 Blankenbaker Parkway
Suite 300
Louisville, Kentucky 40242

Subject: **Overview of Environmental Assessment**
Southside Drive Widening – New Cut Road to Strawberry Lane
Jefferson County, Kentucky
Redwing Project 04-041

Dear Mr. Robison:

Redwing Ecological Services, Inc. (Redwing) is pleased to submit this overview of our environmental assessment of the approximately 1.1-mile Southside Drive widening between New Cut Road and Strawberry Lane in Jefferson County, Kentucky (Figure 1). This overview is intended to identify significant environmental features in the vicinity of the proposed project, and to assist Skees Engineering, Inc. in evaluating the environmental effects of the proposed roadway alignment alternatives. The overview presents methodology and preliminary results of potential air quality, highway noise, terrestrial and aquatic ecology, archaeological, socio-economic, Section 4(f) and 6(f), historic, and UST/HAZMAT impacts within the entire project corridor.

We appreciate the opportunity to work with you on this important project. If you have any questions regarding this overview, please do not hesitate to call Kiersten Fuchs or Brian O'Neill at (502) 625-3009.

Sincerely,

Brian J. O'Neill
Project Aquatic Biologist

Kiersten R. Fuchs
Senior Wildlife Biologist
Principal

04-041/Reports/EO-Final-rpt

Attachment: Overview of Environmental Assessment – Southside Drive Widening (7 copies)

OVERVIEW OF ENVIRONMENTAL ASSESSMENT

SOUTHSIDE DRIVE WIDENING

Prepared for:

LOUISVILLE / JEFFERSON COUNTY
METRO GOVERNMENT
DEPARTMENT OF PUBLIC WORKS

October 2005

OVERVIEW OF ENVIRONMENTAL ASSESSMENT

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Prepared by:

REDWING ECOLOGICAL SERVICES, INC.

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Principal
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Project Aquatic Biologist

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EXECUTIVE SUMMARY

The Louisville/Jefferson County Metro Government, Department of Public Works, is proposing the widening of approximately 1.1 miles of Southside Drive in Louisville, Jefferson County, Kentucky. This Overview of Environmental Assessment presents potential social, economic, and environmental impacts of the proposed project. It addresses a Three-Lane Alternative and Five-Lane Alternative for the proposed project.

The existing Southside Drive is a minor urban arterial, which serves an important linkage role between neighborhoods and between major local roads. The proposed project corridor runs primarily in a north-south direction, and extends from New Cut Road in the south the Strawberry Lane in the north. Currently, most of the southern 0.6 mile of the project corridor is two lanes wide, and most of the northern 0.5 mile is three lanes wide. The additional lanes consist of a central lane or right- or left- turn lanes approaching intersections.

Development in the vicinity of the project area, especially industrial development along National Turnpike, has increased traffic volumes in the project corridor. Two roadway widening projects have recently been undertaken adjacent to Southside Drive. The widening of New Cut Road to five lanes was completed in 1981, and the widening of National Turnpike to five lanes is currently underway and scheduled to be completed in 2006. These projects included modification of Southside Drive within the project corridor, adding one turning lane at its intersections with these roads. Currently, the existing Level of Service for the project corridor ranges from "C" for the segment between New Cut Road and Palatka Road, to "D" for the segment from Palatka Road to National Turnpike, to "E" from National Turnpike to Strawberry Lane. In addition, narrow shoulders, lack of medians, and steep ditches within the project corridor present safety concerns (Skees 2005).

Alternatives evaluated for the project consist of a Three-Lane Alternative and a Five-Lane Alternative. The Five-Lane Alternative provides two lanes for each direction of traffic and a median/turn lane throughout the corridor. The additional lane in each direction allows vehicles to decelerate for right turns with minimal disruption to the flow of traffic. It will require displacements of four residences, one multi-family residence, one residential garage, two commercial buildings, and two commercial accessory structures. One displacement (Speedway SuperAmerica) has UST issues and a second displacement (Kenwood Service Center) has UST, HAZMAT, and soil contamination issues. Impacts to environmental resources from this project are limited to a 0.006-acre emergent wetland and three potential impacts to potential-historic properties. No other resources will be impacted.

The Three-Lane Alternative provides one lane for each direction of traffic and one median/central turn lane. As it provides fewer lanes, this alternative will not reduce traffic congestion to the extent of the Five-Lane Alternative. It will require displacements of one residence, one residential garage, one commercial building, and three commercial accessory structures. Two displacements (Kenwood Service Center and

BP Oil) have UST, HAZMAT, and soil contamination issues. Impacts to environmental resources from this project are limited to a 0.006-acre emergent wetland and three potential impacts to potential-historic properties. No other resources will be impacted.

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2. View of northern terminus of the corridor at the intersection of Southside Drive and Strawberry Lane. Currently, the intersection is five pointed as it includes the dead-end Roberts Avenue, which runs behind the vacant service station (right side of photograph). Southside Drive Widening. December 6, 2004.

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1.0 INTRODUCTION

This report presents an overview of the social, economic, and environmental impacts of the proposed approximately 1.1-mile Southside Drive Widening project in Jefferson County, Kentucky, based on site reconnaissance, document research, and early agency coordination. The report has been prepared by Redwing Ecological Services, Inc. (Redwing), with assistance from Cultural Resource Analysts, Inc. (CRAI) and Fuller Mossbarger Scott & May (FMSM). It is intended to identify significant environmental features in the vicinity of the proposed project, and to assist Skees Engineering, Inc. (Skees) in evaluating the environmental effects of the proposed roadway alignment alternatives. The proposed study corridor for the project begins at the intersection of New Cut Road and Southside Drive and ends at Strawberry Lane (Figure 1).

1.1 Methodology

The proposed project corridor was surveyed for environmental issues in the field and through in-house research for the Five-Lane and Three-Lane Alternatives. Terrestrial and aquatic ecology, socio-economics, and Section 4(f) and 6(f) issues were surveyed by Redwing, air quality, highway noise, and UST/HAZMAT by FMSM, and archaeology and cultural-historic resources by CRAI during April 2005. The surveys evaluated and documented potential impacts to all properties within the proposed project boundaries for the Three-Lane and Five-Lane Alternatives, as marked on maps provided by Skees.

2.0 EARLY COORDINATION

Early coordination letters were sent to relevant agencies. The response letters received and comments to issues raised are included in Appendix B, Part A. Letters were received from the following agencies: the Kentucky Division of Water (KDOW), the Kentucky Division of Forestry (KDOF), the Natural Resource Conservation Service (NRCS), the U. S. Fish and Wildlife Service (USFWS), the Kentucky Department of Fish and Wildlife Resources (KDFWR), and the Kentucky State Nature Preserves Commission (KSNPC).

3.0 PROJECT DESCRIPTION

The Louisville/Jefferson County Metro Government, Department of Public Works, is proposing widening of Southside Drive in southern Louisville, Jefferson County, Kentucky. The project is intended to improve traffic flow and safety conditions in the project corridor and surrounding neighborhoods. A Three-Lane Alternative and Five-Lane Alternative have been developed. These alternatives will add lanes, improve road safety, and install utilities such as sidewalks and bike lanes. Although the project is being conducted under the supervision of the Louisville County Metro Government, project work will be

performed to State and Federal standards so that the project can continue to qualify for Federal funds (Skees 2005).

3.1 Highway, Termini, and Project Length

The proposed project extends approximately 1.1 mile along Southside Drive from New Cut Road (in the south) to Strawberry Lane (in the north). Southside Drive is an urban minor arterial roadway that runs primarily north to south within the urbanized area of the city of Louisville.

3.2 Design Features

The existing Southside Drive has a two-lane or three-lane width within the project corridor. Currently, most of the southern 0.6 mile of the project corridor is two lanes wide, and most of the northern 0.5 mile is three lanes wide. The additional lane serves as a central dual-left turn lane or as a right- or left- turn lane approaching intersections. Much of the southern 0.6 mile of the corridor has narrow shoulders and is bordered closely by steep drainage ditches alternating with driveway culverts. Sidewalks are present along the west side of Southside Drive (Skees 2005).

The project will pass through a densely developed corridor characterized by a diverse mix of residential, commercial, and institutional properties. One ephemeral stream is crossed by the corridor, but it flows though a culvert beneath the roadway and will not be altered by the proposed project.

4.0 DESCRIPTION OF THE AFFECTED ENVIRONMENT

4.1 Physiographic Region

The proposed project is located in Jefferson County, in the north-central portion of the state of Kentucky. The majority of Jefferson County is located within the Outer Bluegrass physiographic region, but a small southwestern portion is located in the Knobs region. Jefferson County is bordered by Oldham County on the northeast, Shelby and Spencer Counties on the east, Bullitt County on the south, and the Ohio River on the west, which separates it from the state of Indiana.

5.0 ALTERNATIVES CONSIDERED

Both a Three-Lane Alternative and a Five-Lane Alternative have been developed to address congestion and safety issues within the project corridor. Due to the lateral constraints imposed by adjacent development, both the proposed alignments were assumed to follow very closely to the existing roadway alignment. Both alternatives will add lanes, improve road grade, align intersections, replace the hazardous roadside

ditches with curb-and-gutter, add bike lanes in each direction, and add a sidewalk to the eastern side of Southside Drive. Each alignment alternative was also designed, to the extent possible, to carefully avoid significant environmental features identified during the preliminary assessment.

5.1 Five Lane Alternative

The Five-Lane Alternative provides two lanes of traffic in each direction and either a central dual-left turn lane or a left- or right-turn lane. The additional lane in each direction allows vehicles to decelerate for right turns with minimal disruption to the flow of traffic. Impacts to environmental resources from this project are limited to a 0.006-acre emergent wetland, a right-of-way adjacent to potential-historic Saint Mark's Church buildings, and two potential impacts to potential-historic buildings. No other resources will be impacted. This alternative will require displacements of four residences, one multi-family residence, one residential garage, two commercial buildings, and two commercial accessory structures. One displacement has UST issues and a second displacement has UST, HAZMAT, and soil contamination issues.

5.2 Three Lane Alternative

The Three-Lane Alternative provides one lane of traffic in each direction and either a central dual-left turn lane or a left- or right-turn lane. As this alternative provides fewer lanes, it will reduce traffic congestion less than the Five-Lane Alternative. Impacts to environmental resources from this project are limited to a 0.006-acre emergent wetland and three potential impacts to potential-historic buildings. No other resources will be impacted. This alternative will require displacements of one residence, one residential garage, one commercial building, and three commercial accessory structures. Two displacements have UST, HAZMAT, and soil contamination issues.

6.0 SUMMARY IMPACT ANALYSIS

6.1 Air Quality Overview

The Air Quality overview was conducted by Palmer Engineering Company. Based on the computer modeling conducted for this air quality overview, the proposed project is in compliance with the Kentucky State Implementation Plan for Attainment and Maintenance of National and State Ambient Air Quality Standards. Potential air quality impacts are depicted in Figure 2, and the Air Quality Evaluation report is included as Appendix B, Part B.

The National Turnpike/Southside Drive Intersection was selected as the "hotspot" in the project corridor that would be expected to have the highest levels of carbon monoxide (CO). Existing and future microscale emissions of CO were calculated using the USEPA MOBILE6.2.03 emissions model and the USEPA CALQ3HC Version 2.0 dispersion model. The maximum CO concentrations, based on computer modeling, are summarized in the following table.

TABLE 1: MAXIMUM CALCULATED CARBON MONOXIDE CONCENTRATIONS – NATIONAL TURNPIKE/SOUTHSIDE DRIVE INTERSECTION

	One-Hour Average (NAAQS Standard = 35 ppm)	**Eight-Hour Average** (NAAQS Standard = 9 ppm)
2005 Existing	4.6	4.3
2029 No Build	4.8	4.4
2029 Build	4.6	4.3

The existing and future calculated CO levels are consistently below the National Ambient Air Quality Standards (NAAQS) one-hour concentration of 35 parts per million (ppm) and the eight-hour concentration of 9 ppm. The proposed Southside Drive project is not predicted to have a negative impact on the ambient air quality of Jefferson County or the Louisville Interstate Air Quality Control Region when these calculated CO levels are compared with the NAAQS.

The proposed project is listed in the Transportation Improvement Program for the Louisville and Southern Indiana Urbanized Area (FY2005-FY2007), published by the Kentuckiana Regional Planning and Development Agency in August 2004. Transportation control measures are not required for Jefferson County, pursuant to the Transportation Conformity Rule Amendments of August 2004.

Jefferson County was designated as a non-attainment area for ozone on June 15, 2004, based on the eight-hour standard for ozone. On April 5, 2005, Jefferson County was designated as a non-attainment area for fine particulates (PM2.5). The county is in attainment for CO and all other transportation related

pollutants. At this time no models are available for accurately predicting ozone and PM2.5 concentrations, which will be addressed on a regional basis rather than at the project level.

Based on the computer modeling conducted for this air quality overview, the proposed project is in compliance with the Kentucky State Implementation Plan for Attainment and Maintenance of National and State Ambient Air Quality Standards. A more detailed air quality analysis for the entire project corridor may be prepared at a future date as part of an Environmental Assessment.

6.2 Highway Noise Overview

The Highway Noise overview was performed by Fuller, Mossbarger, Scott and May Engineers, Inc. (FMSM) to address the effects of traffic-generated noise which can be expected to occur due to the widening of Southside Drive from its intersection with New Cut Road northward to its intersection with Strawberry Lane/Thalia Lane. The analysis contained herein was performed in compliance with 23 USC Section 109(h) and (i), the Federal Highway Administration (FHWA) guidelines for the assessment of highway traffic-generated noise. The Noise Study report is included as Appendix B, Part C.

Existing sound levels adjacent to the project are dominated by traffic from the existing Southside Drive. Therefore, existing sound levels at sensitive receptors were determined by modeling the existing roadway geometry and traffic configuration. The FHWA Highway Traffic Noise Model, TNM 2.5, was used for this purpose. Input to the model includes existing roadway geometry, traffic volumes, vehicle speed, and truck percentage.

The construction of this project would result in a 1 to 3 decibel increase in traffic generated noise throughout the corridor. (It should be noted that increases of 3 dBA or less are not considered to be perceptible by humans.) There would be six single family residences impacted under the build condition northwest of Southside Drive between National Turnpike and Strawberry Lane. Noise abatement for the impacted sites was considered. However, no feasible and reasonable abatement measures were identified for the impacted sites.

6.3 Terrestrial And Aquatic Ecology Overview

Jefferson County is located within the Outer Bluegrass and Knobs physiographic regions. Land in the project corridor is relatively flat, but Southside Drive bends around Kenwood Hill to the northwest. The majority of the project area is located within the Memphis-Loring-Zanesville soil association, which consists of sloping to steep, well drained to moderately well drained soils on hills. The far southern tip of the corridor near New Cut Road is located within the Zipp-Robertsville soil association, which consists of poorly drained soils of flat, slack-water areas (Figure 3). The landscape of the project corridor is heavily populated and no significant natural areas remain.

6.3.1 Natural Habitats

The project corridor is developed, with a significant portion of the corridor paved or occupied by buildings. Natural habitats within the project corridor consisted of mowed lawns, open park area, wetlands and streams. There are no significant impacts to natural habitats from either proposed alternative.

6.3.2 Jurisdictional Waters/Wetlands

Jurisdictional waters/wetlands within the study corridor (Figure 4) are limited to:

- one approximately 0.04-acre emergent and wooded wetland adjacent to a roadside drainage ditch near the southern terminus of the project corridor

- one approximately 0.006-acre emergent wetland within a blocked roadside drainage ditch along Southside Drive west of Palatka Road.

In addition, one ephemeral stream crosses the project corridor east of National Turnpike (Figure 4). Although the USGS 7.5-minute quadrangle map (Figure 1) depicts an intermittent stream within the project corridor just east of New Cut Road, it was documented during a field visit that this stream has been relocated outside the project corridor. Presently, the stream flows through a culvert under New Cut Road approximately 300 feet south of Southside Drive, then flows east and south.

Impacts to greater than 0.5 acre of jurisdictional waters/wetlands require the submittal of an Individual Permit to the U. S. Army Corps of Engineers (USACE). Impacts to waters/wetlands of the U.S. between 0.1 acre and 0.5 acre and less than 300 feet of perennial or intermittent stream require submittal of a Preconstruction Notification (PCN) to the USACE under Nationwide Permit 14 for road crossing projects. Impacts to less than 0.1 acre of jurisdictional waters/wetlands (and less than 300 linear feet of impact to perennial/intermittent streams) meet the conditions of Nationwide Permit 14, and formal notification to the USACE is not required. A Water Quality Certification will be required from the Kentucky Division of Water (KDOW) if the project impacts greater than one acre of jurisdictional wetland or impacts greater

than 200 linear feet of perennial or intermittent stream (as depicted on the USGS topographic quadrangle map).

6.3.3 State Champion Trees

In a letter dated November 3, 2004, the Kentucky Department of Forestry confirmed that the project corridor does not contain any state champion trees (see KDOF letter in Appendix B, Part A).

6.3.4 Outstanding State Resource Waters and Wild Rivers

There are no Outstanding State Resource Waters and Wild Rivers within the proposed corridor and there will not be any impacts to these resources from either proposed alternative (see KDOW letter in Appendix B, Part A).

6.3.5 Protected Species

On October 4, 2004, information requests were submitted to the Kentucky State Nature Preserves Commission (KSNPC), the Kentucky Department of Fish and Wildlife Resources (KDFWR), and the U.S. Fish and Wildlife Services (USFWS) regarding the potential for protected species and protected natural areas along the alternate routes. Response letters from these agencies are included in Appendix B, Part A. The KSNPC replied on October 27, 2004, stating that two federally-listed endangered species, the Indiana bat (*Myotis sodalis*) and gray bat (*Myotis grisescens*), are known to occur within the vicinity of the project corridor, as well as two state listed species: the state endangered Louisville crayfish (*Orconectes jeffersoni*), and the state threatened Kirtland's snake (*Clonophis kirtlandii*).

The KDFWR responded on November 24, 2004, also stating that the Indiana bat, gray bat and Kirtland's snake are known to occur in Jefferson County. Both agencies recommend the area be surveyed for potential summer roost habitat and winter sites and that disturbance of potential summer roost habitat be avoided between March 31 and October 15. The USFWS responded on November 10, 2004 and stated that no significant adverse impacts to endangered or threatened species were expected from the proposed project.

During the ecological assessment, no potential habitat for the Indiana bat, gray bat, Kirtland's snake or Louisville crayfish was documented. No specific surveys for protected species have been performed at this time; however, it appears that this project will not impact any threatened or endangered species.

6.3.6 Designated Parks and Preserves

One park and no preserves were identified within the project corridor. Auburndale Park is located within the study area (Figure 5) and any impacts to the park will be addressed under the Section 4(f) process (see Section 7.1).

6.3.7 Floodplain

The FEMA floodplain map (Figure 6) shows that the entire Five-Lane and Three-Lane corridors are located outside of the 100-year and 500-year floodplains. No impacts to the 100-year floodplain are anticipated for this project.

6.4 Socio-Economic Overview

6.4.1 Land Use

The project corridor is composed of a mix of residential, commercial, and institutional properties (Figure 5). The north portion of the corridor, between Strawberry Lane and Saint Mark's Church, is dominated by commercial properties with one church and some scattered single-family residences. The southern portion of the corridor is dominated by single-family residences and two-story, multi-family residences, with a small amount of commercial development near New Cut Road.

Six churches are located within the project corridor. Moving south to north, they include Our Lady of Mount Carmel Catholic Church and School, South Louisville Seventh Day Adventist Church, New Heights Baptist Church, First Vietnamese Baptist Church, Saint Mark's Lutheran Church, and Epiphany United Methodist Church. The project corridor also includes one publicly-owned park. Auburndale Park measures approximately four acres and features tennis courts, a small playground, parking and several mature trees along Southside Drive.

6.4.2 Prime Farmland

No farmland is present along or within the vicinity of the project corridor. In a letter dated October 6, 2004, the Natural Resource Conservation Service (NRCS) confirmed that the project corridor does not contain any prime or unique farmlands (see NRCS letter in Appendix B, Part A).

6.4.3 Project Displacements

The Five-Lane Alternative will require displacements of four residences, one multi-family residence, one residential garage, two commercial buildings, and two commercial accessory structures. The Three-Lane Alternative will require displacements of one residence, one residential garage, one commercial building, and three commercial accessory structures. The following table presents a summary of these sites.

Table 2: Potential displacements within the project corridor			
Address	**Description**	**Required for Five-Lane Alternative?**	**Required for Three-Lane Alternative?**
7303 Southside Drive	2-Story Residence	Yes	No
7251 Southside Drive	1-Story Residence	Yes	No
7247 Southside Drive	1-Story Residential garage	Yes	Yes
7150 Southside Drive	2-Story, 4-Plex Apartment Building	Yes	No
7146 Southside Drive	2-Story Residence	Yes	Yes
7138 Southside Drive	1-Story Residence	Yes	No
7031 Southside Drive	Patio at 1-Story Business	Yes	Yes
6905 Southside Drive	1-Story Business	Yes	No
6903 Southside Drive	1-Story Business	Yes	Yes
6821 Southside Drive	Gas Station Canopy	Yes	No
5469 New Cut Road	Gas Station Canopy	No	Yes
5447 New Cut Road	ATM	No	Yes

6.4.4 Economic Effects

The entire project corridor is developed, so no opportunities are present for new development. A small number of vacant buildings and lots are present, however, and present opportunities for occupation by new tenants. Both alternatives will improve traffic flow and will likely increase the number of vehicles passing through the corridor. Both alternatives will reduce traffic accidents and the resulting costs to local residents and commuters.

Both alternatives will require the relocation of some businesses, but the loss of parking spaces to the remaining businesses will be minimal. The five lane alternative requires more displacements than the three lane alternative. However, it is expected that many occupants of displaced residences and businesses will relocate locally and that there will not be any social, economic, or cultural loss to the community due to these displacements. The purchase of additional right-of-way will not have a significant effect on property taxes.

6.4.5 Social Effects

The proposed project will improve traffic flow, reducing commute time for local residents and workers and improving local safety and the mobility of pedestrians and cyclists. It will replace steep ditches and culvert headwalls along the road with curb-and-gutter systems, significantly improving safety for local drivers. Currently, sidewalks are in place along the west side of Southside Drive, and no bike lanes are present. Both proposed alternatives will install a sidewalk on the east side of the road and one four-foot bike lane in each direction.

6.4.6 Economic Justice

Minority, elderly, and low-income persons should not be disproportionately affected by the proposed project because they are generally not disproportionally represented in the project area. Both proposed alternatives were developed in a manner that helps to minimize community-related impacts, including residential displacement.

6.5 Archaeological Overview

The archaeological overview, conducted by Cultural Resource Analysts, Inc. (CRAI), indicated that no archaeologically significant sites exist within or near the project corridor. The Archaeological Overview and File Search is included as Appendix B, Part D.

6.5.1 Known Archaeological Sites

A review of archaeological site files maintained by the Office of State Archaeology and the Kentucky Heritage Council indicated that no previously recorded archaeological sites or historic properties were located within the study area. Seven previously recorded archaeological sites have been recorded within two kilometers of the study area.

6.5.2 Archeological Sensitivity/Potential

Four potential historic sites were identified during the review of historic maps (Appendix B, Part D). Residential and commercial development in the areas has likely destroyed the archaeological integrity of these sites. Based on a review of sites in the region and historical maps, the study area has low potential to contain archaeological sites eligible for listing on the National Register of Historic Places (NRHP). Due to the extent of recent development in the area, it is not likely that any existing archaeological sites remain undisturbed. If archaeological sites are encountered they will likely be prehistoric open habitations without mounds or historic farms and residences.

6.6 Historic Overview

The historic overview, conducted by CRAI, determined that five sites within the project corridor are potentially eligible for listing on the NRHP. The Cultural Historic Planning Overview Survey is included as Appendix B, Part E. The following table presents a summary of these sites, which are also depicted in Figure 7.

Table 3: Sites potentially eligible for listing on the National Register of Historic Places within the project corridor					
Number	**Description**	**Location**	**National Historic Register Status**	**Impacted by Five-Lane Alternative?**	**Impacted by Three-Lane Alternative?**
1	1.5-story frame house with stone veneer	West side of Southside Drive between Kenwood Drive and Hatcher Avenue	Potentially Eligible	No	No
2	Ken Bowl Bowling Alley	East side of Southside Drive, south of Strawberry Lane	Potentially Eligible	Potential	Potential
3	St. Mark's Church rectory	East side of Southside Drive, north of Alvina Way	Potentially Eligible	Yes, on Parcel	Yes, on Parcel
4	Former Saint Mark's Church	On Saint Mark's Church property east of Alvina Way	Potentially Eligible	No	No
5	One-story porcelain clad Lustron House	West side of Southside Drive between Meadowood Court and Woodmore Avenue	Potentially Eligible and a nomination is underway that may list this property	Potential	Potential

6.6.1 Five-Lane Alternative

The Five-Lane Alternative has a potential impact to the Ken Bowl property (Site 2) through changes in the adjacent roadway. As the Ken Bowl is a highly visible "roadside" attraction characteristic of 1950s-1960s automobile culture, changes to the adjacent road may be seen as affecting the characteristics that make the building potentially eligible for the Historic Register. This alternative also places a temporary easement on the parcels of Sites 3 and 4, which approaches the sidewalk in front of Site 3. It requires the taking of some right-of-way on property owned by Saint Mark's Church which is adjacent to Sites 3 and 4. However, it increases the amount of space between the oldest building (Site 3) and the roadway.

At Site 5, the temporary disturbance easement enters the driveway of the property. This house is a prefabricated Lustron House dating from the late 1940s-early 1950s, with a unique structure of a metal frame with porcelain panels. It may be sensitive to increased roadway vibrations, and precautions may be necessary to ensure the structural integrity of the house during construction (Creasman, pers. comm.).

6.6.2 Three-Lane Alternative

The Three-Lane Alternative has the potential for minor impact to the Ken Bowl property (Site 2) through disturbance during construction or changes to right-of-way. This alternative also places a temporary easement on the parcels of Sites 3 and 4, which approaches the sidewalk in front of Site 3. It will not require any right-of-way takings from property owned by Saint Mark's Church. At Site 5, the temporary disturbance easement is placed fairly close to the facade of the house. This house is a prefabricated Lustron House dating from the late 1940s-early 1950s, with a unique structure of a metal frame with porcelain panels. It may be sensitive to increased roadway vibrations, and precautions may be necessary to ensure the structural integrity of the house during construction (Creasman, pers. comm.).

6.7 Section 4(f) Overview

The environmental overview inspected the corridor for publicly owned lands, recreational areas, wildlife and waterfowl refuges and scenic resources. It also inspected publicly or privately owned significant historic sites. The corridor contains the four-acre Auburndale Park, as well as five properties which are eligible for listing in the NRHP (see Section 6.6). If any Section 4(f) properties are encroached upon by the proposed project, a separate Section 4(f) evaluation will be necessary and will include state and federal highway involvement.

The Five-Lane Alternative will not impact Auburndale Park. It will set the new west edge of pavement at approximately the location of the current west edge of pavement, and none of the several mature trees along Southside Drive will be impacted. This alternative will use the sidewalk currently existing within the park.

The Three-Lane Alternative will not impact Auburndale Park. It will not require the taking of right-of-way from the park and will not impact the mature trees in the park along Southside Drive. It will use the sidewalk currently existing within the park.

6.8 Section 6(f) Overview

The corridor was inspected for outdoor recreational land and water areas or facilities established from grants-in-aid from the Land and Water Conservation Fund (LWCF). No LWCF funded sites are present in or near the project corridor, so it appears that no Section 6(f) evaluation will be required on this project.

6.9 UST/HAZMAT Overview

The UST/HAZMAT overview, conducted by FMSM, identified approximately 13 environmental sites of interest. The UST/HAZMAT Preliminary Environmental Review is included as Appendix B, Part F.

FMSM performed a preliminary review of hazardous materials/underground storage tank sites associated with the Southside Drive widening project. This assessment included a review of federal, state and local records of environmentally sensitive incidents and activities in the area. Federal and state databases were accessed through EDR, a commercial database retrieval company. State agencies were contacted directly for information concerning environmental activities or conditions representing a significant impact to the property. A site reconnaissance of the project area was performed.

Based on the preliminary overview, approximately 13 sites were identified as having current or previous activities associated with petroleum or other chemical usage. The majority of these sites have either had

limited quantity usage or have had USTs removed and No Further Action letters document the environmental site status.

6.9.1 Underground Storage Tanks

The following table presents a summary of properties having underground storage tanks (USTs) within the project corridor, which are also depicted in Figure 8. Several of the facilities have active underground storage tanks; however they do not appear to be close enough to the roadway to cause a conflict. The Speedway SuperAmerica has a tank pit located approximately 50 feet from the edge of pavement.

Table 4: Sites having or formerly having underground storage tanks within the project corridor

Number	Description	Location	Status	Impacted by Five-Lane Alternative?	Impacted by Three-Lane Alternative?
1	Speedway SuperAmerica	6821 Southside Drive	13 USTs removed in 1998, 4 USTs remain on site	Yes-canopy removed	No
2	Kenwood Service Center	6903 Southside Drive	4 USTs removed (1 UST remaining)	Yes–removed	Yes–removed
3	Ken Towery's Auto Care Supercenter	6919 Southside Drive	1 UST removed prior to 1991	No	No
4	Goodyear Kaiser Tire Center	7000 Southside Drive	1 UST removed in 1999	No	No
5	Payday Advance	7101 Southside Drive	5 USTs removed prior to 2004	No	No
6	South Louisville Body Shop	7105 Southside Drive	3 USTs removed in 1998	No	No
7	Rite Aid Drug Store	7128 Southside Drive	3 USTs removed in 1998	No	No
8	BP Oil	5469 New Cut Road	2 USTs remain on site	No	Yes-canopy removed
9	Valvoline Instant Oil	7401 Third Street Road	Oil/water separator remains on site	No	No

The Five-Lane Alternative will require one displacement of a commercial building (Kenwood Service Center) that has one UST on site and the removal of a gas station canopy at a second site (Speedway SuperAmerica) with four USTs on site. The Three-Lane Alternative will require one displacement of a commercial building (Kenwood Service Center) that has one UST on site and the removal of a gas station canopy at a second site (BP Oil) with two USTs on site.

6.9.2 Hazardous Materials (HAZMAT)

The following table presents a summary of properties having hazardous materials within the project corridor, which are also depicted in Figure 8. The Five-Lane Alternative will require one displacement of a commercial building (Kenwood Service Center) that is a small-quantity generator of hazardous waste. The Three-Lane Alternative will require the displacement of two sites (Kenwood Service Center and BP Oil) which are small-quantity generators of hazardous waste.

Table 5: Sites with hazardous materials within the project corridor

Number	Description	Location	Status	Impacted by Five-Lane Alternative?	Impacted by Three-Lane Alternative?
1	Southside Cleaners (formerly Paxton's One Hour Dry Cleaner)	6920 Southside Drive	Small quantity generator	No	No
2	Kenwood Service Center	6903 Southside Drive	Small quantity generator	Yes–removed	Yes–removed
3	BP Oil	5469 New Cut Road	Small quantity generator	No	Yes-canopy removed
4	Valvoline Instant Oil	7401 Third Street Road	Small quantity generator	No	No

6.9.3 Contaminated Soils

Four sites appear to have a higher potential for encountering soil contamination from petroleum storage on the site. While several of the above sites have received a No Further Action Letter, this does not rule out the possibility of contamination being encountered. The sites involving dry cleaning activities also should be considered as a potential source of contamination, however limited information was available. The sites are summarized in the following table and described in more detail below.

Table 6: Sites with potential for contaminated soils within the project corridor

Number	Description	Location	Impacted by Five-Lane Alternative?	Impacted by Three-Lane Alternative?
1	Kenwood Service Center	6903 Southside Drive	Yes–removed	Yes–removed
2	Payday Advance	7101 Southside Drive	No	No
3	BP Oil	5469 New Cut Road	No	Yes-canopy removed
4	Valvoline Instant Oil	7401 Third Street Road	No	No

- Kenwood Service Center – An additional Information Report submitted to the KDEP in August, 2003 reported contamination exceeding allowable cleanup levels.
- Payday Advance – This site was formerly a JJ Food Mart. Based on a Report submitted to KDEP in July 2004, "it appears that additional investigation will be required to define the extent of groundwater impact." Two monitoring wells were noted on this site approximately 25 feet from the edge of pavement.
- BP Oil Company – This site is currently vacant. Louisville Metro Health logged a complaint in April 1999 regarding a sheen and diesel smell in a Louisville Water Company pipe trench.
- Valvoline Instant Oil – This site apparently had an oil water separator discharge into the storm sewer for a period of time. This site may not be included in the proposed construction

The Five-Lane Alternative will require one displacement of a commercial building (Kenwood Service Center) that may have soil contamination. The Three-Lane Alternative will require the displacement of two commercial buildings (Kenwood Service Center and BP Oil) that may have soil contamination.

7.0 COMMENTS AND COORDINATION

A summary of all public meetings and coordination is available in the "Southside Drive Widening Feasibility Report" (Skees 2005). Please refer to Appendix B, Part A to review all agency letters that have been received regarding this project.

8.0 SUMMARY

The Louisville/Jefferson County Metro Government, Department of Public Works, is proposing the widening of approximately 1.1 miles of Southside Drive in Louisville, Kentucky. Alternatives evaluated for the project consist of a Three-Lane Alternative and a Five-Lane Alternative.

The Five-Lane Alternative provides two lanes for each direction of traffic and a median/turn lane throughout the corridor. The additional lane in each direction allows vehicles to decelerate for right turns with minimal disruption to the flow of traffic. It will require displacements of four residences, one multi-family residence, one residential garage, two commercial buildings, and two commercial accessory structures. One commercial building slated to be removed (Kenwood Service Center) has one UST on site, is a small-quantity generator of hazardous waste, and may have soil contamination. A second site with a gas station canopy to be removed (Speedway SuperAmerica) has four USTs on site. Impacts to environmental resources from this project are limited to a 0.006-acre emergent wetland, a right-of-way taking adjacent to potential-historic Saint Mark's Church buildings (Sites 3 and 4), potential impacts to the historic roadside character of Ken Bowl (Site 2), and potential structural impacts to a single-family residence (Site 5). No other environmental resources will be impacted.

The Three-Lane Alternative provides one lane for each direction of traffic and one median/central turn lane. As it provides fewer lanes, this alternative will not reduce traffic congestion to the extent of the Five-Lane Alternative. It will require displacements of one residence, one residential garage, one commercial building, and three commercial accessory structures. One commercial building slated to be removed (Kenwood Service Center) has one UST on site, is a small-quantity generator of hazardous waste, and may have soil contamination. A second site with a gas station canopy to be removed (BP Oil) has two USTs on site, is a small-quantity generator of hazardous waste, and may have soil contamination. Impacts to environmental resources from this project are limited to a 0.006-acre emergent wetland, placement of a temporary easement on a potential-historic Saint Mark's Church parcel (Site 3), potential construction/right-of-way disturbance to Ken Bowl (Site 2), and potential structural impacts to a single-family residence (Site 5). No other environmental resources will be impacted.

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