





FINAL ENVIRONMENTAL IMPACT STATEMENT

# KANSAS LANE CONNECTOR MONROE, LOUISIANA

STATE PROJECT NO. 700-37-0110 FEDERAL AID PROJECT NO. HP-T021(018) FHWA-LA-EIS-03-01-D State Project No. 700-37-0110 Federal Aid Project No. HP-T021(018)

# **KANSAS LANE CONNECTOR**

## Final Environmental Impact Statement

Submitted Pursuant to: 42 USC 4332(2)(c)

by the

U.S. Department of Transportation - Federal Highway Administration and the Louisiana Department of Transportation and Development

Cooperating Agencies U.S. Army Corps of Engineers – Vicksburg/District U.S./Fish and Wildlife Service

2/8/05 Date of Approval

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This project is a proposal to construct the Kansas Lane Connector, a partially controlled roadway between U.S. 80 (Desiard Street) and the existing Kansas Lane to the south and U.S. 165 and the Forsythe Avenue Extension to the north. The proposed Kansas Lane Connector would be approximately two and a half miles in length through Ouachita Parish, Louisiana. Several alternatives were considered including the No-Build Alternative.

Comments on this FEIS are due by March 31, 2005 and should be sent to:

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Final Environmental Impact Statement

Summary of Mitigation and Commitments

## SUMMARY OF MITIGATION AND COMMITMENTS

## MITIGATION

Although impacts to waters of the U.S. would be avoided and minimized through route location and construction practices, some impacts would be unavoidable. Thus, some form of mitigation will be required. On occasion, on-site restoration of degraded wetland habitat or creation of manmade wetland habitat within the right of way (ROW) may be appropriate. However, off-site mitigation measures may also be proposed. A final determination regarding compensatory mitigation requirements rests with the U.S. Army Corps of Engineers (USACE). Forested and herbaceous wetland impacts would be replaced at a ratio of at least 1:1. Final mitigation ratios and requirements will be determined in conjunction with the Section 404 Permit process.

## ENVIRONMENTAL COMMITMENTS

- § During the final roadway design, the Louisiana Department of Transportation and Development (LDOTD) will work with existing neighborhoods in the vicinity of the Kansas Lane Connector to better integrate the design of the roadway with the surrounding neighborhoods.
- § During the final roadway design, LDOTD will make efforts to maintain access to individual properties.
- § LDOTD will design the project with partial control of access. Access will not be allowed through designated regulated wetlands.
- § LDOTD will acquire right-of-way for the project in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.
- § LDOTD will work with Entergy to coordinate the relocation of electrical transmission lines. LDOTD will conduct any necessary relocation of electrical transmission lines in a timely and orderly fashion, so that any disruptions in service are minimized and safety is not compromised.
- § LDOTD will work with Atmos Energy Louisiana to coordinate the relocation of natural gas lines. LDOTD will conduct any necessary relocation of natural gas lines in a timely and orderly fashion, so that any disruptions in service are minimized and safety is not compromised.
- § LDOTD will coordinate the relocation of water and sewer lines with the City of Monroe Public Works Department or individual property owners as appropriate. LDOTD will make every effort to minimize the inconvenience caused by any unavoidable service interruptions.

Final Environmental Impact Statement

Summary of Mitigation and Commitments

- § LDOTD will develop hydraulic design practices for the construction of the project in accordance with current LDOTD and the Federal Highway Administration (FHWA) design policies and standards. LDOTD will design the project to ensure that encroachment on the floodplains would not increase the base-flood elevation to a level that would violate applicable flood regulations and that the project will permit conveyance of the 100-year flood of the roadway without causing significant damage to the roadway, stream, or other property.
- § LDOTD will collect soil and groundwater samples at a minimum of five locations along the center of the Preferred Alternative between the intersection of the Forsythe Avenue Extension and U.S. 165 and the intersection of the Kansas Lane Connector and Old Sterlington Road. Numerous Recognized Environmental Conditions (RECs) and Historical Recognized Environmental Conditions (HRECs) were revealed during the Phase I Environmental Site Assessment (ESA) in this area.
- § It is not anticipated that the former Creative Coatings site will impact the Preferred Alternative. However, LDOTD will conduct a Phase II investigation at the former Creative Coatings site if any oil or odors are observed during construction activities.
- § LDOTD will conduct asbestos and lead-based paint and piping surveys for any structures demolished in the Ingleside neighborhood, including the Mary Lea Apartments, prior to construction of the project. If the presence of asbestos-containing material and lead paint is determined, the materials will be properly classified and shipped to an appropriate waste disposal facility. LDOTD will require the contractor take precautions when conducting construction and excavation activities in the wetland area as well as the area north of Ouachita Fertilizer to avoid disturbing unmarked highand low-pressure gas lines within the area.
- § Upon completion of construction of the project, LDOTD will require the contractor to stabilize exposed soils by revegetating such areas.
- § LDOTD will conduct further wetland delineation studies prior to finalizing the limited access locations and wetland issues.
- § LDOTD will implement measures to minimize impacts to migratory bird habitat to avoid any harm to migratory birds.
- § LDOTD will conduct a follow-up consultation with the U.S. Fish and Wildlife Service (USFWS) Louisiana Field Office prior to making any expenditures for construction to ensure that no federally listed threatened, endangered, or candidate species occur within the proposed highway corridor.
- § During the final roadway design, LDOTD will make efforts to minimize impacts to fish and aquatic animal passages by spanning Bayou Desiard and using bottomless culverts where practical.

Final Environmental Impact Statement

Summary of Mitigation and Commitments

- § During the final roadway design, LDOTD will evaluate the following measures to minimize and mitigate for visual impacts caused by the Kansas Lane Connector:
  - Integrate landscaping into the project design to promote visual continuity of the roadway and to assist in blending it into the natural landscape as much as possible.
  - Minimize the loss of vegetation, particularly during construction when equipment access, storage, and staging are required.
  - Consider accommodating bicycles and pedestrians in the roadway design to minimize visual impacts, focus on the scenic quality of the area, and to better integrate the roadway into the nearby neighborhoods.
- § LDOTD will require that all construction equipment comply with Occupational Safety and Health Administration (OSHA) Regulations as they apply to the employees' safety and in accordance with LDOTD Standard Specifications. LDOTD will include provisions in the plans and specifications that would require the contractor to make every reasonable effort to minimize construction noise. LDOTD will require that construction equipment used during the construction phase be properly muffled and all motor panels be shut during operation. In order to minimize the potential for impacts of construction noise on the local residents, LDOTD will require the contractor operate, whenever possible, between the hours of 7 a.m. and 5 p.m.
- § LDOTD will require that the contractor implement a traffic control plan to ensure uninterrupted traffic flow during construction.
- § LDOTD will evaluate the construction of a rail grade separation at the Arkansas-Louisiana-Mississippi Railroad crossing and will consider purchasing the necessary ROW in advance should increased rail and automobile traffic warrant a grade separation in the future.
- § LDOTD will require that the contractor comply with all relevant federal, state, and local laws and regulations in order to minimize potential air quality impacts, such as particulate matter. In addition, LDOTD will incorporate dust control measures into the final design and construction specifications. LDOTD will require that all construction equipment comply with OSHA Regulations for employee safety and in accordance with LDOTD Standard Specifications.
- § LDOTD will require the contractor to implement mitigation measures to prevent or minimize erosion and sedimentation.

Final Environmental Impact Statement

EXE	CUTI	<b>VE SUMMARY</b>	i
1.	PUR	POSE AND NEED FOR PROPOSED ACTION	1-1
	1.1	Introduction	1-1
	1.2	Description of the Study Area	1-1
	1.3	Project History	1-3
	1.4	System Linkage	1-3
	1.5	Logical Termini	1-4
	1.6	Transportation Demand	1-5
		1.6.1 Traffic Capacity Analysis	1-5
		1.6.1.1 Level of Service "A"	1-5
		1.6.1.2 Level of Service "B"	1-6
		1.6.1.3 Level of Service "C"	1-6
		1.6.1.4 Level of Service "D"	1-6
		1.6.1.5 Level of Service "E"	1-6
		1.6.1.6 Level of Service "F"	1-6
		1.6.2 Existing and Future Traffic Conditions	1-8
	1.7	Social Demand and Economic Development	1-14
	1.8	Modal Relationships	1-15
		1.8.1 Fixed Route Bus Service	1-15
		1.8.2 Monroe Regional Airport	1-15
		1.8.3 Rail Service	1-16
	1.9	Statement of Project Purpose and Need	1-16
	1.10	NEPA and 404/10 Merged Process on the Purpose and Need	1-16

Final Environmental Impact Statement

2.	ALT	ERNATIVES	2-1
	2.1	Introduction	2-1
	2.2	No-Build Alternative	2-1
	2.3	Transportation System Management	2-2
	2.4	Mass Transit	2-2
	2.5	Build Alternatives	2-3
		2.5.1 Roadway Design Criteria	2-3
		2.5.2 Preliminary Build Alternatives	2-5
		2.5.3 Detailed Study Alternatives	2-12
	2.6	Cost Estimates for the Detailed Study Alternatives	2-21
	2.7	Evaluation of Impacts	2-21
	2.8	Build Alternatives Analysis	2-22
	2.9	Selection of Preferred Alternative	2-24
		2.9.1 The Southern+Central Alternative	2-24
		2.9.2 The Central+Northern Alternative	2-25
		2.9.3 The Central Alternative	2-25
		2.9.4 The Southern Alternative	2-26
		2.9.5 The Northern Alternative	2-26
	2.10	Design Options Evaluated to Minimize Impacts	2-27
		2.10.1 Access Control	2-27
		2.10.2 Elevation of Roadway Across Wetlands	2-29
		2.10.3 Elevation of Roadway Over Railroad	2-30
	2.11	NEPA and 404/10 Merger Process on the Alternatives for Detailed Study	2-30

Final Environmental Impact Statement

3.	AFF	ECTED ENVIRONMENT	3-1
	3.1	Social Environment	3-1
		3.1.1 Population Characteristics	3-1
		3.1.2 Community Facilities and Services	3-7
		3.1.2.1 Schools	3-7
		3.1.2.2 Police and Fire	3-9
		3.1.3 Housing	3-9
		3.1.4 Parks and Recreational Resources	3-10
	3.2	Economic Environment	3-12
		3.2.1 Employment	3-14
		3.2.2 Income	3-20
	3.3	Environmental Justice	3-21
	3.4	Land Use and Planning	3-23
		3.4.1 Existing Land Use	3-23
		3.4.2 Local Plans and Policies	3-30
	3.5	Pedestrian and Bicycle Facilities	3-32
	3.6	Utilities	3-32
		3.6.1 Electric Power	3-32
		3.6.2 Natural Gas	3-33
		3.6.3 Water and Wastewater Facilities	3-36
	3.7	Archaeological and Historical Resources	3-39
		3.7.1 Archaeology	3-39
		3.7.2 Historic Architecture	3-40
	3.8	Meteorology, Climatology, and Topography	3-41

Final Environmental Impact Statement

3.9	Water Resources	3-43
	3.9.1 Rivers, Lakes, and Streams	3-43
	3.9.2 Floodplains and Floodways	3-43
	3.9.3 Water Quality	3-43
3.10	Geology and Soils	3-47
	3.10.1 Geology	3-47
	3.10.2 Soils	3-47
3.11	Mineral Resources	3-50
3.12	Hazardous Waste Sites and Underground Storage Tanks	3-52
	3.12.1 Federal Databases	3-54
	3.12.2 State Databases	3-55
	3.12.3 Solid Waste Facilities/Landfills (SWF/LF)	3-55
	3.12.4 Field Survey	3-56
	3.12.5 Other Databases	3-57
3.13	Air Quality	3-58
3.14	Noise	3-59
	3.14.1 Characteristics of Noise	3-60
	3.14.2 Ambient Noise Levels	3-61
3.15	Prime and Important Farmlands	3-64
3.16	Biotic Resources	3-65
	3.16.1 Vegetation Communities	3-66
	3.16.1.1 Bottomland Woodland	3-66
	3.16.1.2 Upland Woodland	3-66
	3.16.1.3 Grassland	3-67

Final Environmental Impact Statement

		3.16.1.4 Hydric and Aquatic Habitats	3-67
		3.16.1.5 Disturbed Areas	3-67
		3.16.2 Wildlife	3-68
		3.16.2.1 Terrestrial Wildlife	3-68
		3.16.2.2 Aquatic Wildlife	3-70
	3.17	Jurisdictional Wetlands	3-71
	3.18	Protected Species	3-73
	3.19	Wild and Scenic Rivers	3-76
	3.20	Coastal Barriers and Coastal Zones	3-77
	3.21	Essential Fish Habit	3-77
4.	ENV	IRONMENTAL CONSEQUENCES	4-1
	4.1	Social Impacts	4-1
		4.1.1 Community Services and Facilities	4-1
		4.1.1.1 Schools	4-1
		4.1.1.2 Police and Fire	4-1
		4.1.2 Community Impacts, Cohesion, and Integrity	4-2
		4.1.3 Parks and Recreational Resources	4-5
		4.1.4 Travel Patterns and Access	4-5
	4.2	Economic Impacts	4-6
		4.2.1 Tax Revenues and Land Values	4-6
		4.2.2 Transportation and Construction Economic Impacts	4-6
	4.3	Relocation Impacts	4-7
	4.4	Environmental Justice	4-9
	4.5	Land Use	4-10

Final Environmental Impact Statement

	4.5.1 Consistency with Land Use Plans	4-11
4.6	Pedestrian and Bicycle Facilities	4-11
4.7	Utilities	4-11
	4.7.1 Electric Power Lines	4-11
	4.7.2 Natural Gas Transmission Lines and Gas Wells	4-12
	4.7.3 Water and Wastewater Facilities	4-15
4.8	Archaeological and Historical Resources	4-17
	4.8.1 Archaeological Resources	4-17
	4.8.2 Historical Resources	4-19
4.9	Section 4(f) and Section 6(f) Properties	4-19
4.10	Meteorology, Climatology, and Topography	4-20
4.11	Water Resources	4-20
	4.11.1 Floodplains and Floodways	4-20
	4.11.2 Surface Water	4-22
	4.11.3 Public Water Supply	4-24
4.12	Geology and Soils	4-24
4.13	Mineral Resources	4-25
4.14	Hazardous Materials and Underground Storage Tanks	4-25
4.15	Air Quality	4-29
	4.15.1 Transportation Conformity	4-33
4.16	Noise	4-33
	4.16.1 Analysis Methodology and Results	4-34
	4.16.2 Evaluation of Abatement Measures	4-37

Final Environmental Impact Statement

	4.16.2.1 Non-Barrier Measures	4-37
	4.16.2.2 Barrier Measures	4-38
4.17	Prime Farmland Soils	4-45
4.18	Biotic Resource Impacts	4-46
	4.18.1 Vegetation	4-46
	4.18.2 Terrestrial Wildlife	4-47
	4.18.3 Aquatic Wildlife	4-47
4.19	Waters of the U.S. and Wetlands	4-48
	4.19.1 Permit Requirements	4-51
	4.19.2 Mitigation	4-51
	4.19.2.1 Avoidance	4-51
	4.19.2.2 Minimization	4-52
	4.19.2.3 Compensatory Mitigation	4-52
4.20	Protected Species	4-53
4.21	Visual Impacts	4-54
	4.21.1 Mitigation	4-55
4.22	Energy Impacts	4-55
4.23	Coastal Barriers	4-56
4.24	Construction Impacts	4-56
	4.24.1 Air Quality	4-56
	4.24.2 Noise	4-56
	4.24.3 Water Quality	4-57
	4.24.4 Traffic Flow	4-57

Final Environmental Impact Statement

	4.25	Indire	ct Impacts		4-58
		4.25.1	Secondar	y Impacts	4-58
		4.25.2	2 Cumulati	ve Impacts	4-58
			4.25.2.1	Land Use	4-59
			4.25.2.2	Water Quality	4-59
			4.25.2.3	Biotic Resources	4-60
	4.26	Relation Term	onship Bet Benefits	ween Short-Term Impacts and Long-	4-60
	4.27	Irreve	rsible and I	Irretrievable Commitment of Resources	4-61
	4.28	Subse	quent Actio	ons	4-62
5.	AGE	NCY (	COORDIN	ATION AND PUBLIC INVOLVEMENT	5-1
	5.1	Agenc	y Coordin	ation and Involvement	5-1
		5.1.1	Notice of	Intent	5-3
		5.1.2	Kick-off	Meeting	5-3
		5.1.3	Agency S	Scoping Letter and Meeting	5-3
		5.1.4	Agency N	Mailing List	5-4
		5.1.5	Cooperat	ing Agencies	5-4
		5.1.6	NEPA an	d 404/10 Merger Process	5-4
		5.1.7	Tribal Co	oordination	5-6
		5.1.8	Agency (	Comments on DEIS	5-6
	5.2	Involv	vement of H	Public Officials and the Public	5-6
		5.2.1	Public Of	fficials and Public Mailing Lists	5-6
			5.2.1.1	Public Officials Mailing List	5-6
			5.2.1.2	Public Mailing List	5-7

Final Environmental Impact Statement

# Table of Contents

	5.2.2	Toll-Free	e Telephone Hotline	5-7
	5.2.3	Project V	Vebsite	5-7
	5.2.4	Project N	Newsletters	5-8
	5.2.5	Public O	fficials	5-9
		5.2.5.1	Public Official's Scoping Meeting	5-10
		5.2.5.2	Public Officials Project Meetings	5-10
	5.2.6	Public In	nvolvement	5-12
		5.2.6.1	Public Scoping Meeting	5-12
		5.2.6.2	Public Project Meetings	5-13
	5.2.7	Public H	earing	5-14
	5.2.8	Small G	roup Meetings	5-15
	5.2.9	Open Me	eeting of Ouachita Council of Governments	5-16
	5.2.10	) Newspap	pers and Television	5-16
LIST	F OF A	GENCIE: F THIS S	S, ORGANIZATIONS, AND PERSONS T	TO WHOM 6-1
61	Feder	al Agencie		6-1
6.2	Feder	al Senator	s and Penrasantativas	6.1
6.2	State		s and Representatives	6.1
0.5	State	Agencies		0-1
6.4	State S	Senators a	nd Representatives	6-1
6.5	Local	Agencies	and Officials	6-2
6.6	Native	e America	n Tribal Interests	6-2
6.7	Other	Agencies	and Organizations	6-2
LIST	r of pi	REPARE	RS	7-1
LIST	OF A	BBREVIA	ATIONS AND ACRONYMS	8-1

6.

7.

8.

Final Environmental Impact Statement

Table of Contents

9.	REFERENCES	9-1
10.	INDEX	10-1

# Tables

1-1	Existing and Future Level of Service for the No-Build and the Build Scenarios	1-7
1-2	Existing and Future Volume to Capacity Ratios for the No-Build and the Build Scenarios	1-9
1-3	Existing and Future Average Daily Taffic for the No-Build and the Build Scenarios	1-14
2-1	Kansas Lane Connector Roadway Design Criteria - Urban Arterial 2 (UA-2)	2-3
2-2	Kansas Lane Connector Estimated Construction Costs and Design Assumptions for Build Alteratives	2-21
2-3	Advantages and Disadvantages of Each Build Alternative	2-22
2-4	Cost Comparison Between Elevated Structure and At-Grade Roadway Across the Wetland Area North of the ULM Ballfield for the Preferred Alternative	2-29
2-5	Cost Estimation for Construction of Rail Grade Separation at Arkansas-Louisiana-Mississippi Crossing for the Preferred Alternative.	2-30
3-1	1990 and 2000 Population and Race Demographics	3-1
3-2	1990 and 2000 Estimated Minority and White Non- Hispanic Populations	3-4
3-3	Racial Composition Between 1970 and 1990 for the City of Monroe	3-4
3-4	2020 Kansas Lane Connector Study Area Population Projections by Traffic Analysis Zone (TAZ)	3-5

Final Environmental Impact Statement

## Table of Contents

# **Tables (Continued)**

3-5	University of Louisiana at Monroe Population by Ethnicity, Fall 2001	3-7
3-6	Housing Occupancy Type in 1990 and 2000	3-10
3-7	2000 Ouachita Parish Employment by Industry	3-16
3-8	City of Monroe Employment by Occupation in 1970, 1980, and 1990	3-17
3-9	Ouachita Parish Employment by Occupation in 1970, 1980, and 1990	3-17
3-10	Top Ten Projected Regional Occupations for 2008	3-18
3-11	Top Ten Ouachita Parish Employers in 2001	3-20
3-12	Median Family, Median Household, and Per Capita Income Between 1959 and 1999	3-20
3-13	Minority and White Non-Hispanic Populations in 1990 and 2000	3-22
3-14	Percentage of Residents Below the Poverty Threshold in 1990 and 2000	3-23
3-15	Roadway Classifications for Roads Within the Kansas Lane Connector Study Area	3-31
3-16	Summary for the Kansas Lane Connector Study Area Soil Types	3-50
3-17	RCRIS-Small Quantity Generators	3-54
3-18	Underground and Leaking Underground Storage Tanks	3-55
3-19	Potential Contaminants and Sources for the Industrial Area Near the Northern Terminus	3-56
3-20	National Primary and Secondary Ambient Air Quality Standards	3-59
3-21	Common Sound/Noise Levels	3-60

Final Environmental Impact Statement

Table of Contents

# **Tables (Continued)**

3-22	FHWA/LDOTD Noise Abatement Criteria	3-61
3-23	Noise Measurement Summary	3-63
3-24	Threatened and Endangered Species for Ouachita Parish	3-75
4-1	Estimated Relocations	4-7
4-2	Local Area Housing Availability	4-8
4-3	Minority Demographics by Neighborhood for the 1990 and 2000 Census	4-9
4-4	Low-Income (Residents Below the Poverty Threshold) by Neighborhood for the 1990 and 2000 Census	4-10
4-5	Summary of Land Use/Land Cover Impacts	4-11
4-6	Potential Impacts to Floodplains	4-20
4-7	Existing Contaminants and Sources for the Industrial Area Near the Northern Terminus	4-27
4-8	Predicted Worst-Case One-Hour and Eight-Hour Carbon Monoxide Concentrations for the Build Alternatives in 2010 and 2030	4-30
4-9	Noise Impact Summary by Alternative	4-36
4-10	Type of Noise Impact by Receiver and Barrier Feasibility and Reasonableness – Preferred Alternative	4-38
4-11	Type of Noise Impact by Receiver and Barrier Feasibility and Reasonableness – Central Alternative	4-40
4-12	Type of Noise Impact by Receiver and Barrier Feasibility and Reasonableness – Southern Alternative	4-41
4-13	Type of Noise Impact by Receiver and Barrier Feasibility and Reasonableness – Central+Northern Alternative	4-43
4-14	Type of Noise Impact by Receiver and Barrier Feasibility and Reasonableness – Southern+Central Alternative	4-44

Final Environmental Impact Statement

Table of Contents

# **Tables (Continued)**

	4-15	Estimated Impacts on Vegetation Communities	4-46
	4-16	Estimated Impacts on Waters of the U.S. and Wetlands	4-49
	5-1	Agencies Contacted	5-1
	5-2	Public Officials Contacted	5-9
Figu	res		
	1-1	Project Study Area	1-2
	1-2	2001 Daily Traffic Volumes	1-11
	1-3	1-12	
	1-4	2030 Daily Traffic Volumes	1-13
	2-1	Typical 4-Lane Cross Sections	2-6
	2-2	Typical 4-Lane Bridge Cross Section	2-7
	2-3	Typical 5-Lane Cross Sections	2-8
	2-4	Preliminary Build Alternatives	2-9
	2-5	Build Alternatives for Detailed Study	2-13
	2-6	Northern Alternative	2-15
	2-7	Central Alternative	2-16
	2-8	Southern Alternative	2-17
	2-9	Central+Northern Alternative	2-19
	2-10	Southern+Central Alternative	2-20
	2-11	Control of Access Locations on the Preferred Alternative	2-28
	3-1	1990 Census Block Groups in the Study Area	3-2
	3-2	2000 Census Block Groups in the Study Area	3-3

Final Environmental Impact Statement

# Table of Contents

# Figures (Continued)

3-3	Traffic Analysis Zones (TAZ) for the Study Area	3-6
3-4	Community Facilities in the Study Area	3-8
3-5	Recreational Resources and Private Parks in the Study Area	3-11
3-6	Ouachita Parish Renewal Community	3-13
3-7	Monroe Metropolitan Statistical Area (MSA)	3-15
3-8	Top Employers in Ouachita Parish	3-19
3-9	Generalized Land Use in the Study Area	3-24
3-10	Neighborhoods and Major Housing Complexes in the Study Area	3-25
3-11	Churches in the Study Area	3-27
3-12	Electrical Facilities in the Study Area	3-34
3-13	Gas Pipeline Service Locations in the Study Area	3-35
3-14	Water Main Line Locations in the Study Area	3-37
3-15	Sewer Lines, Wastewater Treatment Plant, and LPDES Locations in the Study Area	3-38
3-16	Representative Photographs of the Ingleside Plantation House	3-42
3-17	Topographic Map of the Study Area	3-44
3-18	Location of Bayou Desiard and Chauvin Swamp	3-45
3-19	Designated 100-Year Flood Zones in the Study Area	3-46
3-20	Soil Associations in the Study Area	3-49
3-21	Locations of the Oil and Gas Wells in the Study Area	3-51
3-22	Locations of Hazardous Waste Sites and Underground Storage Tanks	3-53

Final Environmental Impact Statement

## Table of Contents

# Figures (Continued)

	3-23	Existing Noise Measurements Locations	3-62
	3-24	Location of Wetlands in the Study Area (Obtained from Existing Data Sources)	3-74
	4-1	Impacts to Neighborhoods	4-3
	4-2	Crossings of Electrical Power Transmission Lines	4-13
	4-3	Crossings of Natural Gas Transmission Lines and Impacts to Gas Wells	4-14
	4-4	Crossings of Sewer Lines and Impacts to Wastewater Facilities	4-16
	4-5	Crossings of Water Lines	4-18
	4-6	Crossings of 100-Year Floodplain Areas	4-21
	4-7	Crossings of Bayou Desiard	4-23
	4-8	Location of Potentially Impacted Hazardous Materials and UST Sites	4-26
	4-9	Locations of Noise Receivers Modeled	4-35
	4-10	Field-Determined Wetlands in the Study Area	4-50
Char	t		
	3-1	1990-2000 Unemployment Rate for the Monroe Metropolitan Statistical Area	3-14

Final Environmental Impact Statement

Table of Contents

#### Appendices

- A-1 Agency Correspondence and Summary of Comments and Responses on DEIS
- A-2 Concurrence Letters for Project Purpose and Need
- A-3 Correspondence from USACE and USFWS Regarding Selection of Build Alternatives
- A-4 Responses to Scoping Letter
- A-5 Correspondence Received from Louisiana Division of Archaeology and State Historic Preservation Office
- A-6 Prime Farmland Rating Form
- A-7 Correspondence from USACE and USFWS Regarding Cooperating Agencies
- A-8 Comments from Cooperating Agencies on Selection of Preferred Alternative
- A-9 Public Comments Summary and Responses on DEIS

Final Environmental Impact Statement

**Executive Summary** 

#### **EXECUTIVE SUMMARY**

#### INTRODUCTION

The Louisiana Department of Transportation and Development (LDOTD) and the Federal Highway Administration (FHWA) are proposing to construct the Kansas Lane Connector project in the City of Monroe and Ouachita Parish in northeastern Louisiana. The proposed project would be a partially controlled roadway between U.S. 165 and the Forsythe Avenue Extension to the north and U.S. 80 (Desiard Street) and the existing Kansas Lane to the south. The project study area, which is located partially in the Monroe City limits and in Ouachita Parish, is bordered by U.S. 165 to the west and Bayou Desiard to the east, while Bayou Chauvin and U.S. 80 provide the northern and southern boundaries, respectively. The study area is approximately 2.96 square miles and includes residential areas, a large undeveloped area, the University of Louisiana at Monroe (ULM) campus, and a portion of Bayou Desiard. This Final Environmental Impact Statement (FEIS) discusses the natural, social, and cultural resource impacts associated with the project and presents an evaluation of the alternatives considered.

The northern project terminus is at the intersection of U.S. 165 and the Forsythe Avenue Extension and the southern terminus is at the intersection of U.S. 80 and the existing Kansas Lane. U.S. 165 runs north-south through the region from southeast Arkansas to Interstate 10 (I-10) near Lake Charles, Louisiana. U.S. 80 goes east-west, parallel with Interstate 20 (I-20), from Vicksburg, Mississippi, to Dallas, Texas. The project's northern terminus will provide a direct connection from the residential areas and new office developments in northern Monroe with the development to the south, as well as the rapidly developing residential areas east of Monroe on U.S. 80. The project's southern terminus will provide a more direct route to residential areas and development in northern Monroe and Ouachita Parish from I-20, the Monroe Regional Airport, Pecanland Mall, the Monroe Air Industrial Park, and the rapidly expanding retail, commercial and industrial areas to the south of the study area.

#### PURPOSE AND NEED OF THE PROJECT

The purpose of the proposed Kansas Lane Connector is to provide a roadway that will reduce traffic congestion along existing U.S. 80 and U.S. 165 and improve area-wide mobility and safety. The need for the project is demonstrated by the region's increasing travel demand. The Kansas Lane Connector will provide a much more direct route between northern residential and commercial office areas, eastern residential areas, and the southern retail, commercial, and industrial areas of Monroe.

## OTHER MAJOR ACTIONS IN THE PROJECT VICINITY

The proposed Kansas Lane Connector is the last section of a five-section project connecting the north side of Monroe to the east side of Monroe and I-20. The entire project was proposed in the early 1970s. The other four section of the five-section project

Final Environmental Impact Statement

**Executive Summary** 

have already been constructed. They are the Forsythe Avenue Extension from 18<sup>th</sup> Street to Loop Road (1.65 miles), Forsythe Avenue Extension from Loop Road to U.S. 165 (1.31 miles), Kansas Lane from U.S. 80 to Central Avenue (0.83 mile), and Kansas Lane Connector from Central Avenue to Millhaven Road (0.96 mile).

In addition, several projects have also been programmed and funded within the project study area to help ease the congestion problems along U.S. 80 and U.S. 165 and improve mobility within the project study area. These projects include the widening of Old Sterlington Road from U.S. 165 to Fink's Hideaway Road from two to four lanes, the addition of turn lanes on U.S. 80 at Kansas Lane, and the installation of a computerized traffic signal system on U.S. 165 at 18 intersections from Old Sterlington Road to Louisiana State Highway (LA) 15.

Furthermore, the *Monroe, Louisiana Metropolitan Area Transportation Plan Update, 1996 (Transportation Plan)* lists the widening of U.S. 165 from the northern intersection with Old Sterlington Road to U.S. 80 from four to six lanes as programmed between the years 2011 and 2020. Plans are currently underway to connect Garrett Road to Kansas Lane in order to create direct access from U.S. 80 and development near the airport to I-20 and LA 15 to the south. However, none of these programmed and funded improvements provides a direct link between the existing Kansas Lane and the Forsythe Avenue Extension, nor do they provide an alternate route to U.S. 80 and U.S. 165 when traveling from northwestern to southeastern Monroe.

U.S. 165, a four-lane median-divided facility, serves north-south traffic demand in the project study area. As the primary north-south corridor in Monroe, U.S. 165 provides access to adjacent residential and commercial properties and carries traffic between northern Monroe and I-20. U.S. 165 was identified in the *Transportation Plan* as being overloaded and one of the most critical transportation deficiencies in the Monroe Metropolitan Area. U.S. 80 runs parallel to I-20 and serves as a major access route to the rapidly developing section of Ouachita Parish east of Monroe. U.S. 80 is currently an undivided four-lane facility. Plans are underway to widen U.S. 80 ring just west of U.S. 165 east to Kansas Lane. When construction is complete, U.S. 80 will be a five-lane highway with a center two-way left turn lane.

#### ALTERNATIVES CONSIDERED

Ten Preliminary Build Alternatives were developed within the study area. Based on input from the public and local, state, and federal officials and agencies, and an evaluation of potential environmental impacts, seven of the ten Preliminary Build Alternatives were eliminated from further study. Minor modifications were made to the remaining three Preliminary Alternatives studied in detail in the Draft Environmental Impact Statement (DEIS) to minimize impacts. The three alternatives studied in detail in the DEIS were labeled as: the Northern Alternative, which follows the general path of Preliminary Alternative 2; the Central Alternative, which follows the general path of Preliminary Alternative 3; and the Southern Alternative, which follows the general path of

Final Environmental Impact Statement

**Executive Summary** 

Preliminary Alternative 7. In addition to the Northern, Central, and Southern Alternatives described and evaluated in the DEIS, a combination of the Southern and Central Alternatives (Southern+Central Alternative), as suggested by the U.S. Army Corps of Engineers (USACE) and the U.S. Fish and Wildlife Service (USFWS), was evaluated as was a combination of the Central and Northern Alternatives (Central+Northern Alternative), which was suggested by local officials. The two combination alternatives were suggested while the DEIS was being circulated. The Southern+Central Alternative was suggested by the agencies as an alternative that would minimize impacts to wetlands and the Central+Northern alignment was suggested as an alignment because local officials believed that this alternative would have the least impact on the community.

These five Build Alternatives were selected because they had minimal impacts to both the natural and human environment as compared to the other alternatives and they utilized as much of the existing roadway alignment as possible. It was recommended, however, that during the development of the Future Line and Grade Studies, design engineers and planners work together to minimize impacts to both the natural and human environment that may further result from the implementation of the Preferred Alternative. Other alternatives included the No-Build Alternative, the Transportation System Management (TSM) Alternative, and the Mass Transit Alternative.

The No-Build Alternative is inconsistent with the transportation goals outlined in the *Transportation Plan*, which provides recommendations on meeting the area's long range transportation needs based on projected future traffic conditions. Furthermore, the No-Build Alternative would not alleviate the current or projected north-south transportation challenges faced within the study area. TSM strategies could be effective if incorporated with the Kansas Lane Connector and along with land use policies that meet community goals, but TSM strategies alone would not solve the capacity problems existing along U.S. 165 and U.S. 80. The Mass Transit Alternative would not be independently sufficient to accommodate the existing or future transportation demand within the study area.

The five Build Alternatives would provide the City of Monroe and Ouachita Parish with a north-south arterial roadway capable of accommodating anticipated future traffic volumes. The Northern, Central, and Southern Alternatives have lengths of 2.61, 2.51, and 2.45 miles, respectively. The Southern+Central Alternative is 2.43 miles in length and the Central+Northern Alternative is 2.53 miles long.

#### PREFERRED ALTERNATIVE SELECTION

Upon completion of the Public Hearing held on October 16, 2003, a comparative impact matrix was developed to summarize the likely impacts of each of the five Build Alternatives. Impacts to land use, prime farmland, socioeconomics, aesthetic and visual quality, physical resources, natural resources, cultural resources, hazardous materials, and utility crossings were considered. Both qualitative and quantitative criteria were evaluated for each of the five Build Alternatives. For the qualitative criteria, the

Final Environmental Impact Statement

**Executive Summary** 

categories are no impacts, minimal impacts, moderate impacts, and severe impacts. Quantitative criteria are a combination of measurements from aerial photography, mapped resources, and field data. The comparative impact matrix table and the advantages and disadvantages of each Build Alternative were evaluated. The comparative impact matrix table is presented below. The Southern+Central and Central+Northern Alternatives were recommended by the Cooperating Agencies and local officials, respectively. The reasons why these alternatives were not recommended are listed below. The advantages and disadvantages of all of the Build Alternative are described in detail in Chapter 2 and in the *Preferred Alternative Report* (ARCADIS 2004).

The Southern+Central Alternative was supported by the USACE and the USFWS; however, this alternative was not recommended for the following reasons:

- § ULM does not support the alternative because it may prohibit expansion of the university;
- § Severe community cohesion impacts;
- § Most single-family residential relocations (18);
- § Most total residential relocations (58);
- § Impacts the greatest number of noise receivers (22);
- § One church taken;
- § Impacts a cemetery;
- § Impacts a National Register of Historic Places (NRHP)-eligible archaeological site located at a cemetery south of Bayou Desiard;
- § Three fraternity houses taken;
- § Impacts the greatest number of utilities;
- § Impacts the greatest number of hazardous waste sites; and
- § Highest right-of-way (ROW) acquisition costs (\$4,474,000).

ULM submitted a written comment stating that the university will not support the Southern Alternative because it could possibly inhibit expansion of the university (Appendix A-1). Additionally, it was not expected that ULM would support the

Final Environmental Impact Statement

**Executive Summary** 

alternative recommended by the cooperating agencies (Southern+Central) because this alternative would likely result in more direct impacts to the university.

The Central+Northern Alternative was suggested by local officials; however, it was not recommended for the following reasons:

- § Has 13 single-family residential relocations vs. 8 on the Northern Alternative;
- § Has 43 total residential relocations vs. 32 on the Northern Alternative;
- § Impacts a cemetery;
- § Impacts an NRHP-eligible archaeological site located at a cemetery south of Bayou Desiard; and
- § Has the most impact on Bayou Desiard.

Overall, the Northern Alternative seems to be the least damaging alternative and was recommended as the Preferred Alternative. The Northern Alternative was recommended for the following reasons:

- § Only alternative with minimal impacts to community cohesion (other alternatives had moderate to severe impacts on community cohesion);
- § Fewest single-family home relocations (8);
- § Fewest total residential relocations (32);
- § Fewest disruptions to existing utilities;
- § Only alternative that will not impact a portion of an NRHP-eligible archaeological site located at a cemetery south of Bayou Desiard;
- § Lowest ROW acquisition cost (\$2,480,000);
- § Second lowest total cost (\$16,349,000); and
- § Minor difference in wetland impacts (15.2 acres vs. 9.6 acres for the least impact, which is the Southern+Central Alternative).

Final Environmental Impact Statement

**Executive Summary** 

Detailed information regarding the advantages and disadvantages of all of the Build Alternatives are presented in detail in Chapter 2.

#### ACCESS CONTROL

The Northern Alternative (hereinafter referred to as the "Preferred Alternative") recommendation is based on a conceptual design that would implement control of access throughout the wetland areas. Controlled access along the roadway would discourage secondary development in the higher quality wetland areas. A detailed conceptual design description and map showing the full and limited control of access locations are included in Chapter 2. Based on discussions and a field visit conducted on August 18, 2004, with the USACE and the USFWS, the Preferred Alternative recommendation is based on a conceptual design that would consist of a five-lane limited access roadway in developed areas near the northern and southern terminus. A four-lane full control of access roadway would be implemented throughout the wetland areas. Limited access on the four-lane segment would likely be planned for an approximately 2,000-foot section on the south side of the road approximately 500 feet north of Bon Aire Drive (north of Bayou Desiard) to about 1,500 feet northeast of the ULM ballfield. This limited access location would allow access to residences in the area. Another limited access section would likely be planned for an approximately 1,100-foot section on the west side of the roadway near ULM. This limited access location would allow access to the west side of the ULM campus. Further discussions regarding access and avoidance issues will take place between the LDOTD, FHWA, USACE, and USFWS during the final design phase of the project prior to the permitting process.

## SUMMARY OF ENVIRONMENTAL CONSEQUENCES

#### Social Impacts

Anticipated impacts to the human environment include impacts to residences and neighborhoods. The following summarizes the impacts to the human environment resulting from each of the Build Alternatives.

None of the Build Alternatives would impact community services or facilities. If anything, all of the Build Alternatives would improve access to the northern side of ULM and between the Edgewater Gardens and Cypress Point neighborhoods and the Cypress Point Elementary School and Ouachita Junior High School. In addition, all of the Build Alternatives would improve access for emergency vehicles and emergency response times to the neighborhoods in the study area.

One or more of the Build Alternatives will cross the Cypress Point, Edgewater Gardens, and Ingleside neighborhoods (which includes the Fennell Street neighborhood). The Preferred Alternative will have minimal impacts to the existing neighborhoods because it only skirts the eastern edge of the Ingleside neighborhood and uses portions of Bon Aire Drive, an existing roadway, when it goes through the Cypress Point neighborhood. The

Final Environmental Impact Statement

**Executive Summary** 

Central, Southern, Central+Northern, and Southern+Central Alternatives will form a physical and psychological barrier within the Ingleside and Fennell Street neighborhoods that currently does not exist. With the exception of the Preferred Alternative, all of these alternatives could negatively impact connectivity within the neighborhoods.

There are no public parks in the study area. The Pecan Grove Park, a privately owned park, is located near the southern terminus. Efforts will be made during final design of the Preferred Alternative to avoid impacts to this park. Numerous recreational resources associated with ULM are located in the study area. All of the Build Alternatives considered would improve access to the northern side of the ULM campus, where the majority of these facilities are located.

Travel patterns may change in and around the study area as a result of the Kansas Lane Connector, because travelers would be able to bypass the intersection of U.S. 80 and U.S. 165. As a result, travel time for area residents between the areas to the north and south of the study area would be greatly reduced.

Access to the proposed Kansas Lane Connector will be permitted in developed areas and upland areas that have development potential. Efforts will be made during final design of the Preferred Alternative to maintain access to individual properties. However, access will not be allowed through designated regulated wetlands. The Kansas Lane Connector will improve accessibility for the residents of the Cypress Point, Ingleside, and Edgewater Gardens neighborhoods. In particular, access for emergency vehicles and services and school buses will be greatly improved. Additionally, ULM will benefit from the Kansas Lane Connector because the roadway will create an additional point-of-entry to its recreational facilities, particularly during large campus events such as football games.

#### **Economic Impacts**

The proposed Kansas Lane Connector is expected to have an overall beneficial economic impact on the region. The roadway will reduce congestion and travel time between northern and southern portions of Monroe by improving accessibility and mobility. The roadway will also increase the attractiveness of land around major intersections in its path and raise the property values because of the improved access it provides.

#### **Relocation Impacts**

Following the public hearing held on October 16, 2003, a field survey was conducted to better determine relocation impacts along the Build Alternative routes. Results of the field survey indicated that the Southern+Central Alternative (suggested by local officials) has considerably more relocation impacts than the other alternatives due to the engineering design that would be required to connect the Southern Alternative to the Central Alternative. The Southern+Central Alternative is expected to displace 58 residences, 3 ULM fraternity houses, and 1 church, God's House, which occupies the

Final Environmental Impact Statement

**Executive Summary** 

former location of the First Southern Methodist Church located at 3709 Bon Aire Drive on the north side of the ULM campus. The Southern, Central, and the Central+Northern Alternative will relocate 51, 44, and 43 residences, respectively. The Preferred Alternative will displace the fewest (32) residences. None of the alternatives are expected to impact any businesses or community facilities.

#### **Environmental Justice**

All of the Build Alternatives will impact some low-income and some minority residents in the project area, particularly in the Ingleside neighborhood; however, the number impacted would not be disproportionate to the total number of people impacted by each alternative. Therefore, this project is being implemented in compliance with Executive Order (EO) 12898: *Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations* (USDOT 1997).

## Land Use

Land use in the study area is residential, commercial, industrial, institutional, wetlands, and undeveloped land. All five of the Build Alternatives are consistent with existing and future land use. Furthermore, the Ouachita Council of Governments (OCOG), the area's Metropolitan Planning Organization (MPO), has incorporated the Kansas Lane Connector into its long-range transportation plan as an unfunded need and all five of the Build Alternatives are consistent with this plan. OCOG is in the process of developing their regular update of the long-range transportation plan. Because funding for the Kansas Lane Connector has been identified since the previous plan adoption, the MPO will need to include the Kansas Lane Connector in the financially constrained list when they update their long-range transportation plan.

#### **Pedestrian and Bicycle Facilities**

None of the Build Alternatives will impact any existing pedestrian or bicycle facilities. LDOTD will evaluate accommodating facilities for bicycles and pedestrians during the final design of the project.

## Utilities

Electric service in the study area is provided by Entergy. All of the Build Alternatives will traverse electric power lines near the intersection of U.S. 165 and the Forsythe Avenue Extension, near Old Sterlington Road, near the Premier Products building, and near the intersection of U.S. 80 and Kansas Lane. The Preferred Alternative will also cross overhead transmission lines at Bon Aire Drive and Bay Oaks Drive. The Central and Southern+Central Alternatives will cross major power lines along Bon Aire Drive west of the Brentwood and Churchill Circle Apartment complexes.

Final Environmental Impact Statement

**Executive Summary** 

Natural gas service in the area is provided by Atmos Energy Louisiana. All five Build Alternatives will cross 2-inch natural gas transmission lines in the residential areas north and south of Bayou Desiard, In addition, they will all cross gas transmission lines along Old Sterlington Road and the Arkansas-Louisiana-Mississippi Railroad near the intersection of U.S. 165 and the Forsythe Avenue Extension. Additionally, all of the Build Alternatives have the potential for crossing unmapped, unmarked, low-pressure gas lines historically associated with gas wells drilled in the area, particularly in the wetland areas.

The City of Monroe provides potable water service for most of the residences and business in the study area. Potable water for the study area is extracted from Bayou Desiard and treated by a water treatment facility operated by the City of Monroe. All of the Build Alternatives will cross a 6-inch potable water main east of the Mary Lea Apartments, 12-inch mains along Old Sterlington Road and U.S. 165, and water mains near the intersection of U.S. 165 and the Forsythe Avenue Extension. The Preferred Alternative will cross 6- and 12-inch mains near the intersection of Bon Aire Drive and Bay Oaks Drive. The Preferred and Central+Northern Alternatives could impact 8-inch mains serving the Churchill Circle Apartments and the small strip of commercial businesses at Old Sterlington Road and Bon Aire Drive. The Central and Southern+Central Alternatives will cross 8- and 12-inch mains west and south of the Brentwood and Churchill Circle Apartment complexes. The Central, Southern, Southern+Central, and Central+Northern Alternatives will cross 6- and 12-inch water mains along Bon Aire Drive east of the ULM campus and the 6-inch water mains at Virginia Street and Ingleside Drive. The Southern and Southern+Central Alternatives will cross these same mains northeast of the ULM baseball field.

The City of Monroe also provides sewer service to most of the residences and businesses in the study area with the exception of the Ingleside neighborhood. This area uses septic tanks and is not connected to a wastewater system. All of the Build Alternatives will cross a sewer line at U.S. 80, just east of the Mary Lea Apartments. In addition, all of the Build Alternatives will cross two mains, 12 and 16 inches in diameter, located on the east side of U.S. 165. The Central and Central+Northern Alternatives cross an 8-inch main parallel to Bon Aire Drive by ULM north of Bayou Desiard. The Central and Southern+Central Alternatives cross an 8-inch main south of the Brentwood Apartments along Bon Aire Drive and a 6-inch main west of the Brentwood Apartments. The Southern and Southern+Central Alternatives also cross the 8-inch main parallel to Bon Aire Drive by ULM north of Bayou Desiard. Both the Central and Southern+Central Alternatives may impact a lift station west of the Brentwood Apartments. Overall, the Preferred Alternative appears to impact the fewest utilities of all of the Build Alternatives evaluated.

LDOTD will work with Entergy, Atmos Energy Louisiana, the City of Monroe, and any other utility providers in the area to coordinate the relocation of utilities. Any necessary relocation of utilities will be conducted in a timely and orderly fashion, planned so that any disruptions in service are minimized and safety is not compromised.

Final Environmental Impact Statement

**Executive Summary** 

#### Archaeological and Historic Resources

With the exception of the Preferred Alternative, all of the Build Alternatives may impact Site *16OU352*, which is considered eligible for the NRHP, pending further testing.

The Southern and Southern+Central Alternatives would be able to be viewed directly from the *Ingleside Plantation House*, a property found to be eligible for the NRHP. However, visual and vibration impacts on the *Ingleside Plantation House* resulting from the construction of these Alternatives were evaluated and the impacts were found to have No Adverse Effect on the *Ingleside Plantation House*.

#### Section 4(f) and Section 6(f) Properties

The ULM ballfields are considered a Section 4(f) resource because the City of Monroe softball leagues use the fields for organized softball events. However, none of the Build Alternatives would take property from the actual ballfields so a Section 4(f) evaluation is not required. The ULM ballfields are also considered a Section 6(f) resource because a portion of the funding to construct the fields was provided by Section 6(f) of the Land and Water Conservation Act. No portion of the property funded by Section 6(f) is required for ROW for the Preferred Alternative. Therefore, it is not necessary to prepare a Section 6(f) evaluation.

#### Meteorology, Climatology, and Topography

None of the Build Alternatives will impact meteorology, climatology, or topography.

#### Water Resources

All of the Build Alternatives would cross 100-year floodplain areas. The Southern+Central Alternative will have the least acreage impacts crossing approximately 19.6 acres and relatively moderate impacts as a percentage of the alternative with 38.8 percent. The Preferred Alternative will have the greatest acreage impacts crossing approximately 28.3 acres, with relatively moderate impacts of 51.8 percent as a percentage of the alternative. The Central Alternative would cross 21.7 acres, comprising 42.4 percent of the alternative. The Southern Alternative impacts 27.7 acres of floodplain, affecting 53.1 percent of the alternative. The Central+Northern Alternative crosses 27.5 acres, impacting the greatest percentage of the alternative at 52.4 percent. Encroachments on the floodplains would not increase the base-flood elevation to a level that would violate applicable floodplain regulations. The Preferred Alternative will be designed to ensure that encroachment on the floodplains would not increase the base-flood elevation to a level that would violate applicable flood regulations and that the project will permit conveyance of the 100-year flood.

Final Environmental Impact Statement

**Executive Summary** 

All of the Build Alternatives will impact Bayou Desiard and an unnamed stream located parallel to and east of the Arkansas-Louisiana-Mississippi Railroad. The Southern and Southern+Central Alternatives would cross approximately 341 feet and potentially impact 1.4 acres of Bayou Desiard, while the Central and Central+Northern Alternatives would cross approximately 841 feet and potentially impact 3.2 acres. The Preferred Alternative would cross approximately 500 feet and potentially impact 2 acres of Bayou Desiard. The Southern and Southern+Central Alternatives would have the least impact to Bayou Desiard and the Central and Central+Northern Alternatives the most impact. The Preferred, Central+Northern, and Southern Alternatives would each impact 0.2 acre of the unnamed stream and the Central and Southern+Central Alternatives would impact 0.1 acre. However, no long-term impacts to surface waters are anticipated from construction of the any of the Build Alternatives.

The five Build Alternatives will cross the Sparta Aquifer, the primary aquifer used for water supply in the area, the sediments of which are encountered at approximately 750 feet below the surface. Although the Sparta Aquifer is currently not designated as a sole source aquifer, the Louisiana Department of Natural Resources (LDNR) issued a draft order designating the Sparta Aquifer as a Critical Ground Water Area on July 8, 2004. Therefore, the Sparta Aquifer is considered to be an important resource in north central Louisiana.

Potential short-term impacts associated with the construction of the proposed roadway include increase of impervious surfaces and potential impacts resulting from spillage of fuels, oils, greases, or other materials; removal of wells within the proposed ROW; and the potential for reduced yields from shallow wells in the study area. However, the project would likely have no long-term impact on the groundwater resources of the area.

#### **Geology and Soils**

No major impacts to the geology or soils in the area are anticipated. Construction may expose some geologic resources to erosion, but this would be of short duration. Soils would be removed from the ROW and while the remaining soils would be subjected to compaction and increased erosion potential, particularly where vegetation has been cleared, these impacts would be short-term, localized, and manageable.

#### **Mineral Resources**

No known active mines or quarries will be impacted by the construction of the Kansas Lane Connector.

#### Hazardous Waste Sites and Underground Storage Tanks (USTs)

All of the Build Alternatives could be impacted near the northern terminus by undiscovered environmental impacts resulting from current and historical industrial activities. All of the Build Alternatives could potentially be impacted by a former gas

Final Environmental Impact Statement

**Executive Summary** 

station located on the northwestern corner of U.S. 80 and Kansas Lane. Additionally, one UST, a Texaco Station (formerly known as Expressway #692), located at the intersection of Old Sterlington Road and Bon Aire Drive, could impact the Central and Southern+Central Alternatives. All of the Build Alternatives will be impacted by a small sewer treatment pond, reported to be operational, north of the building currently occupied by Premier Products. Efforts will be made during the final design phase of the Preferred Alternative to avoid impacts to these sites. In addition, caution will be taken when conducting construction and excavation activities in the wetland area and in areas north of Ouachita Fertilizer due to the potential presence of unmarked high- and low-pressure gas lines. Several active and inactive gas wells and pits not identified or registered with the LDNR may also be located in this area.

#### Air Quality

National Ambient Air Quality Standards for the one-hour and eight-hour carbon monoxide levels are not expected to be exceeded by the Kansas Lane Connector through the design year 2030. Short-term air quality impacts associated with construction of the proposed roadway may include: pollutant emissions from construction equipment; dust resulting from clearing, demolition, excavation, and grading; and particulate matter emitted from off-site asphalt plants.

#### Noise

Traffic on the proposed roadway would increase noise levels at receivers adjacent to the roadway along all of the Build Alternatives. The total number of receivers expected to experience noise levels which approach or exceed the LDOTD Noise Abatement Criteria or which substantially exceed existing noise levels by the design year 2030 are 15 for the Preferred Alternative, 16 for the Central+Northern Alternative, 19 for the Southern Alternative, 21 for the Central Alternative, and 22 for the Southern+Central Alternative.

Some of the receivers predicted to be impacted would likely be relocated as a result of the construction of the project, including 1 receiver along the Preferred Alternative, 5 receivers along the Central Alternative, 7 receivers along the Southern Alternative, 2 receivers along the Central+Northern Alternative, and 9 receivers along the Southern+Central Alternative. Noise abatement was not considered for those impacted receivers likely to be relocated along each alternative.

Noise abatement measures were considered and evaluated for the remaining receivers impacted by each alternative. Non-barrier abatement measures such as traffic management, alteration of the horizontal and/or vertical alignment, creating a buffer zone, and insulation of public buildings were either not effective or not applicable abatement measures to mitigate for noise impacts predicted along any of the five alternatives. An assessment of implementing a noise barrier as an abatement measure to mitigate for noise analysis was conducted and two barriers were modeled. The barrier

Final Environmental Impact Statement

**Executive Summary** 

analysis concluded that the construction of a noise barrier to mitigate for the predicted impacts to receivers along any of the alternatives was not feasible or reasonable.

#### **Prime and Important Farmlands**

According to an impact evaluation conducted by the Natural Resources Conservation Service (NRCS), no impacts to prime farmland soils would occur as a result of the Kansas Lane Connector project. Although some soils found within the study area are typically classified as prime farmland soils, the NRCS determined that the actual soils located in the study area are nonprime farmland because the soils are inside or immediately adjacent to the city limits. There are no prime farmlands within the study area and as a result there will be no impacts to prime farmlands from any of the Build Alternatives.

#### **Biotic Resource Impacts**

The primary impact on the vegetation communities from the proposed project would be the direct loss of vegetation due to clearing within the proposed ROW. The Preferred Alternative will impact 32.4 acres of wooded areas and 6.2 acres of grassland. The Central Alternative will impact 15.9 acres of wooded areas and 9.7 acres of grassland. The Southern Alternative would impact 29.8 acres of wooded areas and 3 acres of grassland. The Central+Northern Alternative would impact 27.2 acres of wooded area and 6.5 acres of grassland. The Southern+Central Alternative would affect 15.1 acres of woodland and 6.5 acres of grassland.

All of the alternatives are expected to fragment and reduce wildlife habitat. Impacts to terrestrial wildlife from construction-related activities would be less for the Central and Southern+Central Alternatives than for the Preferred, Southern, and Central+Northern Alternatives. Mobile wildlife populations will experience permanent displacement, while slow-moving, burrowing, and subterranean species may experience some loss of life.

Potential impacts to aquatic ecosystems resulting from construction activities could result from physical habitat loss or modification; degrading of water quality; increased erosion, runoff, sedimentation, and turbidity; mechanical disruption of aquatic habitat; and spillage of petroleum and other chemical products. However, most impacts would be short term.

#### Waters of the U.S.

All of the Build Alternatives would impact waters of the U.S. The Southern+Central Alternative would have the least impact on wetlands and waters of the U.S. with approximately 11.1 acres. The Central and Central+Northern Alternatives would impact 13.7 and 18.5 acres, respectively. The Preferred and Southern Alternatives would impact 17.4 and 18 acres, respectively.

Final Environmental Impact Statement

**Executive Summary** 

Wetlands Bayou Desiard Total Streams Alternative (in acres) (in acres) (in acres) (in acres) Southern+Central 9.6 1.4 0.1 11.1 3.2 10.4 0.1 13.7 Central Central+Northern 15.1 3.2 0.2 18.5 Preferred 15.2 2.0 0.2 17.4 Southern 16.4 1.4 0.2 18.0

The table below shows the potential impacts to wetlands and other waters of the U.S. for the five Build Alternatives.

All of the Build Alternatives will require an Individual Section 404 Permit. In addition, a Section 401 General Water Quality Certification would be required for any activity that may result in a discharge into waters of the U.S. or for which the issuance of a federal permit or license is required. Final determination of permit applicability lies with the USACE. LDOTD will coordinate with USACE after the completion of the final design to obtain the necessary permits.

In addition, a National Pollutant Discharge Elimination System (NPDES) permit will also be required. Construction projects affecting 1 to 5 acres must file a Notice of Intent (NOI) with the Louisiana Department of Environmental Quality (LDEQ) in order to obtain authorization under the Louisiana Pollutant Discharge Elimination System (LPDES) under the LPDES Storm Water General Permit for Construction Activities, 1-5 Acres.

## **Protected Species**

Four species protected under the Endangered Species Act of 1973 are listed for Ouachita Parish including the pallid sturgeon (*Scaphirhynchus albus*) and red-cockaded woodpecker (RCW) (*Picoides borealis*), which are listed as endangered, and the bald eagle (*Haliaeetus leucocephalus*) and the Louisiana black bear (*Ursus americanus luteolus*), which are listed as threatened. According to the USFWS and the Louisiana Natural Heritage Program (LNHP), none of the listed species have been recorded within the study area. Habitat for the pallid sturgeon and RCW was not found in the project study area during field visits. In addition, no bald eagles were encountered during the field visits. Potentially suitable habitat was found to occur in the study area for the Louisiana black bear.

#### **Visual Impacts**

The area surrounding the five Build Alternatives consists mainly of residential areas, ULM, some commercial development, and wetlands. All five Build Alternatives would diminish the visual quality for residents living along Bayou Desiard. In addition, the Central, Central+Northern, Southern, and Southern+Central Alternatives would have visual impacts on the residents of the Ingleside and Fennell Street neighborhoods because these neighborhoods would be bisected. The visual and aesthetic quality for Ingleside and

Final Environmental Impact Statement

**Executive Summary** 

Fennell Street residents living adjacent to the roadway would be substantially degraded with the construction of these four Alternatives. The Preferred Alternative would have a minimal impact to residents located in the neighborhoods located south of Bayou Desiard. The construction of the other Build Alternatives would introduce a physical barrier that currently does not exist within these neighborhoods.

#### **Energy Impacts**

Construction activities will require an initial consumption of energy that would only be utilized for the project. The use of energy will be compensated for over time by the increased travel efficiency of motorists driving through the study area. All of the Build Alternatives are expected to have a similar degree of utilization of energy resources.

#### **Coastal Barriers**

The study area falls outside of the coastal barrier zone; therefore, none of the Build Alternatives will impact any coastal barrier resources.

#### SUMMARY OF IMPACTS BY ALTERNATIVE

Factors	Northern (Preferred) Alternative	Central Alternative	Southern Alternative	Central+ Northern Alternative	Southern+ Central Alternative	No-Build Alternative
Length (miles)	2.61	2.51	2.45	2.53	2.43	0
Number of railroad crossings	1	1	1	1	1	0
Construction costs (estimated)	\$13,869,000	\$15,228,000	\$12,470,000	\$14,869,000	\$12,863,000	0
Right-of-way costs (estimated)	\$2,480,000	\$3,152,000	\$3,558,000	\$3,050,000	\$4,474,000	0
Total costs (estimated)	\$16,349,000	\$18,380,000	\$16,028,000	\$17,919,000	\$17,337,000	0
Elevated (estimated)	700 feet	1,100 feet	500 feet	1,100 feet	500 feet	0
Length of fill (estimated)	9,500 feet	7,300 feet	9,800 feet	9,700 feet	6,800 feet	0
Volume of fill (estimated)	159,000 cubic yards	103,000 cubic yards	150,000 cubic yards	157,000 cubic yards	86,000 cubic yards	0
Residential relocations - single family homes	8	14	17	13	18	0
Residential relocations - apartment units	24	28	32	28	32	0

The table below provides a summary of the impacts by each alternative.
Final Environmental Impact Statement

Executive Summary

	Northern (Preferred)	Central	Southern	Central+ Northern	Southern+ Central	No-Build
Factors	Alternative	Alternative	Alternative	Alternative	Alternative	Alternative
Residential relocations - mobile homes	0	2	2	2	5	0
Residential relocations - fraternity houses	0	0	0	0	3	
Total residential relocations	32	44	51	43	58	0
Business relocations	0	0	0	0	0	0
Schools impacted	0	0	0	0	0	0
Churches impacted	0	0 – Planned God's House expansion not counted; no building permit filed as of DEIS publication	0	0	1	0
Cemeteries impacted	0	1	1	1	1	0
Community cohesion <sup>1</sup>	Minimal	Moderate	Severe	Moderate	Severe	None
Environmental justice <sup>1</sup>	None	None	None	None	None	None
Aesthetic & visual quality impacts <sup>1</sup>	Moderate to severe aesthetic impacts through neighborhoods and across bayou	Moderate to severe aesthetic impacts through neighborhoods and across bayou	Moderate to severe aesthetic impacts through neighborhoods and across bayou	Moderate to severe aesthetic impacts through neighborhoods and across bayou	Moderate to severe aesthetic impacts through neighborhoods and across bayou	No impact
Significant electrical transmission lines crossed	6	8	9	8	10	0
Significant gas mains crossed	5	4	3	3	5	0
Gas wells impacted	2	3	2	2	3	0
Significant sewer mains crossed	4	6	4	4	7	0
Significant water mains crossed	7	8	8	9	10	0

Final Environmental Impact Statement

Executive Summary

	Northern (Preferred)	Central	Southern	Central+ Northern	Southern+ Central	No-Build
Factors	Alternative	Alternative	Alternative	Alternative	Alternative	Alternative
Potential hazardous waste sites impacted <sup>2</sup>	13	15	13	13	15	0
Archaeology sites potentially in ROW	0	1 - Only a portion of the site is potentially eligible pending further testing to determine eligibility	1 - Only a portion of the site is potentially eligible pending further testing to determine eligibility	1 - Only a portion of the site is potentially eligible pending further testing to determine eligibility	1 - Only a portion of the site is potentially eligible pending further testing to determine eligibility	0
Historic structures in APE	0	0	1 - No adverse effect	0	1 - No adverse effect	0
Potential Section 4(f)	0	0	0	0	0	0
Potential Section 6(f)	0	0	0	0	0	0
Prime and unique farmlands (acres)	0	0	0	0	0	0
Number of noise receivers negatively impacted	15	21	19	16	22	3
Vegetation - grasslands (acres)	6.2	9.7	3.0	6.5	6.5	0
Vegetation - wooded areas (acres)	32.4	15.9	29.8	27.2	15.1	0
Floodplains (acres)	28.3	21.7	27.7	27.5	19.6	0
Wetland impacts (acres)	15.2	10.4	16.4	15.1	9.6	0
Stream crossings	1	1	1	1	1	0
Stream impacts - excluding Bayou Desiard (acres)	0.2	0.1	0.2	0.2	0.1	0
Bayou Desiard impacts	2.0	3.2	1.4	3.2	1.4	0
Land use - developed land (acres)	12.6	24.3	15.7	13.9	19.0	0
Land use - undeveloped land (acres)	24.5	13.7	17.1	20.3	20.3	0

Final Environmental Impact Statement

### **Executive Summary**

Factors	Northern (Preferred) Alternative	Central Alternative	Southern Alternative	Central+ Northern Alternative	Southern+ Central Alternative	No-Build Alternative
Plant species impacts <sup>1</sup>	Moderate	Minimal	Moderate	Moderate	Minimal	None
Terrestrial wildlife impacts <sup>1</sup>	Moderate	Minimal	Moderate	Moderate	Minimal	None
Water quality <sup>1</sup>	Moderate	Minimal	Moderate	Moderate	Minimal	None
Wetland vegetation <sup>1</sup>	Moderate	Minimal	Moderate	Moderate	Minimal	None
Hydrology <sup>1</sup>	Moderate	Minimal	Moderate	Moderate	Minimal	None
Soils <sup>1</sup>	Minimal	Minimal	Minimal	Minimal	Minimal	None
Protected species habitat <sup>3</sup>	32.4	15.9	29.8	27.2	15.1	0
Permits required <sup>4</sup>	6	6	6	6	6	0

<sup>1</sup> The following scale was used for these criteria: None, Minimal Impacts, Moderate Impacts, or Severe Impacts.

<sup>2</sup> Clusters of historical environmental conditions or recognized environmental conditions that could not be segregated are treated as one impact.

<sup>3</sup> Although all of the Build Alternatives would result in loss of potential habitat for the Louisiana black bear, no bears have been recorded within the study area (USFWS 2001; LNHP 2001). In addition, any bears that may use the habitat in the project study area would most likely only be traveling through the area and would not take up permanent residence in the project study area.

<sup>4</sup> Permits required include: Individual Section 404, Section 401 General Water Quality Permits, Floodplain Development Permit, Louisiana Pollutant Discharge Elimination System (LPDES) permit, USACE Section 10 Navigable Waterways Structure Construction Permit, and U.S. Coast Guard Navigation Permit.

### PERMITS

A USACE Individual Section 404 Permit and a Section 401 General Water Quality Certification permit will be required.

In addition, NPDES, Floodplain Development, U.S. Coast Guard Navigation Permit, and USACE Section 10 Permit for the Construction of a Structure Across Navigable Waterways permits will also be required.

### MITIGATION

Although impacts to waters of the U.S. would be avoided and minimized through route location and construction practices, some impacts would be unavoidable. Thus, some form of mitigation will be required. On occasion, on-site restoration of degraded wetland habitat or creation of manmade wetland habitat within the ROW may be appropriate. However, off-site mitigation measures may also be proposed. A final determination regarding compensatory mitigation requirements rests with the USACE. Forested and

Final Environmental Impact Statement

**Executive Summary** 

herbaceous wetland impacts would be replaced at a ratio of at least 1:1. Final mitigation ratios and requirements will be determined in conjunction with the Section 404 Permit process.

## ENVIRONMENTAL COMMITMENTS

- § During the final roadway design, the LDOTD will work with existing neighborhoods in the vicinity of the Kansas Lane Connector to better integrate the design of the roadway with the surrounding neighborhoods.
- § During the final roadway design, LDOTD will make efforts to maintain access to individual properties.
- § LDOTD will design the project with partial control of access. Access will not be allowed through designated regulated wetlands.
- § LDOTD will acquire right-of-way for the project in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.
- § LDOTD will work with Entergy to coordinate the relocation of electrical transmission lines. LDOTD will conduct any necessary relocation of electrical transmission lines in a timely and orderly fashion, so that any disruptions in service are minimized and safety is not compromised.
- § LDOTD will work with Atmos Energy Louisiana to coordinate the relocation of natural gas lines. LDOTD will conduct any necessary relocation of natural gas lines in a timely and orderly fashion, so that any disruptions in service are minimized and safety is not compromised.
- § LDOTD will coordinate the relocation of water and sewer lines with the City of Monroe Public Works Department or individual property owners as appropriate. LDOTD will make every effort to minimize the inconvenience caused by any unavoidable service interruptions.
- § LDOTD will develop hydraulic design practices for the construction of the project in accordance with current LDOTD and the FHWA design policies and standards. LDOTD will design the project to ensure that encroachment on the floodplains would not increase the base-flood elevation to a level that would violate applicable flood regulations and that the project will permit conveyance of the 100-year flood of the roadway without causing significant damage to the roadway, stream, or other property.
- § LDOTD will collect soil and groundwater samples at a minimum of five locations along the center of the Preferred Alternative between the intersection of the Forsythe Avenue Extension and U.S. 165 and the intersection of the Kansas Lane Connector and Old Sterlington Road. Numerous Recognized Environmental Conditions (RECs) and

Final Environmental Impact Statement

**Executive Summary** 

Historical Recognized Environmental Conditions (HRECs) were revealed during the Phase I Environmental Site Assessment (ESA) in this area.

- § It is not anticipated that the former Creative Coatings site will impact the Preferred Alternative. However, LDOTD will conduct a Phase II investigation at the former Creative Coatings site if any oil or odors are observed during construction activities.
- § LDOTD will conduct asbestos and lead-based paint and piping surveys for any structures demolished in the Ingleside neighborhood, including the Mary Lea Apartments, prior to construction of the project. If the presence of asbestos-containing material and lead paint is determined, the materials will be properly classified and shipped to an appropriate waste disposal facility. LDOTD will require the contractor take precautions when conducting construction and excavation activities in the wetland area as well as the area north of Ouachita Fertilizer to avoid disturbing unmarked highand low-pressure gas lines within the area.
- § Upon completion of construction of the project, LDOTD will require the contractor to stabilize exposed soils by revegetating such areas.
- § LDOTD will conduct further wetland delineation studies prior to finalizing the limited access locations and wetland issues.
- § LDOTD will implement measures to minimize impacts to migratory bird habitat to avoid any harm to migratory birds.
- § LDOTD will conduct a follow-up consultation with the USFWS Louisiana Field Office prior to making any expenditures for construction to ensure that no federally listed threatened, endangered, or candidate species occur within the proposed highway corridor.
- § During the final roadway design, LDOTD will make efforts to minimize impacts to fish and aquatic animal passages by spanning Bayou Desiard and using bottomless culverts where practical.
- § During the final roadway design, LDOTD will evaluate the following measures to minimize and mitigate for visual impacts caused by the Kansas Lane Connector:
  - Integrate landscaping into the project design to promote visual continuity of the roadway and to assist in blending it into the natural landscape as much as possible.
  - Minimize the loss of vegetation, particularly during construction when equipment access, storage, and staging are required.

Final Environmental Impact Statement

**Executive Summary** 

- Consider accommodating bicycles and pedestrians in the roadway design to minimize visual impacts, focus on the scenic quality of the area, and to better integrate the roadway into the nearby neighborhoods.
- § LDOTD will require that all construction equipment comply with Occupational Safety and Health Administration (OSHA) Regulations as they apply to the employees' safety and in accordance with LDOTD Standard Specifications. LDOTD will include provisions in the plans and specifications that would require the contractor to make every reasonable effort to minimize construction noise. LDOTD will require that construction equipment used during the construction phase be properly muffled and all motor panels be shut during operation. In order to minimize the potential for impacts of construction noise on the local residents, LDOTD will require the contractor operate, whenever possible, between the hours of 7 a.m. and 5 p.m.
- § LDOTD will require that the contractor implement a traffic control plan to ensure uninterrupted traffic flow during construction.
- § LDOTD will evaluate the construction of a rail grade separation at the Arkansas-Louisiana-Mississippi Railroad crossing and will consider purchasing the necessary ROW in advance should increased rail and automobile traffic warrant a grade separation in the future.
- § LDOTD will require that the contractor comply with all relevant federal, state, and local laws and regulations in order to minimize potential air quality impacts, such as particulate matter. In addition, LDOTD will incorporate dust control measures into the final design and construction specifications. LDOTD will require that all construction equipment comply with OSHA Regulations for employee safety and in accordance with LDOTD Standard Specifications.

LDOTD will require the contractor to implement mitigation measures to prevent or minimize erosion and sedimentation.

Final Environmental Impact Statement

Chapter 1 – Purpose and Need for the Proposed Action

## 1. PURPOSE AND NEED FOR PROPOSED ACTION

### 1.1 Introduction

The Louisiana Department of Transportation Development (LDOTD) and the Federal Highway Administration (FHWA) are proposing to construct the Kansas Lane Connector. The proposed project would be a partially controlled roadway between U.S. 80 (Desiard Street) and the existing Kansas Lane to the south and U.S. 165 and the Forsythe Avenue Extension to the north.

The purpose of the Kansas Lane Connector is to help alleviate congestion along U.S. 165 and U.S. 80 and improve area-wide mobility and safety. The Kansas Lane Connector will provide a facility between the residential and commercial areas developing in northwestern Monroe along U.S. 165 and the residential, commercial office, retail, and industrial development in eastern and southeastern Monroe. The Kansas Lane Connector will offer a more direct and alternate route between these rapidly growing areas to U.S. 80 and U.S. 165 while bypassing the U.S. 80/U.S. 165 intersection.

The Environmental Impact Statement (EIS) examines the social, economic, and environmental impacts associated with the proposed transportation improvements and considers alternative courses of action pursuant to the National Environmental Policy Act (NEPA) of 1969 and FHWA regulations (23 Code of Federal Regulations [CFR] Part 771).

### 1.2 Description of the Study Area

The proposed Kansas Lane Connector is located in northeastern Louisiana. The project study area is located approximately 4 miles northeast of Monroe's central business district (CBD) within Ouachita Parish and partially in the Monroe city limits. The general project study area is identified on Figure 1-1, but the actual study area varies with respect to the social, economic, or environmental issues being analyzed (e.g., the analyses for population data and traffic will be on a regional scale, whereas biological impacts will be studied within and immediately adjacent to the proposed right-of-way [ROW]). The study area is approximately 2.96 square miles and includes residential areas, a large undeveloped area, the University of Louisiana at Monroe (ULM) campus, and a portion of Bayou Desiard.

The study area lies within the planning area of the Ouachita Council of Governments (OCOG). OCOG is the designated Metropolitan Planning Organization (MPO) for the Monroe Metropolitan Area responsible for transportation planning and programming in the metropolitan area.



u:\projects\kansas-In\plotfiles\Chapter 1\Fig 1-1 Project Study Area.pdf

Final Environmental Impact Statement

Chapter 1 – Purpose and Need for the Proposed Action

The need for the Kansas Lane Connector was identified in the *Monroe, Louisiana Metropolitan Area Transportation Plan Update, 1996 (Transportation Plan)* (State Project No. 736-17-0211, Federal Aid Project No. HPR-0010(017)). The *Transportation Plan* identified the Kansas Lane Connector as an unfunded need, because funding for the project was not available at the time the *Transportation Plan* was updated. Subsequent to the adoption of the *Transportation Plan*, federal and state funding has been committed for the proposed Kansas Lane Connector. Because OCOG is currently in the process of updating the *Transportation Plan*, the MPO will need to include the Kansas Lane Connector in the list of fiscally constrained projects in the update.

The Kansas Lane Connector will connect residential areas in the northwestern and eastern sections of Monroe with the fastest growing commercial office, retail, and industrial areas of the city. Currently, no direct connection exists between these areas. As a result, motorists must travel alternative routes such as U.S. 80 and U.S. 165, which are already heavily congested and over capacity. Improvements to U.S. 80 and U.S. 165 have been planned and programmed in the *Transportation Plan* and current *Transportation Improvement Program (TIP)* for the area. However, even with the construction of the planned and funded improvements to U.S. 80 and U.S. 165, these roadways will be congested. In addition, there is a strong need for an additional roadway to make this connection in order to improve transportation efficiency and safety.

## 1.3 Project History

The proposed Kansas Lane Connector is the last section of a five-section project connecting the northern and eastern sides of Monroe and Interstate 20 (I-20). The entire Kansas Lane Connector project was proposed in the early 1970s. The other four sections of the five-section project have already been constructed.

The *Transportation Equity Act for the Twenty-first Century* (TEA-21) provided \$4.5 million for the improvements in the Kansas Lane Corridor. The fiscal year (FY) 2001 Federal Transportation Appropriations Bill allocated another \$5.5 million for improvements within the corridor. In addition, the Louisiana legislature committed another \$2.5 million to the project in the FY 2001 Capital Outlay Bill.

### 1.4 System Linkage

The proposed project is an important link in the Monroe area transportation system because it will connect the existing Kansas Lane to the Forsythe Avenue Extension. As the last segment in a five-segment project, the proposed project will complete the connection between the northern and eastern sides of Monroe and I-20. The other four projects that have already been completed include:

- § Forsythe Avenue Extension from 18<sup>th</sup> Street to Loop Road (1.65 miles)
- § Forsythe Avenue Extension from Loop Road to U.S. 165 (1.31 miles)

Final Environmental Impact Statement

Chapter 1 – Purpose and Need for the Proposed Action

- § Kansas Lane from U.S. 80 to Central Avenue (0.83 mile)
- § Kansas Lane from Central Avenue to Millhaven Road (0.96 mile)

In addition, several projects have also been programmed and funded to help ease the congestion problems along U.S. 80 and U.S. 165 and improve mobility within the study area. These projects include:

700-18-0071 -	The widening of Old Sterlington Road from U.S. 165 to Fink's
	Hideaway Road from two to four lanes.

- 002-01-0046 The addition of turn lanes on U.S. 80 at Kansas Lane.
- 015-31-0043 The installation of a computerized traffic signal system on U.S. 165 at 18 intersections from Old Sterlington Road to Louisiana State Highway (LA) 15. This project has begun since the publication of the DEIS.
- 002-01-0041 The widening of U.S. 80 from Louisville Avenue to Gilbert Street from four to five lanes.

Furthermore, the *Transportation Plan* lists the widening of U.S. 165 from the northern intersection with Old Sterlington Road to U.S. 80 from four to six lanes as programmed between the years 2011 and 2020. In addition, plans are currently underway to connect Garrett Road to Kansas Lane in order to create a direct access from U.S. 80 and development near the airport to I-20 and LA 15 to the south. Even with construction of the above-mentioned projects, U.S. 80 and U.S. 165 will still be heavily congested. In addition, none of these programmed or funded improvements provides a direct link between the existing Kansas Lane and the Forsythe Avenue Extension nor do they provide an alternate route to U.S. 80 and U.S. 165 when traveling from northwestern to southeastern Monroe.

### 1.5 Logical Termini

Federal Highway Administration regulations (23 CFR 771.111(f)) require that logical termini be established during the development of all highway improvement projects that require federal-aid monies. The proposed Kansas Lane Connector termini are logical because they ensure that the new roadway has independent utility. Whether or not additional roadway improvements are made in the project vicinity, the proposed Kansas Lane Connector would be a useable and reasonable improvement. At the same time, the proposed Kansas Lane Connector would not exclude consideration of other transportation improvement projects in the near future in the project vicinity.

The proposed Kansas Lane Connector begins at the intersection of U.S. 80 and the existing Kansas Lane, inside the Monroe city limits. The project ends at the intersection of U.S. 165 and the Forsythe Avenue Extension, outside the Monroe city limits but within Ouachita Parish. U.S. 80 runs east-west, parallel with I-20, from Vicksburg,

Final Environmental Impact Statement

Chapter 1 – Purpose and Need for the Proposed Action

Mississippi, to Dallas, Texas. U.S. 165 runs north-south through the region from southeast Arkansas to Interstate 10 (I-10) near Lake Charles, Louisiana.

The project's southern terminus will provide a more direct route to residential areas and development in northern Monroe and Ouachita Parish with I-20, the Monroe Regional Airport, Pecanland Mall, the Monroe Air Industrial Park, and the rapidly expanding retail, commercial, and industrial areas to the south of the study area. The project's northern terminus will provide a direct connection from the residential areas and new office developments in northern Monroe with the development to the south, as well as the rapidly developing residential areas east of Monroe on U.S. 80.

### 1.6 Transportation Demand

The rapid growth in commercial office, retail, and industrial development to the south of the study area is expected to continue. In addition, rapidly expanding residential development in the east and north and the office development to the north along U.S. 165 are expected to continue. Therefore, the Kansas Lane Connector will provide a direct route for residents living north and east of the study area to travel to the Monroe Regional Airport, Pecanland Mall, the Monroe Air Industrial Park, ULM, and other commercial office, retail, and industrial development in southern Monroe and new commercial office and light industrial sites north of Monroe developing along U.S. 165.

### 1.6.1 Traffic Capacity Analysis

A capacity analysis was conducted to determine the impact of the area's growing transportation demand on the existing transportation network in the study area. Analyses were conducted for the base year (2001), the build year (2010), and the design year (2030).

Level of Service (LOS) is a qualitative measure used to describe the operating conditions of a roadway. The *Highway Capacity Manual* (Transportation Research Board, Special Report 209, 2000) generally describes LOS in terms of factors such as speed, travel time, freedom to maneuver, traffic interruptions, driver comfort and convenience, and safety. Level of Service is represented by a letter ranking from "A" to "F," with "A" representing free flow conditions and "F" representing traffic breakdown conditions. Levels of Service as described in the *Highway Capacity Manual* are described as follows:

### 1.6.1.1 Level of Service "A"

- § Vehicles move in free-flow traffic conditions.
- § Motorists have a great range of freedom to select their desired speed.
- § Motorists have great maneuverability within the traffic stream.
- § The general level of travel comfort and convenience is excellent.

Final Environmental Impact Statement

Chapter 1 – Purpose and Need for the Proposed Action

#### 1.6.1.2 Level of Service "B"

- § Vehicles move in stable-flow conditions.
- § Motorist's operating speed is somewhat affected by other vehicles.
- § Motorists experience a slight decline in the freedom to maneuver within the traffic stream.
- 1.6.1.3 Level of Service "C"
- § Vehicles move in stable-flow conditions.
- § Motorist's operating speed and maneuverability are substantially affected by other vehicles.
- § The general level of comfort and convenience declines noticeably.
- 1.6.1.4 Level of Service "D"
- § The stable traffic flow begins to become unstable due to a higher density of vehicles.
- § Travel speeds and freedom to maneuver are severely restricted.
- § The general level of comfort and convenience is poor.
- § Operational problems occur with small increases in traffic volumes.
- 1.6.1.5 Level of Service "E"
- § Vehicles move in unstable-flow traffic conditions.
- § Speeds are uniformly reduced.
- § Traffic volumes are at or approaching the roadway's capacity level.
- § Motorist's freedom to maneuver within the traffic stream is extremely constrained.
- § The general level of travel comfort and convenience is extremely poor.
- § Breakdowns in the transportation system are caused by small increases in traffic volume.
- 1.6.1.6 Level of Service "F"
- § Vehicles move in forced-flow (stop and go) traffic conditions.

Final Environmental Impact Statement

Chapter 1 – Purpose and Need for the Proposed Action

- § Traffic volumes exceed the roadway capacity level.
- § Hazardous queues develop.
- § Traffic congestion causes traffic to be stopped for long periods of time.

An operational capacity analysis to determine the LOS of existing facilities in the project vicinity was conducted for existing U.S. 80 using methodologies provided in the *Highway Capacity Manual*. Capacity is defined in the *Highway Capacity Manual* as "the maximum number of vehicles that can pass a given point during a specified period under prevailing roadway, traffic, and control conditions." The quantitative criteria used to determine LOS is discussed in the *Traffic Analysis Technical Report* (ARCADIS 2003) prepared for the project and appended to the FEIS by reference.

Currently, the entire stretch of U.S. 80 between U.S. 165 and Kansas Lane is operating at LOS "D". At LOS "D", traffic conditions are defined as: travel speeds and freedom to maneuver are severely restricted and operational problems are likely to occur with small increases in traffic volume. Projections of future year traffic along U.S. 80 show that, even with the planned improvements to U.S. 80, the roadway will be operating at LOS "F" by the design year 2030. Existing (2001) and future year (2010 and 2030) LOS by segment along U.S. 80 for the No-Build and Build conditions are shown on Table 1-1.

	2001	20	10	20.	30
Location		<b>No-Build</b>	Build	No-Build	Build
US 165					
North of Forsythe Avenue Extension	F	]	F	F	
Between Forsythe Avenue Extension and US 80	D	F	D	F	D
South of US 80	F	F	F	F	F
US 80					
East of Kansas Lane	D		2	F	1
Between Kansas Lane and US 165	D	F	D	F	F
West of US 165	D		C	F	

## Table 1-1. Existing and Future Level of Service for the No-Build and the Build Scenarios.

Existing traffic conditions along U.S. 165 from the Forsythe Avenue Extension to U.S. 80 are currently operating at LOS "F" and "D". The *Highway Capacity Manual* describes LOS "F" as: vehicles moving in forced flow (stop and go) traffic conditions where traffic volumes exceed the roadway capacity level. In addition, hazardous queues develop and congestion causes traffic to be stopped for long periods of time. Traffic conditions at LOS "D" were described above. Traffic projections estimate that this same section will operate at LOS "F" with the No-Build scenario and LOS "D" with the Build scenario by the design year 2030. Existing (2001) and future year (2010 and 2030) LOS

Final Environmental Impact Statement

Chapter 1 – Purpose and Need for the Proposed Action

by segment along U.S. 165 for the No-Build and Build conditions are shown on Table 1-1.

1.6.2 Existing and Future Traffic Conditions

U.S. 165, a four-lane median-divided facility, serves north-south traffic demand in the project study area. It is the primary north-south corridor in Monroe. It provides access to adjacent residential and commercial properties and carries traffic between northern Monroe and I-20. U.S. 165 was identified in the *Transportation Plan* as being overloaded and one of the most critical transportation deficiencies in the Monroe Metropolitan Area. The *Transportation Plan* lists the widening of U.S. 165 from the northern section of Old Sterlington Road to U.S. 80 from four to six lanes as programmed between 2011 and 2020. In addition, a project is being implemented along U.S. 165 to install a computerized traffic signal system at 18 intersections from Old Sterlington Road to LA 15 to improve the roadway's capacity.

U.S. 80 runs parallel to I-20 and serves as a major access route to rapidly developing sections of Ouachita Parish east of Monroe. U.S. 80 is currently an undivided four-lane facility. Plans are underway to widen U.S. 80 from just west of U.S. 165 east to Kansas Lane. When construction is complete, U.S. 80 will be a five-lane highway with a center two-way left turn lane.

A common measure of congestion is the calculation of a "volume to capacity ratio" (v/c ratio). The v/c ratio measures the level of congestion, or level of mobility, by dividing traffic volume by roadway capacity. A "tolerable" level of congestion is considered to be when the traffic volume is approximately 0.84 or less, or 84 percent of capacity. This condition is characterized by free-flowing traffic. A "moderate" level of congestion is when traffic is 0.85 to 0.99 of capacity. This is characterized by an unstable or slower flow of vehicles with momentary stoppages. A "serious" level of congestion occurs when traffic is 1.00 to 1.24 of capacity. This level is characterized by very slow moving traffic with longer and more frequent stoppages.

A review of the existing v/c ratios along U.S. 80 shows a tolerable level of congestion. Currently, the v/c ratio is 0.72 along U.S. 80 east of the existing Kansas Lane, 0.77 along U.S. 80 between Kansas Lane and U.S. 165, and 0.72 along Kansas Lane from U.S. 80 west of U.S. 165. The existing v/c ratios along U.S. 80 are shown on Table 1-2.

Final Environmental Impact Statement

Chapter 1 – Purpose and Need for the Proposed Action

Decinal 105.					
	2001	2010		2030	
Location		No-Build	Build	No-Build	Build
US 165					
North of Forsythe Avenue Extension	1.01	1.34 1.8		86	
Between Forsythe Avenue Extension and US 80	.82	1.17	.84	1.62	.84
South of US 80	1.31	2.26	1.93	3.13	2.35
US 80					
East of Kansas Lane	.72	.91 1.29		29	
Between Kansas Lane and US 165	.77	1.08	.84	1.49	1.14
West of US 165	.72	.92 1.30		30	

# Table 1-2. Existing and Future Volume to Capacity Ratios for the No-Build and the Build Scenarios.

Similarly, a review of the existing v/c ratios along U.S. 165 shows traffic north of the Forsythe Avenue Extension at 1.01; between the Forsythe Avenue Extension and U.S. 80 at 0.82; and U.S. 165 south of U.S. 80 at 1.31. The existing v/c ratios along U.S. 165 between the Forsythe Avenue Extension and U.S. 80 show moderate to serious levels of congestion. The existing v/c ratios along U.S. 80 are shown on Table 1-2.

U.S. 80 v/c ratio 2010 projections demonstrated an increase in roadway congestion over time. The v/c ratio on U.S. 80 east of Kansas Lane is estimated at 0.91 in 2010 and 1.29 in 2030 for both the No-Build and Build scenarios. The v/c ratio on U.S. 80 between Kansas Lane and U.S. 165 is estimated at 1.08 for the No-Build scenario and 0.84 for the Build scenario in 2010, while 1.49 for the No-Build scenario and 1.14 for the Build scenario are estimated for design year 2030. The v/c ratio for the U.S. 80 section west of U.S. 165 is projected at 0.92 in 2010 and 1.30 in design year 2030 for both the No-Build and Build scenarios. The existing v/c ratios along U.S. 80 are shown on Table 1-2.

U.S. 165 v/c ratio projections for 2010 illustrate increasingly serious levels of congestion. The 2010 v/c ratio has been projected at 1.34 for the section north of the Forsythe Avenue Extension for both the Build and No-Build scenarios, 1.17 for the No-Build scenario and 0.84 for the Build scenario between the Forsythe Avenue Extension and U.S. 80, and 2.26 for the No-Build scenario and 1.93 for the Build scenario south of U.S. 80. Projections for 2030 along these same roadway sections were estimated at 1.86 north of the Forsythe Avenue Extension for both the Build scenario between the Forsythe Avenue Extension, 1.62 for the No-Build scenario and 0.84 for the Build scenario between the Forsythe Avenue Extension and U.S. 80, and 3.13 for the No-Build scenario and 2.35 for the Build scenario south of U.S. 80. These v/c ratios illustrate a consistent increase in traffic congestion levels, particularly those resulting from the No-Build scenario. Construction of the Kansas Lane Connector will help to lower congestion levels along U.S. 165. The existing v/c ratios along U.S. 165 are shown on Table 1-2.

Final Environmental Impact Statement

Chapter 1 – Purpose and Need for the Proposed Action

During the past 10 to 20 years, the City of West Monroe experienced the larger share of residential development for the Monroe-West Monroe Metropolitan Area. Consequently, the bridges across the Ouachita River on U.S. 80 became congested and trip times from the City of West Monroe to employment centers in the City of Monroe increased dramatically. In recent years, the residential development trend has shifted to undeveloped land west of the City of Monroe. This development shift coupled with increasing commercial developments north of the City of Monroe on U.S. 165 have lead to an increased demand on the U.S. 80/165 corridor intersection. The majority of the traffic making its way from the new residential developments to the growing employment to the north will be on I-20, U.S. 80, and LA 594 (Millhaven Road). All three highways converge on the U.S. 165 corridor, aggravating an already congested situation. In the case of north to south travel, new and existing residential development off U.S. 165 and the Forsythe Avenue Extension north and west of the project study area is currently using U.S. 165 to access the growing commercial developments along Millhaven Road near the Pecanland Mall and south of I-20 along the access road. As these areas continue to develop, greater demand will be placed upon the U.S. 165 and 80 corridors.

The existing Kansas Lane runs north from Millhaven Road to U.S. 80 east of U.S. 165. When tied with Garrett Road, Kansas Lane will connect with I-20 and LA 15 to the south.

Under the 1990 TranPlan model's No-Build scenario for 2010, U.S. 80 east of Kansas Lane and the existing Kansas Lane are projected to carry up to 21,100 vehicles per day (vpd) and 11,300 vpd, respectively. Counts taken in late 2001 for the same areas show 24,535 vpd and 13,470 vpd. The differences between the 1990 model projections and the 2001 actual traffic counts demonstrate that traffic volumes within the study area for 2001 already exceed those projected by the 1990 model for the year 2010. Based on the actual 2001 traffic counts for the existing Kansas Lane and U.S. 80, traffic growth rates are projected to be double those anticipated for Kansas Lane and three times higher than the projections for U.S. 80 in 2010.

Table 1-3 shows the existing and future average daily traffic (ADT) for segments along U.S. 165, U.S. 80, the Forsythe Avenue Extension, and the existing Kansas Lane within the project study area for the Build and No-Build scenarios. Figures 1-2 through 1-4 illustrate daily traffic volumes for 2001, 2010, and 2030, respectively, for these same major roadways within the project study area.







cts\kansas-In\plotfiles\Chapter 1\Fig 1-3 2010 Daily Traffic Volumes





**Kansas Lane Connector** Ouachita Parish, Monroe, LA

cts\kansas-In\plotfiles\Chapter 1\Fig 1-4 2030 Daily Traffic Volumes.pdf



Final Environmental Impact Statement

Chapter 1 – Purpose and Need for the Proposed Action

Scenarios.					
	2001	2010		2030	
Location		No-Build	Build	No-Build	Build
US 165					
North of Forsythe Avenue Extension	35,225	47,	020	65,0	)80
Between Forsythe Avenue and US 80	28,000	40,960	29,400	56,700	29,400
South of US 80	46,000	79,230	67,670	109,670	82,370
US 80					
East of Kansas Lane	24,535	32,020 44,3		320	
Between Kansas Lane and US 165	26,325	37,730	29,400	52,220	39,760
West of US 165	24,710	0 32,250		44,6	530
Kansas Lane (existing)	13,470	23,470	35,030	32,480	59,780
Forsythe Avenue Extension	16,890	19,290 26,70		700	

# Table 1-3. Existing and Future Average Daily Traffic for the No-Build and the Build Scenarios.

The proposed improvements to the Kansas Lane Connector are projected to cause an increase in traffic to the existing Kansas Lane in the year 2010 and 2030 under the build scenarios. The reason for this projected increase in traffic on the existing Kansas Lane is that the existing Kansas Lane is currently an underutilized roadway. The construction of the Kansas Lane Connector would provide a more direct route to the areas in northwestern Monroe from the existing Kansas Lane, so it is predicted that motorists would travel the existing section of Kansas Lane more frequently than at the present time.

### 1.7 Social Demand and Economic Development

Ouachita Parish experienced modest population growth between 1990 and 2000 and is expected to experience continued modest growth through 2005. According to the U.S. Census Bureau (Census), the population of Ouachita Parish increased by 4 percent between 1990 and 2000 to 147,250 and was estimated to have grown to 147,898 in 2003.

Recent commercial office, retail, and industrial development south of the study area and office development to the north along U.S. 165 have caused much of the unanticipated growth in traffic within the project study area. These developments include the Monroe Air Industrial Park, Pecanland Mall, and CenturyTel.

The Monroe Air Industrial Park located to the south of the study area has 610 acres of land for industrial development. Businesses located within the industrial park include Allied Building Stores, Chase Manhattan Mortgage Corporation, Luv'n Care, and Armin Plastics (a Tyco International Ltd. company).

Final Environmental Impact Statement

Chapter 1 – Purpose and Need for the Proposed Action

The Pecanland Mall is located slightly less than 3 miles south of the study area on Millhaven Road. The existing Kansas Lane connects to the Mall entrance. The Mall has a total gross leaseable area of 923,861 square feet and includes six department stores and 95 mall stores. The Mall attracts over 10 million shoppers annually. Employment at the Mall varies between 2,000 and 3,000 employees depending on the season of the year.

CenturyTel is located 4 miles north of the project study area on U.S. 165. The company headquarters employs approximately 1,000 people. The corporate campus currently consists of 365,000 square feet of office space. CenturyTel provides telephone and wireless service to underserved rural areas. It is the eighth largest local exchange company and eighth largest wireless phone company in the United States.

In addition, ULM, a major traffic generator, is located within the project study area with entrances off U.S. 80 and U.S. 165. Of approximately 9,000 students currently enrolled, only 1,600 live on campus. The university has approximately 1,100 faculty and staff. Over the past 40 years, the university's enrollment has varied from 7,000 to 11,000. The university is currently undergoing a transition from open to selective admissions. Typically, universities that go through this type of transition experience a slight enrollment dip followed by an enrollment rebound. Most traffic destined for ULM proceeds northbound on U.S. 165, exits onto U.S. 80, and enters the campus by turning left onto University Avenue, Bayou Drive, or Stadium Drive. Other traffic enters the campus with right turns onto these same roadways traveling westbound on U.S. 80. More parking spaces are available east of the Bayou than on the west. In addition, all athletic events are held east of the Bayou. The proposed Kansas Lane Connector would provide an alternate route for traffic destined for the east side parking areas and athletic events.

### 1.8 Modal Relationships

### 1.8.1 Fixed Route Bus Service

Transit service within the study area is owned by the City of Monroe and operated by ATE Management and Services. It is the only public bus transit service in the Monroe Metropolitan Area. Sixteen buses operate on 15 routes during peak hours (except Sundays and holidays) within the city limits. The elderly and handicapped are served by a fixed-route system that is to be expanded using paratransit services.

## 1.8.2 Monroe Regional Airport

The Monroe Regional Airport is located less than 3 miles from the study area. The airport is owned and operated by the City of Monroe. The Monroe Regional Airport provides commercial airline, cargo, and charter services for the region. Three commercial airlines, Delta, Northwest Airlink, and Continental Express, serve the Monroe Regional Airport with 15 flights daily to eight domestic cities. Plans to build a new terminal at the airport have been advanced by securing \$10 million in state funds on October 21, 2004. The

Final Environmental Impact Statement

Chapter 1 – Purpose and Need for the Proposed Action

airport's master plan, which was completed in 2003, will provide a guide to the new terminal.

### 1.8.3 Rail Service

Three rail companies, Union Pacific, Arkansas-Louisiana-Mississippi, and Kansas City Southern, operate within the region. However, only the Arkansas-Louisiana-Mississippi operates within the study area, with at-grade rail line crossings at both Old Sterlington Road and U.S. 165.

### 1.9 Statement of Project Purpose and Need

The purpose of the Kansas Lane Connector is to help alleviate congestion along U.S. 165 and 80 and improve area-wide mobility and safety. The need for the project is demonstrated by the region's increasing travel demand. The Kansas Lane Connector will provide a facility between the residential and commercial areas developing in northwestern Monroe along U.S. 165 and the residential, commercial office, retail, and industrial development in eastern and southeastern Monroe. The Kansas Lane Connector will offer an alternate route between these rapidly growing areas that is more direct and bypasses the intersection of U.S. 80 and 165.

### 1.10 NEPA and 404/10 Merged Process on the Purpose and Need

Previously, NEPA documentation for transportation projects was developed independently from Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act permit process. In some cases, the NEPA documentation was an insufficient analysis of practicable alternatives under Section 404(b)(1) guidelines. To avoid this scenario, in September 1996, FHWA, U.S. Army Corps of Engineers (USACE), U.S. Environmental Protection Agency (USEPA), U.S. Fish and Wildlife Service (USFWS), and National Marine Fisheries Service (NMFS) developed the Federal Highway Administration, Region 6, Interagency NEPA and 404/10 Concurrent Process Agreement for Transportation Projects (NEPA/404 Merger Agreement), which merged the NEPA project development and the Section 404 permit process. The project development and environmental process used to develop this Final Environmental Impact Statement (FEIS) for the Kansas Lane Connector was done in accordance with this NEPA/404 Merger Agreement. The merged process includes the participation and concurrence of USACE and USFWS at three key milestones in the development of the project. These milestones include: 1) The development of the purpose and need statement; 2) The alternatives development and screening process; and 3) The selection of the Preferred Alternative. Throughout this process, the NEPA requirements of FHWA and USACE are satisfied with a goal of not having to revisit issues at the Section 404 application stage. This NEPA/404 merged process helps to streamline and makes the project development process more efficient. A copy of the Kansas Lane Connector EIS Purpose and Need Statement (Purpose and Need; ARCADIS 2002) was sent to USACE and USFWS on February 15, 2002. The agencies were asked to review it and to provide their comments

Final Environmental Impact Statement

Chapter 1 – Purpose and Need for the Proposed Action

and concurrence on the project's purpose and need. In addition, FHWA, LDOTD, and their Consultants held a meeting with the agencies on March 7, 2002, to discuss the project's purpose and need and to present the Preliminary Build Alternatives. The USACE was represented at that meeting and provided comments on the purpose and need. Based on USACE's comments, the purpose and need document was modified slightly and the modification was provided to USACE and USFWS. In letters dated March 5 and March 20, 2002, USFWS and USACE, respectively, provided concurrence on the project purpose and need. Copies of these letters are included in Appendix A-2.

Final Environmental Impact Statement

Chapter 2 – Alternatives

## 2. ALTERNATIVES

### 2.1 Introduction

In accordance with NEPA and FHWA regulations and guidance, project planners and design engineers developed and evaluated a full range of reasonable alternatives for meeting the purpose and need of the proposed Kansas Lane Connector. The alternatives evaluated include the No-Build Alternative, the Transportation System Management (TSM) Alternative, the Mass Transit Alternative, and Build Alternatives. The Build Alternatives that were studied in detail and which are evaluated in Chapter 4 of this FEIS were selected from the Preliminary Build Alternatives that were initially developed and evaluated in the *Build Alternatives Development and Screening-Final Report (Alternatives Report;* ARCADIS 2002) and based on comments and suggestions from public officials, USFWS, and USACE.

### 2.2 No-Build Alternative

NEPA requires that the consequences of taking no action are given consideration in an EIS for a proposed Federal action. The No-Build Alternative provides a baseline condition for comparing the impacts of the study alternatives and is the projected future condition that would exist if the proposed project were not constructed. Under the No-Build Alternative, the current congested conditions in the study area would increase and projected traffic volumes would result in a lower level of service in the future.

As discussed in Chapter 1 of this document, the No-Build Alternative v/c ratios and LOS analyses showed increased congestion on U.S. 80 and U.S. 165 in the future. In the year 2010 for the No-Build scenario, the predicted LOS for U.S. 165 and U.S. 80 between Kansas Lane and U.S. 165 is "F." In 2030, predicted LOS for these same segments is also "F" as well as for the entire length of U.S. 80 from east of Kansas Lane to west of U.S. 165. Average daily traffic for the No-Build Alternative demonstrates similar congestion in 2010 and 2030. Traffic volumes are predicted to increase from 28,000 to 40,960 in 2010 and to 56,700 in 2030 along U.S. 165 between the Forsythe Avenue Extension and U.S. 80. Traffic volumes are predicted to increase from 26,325 to 37,730 in 2010 and to 52,220 in 2030 along U.S. 80 between U.S. 165 and Kansas Lane.

In addition to increased congestion along these routes, the No-Build Alternative is inconsistent with the transportation goals outlined in the *Transportation Plan*, which provides recommendations on meeting the area's long-range transportation needs based on projected future traffic conditions. Although the No-Build Alternative would avoid impacts associated with constructing a new roadway or improving an existing roadway, it would not address the current or projected north-south transportation challenges within the study area.

Final Environmental Impact Statement

Chapter 2 – Alternatives

### 2.3 Transportation System Management

The TSM Alternative would include strategies for maximizing the efficiency and effectiveness of existing transportation facilities. TSM improvements are generally low cost, effective measures that improve traffic flow by making better use of the existing transportation system. TSM strategies can involve new construction as well as operational and institutional improvements. They can include improvements to intersections such as constructing turn lanes, widening shoulders, timing traffic signals to coincide with travel demand fluctuations, improving signage to manage traffic movement, channelization, parking management, and turn restrictions. Other types of TSM measures involve attempts to reduce the number of vehicles by encouraging the use of public transportation, employee carpooling programs, flexible work hours, and the development of park-and-ride lots.

Currently, there are some TSM projects planned, programmed, or under construction within the study area designed to help ease the congestion problems and improve mobility along U.S. 80 and U.S. 165. The TSM strategies currently being implemented include the addition of turn lanes on U.S. 80 at Kansas Lane and the installation of a computerized traffic signal system on U.S. 165 at 18 intersections from Old Sterlington Road to LA 15. Even with the construction of these TSM projects, U.S. 80 and U.S. 165 will continue to be heavily congested. Furthermore, these TSM improvements do not provide a direct link between the existing Kansas Lane and the Forsythe Avenue Extension, nor do they provide an alternate route to U.S. 80 and U.S. 165 when traveling from northwestern to southeastern Monroe.

Generally, TSM actions alone do not resolve problems associated with high traffic volumes. They are most effective when incorporated with other construction projects and land use policies that meet community goals. TSM actions alone would not meet the purpose and need of the proposed project. Therefore, TSM was eliminated from further consideration as a viable alternative to the proposed project.

### 2.4 Mass Transit

Transit service within the study area is owned by the City of Monroe and operated by ATE Management and Services. Transit service is currently limited within the study area. The only bus route (Route 15) within the study area runs along Stadium Drive to a portion of Bon Aire Drive, north to Old Sterlington Road, and south on U.S. 165, continuing west outside the study area along Deborah Drive.

The decision to expand transit service within the Monroe Metropolitan Area is determined by the cost of implementing additional service areas and times versus increased ridership and benefits received from that expansion. Transit service expansion costs are based on density and land use patterns that would support the provision of efficient transit service. The *Transportation Plan* recognized that service expansion would not be feasible if existing density and development patterns continued in the

Final Environmental Impact Statement

Chapter 2 – Alternatives

MPO's planning area. Thus, the *Transportation Plan* concluded that the cost of transit service expansion outweighed the benefits under the projected land use scenario and did not recommend substantial expansion of the existing transit service. The *Transportation Plan* recommends studying other transit service options including a demand response system, employee commuting vanpools, and the formation of a Transit Authority that could serve the urbanized area. Although the implementation of these recommendations may increase mobility for a small percentage of the area's population, the current or planned transit system will not accommodate the projected long-range transportation demands of the Monroe Metropolitan Area. Therefore, the Mass Transit Alternative does not meet the purpose and need of the Kansas Lane Connector and was dropped from further consideration as a viable alternative to the proposed project.

### 2.5 Build Alternatives

As required by NEPA and FHWA regulations and guidance, a full range of Build Alternatives were developed and evaluated within the study area. In developing Preliminary Build Alternatives, project planners and design engineers evaluated Build Alternatives that met the purpose and need of the project that was discussed in Chapter 1, the engineering design criteria established by LDOTD, and alternatives that minimized impacts to the human and natural environment.

### 2.5.1 Roadway Design Criteria

The roadway would be designed as an urban arterial. The roadway design criteria established by LDOTD for the Kansas Lane Connector project is listed on Table 2-1. These criteria were used in the development of the Preliminary Build Alternatives and the Build Alternatives that were studied in detail.

Design Factors	<b>Recommended Standards</b>
Design Speed	45 mph
Design Hourly Volume	N/A
Level of Service	C <sup>1</sup>
Number of Travel Lanes	2 (Minimum) to 4 (Typical)
Width of Travel Lanes	12 ft
Width of Parking Lanes (Where Used)	10 ft to 12 ft
Width of Shoulders (Where Used	
(A) Outside	N/A
(B) Median	N/A
Type of Shoulders	N/A
Width of Median	
(A) Depressed	N/A

Table 2-1. Kansas Lane Connector Roadway Design Criteria – Urban Arterial 2 (UA-2).

Final Environmental Impact Statement

Chapter 2 – Alternatives

Design Factors	<b>Recommended Standards</b>
(B) Raised	4 ft to 30 ft
(C) Two Way Left Turn Lanes	11 ft to 14 ft
Width of Sidewalk (Where Used) (Offset from Curb)	4 ft
Width of Sidewalk (Where Used) (Adjacent to Curb)	6 ft
Fore Slope-Ratio	3:1 to 4:1
Back Slope-Ratio	3:1
Pavement Cross Slope <sup>2</sup>	0.025 ft per ft
Stopping Sight Distance <sup>3</sup>	325 ft to 400 ft
Maximum Super Elevation	0.04 ft per ft
Maximum Horizontal Curve (W/O Super Elevation) (+.025) <sup>4</sup>	N/A
Maximum Horizontal Curve (W/O Super Elevation) (025) <sup>4</sup>	N/A
Minimum Horizontal Curve (With Super Elevation) <sup>4</sup>	7 degrees 30 minutes
Maximum Grade	6%
Minimum Vertical Clearance <sup>5</sup>	16 ft
Minimum Horizontal Clearance	
(A) From Edge of Travel Lane	N/A
(B) Outside (From Back of Curb)	6 ft to 15 ft
(C) Median (Where Used) (From Back of Curb)	4 ft to 15 ft
Minimum Width of Right of Way <sup>6,7</sup>	
(A) From Centerline	N/A
(B) From Edge of Travel Way	8 ft to 17 ft
Bridge Design Load	HS-20
Width of Bridge (Minimum) (Face to Face Bridge Rail)	Roadway plus 8 ft <sup>8</sup>
Bridge End Treatment Reg. At Bridges	Yes

NOTES

<sup>1</sup> Level of Service D permissible in heavily developed areas.
 <sup>2</sup> 2% permissible for rehabilitation projects.

<sup>3</sup> Minimum values shown are permissible for rehabilitation projects. Maximum values shown are to be used where conditions permit.

<sup>4</sup> It may be necessary to flatten the degree of the curve and/or increase the shoulder width (12' maximum) to provide adequate stopping sight distance on structure. <sup>5</sup> 6" additional to allow for future surfacing.

<sup>6</sup> Minimum required for new location and as needed for existing alignment.

<sup>7</sup> Obtain additional right of way for future lanes where justified.

<sup>8</sup> For approach roadways without curb, use shoulder width 6 ft sidewalk behind curb to be carried across bridge when justified by pedestrian traffic.

Final Environmental Impact Statement

Chapter 2 – Alternatives

The Kansas Lane Connector will be developed with partial control of access. Access to the proposed Kansas Lane Connector will be permitted in developed areas near the northern and southern terminus and on a relatively small section on the west side of the alignment near the ULM campus; however, access will not be allowed through designated regulated wetlands. Therefore, the majority of the project would be designed as a four-lane control of access facility with two 12-foot travel lanes in each direction and 10-foot shoulders on either side of the roadway. In addition, 2-foot curb and gutters would also be provided, where required. Typical cross sections for a four-lane roadway with shoulders and with curb and gutter are shown on Figure 2-1. The project would include a bridge over Bayou Desiard and any other areas necessary to avoid impacts to wetlands and floodplains. The typical bridge cross section would be four lanes with two 12-foot travel lanes in each direction, a 10-foot median, and 4-foot shoulders on each side of the bridge. The typical cross section for a four-lane bridge is shown on Figure 2-2. In order to minimize impacts to wetlands and to limit future development in undeveloped areas of the study area, the design would include a five-lane section only in areas necessary to serve existing development. Where five-lane sections are proposed, they would be designed with two 12-foot travel lanes in each direction, a 14-foot center turn lane, and 10-foot shoulders on either side of the roadway. In addition, 2-foot curb and gutters would be provided, where required. A typical five-lane shoulder and curb and gutter section is shown on Figure 2-3. The proposed project would have a design and posted speed of 45 miles per hour (mph).

### 2.5.2 Preliminary Build Alternatives

Ten Preliminary Build Alternatives were developed for the proposed Kansas Lane Connector. Each of the Preliminary Build Alternatives is described below and the location of each is shown on Figure 2-4. Each Preliminary Build Alternative was based on a 300-foot wide corridor. Functional centerlines with an average estimated ROW width of 170 feet from the centerline of the corridor were established within each corridor for planning and environmental impact assessment purposes.

Alternative 1 (Segments A-B-C-D-P) is 3.31 miles long. It proceeds north from the intersection of U.S. 80 and Kansas Lane and crosses Bayou Desiard at a 47°<sup>1</sup> angle. It continues northwest between the Edgewater Gardens and Cypress Point neighborhoods and crosses Bon Aire Drive and bisects the uninhabited woodland. It curves west and crosses Old Sterlington Road and the Arkansas-Louisiana-Mississippi Railroad, passing

<sup>&</sup>lt;sup>1</sup> All angles are approximations that were calculated using preliminary engineering conceptual designs with the understanding that  $90^{\circ}$  is perpendicular to Bayou Desiard and  $0^{\circ}$  is parallel to Bayou Desiard.



-G OF PROPOSED BRIDGE 58 -10 66'-0" 4'-0" SHOULDER 2 TRAVEL LANES @ 12'-0" = 24'-0" 2 TRAVEL LANES @ 12'-0" = 24'-0" 4"-0" SHDULDER 10'-0" MEDIAN 7"-9" (TYP.) (TYP.) 7'-10 13/16" 7'-10 13/16" 26'-0 3/8" 26'-0 3/8" 69'-4 5/16"

> TYPICAL 4-LANE BRIDGE SECTION N.T.S.



Kansas Lane Connector Ouachita Parish, Monroe, LA





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u:\projects\kansas-In\plotfiles\chapter2\Fig 2-4 Preliminary Build Alternatives.pdf

Final Environmental Impact Statement

Chapter 2 – Alternatives

north of the Poly Processing business before ending at the intersection of U.S. 165 and the Forsythe Avenue Extension.

Alternative 2 (Segments A-B-C-Q-F-G-H-P) is 2.61 miles long. It proceeds north from the intersection of U.S. 80 and Kansas Lane. It crosses Bayou Desiard at a 47° angle and continues northwest between the Edgewater Gardens and Cypress Point neighborhoods, crossing and then paralleling Bon Aire Drive. It angles west to follow the southern boundary of uninhabited woodland and curves to pass on the northeast side of the Brentwood and Churchill Circle Apartment complexes. It crosses Old Sterlington Road and the Arkansas-Louisiana-Mississippi Railroad before ending at the intersection of U.S. 165 and the Forsythe Avenue Extension.

**Alternative 3** (Segments A-B-C-Q-I-J-P) is 2.60 miles long. It proceeds north from the intersection of U.S. 80 and Kansas Lane and crosses Bayou Desiard at a 47° angle. It continues northwest between the Edgewater Gardens and Cypress Point neighborhoods, crossing and then paralleling Bon Aire Drive and heading west along the southern boundary of uninhabited woodland. It turns north and follows Bon Aire Drive on the southwest side of the Brentwood and Churchill Circle Apartments before crossing Old Sterlington Road and the Arkansas-Louisiana-Mississippi Railroad. It passes north of the Poly Processing business before ending at the intersection of U.S. 165 and the Forsythe Avenue Extension.

Alternative 4 (Segments A-B-E-F-G-H-P) is 2.52 miles long. It proceeds north from the intersection of U.S. 80 and Kansas Lane and crosses Bayou Desiard at a 38° angle. It angles northwest through the Edgewater Gardens neighborhood and crosses Bon Aire Drive and then heads west along the southern boundary of uninhabited woodland. It curves north to pass on the northeast side of the Brentwood and Churchill Circle Apartments. It crosses Old Sterlington Road and the Arkansas-Louisiana-Mississippi Railroad and passes north of the Poly Processing business before ending at the intersection of U.S. 165 and the Forsythe Avenue Extension.

Alternative 5 (Segments A-B-E-I-J-P) is 2.51 miles long. It proceeds north from the intersection of U.S. 80 and Kansas Lane and crosses Bayou Desiard at a 38° angle. It angles northwest through the Edgewater Gardens neighborhood and across Bon Aire Drive. It heads along the southern boundary of uninhabited woodland before turning north to follow Bon Aire Drive on the southwest side of the Brentwood and Churchill Circle Apartments. It crosses Old Sterlington Road and the Arkansas-Louisiana-Mississippi Railroad and passes north of the Poly Processing business before ending at the intersection of U.S. 165 and the Forsythe Avenue Extension.

**Alternative 6** (Segments A-K-L-H-P) is 2.37 miles long. It proceeds north from the intersection of U.S. 80 and Kansas Lane for approximately 200 feet before heading northwest through the Ingleside neighborhood. It crosses Bayou Desiard at a 76° angle and continues northwest through the Edgewater Gardens neighborhood and bisects the uninhabited woodland. It crosses Old Sterlington Road and the Arkansas-Louisiana-

Final Environmental Impact Statement

Chapter 2 – Alternatives

Mississippi Railroad and passes north of the Poly Processing business before ending at the intersection of U.S. 165 and the Forsythe Avenue Extension.

**Alternative 7** (Segments A-K-M-N-G-H-P) is 2.45 miles long. It proceeds north from the intersection of U.S. 80 and Kansas Lane for approximately 200 feet before heading northwest through the Ingleside and Fennell Street neighborhoods. It crosses Bayou Desiard at an 82° angle and proceeds northwest through the Edgewater Gardens neighborhood and south of the uninhabited woodland, just north of the ULM Baseball Fields. It then curves to pass on the northeast side of the Brentwood and Churchill Circle Apartment complexes. It crosses Old Sterlington Road and the Arkansas-Louisiana-Mississippi Railroad and passes north of the Poly Processing business before ending at the intersection of U.S. 165 and the Forsythe Avenue Extension.

**Alternative 8** (Segments A-K-M-O-J-P) is 2.40 miles long. It proceeds north from the intersection of U.S. 80 and Kansas Lane for approximately 200 feet before heading northwest through the Ingleside and Fennell Street neighborhoods and crossing Bayou Desiard at an 82° angle. It continues through the Edgewater Gardens neighborhood and south of the uninhabited woodland before curving north. It passes on the southwest side of the Brentwood and Churchill Circle Apartments, crossing Old Sterlington Road and the Arkansas-Louisiana-Mississippi Railroad and passing north of the Poly Processing business before ending at the intersection of U.S. 165 and Forsythe Avenue Extension.

**Alternative 9** (Segments A-B-C-Q-R-O-J-P) is 2.95 miles long. It proceeds north from the intersection of Kansas Lane and U.S. 80 and across Bayou Desiard at a 47° angle. It continues northwest between the Edgewater Gardens and Cypress Point neighborhoods and across Bon Aire Drive before looping around the uninhabited woodland just north of the ULM Baseball Fields, before heading northwest along existing Bon Aire Drive on the southwest side of the Brentwood and Churchill Circle Apartments. It crosses Old Sterlington Road and the Arkansas-Louisiana-Mississippi Railroad and passes north of the Poly Processing business before ending at the intersection of U.S. 165 and the Forsythe Avenue Extension.

**Alternative 10** (Segments A-B-C-Q-R-N-G-H-P) is 2.99 miles long. It proceeds north from the intersection of U.S. 80 and Kansas Lane and across Bayou Desiard. It continues northwest between the Edgewater Gardens and Cypress Point neighborhoods and crosses Bon Aire Drive at a 47° angle before looping around the uninhabited woodland just north of the ULM Baseball Fields and heading north passing on the northeast side of the Brentwood and Churchill Circle Apartments. It crosses Old Sterlington Road and the Arkansas-Louisiana-Mississippi Railroad and passes north of the Poly Processing business before ending at the intersection of U.S. 165 and the Forsythe Avenue Extension.

To better consider environmental impacts, project planners developed a constraints map using Geographic Information Systems (GIS) that incorporated information collected from secondary data sources, including existing mapping and databases and a preliminary

Final Environmental Impact Statement

Chapter 2 – Alternatives

field reconnaissance. Environmental features that were mapped included existing development, public and community facilities, wetlands, endangered species, historic properties, potential hazardous materials sites, floodplains, and natural habitat. In developing and evaluating possible alternatives, project planners and design engineers made efforts to minimize impacts to the natural and human environment. The alternatives development and evaluation process that was used to develop and evaluate the Preliminary Alternatives is discussed in the *Alternatives Report*.

#### 2.5.3 Detailed Study Alternatives

Based on an evaluation of environmental impacts and input received from resource and regulatory agencies, public officials, and citizens, three Build Alternatives, the Northern, Central, and Southern Alternatives, were selected for detailed study in the DEIS. In addition to these alternatives, a combination of the Southern and Central Alternatives (Southern+Central Alternative), as suggested by the USACE and the USFWS, was evaluated. A combination of the Central and Northern Alternatives (Central+Northern Alternative), which was suggested by local officials prior to the public hearing, was also evaluated. The two new Build Alternatives were evaluated after the DEIS was approved and circulated.

All of the proposed Build Alternatives for detailed study follow the general alignment proposed for at least one of the Preliminary Build Alternatives. A preliminary line and grade with an average ROW width of 170 feet from the centerline of the corridor was developed within each corridor. In some locations, it was not geometrically possible to design the roadway 170 feet from the centerline of the corridor. Therefore, the roadway line and grade was developed in the best location within the corridor in order to minimize environmental impacts and to meet the roadway design criteria. All impacts discussed in Chapter 4 of this FEIS are based on the 170-foot ROW of the preliminary line and grade. The location of all Build Alternatives and the preliminary line and grade for each alternative are shown on Figure 2-5. In addition, a description of each alternative is included below.

The Northern Alternative, which is approximately 2.61 miles long, generally follows the corridor evaluated as Preliminary Build Alternative 2. In response to comments from USFWS, the corridor was widened where it passes the area of the uninhabited woodland, just north of the ULM campus. The Northern Alternative proceeds north from the intersection of U.S. 80 and Kansas Lane. It crosses Bayou Desiard at a 48° angle and continues northwest between the Edgewater Gardens and Cypress Point neighborhoods crossing and then paralleling Bon Aire Drive. It angles west to follow the southern boundary of uninhabited woodland and curves to pass on the northeast side of the Brentwood and Churchill Circle Apartment complexes. It crosses Old Sterlington Road and the Arkansas-Louisiana-Mississippi Railroad before ending at the intersection of U.S. 165 and the Forsythe Avenue Extension. The preliminary line and grade within the Northern Alternative corridor is generally located 170 feet from the centerline of the corridor.


Final Environmental Impact Statement

Chapter 2 – Alternatives

However, it was not geometrically possible to locate the line and grade within the centerline of the Northern Alternative corridor in the section that crosses the uninhabited woodland. Therefore, the line and grade through the uninhabited woodland was designed in the best location that would minimize impacts and meet the roadway design criteria. Based on Preliminary Line and Grade Studies for the Northern Alternative, it is estimated that 700 feet of the roadway would be elevated across Bayou Desiard and 9,500 feet would be on fill. The location of the line and grade is shown on Figure 2-6.

The Central Alternative, which is approximately 2.51 miles long, generally follows the corridor evaluated as Preliminary Build Alternative 3 with some minor alignment shifts based on public comments. In addition, the corridor was widened where it passes through the uninhabited woodland, just north of the ULM campus, in response to comments from USFWS. The Central Alternative proceeds north approximately 200 feet from the intersection of U.S. 80 and Kansas Lane. It turns northwest through the Ingleside neighborhood. It crosses Bayou Desiard at a 21° angle and goes through the Edgewater Gardens neighborhood, crossing the uninhabited woodland in the same location as the Northern Alternative and curves to pass on the southwest side of the Brentwood and Churchill Circle Apartment complexes. It crosses Old Sterlington Road and the Arkansas-Louisiana-Mississippi Railroad before ending at the intersection of U.S. 165 and the Forsythe Avenue Extension. The preliminary line and grade within the Central Alternative corridor is generally located 170 feet from the centerline of the corridor. However, it was not geometrically possible to locate the line and grade within the centerline of the Central Alternative corridor where it crosses the uninhabited woodland. Therefore, the line and grade through the uninhabited woodland was designed in the best location that minimized impacts and met the roadway design criteria. Based on Preliminary Line and Grade Studies for the Central Alternative, it is estimated that 1.100 feet of the roadway would be elevated across Bayou Desiard and 7.300 feet would be on fill. The location of the line and grade is shown on Figure 2-7.

The Southern Alternative, which is approximately 2.45 miles long, generally follows the corridor evaluated as Preliminary Build Alternative 7. It proceeds north from the intersection of U.S. 80 and Kansas Lane for approximately 200 feet before heading northwest through the Ingleside and Fennell Street neighborhoods. It crosses Bayou Desiard at a 90° angle and proceeds northwest through the Edgewater Gardens neighborhood and south of the uninhabited woodland just north of the ULM Baseball Fields. The corridor widens slightly in this location. It then curves to pass on the northeast side of the Brentwood and Churchill Circle Apartment complexes. It crosses Old Sterlington Road and the Arkansas-Louisiana-Mississippi Railroad and passes north of the Poly Processing business before ending at the intersection of U.S. 165 and the Forsythe Avenue Extension. The preliminary line and grade within the Southern Alternative corridor is generally located 170 feet from the centerline of the corridor. Based on Preliminary Line and Grade Studies for the Southern Alternative, it is estimated that 500 feet of the roadway would be elevated across Bayou Desiard and 9,800 feet would be on fill. The location of the line and grade is shown on Figure 2-8.





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napter 2\Fig 2-7 Central Alternative.pdf



2\Fig 2-8 Southern Alternative.pdf

Final Environmental Impact Statement

Chapter 2 – Alternatives

The Central+Northern Alternative, which is approximately 2.53 miles long, is a combination of the Central and Northern Alternatives described above. This Build Alternative was developed and evaluated after approval and circulation of the DEIS based on suggestions by local officials. The Central+Northern Alternative proceeds northward approximately 200 feet from the southern terminus at the intersection of U.S. 80 and Kansas Lane. It turns northwest through the Ingleside neighborhood. It crosses Bayou Desiard at a 21° angle and goes through the Edgewater Gardens neighborhood, crossing the uninhabited woodland where it merges with the Northern Alternative paralleling Bon Aire Drive. It angles west to follow the southern boundary of uninhabited woodland and curves to pass on the northeast side of the Brentwood and Churchill Circle Apartment complexes. It crosses Old Sterlington Road and the Arkansas-Louisiana-Mississippi Railroad before ending at the intersection of U.S. 165 and the Forsythe Avenue Extension. Like the Central Alternative, Preliminary Line and Grade Studies estimate that 1,100 feet of the roadway would be elevated across Bayou Desiard and 9,700 feet would be constructed on fill. The location of the line and grade is shown on Figure 2-9.

The Southern+Central Alternative, which is approximately 2.43 miles long, is a combination of the Southern and Central Alternatives described above. This alternative was evaluated based on comments received from the USACE and the USFWS following the approval and circulation of the DEIS. The Southern+Central Alternative proceeds north from the intersection of U.S. 80 and Kansas Lane for approximately 200 feet before heading northwest through the Ingleside and Fennell Street neighborhoods. It crosses Bayou Desiard at a 90° angle and proceeds northwest through the Edgewater Gardens neighborhood and south of the uninhabited woodland just north of the ULM Baseball Fields. The Southern Alternative links with the Central Alternative just northeast of the God's House Church. The alignment then follows the Central Alternative, which passes on the southwest side of the Brentwood and Churchill Circle Apartment complexes. The Southern+Central Alternative then crosses Old Sterlington Road and the Arkansas-Louisiana-Mississippi Railroad before ending at the intersection of U.S. 165 and the Forsythe Avenue Extension. Like the Southern Alternative, Preliminary Line and Grade Studies estimate that 500 feet of the roadway would be elevated across Bayou Desiard and 6,800 feet would be constructed on fill. The location of the line and grade is shown on Figure 2-10.

The Northern, Central, Central+Northern, Southern+Central, and Southern Alternatives were recommended for detailed study in the FEIS because they met the project purpose and need, were preferred by the agencies, public officials, and citizens, and would have minimal impacts to both the natural and human environment as compared to the other alternatives evaluated in the *Alternatives Report* that were dropped from further consideration.









Final Environmental Impact Statement

Chapter 2 – Alternatives

#### 2.6 Cost Estimates for the Detailed Study Alternatives

Cost estimates were developed for the five alternatives studied in detail. These cost estimates, which include ROW, construction, and total costs for each alternative, are included on Table 2-2. The estimates indicate that the Southern Alternative would have the lowest cost at approximately \$16,028,000. The Preferred Alternative would have the second costliest construction estimate at \$16,349,000. The most expensive construction cost estimate would be the Central Alternative at \$18,380,000. Table 2-2 also includes how much of the roadway was assumed to be on fill and how much was assumed to be elevated based on Preliminary Line and Grade Studies. The design estimates on Table 2-2 assume that the bridge crossings at Bayou Desiard would be the only elevated spans along the alignments.

101	Dunu Anernany	C3.			
	Northern (Preferred) Alternative	Central Alternative	Southern Alternative	Central+ Northern Alternative	Southern+ Central Alternative
Estimated	¢12.860.000	¢15 228 000	¢12.470.000	¢14.960.000	¢12.862.000
Costs	\$13,869,000	\$15,228,000	\$12,470,000	\$14,809,000	\$12,863,000
Estimated Right-of-Way Costs	\$2,480,000	\$3,152,000	\$3,558,000	\$3,050,000	\$4,474,000
Estimated Total Costs	\$16,349,000	\$18,380,000	\$16,028,000	\$17,919,000	\$17,337,000
Estimated Elevated	700 feet	1,100 feet	500 feet	1,100 feet	500 feet
Estimated Length of fill	9,500 feet	7,300 feet	9,800 feet	9,700 feet	6,800 feet
Estimated Quantity of Fill	159,000 cubic yards	103,000 cubic yards	150,000 cubic yards	157,000 cubic yards	86,000 cubic vards

 Table 2-2.
 Kansas Lane Connector Estimated Construction Costs and Design Assumptions for Build Alternatives.

#### 2.7 Evaluation of Impacts

A comparative impact matrix (presented in the Executive Summary) was developed to summarize the likely impacts from each of the five Build Alternatives. Impacts to land use, prime farmland, socioeconomics, aesthetic and visual quality, physical resources, natural resources, cultural resources, hazardous materials, and utility crossing were considered. The table consists of both qualitative and quantitative criteria. For the qualitative criteria, the categories are no impacts, minimal impacts, moderate impacts, and severe impacts. Quantitative criteria are a combination of measurements from aerial photography, mapped resources, and field data.

Final Environmental Impact Statement

Chapter 2 – Alternatives

#### 2.8 Build Alternatives Analysis

The comparative impact matrix (presented in the Executive Summary) was evaluated and the advantages and disadvantages of each Build Alternative were studied.

The advantages and disadvantages of each Build Alternative are presented in Table 2-3.

Advantages	Disadvantages		
§ Lowest ROW acquisition cost (\$2,480,000)	§ Requires greatest volume of fill (159,000 cubic yards)		
§ Fewest single-family home relocations (8)	8 Imposts most protocted species potential habitat		
§ Fewest total residential relocations (32)	(32.4 acres)		
§ Fewest disruptions to existing utilities	§ Impacts the greatest acreage of undeveloped land (24.5 acres)		
§ No impacts to cemetery			
§ No impact to archaeological sites	§ Impacts the most floodplain acreage (28.3 acres)		
§ Minimal impacts to community cohesion	S Moderate impacts to plant species, terrestrial wildlife, water quality, wetland vegetation, and be below.		
§ Smallest amount of developed land taken	nydrology		
Central Alternative			
Advantages	Disadvantages		
<ul> <li>§ Minimal impacts to plant species, terrestrial wildlife, water quality, wetland vegetation, and hydrology</li> <li>§ Utilizes the smallest amount of undeveloped land</li> </ul>	<ul> <li>§ Greatest overall cost (\$18,380,000)</li> <li>§ Along with Central+Northern Alternative, largest bridge expanse over Bayou Desiard (1,100 feet)</li> <li>§ Indirect impacts to church</li> <li>§ Impacts cemetery</li> <li>§ Along with Southern+Central Alternative, may impact the most gas wells</li> <li>§ Impacts NRHP-eligible archaeological site</li> <li>§ Along with Southern+Central Alternative, may impact the most potential hazardous waste sites</li> <li>§ Heaviest public opposition - nearly 200 individuals expressed opposition including St. Matthews Congregation</li> </ul>		

 Table 2-3.
 Advantages and Disadvantages of Each Build Alternative.

Final Environmental Impact Statement

Chapter 2 – Alternatives

Southern Alternative	
Advantages	Disadvantages
<ul> <li>§ Lowest overall cost (\$16,028,000)</li> <li>§ Along with Southern+Central Alternative, shortest elevated bridge expanse across Bayou Desiard</li> <li>§ Along with Central+Northern Alternative, fewest gas mains crossed</li> </ul>	<ul> <li>§ Severe impacts to community cohesion south of Bayou Desiard</li> <li>§ Impacts most wetland acreage (16.4 acres)</li> <li>§ Impacts cemetery</li> <li>§ Impacts NRHP-eligible archaeological site</li> <li>§ Moderate impacts to plant species, terrestrial wildlife, water quality, wetland vegetation, and hydrology</li> <li>§ ULM opposes - could prohibit growth of campus</li> </ul>
Central+Northern Alternative	
Advantages	Disadvantages
<ul> <li>§ Second fewest single-family homes impacted (13) and total residential relocations (43)</li> <li>§ Supported by Representative Kay Kellogg- Katz, Monroe Chamber of Commerce, Ouachita Council of Governments, and Mayor Mayo.</li> </ul>	<ul> <li>§ Second largest total cost</li> <li>§ Along with Central Alternative, largest bridge expanse across Bayou Desiard</li> <li>§ Impacts cemetery</li> <li>§ Impacts NRHP-eligible archaeological site</li> </ul>

Final Environmental Impact Statement

Chapter 2 – Alternatives

Southern+Central Alternative	
Advantages	Disadvantages
<ul> <li>§ Along with Southern Alternative, least elevated expanse over Bayou Desiard (500 feet)</li> <li>§ Lowest volume of required fill (86,000 cubic yards)</li> <li>§ Least impact to floodplain acreage (19.6 acres)</li> <li>§ Fewest wetland acreage impacts (9.6 acres)</li> <li>§ Along with Southern Alternative, least impact to Bayou Desiard</li> <li>§ Minimal impacts to plant species, terrestrial wildlife, water quality, wetland vegetation, and hydrology</li> </ul>	<ul> <li>§ Greatest ROW acquisition costs (\$4,474,000)</li> <li>§ Severe community cohesion impacts</li> <li>§ Most single-family residential relocations (18)</li> <li>§ Most total residential relocations (58)</li> <li>§ One church directly taken</li> <li>§ Three fraternity houses taken</li> <li>§ Impacts the greatest number of utilities including electrical, sewer, and water mains</li> <li>§ Along with Central Alternative, impacts the greatest number of hazardous waste sites</li> <li>§ Impacts the greatest number of noise receivers (22)</li> <li>§ ULM opposes - could prohibit expansion of campus</li> <li>§ Impacts cemetery</li> </ul>
	§ Impacts NRHP-eligible archaeological site

#### 2.9 Selection of Preferred Alternative

#### 2.9.1 The Southern+Central Alternative

The Southern+Central Alternative is supported by the cooperating agencies; however, this alternative was not recommended as the Preferred Alternative for the following reasons:

- § ULM does not support the alternative because it may prohibit expansion of the university campus;
- § Severe community cohesion impacts;
- § Most single-family residential relocations (18);
- § Most total residential relocations (58);
- § Impacts the greatest number of noise receivers (22);

Final Environmental Impact Statement

Chapter 2 – Alternatives

- § One church taken;
- § Impacts a cemetery;
- § Three fraternity houses taken;
- § Impacts NRHP-eligible archaeological site;
- § Impacts the greatest number of utilities;
- § Impacts the greatest number of hazardous waste sites; and
- § Highest ROW acquisition costs (\$4,474,000).

ULM submitted a written comment stating that the university will not support the Southern Alternative because it could possibly inhibit expansion of the university (Appendix A-1). Additionally, this alternative would likely result in more direct impacts to university infrastructure and operations.

2.9.2 The Central+Northern Alternative

The Central+Northern Alternative was suggested by local officials; however, it was not recommended as the Preferred Alternative for the following reasons:

- § Has 13 single-family residential relocations vs. 8 on Northern Alternative;
- § Has 43 total residential relocations vs. 32 on Northern Alternative;
- § Impacts NRHP-eligible archaeological site;
- § Impacts a cemetery; and
- § Has the most impact on Bayou Desiard.
- 2.9.3 The Central Alternative

The Central Alternative was developed and evaluated based on public, environmental, and social impacts to fulfill the purpose and need of this project; however, this alternative was not recommended as the Preferred Alternative for the following reasons:

- § Greatest overall cost (\$18,380,000);
- § Along with Central+Northern Alternative, largest bridge expanse over Bayou Desiard (1,100 feet);

Final Environmental Impact Statement

Chapter 2 – Alternatives

- § Indirect impacts to church;
- § Impacts cemetery;
- § Along with Southern+Central Alternative, may impact the most gas wells;
- § Impacts NRHP-eligible archaeological site;
- § Along with Southern+Central Alternative, may impact the most potential hazardous waste sites; and
- § Heaviest public opposition nearly 200 individuals expressed opposition including St. Matthews Congregation.
- 2.9.4 The Southern Alternative

In developing and evaluating the Southern Alternative, project planners and design engineers made efforts to minimize impacts to the natural environment; however, this alternative was not recommended as the Preferred Alternative for the following reasons:

- § Severe impacts to community cohesion south of Bayou Desiard;
- § Impacts most wetland acreage (16.4 acres);
- § Impacts cemetery;
- § Impacts NRHP-eligible archaeological site;
- § Moderate impacts to plant species, terrestrial wildlife, water quality, wetland vegetation, and hydrology; and
- § ULM opposes could prohibit growth of campus.
- 2.9.5 The Northern Alternative

The Northern Alternative was evaluated as the alternative with the fewest impacts to the human and natural environment and was recommended as the Preferred Alternative. The Northern Alternative was recommended for the following reasons:

- § Only alternative with minimal impacts to community cohesion (other alternatives had moderate to severe impacts on community cohesion);
- § Fewest single-family home relocations (8);
- § Fewest total residential relocations (32);

Final Environmental Impact Statement

Chapter 2 – Alternatives

- § Fewest disruptions to existing utilities;
- § Only alternative that will not impact a portion of an NRHP-eligible archaeological site at a cemetery south of Bayou Desiard;
- § Lowest ROW acquisition cost (\$2,480,000);
- § Second lowest total cost (\$16,349,000); and
- § Not a substantial difference in wetland impacts (15.2 acres vs. 9.6 acres for the least impact, which is the Southern+Central Alternative).

Based on analysis of the five Build Alternatives, it is recommended that the Northern Alternative be selected as the Preferred Alternative. The Northern Alternative will cause the least overall impacts to community cohesion and requires the least residential relocations. Additionally, the Northern Alternative is the only alternative that will not impact an archaeological site at a cemetery located south of Bayou Desiard. The Northern Alternative is also expected to have the fewest impacts on utilities and the lowest Rightof-Way acquisition cost.

#### 2.10 Design Options Evaluated to Minimize Impacts

#### 2.10.1 Access Control

Recommendations regarding access control are based on the conceptual design shown on Figure 2-11. The Preferred Alternative would be designed with the following access controls as discussed with the LDOTD, FHWA, USACE, and USFWS:

- § The project would include a five-lane section with limited control of access from the southern terminus at U.S. 80 and Kansas Lane to approximately 500 feet north of Bon Aire Drive and Bay Oaks Drive;
- § A four-lane section with full control of access on both sides of the roadway from approximately 500 feet north of Bon Aire Drive and Bay Oaks Drive to the Arkansas-Louisiana-Mississippi Railroad crossing, with limited access control along this roadway segment on the southern side only for approximately 2,000 feet beginning at approximately 500 feet north of Bon Aire Drive (north of Bayou Desiard) to approximately 1,500 feet northeast of the ULM ballfield to allow access to residential properties along this section. Another section with limited access control is planned along this segment only for an approximately 1,100-foot section on the western side of the roadway near ULM to allow traffic to access the western side of the campus from the Kansas Lane Connector; and





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Final Environmental Impact Statement

Chapter 2 – Alternatives

§ A five-lane section with limited control of access on the both sides of the roadway from the Arkansas-Louisiana-Mississippi Railroad crossing to the northern terminus at U.S. 165.

#### 2.10.2 Elevation of Roadway Across Wetlands

A construction cost comparison between an elevated structure and at-grade roadway was conducted for the approximately 2,000-foot section of the Preferred Alternative that crosses wetlands just north of the ULM ballfield. Table 2-4 shows a comparison between construction costs for an at-grade roadway versus an elevated structure for this roadway section in question.

Construction Method	Unit	Unit Price	Length of Crossing	Total
Elevated Structure	Linear Foot	\$3,500	1,953	\$ 6,835,500
At-Grade Roadway	Linear Foot	\$1,140	1,953	\$ 2,226,420
Cost Differential				\$ 4,609,080
		Budgeted Project Cost		\$ 16,000,000
		Budget Increase		28.81%

Table 2-4.	Cost Comparison Between Elevated Structure and At-Grade Roadway Across the
	Wetland Area North of the ULM Ballfield for the Preferred Alternative.

Source: Denmon Engineering Company, Inc.

The substantial cost difference between building the 2,000-foot section over the wetland areas at-grade versus elevated represents approximately a 28 percent increase in the estimated costs for the project and would exceed the current project budget.

Due to the high construction costs of an elevated roadway, construction of the Preferred Alternative through the wetland area north of the ULM ballfield will be on embankment unless further wetland delineation studies conducted during the permitting process reveal the presence of high-quality wetlands. Hydrology of the area can be maintained with the use of box culverts built into the embankment.

In correspondence dated August 25, 2004, the USFWS recommended a modification of the "Segment R" alignment as an alternative to the construction of an elevated span across the wetland area north of the ULM ballfield. This recommendation was evaluated; however, it was determined that this configuration would not meet the purpose and need of the project due to the fact that a minimum 45 mile per hour speed limit could not be achieved with the suggested design.

Final Environmental Impact Statement

Chapter 2 – Alternatives

#### 2.10.3 Elevation of Roadway Over Railroad

The Preferred Alternative will cross the Arkansas-Louisiana-Mississippi Railroad before ending at the intersection of U.S. 165 and the Forsythe Avenue Extension. It is possible that the section of the Preferred Alternative that crosses the railroad will be constructed as an overpass. Cost estimates for construction and ROW acquisition are presented on Table 2-5.

 
 Table 2-5.
 Cost Estimation for Construction of Rail Grade Separation at Arkansas-Louisiana-Mississippi Railroad Crossing for the Preferred Alternative.

Cost Component	Unit	Unit Price	Area/Length Required	Total
Bridge Construction	Square Foot	\$55	40,800	\$2,244,000
Replacement of Original At-Grade Construction	Linear Foot	\$1,140	680	-\$775,000
<b>Total Construction Cost</b>	\$1,469,000			
Right-of-Way Acquisition	Acres	\$20,000	3	\$60,000
Additional Cost of Elevate	\$1,529,000			

Sources: Denmon Engineering Company, Inc. and ARCADIS G&M, Inc.

The difference between building an at-grade crossing versus an elevated structure at this location represents a difference of approximately \$1.5 million. The difference between building the railroad overpass represents an increase in the overall project budget of approximately 10 percent. LDOTD is considering purchasing the necessary ROW in anticipation of construction of a rail grade separation in the future when increased rail and automobile traffic warrant a grade separation.

#### 2.11 NEPA and 404/10 Merger Process on the Alternatives for Detailed Study

In accordance with the *NEPA/404 Merger Agreement*, LDOTD and FHWA consulted with USFWS and USACE on the alternatives development process and the selection of the three alternatives for detailed study in the DEIS. USACE and USFWS received copies of the *Alternatives Report* for their review and comment. In addition, a meeting was held at the Holiday Inn-Holidome in Monroe on March 7, 2002. Oral and written comments were received from these agencies and alternatives were evaluated and then modified to address agency concerns. A copy of a letter received from USACE on July 22, 2002, and copies of letters received from USFWS dated April 1, 2002, July 11, 2002, and September 4, 2002, are included in Appendix A-3. An agency meeting to discuss the alternatives recommended for detailed study was also held in Monroe on September 5, 2002. Both agencies verbally concurred in the selection of the Northern, Central, and Southern Alternatives for detailed study in the DEIS. A summary of this meeting is included in the *Kansas Lane Connector Agency Meeting, September 5, 2002, Summary Document* (ARCADIS 2002).

Final Environmental Impact Statement

Chapter 2 – Alternatives

Copies of the DEIS were sent to the USACE and the USFWS for review. Correspondence dated September 17, 2003, from the USACE and January 20, 2004, from the U.S. Department of the Interior (on behalf of the USFWS) recommended that a fourth alternative consisting of a combination of the Southern+Central Alternatives be studied. Copies of the agency correspondence and LDOTD responses on the DEIS are included in Appendix A-1. Based on these two agency's recommendations, the Southern+Central Alternative was evaluated as a Build Alternative.

Following a thorough analysis and evaluation of the Build Alternatives, a recommendation of the Northern Alternative as the Preferred Alternative was made and documented in the *Preferred Alternative Report* (ARCADIS 2004). Copies of the *Preferred Alternative Report* were sent to the USFWS and USACE for review. For reasons described in Section 2.8 of this report, the Southern+Central Alternative was not selected as the Preferred Alternative.

A site visit was conducted on September 18, 2004, with USFWS, FHWA, LDOTD, USACE, and FHWA personnel in an effort to determine the quality of the forested areas and existing hydrology of the area near the Preferred Alternative. Following the site visit, correspondence was received from the USACE dated September 7, 2004, giving concurrence to the Preferred Alternative with the understanding that further delineation studies would be conducted prior to finalizing the limited access locations and avoidance issues. Correspondence dated August 25, 2004, from the USFWS indicated that the USFWS would concur with the Preferred Alternative if the area over the wetlands were elevated in order to minimize impacts to area hydrology. The USFWS also requests that the access control described in Section 2.10.1 be adopted as "an integral feature on the Preferred Alignment".

Final Environmental Impact Statement

Chapter 3 – Affected Environment

### 3. AFFECTED ENVIRONMENT

This chapter provides a general description of the existing social, economic, and natural setting of the study area. The specific environmental consequences for each of the Build Alternatives identified in Chapter 2 will be evaluated in Chapter 4.

#### 3.1 Social Environment

The project study area is located in northeastern Louisiana, approximately 4 miles northeast of Monroe's CBD. It is in Ouachita Parish and partially within the Monroe City limits. The study area is approximately 2.96 square miles and includes residential areas, a large undeveloped area that consists mostly of forested wetlands, the ULM campus, and a portion of Bayou Desiard. Information from the surrounding area and region is included in this discussion to better characterize the affected social environment of the region.

#### 3.1.1 Population Characteristics

Population data obtained from the Census are presented on Table 3-1. The Census reported 142,191 residents in Ouachita Parish in 1990 and 147, 250 in 2000, a 4 percent growth rate. Figures 3-1 and 3-2 illustrate the 1990 and 2000 Census Tracts and Blocks used to calculate the population within the study area. The Census counted 5,841 residents in 1990 and 5,972 residents in 2000 living in the Census Blocks approximating the study area.

	19	90	2000		
	Study Area	Ouachita Parish	Study Area	Ouachita Parish	
Total Population	5,841	142,191	5,972	147,250	
White	71.4%	68.1%	50.9%	64.8%	
Black/African-American	25.2%	30.9%	45.7%	33.6%	
American Indian or Alaska Native	0.2%	0.2%	0.6%	0.1%	
Asian	3.0%	0.6%	1.9%	0.5%	
Native Hawaiian and Pacific Islander	NA	NA	0.0%	0.02%	
Other Race	0.2%	0.2%	0.1%	0.1%	
Two or More Races	NA	NA	0.8%	0.8%	
Total	100.0%	100.0%	100.0%	100.0%	

Table 3-1. 1990 and 2	2000 Population and	<b>Race Demographics.</b>
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Final Environmental Impact Statement

Chapter 3 – Affected Environment

The Census changed the reporting method for racial demographics for data collected for the 2000 Census. The Census reports: "Because individuals could report only one race in 1990 and could report more than one race in 2000 and because of other changes in the Census questionnaire, the race data for 1990 and 2000 are not directly comparable." (Census 2000 PHC T-1, *Population by Race or Latino Origin for the United States: 1990-2000*). For purpose of this analysis, the two data sets were placed in the same table and differences between the data sets were adjusted by the not applicable (NA) category allowing the data sets to total to 100 percent. The White Non-Hispanic and minority data contained on Table 3-2 were also obtained from the Census counts of 1990 and 2000. The data are directly compatible in this case because the population reported as Hispanic was also counted by race in both these Census years.

	19	990	2000		
	Study Area	<b>Ouachita Parish</b>	Study Area	Ouachita Parish	
White Non-Hispanic	70.2%	67.5%	51.5%	63.8%	
Minority	29.8%	32.5%	48.5%	36.2%	
Total	100.0%	100.0%	100.0%	100.0%	

 Table 3-2.
 1990 and 2000 Estimated Minority and White Non-Hispanic Populations.

Table 3-3 illustrates the change in racial composition for the City of Monroe from 1970 to 1990. The black population increased 17.73 percent while the white population decreased 17.89 percent within the 20 years between 1970 and 1990. Projections for racial composition for the City of Monroe and Ouachita Parish for the next 20 to 30 years are not available; however, the trend, as seen on Table 3-3, suggests that the minority populations will increase as the white population decreases.

Tuble e et Tudui composition between 1970 und 1990 for the english formoet						
		1970 1980		1980 1990		990
Race	Population	Percent	Population	Percent	Population	Percent
Black	21,521	37.93%	27,990	48.03%	30,487	55.66%
Latino Black	0	0.00%	224	0.38%	65	0.12%
Latino	223	0.39%	566	0.97%	313	0.57%
White	34,769	61.28%	29,235	50.16%	23,764	43.39%
Latino White	223	0.39%	264	0.45%	140	0.26%
Total	56,736	100.0%	58,279	100.0%	54,769	100.0%

Table 3-3. Racial Composition Between 1970 and 1990 for the City of Monroe.

Source: Marfin Socio-Demographic Database. Louisiana Population Data Center.

Final Environmental Impact Statement

Chapter 3 – Affected Environment

In addition to Census data, Traffic Analysis Zone (TAZ) data are a source for obtaining demographic data for an area. A TAZ is a geographical area designated for analysis of transportation activity within, to, and from an urban area. The size of a TAZ boundary is generally between 1 and 10 square miles. Data available from the TAZ is similar to data available from the Census and can include population, dwelling units, employment, and median income. Racial composition is not available from TAZ data. The benefits of using TAZ data in addition to Census data to analyze the population characteristics of an area are threefold. First, TAZ data are collected more frequently than the decennial Census. Second, TAZ data may more accurately approximate a transportation project area than Census data. Third, projections are often developed for TAZ data that may not be available through other sources. The Transportation Plan includes 2020 TAZ projections. Figure 3-3 shows TAZ boundaries within the study area and Table 3-4 lists projections for these zones. This table shows that no residents were reported for TAZ 79 in 1990 and none are projected for the year 2020. TAZ 79 is an undeveloped privately owned forested wetland currently used for bow and arrow hunting and no future development is planned for this area. TAZ 80 projects a ten percent growth rate by 2020. This TAZ follows Bayou Desiard along Bon Aire Drive from the western to the eastern boundary of the study area and contains land available for moderate growth and development. All other TAZs within the study area have been completely built out or offer no opportunities for development; therefore, no change in population is anticipated between 1990 and 2020 in these areas.

TAZ	1990 Population	2020 Population	Percent Change
74	1,059	1,059	0%
75	1,255	1,255	0%
76	24	24	0%
79	0	0	0%
80	2,618	2,870	10%
81	2,332	2,332	0%

 Table 3-4.
 2020 Kansas Lane Connector Study Area Population Projections by Traffic Analysis Zone (TAZ).

Source: Monroe Metropolitan Area Transportation Plan Update 1996, OCOG.





Final Environmental Impact Statement

Chapter 3 – Affected Environment

As reported in Fall 2001, the ULM student population contributes to the local population by approximately 8,760 students. The racial composition of the ULM student population is provided on Table 3-5.

	Total	Percent
Non-resident aliens*	187	2.1%
American Indian	28	0.3%
Asian	207	2.4%
African-American	2,338	26.7%
Hispanic	79	0.9%
White	5,921	67.6%
Total	8,760	100.0%

 Table 3-5.
 University of Louisiana at Monroe Population by Ethnicity, Fall 2001.

Source: Center for Business and Economic Research, ULM. INS07002 ULM Enrollment by Curricula.

\* A Non-resident alien is a student that is neither a resident of the State of Louisiana or the United States, and is thus an international student that has obtained a green card or student visa to attend university in the U.S.

ULM reported a 67.6 percent white student population and a 26.7 percent black student population at the beginning of the 2001-2002 academic year. The remaining 5.7 percent of the student population are reported within other race categories.

#### 3.1.2 Community Facilities and Services

Existing communities and community facilities were identified from maps, aerial photographs, and field investigations. Community facilities including schools, police and fire stations, and other public facilities within the study area are described below. Figure 3-4 identifies community facilities within the study area. There are no civic meeting places or convention centers located in the study area.

#### 3.1.2.1 Schools

ULM, a state-funded university, is located on approximately 238 acres within the project study area. The campus is located on both banks of Bayou Desiard, which is crossed by two bridges that connect the university's 50 buildings. Founded in 1931, the university enrolled approximately 8,760 students in the fall of 2001, 90 percent as undergraduates. In that year, approximately 70 percent of the undergraduates were under the age of 24 and 22 percent were between the ages of 24 and 35. The remaining 8 percent of undergraduate students were over the age of 35 (http://www.ulm.edu/upa/tables3/TABLE4.1-3.htm). Almost half of the graduate students attending ULM were between the ages of 24 and 35; a third were older than 35; and the remaining 16 percent were under age 24 (http://www.ulm.edu/upa/tables3/TABLE4.2-3.htm). Eighty-two percent of the undergraduate students attended ULM full





Final Environmental Impact Statement

Chapter 3 – Affected Environment

time in 2001; 93 percent of the undergraduate students and approximately 79 percent of the graduate students were residents of Louisiana. Eighteen percent of the student population, or approximately 1600 individuals, lived in campus housing in 2001 (http://www.ulm.edu/upa/tables3/TABLE6.1-3.htm).

There are no other schools within the study area. The Cypress Point Elementary School is located east of the study area on Mosswood Drive. The Ouachita Junior High School is located south of the study area on Blanks Avenue about one-third mile from the intersection of Kansas Lane and U.S. 80.

#### 3.1.2.2 Police and Fire

The ULM campus police station is within the study area at the corner of Bayou Drive and Northeast Drive. In addition, a ULM police annex is located on Bon Aire Drive northwest of the University. There were no fire stations observed within the study area during the field reconnaissance. Furthermore, there are no known police or fire facilities planned in the study area in the future.

#### 3.1.3 Housing

Housing in the study area is a mixture of owner- and renter-occupied, single-family and multi-family residences. Bon Aire Drive contains single-family residences that are part of an established community. In addition, several apartment complexes that house ULM students are located on Bon Aire Drive, U.S. 165, and U.S. 80, near the university.

There is some low-income housing within the study area. The Brentwood Apartments, near the intersection of Bon Aire Drive and Old Sterlington Road, provide Section 8 assisted housing. Brenda Haddad, the Manager of this complex, estimated the racial breakdown of residents as approximately 60 percent black and 40 percent white. She also estimated the breakdown of residents in the apartments as approximately one-third students, one-third elderly, and one-third single mothers with children (Haddad, telephone interview 2001). In addition to the Brentwood Apartments, some low-income housing is located in the Ingleside neighborhood. The Ingleside neighborhood contains single-family homes with mobile homes and multi-family housing scattered throughout. Table 3-6 shows housing owner and rental occupancy status in Ouachita Parish and the study area Census Blocks for 1990 and 2000. The study area has approximately 20 percent more renter-occupied housing units than Ouachita Parish. This difference is explained by the ULM student population living in private housing but in close proximity to the campus and, thus, within the study area.

Final Environmental Impact Statement

Chapter 3 – Affected Environment

Table 3-6. Housing Occu	pancy Type in 1990 and 2000
-------------------------	-----------------------------

		1990	2000		
Housing Occupancy Type	Study Area	Ouachita Parish	Study Area	Ouachita Parish	
Owner-occupied Housing Units	44.8%	64.8%	N/A	64.1%	
Renter-occupied Housing Units	55.2%	35.2%	N/A	35.9%	

3.1.4 Parks and Recreational Resources

Several recreation facilities are located within the study area on the ULM campus. These facilities include:

- § Softball Fields
- § Heard Stadium (Tennis)
- § Brown Stadium
- § Brown Gymnasium
- § Fant-Ewing Coliseum
- § Baseball Stadium
- § Malone Stadium
- § Oxford Natatorium
- § Activity Center
- § University Park Softball Stadium

According to the City of Monroe, the city softball leagues use the ULM ballfields for organized softball events (Tarver, telephone interview 2003). Therefore, the ULM ballfields are considered a Section 4(f) resource because they are used for organized activity significant for recreational purposes. Furthermore, according to the Louisiana Office of State Parks, Department of Culture, Recreation and Tourism, the ULM ballfields were funded using Section 6(f) funds from the Land and Water Conservation Act. (Craven, telephone interview 2003).

The locations of some of the recreational facilities associated with ULM are shown on Figure 3-5.





Final Environmental Impact Statement

Chapter 3 – Affected Environment

No public parks are located in the study area. Two park-like lots were identified on Bon Aire Drive near the intersection with Bay Oaks Drive during the field reconnaissance; however, coordination with local parks and recreation department officials regarding ownership of these two properties concluded that they are not publicly owned parks. A letter was written to Delles Howell, Director of the City of Monroe Parks and Recreation Department, on October 26, 2001, to request ownership information on these two areas. A follow-up telephone call on January 17, 2002, confirmed that these areas are privately owned residential lots. During this conversation, Mr. Howell confirmed that there is no public parkland in the study area. However, Pecan Grove Park, a park privately owned by the Baptist Children's Home, a non-profit organization, is located south of Bayou Desiard, near U.S. 80. The location of the Pecan Grove Park is shown on Figure 3-5.

#### 3.2 Economic Environment

Considerable commercial office, retail, and industrial development has occurred near the study area in the past 5 to 10 years. This is largely due to the proactive approach taken by the City of Monroe and Ouachita Parish in pursuing federal programs and economic development district designations that provide grants and incentives to encourage and stimulate economic growth in the City of Monroe and Ouachita Parish.

In December 1994, the U.S. Department of Housing and Urban Development (HUD) designated Ouachita Parish as an Enterprise Community (EC). The EC Program provided specific incentives and credits to those businesses located in the EC. In January 2002, as the EC program was discontinued, HUD designated Ouachita Parish as a Renewal Community (RC). The RC designation encourages public-private collaboration to help generate economic development in distressed communities. It provides regulatory relief and tax breaks to assist local businesses within the RC to provide more jobs and promote community revitalization. Figure 3-6 shows the boundaries of the Ouachita Parish RC.

The I-20 corridor, to the south of the study area, is an Economic Development District. Studies, including the *Long-Term Retail Feasibility Study of the Interstate 20 Economic Development District* (The Green Group 2001), have outlined strategies and targeted potential businesses for the City of Monroe to encourage to locate within the district.

The HUD designations of the area as an EC and an RC and the I-20 Economic Development District have helped to stimulate rapid growth in commercial office, retail, and industrial development to the south of the study area. This commercial office, retail, and industrial development is expected to continue in the areas near the Monroe Regional Airport, Pecanland Mall, the Air Industrial Park, and along the I-20 corridor.



Final Environmental Impact Statement

Chapter 3 – Affected Environment

#### 3.2.1 Employment

Based on data provided by the Louisiana Department of Labor (LDOL), the Ouachita Economic Development Corporation (OEDC) reports a labor force of over 75,000 in Ouachita Parish. The LDOL also reported unemployment for the Monroe Metropolitan Statistical Area (MSA). The MSA experienced a steady decrease in the unemployment rate between 1990 and 2000. Chart 3-1 graphically shows this decrease, with the unemployment rate going from a high of 8.3 percent in January 1991 to a low of 4.5 percent in January 2000. The MSA boundary is shown on Figure 3-7.







Final Environmental Impact Statement

Chapter 3 – Affected Environment

The declining unemployment rate between 1990 and 2000 most likely results from new businesses locating to the area and existing business expansions. HUD designation of portions of the region as an EC and an RC has allowed the region to support new and expanding businesses in recent years with incentives for job creation. This has helped to accelerate the number of new jobs added to the local economy and to lower the unemployment rate in the MSA. By establishing programs such as the EC and the RC, local government has followed a proactive strategy to stimulate sustainable growth and to diversify the economic base for the region.

The OEDC reported that almost 59 percent of the jobs in Ouachita Parish are in the service and retail industries. Jobs in these two industries primarily consist of low paying, low skilled jobs. Table 3-7 identifies employment in Ouachita Parish by industry.

Industry	Percent
Services	39.2%
Retail Trade	19.3%
Manufacturing	11.5%
Finance, Insurance, & Real Estate	7.4%
Transportation & Public Utilities	6.4%
Construction	5.8%
Wholesale Trade	5.2%
Public Administration	4.4%
Agriculture Services (Forestry, Fishing)	0.6%
Mining	0.3%

 Table 3-7.
 2000 Ouachita Parish Employment by Industry.

Source: OEDC & Louisiana Department of Labor, 3rd Quarter 2000.

Employment within the City of Monroe is dominated by the service and sales occupations. Table 3-8 shows employment by occupation between 1970 and 1990 in the City of Monroe. Examination of the data shows that the percentage of sales, executive/managerial, farm/fish/forest, service, and technical occupations increased substantially during the 20-year period. Conversely, the percentage of clerical, craft, household services, laborer/handler, and operative/transportation occupations have decreased.

Final Environmental Impact Statement

Chapter 3 – Affected Environment

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Occupation	1970	1970 Percent	1980	1980 Percent	1990	1990 Percent
Sales	1,688	9.90%	2,510	5.01%	2,637	17.61%
Clerical	3,395	19.92%	36,590	72.97%	2,633	17.58%
Craft	2,106	12.35%	1,855	3.70%	1,138	7.60%
Executive/Managerial	1,809	10.61%	2,366	4.72%	1,942	12.97%
Farm/Fish/Forest	123	0.72%	155	0.31%	223	1.49%
Household Services	1,349	7.91%	448	0.89%	256	1.71%
Laborer/Handler	1,038	6.09%	965	1.92%	680	4.54%
Operative/Transportation	1,283	7.53%	1,131	2.26%	912	6.09%
Service	4,057	23.80	3,609	7.20%	3,820	25.51%
Technical	199	1.17%	517	1.03%	732	4.89%

 Table 3-8.
 City of Monroe Employment by Occupation in 1970, 1980, and 1990.

Source: Marfin Socio-Demographic Database. Louisiana Population Data Center.

Table 3-9 shows the occupational breakdown in Ouachita Parish between 1970 and 1990. The percentage of occupation in sales, clerical, executive, managerial, farm/fish/forest, and technical categories increased, while the percentage of craft, household services, laborer/handler, and operative/transportation decreased in Ouachita Parish. The most notable increase was in the sales occupation and the largest decrease was in household services, in terms of both percentage and absolute number of jobs.

Occupation	1970	1970 Percent	1980	1980 Percent	1990	1990 Percent
Sales	3363	9.85%	6803	14.96%	8196	17.35%
Clerical	6619	19.39%	9155	20.13%	9179	19.43%
Craft	5450	15.97%	7336	16.13%	6365	13.48%
Executive/Managerial	3759	11.01%	5817	12.79%	6159	13.04%
Farm/Fish/Forest	478	1.40%	717	1.58%	835	1.77%
Household Services	1832	5.37%	685	1.51%	483	1.02%
Laborer/Handler	2075	6.08%	2733	6.01%	1950	4.13%
Operative/Transportation	3645	10.68%	3627	7.97%	3169	6.71%
Service	6471	18.96%	6925	15.22%	8580	18.17%
Technical	436	1.28%	1691	3.72%	2315	4.90%

 Table 3-9.
 Ouachita Parish Employment by Occupation in 1970, 1980, and 1990.

Source: Marfin Socio-Demographic Database. Louisiana Population Data Center.

Final Environmental Impact Statement

Chapter 3 – Affected Environment

Based on the information presented on Tables 3-8 and 3-9, it appears that the concentration of employment in both the City of Monroe and Ouachita Parish are primarily low paying, low skilled jobs in the service and retail industries.

Dr. Jerry Wall, Director of the Center for Business and Economic Research at ULM, reported the top 25 occupations projected to 2008 for Ouachita Parish. The top 10 of the 25 projected occupations for 2008 are included on Table 3-10. This table shows that the majority of the top ten occupations projected will continue to be low skilled, low paying occupations, such as cashiers, retail sales, general office clerks, and food sales or food preparation.

No.	Occupation
1	Cashiers
2	Retail Salespersons
3	General Office Clerks
4	General Managers & Top Executives
5	General Laborers
6	Waiters & Waitresses
7	Fast Food Worker
8	Food Preparation Worker
9	Registered Nurses
10	Truck Drivers-Heavy or Tractor-Trailer

Table 3-10. Top 10 Projected Regional Occupations for 2008.

Source: Wall, Jerry. "Work Force Issues, Northeast LA."

Table 3-11 lists major employers by number of employees in Ouachita Parish as reported by the City of Monroe Chamber of Commerce in 2001. The largest employer in Ouachita Parish is the Ouachita Parish School System. Other large employers include the St. Francis Medical Center, Riverwood International, Monroe City Schools, State Farm, and ULM. ULM is located in the study area, while three of the other top ten employers in the parish, State Farm, CenturyTel, and Chase Manhattan Mortgage, are located within 3 miles of the study area. Figure 3-8 illustrates the location of several of the top ten Ouachita Parish Employers for 2001 in relation to the study area.


Final Environmental Impact Statement

Chapter 3 – Affected Environment

Company/Organization	Number of Employees
Ouachita Parish School System	2,638
St. Francis Medical Center	1,745
Riverwood International (Pulp & Paper Processing)	1,500
Monroe City Schools	1,400
State Farm Insurance	1,400
ULM	1,250
Glenwood Regional Medical Center	1,000
City of Monroe	1,100
CenturyTel	1,018
Chase Manhattan Mortgage Corporation (Records Storage /Mortgage Servicing/Call Center)	900

#### Table 3-11. Top Ten Ouachita Parish Employers in 2001.

Source: Chamber of Commerce, 2001 Membership Directory & Buyer's Guide.

#### 3.2.2 Income

In the past decade, per capita income has increased in Ouachita Parish. The OEDC reported that total per capita income in Ouachita Parish increased between 1990 and 1998 from \$14,587 to \$21,268. Growth in income levels is one indicator of continued economic activity in the region. However, although income levels in Ouachita Parish grew, the *Metro Business Barometer (MBB)* concluded that the annual growth rate in per capita income levels for Ouachita Parish was still below that of both the state and the nation (*MBB*, Summer 2000). Table 3-12 shows Census data for median family income, median household income, and per capita income for the state of Louisiana and Ouachita Parish for every 10 years from 1959 to 1999.

# Table 3-12. Median Family, Median Household, and Per Capita Income between 1959 and 1999.

Type of Income	1999	1989	1979	1969	1959
Louisiana State Median Family Income	\$39,774	\$26,313	\$30,310	\$23,689	\$16,764
Ouachita Parish Median Family Income	\$40,206	\$26,284	\$28,721	\$23,110	\$17,136
Study Area Block Group Median Family Income	\$46,302	\$30,570	NA*	NA*	NA*
Percent Ouachita Parish is of the Louisiana State Median Family Income	103%	99.9%	94.6%	97.5%	102%
Louisiana Median Household Income	\$32,566	\$21,949	\$25,516	\$20,576	NA
Ouachita Parish Median Household Income	\$32,047	\$21,129	\$23,263	\$19,736	NA
Study Area Block Group Median	\$29,163	\$23,483	NA*	NA*	NA*

Final Environmental Impact Statement

Chapter 3 – Affected Environment

Type of Income	1999	1989	1979	1969	1959
Household Income					
Percent Ouachita Parish is of the Louisiana State Median Household Income	98.4%	96.3%	91.2%	96.0%	NA
Louisiana Per Capita Income	\$16,912	\$10,635	\$10,766	\$7,333	\$5,372
Ouachita Parish Per Capita Income	\$17,084	\$10,593	\$10,336	\$7,295	\$5,458
Study Area Block Group Per Capita Income	\$13,373	\$12,425	NA*	NA*	NA*
Percent Ouachita Parish is of the Louisiana State Per Capita Income	101%	99.6%	96.0%	99.5%	102%

Source: U.S. Census Bureau & the Louisiana Population Data Center, Socio-Demographic Database.

NA\* - This information is not available through the U.S. Census Bureau's website.

Note: The data on Table 3-12 are derived from two different sources. For this reason, the data are considered approximations of income levels and should not be used for any purpose other than a generalized understanding of income as it relates to the Kansas Lane Connector. Additionally, the statistics provided for the Study Area Block Groups are not directly comparable due to changes in census tract, block group, and block boundaries between the 1989 and 1999 Census'. This data are only provided to give some understanding of the changes over time for a generalized area.

In 1959, the median family and per capita income levels were approximately 2 percent higher than the state. However, in 1969, 1979, and 1989, median family income, median household income, and per capita income levels had dropped below the state levels. By 1999, the median family income for the parish and the study area had risen above that of the state. However, although the per capita income of the parish was above the state, the per capita income of the study area was below both the parish and the state in 1999.

#### 3.3 Environmental Justice

Presidential Executive Order (EO) 12898, signed on February 11, 1994, requires federal agencies to "make achieving environmental justice as part of its mission by identifying and addressing, as justice, part of its programs, policies, and activities on minority populations and low-income populations." In a memorandum from the President concerning EO 12898, he stated that federal agencies should collect and analyze information concerning a project's effects on minorities or low-income groups when required by the National Environmental Policy Act of 1969. The President's order requires that if such investigations find a federal action would disproportionately or adversely affect a minority or low-income group, the federal agency would develop appropriate avoidance or mitigation measures.

Final Environmental Impact Statement

Chapter 3 – Affected Environment

The DOT and FHWA Orders on Environmental Justice specifically define minority populations as persons belonging to any of the following ethnic or racial groups:

- § Black a person having origins in any of the black racial groups of Africa.
- § Hispanic a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.
- § Asian a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent.
- § American Indian and Alaskan Native a person having origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition.
- § Native Hawaiian and Other Pacific Islander.

Low-income populations are defined as the group of persons whose median household income is at or below the U.S. Department of Health and Human Services poverty guidelines.

As shown on Table 3-13, the minority population in the study area was comparable to the State of Louisiana and Ouachita Parish percentages in 1990. However, by 2000, the study area was populated by a noticeably higher percentage of minorities than the parish and state.

		1990				
	Study Area	Ouachita Parish	State	Study Area	Ouachita Parish	State
White Non-Hispanic	70.2%	67.5%	67.8%	51.5%	63.8%	63.5%
Minority	29.7%	32.5%	32.2%	48.5%	36.2%	36.5%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 3-13. Minority and White Non-Hispanic Populations in 1990 and 2000.

As presented on Table 3-13, the racial and ethnic composition of Ouachita Parish changed slightly between 1990 and 2000, with the minority populations increasing by less than 4 percent. The state minority populations showed a similar increase of slightly better than 4 percent. However, the study area minority populations rose by a disproportionate 18.8 percent. The predominant group within the minority category is African-American or Black.

Final Environmental Impact Statement

Chapter 3 – Affected Environment

Table 3-14 shows the poverty level data for 1990 and 2000 for the State of Louisiana, Ouachita Parish, and the study area obtained from the Census. Approximately 27 percent of the households in the study area lived below the poverty threshold in 1990. In comparison, approximately 25 percent of households in Ouachita Parish lived below the poverty threshold during the same period. In 2000, both the study area and Ouachita Parish experienced a decrease on those living below the poverty threshold; approximately 22 percent of households in the study area and 21 percent of the households in Ouachita Parish lived below the poverty threshold.

Table 2 14	Doroontogo	of Docidonta	Dolow the	Dovorty	Threshold in	1000	nd 2000
1 able 3-14.	rercentage	of Residents	below the	roverty	I III esiioiu III	1990 al	nu 2000.

	1	1990	2000		
	Study Area	Ouachita Parish	Study Area	Ouachita Parish	
Ratio of Income to Poverty Level (Percentage of residents below the HUD poverty threshold)	26.9%	24.7%	21.8%	20.7%	

Source: U.S. Census Bureau.

#### 3.4 Land Use and Planning

#### 3.4.1 Existing Land Use

The City of Monroe's most recent *Comprehensive Plan* from May 1988 details existing land use as recorded at that time. A reconnaissance of the study area conducted in October 2001 observed that the land use had not changed substantially since May 1988. Figure 3-9 illustrates generalized land uses within the study area based on observations made during the field reconnaissance.

The study area existing land use is characterized by low-, medium-, and high-density residential, commercial, industrial, and institutional uses and open space or undeveloped land. Approximately 40 percent of the land in the study area is undeveloped. The section below describes the study area land use by neighborhood as designated in the *Comprehensive Plan.* Figure 3-10 illustrates the location of each neighborhood described below.

# North of Bayou Desiard – Edgewater and Cypress Point Neighborhoods, ULM Campus, Bon Aire/Old Sterlington Road

North of Bayou Desiard, Bon Aire Drive bisects the study area from east to west in parallel to the bayou and provides access to two neighborhoods identified in the *Comprehensive Plan* as Edgewater Gardens and Cypress Point. Bon Aire Drive is the only east-west connector north of U.S. 80 and Bayou Desiard that travels the length of the study area. It curves around and through the ULM campus and the low-density, large lot residential neighborhoods from the western border of the study area at Old Sterlington Road up to the Cypress Point neighborhoods. Along Bon Aire Drive to the west, the low-density housing is intermingled with high-density housing, including Sherrouse Hall, Mansur Hall, and









Final Environmental Impact Statement

Chapter 3 – Affected Environment

Hudson Hall ULM dormitories, and other apartment complexes serving the ULM student population. The Brentwood Apartments, located near the Bon Aire Drive intersection with Old Sterlington Road, accepts Section 8 housing applications.

Several facilities associated with ULM are located in this area, including:

- § Athletic Scholarship Foundation
- § ULM Booster House
- § ULM Institute of Gerontology
- § ULM Retired Senior Volunteer Program
- § ULM Police Annex
- § ULM Plant Science Research Center
- § ULM Sports Fields

Two churches, God's House (formerly the First Southern Methodist Church) and St. Thomas Episcopal Church, are also located on the western end of this area (Figure 3-11).

Northeast of Bon Aire Drive is an undeveloped forested wetland. The land is privately owned and is used by the Chauvin Basin Hunting Club. During a field reconnaissance conducted in mid-October 2001, several hunters were observed entering the forested wetland area.

Stadium Drive runs north-south in parallel to the western end of Bon Aire Drive and crosses the bayou by the eastern bridge terminating at U.S. 80. At the northern end of this road, there are several fraternity houses and apartment complexes including:

- § Kappa Alpha (••) Fraternity House
- § Pi Kappa Alpha (•••) Fraternity House
- § Delta Sigma Phi (•••) Fraternity House
- § Sigma Phi Epsilon (•• E) Fraternity House
- § University View Apartments
- § Ryan Manor Apartments
- § Stadium Place Apartments



Final Environmental Impact Statement

Chapter 3 – Affected Environment

#### U.S. 165 Corridor South - University Place/Sherrouse Neighborhood

- § Located between U.S. 165 and Bayou Desiard is the University Place/Sherrouse neighborhood (University/Sherrouse). Bayou Desiard borders this neighborhood to the north and east and U.S. 80 borders it to the south. The neighborhood consists of small lot single-family residential homes with apartment complexes. The residential portion of the neighborhood to the north of the ULM campus is laid out in a grid formation, typical of older traditional neighborhood developments. The neighborhood contains university properties, such as the ULM President's residence, ULM phone-a-friend, and JobLink, as well as numerous churches and charitable organizations including:
- § Living Water Revival Center and Daycare University/Sherrouse
- § First Church of Christ Scientist and Daycare University/Sherrouse
- § University Church of Christ University/Sherrouse
- § Catholic Union Building/Catholic Student Center University/Sherrouse
- § Baptist Union Building University/Sherrouse
- § Missionary Baptist Student Fellowship University/Sherrouse
- § Covenant Church U.S. 165
- § Pine Grove Baptist Church U.S. 165
- § Northgate Church U.S. 165
- § Messiah Lutheran Church U.S. 165
- § Christ St. Joseph Home (Church on premises) U.S. 165
- § Scottish Rite Temple University/Sherrouse

#### U.S. 165 Corridor North – Old Sterlington Road

Old Sterlington Road cuts across the northwestern corner of the study area at a 45-degree angle from U.S. 165 north of Bayou Desiard. Light Industrial uses predominate in the Old Sterlington Road Corridor with a small section of single-family housing on the southeast side between Old Sterlington Road and the bayou. There is a small wedge of commercial development at the intersection of the Arkansas-Louisiana-Mississippi Railroad and Old Sterlington Road and there are a number of sizeable tracts of open space/undeveloped properties interspersed among the industrial uses.

Final Environmental Impact Statement

Chapter 3 – Affected Environment

Businesses located on Old Sterlington Road include:

- § Poly Processing Company
- § Gulf South Warehouse
- § Scott's Auto Service
- § Texaco Station
- § Salon Lauren
- § U.S. Department of Agriculture Field Office
- § NRCS Field Office

A strip of commercial land use lies along U.S. 165. Some of the larger businesses in this strip include:

- § Ouachita Fertilizer
- § Albertson's
- § Eckerd Drug Store
- § Mulhearn Funeral Home
- § Quality Sheet Metal & Fabricating Inc.
- § True Value Hardware Store and Small Engine Parts Center

South of Bayou Desiard – U.S. 80 Corridor and the Ingleside Neighborhood

The area along U.S. 80 is a mixture of commercial and residential uses, many of which serve the ULM campus.

Commercial land use includes a variety of small businesses, chain restaurants, and gas stations including:

- § Cajun Cars
- § Desiard Street Pawn
- § Dirty Dan's Car Wash
- § Peking Restaurant

Final Environmental Impact Statement

Chapter 3 – Affected Environment

- § Waterfront Grill
- § Brooks Florist and Greenhouse
- § ATV Cycle City
- § Burger King
- § Kentucky Fried Chicken
- § Exxon Gas Station

A number of ULM properties are located along U.S. 80 on the southwest side of the study area.

On the southeast side of the study area, north of U.S. 80 is the Ingleside neighborhood consisting of older, single-family residences, most likely built before U.S. 80 was a major east-west artery. The Pecan Grove Memorial Park (Pecan Grove) is located in this neighborhood between U.S. 80 and Bayou Desiard. This private park is owned by the Baptist Children's Home (BCH), a private children's home that has provided physical and psychological care in Louisiana for over 100 years. The home is located outside the study area across U.S. 80 from Pecan Grove. BCH utilizes Pecan Grove for a variety of events. The private park contains a screened-in patio, numerous picnic benches, restrooms, a boat dock, two large outdoor barbeque cookers, one swing set, and two sets of seesaws, all shaded under large pecan and oak trees. The homes of the Executive Director and Director of Counseling are adjacent to Pecan Grove.

Churches located along this corridor include the University Church of Christ and the First Apostolic Church.

3.4.2 Local Plans and Policies

There are currently no land use plans to guide future land use in the study area. The City of Monroe developed the *Comprehensive Plan* in 1988. The *Comprehensive Plan* reported land use percentages as: 18.6 percent residential, 4.3 percent commercial, 2.8 percent industrial, 12 percent public and semi-public, 10.3 percent transportation, 47.8 percent open space, and 4.2 percent bodies of water (48 percent total developed land and 52 percent total undeveloped land) within the City of Monroe.

The study area lies within the transportation planning area of OCOG. The *Transportation Plan*, developed by OGOG, is intended to guide future transportation planning by proposing transportation projects, which include widening improvements, new roadways, and reconstruction, resurfacing, and other maintenance activities. The Kansas Lane Connector was identified in the *Transportation Plan* as an unfunded need, because funding for the project was not available at the time the *Transportation Plan* was

Final Environmental Impact Statement

Chapter 3 – Affected Environment

updated. Subsequent to the adoption of the *Transportation Plan*, federal and state funding has been committed for the proposed Kansas Lane Connector. Because OCOG is currently in the process of updating the *Transportation Plan* for the Monroe Metropolitan Area, the MPO will need to include the Kansas Lane Connector in the fiscally constrained list of projects in the update.

The *Transportation Plan* classifies the roadway network and provides traffic projections within the jurisdiction of the OCOG using 1990 as the base year. The existing roadway network is comprised of freeways, principal and minor arterials, and collectors. There are no freeways in the study area. However, there are principal arterials, which serve as feeders to freeways, as well as long distance travel. Collectors feed into the arterials and are generally intended for short trips. Given that the study area is comprised largely of residential neighborhoods, there are a considerable number of collectors feeding into the arterial system within the study area. Table 3-15 lists the roadways by functional classification for all the roads within the study area.

Principal Arterial	Minor Arterial	Confector
US 165	US 80 from Kansas Lane west	Bon Aire Drive
US 80 from US 165 to Kansas Lane		Tidewater Street
Kansas Lane		University Place
		Howell Street
		University Street
		Filhiol Avenue
		McGuire Avenue
		Cole Avenue
		College Street
		Rapides Street
		Lafayette Street
		Grant Street
		Webster Street
		Caddo Street
		Lafourche Street
		Breville Street
		La Salle Street
		Evangeline Street
		Cameron Street
		Northeast Drive
		De Soto Street
		Claiborne Street
		Lincoln Street
		Armand Street
		Madison Street
		Concordia Street
		Delario Street
		Bayou Street
		Stadium Drive
		Churchill Circle
		Airlie Circle
		Peyton Street
		Edgewater Street

Table 3-15. Roadway Classifications for Roads within the Kansas Lane Connector Study Area.

Final Environmental Impact Statement

Chapter 3 – Affected Environment

Principal Arterial	Minor Arterial	Collector
		Bon Aire Street
		Bay Oaks Drive
		Arrow Head Street
		Indian Trail
		Diamond Head
		Moss Wood Street
		Cypress Point
		Sandalwood Street
		Fennell Drive
		Inglewood Drive
		Tennessee Street
		Kentucky Street
		Bryan Street
		Virginia Street
		Pecan Grove Street

#### 3.5 Pedestrian and Bicycle Facilities

Policy statements by the U.S. Congress, the U.S. Department of Transportation (USDOT), and FHWA state that the federal goal for bicycling is to accommodate current bicycle use and encourage increased use, while enhancing bicycle safety. The City of Monroe adopted a *Bicycle and Jogging Trails Plan* that identifies existing streets appropriate for bicycle use. It also proposes routes that could be designated as future bicycle corridors. The routes in the bicycle plan are laid out to connect schools, parks, recreation areas, and major employment concentrations. The overall goal of the bicycle/pedestrian trail concept is to encourage non-motorized transportation choices. In the study area, Bon Aire Drive from Old Sterlington Road to Cypress Point Drive is designated as a future trail in the *Bicycle and Jogging Trails Plan*.

#### 3.6 Utilities

#### 3.6.1 Electric Power

Entergy provides electrical service within the study area. According to Mr. Ronnie Teague of Entergy, no major transmission lines (69,000 volts or greater) are located in the study area. Mr. Teague explained the high voltage transmission lines are located west and north of the study area, along U.S. 165, and north of the study area, eastward to the Swartz community. Many lower voltage (120- to 240-volt domestic current) distribution lines were observed in the residential areas. According to Mr. Dan Carpenter of Entergy, the most notable distribution lines are overhead power lines ranging from 4,000 to 13,800 volts at the western, southern, and eastern portions of the study area. The high voltage lines originate southwest of the study area from a substation feeding ULM by way of U.S. 80 crossing Bayou Desiard at Stadium Drive. The 13,800-volt power lines remain above ground and parallel Bon Aire Drive and U.S. 80 to the north and south of Bayou Desiard, respectively. The 13,800-volt lines cross Bayou Desiard at two locations to the west of and at Virginia Street. Lower voltage underground power domestic power lines feed portions of the Ingleside, Bon Aire, and Cypress Point subdivisions. The

Final Environmental Impact Statement

Chapter 3 – Affected Environment

locations of these power lines are presented on Figure 3-12. Entergy personnel reported that there are currently no plans for future construction of substations or transmission and distribution lines within the study area.

#### 3.6.2 Natural Gas

Natural gas service is provided to most of the residences and businesses located in the study area by Atmos Energy Louisiana. Atmos Energy (formerly Louisiana Gas Service Company) also acquired Trans Louisiana Gas Company. Four- to 6-inch plastic mains provide natural gas to the residential area north of Bayou Desiard near the Cypress Point Subdivision. This area includes the eastern end of Bon Aire Drive, south of Diamond Head Street, and Cypress Point Street, on the east side of the Cypress Point Subdivision. Natural gas is provided through 2-inch non-plastic pipes with service lines to the residential areas north of Bayou Desiard, specifically Bon Aire Drive and Bay Oaks Drive, as well as the majority of the Cypress Point Subdivision, including Arrow Head Drive, Diamond Head Drive, Mosswood Drive, and a portion of Cypress Point Drive. Figure 3-13 shows the gas pipeline service locations within the study area.

Two-inch non-plastic pipes with service lines serve the residential area located near the southern terminus, including Fennell, North Inglewood, Tennessee, Kentucky, Ingleside, Virginia, and Pecan Grove Streets. Two-inch lines also serve the residential area on the south side of Bayou Desiard, west of ULM, as well as the areas along Old Sterlington Road, and Bon Aire Drive, north of the University. Two-inch lines also serve a small area located southwest of Stadium Drive entering the ULM campus.

A 12-inch diameter pipeline, owned by Louisiana Intrastate Gas (LIG), parallels the Arkansas-Louisiana-Mississippi Railroad on the west side of the study area. This pipeline is a supply line that crosses Old Sterlington Road in the northwestern section of the study area and Bayou Desiard in the west-central portion of the study area. A transmission pipeline of unspecified diameter crosses Bayou Desiard in the southwestern portion of the study area at the Stadium Drive Bridge. This pipeline branches at Bon Aire Drive and extends eastward for approximately 200 feet where it connects with valves and a smaller 2-inch non-plastic service line that continues eastward to the Cypress Point Subdivision. The 12-inch pipeline extends westward approximately 600 feet, turning southward on Northeast Drive and terminating with a hot tap on the north side of Northeast Drive near the western entrance to the ULM campus.

Two-inch and smaller non-plastic gas lines provide service to the residential areas flanking University Avenue along Filhiol, North McGuire, and Cole Avenues to the west, as well as Sabine, Howell, Holt, Lafourche, and Caddo Streets to the east. There is one transmission pipeline of unknown diameter that extends northward from U.S. 80 to a point about 400 feet north of Mitchell Street where the pipeline terminates with an end cap. There are two 4- to 6-inch plastic gas mains west of ULM. The first main runs northward from U.S. 80 and west along Madison Street to Old Sterlington Road where the line runs northward. The second main parallels University Avenue from U.S. 80 and



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Final Environmental Impact Statement

Chapter 3 – Affected Environment

runs westward along Northeast Drive where it eventually connects with the first main at Old Sterlington Road. Gas pipelines were not noted near the ULM campus buildings bounded by Bayou Drive, Mitchell Street, and University Avenue. According to Atmos Energy personnel, plans for expansion within the study area include the area along U.S. 80, which will be constructed in tandem with the LDOTD planned five-lane widening project of U.S. 80.

#### 3.6.3 Water and Wastewater Facilities

Public water and wastewater services are provided by the City of Monroe Public Works Department for most of the businesses and residences located in the study area. Potable water and wastewater services are provided to the area near Old Sterlington Road, particularly the Town and Country Subdivision, by the Town & Country Service Company. Drinking water is supplied to the study area by Bayou Desiard. Potable water mains within the study area are shown on Figure 3-14. Networks of underground sewer lines service the residential and commercial areas in the study area.

A four-cell oxidation pond, the Oakwood Regional Wastewater Treatment Plant (Permit Number LA0052078), serves the Town and Country, Northgate Estates, Northside Terrace, and West Elmwood subdivisions. Figure 3-15 shows the location of this facility. This facility is located directly outside of the study area, approximately 0.5 mile east of Old Sterlington Road and 0.1 mile south of the Town and Country Subdivision. The facility has a design flow of 1.6 million gallons per day discharging into Bayou Chauvin and, subsequently, into the Ouachita River. The Oakwood facility applies chlorination for disinfection prior to discharge.

According to Louisiana Department of Environmental Quality (LDEQ) personnel in the Northeast Regional Office, Poly Processing Company has a Louisiana Pollutant Discharge Elimination System (LPDES) permit for the discharge of wastewater. Poly Processing Company is classified as a minor wastewater discharger. The facility has two outfalls, 001 (storm water) and 002 (sanitary wastewater), that discharge into Bayou Chauvin (Subsegment 080102 of the Ouachita Basin). According to LDEQ personnel, Ouachita Fertilizer does not have a wastewater permit.

A small oxidation pond used for wastewater treatment was observed approximately 175 feet north of the northeast corner of the Premier Products building. Premier Products personnel reported that the pond provides wastewater treatment for Premier Products and Tyner Petrus Hardware and was previously operated by the Town & Country Service Company. Additional sewer treatment ponds were observed east of the railroad tracks approximately 200 yards northeast of Premier Products. It is believed that wastewater previously treated by these oxidation ponds has been re-routed to the new Oakwood Regional Wastewater Treatment facility.





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Final Environmental Impact Statement

Chapter 3 – Affected Environment

#### 3.7 Archaeological and Historical Resources

Section 106 of the National Historic Preservation Act of 1966 protects properties that are listed in or eligible for listing in the NRHP. In accordance with the requirements of Section 106, an assessment was made of the cultural resources in the study area. A literature and records review was conducted to determine the locations of recorded archaeological and historic sites in the study area. In addition, pedestrian surveys were conducted.

#### 3.7.1 Archaeology

Research at the Louisiana Division of Archaeology revealed that three previous cultural resources surveys were conducted within 1 mile of the study area. The studies included: 1) Rivet (1974) for a construction project, 2) Price (1978a) for a sewer line, and 3) Price (1978b) for the construction of the Twin Cities Loop Parkway. The archaeological background and site file search revealed that one previously recorded archaeological site, Lauren's Site (*16OU253*), is located within 1 mile of the study area and that no previously recorded sites are located within the proposed ROW of any of the Build Alternatives.

An intensive pedestrian survey and subsurface testing were undertaken within the proposed ROW of all Build Alternatives, resulting in the documentation of three new archaeological sites. The pedestrian survey was confined to 196.85 feet and consisted of two survey transects spaced 98.43 feet (30 meters) apart. Shovel tests were excavated at 98.43-foot (30-meter) intervals along each transect. Shovel tests measured approximately 11.81 inches (30 centimeters) in diameter and were excavated to a depth of 19.69 inches (50 centimeters) below surface or to sterile clay subsoil. Excavated soils were screened through ¼-inch wire mesh whenever conditions permitted. Very clayey soils were carefully trowel-sorted and examined for artifacts. Soil descriptions, using standard nomenclature, were recorded for each shovel test. No shovel tests were excavated in areas with greater than 90 percent surface visibility, in areas that were inundated, or in areas with a slope of greater than 20 percent.

Positive shovel tests and surface scatters were treated as potential sites and subjected to site definition. Site definition consisted of additional shovel tests at 32.81-foot (10-meter) intervals to determine the vertical and horizontal extent of the site. These shovel tests extended in two perpendicular lines from datum. Testing continued along these lines until two consecutive negative shovel tests were excavated in all four directions. However, site definition was restricted to the project area ROW and no definition tests were excavated outside of the ROW.

Two of the sites, *16OU353* and *16OU354*, were found to be ineligible for the NRHP. It is recommended that the third site (*16OU352*) be considered eligible for the NRHP, pending further testing. The location of each site was plotted on U.S. Geological Survey (USGS) quadrangles and on project area maps, and state site forms were completed for

Final Environmental Impact Statement

Chapter 3 – Affected Environment

each site. Site *160U352* is discussed below. Detailed information on the other evaluated sites is provided in the *Final Intensive Cultural Resources Survey* (Earth Search 2004).

No tribal Indian resources were found within the project study area. LDOTD, through FHWA, has initiated coordination with the Chitimacha Tribe of Louisiana, the only Indian tribe with a historical presence in the project area, and the Adai Caddo Indian Tribe. Correspondence from these tribes was received during the scoping process. Copies of the letters received are included in Appendix A-4.

## *160U352*

Brick fragments were recovered in shovel tests. The positive shovel test was designated site datum. Shovel tests were excavated in the cardinal directions. Only one shovel test was excavated to the west, because there was a house approximately 26.25 feet (8 meters) west of datum. Two strata were observed at the site: 1) Stratum I is a 10YR 3/1 (very dark gray) silty clay, and 2) Stratum II is a 10YR 5/4 (yellowish brown) silty clay. No evidence of intact midden was observed. Only two of the site definition shovel tests were positive. One shovel test yielded two colorless glass fragments. The other shovel test contained aquamarine glass and non-diagnostic brick fragments.

Disarticulated gravestones dating to the 1820s were observed east of the site delineation area. The stones were scattered behind a storage shed. According to the landowner, the stones were removed from a cemetery located 98.43 to 131.23 feet north of the shed. The landowner and other local residents reported that the cemetery may have been associated with the Ingleside Plantation, and was discovered during the installation of a drainage pipe several years ago. Even if the graves were exhumed prior to construction, it is likely that there are still isolated, intact human remains in the area. The portion of 160U352 where shovel tests were performed lacks integrity and research potential, due to the absence of intact archaeological deposits and the paucity of artifacts in the area of the site shovel tested. Therefore, it is not eligible for the NRHP. However, subsurface testing was not undertaken in the portion of the site in the area of the cemetery; therefore, the extent of the human remains in the area of the cemetery is unknown. Thus, it is recommended that this portion of 160U352 be considered eligible for the NRHP pending further testing because the nature and the extent of human remains are uncertain. Section 106 coordination with the Division of Archeology on this recommendation is currently underway.

#### 3.7.2 Historic Architecture

An architectural survey was performed to locate and record any structures older than 50 years within the Area of Potential Effect (APE) and to evaluate these structures using NRHP criteria. The APE was set to include a buffer of 656.17 feet on either side of the proposed centerline of the proposed Build Alternatives. All buildings greater than 50 years of age within the APE were recorded using State of Louisiana Historic Resource Inventory Forms. In addition to buildings within 656.17 feet from the centerline of the

Final Environmental Impact Statement

Chapter 3 – Affected Environment

proposed Build Alternatives, the APE was extended to include all buildings greater than 50 years of age along the following streets: Kentucky Street between Bayou Desiard and U.S. 80, Tennessee Street between Bayou Desiard and U.S. 80, Inglewood Drive between Bayou Desiard and U.S. 80, and Fennell Street between Bayou Desiard and U.S. 80. These streets between the proposed alternatives and U.S. 80 were included in the survey because of their narrowness and potential use as access roads during construction of the proposed project. During the architectural survey, 24 buildings greater than 50 years of age were recorded and photo-documented. All of the buildings surveyed were assigned State of Louisiana Historic Resource Inventory identification numbers. Only one, the *Ingleside Plantation House*, was found to be eligible for nomination to the NRHP. The remaining structures were not eligible for the NRHP. A description of the *Ingleside Plantation House* is presented below. Information on evaluated structures is provided in the *Final Intensive Cultural Resources Survey* (Earth Search 2004).

#### Ingleside Plantation House (Resource ID 37-02245)

The large house at 5511 Desiard Street was historically called the Ingleside Plantation. The house was built in 1883. Figure 3-16 shows representative photographs of the Ingleside Plantation House. The house has double galleries on both the front and the back. The Ionic columns on the first floor are cast iron, and the Doric columns on the second floor are solid wood. There are turned wood balustrades on the front and rear of the second floor galleries, the two side balconies, and on the widow's walk at the peak of the double-hipped roof. The first floor is solid brick (24 inches thick) while the upper two floors are wood frame. Both galleries have five openings with a central door flanked by two windows, which are triple hung, one over one over one. The first floor windows have large cornices and pilasters hidden by louvered shutters. The main entrance is a heavy, partially glazed door with a Victorian era wood frame screen. The door has partially glazed sidelights and a two-pane transom with pilasters flanking the door and on the outside of the sidelights and transom. The second floor door, leading to the gallery, is also partially glazed with a wood frame screen. It has rounded pilasters, sidelights, and a stained glass fanlight. On the second floor, just under the eave, at the top of the tall frieze, are simple dentils. Ingleside Plantation was originally an antebellum Greek Revival home. This is still evident in the ground floor. It is a distinctive interpretation of the Queen Anne style, displaying high artistic value. It is eligible for nomination to the NRHP under Criterion C. The State Historic Preservation Office (SHPO) concurred in these findings and accepted the Final Intensive Cultural Resources Survey (Earth Search 2004) on July 14, 2004 (Appendix A-5).

#### 3.8 Meteorology, Climatology, and Topography

The average annual temperature for Ouachita Parish is 64.5 degrees Fahrenheit (° F), while the average monthly temperature ranges from 34° F in January to 92° F in July. Precipitation is well distributed throughout the year and averages 51.33 inches annually. The growing season in Ouachita Parish lasts from March through November (Louisiana Office of State Climatology [LOSC] 2002).



Ingleside Plantation House: Facing Front Entrance



Ingleside Plantation House: Facing Back Entrance



Representative Photographs of the Ingleside Plantation House Kansas Lane Connector Ouachita Parish, Louisiana Figure No.

Final Environmental Impact Statement

Chapter 3 – Affected Environment

Ouachita Parish is located in the Ouachita Water Basin. The Ouachita River, originating in the Ouachita Mountains of west-central Arkansas near the Oklahoma border, flows south through northeastern Louisiana and joins with the Tensas River to form the Black River, which empties into the Red River. The Ouachita Basin covers over 10,000 square miles of drainage area. Most of the basin consists of rich, alluvial plains cultivated in cotton and soybeans. The northwest corner of the basin is forested in pine, which is commercially harvested. The topography of the study area consists predominantly of flat, formerly floodplain land. Figure 3-17 contains a topographic map of the study area.

#### 3.9 Water Resources

#### 3.9.1 Rivers, Lakes, and Streams

The study area is located within the Upper Mississippi Delta Alluvial Plain, which spans 700 miles from southern Illinois to the mouth of the Mississippi River across seven states (USEPA 2001). All streams, creeks, and tributaries within the study area are part of the Lower Ouachita watershed. This watershed encompasses approximately 12,212 total acres within eight parishes. There are six rivers included in this watershed: Bayou Desiard, Bayou Louis, Boeuf River, Cheniere Brake, Ouachita River, and Tensas River. Only one river, Bayou Desiard, will be crossed by the Kansas Lane Connector project. Bayou Desiard is located on the southern boundary of the study area and is classified as a navigable waterway. The northern boundary of the study area borders Chauvin Swamp, which is not navigable. Figure 3-18 shows the location of Bayou Desiard and Chauvin Swamp within the study area.

#### 3.9.2 Floodplains and Floodways

EO 11988 requires the identification of 100-year floodplains and the avoidance of impacts to the greatest extent possible. Ouachita Parish participates in the National Flood Insurance Program (NFIP) administered by the Federal Emergency Management Agency (FEMA). The NFIP defines a floodplain as any land area susceptible to being inundated by water. The floodplain is divided into two sections, the floodway and floodway fringe. The floodway is defined as the channel of the stream and adjacent floodplain area that should be kept free of encroachment so that a 100-year flood event may occur without increasing the level and extent of the base flood elevations. The base, or 100-year, flood is defined as an event that is equaled or exceeded, on average, once every 100 years. The floodway fringe, or the 100-year floodplain, is the area between the floodway boundary and the 100-year floodplain boundary. According to FEMA (1999), and, as shown on Figure 3-19, the northeastern portion of the study area and Bayou Desiard fall within the 100-year floodplain.

## 3.9.3 Water Quality

LDEQ routinely monitors surface water quality in the state of Louisiana and publishes the results in the *Louisiana Department of Environmental Quality Environmental Regulatory Code* (1994). Chauvin Basin is a headwater to the Ouachita River and the



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Final Environmental Impact Statement

Chapter 3 – Affected Environment

designated uses are primary contact recreation, secondary contact recreation, and propagation of fish and wildlife. Bayou Desiard is an oxbow lake that has designated uses of primary contact recreation, secondary contact recreation, and propagation of fish and wildlife. It also serves as a drinking water supply for the study area.

The Clean Water Act makes it unlawful to discharge storm water from construction sites into Waters of the U.S. unless authorized by the USEPA's National Pollutant Discharge Elimination System (NPDES) General Permit. A construction project that affects 1 to 5 acres is required to file a Notice of Intent (NOI).

#### 3.10 Geology and Soils

#### 3.10.1 Geology

The study area is located on Recent (Quaternary) alluvium of Bayou Desiard and lies within the Gulf Coastal Plain physiographic province. Subsurface sediments of this regional province generally dip southward and thicken toward the Gulf of Mexico (Jones and Holmes 1947) and beneath the continental shelf. Specifically, the study area lies on alluvial deposits within the Ouachita River Valley of the Gulf Coastal Plain. The alluvial deposits are Pleistocene age that generally consist of silts and clays that eventually grade into sands and gravels that extend to approximately 100 feet below the surface. The alluvium, which is considered the uppermost water-bearing unit in the study area, is thick enough to be considered a significant source of fresh water beneath Ouachita Parish (Rogers et al. 1972). The alluvium was deposited by the Arkansas River before it shifted to its present location 1,500 years ago. Bayou Desiard is considered an abandoned channel of the Arkansas River.

Recharge of these alluvium deposits comes from rainfall and high water stages associated with Bayou Desiard. Groundwater flow direction is generally toward Bayou Desiard. Deeper water-bearing aquifers under the study area include sands of the undivided Miocene deposits, the Cockfield Aquifer, the Sparta Aquifer, and the Carrizo-Wilcox Aquifer. The primary aquifer used for water supply in the area is the Sparta Aquifer, the sediments of which are encountered at approximately 750 feet below the surface. The Sparta Aquifer is not currently designated as a sole source aquifer. However, as of July 8, 2004, the Louisiana Department of Natural Resources (LDNR) issued a draft order to designate the Sparta Aquifer as a Critical Ground Water Area. Therefore, although the Sparta Aquifer is not a sole source aquifer, it is considered to be an important resource in north central Louisiana.

#### 3.10.2 Soils

The process of soil development depends on both biotic and abiotic influences. These influences include past geologic activities, nature of parent materials, environmental and human influences, plant and animal activity, time, climate, and topographical position. According to the Natural Resources Conservation Service (NRCS), formerly the Soil Conservation Service (SCS), two soil associations occur in the study area, as shown on

Final Environmental Impact Statement

Chapter 3 – Affected Environment

Figure 3-20: the Hebert-Sterlington-Rilla association and the Perry-Portland-Forestdale association found within the Chauvin Swamp (SCS 1974).

The Hebert-Sterlington-Rilla association consists of level to nearly level loamy soils found on natural levees. Soils of the Hebert Series are somewhat poorly drained and loamy throughout. They occur on the lower parts of natural levees of the Ouachita River, Bayou Desiard, and other streams. The Sterlington Series consists of well-drained and loamy soils that occur on natural levees of the Ouachita River, Bayou Desiard, and other streams in the eastern half of Ouachita Parish. The Rilla Series soils are well-drained and loamy throughout, occurring on natural levees of the Ouachita River, Bayou Desiard, and other streams in the eastern half of Ouachita Parish.

The Perry-Portland-Forestdale association found within the Chauvin Swamp is characterized by very poorly drained soils with a clayey subsoil. This association is found in areas that are level or depressional in broad floodplains in the eastern half of the Ouachita Parish.

The dominant soil types within the study area are Perry clay, frequently flooded (Pc); Perry clay, occasionally flooded (Pe); Portland clay (Pr), Portland silt loam (Po), Hebert silt loam (Hb); Sterlington silt loam, 0 to 1 percent (StA); Sterlington silt loam, 1 to 3 percent (StB), Rilla silt loam, 0 to 1 percent (RIA) and Rilla silt loam, 1 to 3 percent (RIB). These soil types are summarized on Table 3-16.



Ouachita Parish, Monroe, LA

Soil Associations in the Study Area

oils Map 11X17.pd

## LEGEND



Project Study Area Perry, Portland, Forestdale Hebert, Rilla, Sterlington Logical Terminus



Final Environmental Impact Statement

Chapter 3 – Affected Environment

Symbol	Map Unit Name	Slope	General Characteristics
Pc	Perry clay, frequently flooded	-	Permeability is very slow, and surface runoff is slow. This soil typically supports hardwood forest.
Ре	Perry clay, occasionally flooded	-	Permeability is very slow, and surface run off is slow. About 60% of the acreage is hardwood forest and 30% is used for cropland and pasture with proper flood control measures in place.
Pr	Portland clay	-	Permeability is very slow, and surface runoff is slow. About half the acreage is in hardwoods. The rest is used for pasture and cultivated crops.
Ро	Portland silt loam	-	Permeability is very slow, and surface runoff is slow. Practically all the acreage is used for cultivated crops and pasture.
Hb	Hebert silt loam	-	Permeability is very slow, and surface runoff is slow. This soil typically supports hardwood forest.
StA	Sterlington silt loam	0-1%	Permeability is moderate, and surface runoff is slow. These soils are used for cultivated cropland. Erosion is a slight hazard if the soil is clean tilled.
StB	Sterlington silt loam	1-3%	Permeability is moderate, and surface runoff is medium. Practically all the acreage is used for cultivated crops.
RIA	Rilla silt loam	0-1%	Permeability is moderately slow, and surface runoff is medium. Most acreage is used for cultivated crops.
RIB	Rilla silt loam	1-3%	Permeability is moderately slow, and surface runoff is medium. Nearly all acreage is used for cultivated crops.

Table 3-16.	Summary	for the	Kansas	Lane	Connector	Study	Area	Soil '	Types
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Hydric soils are defined as soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions that favor the growth and regeneration of hydrophytic vegetation (Cowardin et al. 1979). Pc and Pe are listed as Hydric A soils within the study area, while StA, Pr, Po, RIA, and RIB are listed as Hydric B soils, denoting that they are known to contain hydric inclusions when found in depressional areas (SCS 1974).

#### 3.11 Mineral Resources

Natural gas is the predominant mineral product in Ouachita Parish. The Monroe gas field, which covers a total area of approximately 400 square miles, is located within the study area. According to the LDNR, 11 natural gas wells were located within the study area. At the present time, it is not known how many of the wells are active. Figure 3-21 shows the





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Final Environmental Impact Statement

Chapter 3 – Affected Environment

location of the oil and gas wells identified by LDNR within and near the study area. The discovery of the Monroe gas field attracted a number of carbon black operators to the area. Production of carbon black in the vicinity peaked in 1924 and has substantially declined since that time. Presently, there are no known carbon black production facilities in or near the study area, and it is not known if any of these facilities operated within the study area during the last century.

Commercial deposits of sand and gravel deposits are located (predominantly) west of the Ouachita River. Brick clays have also been exploited within Ouachita Parish, primarily for the manufacture of hollow tiles and other clay products. It is unlikely that any of these mining operations existed within the study area.

#### 3.12 Hazardous Waste Sites and Underground Storage Tanks

The Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) regulate hazardous materials and waste sites. Hazardous waste is generally defined as any material that has, or, when combined with other materials, will have a deleterious effect on humans or the natural environment. Characterized as reactive, toxic, infectious, flammable, explosive, corrosive, or radioactive, hazardous wastes may be solids, sludges, liquids, or gases. Potential hazardous waste sites include landfills, dumps, pits, lagoons, salvage yards, and industrial sites, as well as above and below ground storage tanks. Service stations are one of the most common generators of potential hazardous material sites because older underground storage tanks may deteriorate and contaminate surrounding soil and groundwater with gasoline.

Encounters with hazardous materials during roadway construction can require costly and time-consuming cleanup operations. Therefore, federal and state regulatory databases were searched within and near the study area. Environmental Data Resources, Inc. (EDR), of Southport, Connecticut, prepared the review of state and federal regulatory databases. The regulatory listings include only those sites known to the regulatory agencies to be contaminated, or those in the process of evaluation for potential contamination at the time of publication. The area reviewed in the preliminary assessment included only the study area and immediate vicinity. Various businesses within the study area handle regulated materials such as petroleum products, waste oils, lubricating oils, hydraulic fluids, and fertilizer compounds. The following section describes the federal and state environmental databases that were reviewed.

Many of the facility locations from the EDR search were field verified during the field reconnaissance completed between October 9 and 12, 2001. Information regarding these locations is presented in detail in the *Phase I Environmental Site Assessment* (ARCADIS 2003). In many cases, facilities identified by EDR could not be verified in the field survey due to name changes, address discrepancies, and location errors. Figure 3-22 illustrates the approximate locations of known hazardous waste materials and USTs identified within the study area. Field-verified sources have the most accurate location





Final Environmental Impact Statement

Chapter 3 – Affected Environment

information. The EDR information was useful in providing regulatory information for some of these field-verified facilities. EDR information that could not be field verified was mapped because it may provide historical information about environmental activities in the area.

3.12.1 Federal Databases

USEPA listings that were reviewed are described in the following section.

<u>National Priorities List (NPL)</u> - NPL includes any property or site that is included on the USEPA database of uncontrolled or abandoned hazardous waste sites identified for priority remedial action under CERCLA, also known as Superfund.

§ The EDR report did not identify any NPL locations within or near the study area.

<u>Federal Comprehensive Environmental Response, Compensation, and Liability</u> <u>Information System (CERCLIS)</u> - CERCLIS includes any property or site identified by USEPA as abandoned, inactive, or uncontrolled hazardous waste sites that may require cleanup. Sites contained with the CERCLIS-No Further Remedial Action Planned (CERC-NFRAP) database are sites that have been removed from CERCLIS because of resolved issues.

§ The EDR report did not identify any CERCLIS locations in or near the study area.

<u>Resource Conservation and Recovery Information System (RCRIS)/Hazardous Waste</u> <u>Discharge Monitoring System (HWDMS)</u> - The RCRIS database contains selective information on sites which generate, store, transport, treat, or dispose of hazardous waste.

§ Two RCRIS-Small Quantity Generator (SQG) facilities were identified within the study area by EDR. The name and location of these two RCRIS-SQGs are included on Table 3-17.

Tuble e The Refub Shall Quality Scherutors.						
Facility Name	Location Description	Type of Facility				
ULM Chemistry Building	700 University Avenue	RCRIS-Small Quantity Generator				
Poly Processing Company	2201 Sterlington Road	RCRIS-Small Quantity Generator				

Table 3-17. RCRIS-Small Quantity Generators.

According to information provided by the LDEQ Northeast Regional Office, Poly Processing Company is a polyethylene tank manufacturer. They manufacture highdensity polyethylene tanks from rotational molding. Poly Processing Company does not produce the chemicals used in the tank manufacturing process.
Final Environmental Impact Statement

Chapter 3 – Affected Environment

#### 3.12.2 State Databases

<u>State Hazardous Waste Sites (SHWS)</u> - The state Hazardous Substance Remedial Action Trust Fund Priority List is a database that identifies state hazardous waste sites. Priority sites planned for cleanup using state funds and contributions by potentially responsible parties are included in this database.

§ The EDR report did not identify any locations within or near the study area.

<u>Underground and Leaking Underground Storage Tanks (USTs and LUSTs)</u> - The UST and LUST database is an inventory of registered underground storage tanks and leaking underground storage tanks registered in the State of Louisiana.

§ EDR identified seven USTs within the study area. Two LUST locations, the ULM Auto Service located at 501 Stadium Drive and University Shell located at 3405 Desiard, were identified by EDR within the study area. EDR identified 38 UST and 10 LUST sites outside the study area. The majority of these facilities are located outside of the western and southern boundaries of the study area along U.S. 165 and U.S. 80, respectively. Table 3-18 summarizes the name, location, and type of facility located in the study area.

Facility Name	Location Description	Type of Facility
University of Louisiana at Monroe Chemistry Building	806 University Avenue	Underground Storage Tank
ULM Auto Service	501 Stadium Drive located	Underground Storage Tank
ULM Grounds Maintenance	Malone Stadium	Underground Storage Tank
Nelson D. Abel, Jr.	3404 Bon Aire Drive	Underground Storage Tank
Expressway #692	2400 Old Sterlington Road	Underground Storage Tank
University Shell	3405 US 80	Leaking Underground Storage Tank
University of Louisiana at Monroe Auto Service	501 Stadium Drive	Leaking Underground Storage Tank
University Shell	3405 Desiard	Leaking Underground Storage Tank
Cranford's Gulf	6001 Desiard	Underground Storage Tank

 Table 3-18.
 Underground and Leaking Underground Storage Tanks.

3.12.3 Solid Waste Facilities/Landfills (SWF/LF)

The SWF/LF database is maintained by LDEQ. This database is an inventory of solid waste disposal facilities or landfill sites. No SWF/LF facilities were identified by EDR in or near the study area.

Final Environmental Impact Statement

Chapter 3 – Affected Environment

#### 3.12.4 Field Survey

Two industrial facilities were observed within the study area during the field survey, Ouachita Fertilizer and Poly Processing Company. As previously stated, Poly Processing Company is a polyethylene tank manufacturer that manufactures high-density polyethylene tanks from rotational molding. Poly Processing Company does not produce the chemicals used in the tank manufacturing process; however, the facility was identified by EDR as a RCRIS-SQG.

Ouachita Fertilizer was not identified in any of the EDR database listings. According to LDEQ Northeast Field Office personnel, Ouachita Fertilizer has a small source air permit for a liquid fertilizer manufacturing operation. Nitrogen is supplied in the form of anhydrous ammonia and phosphorus is provided as super phosphoric acid. Both chemicals are delivered to Ouachita Fertilizer, either by truck or railcar, where they are subsequently blended and packaged in tanks manufactured by Poly Processing Company.

The field surveys and the records review indicated numerous historical and recognized environmental conditions (HRECs, RECs) resulting from industrial uses in the last 40 years near the northern terminus. Table 3-19 lists existing potential contaminants and sources near the northern terminus.

Facility	Current or Historic REC	Sources	Compounds
Moore Fertilizer and Chemical Company/Terrel AgriService	HREC	Mixing and sales of agricultural chemicals/ bulk seed sales	TPH-Gas, TPH-Diesel, TPH-Oil, Pesticides, Herbicides, Arsenic
R.J. Moore Trucking Co.	HREC	Parking, maintenance, and wash down of trucks	TPH-Gas, TPH-Diesel, TPH-Oil
W.R. Grace Company	HREC	Mixing and sales of agricultural chemicals and fertilizers/bulk seed sales	TPH-Gas, TPH-Diesel, TPH-Oil, Pesticides, Herbicides, Arsenic
Northeast Louisiana Oil and Filtration	HREC	Unknown - presumed oil recycler	TPH-Gas, TPH-Diesel, TPH-Oil
Dittco Products (previously National Steel Products)	HREC	Waste F-solvents, D001 and D007, and painting process wastes	VOCs, SVOCs, Lead
Red Barn Chemical Company	REC	Potential production and packaging of agricultural chemicals	Pesticides, Herbicides, Arsenic

# Table 3-19. Potential Contaminants and Sources for the Industrial Area near the Northern Terminus.

Final Environmental Impact Statement

# Chapter 3 – Affected Environment

Facility	Current or Historic REC	Sources	Compounds
Inactive Gas Well #165700 with pit and unregistered pits	REC	Pit containing drilling mud	RCRA Metals, PAHs, TPH- Diesel
Well #163351 (Active Injection Well)	REC	Possible pits from drilling and/or cleaning activities	TPH-Diesel, RCRA Metals
Sewage Treatment Lagoons including lagoon 10 yards east of AST at Premier Products	HRECs and REC	Treatment of sanitary wastewater	VOCs, SVOCs, RCRA Metals
Backfilled Ponds on Poly Processing Site	REC	Pond potentially used by industrial facilities in the area	Pesticides, Herbicides, Arsenic
Premier Products	REC	Storm water runoff from maintenance yard area	Oil and Grease, TPH-Gas, TPH- Diesel
Effluent Ditch north of Poly Processing Along East Side of Railroad Tracks	REC	Unknown discharge of wastewater	VOCs, SVOCs, Oil and Grease, TPH-Gas, TPH-Diesel
Ouachita Fertilizer	REC	ASTs with no secondary containment	Phosphoric Acid; Superphosphoric Acid

TPH – Total Petroleum Hydrocarbons

VOCs – Volatile Organic Compounds

SVOCs – Semivolatile Organic Compounds

PAHs - Polycyclic Aromatic Hydrocarbons

The assessment findings resulting from the EDR database search and the field reconnaissance survey are preliminary and are not intended to supplant more detailed studies of subsurface soils and groundwater, if warranted. In addition to sites identified during this assessment, other potential hazardous material and waste sites may exist in the study area due to illegal dumping, lack of regulatory compliance, or limited regulatory information.

#### 3.12.5 Other Databases

Additional USEPA listings that were reviewed include the following:

<u>Emergency Response Notification System (ERNS)</u> - The ERNS database includes any property or site that is included in a national database of reported releases of oil and hazardous substances;

Final Environmental Impact Statement

Chapter 3 – Affected Environment

<u>Facilities Index System (FINDS)</u> - The FINDS database includes any property or site that the USEPA has investigated, reviewed, or been made aware of through its various regulatory programs;

<u>Corrective Action Report (CORRACTS)</u> - The CORRACTS database identifies hazardous waste handlers with RCRA corrective action activity;

<u>PCB Activities Database System (PADS)</u> - The PADS database identifies generators, transporters, commercial storers, and/or brokers and disposers of PCBs who are required to notify USEPA of such activities;

<u>RCRA Administrative Action Tracking System (RAATS)</u> - The RAATS database contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by USEPA;

<u>Toxic Chemical Release Inventory System (TRIS)</u> - The TRIS database identifies facilities which release toxic chemicals to the air, water, and land in reportable quantities under SARA Title III Section 313;

<u>Toxic Substances Control Act (TSCA)</u> - The TSCA database identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substances Inventory List;

<u>Material Licensing Tracking System (MLTS)</u> - MLTS lists sites that possess or use radioactive materials;

<u>Superfund (CERCLA Consent Decrees [CONSENT])</u> - The CONSENT database lists sites that have major legal settlements establishing responsibility and standards at Superfund sites;

<u>Records of Decision (ROD)</u> - This database lists sites that have had mandates for cleanup. ROD documents contain specific technical and health information for site remediation;

<u>Federal Superfund LIENS (NPL LIENS)</u> - This is a USEPA compiled list of filed notices of Superfund Liens.

The ULM Chemistry Building and Poly Processing Company identified by EDR as RCRIS-SQG sites were also listed in the FINDS database. EDR also identified ten FINDS sites outside of the study area, primarily along U.S. 165 and U.S. 80 west and south of the study area, respectively.

#### 3.13 Air Quality

USEPA and LDEQ are responsible for the protection of air quality within Louisiana. USEPA established criteria for evaluating air quality in accordance with the 1990 Clean

Final Environmental Impact Statement

Chapter 3 – Affected Environment

Air Act Amendments. Two standards, primary and secondary, were established for defining air quality. Primary standards refer to air quality levels required to protect public health within an adequate margin of safety. Secondary standards refer to air quality levels required to safeguard visibility, comfort, animals, and property from the deleterious effects of poor air quality. National Ambient Air Quality Standards (NAAQS) were established for the following six air pollutants: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), ozone (O<sub>3</sub>), and particulate matter of 10 microns or less in size (PM-10). The NAAQS are shown on Table 3-20.

Pollutant	Type of Standard	Averaging Time	Concentration • g/m <sup>3</sup>	Concentration ppm
Carbon	Primary and Secondary	8-hour*	10,000	9
Monoxide	Primary and secondary	1-hour*	40,000	35
Nitrogen Dioxide	Primary and Secondary	Annual Arithmetic Mean	100	0.05
Ozone	Primary and Secondary	1-hour	235	0.12
Particulate Matter	Primary and Secondary	Annual Arithmetic Mean	50	-
	Primary and Secondary	24-hour	150	-
Sulfur Dioxida	Primary	Annual Arithmetic Mean	80	0.03
Sullur Dioxide	Primary	24-hour	365	0.14
	Secondary	3-hour	1,300	0.05
Lead	Primary and Secondary	3-month	1.5	-

Table 3-20.	National Primary	y and Secondary	y Ambient Air (	<b>Quality Standards.</b>
	•	/ •		

µg/m<sup>3</sup> micrograms per cubic meter

ppm parts per million

\*Not to be exceeded more than once per year

USEPA has designated all areas of Louisiana as either attainment, nonattainment, or unclassified. The study area is located within both the City of Monroe and Ouachita Parish, which USEPA has designated as attainment status for all NAAQS pollutants. The attainment status indicates the historical pollutant levels are below the NAAQS. Therefore, the project is in an area where the Louisiana State Implementation Plan (SIP) does not require any transportation control measures and the transportation conformity procedures do not apply to this project.

#### 3.14 Noise

The Noise Control Act of 1972 authorized USEPA to regulate major sources of noise, such as transportation vehicles and construction equipment. The Federal-Aid Highway Act of 1970 mandated FHWA to develop standards for mitigating highway traffic noise. This Act requires that all traffic noise impacts be identified, all potential mitigation measures be examined, and all reasonable and feasible noise mitigation measures be

Final Environmental Impact Statement

Chapter 3 – Affected Environment

incorporated into the planning and design of highway projects. The regulations include criteria at which noise abatement must be considered.

#### 3.14.1 Characteristics of Noise

Noise is generally defined as unwanted sound. It is emitted from many sources, including airplanes, factories, railroads, power plants, and highway vehicles. Highway traffic noise is generated primarily from a vehicle's tires on pavement, engine, and exhaust.

The magnitude of noise is usually described by its sound pressure and is commonly measured in decibels, which is expressed as "dB." However, not all frequencies are detectable by the human ear; therefore, an adjustment is made to the high and low frequencies to approximate the way an average person hears traffic sounds. This adjustment is called A-weighting and is expressed as "dBA." Table 3-21 provides a list of common sound/noise levels.

Outdoor	dBA	Indoor
Pneumatic hammer	100	Subway train
Gas lawn mower at 1 meter		
	90	Food blender at 1 meter
Downtown (large city)	80	Garbage disposal at 1 meter
		Shouting at 1 meter
Lawn mower at 30 meters	70	Vacuum cleaner at 3 meters
Commercial area		Normal speech at 1 meter
Air conditioning unit	60	Clothes dryer at 1 meter
Babbling brook		Large business office
Quiet urban (daytime)	50	Dishwasher (next room)
Quiet urban (nighttime)	40	Library

#### Table 3-21. Common Sound/Noise Levels.

Due to the changing number, type, and speed of vehicles, there are variances in traffic sound levels. This variation can be plotted as a function of time and converted to a single value to represent the average or equivalent sound level, which is expressed as " $L_{eq}$ ."

 $L_{eq}$  is defined as a steady-state sound level, which over a period of time contains the same amount of acoustic energy as the varying sound levels of the traffic noise. This measure is used by FHWA in determining appropriate noise abatement actions. The usual period of interest for the  $L_{eq}$  is hourly, referred to as the  $L_{eq}$  (H). The FHWA and LDOTD Noise Abatement Criteria (NAC) for different land uses close to highways are described on Table 3-22.

Final Environmental Impact Statement

Chapter 3 – Affected Environment

Activity Category	dBA L <sub>eq</sub>	Description of Land Use Activity Areas
A	56 (exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
В	66 (exterior)	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.
С	71 (exterior)	Developed lands, properties, or activities not included in categories A or B above.
D		Undeveloped lands.
E	51	Residences, motels, hotels, public meeting rooms, schools,

#### Table 3-22. FWHA/LDOTD Noise Abatement Criteria.

(interior)

These criteria are consistent with the FHWA Noise Abatement Criteria (23 CFR 772) allowing for consideration of traffic noise impacts 1 dBA below the FHWA criteria.

churches, libraries, hospitals, and auditoriums.

The procedures for determining highway noise impacts are derived from Part 772, Title 23 of the Code of Federal Regulations. FHWA guidelines dictate that receptors exposed to noise levels approaching or exceeding 67 dBA for residential and 72 dBA for commercial land uses, or experiencing substantial noise increases, should be considered for mitigation. LDOTD guidelines regard 66 dBA for residential receptors and 71 dBA for commercial receptors as levels approaching FHWA noise abatement criteria. LDOTD has defined a substantial increase as 10 dBA or more over existing noise levels for any sensitive receptor.

#### 3.14.2 Ambient Noise Levels

Ambient noise describes natural and mechanical sources of sound, as well as sound produced from human activities which are typically present in any one particular area. The ambient noise levels along the project must be known to determine the impact of future increases in noise due to the proposed project.

Land use activity within the project area is a mixture of undeveloped land, residential, light commercial/industrial, and institutional (University). The primary areas of concern for this project are the residential areas located along or adjacent to the proposed Build Alternatives. Three churches are located within 500 feet of the proposed Build Alternative ROWs. Residences, churches, and outdoor recreation areas are included in Activity Category B of the LDOTD Noise Standards and have an NAC of 66 dBA.

Existing noise measurements were conducted at 15-minute intervals at 13 representative sites along the proposed Build Alternative locations during weekday peak and off-peak traffic times. These sites were sampled during daytime hours for both peak and off-peak hours. Measurements were taken at an area of outdoor use (backyards, patios, playgrounds) at different representative receptors throughout the project area, including Pecan Grove, the park that is owned and operated by the Baptist Children's Home. Locations where noise measurements were taken are shown on Figure 3-23.



figure3-23.pd

Final Environmental Impact Statement

Chapter 3 – Affected Environment

The major source of noise for existing receivers comes from nearby major roadways including U.S. 80, U.S. 165, Stadium Drive, and Bon Aire Drive. The peak  $L_{eq}$  for the receivers ranged from 42.0 to 61.0 dBA. None of the measured levels equaled or exceeded the LDOTD NAC. The results of the ambient noise-monitoring program are shown on Table 3-23.

					Noise Level	Traffic Information (Cars/
			Peak Hourly	Time Data	Reading	2-axle/
Site	Location	Description	Traffic	Taken	(dBA)	3-axle)
1	Kansas Lane at	Apartment	7:15 - 8:15 am	4:49 - 5:04 pm	55.5	397/3/3
	US 80, Monroe,	Complex	4:15 - 5:15 pm		51.0	
	LA (Mary Lea				52.5	
	Apartments)					
2	Kansas Lane	Public Park	7:15 - 8:15 am	7:07 - 7:22 am	61.0	38/1/3
	near Bayou		4:15 - 5:15 pm			
	Desiard,					
	Monroe, LA					
	(Louisiana					
	Baptist					
	Children's					
	Home)					
3	Bay Oaks Drive,	Residential Area	8:45 am -	9:45 - 10:00	49.7	35/2/0
	Monroe, LA		6:00 pm	am	46.5	
	(open lot next to				42.0	
	5703 Bay Oaks)					
4	Bon Aire Drive,	Residential Area	8:45 am -	11:02 - 11:17	52.1	25/0/1
	Monroe, LA		6:00 pm	am	50.2	
	(open lot across				48.0	
	from 5203 Bon					
	Aire Drive)	D 11 11 14	0.45	0.42 0.50		10/0/0
5	Bon Aire Drive,	Residential Area	8:45 am -	8:43 - 8:58 am	54.6	48/0/0
	Monroe, LA	and University of	6:00 pm		53.3	
	(empty lot next	Louisiana Stadium			51.5	
	to 4910 Bon				53.3	
	Aire Drive)	American	7.15	1.25	50.4	27/1/0
0	Stadium Drive,	Apartment	/:15 am -	1:55 -	58.4	3//1/0
	Monroe, LA	Complex	4:45 pm	1:50 pm	56.5 52.2	
	(Kyan Manor				53.5	
	Apartment					
	Complex)	Dest 1 and 1 Am	7.15	2.42 2.57	50.5	27/1/0
/	Stadium Drive,	Residential Area	/:15 am -	2:42 - 2:57 pm	52.5	3//1/0
	Monroe, LA		4:45 pm		51.0	
	(Behind Kappa					
	Alpha Fraternity					
	House)					

Table 3-23. Noise Measurement Summary.

Final Environmental Impact Statement

# Chapter 3 – Affected Environment

						Traffic Information
					Noise Level	(Cars/
			Peak Hourly	Time Data	Reading	2-axle/
Site	Location	Description	Traffic	Taken	(dBA)	3-axle)
8	Stadium Drive,	Church	7:15 am -	3:41 - 3:56 pm	54.7	35/0/1
	Monroe, LA		4:45 pm		51.0	
	(God's House				50.3	
	Church [F.K.A.					
	First Southern					
	Methodist					
0	Church])	<b>A</b>	0.45	4.24 4.40	(0.1	101/0/0
9	Bon Aire Drive,	Apartment	8:45 am -	4:34 - 4:49 pm	60.1	101/0/0
	Monroe, LA	Complex	6:00 pm		57.2	
	(Brentwood				33.2	
	Apartment Complex)					
10	Bon Aire Drive	Apartment	8:45 am -	9.47 - 10.02	56.2	53/0/1
10	Monroe I A	Complex	6:00 pm	9.47 - 10.02 am	51.6	55/0/1
	(Unnamed	complex	0.00 pm	am	50.5	
	Apartment				50.5	
	Complex at					
	3800 Bon Aire					
	Drive)					
11	Bon Aire Drive,	Apartment	8:45 am -	8:31- 8:46 am	50.7	42/0/0
	Monroe, LA	Complex and	6:00 pm		51.4	
	(Marriage and	Residential Area				
	Family Therapy					
	Center)					
12	Diamondhead	Residential Area	7:15 - 8:15 am	7:31-7:46 am	53.5	95/1/0
	Subdivision				50.9	
	(empty lot				50.0	
	across from					
	0211 Diamondhard					
	Diamondnead Drive)					
12	Diamondhood	Pasidantial Area		7:54 8:00 am	40.7	2/0/0
15	Subdivision	Residential Area		7.54-8.09 am	49.7	2/0/0
	(dead end on					
	6601 Mosswood					
	Drive)					

#### 3.15 Prime and Important Farmlands

The Farmland Protection Policy Act of 1983 (7 CFR Part 658) (FPPA) establishes criteria for identifying and considering the effects of federal programs on the conversion of farmland soils to non-agricultural uses. The purpose of the FPPA is to minimize the extent to which federal programs contribute to the unnecessary and irreversible conversion of prime, unique, and other statewide or locally important farmlands to non-agricultural uses. The three categories, prime, unique, and other statewide or locally important farmlands, are defined by the U.S. Department of Agriculture as follows:

Final Environmental Impact Statement

Chapter 3 – Affected Environment

Prime Farmland	Land which has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, and labor without intolerable soil erosion.
Unique Farmland	Land used for production of specific high-value food and fiber crops. It has the special combination of soil quality, location, growing season, and moisture supply needed to economically produce sustained high quality or high yields of specific crops when treated or managed.
State and Locally Important Farmland	Land of statewide or local importance for the production of food, fiber, forage, or oilseed crops as determined by the appropriate state or local government agency.

NRCS establishes Land Capability Classifications to determine the suitability of soils for field crops. Capability classes range from I to VIII, indicating progressively greater limitations and narrower choices for practical use (Werchan and Coker 1983). NRCS considers those soils with Capability Classes III and IV to be the best soils for crop production.

Agencies are directed to identify and take into account the adverse effect of federal actions on farmlands, to consider appropriate alternative actions that mitigate adverse effect, and to assure that such federal actions are comparable with those state, local, and private programs designed to protect farmlands (Federal Register 1984).

The presence of important farmland is based on the underlying soil types. Prime and important farmland soils occurring in the study area are Hebert silt loam (Hb); Sterlington silt loam, 0 to 1 percent slope (StA); Sterlington silt loam, 1 to 3 percent slope (StB); Rilla silt loam, 1 to 3 percent slope (RIB); Portland clay (Pr); and Portland silt loam (Po). Urban land is typically exempt from the rules and regulations of FPPA. However, due to the presence of prime farmland soils within the study area and because a portion of the study area is outside of the city limits, the Farmland Conversion Import Rating Form was processed with NRCS. The completed form and NRCS conclusions are included in Appendix A-6. Results of the NRCS review determined that the soils inside the city limits or immediately adjacent to the city limits are considered to be non-prime farmland.

#### 3.16 Biotic Resources

Field visits were conducted to identify the biotic resources within the study area in November 2001, March 2002, and September 2002. The following sections provide a

Final Environmental Impact Statement

Chapter 3 – Affected Environment

summary of existing vegetation and associated wildlife (both terrestrial and aquatic) that occur within the study area. Approximately 40 percent of the land in the study area is undeveloped.

#### 3.16.1 Vegetation Communities

Several different vegetation community types occur in the study area. These include bottomland woodland, upland woodland, grassland (including pasture and cropland), hydric and aquatic habitats, and disturbed areas. Distribution and composition of these communities reflect variations in topography, soils, hydrology, disturbance, and past and present land uses. A brief description of the vegetation communities found in the study area based upon the results of several field trips and in-house data is presented below.

#### 3.16.1.1 Bottomland Woodland

Bottomland hardwood forest dominates the vegetation community types in the study area. Much of this occurs in the Chauvin Swamp. Dominant overstory species observed during the field investigations include the willow oak (*Quercus phellos*), water oak (*Quercus*) nigra), overcup oak (Quercus lyrata), sweetgum (Liquidambar styraciflua), cedar elm (Ulmus crassifolia), green ash (Fraxinus pennsylvanica), sugar hackberry (Celtis laevigata), Chinese tallow (Sapium sebiferum), and, in the wetter areas, bald cypress (Taxodium distichum) and black willow (Salix nigra). Additional species encountered in this community include the American elm (Ulmus americana), hickories (Carya spp.), water hickory (Carva aquatica), American hornbeam (Carpinus carolina), and eastern hophornbeam (Ostrya virginiana). Woody species representing the shrub stratum include winged elm (Ulmus alata), possumhaw (Ilex decidua), yaupon (Ilex vomitoria), and common buttonbush (Cephalanthus occidentalis). Vines encountered include the common greenbriar (Smilax rotundifolia), Alabama supplejack (Berchemia scandens), common balloonvine (Cardiospermum halicacabum), American buckwheat vine (Brunnichia ovata), muscadine grape (Vitis rotundifolia), Virginia creeper (Parthenocissus quinquefolia), peppervine (Ampelopsis arborea), dewberry (Rubus sp.), and poison-ivy (Toxicodendron radicans). This community also exhibits a diverse herbaceous assemblage of flora including inland sea oats (Chasmanthium latifolium), smartweed (Polygonum sp.), goldenrods (Solidago spp.), soft rush (Juncus effusus), sedges (Carex spp.), wildryes (Elymus spp.), giant ragweed (Ambrosia trifida), and dwarf palmetto (Sabal minor).

#### 3.16.1.2 Upland Woodland

Upland woodlands are not common in the study area. Canopy species are represented by live oak (*Quercus virginiana*), southern red oak (*Quercus falcata*), loblolly pine (*Pinus taeda*), and white oak (*Quercus alba*). The shrub layer in this community includes American beautyberry (*Callicarpa americana*), yaupon, flameleaf sumac (*Rhus copallina*), and baccharis (*Baccharis* sp.). Vines observed include greenbriars (*Smilax spp.*), Alabama supplejack, Japanese honeysuckle (*Lonicera japonica*), Virginia creeper, dewberry, and poison-ivy. The herbaceous stratum is typically sparse in this community

Final Environmental Impact Statement

Chapter 3 – Affected Environment

type, but includes narrowleaf woodoats (*Chasmanthium sessiliflorum*), rosettegrasses (*Dichanthelium* spp.), wildryes, violet (*Viola* sp.), wood sorrel (*Oxalis* sp.), and asters (*Aster* spp.).

#### 3.16.1.3 Grassland

The grassland community type consists of pasturelands (improved and unimproved), old fields, and utility and roadway ROWs. Improved or managed pastureland in the study area is typically dominated by improved varieties of Bermuda grass (*Cynodon dactylon*) and Bahia grass (*Paspalum notatum*). Unimproved pastureland, old fields, and ROWs consist of a variety of grasses, other herbaceous plants, and woody species. Common grasses found in these habitats throughout the study area include Johnson grass (*Sorghum halepense*), purpletop (*Tridens flavus*), white tridens (*Tridens albescens*), bristletail (*Setaria* sp.), little bluestem (*Schizachyrium scoparium*), King Ranch bluestem (*Bothriochloa ischaeum*), lovegrass (*Eragrostis* sp.), threeawn (*Aristida* sp.), brome grass (*Bromus* sp.), paspalums (*Paspalum* spp.), and rosettegrasses. Other herbaceous species observed include croton (*Croton* sp.), goldenrods, giant ragweed, sensitive briar (*Schrankia* sp.), and species of *Eupatorium*. Woody species observed in oldfields in the study area include baccharis, dewberry, sumac, and young Chinese tallow and sweetgum.

#### 3.16.1.4 Hydric and Aquatic Habitats

Hydric habitats in the study area are generally associated with streams, creeks, impoundments, low topographic areas, and Bayou Desiard. Associated with the streams/creeks are the bottomland/riparian woodlands, swamps, bogs, and marshes. Impoundments generally result in either permanent or ephemeral marshes or fringe marshes. Most of the hydric habitats in the study area are located within the floodplains, and include the wetter portions of bottomland woodlands, along with swamps and marshes.

Swamps in the study area have more than 40 percent cover by woody plants and are occasionally or regularly flooded by fresh water. Inundation in these areas ranges from permanent to seasonal. Swamps in the study area are dominated by bald cypress, overcup oak, and willow oak, along with black willow and common buttonbush.

Marshes are typically found as narrow bands along the edges of ponds and creeks and support such species as cattails (*Typha* spp.), rushes, sedges, flatsedges (*Cyperus* spp.), spikesedges (*Eleocharis* spp.), smartweeds, arrowheads (*Saggitaria* spp.), and, occasionally, woody species such as common buttonbush and black willow.

#### 3.16.1.5 Disturbed Areas

A large portion of the study area is residential/commercial. In these areas, the vegetation has been disturbed as a result of construction of roadways, buildings, parking lots, utility ROWs, and maintained yards. Standard mixed vegetation associated with human-influenced, maintained communities is primarily kept in a low state of succession by

Final Environmental Impact Statement

Chapter 3 – Affected Environment

regular mowing and/or maintenance. Residential areas show a mixture of native bottomland and upland species, as well as non-native species. Disturbed areas can also result from logging activities or ROW construction. These areas tend to be populated by woody species that were present prior to clearing and certain invasive plant species. Thus, in the study area the disturbed areas are dominated by bottomland and upland species and often tend to have a strong brush and herbaceous component.

#### 3.16.2 Wildlife

The study area lies within the Austroriparian Biotic Province, which stretches from the Pineywoods of eastern Texas through the southeastern U.S. to the Atlantic Ocean. This province is characterized by extensive pine and hardwood forests, swamps, marshes, and other hydric communities (Blair 1950). The wildlife habitats in the study area, both terrestrial and aquatic, correspond to the vegetation types described in the preceding paragraphs. These habitat types include bottomland woodland, upland woodland, grassland, hydric and aquatic habitats, and disturbed areas. They offer all the necessary components, including food, water, and cover, to support a variety of amphibians, reptiles, birds, and mammals. Bottomland hardwood and disturbed (human-influenced) are the predominant vegetation types occurring within the study area. Despite human influence, some wildlife species have adapted to the changes in habitat, and residential areas in particular do provide habitat, particularly for birds. Characteristic wildlife species of the study area are presented below. No species is considered endemic to the study area.

#### 3.16.2.1 Terrestrial Wildlife

Amphibian species (salamanders, newts, frogs, and toads) in the study area inhabit moist bottomland areas, bayous, streams, ponds, hydric habitats, and wet grassy areas, avidly feeding on insects and other invertebrates. Only two amphibian species were encountered in the study area during the field visits: the southern leopard frog (*Rana sphenocephala utricularius*) and Cope's gray treefrog/gray treefrog (*Hyla chrysoscelis/versicolor*). Other amphibians of potential occurrence include the marbled salamander (*Ambystoma opacum*), central newt (*Notophthalmus viridescens louisianensis*), northern cricket frog (*Rana clamitans*), northern spring peeper (*Pseudacris crucifer crucifer*), bronze frog (*Rana clamitans clamitans*), bullfrog (*Rana catesbeiana*), and green treefrog (*Hyla cinerea*) (Conant and Collins 1998; Carr 2002b).

Many reptile (turtles, lizards, and snakes) species also occur in the study area. They are often hidden among the leaf litter or under logs and rocks and forage on a variety of organisms, including insects, amphibians, birds, and some mammals. However, few reptiles were encountered in the study area during the field visits. Because of the inclement weather (rain as a result of Hurricane Isidore), turtles that would normally be basking in Bayou Desiard were not seen. Species known to inhabit the bayou, however, include the red-eared slider (*Trachemys scripta elegans*), eastern river cooter (*Pseudemys*)

Final Environmental Impact Statement

Chapter 3 – Affected Environment

*concinna*), spiny softshell (*Apalone spinifera*), and common snapping turtle (*Chelydra serpentina*) (Carr 2002a).

Other reptiles expected to occur in the study area include the three-toed box turtle (*Terrapene carolina triunguis*), American alligator (*Alligator mississippiensis*), and lizards such as the green anole (*Anolis carolinensis*), six-lined racerunner (*Cnemidophorus sexlineatus sexlineatus*), ground skink (*Scincella lateralis*), and northern fence lizard (*Sceloperus undulatus hyacinthinus*) (Conant and Collins 1998; Carr 2002b). Only the ground skink was observed during the field visits.

Two snake species were encountered in the study area during the field visits: the western cottonmouth (*Agkistrodon piscivorus leucostoma*) and western ribbon snake (*Thamnophis proximus proximus*). Other snakes expected to occur in the study area include the broad-banded water snake (*Nerodia fasciata confluens*), eastern garter snake (*Thamnophis sirtalis sirtalis*), rough green snake (*Opheodrys aestivus*), western mud snake (*Farancia abacura reinwardtii*), and southern copperhead (*Agkistrodon contortrix contortrix*) (Conant and Collins 1998; Carr 2002b).

Numerous avian species occur within the study area. Species encountered during the field visits include year-round residents, summer residents, and winter residents. Year-round residents encountered in aquatic areas such as Bayou Desiard and emergent marshes include the great blue heron (Ardea herodias), great egret (Ardea alba), white ibis (Eudocimus albus), wood duck (Aix sponsa), American coot (Fulica americana), belted kingfisher (Ceryle alcyon), and red-winged blackbird (Agelaius phoeniceus). Year-round residents encountered in the forested areas include the mourning dove (Zenaida macroura), barred owl (Strix varia), red-headed woodpecker (Melanerpes erythrocephalus), red-bellied woodpecker (Melanerpes carolinus), northern flicker (Colaptes auratus), pileated woodpecker (Dryocopus pileatus), Carolina chickadee (Poecile carolinensis), tufted titmouse (Baeolophus bicolor), Carolina wren (Thrvothorus ludovicianus), blue jay (Cyanocitta cristata), American crow (Corvus brachyrhynchos), American robin (Turdus migratorius), northern mockingbird (Mimus polyglottos), brown thrasher (Toxostoma rufum), and northern cardinal (Cardinalis cardinalis). Many of these species, such as the mourning dove, red-bellied woodpecker, Carolina chickadee, tufted titmouse, Carolina wren, blue jay, American robin, northern mockingbird, and northern cardinal, among others, were also encountered in the residential areas. The loggerhead shrike (Lanius ludovicianus), eastern meadowlark (Sturnella magna), and killdeer (Charadrius vociferous), all grassland species, and the red-tailed hawk (Buteo *jamaicensis*) were also observed.

Summer residents encountered in the study area during the field visits include the yellowbilled cuckoo (*Coccyzus americanus*), chimney swift (*Chaetura pelagica*), white-eyed vireo (*Vireo griseus*), and red-eyed vireo (*Vireo olivaceous*). Other summer residents expected to occur include the common nighthawk (*Chordeiles minor*), ruby-throated hummingbird (*Archilochus colubris*), eastern wood-pewee (*Contopus virens*), great crested flycatcher (*Myiarchus crinitus*), eastern kingbird (*Tyrannus tyrannus*), purple

Final Environmental Impact Statement

Chapter 3 – Affected Environment

martin (*Progne subis*), barn swallow (*Hirundo rustica*), summer tanager (*Piranga rubra*), and painted bunting (*Passerina ciris*) (Dickinson 1999; Sibley 2000).

Winter residents encountered during the field visits include the double-crested cormorant (*Phalacrocorax auritus*), mallard (*Anas platyrhynchos*), yellow-rumped warbler (*Dendroica coronata*), white-throated sparrow (*Zonotrichia albicollis*), and American goldfinch (*Carduelis tristis*). Other wintering species expected to occur in the study area include the gadwall (*Anas strepera*), sharp-shinned hawk (*Accipiter striatus*), spotted sandpiper (*Actitis macularia*), ring-billed gull (*Larus delawarensis*), eastern phoebe (*Sayornis phoebe*), red-breasted nuthatch (*Sitta canadensis*), ruby-crowned kinglet (*Regulus calendula*), cedar waxwing (*Bombycilla cedrorum*), orange-crowned warbler (*Vermivora celata*), vesper sparrow (*Pooecetes gramineus*), and dark-eyed junco (*Junco hyemalis*) (Dickinson 1999; Sibley 2000).

Mammals are generally nocturnal and not easily observed. Species encountered during the field visits include the nine-banded armadillo (*Dasypus novemcinctus*), Virginia opossum (*Didelphis virginiana*), eastern fox squirrel (*Sciurus niger*), swamp rabbit (*Sylvilagus aqauticus*), common raccoon (*Procyon lotor*), and white-tailed deer (*Odocoileus virginianus*). Other species of potential occurrence include the least shrew (*Cryptotis parva*), eastern mole (*Scalopus aquaticus*), evening bat (*Nycticeius humeralis*), eastern cottontail (*Sylvilagus floridanus*), eastern gray squirrel (*Sciurus carolinensis*), southern flying squirrel (*Glaucomys volans*), cotton mouse (*Peromyscus gossypinus*), white-footed mouse (*Peromyscus leucopus*), eastern woodrat (*Neotoma floridana*), common muskrat (*Ondatra zibethicus*), common gray fox (*Urocyon cinereoargenteus*), striped skunk (*Mephitis mephitis*), and bobcat (*Felis rufus*) (Burt and Grossenheider 1976; Davis and Schmidly 1994).

#### 3.16.2.2 Aquatic Wildlife

The major water body in the study area providing aquatic habitat is Bayou Desiard. Small streams and ponds also contribute, as well as a marsh in the northwest corner of the study area near the Arkansas-Louisiana-Mississippi Railroad. The soil, vegetation, and geology of the area determine the general nature of the water and sediments of the aquatic environment. The benthic components consist of those invertebrates that live in (infauna) or on (epifauna) the bottom substrate. These organisms play a prominent role in the ecological balance of an aquatic system. The benthic macroinvertebrates of freshwater systems form a highly diverse group of organisms with a wide variety of functions in the aquatic community. In addition to serving as a major food source for vertebrate predators such as fish, macroinvertebrates have important roles as herbivores, detrivores, and carnivores. The major groups generally included in the macroinvertebrate category are the Insecta (insects, particularly immature forms), Mollusca (mussels and snails), Oligochaeta (aquatic earthworms), and Crustacea (crawfishes and shrimp).

Food habits of fish vary with season, food availability, and life cycle stages. For example, the diet of most young fish consists of microscopic plants and animals, including algae,

Final Environmental Impact Statement

Chapter 3 – Affected Environment

protozoans, and crustaceans found on plants, in bottom material, or suspended in the water column. As fish develop and attain sexual maturity, feeding adaptations develop and the diets of some species become very restricted. Some fish are herbivorous, while others such as bass are carnivorous. Most of the sunfish (*Lepomis* spp.) and catfish (*Ictalurus* spp.) are omnivorous.

Fish species recorded from Bayou Desiard include the spotted gar (*Lepisosteus oculatus*), creek chub (*Semotilus atromaculatus*), grass pickerel (*Esox americanus vermiculatus*), pirate perch (*Aphredoderus sayanus*), mosquitofish (*Gambusia affinis*), brook silverside (*Labidesthes sicculus*), bullhead minnow (*Pimephales vigilax*), emerald shiner (*Notropis atherinoides*), golden shiner (*Notemigonus crysoleucas*), blackstripe topminnow (*Fundulus notatus*), bluegill (*Lepomis macrochirus*), redear sunfish (*Lepomis microlophus*), warmouth (*Lepomis gulosus*), cypress darter (*Etheostoma proeliare*), and swamp darter (*Etheostoma fusiforme*) (Pezold 2002).

Gamefish/recreational species recorded from Bayou Desiard include the largemouth bass (*Micropterus salmoides*), white bass (*Morone chrysops*), white crappie (*Pomoxis annularis*), black crappie (*Pomoxis nigromaculatus*), and channel catfish (*Ictalurus furcatus*), as well as the sunfish. Other fish recorded from Bayou Desiard include forage species such as the gizzard shad (*Dorosoma cepedianum*), threadfin shad (*Dorosoma petenense*), and lake chubsucker (*Erimyzon sucetta*). Important rough fish species recorded from Bayou Desiard include the black bullhead catfish (*Ameiurus melas*) and yellow bullhead catfish (*Ameiurus natalis*) (Pezold 2002).

#### 3.17 Jurisdictional Wetlands

Activities conducted in wetlands may be subject to the guidelines and regulations of Section 404 of the Clean Water Act and may be regulated by the USACE. Current Federal decision-making authority for activities affecting wetlands and other waters of the U.S. lies principally with the USACE through Section 10 of the Rivers and Harbor Act of 1998 and Section 404 of the Federal Water Pollution Control Act of 1948, also known as the Clean Water Act (CWA). In 1972, amendments to this act established a permit program and authorized the Secretary of the Army, acting through the Chief of Engineers, to issue permits for regulating the discharge of dredged or fill material into all waters of the U.S. While USEPA is the primary administrative agency for the CWA, the USACE is responsible for enforcement, implementation, and permitting of the Act's provisions. The USACE regulatory program is defined in 33 CFR 320-330.

Final Environmental Impact Statement

Chapter 3 – Affected Environment

Any action that proposes to place fill into wetlands and other waters of the U.S. requires a jurisdictional determination from the USACE. A wetland, as defined in 33 CFR 328.3, is any area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and under normal circumstances supports, a prevalence of vegetation typically adapted for life in saturated soil conditions. The USACE has adopted, through the Council on Environmental Quality (CEQ), a mitigation policy that embraces the concepts of "no net loss of wetlands" and sequencing. The purpose of this policy is to restore and maintain the chemical, biological, and physical integrity of waters of the U.S., specifically wetlands. Mitigation of wetland impacts has been defined by the CEQ as avoidance of, minimizing, rectifying, reducing over time, and compensating for impacts (40 CFR 1508.20). Each of the principles of avoidance, minimization, and compensatory mitigation must be considered in sequential order.

Wetlands within the study area were identified using the USGS Gap Analysis Program (GAP) data, soil distribution data in the Soil Survey of Ouachita Parish (SCS 1974), and field determinations. An on-site wetland determination was conducted September 23 through September 26, 2002. It was conducted in accordance with methods outlined in the USACE 1987 *Wetlands Delineation Manual* (USACE Technical Report Y-87-1, January 1987). Wetlands were identified based on the presence of hydric soils, hydrophytic vegetation, and hydrology.

Wetlands are found in association with the Bayou Desiard floodplains and Chauvin Swamp. The Chauvin Basin floodplain is relatively large and exhibits seasonal flooding. Jurisdictional wetlands in the study area are primarily palustrine in nature, which, as defined by Cowardin et al. (1979), includes all nontidal wetlands dominated by trees, shrubs, persistent emergents, and emergent mosses and lichens. Wetlands identified within the project area were classified as emergent marsh or forested wetlands (bottomland hardwoods) habitat types. The species composition of emergent marsh consisted of obligate hydrophytic vegetation species such as spikerush (*Eleocharis* sp.), panic grass (*Panicum* sp.), umbrella sedge (*Cyperus alternifolus*), and beakrush (Rynchospora sp.). A small stream, approximately 6 feet in width and 6 inches in depth, provides the saturated conditions that are present within this habitat type. Water is often trapped for extended periods due to the low soil permeability. This area is maintained as emergent marsh through periodic clippings. While the emergent marsh appears on aerial photography, it appears to be wooded as recently as February 2000. A small stand of facultative wet and obligate hydrophytic species, including willow oak, overcup oak, and bald cypress, was also observed along the northern portion of the emergent marsh area.

Bottomland hardwood forests were the dominant wetland type in the study area. Most are associated with the gently sloping topography associated with the floodplains of Bayou Desiard that eventually diminish to form what is known as the Chauvin Swamp. Bottomland hardwood forests generally support a diverse vegetative community that provides an array of habitat for wildlife. Species associated with the bottomland hardwood forest included bald cypress, willow oak, sweetgum, overcup oak, sugarberry,

Final Environmental Impact Statement

Chapter 3 – Affected Environment

palmetto, and deciduous holly. Bottomland forests are able to slow and retain floodwaters, stabilize streambanks, and filter/remove pollutants. These systems also act as buffers during times of flooding by reducing runoff and allowing for absorption and infiltration. Figure 3-24 contains a map showing the wetlands in the study area. Soils associated with wetlands generally consist of level to gently sloping loamy and clay soils that reduce soil permeability and result in poor drainage. Wetland soils were dark gray to gray, with distinct mottles, which are associated with reducing conditions and lack of oxygen; typical of hydric soils. Due to the predominance of clay in the area soils, wetland areas remained inundated or saturated for long periods after heavy rains due to slow percolation.

A detailed description of hydrology, soil, and vegetation within the wetland areas can be found in the *Wetland Delineation Report* (ARCADIS 2004).

#### 3.18 Protected Species

Some populations of flora and fauna have been, or are, in the process of decline due to either natural forces or their inability to coexist with humans. Federal law, under the provisions of Section 7 of the Endangered Species Act of 1973, as amended, requires that any action likely to adversely affect a species classified as federally protected be subject to review by USFWS. An endangered species is one that is in danger of extinction throughout all or a significant portion of its range, while a threatened species is one that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. Federal Species of Concern (FSC) and state-protected species are not protected under Section 7 of the Endangered Species Act of 1973, as amended; only those species listed by USFWS as endangered or threatened are afforded complete federal protection.

Four federally listed species have been recorded in Ouachita Parish as listed on Table 3-24. The pallid sturgeon (*Scaphirhynchus albus*) and red-cockaded woodpecker (*Picoides borealis*) are listed as endangered, while the bald eagle (*Haliaeetus leucocephalus*) and Louisiana black bear (*Ursus americanus luteolus*) are listed as threatened. According to USFWS (2001) and the Louisiana Natural Heritage Program (LNHP 2001), no occurrences of these species have been recorded in the study area. Following Table 3-24 is a brief description of each species and a discussion on the potential occurrence of each species in the study area. Critical habitat, as defined by the Endangered Species Act, is a term for habitat given special protection for the benefit of the listed species. No critical habitat occurs in the study area.





Fig 3-24 GAP Wetlands Map.pdf

Final Environmental Impact Statement

Chapter 3 – Affected Environment

Common Name	Scientific Name	Federal Status	State Status	Available _ Habitat _
Pallid sturgeon	Scaphirhynchus albus	Е	Е	No
Red-cockaded woodpecker	Picoides borealis	Е	Е	No
Bald eagle	Haliaeetus leucocephalus	Т	Т	No
Louisiana black bear	Ursus americanus luteolus	Т	Т	Yes

Table 3-24. Threatened and Endangered Species for Ouachita Parish.

"E" Endangered A taxon "in danger of extinction throughout all or a significant portion of its range."
 "T" Threatened A taxon "likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range."

Source: USFWS (2002)

Pallid Sturgeon (*Scaphirhynchus albus*) Date Listed: Endangered, 1992

The pallid sturgeon is a relatively large fish, between 19 and 30 inches in length, and weighing up to 65 pounds. Its known habitat extends from the Missouri River in central Montana to St. Louis, Missouri, the Yellowstone River of eastern Montana, and the Mississippi River from St. Louis to the Gulf of Mexico. This species also occurs in the Atchafalaya River and, possibly, the Red River as well. The pallid sturgeon prefers the main channels of excessively turbid rivers with strong currents and a firm sandy bottom. Aquatic insects and small fish comprise a majority of the diet. It has not been recorded in the study area (USFWS 2001; LNHP 2001; Pezold 2002) and is unlikely to occur in the study area due to a lack of suitable habitat.

Red-cockaded Woodpecker (*Picoides borealis*) Date Listed: Endangered, 1970

The red-cockaded woodpecker (RCW) is found in pine forests in the southeastern United States. Its plumage is entirely black and white except for small red streaks (cockades) on the sides of the nape of the male, hence its name. This woodpecker has a strong preference for open, park-like stands of living, mature pines with little to no hardwoods, particularly in the midstory. It is unique among woodpeckers in that it nests exclusively in living pine trees, generally older than 60 years, particularly longleaf pine (*Pinus palustris*). Appropriate habitat must contain at least 50 percent pine, lack a thick understory, and be contiguous with other stands at least 30 years of age. Their foraging range may extend to 500 acres, but must be contiguous with suitable nesting sites. The RCW has not been recorded in the study area (USFWS 2001; LNHP 2001) and is highly unlikely to occur in the study area due to lack of suitable habitat.

Final Environmental Impact Statement

Chapter 3 – Affected Environment

Bald Eagle (*Haliaeetus leucocephalus*) Date Listed: Endangered, 1967; Threatened, 1995

Bald eagles are generally found in coastal areas around large bodies of water such as reservoirs, lakes, and rivers. The large stick nests, which measure about 6 feet across and weigh hundreds of pounds, are lined with soft materials such as grass, leaves, and Spanish moss. These nests are often used for several years by the same pair of eagles, with new materials added each year. Young eagles can fly in 11 to 12 weeks, but the parents continue to feed them for another four to six weeks while they learn to hunt. Their diet consists mostly of fish (often scavenged) and waterfowl. Bald eagles nest in Louisiana from October through mid-May, typically in bald cypress trees near fresh to intermediate marshes or open water in the southeastern parishes. Wintering eagles occur and infrequently nest near large lakes in central and northern Louisiana. The bald eagle has not been recorded in the study area (USFWS 2001; LNHP 2001) and is unlikely to occur in the study area due to the lack of suitable habitat.

Louisiana Black Bear (*Ursus americanus luteolus*) Date Listed: Threatened, 1992

Louisiana black bears are active from April to November. They hibernate in the winter in large hollow trees, downed logs, or in ground nests, which are shallow depressions lined with vegetation. After emerging from dens in the spring, bears initially semi-fast, typically eating succulent, easy-to-digest vegetation as they continue to utilize remaining fat reserves. During the summer, they eat mostly berries, insects, and carrion. In order to gain weight for the winter, bears eat nuts, which are high in carbohydrates and fats. The habitat of the Louisiana black bear is primarily in bottomland hardwoods and floodplain forests, but can also be found in upland hardwoods, mixed pine/hardwoods, coastal flatwoods, and marshes. Remaining Louisiana black bear populations occur in the Tensas River Basin and the coastal parishes of St. Mary and Iberia. Although the Louisiana black bear has not been recorded in the study area (USFWS 2001; LNHP 2001), apparently suitable habitat occurs in the Chauvin Swamp area and may provide shelter for itinerant bears.

#### 3.19 Wild and Scenic Rivers

The National Wild and Scenic Rivers Act of 1968 (16 USC 1271) was adopted to preserve certain rivers with outstanding natural, cultural, or recreational features in a freeflowing condition. The Act classifies designated rivers as Wild, Scenic, or Recreational. Wild rivers are those rivers free of impoundments, inaccessible except by trails, with primitive, pristine shorelines, and unpolluted waters. Scenic rivers must meet these same criteria, with the exception of being accessible by roadways. Recreational rivers are the least pristine of the three classifications because there may be some development along their shoreline, are accessible by roadways, and may have been impounded in some sections. Rivers classified under this Act must first be listed on the National Rivers Inventory (NRI). The Act requires that all federal actions which may compromise the

Final Environmental Impact Statement

Chapter 3 – Affected Environment

designation of a Wild and Scenic River or foreclose the possibility of future designation of an NRI river be coordinated with the U.S. Department of Interior.

No Wild and Scenic rivers occur in the study area. While the Ouachita River is characterized as a Scenic River, it occurs outside of the study area.

#### 3.20 Coastal Barriers and Coastal Zones

The study area is located outside the Coastal Zone and contains no coastal barriers.

#### 3.21 Essential Fish Habit

The study area does not fall within a tidally influenced area and, thus, has no essential fish habitat (EFH).

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

## 4. ENVIRONMENTAL CONSEQUENCES

This chapter identifies the potential impacts to the human, physical, and natural environment that may result from each of the five Build Alternatives evaluated for the Kansas Lane Connector.

#### 4.1 Social Impacts

The Federal-Aid Highway Act of 1970 (23 USC 109(h)) requires that the effects of federal-aid transportation projects upon residences, businesses, the tax base, and other community resources be considered during transportation decision-making. Impacts to the social environment may include loss of neighborhood and community cohesion, relocation of individual homes and businesses, and impacts to community or public facilities.

#### 4.1.1 Community Services and Facilities

As discussed in Chapter 3, the only community services or facilities within the study area are ULM and a ULM police station and annex.

### 4.1.1.1 Schools

All of the Build Alternatives would provide improved access to the north of the ULM campus, particularly to the ULM ballfields, stadiums, and parking facilities. In addition, the Kansas Lane Connector would provide a positive impact on schools outside of the study area, such as the Ouachita Junior High School and the Cypress Point Elementary School, by providing a more direct travel route from the Cypress Point and Edgewater Gardens neighborhoods to these schools.

The No-Build Alternative would not improve access to the northeastern side of the ULM campus and it would not provide a more direct travel route for area school buses to transport children between the Cypress Point and Edgewater Gardens neighborhoods and Cypress Point Elementary School and Ouachita Junior High School.

## 4.1.1.2 Police and Fire

None of the Build Alternatives would impact the ULM police station or annex, but any of the Build Alternatives would have a positive impact on the local police, fire, and emergency services by reducing the response times to the Cypress Point and Edgewater Gardens neighborhoods.

The No-Build Alternative would not improve the response times to the neighborhoods in the study area.

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

#### 4.1.2 Community Impacts, Cohesion, and Integrity

There are three neighborhoods which could be affected by the Kansas Lane Connector: Ingleside, Edgewater Gardens, and Cypress Point. Figure 4-1 shows the general location of these neighborhoods in relation to the Build Alternatives. The presence of the Kansas Lane Connector may have both positive and negative impacts on these neighborhoods. Many of these impacts are often subjective, making them difficult to quantify. Others, such as relocations and noise impacts, which are discussed in detail later in this chapter, can be more readily measured.

The Preferred Alternative skirts the eastern edge of the Ingleside neighborhood, passes between the Cypress Point and Edgewater Gardens neighborhoods, and then follows the northern border of these neighborhoods all the way to Old Sterlington Road. This route will impact neighborhood cohesion the least of any of the Build Alternatives by closely tracking the outer boundaries of the neighborhoods. The route through the Ingleside neighborhood, for instance, is proposed to follow the western boundary of Pecan Grove Park. This park physically separates the two sides of the neighborhood and has no streets through it. While the Preferred Alternative would amplify the existing condition, it is the least disruptive of the Build Alternatives for Ingleside.

On the north side of Bayou Desiard, the Preferred Alternative proposes to follow Bon Aire Drive, an existing roadway with a median, which currently forms a physical barrier and border separating the Edgewater Gardens neighborhood to the west from the Cypress Point neighborhood to the east. Cohesion and interaction between these two neighborhoods is unsubstantiated. The Preferred Alternative will not substantially diminish the quality of life for the residents of the Edgewater Gardens or Cypress Point neighborhoods because they are already separated by Bon Aire Drive and because the proposed roadway will be set back a distance from existing homes. Although this alternative is the one that comes closest to the Cypress Point neighborhood, it will not negatively affect its integrity, nor will it cause negative impacts to the cohesion of Edgewater Gardens. By passing east of the Churchill and Brentwood Apartments, it will have limited negative impacts on these complexes.

LDOTD will work with existing neighborhoods in the vicinity of the proposed Kansas Lane Connector to better integrate the design of the roadway with the surrounding communities.

The Central Alternative proceeds northwest from the existing Kansas Lane and bisects the Ingleside neighborhood and Edgewater Gardens. It would create physical and visual barriers within these communities that currently do not exist, and the cohesion and integrity of the Ingleside neighborhood, in particular, would be substantially diminished. This route through Edgewater would change the character of the neighborhood by introducing a major street between homes where there is none and disrupt the park-like setting. The Central Alternative will have no impact on the integrity of the Cypress Point neighborhood. Indirect impacts from the Central Alternative would likely occur to the





**Kansas Lane Connector** Ouachita Parish, Monroe, LA

Impacts to Ne

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## LEGEND



Project Study Area All Alternatives Northern Alternative Central Alternative Central + Northern Connection Southern Alternative Southern + Central Connection Logical Terminus



Aerial photography from Aero-Data, provided by Ouachita Parish Police Jury, flown March 2000.

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Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

God's House Church located north of the ULM campus. Direct impacts to the God's House Church from planned expansion were not considered for the Central Alternative because no building permit was on file at the time the DEIS was published. It would also have some impact on the Churchill Circle and Brentwood Apartment complexes by reducing the size of the setbacks of the buildings.

The Southern Alternative proceeds northwest from the existing Kansas Lane and also bisects the Ingleside and Edgewater Gardens neighborhoods. It would create physical and visual barriers within these communities that currently do not exist, and the cohesion and integrity of the Ingleside neighborhood, in particular, would be substantially diminished. A major street through Edgewater would substantially change the character of the neighborhood by introducing traffic between homes that currently enjoy a park-like setting. The Southern Alternative will have no impact on the Cypress Point neighborhood integrity.

The Central+Northern Alternative is a combination of the Central and Northern Alternatives described above. The route follows the Central Alternative through the Ingleside and Edgewater Gardens neighborhoods, crossing Bayou Desiard and merging with the Northern Alternative where the two routes intersect to cross the wetlands. From that point it follows the Northern Alternative route to pass on the east side of the Churchill Circle and Brentwood Apartment complexes paralleling Bon Aire Drive. It angles west to follow the southern boundary of uninhabited woodland and curves to pass on the northeast. The southern half of this alternative will have the same impacts on the integrity of the Ingleside and Edgewater Gardens neighborhoods as the Central Alternative. However, the Central+Northern Alternative will have no impacts on neighborhood cohesion or integrity to any other neighborhoods along the section that follows the Northern Alternative alignment.

The Southern+Central Alternative is a combination of the Southern and Central Alternatives described above. The route follows the Southern Alternative through the Ingleside and Edgewater Gardens neighborhoods, follows the southern boundary of the wetlands, and links with the Central Alternative just northeast of the God's House Church. The alignment then follows the Central Alternative, which passes on the southwest side of the Brentwood and Churchill Circle Apartment complexes. Besides having an effect on the integrity of the Ingleside and Edgewater Gardens neighborhoods and impacting the apartment complexes as previously stated, this alternative would require the relocation of three fraternity houses near the end of Stadium Drive. The relocations would be required to provide adequate space for a smooth transition between the Southern and Central Alternatives.

There would be no impacts to neighborhoods, community cohesion, or integrity resulting from the No-Build Alternative.

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

#### 4.1.3 Parks and Recreational Resources

There are no public parks in the study area. The Pecan Grove Park, which is owned by the Baptist Children's Home, a non-profit organization, is located near the southern terminus where all of the Build Alternatives would connect to the existing Kansas Lane. As a privately owned park, it is not protected by Section 4(f) of the DOT Act of 1966; however, efforts will be made during final design to avoid impacts to this park.

As discussed in Chapter 3, there are numerous recreational resources associated with ULM in the study area. The Kansas Lane Connector would improve access to the northeastern side of the ULM campus, where the majority of these facilities are located.

#### 4.1.4 Travel Patterns and Access

Travel patterns will change in and around the study area as a result of the Kansas Lane Connector. Residents within the study area and from areas surrounding the study area would have more convenient access to U.S. 165 and U.S. 80, as well as to areas to the north and south of the study area along the Kansas Lane Connector. In addition, residents would be able to bypass the intersection of U.S. 165 and U.S. 80 by traveling the Kansas Lane Connector. As a result of construction of the Kansas Lane Connector, travel time between the areas to the north and south of the study area would be greatly reduced as would travel times to destinations immediately around that intersection, such as ULM buildings south of Bayou Desiard, by reducing through-traffic.

As discussed in Chapter 1, the No-Build Alternative would not provide a more convenient travel route between the northern and southern sections of Monroe besides U.S. 165 and U.S. 80.

The Kansas Lane Connector will be developed with limited control of access, as was described in Chapter 2. Access to the proposed Kansas Lane Connector will be permitted in developed areas and upland areas that have development potential. Efforts will be made during final design to maintain access to individual properties. However, access will not be allowed through designated regulated wetlands.

Delivery of crucial emergency services including police, fire, and ambulance service would be greatly improved by the Kansas Lane Connector, particularly for the residents of the Cypress Point neighborhood and the west end of Edgewater Gardens, who can only be reached by way of Bon Aire Drive. The same holds true for school buses trying to reach these neighborhoods. Additionally, ULM will benefit from the Kansas Lane Connector because the roadway will create a northside point-of-entry and third bayou crossing for access to its recreational facilities and parking. This will be a particular advantage during high-volume campus events such as football games. The No-Build Alternative would not provide improved access for emergency services, ULM area residents, or school buses.

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

#### 4.2 Economic Impacts

#### 4.2.1 Tax Revenues and Land Values

The economic impacts of the Build Alternatives on parish and municipal tax revenues may be neutral in the short-term. ROW required for all five of the Build Alternatives will remove some currently taxed property from the revenue base. However, in the long run, improved accessibility to the Ingleside, Edgewater Gardens, and Cypress Point neighborhoods created by the Kansas Lane Connector will most likely increase the property values of these areas.

The Kansas Lane Connector will increase the potential for commercial development at major intersections along the project, particularly on the east side of the intersection of the Forsythe Avenue Extension and U.S. 165. Commercial development typically generates more tax revenues than residential uses or undeveloped land. Therefore, it is anticipated that the temporary loss of tax revenues due to residential displacements has the potential to be offset by an increase in land values and new development at major intersections.

None of the land within the study area is currently used as farmland (and no prime farmlands exist within the study area); therefore, there are no impacts associated with the removal of farmland to the local economy.

The No-Build Alternative would not improve property values in the long run or increase the potential for commercial development in the study area.

#### 4.2.2 Transportation and Construction Economic Impacts

The improved accessibility and additional roadway capacity provided by the Kansas Lane Connector will produce savings in both travel time and operating costs for motorists traveling in the vicinity of the study area. Economic gains will also be obtained through the reduction in accidents and the associated costs as a result of reduced congestion along U.S. 165 and U.S. 80. Improved accessibility between the Forsythe Avenue Extension and the existing Kansas Lane provided by the Kansas Lane Connector to the Pecanland Mall, the Monroe Regional Airport, and other business and industrial areas to the south of the study area will increase the economic development potential in the area. This accessibility, together with the study area's close proximity to the Pecanland Mall, the Monroe Regional Airport, I-20, and the Airport Industrial Park, will increase development potential on the east side of the intersection could provide some employment opportunities in the area.

Construction of the roadway will create jobs and employ local industries yielding temporary economic benefits.

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

Reduced travel times for emergency vehicles and school buses will result in cost savings in the municipal sector of the economy.

#### 4.3 Relocation Impacts

An inventory of potential relocation impacts of the Build Alternatives was performed. Data obtained for the study area are based exclusively on conclusions made from aerial photography, a field reconnaissance, and information from real estate sources regarding recent and comparable real estate listings in the area. Owners and tenants were not surveyed or disturbed during the inventory process. The relocation estimates are based on impacts identified from conceptual designs for each of the five Build Alternatives. No businesses or community facilities would be relocated by any of the Build Alternatives. However, all of the Build Alternatives would result in residential relocations. The Preferred Alternative would result in approximately 32 residential relocations. Based on field observations, 8 are homeowners and 24 are renters. The Central Alternative would result in approximately 44 residential relocations. Based on field observations, 16 are homeowners and 28 are renters. The Southern Alternative would result in approximately 51 residential relocations. Based on field observations, 19 are homeowners and 32 are renters. The Central+Northern Alternative would result in 43 residential relocations, of which 15 are homeowners and 28 are renters. The Southern+Central Alternative has the largest number of relocations with 58. A total of 23 homeowners, 32 renters, and 3 fraternity houses would be required to relocate under this alternative. God's House Church would also be relocated by the Southern+Central Alternative.

Table 4-1 provides more information on the type of residential relocation resulting from each Build Alternative.

	Relocation Type						
Alternative	Single Family Homes	Mobile Homes	Multifamily Apt. Units	Business	Community Facility	Other	Total
Preferred	8	0	24 Residences	0	0	0	32 Residences
Central	14	2	28 Residences	0	0	1 cemetery	44 Residences and 1 cemetery
Southern	17	2	32 Residences	0	0	1 cemetery	51 Residences and 1 cemetery
Central+ Northern	13	2	28 Residences	0	0	1 cemetery	43 Residences and 1 cemetery

Table 4-1. Estimated Relocation
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Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

	Relocation Type						
Alternative	Single Family Homes	Mobile Homes	Multifamily Apt. Units	Business	Community Facility	Other	Total
Southern+ Central	18	5	32 Residences and 3 fraternity houses	0	0	1 church and 1 cemetery	55 Residences, 1 church, 1 cemetery, and 3 fraternity houses

It is assumed that the industrial business on the southwest corner of Old Sterlington Road and Bon Aire Drive will be avoided in the final design of the Preferred Alternative. Therefore, the industrial business at the corner of Old Sterlington Road and Bon Aire Drive was not considered as a relocation and is not included on Table 4-1. Other measures will be incorporated in the final design to minimize to the greatest extent possible the relocations identified on Table 4-1.

An assessment was made of available housing to determine whether an adequate supply of housing exists to meet the needs of relocated residents. Available housing in the study area was obtained from the online real estate service Realtor.com (<u>www.realtor.com</u>). This website was chosen because it is the official site of the National Association of Realtors. The results are summarized on Table 4-2.

Location	Price Range	Number of Properties
Monroe and West Monroe (71202,	\$50,000 to \$75,000	89
71203, and 71291)	\$75,000 to \$100,000	95
	\$100,000 to \$125,000	69
	\$125,000 to \$150,000	84
	\$150,000 to \$200,000	74
	\$200,000 to \$250,000	44
	\$250,000 to \$300,000	34
	\$300,000 to \$350,000	14

Table 4-2.	Local Area	Housing	Availability.

Source: http://www.realtor.com (December 13, 2002).

Based on information from online sources (<u>www.apartmentguide.com</u>), there appears to be an adequate supply of rental units within the Monroe Metropolitan Area. The mobile homes that would be impacted by the Build Alternatives appear to be owner occupied. An adequate supply of land exists within the surrounding area for the relocation of any displaced mobile home.

The acquisition and relocation program will be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

amended. LDOTD will make relocation assistance available to all displaced persons as defined in the act, without discrimination on the basis of race, color, national origin, age, sex, or religion. In all cases, decent, safe, and sanitary housing will be made available for all eligible displaced persons. Current data collected indicate that adequate replacement housing units are available that would meet the needs of all those displaced and in a variety of price ranges. The LDOTD Relocation Assistance Officer assigned to the Kansas Lane Connector will provide current and continuing information on the availability, sales prices, and rental charges of comparable replacement dwellings for displaced homeowners and tenants. LDOTD is committed to assuring that a person shall not be required to move from a dwelling unless the person has had a reasonable opportunity to relocate to a comparable replacement dwelling within his financial means and within the general vicinity of the project study area. If comparable replacement is not available or the replacement payment exceeds the federal/state legal limitation, LDOTD will provide housing as a last resort pursuant to Section 206(a) of the Relocation Assistance Act. Real estate availability will be reassessed once final design of the Kansas Lane Connector has been completed.

#### 4.4 Environmental Justice

EO 12898 requires federal agencies to administer and implement programs so that "disproportionately high and adverse" effects to minority and low income populations are avoided. The objective of EO 12898 is to ensure that minority and low-income populations are fully and equitably considered during the project development process.

Table 4-3 shows the minority demographics in percentages in the neighborhoods that may be impacted by the Build Alternatives. As of the 2000 Census, 45.6 percent of the residents in the Ingleside neighborhood and 68.4 percent of the residents in the Cypress Point and Edgewater Gardens neighborhoods were minorities.

Table 4-5. Withoffty Demographics by Reignborhood for the 1990 and 2000 Census.					
	1990	1990 White	2000	2000 White	
Neighborhood	Minority	Non-Hispanic	Minority	Non-Hispanic	
Ingleside Neighborhood (Tract 5 Block	2.4%	97.6%	45.6%	54.4%	
Group 2)*					
Cypress Point & Edgewater Gardens	18.2%	81.7%	64.8%	35.2%	
Neighborhood (Tract 4.01 Block					
Group 1)*					

 Table 4-3.
 Minority Demographics by Neighborhood for the 1990 and 2000 Census.

\*The tract and block group numbering remained the same for the 1990 and 2000 Census.

All of the Build Alternatives go through some portion of the Ingleside neighborhood. The Preferred Alternative goes on the eastern edge of the Ingleside neighborhood and will have a minimal impact on the residents of the Ingleside neighborhood. The Central, Southern, and the two combined alternatives would have the greatest impact on this neighborhood. Based on a field reconnaissance, it appears the non-minority population within this neighborhood would mostly be impacted by the Central and Southern Alternatives or any combination of these.

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

In the Edgewater Gardens and Cypress Point neighborhoods, the Census blocks of Tract 4.01 in the immediate area of the proposed Alternatives, Blocks 1013, 1019 and 1010, are 45.1 percent minority compared to those farther to the east of the Build Alternatives, Blocks 1011, 1012, 1015, 1016 and 1017, that are 70.2 percent minority. Therefore, none of the Build Alternatives will have a disproportionate adverse effect on minority populations, but will positively impact them farther east by providing more convenient access to U.S. 165 and U.S. 80.

Table 4-4 shows the percentage of residents living below the poverty threshold in the neighborhoods that will be impacted by the Build Alternatives. As of the 2000 Census, 21.8 percent of the residents in the Ingleside neighborhood and 14.3 percent of the residents in the Cypress Point and Edgewater Gardens neighborhoods were living below the poverty threshold.

## Table 4-4.Low-Income (Residents below the Poverty Threshold) by Neighborhood for the<br/>1990 and 2000 Census.

Neighborhood	1990 Low-income	2000 Low-income
Ingleside Neighborhood (Tract 5 Block Group 2)*	15.5%	21.8%
Cypress Point & Edgewater Gardens Neighborhood (Tract 4.01 Block Group 1)*	7.3%	14.3%

\*The tract and block group numbering remained the same for the 1990 and 2000 Census.

The residents that will be impacted in the Cypress Point neighborhood by the Preferred Alternative and in the Edgewater Gardens neighborhood by all of the alternatives are predominately middle to upper middle class. Some of the residents that will be impacted in the Ingleside neighborhood by each of the alternatives are low income; however, the number impacted would not be disproportionate to the total number of people impacted by each alternative.

This project is being implemented in compliance with EO 12898. Therefore, the project will not disproportionately impact minority or low income populations.

#### 4.5 Land Use

The Kansas Lane Connector will have a direct impact to existing land uses. Although all of the proposed Build Alternatives would widen some portion of existing roadways, each would also require converting undeveloped areas and existing development to a transportation use.

As shown on Table 4-5, land taken by the proposed highway would be converted from its present use to a transportation use. Impacts to developed land and uplands include the area required for the roadway and any fill required to transition to and from any elevated roadway sections. Impacts to Bayou Desiard include the area of support piles.

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

	Land Use/Land Cover						
Alternative	Developed (acres)	Upland Undeveloped (acres)	Wetlands (acres)	Open Water Bayou Desiard and Streams (acres)	Total (acres)		
No-Build	0	0	0	0	0		
Preferred	12.6	24.5	15.2	2.2	54.5		
Central	24.3	13.7	10.4	3.3	51.7		
Southern	15.7	17.1	16.4	1.6	50.8		
Central+Northern	13.9	20.3	15.1	3.4	52.7		
Southern+Central	19.0	20.3	9.6	1.5	50.4		

#### Table 4-5. Summary of Land Use/Land Cover Impacts.

#### 4.5.1 Consistency with Land Use Plans

The study area is within the land use planning area covered by the *Comprehensive Plan*. Although the *Comprehensive Plan* does not include a proposed future land use map for land within the study area, one of the *Comprehensive Plan's* goals is to "assure adequate services including transportation, recreation, shopping, schools, and community facilities to all residential areas." In addition, the *Comprehensive Plan's Major Street Plan Map* shows a proposed arterial with a similar alignment to the Preferred Alternative. Therefore, the proposed Kansas Lane Connector is consistent with local land use planning goals for the area.

#### 4.6 Pedestrian and Bicycle Facilities

None of the Build Alternatives will impact any existing pedestrian or bicycle facilities. As mentioned in Chapter 3, Bon Aire Drive from Old Sterlington Road to Cypress Point Drive is designated as a future trail in the *Bicycle and Jogging Trails Plan*. LDOTD will evaluate accommodating facilities for bicycle and pedestrians during the final design of the project.

#### 4.7 Utilities

4.7.1 Electric Power Lines

All of the Build Alternatives will impact notable overhead distribution lines (13,800 volts) south of Bayou Desiard located to the east and west of the Mary Lea Apartments. The Southern and the Southern+Central Alternatives will impact more residential electrical power lines south of Bayou Desiard than the Preferred, Central, or Central+Northern Alternatives. The Preferred Alternative appears to impact 13,000-volt overhead lines and some underground power lines near the intersection of Bon Aire Drive and Bay Oaks Drive. It appears that the Central and Southern+Central Alternatives

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

have a greater impact on higher voltage lines along Bon Aire Drive west of the Brentwood and Churchill Circle Apartment complexes. Crossings for all of the Build Alternatives will impact 13,800-volt overhead lines located along Old Sterlington Road as well as overhead lines located on the north side of the Premier Products building near the north terminus. Figure 4-2 shows where the Build Alternatives cross electrical power transmission lines.

LDOTD will work with Entergy to coordinate the relocation of electrical transmission lines. Any necessary relocation of utilities will be conducted in a timely and orderly fashion, planned so that any disruptions in service are minimized and safety is not compromised.

The No-Build Alternative will not impact any electrical transmission lines.

### 4.7.2 Natural Gas Transmission Lines and Gas Wells

All of the Build Alternatives will impact 2-inch natural gas transmission lines in the Ingleside neighborhood. It appears the Southern and Southern+Central Alternatives will have a greater impact on these lines than the Preferred, Central, or Central+Northern Alternatives because it traverses a greater distance across the Ingleside neighborhood. The Preferred Alternative could potentially impact 4- to 6-inch plastic mains near the intersection of Bon Aire Drive and Bay Oaks Drive. The Central and Southern+Central Alternatives will likely impact 2-inch lines along Bon Aire Drive located west of the Brentwood and Churchill Circle Apartment complexes. Crossings for all of the Build Alternatives will impact gas transmission lines located along Old Sterlington Road and the Arkansas-Louisiana-Mississippi Railroad, near the northern terminus.

All of the Build Alternatives have some potential for crossing unmapped, unmarked, lowpressure gas lines historically associated with gas wells drilled in the area, particularly in the wetland areas. Encounters with these unmarked gas lines have been reported in the vicinity of Ouachita Fertilizer and Poly Processing Company near the northern terminus. One old, non-operational gas well is located in the wetland area just east of the Brentwood Apartment complex. Observations made during the field survey indicated that lines leading to the well were disconnected and the well was inactive. The Central and Southern+Central Alternatives could impact three gas wells located between Old Sterlington Road and the Arkansas-Louisiana-Mississippi Railroad. Two of these wells are believed to be inactive based on information acquired from a field survey and the LDNR Strategic Online Natural Resources Information System (SONRIS). One of these wells (LDNR Serial Number 182087) is identified as having an expired permit, but may still be in operation. According to information provided by LDNR, this well is located north of Poly Processing Company along the edge of the wetland area. Since the early 1900s, there have been numerous unregistered wells within the study area that could fall within any of the Build Alternatives. Some of these wells could have pits associated with them. Figure 4-3 shows where the five Build Alternatives could potentially impact known gas transmission lines and wells.





**Kansas Lane Connector** Ouachita Parish, Monroe, LA **Crossings of Electrical** 

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4-2




**Kansas Lane Connector** Ouachita Parish, Monroe, LA

4-3

# **Transmission Lines and** Impacts to Gas Wells

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

LDOTD will work with Atmos Energy Louisiana to coordinate the relocation of natural gas lines. Any necessary relocation of utilities will be conducted in a timely and orderly fashion, planned so that any disruptions in service are minimized and safety is not compromised.

The No-Build Alternative will not impact any natural gas lines.

#### 4.7.3 Water and Wastewater Facilities

Wastewater services are provided by the City of Monroe for most of the businesses and residences within the study area. However, the industrial area near the northern terminus and in the vicinity of Old Sterlington Road is not connected to a public sewer system. The Ingleside neighborhood south of Bayou Desiard is also not served by a public sewer system. A single 8-inch sewer main serving the Cypress Point neighborhood crosses Bayou Desiard near BCH's Pecan Grove Park. This sewer line crosses U.S. 80 continuing in a southerly direction east of the Mary Lea Apartments. All of the proposed Build Alternatives will impact this sewer line south of Bayou Desiard with the Preferred Alternative having the most effect.

North of Bayou Desiard, there is another 8-inch main that follows Bon Aire Drive. All of the Build Alternatives will cross this sewer main at some point on the eastern end. The Southern and Southern+Central Alternatives would also impact a lift station in the area where they cross it.

On the west side of the Project Study Area, there are two sewer mains that would be impacted by the Central and Southern+Central Alternatives. While these alternatives will cross the 8-inch main south of the Brentwood Apartments along Bon Aire Drive and the 6-inch main west of the Brentwood Apartments and a lift station, the Preferred Alternative will have no effect. All of the proposed alternatives will impact two mains, 12 and 16 inches in diameter, that are located on the east side of U.S. 165 near the northern terminus.

Plans are underway to connect the Ingleside neighborhood to a public sewer system; therefore, LDOTD will coordinate with the appropriate Ouachita Parish and/or City of Monroe authorities prior to beginning construction in the residential area south of Bayou Desiard to coordinate construction schedules wherever possible. Some sewer lines or individual systems may require relocation due to construction activities. LDOTD will coordinate all necessary modifications with the City of Monroe Public Works Department or individual property owners as appropriate. Short-term interruptions in service may occur during construction; however, every effort will be made to minimize the inconvenience caused by any unavoidable service interruptions. Figure 4-4 shows where the Build Alternatives will impact sewer lines.



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Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

Potable water services are provided by the City of Monroe for most of the businesses and residences within the study area. All of the proposed Build Alternatives are expected to impact a 6-inch potable water main located east of the Mary Lea Apartments. The Central, Southern, Central+Northern, and Southern+Central Alternatives will impact two 6-inch water mains in the Ingleside neighborhood, one along Virginia Street and the other at Ingleside Drive. The Preferred Alternative will cross 6- and 12-inch mains near the intersection of Bon Aire and Bay Oaks Drive north of Bayou Desiard. The other Build Alternatives will also cross these mains at two other locations farther west. The Preferred and Central+Northern Alternatives would impact 8-inch mains serving the Churchill Circle Apartments and the small strip of commercial businesses at Old Sterlington Road and Bon Aire Drive, while the Central and Southern+Central Alternatives will impact 8- and 12-inch mains located west and south of the Brentwood and Churchill Circle Apartment complexes along Bon Aire Drive.

All of the proposed Build Alternatives will cross 12-inch mains located along Old Sterlington Road and U.S. 165, as well as water mains located on the north side of the gravel road servicing the aboveground water tank at Premier Products near the northern terminus. LDOTD will coordinate all necessary modifications with the City of Monroe Public Works Department or individual property owners as appropriate. Short-term interruptions in service may occur during construction; however, every effort will be made to minimize the inconvenience caused by any unavoidable service interruptions. Figure 4-5 shows where the five Build Alternatives will impact water lines.

The No-Build Alternative will not impact sewer lines or potable water service lines.

#### 4.8 Archaeological and Historical Resources

As discussed in the *Final Intensive Cultural Resources Survey* Report (Earth Search 2004) and Chapter 3, one archaeological site considered eligible for NRHP pending further testing and one historic structure eligible for the NRHP were identified in the study area.

#### 4.8.1 Archaeological Resources

The archaeological survey found that the portion of Site *16OU352* that encompasses the unmarked cemetery should be considered eligible for NRHP pending further testing. This site would be impacted by the Central, Central+Northern, Southern, and Southern+Central Alternatives, but would not be impacted by the Preferred Alternative. If avoidance of this portion of the site is not possible, testing in the area of the unmarked graves will be conducted to determine the research potential for this portion of the site. A concurrence memorandum, stamped July 14, 2004, from the Louisiana Division of Archaeology is included in Appendix A-5. This correspondence indicates that the findings of the *Final Intensive Cultural Resources Survey* (Earth Search 2004) has been received and approved.





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Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

No tribal Indian resources will be impacted by any of the Build Alternatives. LDOTD, through FHWA, has initiated coordination with the Chitimacha Tribe of Louisiana, the only Indian tribe with a historical presence in the project area, and the Adai Caddo Indian Tribe. Correspondence from these tribes was received during the scoping process indicating that they have no records or reasons to believe that there are any spiritual or historical sites in the study area. Copies of the letters received are included in Appendix A-4. A copy of the DEIS was also send to the Caddo Nation of Oklahoma; however, no comment was received from the tribal concern as of publication of the FEIS.

The No-Build Alternative would not impact any archaeological sites.

#### 4.8.2 Historical Resources

The *Final Intensive Cultural Resources Survey* (Earth Search 2004) found that the *Ingleside Plantation House* is eligible for nomination to the NRHP under Criterion C. The *Ingleside Plantation House* is located approximately 1,968 feet south of the centerline of the Southern and Southern+Central Alternatives. Visual impacts of the proposed bridge construction across Bayou Desiard for the Southern and Southern+Central Alternatives.

The proposed bridge crossing for the Southern and Southern+Central Alternatives, which would be located approximately 1,640 feet north of the Ingleside Plantation House, will be able to be viewed directly from the home. But, because the bridge will be constructed at grade, the effect will be minimal. And because modern houses and roads that currently surround the building have already compromised the viewscape of the house, it was determined that the construction of the either of these alternatives would not cause an adverse impact. The impacts of construction traffic utilizing Inglewood Drive and Fennell Drive emitting ground-borne vibrations exceeding Federal Transit Administration criterion at high speeds were also considered and were determined to be negligible. Effects would be intermittent and temporary and would not constitute adverse effects on the structure. In summary, the Preferred, Central, and Central+Northern Alternatives will not impact any properties on or eligible for NRHP and the Southern and Southern+Central Alternatives will not adversely impact the Ingleside Plantation House. The correspondence stamped on July 14, 2004, by the State Historic Preservation Office (SHPO) documents concurrence with this determination of effect to the Ingleside Plantation House. The correspondence is provided in Appendix A-5.

The No-Build Alternative will not impact any historic structures.

#### 4.9 Section 4(f) and Section 6(f) Properties

The ULM ballfields are considered a Section 4(f) resource because the City of Monroe softball leagues use the fields for organized softball events. None of the Build Alternatives would take property from the actual ballfields, that portion of the ULM property protected by Section 4(f). The ULM ballfields are also considered a Section 6(f)

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

resource because a portion of the funding to construct the fields was provided by Section 6(f) of the Land and Water Conservation Act. No portion of the property funded by Section 6(f) is required for ROW for any of the Build Alternatives

#### 4.10 Meteorology, Climatology, and Topography

The Kansas Lane Connector will not impact meteorology or climatology. No major impacts to topography in the study area are expected from construction of the Kansas Lane Connector.

The No-Build Alternative will also not impact meteorology, climatology, or topography.

#### 4.11 Water Resources

#### 4.11.1 Floodplains and Floodways

All of the Build Alternatives would cross 100-year floodplain areas. Figure 4-6 shows where each Build Alternative crosses the 100-year floodplain in the study area. Table 4-6 shows the amount of acreage that will be impacted by the Build Alternatives. The Southern+Central Alternative will have the least impact to floodplains, crossing approximately 19.6 acres. The Preferred Alternative will have the greatest impact to floodplains, crossing approximately 28.3 acres. The Southern Alternative would cross 27.7 acres. The Central+Northern Alternative would impact 27.5 acres of floodplain, while the Central Alternative would impact 21.7 acres of floodplain.

#### Table 4-6. Potential Impacts to Floodplains.

				Central+	Southern+	
	Preferred	Central	Southern	Northern	Central	No-Build
	Alternative	Alternative	Alternative	Alternative	Alternative	Alternative
Floodplains (acres)	28.3	21.7	27.7	27.5	19.6	0

Encroachments on the floodplains would not increase the base-flood elevation to a level that would violate applicable floodplain regulations. The proposed project would permit conveyance of the 100-year flood of the roadway without causing significant damage to the roadway, stream, or other property. Ouachita Parish and the City of Monroe participate in the NFIP, which requires permitting requirements to develop within a floodplain. A drainage impact statement, which will assess impacts of the roadway construction to the floodplain, and a development permit must be completed for Ouachita Parish prior to the beginning of construction. The hydraulic design practices for construction of any of the Build Alternatives would be in accordance with current LDOTD and FHWA design policies and standards. Project design and construction would meet federal requirements to result in no adverse impacts on floodplain. If culverts are used in the design, they would convey normal drainage as well as storm flows.





Kansas Lane Connector Ouachita Parish, Monroe, LA Crossings of 100-Year Floodplain Areas

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Project Study Area

All Alternatives

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Northern Alternative

**Central Alternative** 

Central and Northern Connection

Southern Alternative

Southern and Central Connection

100-Year Flood Zone

Logical Terminus



FEMA Flood Zones from LA GIS CD: A Digital Map of the State, LSU Department of Geography and Anthropology, 2000. Aerial Photography from Aero-Data, flown March 2000, provided by the Ouachita Parish Police Jury.



Figure No.

**4-6** 

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

The No-Build Alternative would have no impact on floodplains.

#### 4.11.2 Surface Water

All of the Build Alternatives will cross Bayou Desiard. The Southern and Southern+Central Alternatives would have the least impact to Bayou Desiard and the Central and Central+Northern Alternatives the most impact. The former would cross approximately 341 feet and potentially impact 1.4 acres of Bayou Desiard, while the latter would cross approximately 841 feet and potentially impact 3.2 acres. The Preferred Alternative would cross approximately 500 feet and potentially impact 2 acres of Bayou Desiard. In addition to impacting Bayou Desiard, all of the Build Alternatives would cross the same stream located parallel to and east of the Arkansas-Louisiana-Mississippi Railroad. The Preferred, Southern, and Central+Northern Alternatives would impact 0.2 acre of streams and the Central and Southern+Central Alternatives would impact 0.1 acre. Figure 4-7 shows where each Build Alternative crosses Bayou Desiard.

No long-term impacts to surface waters are anticipated from construction of the proposed roadway. Erosion and sedimentation during construction of the roadway could have potentially short-term, adverse impacts on water quality in the study area. Because construction of the proposed roadway will involve vegetation removal, including forested areas and forested wetlands, cleared areas and other areas devoid of vegetation would be subject to erosion. Erosion may cause water quality degradation from runoff and sedimentation. Other possible short-term impacts that may occur during roadway construction include disturbance of soils such that local stability of both natural slopes and excavations may be disrupted, increased turbidity, altered flow rates, and possible temperature fluctuations within the aquatic habitat caused by the removal of vegetation near water bodies.

Once the roadway has been completed, the amount of impervious area will increase, resulting in increased runoff. This highway runoff may contain a wide variety of potential pollutants, including hydrocarbons, toxic substances, and debris.

Authorization to discharge storm water from construction activities is granted by LDEQ under the LPDES General Permit. All terms and conditions of this authorization are outlined in the permit, one condition being that a storm water pollution prevention plan (SWPPP) must be prepared by the discharger. In accordance with the permit, a SWPPP will be prepared for the construction site that will incorporate the specific measures to be undertaken to minimize the impacts from pollutants in storm water runoff. Such measures include: an erosion and sedimentation control plan (revegetation, silt fences, rock berms, hay bale dikes, etc.); provisions for waste materials and storage; storm water management measures; appropriate road maintenance measures; and other Best Management Practices (BMPs). Other BMPs could include: scheduling construction activities to minimize exposed land and the duration of exposure; clearing only minimal areas before grading; temporary seeding, sodding, or mulching disturbed areas; use of gravel, straw, or other





Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

materials on exposed surfaces prior to revegetation; use of energy dissipaters at outfalls; covering stockpiled soil, sand, and other materials; and use of water applications to control dust from exposed land.

Bayou Desiard is considered a navigable water of the U.S.; therefore, a U.S. Coast Guard Navigation permit and a USACE Section 10 permit will be required.

Because the Central and Central+Northern Alternatives have the longest bridge crossing, they would likely have the greatest impacts on surface water resources, while the Southern Alternative would likely have the least impacts. No rivers classified as wild or scenic occur in the study area. The No-Build Alternative would have no impact on surface water resources.

#### 4.11.3 Public Water Supply

Potential short-term impacts associated with the construction of the proposed roadway include increase of impervious surfaces and potential impacts resulting from spillage of fuels, oils, greases, or other materials; removal of wells within the proposed ROW; and the potential for reduced yields from shallow wells in the study area. However, the project would likely have no long-term impact on the groundwater resources of the area. During construction, spills would be mainly limited to fuels (gasoline and diesel) and lubricants used by construction equipment. Such spills and their adverse impacts would be controlled through proper equipment maintenance, management of these materials, and by prompt response and cleanup of spills and leaks. Potential impacts to the groundwater resources would be minimized by the implementation of BMPs.

While the No-Build Alternative would have no impact on groundwater resources, pollutant levels in storm water runoff from existing roadways would likely increase due to increased traffic and congestion.

The Build Alternatives will all cross the Sparta Aquifer, the primary aquifer used for water supply in the area, the sediments of which are encountered at approximately 750 feet below the surface. The Sparta Aquifer is currently not designated as a sole source aquifer. As of July 2004, LDNR issued a draft order to designate the Sparta Aquifer as a Critical Ground Water Area. Therefore, the Sparta Aquifer is considered to be an important resource in north central Louisiana.

#### 4.12 Geology and Soils

No major impacts to the geology or soils in the area are anticipated. Construction may expose some geologic resources to erosion, but this would be of short duration. Soils would be removed from the ROW and while the remaining soils would be subjected to compaction and increased erosion potential, particularly where vegetation has been cleared, these impacts would be short-term, localized, and manageable. Slope, soil texture, precipitation during construction, and the effectiveness of erosion and

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

sedimentation control measures would affect the soil-loss potential. These short-term erosion problems would be minimized by implementing erosion-control measures during construction.

The No-Build Alternative would have no impact on the area's geology or soils.

#### 4.13 Mineral Resources

No known active mines or quarries will be impacted by the construction of the Kansas Lane Connector. Construction of the roadway may temporarily increase the demand for local mineral resources. One non-operational gas well is located in the wetland area just east of the Brentwood Apartment complex. Observations made during the field survey indicated that lines leading to the well appeared to be disconnected and the well did not appear to be active. However, if it is active, the Preferred, Southern, and Central+Northern Alternatives could potentially impact this site.

The No-Build Alternative would not impact any mineral resources in the study area.

#### 4.14 Hazardous Materials and Underground Storage Tanks

Figure 4-8 shows the location of potential hazardous waste materials and UST sites that may impact the Build Alternatives. All of the Build Alternatives could potentially be impacted by historical recognized environmental conditions (HRECs) and recognized environmental conditions (HRECs) and recognized environmental conditions (HRECs) resulting from industrial uses near the northern terminus. Historical reviews have identified the existence of several industrial facilities in this area within the last 40 years. Historical storage, handling, or disposal practices at these locations are not known and poor housekeeping and/or disposal practices might have produced undiscovered environmental impacts. Additionally, it is possible that flood events could have dispersed contaminants from some areas of these facilities. Existing conditions include potential contaminants and sources that could possibly impact all of the Build Alternatives near the northern terminus are listed on Table 3-19 in Chapter 3.





Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

The following table lists potential impacts to the individual Build Alternatives.

			Central+Northe	Southern+	
Preferred	Central	Southern	rn	Central	No-Build
Alternative	Alternative	Alternative	Alternative	Alternative	Alternative
HREC - R.J.	HREC - R.J.	HREC - R.J.	HREC - R.J.	HREC - R.J.	No Impacts
Moore Trucking	Moore Trucking	Moore Trucking	Moore Trucking	Moore Trucking	<u>^</u>
RECs - Red Barn	RECs - Red Barn	RECs - Red Barn	RECs - Red Barn	RECs - Red Barn	No Impacts
Chemical and	Chemical and	Chemical and	Chemical and	Chemical and	<b>^</b>
Site Previously	Site Previously	Site Previously	Site Previously	Site Previously	
Occupied by	Occupied by	Occupied by	Occupied by	Occupied by	
N.E. La. Oil &	N.E. La. Oil and	N.E. La. Oil &	N.E. La. Oil and	N.E. La. Oil &	
Filtration, Moore	Filtration, Moore	Filtration, Moore	Filtration, Moore	Filtration, Moore	
Fertilizer &	Fertilizer &	Fertilizer &	Fertilizer &	Fertilizer &	
Chemical Co.,	Chemical Co.,	Chemical Co.,	Chemical Co.,	Chemical Co.,	
W.R. Grace,	W.R. Grace,	W.R. Grace,	W.R. Grace,	W.R. Grace,	
AFCO Farm	AFCO Farm	AFCO Farm	AFCO Farm	AFCO Farm	
Service, Terrel	Service, Terrel	Service, Terrel	Service, Terrel	Service, Terrel	
AgriService	AgriService	AgriService	AgriService	AgriService	
No Impacts	Backfilled Ponds	No Impacts	No Impacts	Backfilled Ponds	No Impacts
_	- Poly Processing	_	_	- Poly Processing	_
2 Gas Wells	1 Gas Well	2 Gas Wells	2 Gas Wells	1 Gas Well	No Impacts
Unregistered	Unregistered	Unregistered	Unregistered	Unregistered	No Impacts
Wells and Pits	Wells and Pits	Wells and Pits	Wells and Pits	Wells and Pits	-
Registered Pit	Registered Pit	Registered Pit	Registered Pit	Registered Pit	No Impacts
with Well	with Well	with Well	with Well	with Well	-
#165700	#165700	#165700	#165700	#165700	
No Impacts	Active Injection	No Impacts	No Impacts	Active Injection	No Impacts
	Well			Well	
Various Sewage	Various Sewage	Various Sewage	Various Sewage	Various Sewage	No Impacts
Treatment	Treatment	Treatment	Treatment	Treatment	
Lagoons	Lagoons	Lagoons	Lagoons	Lagoons	
(including	(including	(including	(including	(including	
lagoon 10 yards	lagoon 10 yards	lagoon 10 yards	lagoon 10 yards	lagoon 10 yards	
east of water	east of water	east of water	east of water	east of water	
tank at Premier	tank at Premier	tank at Premier	tank at Premier	tank at Premier	
Products)	Products)	Products)	Products)	Products)	
Stream with	Stream with	Stream with	Stream with	Stream with	No Impacts
Unknown	Unknown	Unknown	Unknown	Unknown	
Effluent	Effluent	Effluent	Effluent	Effluent	
Premier Products	Premier Products	Premier Products	Premier Products	Premier Products	No Impacts
- SQG	- SQG	- SQG	- SQG	- SQG	
Creative	Creative	Creative	Creative	Creative	No Impacts
Coatings	Coatings	Coatings	Coatings	Coatings	_
Older residences	Older residences	Older residences	Older residences	Older residences	No Impacts
south of Bayou	south of Bayou	south of Bayou	south of Bayou	south of Bayou	
Desiard	Desiard	Desiard	Desiard	Desiard	
(Asbestos &	(Asbestos &	(Asbestos &	(Asbestos &	(Asbestos &	
Lead)	Lead)	Lead)	Lead)	Lead)	

Table 4-7.	Existing Contaminants and Sources for the Industrial Area Near the Northern
	Terminus.

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

Preferred Alternative	Central Alternative	Southern Alternative	Central+Northe rn Alternative	Southern+ Central Alternative	No-Build Alternative
No Impacts	Texaco (former	No Impacts	No Impacts	Texaco (former	No Impacts
	Expressway			Expressway	
	#692)			#692)	
Poly Processing -	Poly Processing -	Poly Processing -	Poly Processing -	Poly Processing -	No Impacts
Wastewater	Wastewater	Wastewater	Wastewater	Wastewater	
Discharge	Discharge	Discharge	Discharge	Discharge	
Dittco Products	Dittco Products	Dittco Products	Dittco Products	Dittco Products	No Impacts
Ouachita	Ouachita	Ouachita	Ouachita	Ouachita	No Impacts
Fertilizer	Fertilizer	Fertilizer	Fertilizer	Fertilizer	

HREC Historical Recognized Environmental Condition

REC Recognized Environmental Condition

A convenience store/gas station (former Expressway #692, now Texaco), is located on the corner of Old Sterlington Road and Bon Aire Drive. This site could potentially be impacted by the Central and Southern+Central Alternatives.

A former gas station located on the northwestern corner of U.S. 80 and Kansas Lane could potentially impact all of the Build Alternatives near the southern terminus. This UST site was identified during the regulatory review as Cranford's Gulf. However, Creative Coatings, an applicator of spray-on urethane pick-up truck bed liners, last occupied the location. Observations made during the October 2002 field survey indicated that some releases to subsurface soils might have occurred as a result of poor housekeeping practices at the site.

For all of the Build Alternatives, caution should be taken when conducting construction and excavation activities in the wetland areas as well as in the area north of Ouachita Fertilizer due to the potential presence of unmarked high- and low-pressure gas lines. Several active and inactive gas wells and pits not identified or registered with the LDNR may also be located within the wetland areas for all of the Build Alternatives.

Additionally, based on the age of the structures near the southern terminus, the potential for lead-based paint and piping as well as asbestos-containing material (ACM) exists. If asbestos and lead-based paint surveys are not conducted, it should be assumed that the Mary Lea Apartments and all structures in the Ingleside neighborhood and the area north of Bayou Desiard contain ACM and lead-based paint and piping. If the presence of ACM and lead paint is determined, the materials should be properly classified or shipped to an appropriate waste disposal facility. Impacts could occur to all of the Build Alternatives due to the structures in the Ingleside neighborhood and in the area north of Bayou Desiard.

Current or historic environmental concerns discussed in Chapters 3 and 4 of this document are based upon information acquired during the *Phase I Environmental Site Assessment* (ARCADIS 2003). Site conditions for the areas in the proposed ROW and near the Build Alternatives are described in detail in accordance with procedures defined

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

in the American Society for Testing and Materials (ASTM) Practice E 1527-00, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.* Based on the potential hazardous sources listed in the preceding table and the fact that flood events could have potentially dispersed contamination, a Phase II Environmental Site Assessment (ESA) is recommended for the area near the northern terminus. It is recommended that soil and groundwater samples be collected along the center of the Preferred Alternative from the intersection of the Forsythe Avenue Extension and U.S. 165 to Old Sterlington Road before construction begins. These samples should be collected from at least five locations along the center of the Preferred Build Alternative for this approximately ½-mile stretch.

A Phase II ESA was not recommended for the area near the southern terminus. Although some minor concrete staining and a drain containing oil were observed during the June 2002 and September 2002 site visits to the former Creative Coatings site, impacts to the Build Alternatives are not expected as a result of previous site operations. However, the Phase I ESA recommended a Phase II ESA at the former Creative Coatings site if any oil or odors are observed during construction activities.

The assessment findings are preliminary and are not intended to replace more detailed studies of subsurface soils and groundwater, if warranted. In addition to the sites identified through the file searches, field surveys and interviews with local environmental officials, other potential hazardous materials and waste sites may exist within the study area due to illegal dumping, lack of regulatory compliance, and limited regulatory data.

The presence of hazardous materials, including USTs, in the area would have no impact on the No-Build Alternative.

#### 4.15 Air Quality

An air quality assessment was conducted to determine the air emissions associated with the proposed Kansas Lane Connector. The assessment is documented in the *Air Quality Analysis Technical Report* (ARCADIS 2003). Motor vehicles are the major emissions source of carbon monoxide (CO) in the study area. They also emit nitrogen oxides (NO), hydrocarbons (HC), particulate matter ( $PM_{10}$ ), sulfur dioxide (SO<sub>2</sub>), and lead (Pb), listed in order of the decreasing rate of emission. Each of these pollutants requires different assessment procedures, the results of which are summarized below. It should be noted that the study area is in an attainment parish for all criteria pollutants.

#### Carbon Monoxide (CO)

An analysis of air quality impacts from the construction of the Kansas Lane Connector was conducted using the CAL3QHC model, a microscale dispersion analysis, in order to identify roadway intersections where vehicular traffic could potentially contribute to levels of CO beyond the one-hour and eight-hour NAAQS. The intersection at U.S. 165 and the Forsythe Avenue Extension and the intersection at U.S. 80 and Kansas Lane were

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

modeled for the years 2010 and 2030 because of the volume of traffic and poor LOS observed at these two locations.

The modeling analysis was completed in accordance with the USEPA Guideline for Modeling Carbon Monoxide from Roadway Intersections (USEPA 1992; USEPA Guidelines). This analysis used the following procedures:

- § Identification of the highest traffic volume intersection for which CO modeling would be completed as a worst-case scenario;
- § Collection of traffic, roadway design, and meteorological and emissions modeling data;
- § Computation of traffic flow conditions and emissions for intersections requiring CO modeling, based on free-flow vehicles and delayed or stopped vehicles;
- § Select receptor points along existing and proposed ROW as a worst-case scenario;
- § Modeling using the USEPA CAL3QHC dispersion model to calculate CO concentrations at the intersection; and
- § Computation and comparison of total concentrations of the intersection and background levels with the NAAQS.

Predicted one- and eight-hour worst-case CO concentrations for the Build Alternatives near the intersection of U.S. 165, the Forsythe Avenue Extension, and the proposed Kansas Lane Connector and the intersection of Kansas Lane, U.S. 80, and the proposed Kansas Lane Connector are presented on Table 4-8.

0011001						
	Year					
	2	010	2030			
Case	One Hour (ppm)	Eight Hour (ppm)	One Hour (ppm)	Eight Hour (ppm)		
Mainline US 165 BUILD	3.2	2.2	3.5	2.5		
Mainline US 165 NO BUILD	3.2	2.2	3.9	2.7		
Intersection Kansas Lane, Forsythe Avenue, and US 165 BUILD	6.2	4.3	6.8	4.8		

Table 4-8.Predicted Worst-Case One-Hour and Eight-Hour Carbon Monoxide<br/>Concentrations for the Build Alternatives in 2010 and 2030.

Final Environmental Impact Statement

#### Chapter 4 – Environmental Consequences

	Year				
	2	010	2030		
Case	One Hour (ppm)	Eight Hour (ppm)	One Hour (ppm)	Eight Hour (ppm)	
Intersection Kansas Lane, Forsythe Avenue, and US 165 NO BUILD	4.3	3.0	5.5	3.9	
Mainline Kansas Lane at US 80 BUILD	6.7	4.7	10.2	7.1	
Mainline US 80 NO BUILD	5.2	3.6	6.8	4.8	
Intersection Kansas Lane, Kansas Lane Connector, and US 80 BUILD	8.8	6.2	12.3	8.6	
Intersection Kansas Lane, Kansas Lane Connector, and US 80 NO BUILD	5.9	4.1	8.0	5.6	

ppm parts per million

The CAL3QHC modeled concentrations do not exceed the NAAQS at any of the modeling locations in either the one- or eight-hour averaging periods in 2010 or 2030. The CO modeling for the U.S. 165 mainline found that the one-hour levels were 3.2 ppm in 2010 and 3.5 ppm in 2030, well below the NAAQS of 35 ppm. The CO modeling for the No-Build Alternative found that the one-hour levels were 3.2 ppm in 2010 and 3.9 ppm in 2030, also well below the NAAOS of 35 ppm. The CO modeling for the U.S. 165 mainline found that the eight-hour levels were 2.2 ppm in 2010 and 2.7 ppm in 2030, below the NAAQS of 9 ppm. The CO modeling for the No-Build Alternative found that the eight-hour concentrations were 2.2 ppm in 2010 and 2.7 ppm in 2030, also below the standard. The CO modeling for the intersection of the proposed Kansas Lane Connector, Forsythe Avenue Extension, and U.S. 165 found that the one-hour levels were 6.2 ppm in 2010 and 6.8 ppm in 2030, well below the NAAQS of 35 ppm. The CO modeling for the No-Build Alternative found that the levels were 4.3 ppm in 2010 and 5.5 ppm in 2030, also below the standard. The eight-hour levels for the intersection were 4.3 ppm in 2010 and 4.8 ppm in 2030, also well below the NAAQS of 9 ppm. The eight-hour levels for the No-Build Alternative were 3.0 ppm in 2010 and 3.9 ppm in 2030, also below the standard. The CO modeling for the U.S. 80 mainline found that the one-hour levels were 6.7 ppm in 2010 and 10.2 ppm in 2030, well below the NAAQS of 35 ppm. The CO modeling for the No-Build Alternative found that the one-hour levels were 5.2 ppm in 2010 and 6.8 ppm in 2030, also below the NAAQS of 35 ppm. The CO modeling for the U.S. 80 mainline found that the eight-hour levels were 4.7 ppm in 2010 and 7.1 ppm in 2030, below the NAAQS of 9 ppm. The CO modeling for the No-Build Alternative found

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

that the eight-hour concentrations were 3.6 ppm in 2010 and 4.8 ppm in 2030, also below the standard. The CO modeling for the intersection of the proposed Kansas Lane Connector, Kansas Lane, and U.S. 80 found that the one-hour levels were 8.8 ppm in 2010 and 12.3 ppm in 2030, well below the NAAQS of 35 ppm. The CO modeling for the No-Build Alternative found that the levels were 5.9 ppm in 2010 and 8.0 ppm in 2030, also below the standard. The eight-hour levels for the intersection were 6.2 ppm in 2010 and 8.6 ppm in 2030, also below the NAAQS of 9 ppm. The eight-hour levels for the No-Build Alternative were 4.1 ppm in 2010 and 5.6 ppm in 2030, also below the standard. The input and output files are documented in the *Air Quality Analysis Technical Report* (ARCADIS 2003).

The relatively small increase in maximum concentrations between 2010 and 2030 occurs because of the anticipation of more advanced and pollution sensitive vehicles in the future. Despite these small increases, the carbon monoxide concentrations are below the NAAQS. Therefore, the proposed improvements to the Kansas Lane Connector are not anticipated to substantially impact air quality along this corridor. However, short-term impacts to air quality could result from the construction and development of the proposed project. To minimize potential air quality impacts, such as particulate matter, the contractor shall comply with all relevant federal, state, and local laws and regulations.

#### Hydrocarbons (HC) and Nitrogen Dioxides (NO<sub>2</sub>)

Automobile emissions of HC and NO<sub>2</sub> are carried into the atmosphere where they react with sunlight to form ozone (O<sub>3</sub>) and NO<sub>2</sub>. Automobile emissions of HC and NO<sub>2</sub> are expected to decrease over time due to the continued installation and maintenance of pollution control devices on new vehicles. However, the increasing traffic volumes projected for the study area may offset the air quality improvements provided by technological advances.

#### Particulate Matter (PM<sub>10</sub>) and Sulfur Dioxide (SO<sub>2</sub>)

Automobiles are not significant sources of  $PM_{10}$  and  $SO_2$ , accounting for less than 7 percent of the total  $PM_{10}$  emissions and less than 2 percent of the  $SO_2$  emissions nationwide. Therefore, traffic on the proposed Kansas Lane Connector is not expected to exceed the air quality standards for these pollutants.

#### Lead (Pb)

The sale, supply, and transport of leaded gasoline or lead additives was made unlawful after December 31, 1995, by the Clean Air Act Amendments of 1990. Therefore, traffic on the proposed Kansas Lane Connector is not expected to exceed the NAAQS for lead.

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

#### 4.15.1 Transportation Conformity

The regulatory approach to non-attainment areas is to set regional goals for the attainment of the NAAQS, which are addressed in an SIP. When special measures are considered necessary to assist in attaining the NAAQS, an SIP may mandate Transportation Control Measures (TCMs) to reduce motor vehicle pollutant emissions. In these areas, transportation projects are required to conform to the SIP and are not to interfere with the implementation of effectiveness of the TCMs. Ouachita Parish is designated as an attainment parish for all criteria pollutants. The attainment status indicates the historical pollutant levels are below the NAAQS. Because Ouachita Parish is neither a nonattainment area nor a maintenance area, the conformity requirements do not apply to this project.

#### 4.16 Noise

A noise analysis was conducted in accordance with the FHWA traffic noise standards, *Procedures for Abatement of Highway Traffic and Construction Noise*, 23 CFR 772 (USDOT 1984) and the *LDOTD Louisiana Traffic Noise Policy* (2004)<sup>2</sup>. The traffic noise analysis is documented in the *Noise Analysis Technical Report* (ARCADIS 2003).

This traffic noise analysis included the following elements:

- § Identification of land use activity areas that might be impacted by traffic noise;
- § Determination of existing noise levels;
- § Prediction of future noise levels;
- § Identification of possible noise impacts; and
- § Consideration and evaluation of measures to reduce noise impacts.

These criteria are consistent with the FHWA NAC (23 CFR 772) allowing for consideration of traffic noise impacts 1 dBA below the FHWA criteria and reviewed against the updated criteria established by the Louisiana Traffic Noise Policy (2004 LDOTD Noise Policy).

<sup>&</sup>lt;sup>2</sup> The original noise analysis conducted for the DEIS was based on the LDOTD 1997 Noise Policy. The noise impacts were reassessed for the FEIS based on LDOTD's updated Noise Policy adopted in 2004.

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

#### 4.16.1 Analysis Methodology and Results

Predicted sound levels for design years 2010 and 2030 were made using FHWA's Traffic Noise Model (TNM) 1.0b. Aerial photos flown in March 2000 and traffic volumes were used to compute future noise levels. The various TNM parameters include: traffic counts, roadway configuration, receptor locations, ground type, tree zones, and ground zones. A 45 mile per hour (mph) design speed was modeled for the proposed Kansas Lane Connector. A total of 58 receivers were considered for the Preferred, Southern, and Central+Northern Alternatives. Sixty-nine receivers were considered for the Central and the Southern+Central Alternatives. Figure 4-9 shows the location of the receivers modeled.

An impact determination was completed to identify those locations that were predicted to be impacted in the future and for which abatement should be considered. A location was considered impacted if the predicted peak hour noise levels equaled or exceeded the LDOTD NAC of 66 dBA for residential land use or there was an increase over the existing noise levels of 10 dBA or more.

The existing and predicted noise levels for each receiver for the No-Build and the Build Alternatives, are summarized in the *Noise Analysis Technical Report* (ARCADIS 2003). Table 4-9 shows the number of sensitive receivers where a substantial increase in noise would occur due to the proposed connector. The modeling showed that, in 2030, the No-Build Alternative would result in three receivers with increases in noise exposures. The impact is a result of the sound levels approaching or exceeding the NAC. The receivers experiencing noise increases under the No-Build Alternative are all located in proximity to U.S. 80; therefore, these impacts are most likely coming from traffic increases on U.S. 80.





Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

	Current Year	No-Build Alternative	Preferred Alternative	2030 Central Alternative	2030 Southern Alternative	2030 Central+ Northern Alternative	2030 Southern+ Central Alternative
Total Number of	69	58	58	69	58	58	69
Receivers							
Number of	1	3	5	5	4	4	5
Receivers							
Approaching or							
Exceeding the							
LDOTD NAC							
(>66 dBA)							
Number of	NA	0	10	13	14	9	16
Receivers with							
Substantial Noise							
Increase (+10 dBA)							
Number of	NA	0	0	3	1	3	1
Receivers where							
Both Types of							
Impacts Occur							
Total Number of	1	3	15	21	19	16	22
Impacted Receivers							

Table 4-9. Noise Impact Summary by Alternative.

The modeling showed that, in 2030, the Preferred Alternative would result in 15 impacted receivers. The impact at 10 of the receivers is a result of substantial increases in the noise levels over existing noise levels. The impact at five of the receivers is the result of noise levels approaching or exceeding the NAC.

The modeling showed that, in 2030, the Central Alternative would result in 21 impacted receivers. The impact at 13 of the receivers is a result of substantial increases in the noise levels over existing noise levels. The impact at five of the receivers is the result of noise levels approaching or exceeding the NAC. Three of the receivers would be impacted by both substantial increases and NAC approaches or exceedances.

The modeling showed that, in 2030, the Southern Alternative would result in 19 impacted receivers. The impact at 14 of the receivers is a result of substantial increases in the noise levels over existing noise levels. The impact at four of the receivers is the result of noise levels exceeding the NAC. One receiver would be impacted by both a substantial increase and the approaching or exceedance of NAC criteria.

The modeling showed that, in 2030, the Central+Northern Alternative would result in 16 impacted receivers. The impact at nine of the receivers is a result of substantial increases in the noise levels over existing noise levels. The impact at four of the receivers is the result of noise levels exceeding the NAC. Three of the receivers would be impacted by both substantial increases and NAC approaches or exceedances.

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

The modeling showed that, in 2030, the Southern+Central Alternative would result in 22 impacted receivers. The impact at 16 of the receivers is a result of substantial increases in the noise levels over existing noise levels. The impact at five of the receivers is the result of noise levels exceeding the NAC. One receiver would be impacted by both a substantial increase and the approaching or exceedance of NAC criteria.

#### 4.16.2 Evaluation of Abatement Measures

In situations where the NAC is approached or exceeded at any receptor location, noise abatement measures must be considered. All of the Build Alternatives would result in a traffic noise impact; therefore, both non-barrier and barrier noise abatement measures were considered in locations where each Build Alternative would result in a predicted noise impact. Before any abatement measure can be incorporated into the Kansas Lane Connector project, it must be both feasible and reasonable. In order to be feasible, the measure should reduce noise levels by at least 8 dBA for at least one impacted receiver. Further feasibility determination should take into account the engineering aspect of the noise abatement measure (i.e., maintain access, drainage, safety, maintenance, topography). In order to be reasonable, the abatement measure should not exceed \$25,000 per benefited receptor, defined as a receptor who receives at least 5 dBA of decreased impacts due to implementation of the measure.

#### 4.16.2.1 Non-Barrier Measures

**Traffic management:** Traffic management control devices could be used to reduce the speed of traffic; however, the minor benefit of 1 dBA per 5 mph reduction in speed does not outweigh the associated increase in congestion and air pollution.

Alteration of horizontal and/or vertical alignments: Consideration to shifts in the horizontal and vertical alignment should be given during final design of the project; however, any alteration of the proposed alignment should not increase displacements of existing residences or business and may require additional ROW to be cost effective or reasonable.

**Buffer zone:** The acquisition of sufficient land adjacent to the highway to preclude future development that could be impacted by the proposed highway traffic noise would not be cost effective. However, one of the most effective noise abatement measures is local land use planning and effective zoning controls to minimize future impacts. The local jurisdiction should consider developing regulations which limit the location of noise sensitive land uses adjacent to the Kansas Lane Connector. Buffers of undeveloped land between the Kansas Lane Connector and residential areas can effectively reduce noise impacts on future development.

**Insulation of public buildings:** This measure includes insulating public use or nonprofit institutional structures such as schools and hospitals. It does not include any private

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

residences or businesses. No schools, hospitals, or public use of nonprofit institutional structures would be impacted by noise along any of the Build Alternatives.

#### 4.16.2.2 Barrier Measures

Noise barriers are the most commonly used noise abatement measure. Noise barriers are normally solid wall-like structures constructed between the noise source (traffic) and the impacted receivers. They can also be constructed from earth piled into a large mound or berm. Noise barriers were considered to mitigate noise impacts predicted for each of the Build Alternatives. The preliminary determination of the feasibility and reasonableness of a noise barrier for impacts at receivers along each alternative is discussed below.

#### The Preferred Alternative

A noise barrier was considered to mitigate impacts at the receivers predicted to have noise impacts from the Preferred Alternative. Table 4-10 summarizes the type of noise impact by receiver and whether a noise barrier was feasible and reasonable in accordance with the 2004 LDOTD Noise Policy. Following the table is an explanation of the feasibility and reasonableness of using a barrier as an abatement measure for noise impacts at each receiver impacted by the Preferred Alternative.

	Noise Impact	
<b>Receiver Number</b>	(dBA)	Feasibility and Reasonableness
16	Substantial increase	Not feasible – existing driveways and cross streets would
		render a barrier ineffective at this location.
28 through 30	Substantial increase	Not feasible - existing driveways and cross streets would
		render a barrier ineffective at this location.
33	Substantial increase	Not feasible – existing driveways and cross streets would
		render a barrier ineffective at this location.
41	Substantial increase	Not feasible – existing driveways and cross streets would
		render a barrier ineffective at this location.
42	Substantial increase	NA – likely to be relocated.
43	Substantial increase	Not feasible – existing driveways and cross streets would
		render a barrier ineffective in this location.
47	Substantial increase	Not feasible – existing driveways and cross streets would
		render a barrier ineffective in this location.
49	Exceeds NAC	May be feasible based on available data, but determined not
		reasonable because an existing highway (U.S. 80) is located
		<200 feet from this receiver; modeled noise impacts exceed
		NAC by <3 dBA, exceed No Build by <3 dBA.
52	Substantial increase	Barrier modeled, but not feasible because 8 dBA reduction in
		impacts not achieved at any receiver modeled and not
		reasonable because cost per benefited receptor exceeds
		LDOTD maximum of \$25,000.
55	Exceeds NAC	Barrier modeled, but not reasonable because cost per
		benefited receptor exceeds LDOTD maximum of \$25,000.

 Table 4-10.
 Type of Noise Impact by Receiver and Barrier Feasibility and Reasonableness –

 Preferred Alternative.

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

Receiver Number	Noise Impact (dBA)	Feasibility and Reasonableness
56 and 57	Exceeds NAC	Barrier modeled, but not feasible because 8 dBA reduction in impacts not achieved at any receiver modeled and not reasonable because cost per benefited receptor exceeds LDOTD maximum of \$25,000.
58	Exceeds NAC	May be feasible based on available data, but determined not reasonable because an existing highway (U.S. 80) is located <200 feet from this receiver; modeled noise impacts exceed NAC by <3 dBA, exceed No Build by <3 dBA.

A barrier was determined to not be feasible to mitigate for noise impacts at Receivers 16, 28 through 30, 33, 41, 43, and 47 due to existing driveways and cross streets that would create gaps in the noise barrier and make it ineffective.

Two barrier modeling analyses were conducted using TNM for Receivers 52 through 57. The first barrier analysis assumed a 1,000-foot long, 20-foot high wall at a cost of \$25 per square foot, with a total cost of \$500,000, or \$166,666 per benefited receiver. The second barrier analysis assumed a 1,000-foot long, 10-foot high wall at a cost of \$25 per square foot, with a total cost of \$250,000, or \$83,333 per potentially benefited receiver. The noise barrier analysis concluded that a noise barrier was not reasonable because the minimum cost per benefited receiver of \$83,333 exceeds the LDOTD maximum allowable cost of \$25,000 per benefited receiver in the *2004 LDOTD Noise Policy*. In addition, Receivers 56 and 57 were two of the receivers where the modeling showed that the barrier would not provide the minimum level of noise reduction (8 dBA) required for any of the affected dwelling units.

Although a barrier may be feasible to mitigate for noise impacts at Receivers 49 and 58, it was not modeled. Because of the proximity of existing U.S. 80 to the receivers, a barrier was determined to not be reasonable for the Preferred Alternative. In addition, the modeled impacts exceeded the NAC and No-Build by less than 3 dBA.

The noise analysis conducted for the FEIS determined that a noise barrier either was not feasible or reasonable to mitigate for noise impacts at any impacted receivers along the Preferred Alternative.

#### The Central Alternative

A noise barrier was considered to mitigate impacts at the receivers predicted to have noise impacts from the Central Alternative. Table 4-11 summarizes the type of noise impact by receiver and whether a noise barrier was feasible and reasonable in accordance with the 2004 LDOTD Noise Policy. Following the table is an explanation of the feasibility and reasonableness of using a barrier as an abatement measure for noise impacts at each receiver impacted by the Central Alternative.

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

Cent	rai Alternative.	
	Type of Noise	
Receiver Number	Impact	Feasibility and Reasonableness
8	Substantial increase	NA – likely to be relocated.
12	Substantial increase	NA – likely to be relocated.
13	Substantial increase	NA – likely to be relocated.
16 and 17	Substantial increase	Not feasible – existing driveways and cross streets would render a barrier ineffective at these locations.
25 and 26	Substantial increase	Not feasible – existing driveways and cross streets
27	Substantial increase	Not feasible – existing driveways and cross streets
33	Substantial increase	Not feasible – existing driveways and cross streets
		would render a barrier ineffective at this location.
34	Substantial increase and Exceeds NAC	Not feasible – existing driveways and cross streets would render a barrier ineffective at this location.
35	Substantial increase	Not feasible – existing driveways and cross streets would render a barrier ineffective at this location.
39	Substantial increase	Not feasible – existing driveways and cross streets would render a barrier ineffective at this location.
40	Substantial increase and Exceeds NAC	NA – likely to be relocated.
41	Substantial increase	Not feasible – existing driveways and cross streets would render a barrier ineffective at this location.
47	Substantial increase	NA – likely to be relocated.
49	Exceeds NAC	May be feasible based on available data, but determined not reasonable because an existing highway (U.S. 80) is located <200 feet from this receiver; modeled noise impacts exceed NAC by <3 dBA, exceed No Build by <3 dBA.
55	Exceeds NAC	Barrier modeled, but not reasonable because cost per benefited receptor exceeds LDOTD maximum of \$25,000.
56	Exceeds NAC	Barrier modeled, but not feasible because 8 dBA reduction in impacts not achieved at any receiver modeled and not reasonable because cost per benefited receptor exceeds LDOTD maximum of \$25,000.
58	Exceeds NAC	May be feasible based on available data, but determined not reasonable because an existing highway (U.S. 80) is located <200 feet from this receiver; modeled noise impacts exceed NAC by <3 dBA, exceed No Build by <3 dBA.
59	Exceeds NAC	Not feasible – existing driveways and cross streets would render a barrier ineffective at this location.
69	Exceeds NAC	Not feasible – existing driveways and cross streets would render a barrier ineffective at this location.

# Table 4-11. Type of Noise Impact by Receiver and Barrier Feasibility and Reasonableness – Central Alternative.

A barrier was determined to not be feasible to mitigate for noise impacts at Receivers 16, 17, 25, 26, 27, 33, 34, 35, 39, 41, 59, and 69 due to existing driveways and cross streets that would create gaps in the noise barrier and make it ineffective.

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

The barrier analyses previously discussed included Receivers 55 and 56 impacted by the Central Alternative. The modeling determined the barriers analyzed would not be reasonable to mitigate for noise impacts at these receivers because the minimum cost per benefited receiver of \$83,333 exceeded the LDOTD maximum allowable cost of \$25,000 per benefited receiver in the 2004 LDOTD Noise Policy. In addition, Receiver 56 was one of the receivers where the modeling showed that the barrier would not provide the minimum level of noise reduction (8 dBA) required for any of the affected dwelling units.

Although a barrier may be feasible to mitigate for noise impacts at Receivers 49 and 58, it was not modeled. Because of the proximity of existing U.S. 80 to the receivers, a barrier was determined to not be reasonable for the Central Alternative. In addition, the modeled impacts exceeded the NAC and No-Build by less than 3 dBA. The noise barrier analysis conducted for the FEIS determined that a noise barrier either was not feasible or reasonable to mitigate for noise impacts at any impacted receivers along the Central Alternative.

# The Southern Alternative

A noise barrier was considered to mitigate impacts at the receivers predicted to have noise impacts from the Southern Alternative. Table 4-12 summarizes the type of noise impact by receiver and whether a noise barrier was feasible and reasonable in accordance with the 2004 LDOTD Noise Policy. Following the table is an explanation of the feasibility and reasonableness of using a barrier as an abatement measure for noise impacts at each receiver impacted by the Southern Alternative.

Jour	internative.	
Dogoiyor Numbor	Type of Noise	Fassibility and Passanablanass
Keceivei Nuilibei	Impaci	reasibility and Reasonableness
13 and 14	Substantial increase	Not feasible – existing driveways would render a barrier
		ineffective at these locations.
18	Substantial increase	Not feasible – existing driveways and cross streets would
		render a barrier ineffective at this location.
19	Substantial increase	Not feasible – existing driveways and cross streets would
	and Exceeds NAC	render a barrier ineffective at this location.
20	Substantial increase	NA – likely to be relocated.
24	Substantial increase	NA – likely to be relocated.
25 and 26	Substantial increase	Not feasible – existing driveways and cross streets would
		render a barrier ineffective at these locations.
34	Substantial increase	Not feasible – existing driveways and cross streets would
		render a barrier ineffective at this location.
35 and 36	Substantial increase	NA – likely to be relocated.
39	Substantial increase	NA – likely to be relocated.
40	Substantial increase	Not feasible – existing driveways and cross streets would
		render a barrier ineffective at this location
47	Substantial increase	NA – likely to be relocated.

 Table 4-12.
 Type of Noise Impact by Receiver and Barrier Feasibility and Reasonableness –

 Southern Alternative.

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

	Type of Noise	
Receiver Number	Impact	Feasibility and Reasonableness
49	Exceeds NAC	May be feasible based on available data, but determined not
		reasonable because an existing highway (U.S. 80) is located
		<200 feet from this receiver; modeled noise impacts exceed
		NAC by <3 dBA, exceed No Build by <3 dBA.
51	Substantial increase	NA – likely to be relocated.
55	Exceeds NAC	Barrier modeled, but not reasonable because cost per
		benefited receptor exceeds LDOTD maximum of \$25,000
56	Exceeds NAC	Barrier modeled, but not feasible because 8 dBA reduction in
		impacts not achieved at any receiver modeled and not
		reasonable because cost per benefited receptor exceeds
		LDOTD maximum of \$25,000.
58	Exceeds NAC	May be feasible based on available data, but determined not
		reasonable because an existing highway (U.S. 80) is located
		<200 feet from this receiver; modeled noise impacts exceed
		NAC by <3 dBA, exceed No Build by <3 dBA.

A barrier was determined to not be feasible to mitigate for noise impacts at Receivers 13, 14, 18, 19, 25, 26, 34, and 40 due to existing driveways and cross streets that would create gaps in the noise barrier and make it ineffective.

The barrier analyses previously discussed included Receivers 55 and 56 impacted by the Southern Alternative. The modeling determined the barriers analyzed would not be reasonable to mitigate for noise impacts at these receivers because the minimum cost per benefited receiver of \$83,333 exceeded the LDOTD maximum allowable cost of \$25,000 per benefited receiver in the 2004 LDOTD Noise Policy. In addition, Receiver 56 was one of the receivers where the modeling showed that the barrier would not provide the minimum level of noise reduction (8 dBA) required for any of the affected dwelling units.

Although a barrier may be feasible to mitigate for noise impacts at Receivers 49 and 58, it was not modeled. Because of the proximity of existing U.S. 80 to the receivers, a barrier was determined to not be reasonable for the Southern Alternative. In addition, the modeled impacts exceeded the NAC and No-Build by less than 3 dBA. The noise analysis conducted for the FEIS determined that a noise barrier either was not feasible or reasonable to mitigate for noise impacts at any impacted receivers along the Southern Alternative.

#### The Central+Northern Alternative

A noise barrier was considered to mitigate impacts at the receivers predicted to have noise impacts from the Central+Northern Alternative. Table 4-13 summarizes the type of noise impact by receiver and whether a noise barrier was feasible and reasonable in accordance with the 2004 LDOTD Noise Policy. Following the table is an explanation of the feasibility and reasonableness of using a barrier as an abatement measure for noise impacts at each receiver impacted by the Central+Northern Alternative.

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

Table 4-13.	Type of Noise Impact by Receiver and Barrier Feasibility and Reasonableness -
	Central+Northern Alternative.

Receiver Number	Type of Noise Impact	Feasibility and Reasonableness		
16 and 17	Substantial increase	Not feasible – existing driveways and cross streets would render a barrier ineffective in these locations.		
25 and 26	Substantial increase	Not feasible – existing driveways and cross streets would render a barrier ineffective in these locations.		
27	Substantial increase and Exceeds NAC	Not feasible – existing driveways and cross streets would render a barrier ineffective in this location.		
33	Substantial increase	Not feasible – existing driveways and cross streets would render a barrier ineffective in this location.		
34	Substantial increase and Exceeds NAC	Not feasible – existing driveways and cross streets would render a barrier ineffective in this location.		
35	Substantial increase	Not feasible – existing driveways and cross streets would render a barrier ineffective in this location.		
39	Substantial increase	Not feasible – existing driveways and cross streets would render a barrier ineffective in this location.		
40	Substantial increase and Exceeds NAC	NA – likely to be relocated.		
41	Substantial increase	Not feasible – existing driveways and cross streets would render a barrier ineffective in this location.		
47	Substantial increase	NA – likely to be relocated.		
49	Exceeds NAC	May be feasible based on available data, but determined not reasonable because an existing highway (U.S. 80) is located <200 feet from this receiver; modeled noise impacts exceed NAC by <3 dBA, exceed No Build by <3 dBA.		
55	Exceeds NAC	Barrier modeled, but not reasonable because cost per benefited receptor exceeds LDOTD maximum of \$25,000.		
56	Exceeds NAC	Barrier modeled, but not feasible because 8 dBA reduction in impacts not achieved at any receiver modeled and not reasonable because cost per benefited receptor exceeds LDOTD maximum of \$25,000.		
58	Exceeds NAC	May be feasible based on available data, but determined not reasonable because an existing highway (U.S. 80) is located <200 feet from this receiver; modeled noise impacts exceed NAC by <3 dBA, exceed No Build by <3 dBA.		

A barrier was determined to not be feasible to mitigate for noise impacts at Receivers 16, 17, 25 through 27, 33 through 35, 39, and 41 due to existing driveways and cross streets that would create gaps in the noise barrier and make it ineffective.

The barrier analyses previously discussed included Receivers 55 and 56 impacted by the Central+Northern Alternative. The modeling determined the barriers analyzed would not be reasonable to mitigate for noise impacts at these receivers because the minimum cost per benefited receiver of \$83,333 exceeded the LDOTD maximum allowable cost of \$25,000 per benefited receiver in the *2004 LDOTD Noise Policy*. In addition, Receiver 56 was one of the receivers where the modeling showed that the barrier would not provide the minimum level of noise reduction (8 dBA) required for any of the affected dwelling units.

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

Although a barrier may be feasible to mitigate for noise impacts at Receivers 49 and 58, it was not modeled. Because of the proximity of existing U.S. 80 to the receivers, a barrier was determined to not be reasonable for the Central+Northern Alternative. In addition, the modeled impacts exceeded the NAC and No-Build by less than 3 dBA. The noise analysis conducted for the FEIS determined that a noise barrier either was not feasible or reasonable to mitigate for noise impacts at any impacted receivers along the Central+Nothern Alternative.

#### The Southern+Central Alternative

A noise barrier was considered to mitigate impacts at the receivers predicted to have noise impacts from the Southern+Central Alternative. Table 4-14 summarizes the type of noise impact by receiver and whether a noise barrier was feasible and reasonable in accordance with the 2004 LDOTD Noise Policy. Following the table is an explanation of the feasibility and reasonableness of using a barrier as an abatement measure for noise impacts at each receiver impacted by the Southern+Central Alternative.

	Type of Noise		
<b>Receiver Number</b>	Impact	Feasibility and Reasonableness	
8	Substantial increase	NA – likely to be relocated.	
12	Substantial increase	NA – likely to be relocated.	
13	Substantial increase	NA – likely to be relocated.	
18	Substantial increase	Not feasible – existing driveways and cross streets would	
		render a barrier ineffective at this location.	
19	Substantial increase	Not feasible – existing driveways and cross streets would	
	and Exceeds NAC	render a barrier ineffective at this location.	
20	Substantial increase	NA – likely to be relocated.	
24	Substantial increase	NA – likely to be relocated.	
25 and 26 Substantial increase Not feasible – existing driveways and cros		Not feasible – existing driveways and cross streets would	
		render a barrier ineffective at these locations.	
34	Substantial increase	Not feasible – existing driveways and cross streets would	
		render a barrier ineffective at this location.	
35 and 36	Substantial increase	NA – likely to be relocated.	
39	Substantial increase	NA – likely to be relocated.	
40	Substantial increase	se Not feasible – existing driveways and cross streets would	
		render a barrier ineffective in this location.	
47	Substantial increase	NA – likely to be relocated.	
49	Exceeds NAC	May be feasible based on available data, but determined not	
		reasonable because an existing highway (U.S. 80) is located	
		<200 feet from this receiver; modeled noise impacts exceed	
		NAC by <3 dBA, exceed No Build by <3 dBA.	
51	Substantial increase	NA – likely to be relocated.	
55	Exceeds NAC	Barrier modeled, but not reasonable because cost per	
		benefited receptor exceeds LDOTD maximum of \$25,000.	
56	Exceeds NAC Barrier modeled, but not feasible because 8 dBA reduction		
		impacts not achieved at any receiver modeled and not	
		reasonable because cost per benefited receptor exceeds	
1		LDOTD maximum of \$25,000.	

# Table 4-14. Type of Noise Impact by Receiver and Barrier Feasibility and Reasonableness – Southern+Central Alternative.

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

Receiver Number	Type of Noise Impact	Feasibility and Reasonableness
58	Exceeds NAC	May be feasible based on available data, but determined not reasonable because an existing highway (U.S. 80) is located <200 feet from this receiver; modeled noise impacts exceed NAC by <3 dBA, exceed No Build by <3 dBA.
59	Exceeds NAC	Not feasible – existing driveways and cross streets would render a barrier ineffective in this location.
69	Exceeds NAC	Not feasible – existing driveways and cross streets would render a barrier ineffective in this location.

A barrier was determined to not be feasible to mitigate for noise impacts at Receivers 18, 19, 25, 26, 34, 40, 59, and 69 due to existing driveways and cross streets that would create gaps in the noise barrier and make it ineffective.

The barrier analyses previously discussed included Receivers 55 and 56 impacted by the Southern+Central Alternative. The modeling determined the barriers analyzed would not be reasonable to mitigate for noise impacts at these receivers because the minimum cost per benefited receiver of \$83,333 exceeded the LDOTD maximum allowable cost of \$25,000 per benefited receiver in the *2004 LDOTD Noise Policy*. In addition, Receiver 56 was one of the receivers where the modeling showed that the barrier would not provide the minimum level of noise reduction (8 dBA) required for any of the affected dwelling units.

Although a barrier may be feasible to mitigate for noise impacts at Receivers 49 and 58, it was not modeled. Because of the proximity of existing U.S. 80 to the receivers, a barrier was determined to not be reasonable for the Southern+Central Alternative. In addition, the modeled impacts exceeded the NAC and No-Build by less than 3 dBA. The noise analysis conducted for the FEIS determined that a noise barrier either was not feasible or reasonable to mitigate for noise impacts at any impacted receivers along the Southern+Central Alternative.

#### 4.17 Prime Farmland Soils

Impact evaluation for prime farmland soils was based on a review by the NRCS. A letter requesting prime farmland impacts was sent to the NRCS on August 28, 2002, along with the Farmland Conversion Impact Rating Form AD-1006 for the Preferred, Central, and Southern Alternatives. The NRCS returned the completed Farmland Rating Form with a note that stated "All soils inside city limits or immediately adjacent to the city limits are considered to be nonprime farmland." Based on the information provided by the NRCS, it was determined that none of the five Build Alternatives will impact prime farmland soils. A copy of the completed Farmland Rating Form is included in Appendix A-6.

The No-Build Alternative will also not have impacts to prime farmland soils.

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

#### 4.18 Biotic Resource Impacts

#### 4.18.1 Vegetation

The primary impact on the vegetation communities from the proposed project would be the direct loss of vegetation due to clearing within the proposed ROW. During construction, fugitive dust may accumulate on adjacent vegetation, causing a temporary reduction in photosynthesis and transpiration rates. Soil erosion may result in sedimentation of downstream plant communities and off-site pollution may occur as runoff carries oil and grease from heavy equipment to adjacent plant communities. These potential impacts would be minimized, however, by implementing proper runoff and erosion-control measures, dust suppression and control, and removal of accidental spills of fuel or waste oil during construction. As soon as possible after construction is complete, exposed soils will be stabilized by revegetation.

Table 4-15 presents the approximate amount of each vegetation community type impacted by the project for each alternative. The Preferred Alternative would result in the loss of the most wooded area with approximately 32.4 acres, followed by the Southern Alternative with approximately 29.8 acres. The Southern+Central Alternative would have the least impact on wooded areas, resulting in a loss of approximately 15.1 acres. The loss of grassland would range from approximately 9.7 acres for the Central Alternative, to 3 acres for the Southern Alternative, while the Preferred Alternative would result in the loss of about 6.2 acres. The No-Build Alternative would have no impact on the vegetation within the study area.

Alternative	Wooded Areas <sup>1</sup> (in acres)	Grassland (in acres)
Preferred	32.4	6.2
Central	15.9	9.7
Southern	29.8	3.0
Central+Northern	27.2	6.5
Southern+Central	15.1	6.5

 Table 4-15. Estimated Impacts on Vegetation Communities.

Although all of the Build Alternatives would result in loss of potential habitat for the Louisiana black bear, no bears have been recorded within the study area (USFWS 2001; LNHP 2001). In addition, any bears that may use the habitat in the project study area would most likely only be traveling through the area and would not take up permanent residence in the project study area.

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

#### 4.18.2 Terrestrial Wildlife

Clearing and construction-related activities would directly and/or indirectly affect most animals that currently reside or wander within the proposed ROW, resulting in temporary population fluctuations. Slow-moving, burrowing, and/or subterranean animals may be killed by construction vehicles and heavy machinery, while larger, more-mobile species may avoid the initial clearing and construction activities and move into adjacent areas outside the ROW. Because adjacent habitat is presumed to be at carrying capacity, the animals displaced from the proposed ROW would either displace other resident individuals or be forced to keep moving in search of new territory.

The increased noise and activity levels during construction could potentially disturb breeding or other activities of species inhabiting the areas adjacent to the construction area. Because of the expected increase in vehicular traffic and increased speed of the traffic as a result of the project, an increase in the mortality of wildlife would be expected. This would particularly apply to those species requiring a large home range or territory.

The Migratory Bird Treaty Act (MBTA) states that it is unlawful to kill, capture, collect, possess, buy, sell, trade, or transport any migratory bird, nest, or egg, in part or in whole, without a federal permit issued in accordance with the MBTA's policies and regulations. Measures to minimize impacts to migratory bird habitat will be implemented to avoid any harm to migratory birds.

In general, vegetation provides habitat for wildlife; therefore, the loss of wildlife habitat corresponds to the vegetation types presented previously on Table 4-15.

The No-Build Alternative would have no impact on wildlife in the study area. The potential impacts to protected species by Build Alternatives are discussed in Section 4.20 of this document.

#### 4.18.3 Aquatic Wildlife

Potential impacts to aquatic ecosystems resulting from construction activities could result from physical habitat loss or modification; degrading of water quality; increased erosion, runoff, sedimentation, and turbidity; mechanical disruption of aquatic habitat; and spillage of petroleum and other chemical products. All of these would tend to be shortterm effects and would vary with the intensity of construction and location.

Because aquatic communities are acutely sensitive to changes in their environment, some minor impacts to small groups of biological organisms may result. Organisms such as small fish and invertebrates that cannot flee the area would likely be destroyed. Increased siltation could clog the gills and/or feeding mechanisms of benthic organisms, fish, and amphibian species. These organisms are slow to recover and usually do not, once the

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

water body has been severely impacted. Any instream construction may alter the substrate and impact adjacent streamside vegetation. Increased light penetration from the removal of streamside vegetation may increase water temperatures. Warmer water contains less oxygen, thus reducing aquatic life that depends on high oxygen concentrations.

Because area streams typically exhibit relatively high turbidities during and following rainfall/runoff events, small increases in suspended solids during construction are unlikely to have any discernible adverse impact. Following BMPs would limit water quality degradation by minimizing fill washing into water bodies, provide control of erosion and sedimentation, and ensure adherence to proper clean-up procedures. Additional procedures would include minimizing the area to be disturbed and revegetating the areas cleared. Impacts could be further minimized by spanning water bodies or using bottomless culverts where practical to maintain fish and aquatic animal passages.

Impacts to aquatic life in the areas where the alignments cross Bayou Desiard are shown on Table 4-15 in the following section. The No-Build Alternative would have no impact on the aquatic resources within the study area. No EFH would be impacted by the project because the waters in the study area are outside of a tidal influence.

#### 4.19 Waters of the U.S. and Wetlands

The impacts to jurisdictional waters of the U.S., which include wetlands, was based on a review of GAP data, aerial photography (March 2000 and February 2002), the General Soil Map for Ouachita Parish, and the results of a preliminary wetlands delineation/inventory for the ROW along the alternatives that was performed during a September 2002 field visit. A wetland delineation was completed for the Preferred Alternative using the data collected during a September 2004 field visit (*Kansas Lane Wetland Delineation Report*; ARCADIS 2004). The wetland delineation was based on the methods established in the *1987 USACE Wetland Delineation Manual* (Environmental Laboratory 1987). This process is described in detail in the *Wetland Delineation Report*. Due to the spatial distribution patterns of the wetland communities, as well as a thorough consideration of other environmental concerns including topography, residential structures, and communities, a practicable alignment that avoids all wetlands is not possible within the Build Alternatives. However, throughout the development of all alignments, wetland impacts were minimized to the greatest extent possible.

The estimated amount of waters of the U.S. and wetlands occurring within the boundaries of each Build Alternative ROW was calculated electronically. The results are presented on Table 4-16. The information on Table 4-16 is intended to provide an overall general comparison of potential impacts to wetlands and other waters of the U.S. for the Build Alternatives.

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

Alternative	Wetlands (in acres)	Bayou Desiard (in acres)	Streams (in acres)	Total (in acres)
Preferred Alternative	15.2	2.0	0.2	17.4
Central Alternative	10.4	3.2	0.1	13.7
Southern Alternative	16.4	1.4	0.2	18.0
Central+Northern	15.1	3.2	0.2	18.5
Southern+Central	9.6	1.4	0.1	11.1

#### Table 4-16. Estimated Impacts on Waters of the U.S. and Wetlands.

The majority of wetland impacts would be to bottomland hardwoods systems, which are located on the fringe of Chauvin Swamp. Impacts to emergent marsh systems would also occur with all of the Build Alternatives. The bottomland hardwood system is predominately composed of willow oak, water hickory, sweetgum, overcup oak, bald cypress, and sugarberry. The emergent marsh system included many species of spikerushes, panic grasses, sedges, and beakrushes, with scattered species of overcup oak, bald cypress, and willow oak. The amount of wetlands that would be impacted by the Build Alternatives ranges from 9.6 acres for the Southern+Central Alternative to 16.4 acres for the Southern Alternative. The Preferred Alternative would impact approximately 15.2 acres of wetlands.

Regarding the crossing of Bayou Desiard, the Southern and Southern+Central Alternatives would have the least impact and the Central and Central+Northern Alternatives the most impact. The Southern and Southern+Central Alternatives would cross approximately 341 feet and potentially impact 1.4 acres of the bayou, while the Central and Central+Northern Alternatives would cross approximately 841 feet and potentially impact 3.2 acres. The Preferred Alternative would cross approximately 500 feet and potentially impact 2.0 acres of the bayou. The field-determined wetlands in the study area are shown on Figure 4-10.

In addition to Bayou Desiard, all Build Alternatives would cross the same unnamed stream located parallel to and east of the Arkansas-Louisiana-Mississippi railroad, impacting 0.2 acre (Preferred, Southern, and Central+Northern Alternatives) and 0.1 acre (Central and Southern+Central Alternatives).

Thus, based on the extent of wetlands and waters of the U.S. within the ROW, the Southern+Central Alternative would have the least impact (approximately 11.1 acres), while the Preferred Alternative would impact approximately 17.4 acres. The Central+Northern Alternative would impact the most wetland and waters of the U.S. acreage at 18.0.

However, the selection of the No-Build Alternative would not impact any wetlands or other waters of the U.S. Growth in the area is expected to continue and impacts




Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

associated with resulting development could occur. However, efforts will be made to restrict future development in the wetland areas as much as possible by implementing full control of access within the wetland areas.

#### 4.19.1 Permit Requirements

Impacts to waters of the U.S. come under the jurisdiction of USACE. Permits will be required for highway encroachment into jurisdictional wetlands and surface waters. The USACE will submit a jurisdictional determination once the ROW has been demarcated prior to construction. Once a jurisdictional determination has been made, impacts will require an Individual Section 404 Permit. In addition, a Section 401 General Water Quality Certification is also required for any activity that may result in a discharge into waters of the U.S. or for which the issuance of a federal permit or license is required. USACE cannot issue a Section 404 permit until a Section 401 certification is issued. Final determination of permit applicability lies with USACE. LDOTD will coordinate with USACE prior to construction to obtain the necessary permits.

USFWS is responsible for administering the Endangered Species Act of 1973, as amended. This responsibility includes a review of all Section 404 permit applications to determine a project's impact on fish and wildlife resources, including federally protected species. USFWS provides recommendations to USACE on how the project could avoid or minimize impacts to fish and wildlife and their habitat.

## 4.19.2 Mitigation

USACE has adopted, through CEQ, a mitigation policy that embraces the concepts of "no net loss of wetlands" and sequencing. The purpose of this policy is to restore and maintain the chemical, biological, and physical integrity of waters of the U.S., specifically wetlands. Mitigation of wetland impacts has been defined by CEQ as avoidance of, minimizing, rectifying, reducing over time, and compensating for impacts (40 CFR 1508.20). Each of the principles of avoidance, minimization, and compensatory mitigation must be considered in sequential order.

## 4.19.2.1 Avoidance

Avoidance examines all appropriate and practicable possibilities of averting impacts to waters of the U.S. According to a 1990 Memorandum of Agreement (MOA) between USEPA and USACE, "appropriate and practicable" measures to offset unavoidable impacts must be determined. Such measures should be appropriate to the scope and degree of those impacts and practicable in terms of cost, existing technology, and logistics in light of overall project purposes. Throughout the alternatives development and analysis process, preliminary routes have been eliminated or modified to avoid waters of the U.S. However, some unavoidable impacts to surface waters and wetlands will result from culvert construction and road fill.

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

Avoidance is not a practical solution to eliminating impacts associated with the proposed project, because all of the Build Alternatives cross wetland areas. Roadway construction on new location typically results in impacts to all natural communities, including wetlands.

#### 4.19.2.2 Minimization

Minimization includes the examination of appropriate and practicable steps to reduce adverse impacts to waters of the U.S. Implementation of these steps will be required through project modifications and permit conditions. Minimization typically focuses on decreasing the footprint of the proposed project through the reduction of median widths, ROW widths, fill slopes and/or road shoulder widths, and alignment adjustments. Minimization can be effectively employed along the proposed project.

Avoidance of the wetland areas is not practicable. Therefore, modifications were made based on the presence of wetlands to reduce potential current and future impacts. There will be full control of access along the entire northern edge of the roadway that crosses Chauvin Swamp. Limited control of access would be allowed in all other areas of the roadway which do not cross Chauvin Swamp that would discourage secondary development in wetland areas.

Other construction-related impacts could include erosion and sediment deposition and altering water regimes and water quality. The majority of these impacts are temporary in nature and their severity can be mitigated during construction through implementation of the following: 1) wetlands outside the construction limits will not be used for construction support activities (borrow sites, waste sites, storage, parking, access, etc.) unless the contractor obtains 404 permits from the USACE; 2) clearing of wetland vegetation will be limited to the minimum required for job completion; and 3) coordination with the contractor to ensure that all appropriate measures will be taken to protect the water quality of adjacent wetlands through the use of BMPs.

Wetland impacts could also result from the relocation of utilities such as electric, gas, water, and sewage transmission lines. These issues were considered during the alignment development process. The Preferred Alternative has been developed in such a way to reduce the impacts to major utilities to the greatest extent possible, therefore minimizing the potential for unnecessary wetland impacts.

#### 4.19.2.3 Compensatory Mitigation

Compensatory mitigation is not normally considered until anticipated impacts to waters of the U.S. have been avoided and minimized to the maximum extent possible. It is recognized that "no net loss of wetlands" functions and values may not be achieved in every permit action. Appropriate and practicable compensatory mitigation is required for unavoidable adverse impacts that remain after all appropriate and practicable minimization has been achieved. Compensatory actions often include restoration,

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

creation, and enhancement of waters of the U.S., specifically wetlands. Such actions should be undertaken in areas adjacent to or contiguous to the discharge site if practicable.

Although impacts to waters of the U.S. would be avoided and minimized through route location and construction practices, some impacts would be unavoidable. Thus, some form of mitigation will be required. On occasion, on-site restoration of degraded wetland habitat or creation of manmade wetland habitat within the ROW may be appropriate. However, off-site mitigation measures may also be proposed. A final determination regarding compensatory mitigation requirements rests with USACE. Forested and herbaceous wetland impacts would be replaced at a ratio of at least 1:1. Final mitigation ratios and requirements will be determined in conjunction with the Section 404 Permit process.

## 4.20 Protected Species

As discussed in Chapter 3, four federally listed species have been recorded from Ouachita Parish. The pallid sturgeon and red-cockaded woodpecker (RCW) are listed as endangered, while the bald eagle and Louisiana black bear are listed as threatened. According to USFWS (2001) and LNHP (2001), these species have not been recorded within the study area. Potentially suitable habitat occurs in the study area for only one of these four species, the Louisiana black bear.

The pallid sturgeon prefers the main channels of excessively turbid rivers with strong currents and a firm sandy bottom. This habitat does not exist in the study area. Because this species has not been recorded within the study area (USFWS 2001; LNHP 2001; Pezold 2002) and because suitable habitat is lacking, no impacts to the pallid sturgeon as a result of the proposed project are anticipated.

The RCW has a strong preference for open, park-like stands of living, mature pines with little to no hardwoods, particularly in the midstory. Appropriate habitat must contain at least 50 percent pine, lack a thick understory, and be contiguous with other stands at least 30 years of age. The foraging range of these woodpeckers may extend to 500 acres, but must be contiguous with suitable nesting sites. This species has not been recorded within the study area (USFWS 2001; LNHP 2001) and is highly unlikely to occur there due to lack of suitable habitat. Thus, the proposed project would have no impact on this species.

Bald eagles are generally found in coastal areas around large bodies of water such as reservoirs, lakes, and rivers. This species has not been recorded within the study area (USFWS 2001; LNHP 2001) and is unlikely to occur there. No bald eagles were encountered during the field visits. The proposed project would have no impact on this species.

The preferred habitat of the Louisiana black bear is primarily in bottomland hardwoods and floodplain forests, but can also be found in upland hardwoods, mixed

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

pine/hardwoods, coastal flatwoods, and marshes. Remaining Louisiana black bear populations occur in the Tensas River Basin and the coastal parishes of St. Mary and Iberia. Although the Louisiana black bear has not been recorded within the study area (USFWS 2001; LNHP 2001), apparently suitable habitat occurs in the Chauvin Swamp and may provide shelter for itinerant bears. Noise during construction may cause any bears in the area to avoid the construction areas. An increase in traffic in the area could increase the chance of mortality through collision with vehicles.

Correspondence from the LNHP (Appendix A-4) dated October 22, 2001, indicates observations of a bigeye shiner in 1977 and a paddlefish in 1966. However, correspondence dated September 20, 2001, from the LNHP states that no species of concern are found within the project area.

The No-Build Alternative would have no impact on the protected species within the study area. Growth in the area is expected to continue and impacts associated with resulting development could occur.

Critical habitat, as defined by the Endangered Species Act, is a term for habitat given special protection for the benefit of the listed species. No critical habitat occurs in the study area. In correspondence dated January 18, 2001 (see Appendix A-7), the USFWS stated that no Federally listed, threatened, or endangered species occurred within the project area. However, the USFWS also stated that an additional endangered species consultation should be conducted prior to making expenditures for construction.

## 4.21 Visual Impacts

Land uses along all of the Build Alternatives include wetlands, low and high density residential, ULM, and some commercial development. The landscape in the residential areas consists of scattered woodlands with typical waterway vegetation along Bayou Desiard. The character of the study area has remained stable. Most neighborhoods and commercial areas are built-out and the open space that exists in the study area is mainly comprised of Chauvin Swamp, a privately owned wetland area that is primarily used for hunting. Although there are no designated scenic corridors near any of the Build Alternatives, the area along Bayou Desiard has a high scenic value.

The Kansas Lane Connector would be designed as a four-lane facility, with five lanes in areas where necessary to accommodate existing development. Clearing will be necessary within the construction limits of the project's ROW and at intersections. Typically, the Kansas Lane Connector's visual quality will be generally positive for those using the facility, but degraded for those living adjacent to the roadway and viewing it from off-road. Construction of any of the Build Alternatives would have a visual impact on adjacent neighborhoods, particularly on properties fronting Bayou Desiard. The Central, Southern, Central+Northern, and Southern+Central Alternatives will have visual impacts on the residents of the Ingleside and Fennell Street neighborhoods because these four alternatives will bisect these neighborhoods. These alternatives will cause the visual and

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

aesthetic quality for Ingleside and Fennell Street residents living adjacent to the roadway to be substantially degraded. In addition, these alternatives would cause residents living along Bayou Desiard to have substantially diminished visual quality because their post roadway construction view of the bayou would include a bridge that currently does not exist.

The Preferred Alternative would also create diminished visual quality for residents living along Bayou Desiard because their post roadway construction view of the Bayou would include a bridge that currently does not exist. However, the visual and aesthetic impacts to other residents living along Bon Aire Drive will be minimal given the setback of the proposed roadway from the residences and the existing presence of Bon Aire Drive in their current viewshed.

No adverse visual impacts are anticipated for businesses or industrial uses located at the northern terminus of the five Build Alternatives.

The No-Build Alternative would not have any visual impacts on the neighborhoods discussed above.

#### 4.21.1 Mitigation

Incorporating aesthetic features into the roadway design will help to better integrate the roadway into existing residential neighborhoods and create a more aesthetically pleasing roadway that minimizes visual impacts. The following aesthetic features will be considered during the final design of the Kansas Lane Connector:

- § Integrating landscaping into the project design to promote visual continuity of the roadway and to assist in blending it into the natural landscape as much as possible;
- § Minimizing the loss of vegetation, particularly during construction when equipment access, storage, and staging are required; and
- § Considering accommodating bicycle and pedestrians in the roadway design to minimize visual impacts, focus on the scenic quality of the area, and to better integrate the roadway into the nearby neighborhoods.

## 4.22 Energy Impacts

All of the Build Alternatives would require short-term energy consumption. Construction activities would require an initial consumption of energy resources that would not otherwise be utilized if the project were not constructed. However, this construction-related energy consumption would be offset over the life of the project by the energy efficiencies gained by increasing the efficiency in the travel patterns of commuters and other motorists in the project study area and vicinity. As traffic is diverted to the Kansas Lane Connector, U.S. 165 and U.S. 80 would experience a decrease in traffic over the

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

No-Build Alternative. This efficiency would be realized through a decrease in vehicle hours traveled, a decrease in vehicle delays, higher and more efficient operating speeds, and the redistribution of traffic away from less-efficient roadways. The project is consistent with the Federal Energy Policy and Conservation Act.

## 4.23 Coastal Barriers

The study area falls outside of the coastal barrier zone; therefore, none of the Build Alternatives will impact any coastal barrier resources.

## 4.24 Construction Impacts

The impacts for construction activities for each of the Build Alternatives would be similar. Construction impacts typically include air quality impacts resulting from dust and emissions from heavy equipment, temporary increases in noise, and loss of vegetation resources due to clearing within the ROW. Impacts on traffic flow may also occur but are expected to be minimal given that portions of the project may be constructed on new location. Unavoidable impacts to traffic flow, however, can be expected during construction at intersection locations.

Construction impacts would not occur under the No-Build Alternative.

## 4.24.1 Air Quality

Temporary degradation of air quality in the immediate vicinity of construction activities will be primarily because of fugitive dust from earth-moving operations and emissions from heavy construction equipment. Air quality may also be affected by burning of cleared debris. Increased vehicular emissions, such as carbon monoxide, will be minimal. Diesel emissions from heavy equipment are expected to have an insignificant impact due to the low number of sources.

To minimize potential air quality impacts, such as particulate matter, the contractor will comply with all relevant federal, state, and local laws and regulations. Measures to control dust will be incorporated into the final design and construction specifications. The contractor is responsible for the protection of the general public throughout the project. All construction equipment will be required to comply with Occupational Safety and Health Administration (OSHA) Regulations for employee safety and in accordance with the LDOTD Standard Specifications.

## 4.24.2 Noise

The construction of the proposed project would result in temporary noise increases within the vicinity of the project. Noise associated with project construction, however, is difficult to predict. Heavy machinery, the major source of construction noise, is constantly moving in unpredictable patterns. However, construction normally occurs during daylight hours when occasional loud noises are more tolerable. Because none of

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

the receivers are likely to be exposed to construction noise for a long period, no extended disruption of normal activities is anticipated.

The construction contractor has the responsibility for protection of the general public in all aspects of construction throughout the life of the project. All construction equipment will be required to comply with OSHA regulations as they apply to the employees' safety and in accordance with the LDOTD Standard Specifications. Provisions will be included in the plans and specifications that would require the contractor to make every reasonable effort to minimize construction noise. Construction equipment used during the construction phase will be properly muffled and all motor panels will be shut during operation. In order to minimize the potential for impacts of construction noise on the local residents, the contractor will operate, whenever possible, between the hours of 7 a.m. and 5 p.m.

#### 4.24.3 Water Quality

Soil erosion is generally the most critical water quality impact resulting from construction activities. The degree of erosion is dependent on factors such as the amount of vegetation and soil removal, slope of the exposed area, and the effectiveness of erosion-control measures. Erosion can lead to deposition of sediment in the waterway, potentially allowing unwanted vegetation to grow, resulting in slowing of the natural flow of the waterway.

Adverse impacts to water quality will be reduced by application of BMPs and adhering to an erosion and sedimentation control plan. The plan typically includes such measures as limiting the amount of disturbance to the natural vegetation, prompt revegetation of disturbed areas, mulching, sodding, sediment catch basins, silt fences, diversion berms, storm water management measures, and appropriate road maintenance measures. Appropriate measures, such as provisions for proper disposal and storage of materials and wastes, will also be taken to avoid accidental spillage of fuels or other chemicals and to control runoff into public drainage systems. NPDES procedures will be followed during construction, and a SWPPP and an NOI will be developed for the project.

#### 4.24.4 Traffic Flow

Because portions of the project will be on new location, disruption to traffic movement will be limited to intersection locations. However, the proposed project will likely require some traffic control. A traffic control plan will be implemented to ensure uninterrupted traffic flow during construction. Signs will be strategically placed as a method of controlling traffic during construction activities. Access to any affected private, governmental, commercial, or retail properties will be maintained throughout the construction period. Maintenance of traffic flow and the phasing of construction will be scheduled to minimize traffic delays. Signing plans will be developed and implemented to inform the general public of work zones, road closures, detours, and other temporary changes.

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

#### 4.25 Indirect Impacts

CEQ defines indirect impacts as those effects "caused by the action" that occur "later in time or farther removed in distance, but are still reasonably foreseeable" (40 CFR 1508.8). In the FHWA's Environmental Policy Statement, the agency uses the term "indirect impacts " to encompass both secondary and cumulative effects, which may involve impacts to the social and economic base of a community, as well as impacts to natural resources such as floodplains, water quality, and wetlands. Secondary impacts are those that occur later in time or are removed in distance, while cumulative impacts are those that result from the incremental consequences of an action when added to past and reasonably foreseeable future actions. Secondary and cumulative impacts are less defined than direct impacts and may not be readily observable.

#### 4.25.1 Secondary Impacts

Growth and development are typical secondary impacts related to a roadway project of this type. Such growth usually is the result of access being provided to undeveloped areas and often occurs along that portion of a roadway on new location. Little secondary growth as a result of the proposed project would be expected, because the Kansas Lane Connector roadway will have full control and limited access control except in areas where development already exists (see Section 2.10.1). Because the project is being developed to meet transportation needs created by growth in the area, implementation of any of the Build Alternatives would include beneficial secondary effects such as the relief of congestion on existing roads in the area. Secondary development associated with the new roadway would be required to comply with federal and state regulations, as well as with local planning and land use guidelines. Overall compliance with these regulations and policies would minimize adverse effects of secondary impacts. If secondary development occurs in the Chauvin Swamp, wildlife habitat would be lost and potentially become more fragmented. Secondary impacts to protected species are unlikely to occur except, perhaps, to the Louisiana black bear. Because the Chauvin Swamp provides potential habitat, black bears, if they occur in this area, may be impacted by impingement of secondary development on their habitat.

Indirect effects to water quality resulting from the proposed project are expected to result from an increase in impervious surface created by the roadway itself, as well as the impervious surfaces of the buildings and parking lots of the secondary development induced by the proposed roadway.

#### 4.25.2 Cumulative Impacts

As noted above, cumulative impacts are those that result from the incremental consequences of an action when added to past and reasonably foreseeable future actions. They are incremental, not easily quantifiable, and less-defined than secondary impacts. While the addition of a roadway to the study area could contribute to the development of the area, many other factors influence the development of residential and commercial

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

properties, making it difficult to quantify the cumulative consequences of a particular action. For the Kansas Lane Connector, foreseeable potential cumulative impacts were defined as those actions for which plans exist.

#### 4.25.2.1 Land Use

The most apparent indirect effect of the proposed Kansas Lane Connector may be the demand for residential or commercial development along the roadway corridor, particularly near the intersections at U.S. 80, U.S. 165, and Old Sterlington Road. The Kansas Lane Connector will be developed with full and limited control of access. Access to the proposed Kansas Lane Connector will be permitted in developed areas and upland areas that have development potential. Access will not be allowed through designated regulated wetlands. Therefore, the control of access along the Kansas Lane Connector will help to limit development to upland areas only.

Additionally, the *Comprehensive Plan* currently in place is 15 years old and has not been updated to establish land use controls that take into consideration the type of growth that has occurred since its creation nor does it guide future growth. The update of the Comprehensive Plan and land use controls could assist in controlling any growth in the study area following construction of the Kansas Lane Connector. A telephone interview with of the City of Monroe Engineering Department confirmed that no private actions for developments in the study area had been received in 2003 (Ray, telephone interview 2003). Additionally, a discussion with the Ouachita Parish Permit Department confirmed that no permit applications or development plans had been submitted to the Parish in 2003. Additionally, the Interim Director for the City of Monroe confirmed plans to update the Comprehensive Plan with a completion goal of Spring 2004. However, since the publication of the DEIS, this date has been postponed until Spring 2005 (Tarver, telephone interview 2004). The Interim Director expressed a desire on the part of the City of Monroe to protect the Chauvin Swamp area and emphasize the area's scenic beauty by limiting development. Additionally, sign ordinances that will limit off-premises signs and sign height should be in place for some time by the time the Kansas Lane Connector is constructed to reduce the impacts to the visual and aesthetic quality of the area if development were to take place (Tarver, telephone interview 2003).

#### 4.25.2.2 Water Quality

Growth and development in the past has resulted in an increase in impervious cover, leading to more runoff into area surface waters. The proposed project will increase the amount of impervious cover as a result of the proposed roadway itself, as well from secondary development. Compliance with federal, state, and local regulations would minimize the adverse cumulative effects.

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

#### 4.25.2.3 Biotic Resources

Growth and development in the past has resulted in a loss of vegetative cover and wildlife habitat. Some wildlife habitat may be lost directly as a result of clearing the ROW. If growth and development occur in the Chauvin Swamp area as a secondary impact, further wildlife habitat loss and fragmentation may occur. Impacts to biotic resources may be minimized by compliance with USACE regulations regarding waters of the U.S., including wetlands, and with USFWS regarding endangered species. Impacts would be further minimized through compliance with zoning and other land use and roadway access controls.

Under the No-Build Alternative, the growth of the human population within the study area is expected to continue. However, the rate of secondary growth and development resulting from the No-Build Alternative would likely be less than the secondary growth from the Preferred Alternative.

#### 4.26 Relationship Between Short-Term Impacts and Long-Term Benefits

The direct short-term impacts of the Kansas Lane Connector are largely related to the construction phase of the roadway. The construction phase is typically the most disruptive because of the displacement of existing homes. Woodland will also be lost because of the ROW acquisition. The loss of private property for use as a roadway would remove revenues from the local tax base. This temporary loss is expected to be offset by an increase in the value of properties located in the vicinity of proposed intersections. Construction of the roadway will be beneficial to the local economy by generating employment and stimulating area real estate, materials, trade, and service industries.

Normal traffic patterns may encounter delays and detours during construction. Temporary interruptions in service from some utilities may occur. Construction activities may also create short-term air quality, noise, and visual impacts to nearby residences and businesses, as well as safety risks. Localized water quality may also be temporarily affected during construction activities, specifically due to an increased sediment load. As noted earlier, BMPs would minimize impacts to water quality.

The long-term benefits of the proposed roadway are integral to its role in the area's transportation network. The roadway will simplify the movement of commuters within the study area and may directly contribute to new economic development in the area.

Additional benefits of the proposed project that would enhance the region's overall longterm productivity include: reduction in energy consumption through improved travel efficiency, reduction in vehicle operating costs and travel time, reduction in accident rates and associated costs, and improved delivery of emergency services.

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

#### 4.27 Irreversible and Irretrievable Commitment of Resources

The proposed Kansas Lane Connector project would require utilization of a variety of natural and human resources. Commitment of many of these resources will be irreversible and irretrievable in that the land used for the roadway would be irrevocably committed to use as a transportation corridor.

Construction of the proposed Kansas Lane Connector will produce both short- and longterm losses and alterations to the natural resources in the area. The most apparent impact is the loss of both terrestrial and aquatic habitat productivity and, therefore, a decline in wildlife abundance as a result of habitat destruction. Within the ROW, some woodland areas may be cleared and some wetlands and other water bodies may be filled. Increased noise levels will be intolerable to some wildlife species, and mortality of wildlife through collision with vehicles can be expected to rise. After construction, some habitat types may be restored within the construction limits, although their value to wildlife may not be as great as before. Mitigation of wetland impacts could involve restoration of degraded wetlands within the project vicinity. In the long term, this would offset any loss of wetland habitat resulting from the project. Nevertheless, the commitment of natural resources within the ROW would be a permanent loss of productive wildlife habitat.

Motorized vehicles generate heavy metal pollution from expelled fuels, lubricants, hydraulic fluids, and coolants. Runoff carrying these pollutants, as well as sediments and other pollutants, may enter nearby streams and other water bodies. These pollutants can have a long-term impact on the quality and productivity of aquatic habitat in the vicinity of the roadway. Careful design of the roadway's drainage features would help to ameliorate the degree of surface water runoff from the roadway and its effects to the aquatic habitat in the vicinity.

Upland and aquatic biotic communities within the roadway's construction limits would be lost. The presence of the roadway and its associated noise would permanently change the area's character both visually and audibly. Irretrievable human and capital resources would also be committed to the project. Human resources include the skills and labor required to design, construct, and maintain the roadway, as well as fabricate and prepare the construction materials. Irretrievable capital expenditures include the federal and state monetary commitment required for building the roadway. Natural resources that would be used in construction include fossil fuels and stone used in cement, aggregate, and bituminous products. While these materials are generally not retrievable, they are not in short supply and their use would not limit the availability of these resources.

The allocation of these finite or irretrievable resources for the proposed project in lieu of other social, economic, and environmental needs is a policy decision supported by the State of Louisiana and FHWA. This commitment of resources is made to meet the goal of serving the transportation needs of the study area and the State of Louisiana. It will provide an improved transportation network, thereby benefiting local residents as well as

Final Environmental Impact Statement

Chapter 4 – Environmental Consequences

others from within and outside of the State of Louisiana who would use the facility. These benefits outweigh the costs required to implement the project.

## 4.28 Subsequent Actions

The FEIS will be circulated for public and agency review. After all comments have been received and considered, a Record of Decision (ROD) for the project will be issued by FHWA.

Final roadway designs will be developed based on comments received during the Public Meetings, Public Hearings, at agency reviews, and other aspects of the project development process. In addition, the roadway plans will include environmental commitments made on the project. The following studies will be undertaken once the final roadway designs have been completed:

- § A traffic control plan will be developed to maintain traffic flow and property access in the project area during construction;
- § Survey for wells within and adjacent to the proposed ROW will be conducted;
- § Drainage and hydrological studies will be prepared to finalize the design of drainage structures;
- § Geotechnical investigations will be completed to determine the appropriate techniques and materials for construction suitable for soil characteristics of the project area; and
- § ROW limits will be finalized.

Prior to construction the following actions will be completed:

- § An erosion control plan that incorporates BMPs will be prepared;
- § Coordination with all public utility providers will be completed regarding the relocation or reconfiguration of electrical, gas, water, and wastewater systems; and
- § The Relocation Assistance Program will be implemented and all necessary ROW will be acquired.

Final Environmental Impact Statement

Chapter 5 – Agency Coordination and Public Involvement

# 5. AGENCY COORDINATION AND PUBLIC INVOLVEMENT

A *Public Involvement Plan* (PIP) (ARCADIS 2001) and an *Interagency Involvement Plan* (IIP) (ARCADIS 2001) were developed for the Kansas Lane Connector FEIS to ensure that every reasonable opportunity was available to interested citizens, civic groups, public officials, and state or federal resource agencies to participate in the planning process. To that end, the PIP and IIP included a variety of methods for providing project feedback and obtaining information on the project.

## 5.1 Agency Coordination and Involvement

As part of the project development process, federal, state, and local agencies were consulted prior to and during the preparation of this FEIS. A database of federal, state, and local agencies was developed from the *Louisiana State Solicitation of Views* (SOV) and was updated and maintained throughout the project planning process. Table 5-1 lists the agencies requested, by correspondence, to provide input on the proposed project.

#### Table 5-1. Agencies Contacted.

Final Environmental Impact Statement

Chapter 5 – Agency Coordination and Public Involvement

State Agencies (Continued)		
Historic Preservation, Advisory Council		
Louisiana Archaeological Society		
Louisiana Department of Wildlife & Fisheries, Louisiana Natural Heritage Program		
Louisiana Forestry Association		
Louisiana Health & Human Resources, Bureau of Environmental Services		
Louisiana House of Representatives		
Louisiana House of Representatives, District 13		
Louisiana House of Representatives, District 15		
Louisiana House of Representatives, District 16		
Louisiana House of Representatives, District 17		
Louisiana House of Representatives, District 19		
Louisiana State Attorney General		
Louisiana State Mineral Board		
Louisiana State Police		
Louisiana State Senate, District 33		
Louisiana State Senate, District 34		
Louisiana State Senate, District 35		
Louisiana State University, Sea Grant Legal Program		
State Land Office, Division of Administration		
State Planning Office		
U.S. Department of Housing/Urban Development		
University of Louisiana at Monroe		
Federal Agencies		
8 <sup>th</sup> Coast Guard District		
Chamber of Commerce		
Federal Emergency Management Agency, Region VI		
Federal Transit Administrator		
National Park Service		
U.S. Army Corps of Engineers, Vicksburg District		
U.S. Department of Agriculture and Forestry, Office of Commerce and Industry		
U.S. Department of Agriculture and Forestry, Office of Forestry		
U.S. Department of Agriculture and Forestry, Office of Soil/Water Conservation		
U.S. Department of Agriculture, Natural Resource Conservation Service		
U.S. Department of Commerce, Economic Development Administration		
U.S. Department of Housing and Urban Development		
U.S. Department of Interior, Geological Survey		
U.S. Department of Interior, National Park Service		
U.S. Department of Interior, Regional Environmental Office		
U.S. Department of Transportation, Federal Aviation		
U.S. Environmental Protection Agency		
U.S. Environmental Protection Agency, Federal Activities		
U.S. Environmental Protection Agency, Office of Groundwater		
U.S. Fish & Wildlife Service		
U.S. House of Representatives		
U.S. Senate		
Indian Tribes		
Adai Caddo Indians of Louisiana		
Apalachee Tribe of Louisiana		
Caddo Tribe of Oklahoma		
Chitimacha Tribe of Louisiana		

Final Environmental Impact Statement

Chapter 5 – Agency Coordination and Public Involvement

Indian Tribes (Continued)
Choushatta Tribe Louisiana
Choctaw-Apache Tribe of Ebarb
Clifton Choctaw Tribe of Louisiana
Four-Winds Cherokee
Jean Band of Choctaws
Inter-Tribal Council of Louisiana, Inc.
Office of Indians Affairs
Quapaw Tribe of Oklahoma
Tunica Biloxi Indians of Louisiana
United Houma Nation
Other
Arkansas-Louisiana-Mississippi Railroad
Curtis F. Hoglan
Coalition to Restore Coastal Louisiana
Mid-South Railroad Service

#### 5.1.1 Notice of Intent

A formal NOI to prepare an EIS for the Kansas Lane Connector was published by FHWA in the *Federal Register* (Volume 65, Number 123) on June 26, 2000. The notice described the project, provided notification of the project's upcoming scoping meeting, and invited comments and questions concerning the project. No comments were received in response to the NOI.

## 5.1.2 Kick-off Meeting

A kick-off meeting was held with LDOTD, FHWA, and the Consultant team in August 2001. The project was introduced to all attendees. An aerial photograph was provided and used to determine the Kansas Lane Connector study area boundary for the EIS. Tribal coordination and the *NEPA/404 Merger Agreement* were discussed. Public involvement techniques were reviewed and it was decided that a project logo, website, and toll-free number would be developed. The project work plan and schedule were reviewed and a date was set for the project scoping meetings for the public, agencies, and public officials as described below.

## 5.1.3 Agency Scoping Letter and Meeting

A letter regarding the agency scoping process was sent on September 4, 2001, to local, state, and federal resource and regulatory agencies advising them that the EIS process was beginning for the Kansas Lane Connector and soliciting their comments about the project.

The letter also invited them to the project's agency scoping meeting, which was held on September 25, 2001, at the City of Monroe Council Chambers.

Final Environmental Impact Statement

Chapter 5 – Agency Coordination and Public Involvement

Responses to the scoping letter were received from the following organizations:

- § Adai Caddo Indian Tribe
- § Chitimacha Tribe of Louisiana
- § Louisiana Department of Environmental Quality
- § Louisiana Department of Environmental Quality, Department of Environmental Services
- § Louisiana Department of Natural Resources
- § Louisiana Department of Wildlife and Fisheries
- § U.S. Fish and Wildlife Service
- § University of Louisiana at Monroe

Copies of these letters are included in Appendix A-4.

5.1.4 Agency Mailing List

The mailing list of resource and regulatory agencies was developed using the SOV for Ouachita Parish. This list was continuously updated as necessary.

## 5.1.5 Cooperating Agencies

An agency is requested to be a cooperating agency upon the request of the lead agency, when they have jurisdiction or can offer special expertise in regards to environmental issues that may be addressed in the EIS (23 CFR 771, 40 CFR Part 1501.6, and *Guidance on Cooperating Agencies*, Office of Environment and Planning, FHWA, March 1992). In a letter dated January 8, 2001, FHWA requested USACE be a cooperating agency; similarly, in a letter dated January 9, 2002, FHWA requested USFWS be a cooperating agency. USACE accepted FHWA's request to be a cooperating agency and designated a point of contact in a letter dated January 30, 2001; similarly, USFWS accepted FHWA's request to be a cooperating agency in a letter dated January 18, 2001. Copies of these letters are included in Appendix A-7.

#### 5.1.6 NEPA and 404/10 Merger Process

Previously, NEPA documentation for transportation projects was developed independently from Section 404 of the Clean Water Act (404) and Section 10 of the Rivers and Harbors Act permit process. In some cases, the NEPA documentation was an insufficient analysis of practicable alternatives under Section 404(b)(1) guidelines. To avoid this scenario, in September 1996, FHWA, USACE, USEPA, USFWS, and NMFS

Final Environmental Impact Statement

Chapter 5 – Agency Coordination and Public Involvement

developed the NEPA/404 Merger Agreement, which merged the NEPA project development and the Section 404 permit process. The project development and environmental process used to develop this FEIS for the Kansas Lane Connector was done in accordance with this NEPA/404 Merger Agreement. The merged process includes the participation and concurrence of USACE and USFWS at three key milestones in the development of the project. These milestones include: 1) the development of the purpose and need statement, 2) the alternatives development and screening process, and 3) the selection of the Preferred Alternative. Throughout this process, the NEPA requirements of FHWA and USACE are satisfied with a goal of not having to revisit issues at the Section 404 application stage. This NEPA/404 merger process helps to streamline and make the project development process more efficient. A copy of the Purpose and Need was sent to USACE and USFWS on February 15, 2002. The agencies were asked to review it and to provide their comments and concurrence on the project's purpose and need. In addition, FHWA, LDOTD, and their Consultants held a meeting with the agencies on March 7, 2002, to discuss the project's purpose and need and to present the Preliminary Build Alternatives. A summary of this meeting is included in the Kansas Lane Connector Agency Meeting Summary Document (ARCADIS 2002). USACE was represented at that meeting and provided comments on the purpose and need. Based on USACE's comments, the purpose and need was modified slightly and the modification was provided to USACE and USFWS. In letters dated March 5 and March 20, 2002, USFWS and USACE, respectively, provided concurrence on the project purpose and need. Copies of these letters are included in Appendix A-2.

In June 2002, LDOTD sent USACE and USFWS copies of the *Alternatives Report*. Following revisions to the *Alternatives Report* based on comments received by USACE and USFWS, both agencies concurred in the alternatives development and screening process. USFWS sent a letter dated September 4, 2002, and USACE sent a letter dated July 16, 2002. Copies of these letters are included in Appendix A-3.

Following the circulation, Public Hearing, and review of the DEIS, FHWA and LDOTD recommended a Preferred Alternative. Prior to selecting the Preferred Alternative and preparing the FEIS, FHWA and LDOTD requested concurrence from USACE and USFWS on the Preferred Alternative.

Prior to giving concurrence on the project, the cooperating agencies requested a site visit that was conducted on September 8, 2004. The purpose of the site visit was to assess the value of the forested wetlands where the Preferred Alternative would traverse the Chauvin Swamp north of the ULM ballfields. In correspondence dated August 25, 2004, the USFWS stated that it would give concurrence with the Preferred Alternative only if the segment crossing the wetland area north of ULM is elevated. The USFWS also suggested that, if construction of the elevated span is cost prohibitive, a modification of Segment R shown on Figure 2-4 should be constructed. The USFWS concurred with the proposed access shown on Figure 2-11. A copy of the USFWS correspondence is provided in Appendix A-8.

Final Environmental Impact Statement

Chapter 5 – Agency Coordination and Public Involvement

In correspondence dated September 7, 2004, the Chief of the Regulatory Branch of the Vicksburg District USACE indicated that the USACE concurred with the selection of the Preferred Alternative. However, further discussion on limited access and avoidance issues are warranted. A copy of the USACE correspondence is provided in Appendix A-8.

## 5.1.7 Tribal Coordination

FHWA strives to consult with Indian tribes before taking any actions that may significantly or uniquely affect them. LDOTD, through FHWA, initiated coordination with the Chitimacha Tribe of Louisiana, the only Indian tribe with a historical presence in the project area, and the Adai Caddo Indian Tribe. A copy of the DEIS was sent to the Caddo Tribe of Oklahoma. Correspondence was received during the scoping process and copies of the letters received are included in Appendix A-4.

5.1.8 Agency Comments on DEIS

Copies of the DEIS were sent to the agencies listed in the distribution list in Chapter 6. In addition to the cooperating agencies, only four agencies submitted comments on the DEIS: FEMA, USEPA, NRCS, and NMFS. None of the non-cooperating agencies had objections to the project. Comments on the DEIS were received from both of the cooperating agencies in correspondence dated September 17, 2003, and January 20, 2004. Other correspondence with agency comments on the DEIS are included in Appendix A-1. Comments and responses to comments are provided in the table in Appendix A-1.

## 5.2 Involvement of Public Officials and the Public

The exchange of information with public officials and the public, particularly the opportunity to receive feedback throughout the entire planning process, is integral to the environmental analysis of the proposed project. Early and continuing public involvement enables planners to collect useful information about the needs and concerns of the citizens most directly affected by the proposed action. This process ensures citizens have ample opportunities to comment about the project. A variety of public involvement techniques were utilized for this project as detailed below.

## 5.2.1 Public Officials and Public Mailing Lists

## 5.2.1.1 Public Officials Mailing List

The public officials mailing list was developed using the SOV for Ouachita Parish. This list was supplemented by a list of local officials for the City of Monroe and Ouachita Parish provided by OCOG. This list was continuously updated throughout the project planning process.

Final Environmental Impact Statement

Chapter 5 – Agency Coordination and Public Involvement

#### 5.2.1.2 Public Mailing List

The public mailing list was initially developed using the Microsoft Streets and Trips software program to determine the range of addresses included within the Kansas Lane Connector study area. The resulting list of addresses was then mailed to Tom Atteberry at the City of Monroe's Planning and Zoning Department to be cross-checked with properties that were vacant. Mr. Atteberry provided a list of addresses for occupied properties located within the project study area. Flyers regarding the project were sent to the occupant at the addresses on this list. If the flyer was returned, the address was removed from the mailing list, under the assumption that there was no current occupant at the address. The mailing list was continuously updated throughout the project planning process. The list was updated upon requests received through the project website, hotline, or at Public Meetings.

#### 5.2.2 Toll-Free Telephone Hotline

A toll-free telephone hotline was established to answer questions and record comments regarding the project. The toll-free hotline (1-888-452-3010) was available Monday through Friday from 8 a.m. to 5 p.m. If a caller did not speak with a project representative upon calling, every effort was made to return the call within 48 hours. Phone calls and responses were recorded in the project public comment database and made part of the official project record.

## 5.2.3 Project Website

A project website (http\\:www.kansaslane.com) was established to provide stakeholders information regarding the progress of the project. The website gave a project overview, as well as information on the NEPA and project planning process. The website was continuously updated throughout the project planning process to provide project information such as:

- § Study area map;
- § Preliminary Alternatives map and the locations of exhibits of the Preliminary Alternatives that could be viewed;
- § Update on project planning process;
- § Notification of meetings;
- § Toll-free hotline number;
- § Project milestones;
- § Build Alternatives for detailed study;

Final Environmental Impact Statement

Chapter 5 – Agency Coordination and Public Involvement

- § Preferred Alternative information; and
- § Frequently Asked Questions (FAQs).

Visitors to the website could submit comments and request to have their names added to the project mailing list. Comments received on the website were responded to in writing and all comments to the website were recorded in the project public comment database and made part of the official project record.

#### 5.2.4 Project Newsletters

Project newsletters were distributed during the project planning process. The first newsletter was mailed February 20, 2002, and the second newsletter was mailed August 16, 2002. The third newsletter was mailed on September 25, 2003. The newsletters provided information about the study process, discussed major developments during the course of the study, summarized previous Public Meetings, and advertised upcoming Public Meetings and the Public Hearing. Each newsletter contained a form for written comments that could be mailed to LDOTD as well as the toll-free hotline telephone number and the project website address. LDOTD sent a written response to anyone who sent comments on the newsletter comment form. In addition, all comments received on the newsletter comment form were recorded in the public comment database and made part of the official project record.

The first project newsletter (February 2002, Volume 1, Number 1) detailed the scoping meetings held in late September, informed the public on the planning process including a brief discussion of the NEPA process, and advertised the upcoming March 7, 2002, Public Meeting.

The second project newsletter (August 2002, Volume 2, Number 2) summarized the second Public Meeting held March 7, 2002, and public involvement activities to date, showed a map of the Preliminary Build Alternatives, and informed citizens of the upcoming Public Meeting/Open House on September 5, 2002. This newsletter encouraged comments on the project, specifically the alternatives proposed.

A third newsletter was mailed upon approval of the DEIS and prior to the Public Hearing. This newsletter (September 2003) announced the time, date, and location for the upcoming Public Hearing and publicized the availability of the DEIS for review and/or purchase. The third newsletter also described the Build Alternatives and explained the EIS planning process following the Public Hearing. Like the previous newsletters, the third issue also provided a comment form that encouraged the submittal of comments.

Final Environmental Impact Statement

Chapter 5 – Agency Coordination and Public Involvement

## 5.2.5 Public Officials

As previously discussed, public officials were consulted prior to and during the preparation of this document. Table 5-2 lists the public officials requested, by correspondence, to provide input on the proposed project.

Public Officials
William Weirick, University of Louisiana at Monroe
Francis C. Thompson, Louisiana House of Representatives
David Creed, Ouachita Council of Governments
Judy Williams, City of Monroe
Charles D. Jones, Louisiana State Senate
Charles McDonald, Louisiana House of Representatives
Chris John, U.S. House of Representatives
David Vitter, U.S. House of Representatives
Doug Mitchell, Ouachita Council of Governments
Cristina Rocha, Monroe Chamber of Commerce
Robert Barham, Louisiana State Senate
Lawson Swearingen, University of Louisiana at Monroe
Jim McCrery, Louisiana House of Representatives
John B. Breaux, U.S. Senator
John Cooksey, U.S. House of Representatives
Kay Kellogg Katz, Louisiana House of Representatives
Mary Landrieu, U.S. Senator
Mike Walsworth, Louisiana House of Representatives
Richard H. Baker, U.S. House of Representatives
Rodney M. Alexander, Louisiana House of Representatives
W. J. "Billy" Tauzin, U.S. House of Representatives
William Jones, Louisiana State Senate
Willie Hunter, Louisiana House of Representatives
Dawson King, Ouachita Parish Police Juror
Asa Ray, City of Monroe
Ben Katz, City of Monroe
Daryll Berry, Ouachita Parish Police Juror
Donald W. Nugent, Ouachita Parish Fire Department
Kim Golden, Ouachita Parish Police Juror
Jamie Mayo, Mayor, City of Monroe
Arthur Gilmore, Monroe City Council
Ed Cheek, City of Monroe Traffic Engineer
Ed Lenard, Ouachita Parish Fire Department
Mack Calhoun, Ouachita Parish Police Juror
Mike Neal, Monroe Chamber of Commerce
Richard Fewell, Ouachita Parish
Roger Elkin, Ouachita Parish Police Juror
Tom Holzclaw, Ouachita Parish Police Juror
Kay Norman-Chandler, Ouachita Parish Police Juror
Lori Reneau, Monroe Chamber of Commerce
O.H. Burns, Ouachita Parish League of Women Voters
Will Lambart City of Monroe
will Lambert, City of Moniloe

Table 5-2. Public Officials Contacted.

Final Environmental Impact Statement

Chapter 5 – Agency Coordination and Public Involvement

Public Officials
Perry Thomas, City of Monroe
Jerry Jones, Ouachita Parish District Attorney
William Jefferson, U.S. House of Representatives

#### 5.2.5.1 Public Official's Scoping Meeting

Public officials were invited to the scoping meeting in a letter dated August 30, 2001. The letter briefly provided an overview of the project, explained the purpose of the meeting, and included a map introducing the Kansas Lane Connector study area.

The public officials scoping meeting was held September 25, 2001, at the City of Monroe Council Chambers at 1:30 p.m. Seventeen attendees registered at the meeting including representatives from FHWA, LDOTD, OCOG, the Monroe Chamber of Commerce, the City of Monroe, the Ouachita Parish Fire Department, and the Consultant team. The public officials scoping meeting included a project overview with the proposed project schedule, a brief explanation of the NEPA process, and maps showing the Kansas Lane Connector study area. The goals of the meeting were as follows:

- § Present the proposed Kansas Lane Connector project and study area;
- § Provide information regarding the proposed project schedule and the NEPA process;
- § Receive comments on the project and provide an opportunity to ask related questions; and
- § Provide the opportunity to identify potential project constraints.

A summary of this meeting is included in the Kansas Lane Connector Scoping Meeting Summary Document, September 25, 2001 (ARCADIS 2001).

## 5.2.5.2 Public Officials Project Meetings

In addition to the project scoping meeting, two other meetings with public officials were held during the project planning process. A public officials project meeting was held March 7, 2002, at the Holiday Inn-Holidome at 2 p.m. Sixteen people attended the public officials meeting including representatives from FHWA, LDOTD, OCOG, the Monroe Chamber of Commerce, the City of Monroe, the Ouachita Parish Fire Department, ULM, and the Consultant team. The presentation included a project overview, a brief explanation of the NEPA process, presentation of traffic data, preview of the project's purpose and need, and presentation of the Preliminary Build Alternatives. Additionally, study area maps with an overlay showing Preliminary Build Alternatives proposed for the project were available for review and comment. The goals of the meeting were to:

Final Environmental Impact Statement

Chapter 5 – Agency Coordination and Public Involvement

- § Present the project purpose and need;
- § Present the proposed Preliminary Build Alternatives;
- § Receive comments and questions regarding these alternatives; and
- § Provide an update on the project schedule.

A summary of this meeting is included in the *Kansas Lane Connector Local Officials Meeting Summary Document, March 7, 2002* (ARCADIS 2002).

Another public officials project meeting was held to provide the public officials an opportunity to comment on the Build Alternatives selected for detailed study in this FEIS. This meeting was held at the Holiday Inn-Holidome on September 5, 2002, from 10:30 a.m. to 11:30 a.m. Twenty-one people attended the public officials meeting including one elected official. The presentation included a project overview, a brief explanation of the NEPA process, and presentation of the Build Alternatives and No-Build Alternative selected for detailed study in the EIS. Additionally, study area maps showing the Build Alternatives overlaid were available for viewing.

The goals of the meeting were as follows:

- § Present the proposed Build Alternatives and the No-Build Alternative;
- § Receive comments and questions regarding these alternatives; and
- § Provide an update on the project schedule.

A summary of this meeting is included in the Kansas Lane Connector Public Officials Meeting Summary Document, September 5, 2002 (ARCADIS 2002).

On October 16, 2003, a meeting was held to present the Build Alternatives to the local officials prior to the formal Public Hearing. The meeting was held at 3 p.m. at the Holiday Inn-Holidome in Monroe and was attended by 24 people. Five of the attendees were elected officials or their designees. The presentation included a project overview, explanation of the NEPA/EIS planning process, a summary of the previous public meetings, and a comparison of the Build Alternative impacts. Maps of each of the Build Alternatives were made available for viewing.

Goals of the meeting were as follows:

- § Present and compare impacts of the Build Alternatives and the No-Build Alternative;
- § Receive comments and questions regarding these alternatives; and

Final Environmental Impact Statement

Chapter 5 – Agency Coordination and Public Involvement

§ Provide an update on the project schedule.

It was at this meeting that local officials proposed that a combination of the Central and Northern Alternatives be considered as an additional Build Alternative for study in an effort to minimize relocation impacts. A summary of this meeting is included in the *Kansas Lane Environmental Impact Statement Local Officials and Public Hearing Summary Document, October 16, 2003* (ARCADIS 2003). Comments received from public officials during this meeting through the end of the comment period on October 31, 2003, are also included in this document. Comments from public officials are summarized in the table shown in Appendix A-9 along with comments received by the general public. Responses to comments are also included in this table.

At the request of LDOTD, two additional meetings were held following the issuance of the *Preferred Alternative Report* to announce the Preferred Alternative recommendation to local officials. The first of these meetings was held in the Delta Board Room at the OCOG office on Stubbs Avenue. The meeting was held at 10 a.m. on August 24, 2004, and was attended by 20 people, 4 of whom were elected officials. The meeting presentation consisted of an overview of the EIS planning process, project milestones, schedule, the Preferred Alternative selection process, conceptual design, and budget issues. The goals of the meeting held for the local officials were as follows:

- § Present the advantages and disadvantages of each Build Alternative;
- § Explain the Preferred Alternative selection process;
- § Present the Preferred Alternative recommendation; and
- § Provide an update on the project schedule and outstanding issues.

Following the August 24, 2004, meeting at OCOG, the OCOG Executive Director requested that the Preferred Alternative recommendation be presented at a special meeting of the OCOG Transportation Policy Committee. This meeting, which was open to the public, was held on September 9, 2004, at the Monroe City Hall. At this meeting, OCOG Transportation Committee members unanimously voted to support the Preferred Alternative recommendation.

5.2.6 Public Involvement

## 5.2.6.1 Public Scoping Meeting

The scoping meeting with the public was held September 25, 2001, at the Monroe Civic Center from 6 p.m. to 8 p.m. Seventy-five people attended the Public Meeting including one public official. The presentation included a project overview with the proposed project schedule, a brief explanation of the NEPA process, and maps showing the project study area. Additionally, maps showing the Kansas Lane Connector study area were

Final Environmental Impact Statement

Chapter 5 – Agency Coordination and Public Involvement

available for review and comment. This meeting was advertised in English in *The News-Star*, the *Monroe Dispatch*, and the *Free Press* on September 11, 2001, and in the *Ouachita Citizen* September 13, 2001. The meeting was advertised a second time in *The News-Star*, the *Monroe Dispatch*, and the *Free Press* on September 18, 2001, and in the *Ouachita Citizen* September 20, 2001. A flyer to notify people within the study area was also directly mailed to 1,025 local residents. The goals of the meeting were to:

- § Present the proposed Kansas Lane Connector project;
- § Provide information regarding the proposed project schedule and the NEPA process;
- § Receive comments on the project and provide an opportunity to ask related questions; and
- § Provide the opportunity to identify potential project constraints.

A summary of this meeting is included in the Kansas Lane Connector Scoping Meeting Summary Document, September 25, 2001 (ARCADIS 2001).

#### 5.2.6.2 Public Project Meetings

In addition to the public scoping meeting, two other Public Meetings were held during the project planning process. A Public Meeting was held March 7, 2002, at the Holiday Inn-Holidome from 6 p.m. to 9:45 p.m. Approximately 101 people attended the Public Meeting including four public officials. The presentation included a project overview with the proposed project schedule, a brief explanation of the NEPA process, and maps showing the project study area and proposed Preliminary Build Alternatives. This meeting was advertised in English in the *Monroe Dispatch*, the *Free Press*, and the *Ouachita Citizen* on February 21, 2002, and in *The News-Star* February 24, 2002. The meeting was advertised a second time in the *Monroe Dispatch*, the *Free Press*, and the *Ouachita Citizen* on February 28, 2002, and in *The News-Star* March 3, 2002. The meeting notice was mailed to 928 local residents. The goals of the meeting were to:

- § Present the project purpose and need;
- § Present the proposed Preliminary Build Alternatives;
- § Receive comments and questions regarding these alternatives; and
- § Provide an update on the project schedule.

A summary of this meeting is included in the *Kansas Lane Connector Public Meeting Official Transcript, March 7, 2002* (ARCADIS 2002).

Final Environmental Impact Statement

Chapter 5 – Agency Coordination and Public Involvement

Another Public Meeting was held to provide the public an opportunity to comment on the Build Alternatives selected for detailed study in the EIS. The meeting was an open house format with a presentation at 2 p.m., which was repeated again at 4 p.m. and 6 p.m. Attendees were able to view the proposed Build Alternatives to be studied in detail in the EIS and ask LDOTD staff questions regarding the project. This meeting was held at the Holiday Inn-Holidome on September 5, 2002, from 2 p.m. to 8 p.m. Approximately 128 people attended the Public Meeting including one public official. The presentation included a project overview, a brief explanation of the NEPA process, and presentation of the Build Alternatives and No-Build Alternative selected for detailed study in the EIS. Additionally, study area maps showing each of the Build Alternatives were available for viewing. This meeting was advertised in English in the *Monroe Dispatch*, the *Free Press*, and the *Ouachita Citizen* on August 22, 2002, and in *The News-Star* August 18, 2002. The meeting was advertised a second time in the *Monroe Dispatch*, the *Free Press*, and the *Ouachita Citizen* on August 29, 2002, and in *The News-Star* August 25, 2002. The meeting notice was mailed to 1,093 local residents. The goals of the meeting were to:

- § Present the proposed Build Alternatives and No-Build Alternative;
- § Receive comments and questions regarding these alternatives; and
- § Provide an update on the project schedule.

A summary of this meeting is included in the *Kansas Lane Connector Public Meeting Official Transcript, September 5, 2002* (ARCADIS 2002).

## 5.2.7 Public Hearing

On October 16, 2003, a formal Public Hearing was held to summarize the impacts of the three Build Alternatives and the No-Build Alternative that were studied in the DEIS. The meeting was held from 6 p.m. to 8 p.m. at the Holiday Inn-Holidome in Monroe and was attended by 92 citizens including 2 elected officials. The presentation included a project overview, explanation of the NEPA/EIS planning process, a summary of the previous public meetings including Preliminary and Build Alternatives selection, and a comparison of the Build Alternative impacts. A representative from the LDOTD District 05 Relocation Assistance Office also gave a presentation and disseminated information regarding ROW acquisition and relocation assistance. This meeting was advertised in English in the *Monroe Dispatch*, the *Free Press*, and the *Ouachita Citizen* on September 11, 2003. The *News-Star* advertised the Public Hearing on September 13, 2003. Maps of each of the Build Alternatives were made available for viewing.

Goals of the meeting were as follows:

§ Present and compare impacts of the Build Alternatives and the No-Build Alternative;

Final Environmental Impact Statement

Chapter 5 – Agency Coordination and Public Involvement

- § Receive comments and questions regarding the selection of the Preferred Alternative; and
- § Provide an update on the project schedule.

During this Public Hearing, it was announced that local officials had proposed a combination of the Central and Northern Alternatives as an additional Build Alternative at the public officials meeting held earlier that day. Following the presentation, representatives from LDOTD and FHWA received comments on the DEIS and the Build Alternatives. Comments were received orally during the Public Hearing and in writing until October 31, 2003, when the comment period officially ended. Comments were also accepted via the toll-free hotline and the website throughout this same timeframe. A summary of the Public Hearing is included in the *Kansas Lane Environmental Impact Statement Local Officials and Public Hearing Summary Document, October 16, 2003* (ARCADIS 2003). All comments received during the Public Hearing through October 31, 2003, are also included in this document. A summary of public comments on the DEIS, sorted by preference, is included in Appendix A-9. Public comments are commingled with those submitted by local officials.

5.2.8 Small Group Meetings

Small group meetings were held at various stages throughout the project in order to obtain information for the environmental analysis or to discuss particular concerns of a specific group or individual. Interviews with the following people were conducted in October 2001:

- § Mr. Williams, Director, Baptist Children's Home
- § Dr. Ulrich, concerned citizen
- § David Creed, OCOG
- § Doug Mitchell, OCOG
- § Michael Neal, President, Monroe Chamber of Commerce
- § Lori Reneau, Vice President of Government and Infrastructure, Monroe Chamber of Commerce
- § Gene Tarver, Interim Director, Planning and Urban Development Department, City of Monroe
- § Dr. Jerry Wall, Director of the Center for Business and Economic Research at ULM

Final Environmental Impact Statement

Chapter 5 – Agency Coordination and Public Involvement

- § Scott O'Neal, Business Development Director, Ouachita Economic Development Corporation
- § Randy Barnett, General Manager, Pecanland Mall

Following the March 7, 2002, public project meeting that introduced the Preliminary Build Alternatives, three small group meetings were held in April 2002 with the following groups to discuss their specific concerns.

- § Baptist Children's Home
- § Cypress Point Homeowner's Association Board
- § Ingleside Neighborhood Representatives

In each case, the small group meetings were initiated by LDOTD to better understand the concerns each group had regarding the impacts of the proposed project. Don Tolar, the LDOTD District 5 Administrator and the representatives from the Consultant Team met with the Ingleside neighborhood representatives on April 15, 2002. Wayne Nguyen, Project Coordinator, and representatives from the Consultant team met with the Cypress Point Homeowners Association Board and the Baptist Children's Home in separate meetings on April 16, 2002.

5.2.9 Open Meeting of Ouachita Council of Governments

On September 9, 2004, the Preferred Alternative recommendation was presented at a special meeting of the OCOG Transportation Policy Committee at the request of the OCOG Executive Director. This meeting was held at the Monroe City Hall and was open to the public. Following the presentation, OCOG panel members elected to open the meeting to public comments. Following the comment period, OCOG Transportation Committee members unanimously voted to support the Preferred Alternative recommendation.

## 5.2.10 Newspapers and Television

To stay current with new developments in the Kansas Lane Connector project study area and the surrounding region, a subscription to *The News-Star* was obtained and a newspaper clippings file was maintained. In addition, LDOTD representatives were available to reporters to provide information for articles about the Kansas Lane Connector. Local television news crews attended the Public Meetings, interviewed LDOTD representatives, and aired stories about the proposed Kansas Lane Connector on the evening news. Local media was also present at the Public Hearing held on October 16, 2003.

Final Environmental Impact Statement

Chapter 6 - List of Agencies, Organizations, and Persons, to Whom Copies of this Statement are Sent

#### 6. LIST OF AGENCIES, ORGANIZATIONS, AND PERSONS TO WHOM COPIES OF THIS STATEMENT ARE SENT

#### 6.1 **Federal Agencies**

8<sup>th</sup> Coast Guard District, Commander

- U.S. Army Corps of Engineers Vicksburg, Mississippi, Phillip Hollis
- U.S. Department of Agriculture, Natural Resources Conservation Service -Alexandria, Louisiana, Donald Gohmert
- U.S. Department of the Interior Washington, D.C., Office of Environmental Policy and Compliance
- U.S. Department of the Interior, Fish and Wildlife Service Lafayette, Louisiana, Patti Holland
- U.S. Department of the Interior, National Park Service Director, Facilities Management Division
- U.S. Environmental Protection Agency Washington, D.C., EIS Filing Section
- U.S. Environmental Protection Agency, Region 6 Dallas, Texas, Mike Jansky
- U.S. Federal Emergency Management Agency, Region 6 Denton, Texas, Greg Solvev

#### 6.2 **Federal Senators and Representatives**

- U.S. House of Representatives, 1<sup>st</sup> District, Bobby Jindal
- U.S. House of Representatives, 2<sup>nd</sup> District, William Jefferson U.S. House of Representatives, 3<sup>rd</sup> District, Charlie Melancon U.S. House of Representatives, 4<sup>th</sup> District, Jim McCrery

- U.S. House of Representatives, 5<sup>th</sup> District, Rodney Alexander
- U.S. House of Representatives, 6<sup>th</sup> District, Richard H. Baker
- U.S. House of Representatives, 7<sup>th</sup> District, Charles W. Boustany, Jr.
- U.S. Senator, Mary Landrieu
- U.S. Senator, David Vitter
- **State Agencies** 6.3

Louisiana Department of Culture, Recreation & Tourism, Division of Archaeology -**Duke Rivet** 

Louisiana Department of Culture, Recreation, & Tourism, Office of State Parks Louisiana Department of Environmental Quality, Municipal Facilities - Lisa Miller Louisiana Department of Natural Resources, Office of Conservation Louisiana Department of Wildlife & Fisheries - Maurice Watson

#### **State Senators and Representatives** 6.4

Louisiana House of Representatives, Kay Kellogg Katz Louisiana House of Representatives, Charles McDonald Louisiana House of Representatives, Francis C. Thompson

Final Environmental Impact Statement

Chapter 6 – List of Agencies, Organizations, and Persons, to Whom Copies of this Statement are Sent

Louisiana House of Representatives, Mike Walsworth Louisiana House of Representatives, Willie Hunter Louisiana State Senate, Robert Barham Louisiana State Senate, Charles D. Jones Louisiana State Senate, William Jones

## 6.5 Local Agencies and Officials

City of Monroe, Gene Tarver City of Monroe, Judy Williams City of Monroe, Perry Thomas City of Monroe, Will Lambert Councilman, Robert Johnson Mayor, City of Monroe, Jamie Mayo Monroe Chamber of Commerce, Lori Reneau Monroe City Engineers Office Monroe Housing Authority Monroe Transit System, Ken Monroe Ouachita Council of Governments, David Creed Ouachita Parish District Attorney, Jerry Jones Ouachita Parish Police Juror District A Ouachita Parish Police Juror, District B Ouachita Parish Police Juror, District C Ouachita Parish Police Juror, District D Ouachita Parish Police Juror, District E Ouachita Parish Police Juror, District F Sheriff, Richard Fewell

#### 6.6 Native American Tribal Interests

Adai Caddo of Louisiana Caddo Nation, Robert Cast Chitimacha Tribe of Louisiana, Jaon Emery Inter-Tribal Council of Louisiana, Mona Kogel Jena Band of Choctaw, Beverly Smith Office of Indian Affairs, Joe Strickland Quapaw Tribe of Oklahoma, Carrier Wilson Tunica Biloxi Indians of Louisiana, Earl Barby

#### 6.7 Other Agencies and Organizations

Anti-Central Coalition, Representative, Ms. Pam Hill Arkansas-Louisiana-Mississippi Railroad, Rick Clayton Carver Branch Library Cypress Point Homeowners Association, Representative, Dr. Christian Ulrich

Final Environmental Impact Statement

Chapter 6 – List of Agencies, Organizations, and Persons, to Whom Copies of this Statement are Sent

Fennell Street/Ingleside Neighborhoods, Representative, Dr. Ann Kapp Louisiana Baptist Children's Home, A. Perry Hancock, Ph.D., Executive Director Louisiana State Library in Baton Rouge Mid-South Railroad Service, Glen Nuntzman New Orleans Public Library Ouachita Parish Central Library Ouachita Parish Fire Department Ouachita Parish League of Women Voters University of Louisiana at Monroe, Lawson Swearingen University of Louisiana at Monroe, William Weirick University of New Orleans Earl K. Long/Louisiana Collection University of South Louisiana, Lafayette

Final Environmental Impact Statement

Chapter 7 – List of Preparers

## 7. LIST OF PREPARERS

## **Federal Highway Administration**

Colby Guidry, P.E. Area Engineer

William C. Farr Program Operations Manager

Robert V. Mahoney Environmental Specialist B.S. Degree in Engineering with five years of experience.

B.S. Degree in Civil Engineering with 26 years of experience.

M.S. Degree in Engineering with 40 years of experience.

## Louisiana Department of Transportation and Development

Vincent G. Russo, Jr., P.E. Environmental Engineer Administrator	B.S. Degree in Civil Engineering with 20 years engineering experience and 10 years environmental experience.
Quang "Wayne" Nguyen, P.E. Environmental Engineer	B.S. Degree in Chemical Engineering, Master's Degree in Business Administration with 6 years environmental engineering experience.
ARCADIS G&M, Inc.	
Marwan Abboud, P.E.	M.S. Degree in Transportation Engineering

Marwan Abboud, P.E. Traffic Engineering Manager

Hillary Calavitta, AICP Transportation Planner M.S. Degree in Transportation Engineering with 20 years of experience. Role in project: provided technical support and quality assurance to the Traffic Analysis Technical Report.

M.S. Degree in Community Planning with 3 years of experience in transportation planning. Role in project: socioeconomic analysis, public involvement.

Final Environmental Impact Statement

Chapter 7 – List of Preparers

Jason Carr GIS Analyst/Geographer

Lucila Cobb Principal Scientist

Jason Costanzo, EIT Project Engineer

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Lisa De La Cruz Environmental Biologist

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Final Environmental Impact Statement

Chapter 7 – List of Preparers

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PrCE (Transportation) Degree and B.S. Degree in Civil Engineering with 36 years of experience in transportation project development and environmental planning. Role in project: quality assurance, quality control, and technical advisory.

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M.S. Degree in Civil Engineering with 10 years of experience in land use planning. Role in project: assisted with field investigations, wetland determinations, and habitat assessment.

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Final Environmental Impact Statement

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Final Environmental Impact Statement

Chapter 8 – Abbreviations and Acronyms

# 8. LIST OF ABBREVIATIONS AND ACRONYMS

ACM	Asbestos-Containing Material
ADT	Average Daily Traffic
APE	Area of Potential Effect
ASTM	American Society for Testing and Materials
BCH	Baptist Children's Home
BMPs	Best Management Practices
CBD	Central Business District
Census	U.S. Bureau of the Census
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CERC-NFRAP	CERCLIS No Further Remedial Action Planned
СО	Carbon Monoxide
CFR	Code of Federal Regulations
CORRACTS	Corrective Action Report
CWA	Clean Water Act
dB	Decibel
dBA	Decibel "A" Weighted
DEIS	Draft Environmental Impact Statement
DHHS	Department of Health and Human Services
EC	Enterprise Community
EDR	Environmental Data Resources, Inc.
EFH	Essential Fish Habitat
EIS	Environmental Impact Statement
EO	Executive Order
ERNS	Emergency Response Notification System
ESA	Environmental Site Assessment
FAQs	Frequently Asked Questions

Final Environmental Impact Statement

Chapter 8 – Abbreviations and Acronyms

FEIS	Final Environmental Impact Statement
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FINDS	Facilities Index System
FPPA	Farmland Protection Policy Act
FSC	Federal Species of Concern
FY	Fiscal Year
GAP	Gap Analysis Program
GIS	Geographic Information System
НС	Hydrocarbon
HREC	Historical Recognized Environmental Concern
HUD	Housing and Urban Development
HWDMS	Hazardous Waste Discharge Monitoring System
I-10	Interstate 10
I-20	Interstate 20
UD	Interacency Involvement Dien
IIP	interagency involvement Flan
LDEQ	Louisiana Department of Environmental Quality
LDEQ LDNR	Louisiana Department of Environmental Quality Louisiana Department of Natural Resources
IIP LDEQ LDNR LDOL	Louisiana Department of Environmental Quality Louisiana Department of Natural Resources Louisiana Department of Labor
IIP LDEQ LDNR LDOL LDOTD	Louisiana Department of Environmental Quality Louisiana Department of Natural Resources Louisiana Department of Labor Louisiana Department of Transportation Development
IIP LDEQ LDNR LDOL LDOTD L <sub>eq</sub>	Louisiana Department of Environmental Quality Louisiana Department of Natural Resources Louisiana Department of Labor Louisiana Department of Transportation Development Equivalent Sound Level
IIP LDEQ LDNR LDOL LDOTD L <sub>eq</sub> LIG	Louisiana Department of Environmental Quality Louisiana Department of Natural Resources Louisiana Department of Labor Louisiana Department of Transportation Development Equivalent Sound Level Louisiana Intrastate Gas
IIP LDEQ LDNR LDOL LDOTD L <sub>eq</sub> LIG LNHP	<ul> <li>Interagency Involvement Plan</li> <li>Louisiana Department of Environmental Quality</li> <li>Louisiana Department of Natural Resources</li> <li>Louisiana Department of Labor</li> <li>Louisiana Department of Transportation Development</li> <li>Equivalent Sound Level</li> <li>Louisiana Intrastate Gas</li> <li>Louisiana Natural Heritage Program</li> </ul>
IIP LDEQ LDNR LDOL LDOTD L <sub>eq</sub> LIG LNHP LOS	Interagency Involvement Plan Louisiana Department of Environmental Quality Louisiana Department of Natural Resources Louisiana Department of Labor Louisiana Department of Transportation Development Equivalent Sound Level Louisiana Intrastate Gas Louisiana Natural Heritage Program Level of Service
IIP LDEQ LDNR LDOL LDOTD L <sub>eq</sub> LIG LNHP LOS LOSC	<ul> <li>Interagency Involvement Plan</li> <li>Louisiana Department of Environmental Quality</li> <li>Louisiana Department of Natural Resources</li> <li>Louisiana Department of Labor</li> <li>Louisiana Department of Transportation Development</li> <li>Equivalent Sound Level</li> <li>Louisiana Intrastate Gas</li> <li>Louisiana Natural Heritage Program</li> <li>Level of Service</li> <li>Louisiana Office of State Climatology</li> </ul>
IIP LDEQ LDNR LDOL LDOTD L <sub>eq</sub> LIG LNHP LOS LOSC LPDES	Interagency Involvement Plan Louisiana Department of Environmental Quality Louisiana Department of Natural Resources Louisiana Department of Labor Louisiana Department of Transportation Development Equivalent Sound Level Louisiana Intrastate Gas Louisiana Natural Heritage Program Level of Service Louisiana Office of State Climatology Louisiana Pollutant Discharge Elimination System
IIP LDEQ LDNR LDOL LDOTD L <sub>eq</sub> LIG LNHP LOS LOSC LPDES LUST	Interagency Involvement Plan Louisiana Department of Environmental Quality Louisiana Department of Natural Resources Louisiana Department of Labor Louisiana Department of Transportation Development Equivalent Sound Level Louisiana Intrastate Gas Louisiana Natural Heritage Program Level of Service Louisiana Office of State Climatology Louisiana Pollutant Discharge Elimination System Leaking Underground Storage Tank
IIP LDEQ LDNR LDOL LDOTD L <sub>eq</sub> LIG LNHP LOS LOSC LPDES LUST MBB	Interagency Involvement Plan Louisiana Department of Environmental Quality Louisiana Department of Natural Resources Louisiana Department of Labor Louisiana Department of Transportation Development Equivalent Sound Level Louisiana Intrastate Gas Louisiana Natural Heritage Program Level of Service Louisiana Office of State Climatology Louisiana Pollutant Discharge Elimination System Leaking Underground Storage Tank Metro Business Barometer
IIP LDEQ LDNR LDOL LDOTD L <sub>eq</sub> LIG LNHP LOS LOSC LOSC LPDES LUST MBB	Interagency Involvement Plan Louisiana Department of Environmental Quality Louisiana Department of Natural Resources Louisiana Department of Labor Louisiana Department of Transportation Development Equivalent Sound Level Louisiana Intrastate Gas Louisiana Natural Heritage Program Level of Service Louisiana Office of State Climatology Louisiana Pollutant Discharge Elimination System Leaking Underground Storage Tank Metro Business Barometer Migratory Bird Treaty Act

Final Environmental Impact Statement

Chapter 8 – Abbreviations and Acronyms

MOA	Memorandum of Agreement
MPO	Metropolitan Planning Organization
MSA	Metropolitan Statistical Area
MTS	Monroe Transit System
NAAQS	National Ambient Air Quality Standard
NAC	Noise Abatement Criteria
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NMFS	National Marine Fisheries Service
NO <sub>2</sub>	Nitrogen Dioxide
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NRI	National Rivers Inventory
O <sub>3</sub>	Ozone
OCOG	Ouachita Council of Governments
OEDC	Ouachita Economic Development Corporation
OSHA	Occupational Safety and Health Administration
PADS	PCB Activities Database System
Pb	Lead
РСВ	Polychlorinated Biphenyl
PIP	Public Involvement Plan
PM-10	Particulate Matter of 10 Microns or Less in Size
ppm	Parts Per Million
RAATS	RCRA Administrative Action Tracking System
RC	Renewal Community
RCRA	Resource Conservation and Recovery Act
RCRIS	Resource Conservation and Recovery Information System

Final Environmental Impact Statement

Chapter 8 – Abbreviations and Acronyms

RCW	Red-Cockaded Woodpecker
REC	Recognized Environmental Concern
ROD	Record of Decision
ROW	Right of Way
SCS	Soil Conservation Service
SHPO	State Historic Preservation Office
SHWS	State Hazardous Waste Sites
SIP	State Implementation Plan
$SO_2$	Sulfur Dioxide
SONRIS	Strategic Online Natural Resources Information System
SOV	Solicitation of Views
SQG	Small Quantity Generator
SWF/LF	Solid Waste Facilities/Landfills
SWPPP	Storm Water Pollution Prevention Plan
TAZ	Traffic Analysis Zone
TCM	Transportation Control Measure
TEA-21	Transportation Equity Act for the 21st Century
TIP	Transportation Improvement Program
TNM	Traffic Noise Model
TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substances Control Act
TSM	Transportation System Management
UA	Urban Arterial
$\mu g/m^3$	Micrograms per Cubic Meter
ULM	University of Louisiana at Monroe
USACE	U.S. Army Corps of Engineers
USDOT	U.S. Department of Transportation
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

Final Environmental Impact Statement

Chapter 8 – Abbreviations and Acronyms

UST v/c ratio vpd Underground Storage Tank volume to capacity ratio vehicles per day

Final Environmental Impact Statement

Chapter 9 – References

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Final Environmental Impact Statement

Chapter 9 – References

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Chapter 9 – References

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Final Environmental Impact Statement

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Final Environmental Impact Statement

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Final Environmental Impact Statement

Chapter 10 - Index

#### **10. INDEX**

access, s-1, s-2, s-3, ii, vi, vii, xix, xx, 1-4, 1-8, 1-10, 2-5, 2-27, 2-29, 2-31, 3-23, 3-41, 4-1, 4-5, 4-10, 4-37, 4-51, 4-52, 4-55, 4-58, 4-59, 4-60, 4-62, 5-5, 5-6

air quality, xii, 3-58, 3-59, 4-29, 4-32, 4-56, 4-60, 7-2, 7-3

aquatic resources, 4-48

Archaeological Resources, 4-17

Arkansas-Louisiana-Mississippi Railroad, s-3, ix, xi, xxi, 2-5, 2-10, 2-11, 2-12, 2-14, 2-18, 2-27, 2-29, 2-30, 3-28, 3-33, 3-70, 4-12, 4-22, 5-3, 6-2

average daily traffic, 1-10, 1,14, 2-1

Bayou Desiard, s-2, n, o, i, iv, v, vi, ix, xi, xiv, xvii, xx, 1-1, 2-5, 2-10, 2-11, 2-12, 2-14, 2-18, 2-21, 2-22, 2-23, 2-24, 2-25, 2-26, 2-27, 3-1, 3-5, 3-7, 3-12, 3-23, 3-28, 3-29, 3-30, 3-32, 3-33, 3-36, 3-41, 3-43, 3-47, 3-48, 3-63, 3-67, 3-68, 3-69, 3-70, 3-71, 3-72, 4-2, 4-4, 4-5, 4-10, 4-11, 4-15, 4-17, 4-19, 4-22, 4-24, 4-27, 4-28, 4-48, 4-49, 4-54, 4-55

biotic communities, 4-61

- Bon Aire Drive, *vi, viii, ix, xii, 2-2, 2-5, 2-10, 2-11, 2-12, 2-18, 2-27, 3-5, 3-9, 3-12, 3-23, 3-26, 3-31, 3-32, 3-33, 3-55, 3-63, 3-64, 4-2, 4-4, 4-5, 4-8, 4-11, 4-12, 4-15, 4-17, 4-28, 4-55*
- Brentwood, viii, ix, 2-10, 2-11, 2-12, 2-14, 2-18, 3-9, 3-26, 3-64, 4-2, 4-4, 4-12, 4-15, 4-17, 4-25, 9-4
- Build Alternatives, *ii*, *vi*, *viii*, *viii*, *ix*, *x*, *xi*, *xii*, *xiii*, *xiv*, *xv*, 1-17, 2-1, 2-3, 2-5, 3-1, 3-39, 3-40, 3-61, 4-1, 4-5, 4-6, 4-7, 4-9, 4-10, 4-11, 4-12, 4-15, 4-17, 4-22, 4-24, 4-30, 4-34, 4-37, 4-38, 4-45, 4-48, 4-49, 4-52, 4-54, 4-55, 4-56, 4-58, 5-5, 5-7, 5-8, 5-10, 5-11, 5-13, 5-14, 5-16

cemetery, 3-40, 4-17

church, 3-61, 3-64

Churchill Circle, viii, ix, 2-10, 2-11, 2-12, 2-14, 2-18, 3-31, 4-4, 4-12, 4-17

climatology, *x*, *3-41*, *4-20* 

Final Environmental Impact Statement

Chapter 10 – Index

commercial development, *xiv*, 1-10, 4-6, 4-54, 4-59

community impacts, 4-2

community services, vi, 4-1

construction impacts, 4-56

cost estimate, 2-21

Cypress Point, vi, vii, 2-5, 2-10, 2-11, 2-12, 3-9, 3-23, 3-32, 3-33, 4-1, 4-2, 4-4, 4-5, 4-6, 4-9, 4-10, 4-11, 4-15, 5-16, 6-2

DEIS, i, ii, 1-7, 2-1, 2-18, 2-30, 5-5, 5-8

detailed study alternatives, 2-12

drainage structures, 4-62

economic impacts, vii, 4-6

Edgewater Gardens, vi, vii, 2-5, 2-10, 2-11, 2-12, 2-14, 2-18, 3-23, 4-1, 4-2, 4-4, 4-6, 4-9, 4-10

EIS, 1-1, 1-16, 2-1, 2-12, 5-1, 5-3, 5-4, 5-5, 5-11, 5-14

electric power, 3-32

elevated roadway, 2-29, 4-10

employment, 1-10, 1-15, 3-5, 3-14, 3-16, 3-17, 3-18, 3-32, 4-6, 4-60

endangered species, xiv, 2-12, 3-73, 3-75, 4-51, 4-54, 4-60

Energy Impacts, xv, 4-55

Environmental Justice, viii, 3-21, 4-9

EO, viii, 3-21, 3-43, 4-9, 4-10

existing traffic condition, 1-7

FEIS, 1-16, 2-1, 2-12, 4-19, 4-33, 4-39, 4-41, 4-42, 4-44, 4-45, 4-62, 5-5, 7-3, 8-2

FEMA, 3-43

Fennell Street, vi, xiv, 2-11, 2-14, 2-18, 3-41, 4-54, 6-3

FHWA, *i*, 1-1, 1-16, 2-1, 2-3, 2-30, 3-32, 3-59, 3-60, 3-61, 4-20, 4-33, 4-34, 4-58, 4-61, 4-62, 5-3, 5-4, 5-5, 5-6, 5-10

Final Environmental Impact Statement

Chapter 10 – Index

floodplain, x, 2-5, 3-43, 3-48, 3-67, 3-72, 3-76, 4-20, 4-53

Floodway, 3-43, 4-20

Forsythe Avenue Extension, 1-1, 2, i, ii, viii, ix, xix, 1-1, 1-3, 1-4, 1-7, 1-9, 1-10, 1-14, 2-1, 2-2, 2-10, 2-11, 2-12, 2-14, 2-18, 2-30, 4-6, 4-29, 4-30, 4-31

geology, xi, 3-47, 3-70, 4-24, 4-25, 7-2

GIS, 2-11, 7-2, 7-3, 9-6

groundwater, xi, 3-52, 3-47, 3-57, 3-72, 4-24

hazardous materials, 2-12, 3-52, 7-3

IIP, 5-1

Ingleside, s-2, n, vi, vii, viii, ix, x, xiv, xx, 2-10, 2-11, 2-14, 2-18, 3-9, 3-29, 3-30, 3-32, 3-33, 3-40, 3-41, 4-2, 4-4, 4-6, 4-9, 4-10, 4-12, 4-15, 4-17, 4-19, 4-28, 4-54, 5-16, 6-3

intersections, ii, vii, 1-4, 1-8, 2-2, 4-6, 4-29, 4-30, 4-54, 4-59, 4-60

Irreversible and Irretrievable Commitment of Resources, 4-61

Jurisdictional wetlands, 3-71, 3-72, 4-51

land use, iii, viii, 2-2, 3-23, 3-29, 3-30, 3-61, 4-10, 4-11, 4-33, 4-34, 4-37, 4-58, 4-59, 4-60, 7-3

LDEQ, xiv, 3-36, 3-43, 3-54, 3-55, 3-56, 3-58

LDNR, 3-50, 4-12

LDOTD, *i*, *viii*, *ix*, *xii*, *xiv*, 1-1, 1-17, 2-3, 2-30, 3-36, 3-60, 3-61, 3-63, 4-2, 4-9, 4-11, 4-12, 4-15, 4-17, 4-20, 4-33, 4-34, 4-51, 4-56, 4-57, 5-3, 5-5, 5-6, 5-8, 5-10, 5-14, 5-16

level of service, 1-5, 1-6, 1-7, 2-3, 2-4

logical termini, 1-4

long-term benefits, 4-60

mailing list, 5-4, 5-6, 5-7

mass transit, 2-2

median income, 3-5

Migratory Bird Treaty Act (MBTA), 3-5, 4-47

Final Environmental Impact Statement

Chapter 10 - Index

mineral resources, 4-25

Mineral Resources, xi, 3-50, 4-25

Monroe Transit System, 5-1

MPO, viii, 1-1, 2-3

natural gas, ix, 3-33, 3-50, 4-12, 4-15

neighborhood, vi, viii, 2-10, 2-11, 2-14, 3-9, 3-23, 3-28, 4-1, 4-2, 4-4, 4-5, 4-9, 4-10, 4-12, 4-15, 4-17, 5-16

NEPA, 1-1, 1-16, 2-1, 2-3, 2-30, 5-3, 5-4, 5-7, 5-8, 5-10, 5-11, 5-12, 5-13, 5-14, 7-2, 7-3

newsletters, 5-8

newspapers, 5-16

NFIP, 3-43, 4-20

No-Build, 1-1, b, j, iii, xv, 1-7, 1-8, 1-9, 1-10, 1-14, 2-1, 4-1, 4-4, 4-5, 4-6, 4-11, 4-12, 4-15, 4-17, 4-19, 4-20, 4-22, 4-24, 4-25, 4-27, 4-29, 4-31, 4-34, 4-36, 4-39, 4-41, 4-42, 4-44, 4-45, 4-46, 4-47, 4-48, 4-49, 4-54, 4-55, 4-56, 4-60, 5-11, 5-14

NOI, xiv, 3-47, 4-57, 5-3

noise, *xii*, 3-59, 3-60, 3-61, 3-63, 4-2, 4-33, 4-34, 4-36, 4-37, 4-38, 4-47, 4-54, 4-56, 4-57, 4-60, 4-61, 7-2, 7-3, 8-4, 9-8

Noise barriers, 4-38

NRHP, x, 3-39, 3-40, 3-41, 4-17, 4-19

OCOG, viii, 1-1, 1-3, 3-5, 3-30, 3-31, 5-6, 5-10, 5-15

OEDC, 3-14, 3-16, 3-20

Old Sterlington Road, s-2, ii, viii, ix, xii, xix, 1-4, 1-8, 1-16, 2-2, 2-5, 2-10, 2-11, 2-12, 2-14, 2-18, 3-9, 3-23, 3-26, 3-28, 3-29, 3-32, 3-33, 3-36, 3-55, 4-2, 4-8, 4-11, 4-12, 4-15, 4-17, 4-28, 4-29, 4-59

parks, vii, 3-12, 3-32, 3-61, 4-5

peak hours, 1-15, 3-61

Final Environmental Impact Statement

Chapter 10 – Index

permits, xiv, 4-51

Phase I ESA, 4-29, 7-2

planned improvements, 1-7

plant communities, 4-46

population characteristics, 3-1

Preferred Alternative, s-2, b, j, l, m, p, iii, iv, v, vi, vii, viii, ix, x, xii, xv, xix, xx, 1-16, 2-21, 2-24, 2-25, 2-26, 2-27, 2-29, 2-30, 2-31, 4-2, 4-8, 4-15, 4-17, 4-29, 4-38, 4-39, 4-46, 4-48, 4-49, 4-52, 4-55, 4-60, 5-5, 5-6, 5-8, 5-12, 5-15, 5-16, 9-,

Preliminary Alternatives, ii, 2-12, 5-7, 9-2

Prime and important farmland, xiii, 3-64, 3-65

proposed action, 1-1, 5-6

protected species, xiv, 3-73, 4-51, 4-53, 4-54, 4-58

public hearing, 5-5, 5-8

Public Involvement Plan (PIP), 5-1

public officials meeting, 5-10, 5-11

purpose and need, *i*, 1-1, 1-16, 2-1, 2-2, 2-3, 2-18, 5-5, 5-10, 5-11, 5-13

rail service, 1-16

relocation, ix, 4-1, 4-7, 4-9, 4-12, 4-15, 4-62

residential development, 1-5, 1-10

roadway design criteria, 2-3

safety, 3-32

schools, 3-7, 3-9, 3-18, 3-20, 3-32, 3-61, 4-1, 4-11

scoping letter, 5-3

Section 4(f), *x*, 4-5, 4-19

short-term impacts, xi, 4-22, 4-24, 4-32, 4-60

State Historic Preservation Office (SHPO), 4-19

Final Environmental Impact Statement

Chapter 10 – Index

small group meetings, 5-15, 5-16

socioeconomic, 7-1, 7-3

streams, xiv, 3-43, 3-48, 3-67, 3-68, 3-70, 4-11, 4-48, 4-49, 4-61

subdivisions, 3-32, 3-36

Subsequent Actions, 4-62

surface water, 3-43, 3-72, 4-22, 4-24, 4-61

System Linkage, 1-3

TEA-21, 1-3

telephone hotline, 5-7

television, 5-16

TIP, 1-3

topography, x, 3-41, 3-43, 3-66, 4-20

Traffic Capacity Analysis, 1-5

traffic flow, 1-6, 2-2, 4-30, 4-56, 4-57, 4-62

traffic projections, 1-7, 3-31

TSM, *iii*, 2-1, 2-2

ULM, *i*, *vi*, *vii*, *ix*, *xiv*, 1-1, 1-5, 1-15, 2-11, 2-14, 3-1, 3-7, 3-9, 3-10, 3-18, 3-20, 3-26, 3-28, 3-29, 3-32, 3-33, 3-54, 3-55, 3-58, 4-1, 4-5, 4-54, 5-10, 5-15

Underground Storage Tanks, xi, 3-52, 3-55, 4-25

unemployment rate, 3-14, 3-16

USACE, xiv, xviii, xxi, 1-16, 2-30, 3-71, 3-72, 4-48, 4-51, 4-53, 4-60, 5-4, 5-5

Final Environmental Impact Statement

Chapter 10 – Index

USEPA, 1-16, 3-43, 3-47, 3-54, 3-57, 3-58, 3-59, 3-71, 4-30, 4-51, 5-4

utilities, ix, 4-12, 4-15, 4-60, 7-3

v/c ratio, 1-8, 1-9

Visual Impacts, xiv, 4-54

Water and Wastewater Facilities, 3-36, 4-15

water quality, xiii, 3-43, 4-22, 4-47, 4-48, 4-57, 4-58, 4-60

water resources, 4-24

wetland, s-1, s-2, v, vi, ix, xii, xviii, xx, 2-22, 2-23, 2-24, 2-26, 2-27, 2-29, 3-5, 3-26, 3-72, 3-73, 4-12, 4-25, 4-28, 4-48, 4-49, 4-51, 4-52, 4-53, 4-54, 4-61, 5-5, 7-3, 7-4

wetland delineation, 2-29, 4-48, 7-4

Wild and Scenic rivers, 3-76, 3-77

wildlife, xiii, 3-47, 3-66, 3-68, 4-47, 4-51, 4-58, 4-60, 4-61

# **APPENDIX A-1**

Agency Correspondence and Summary of Comments and Responses on DEIS



DEPARTMENT OF THE ARMY

VICKSBURG DISTRICT, CORPS OF ENGINEERS 4155 CLAY STREET VICKSBURG, MISSISSIPPI 39183-3435

REPLY TO ATTENTION OF:

http://www.mvk.usace.army.mil/ September 17, 2003

Operations Division Regulatory

SUBJECT: Comments on the Draft Environmental Impact Statement, Kansas Lane Connector, Monroe, Louisiana, State Project No. 700-37-0110, Federal Aid Project No. HP T021 (018)

Mr. Vincent G. Russo Environmental Engineer Adminstrator Louisiana Department of Transportation and Development Post Office Box 94245 Baton Rouge, Louisiana 70804-9245

Dear Mr. Russo:

I am responding to your letter of August 19, 2003, concerning the subject project. We appreciate your invitation to attend and participate in the upcoming public hearing on October 16, 2003, to discuss the Draft Environmental Impact Statement (DEIS).

You asked for comments concerning the DEIS. We have reviewed all the information you provided and offer the following comments. Please include a summary matrix of impacts for the three alternative corridors and no build alternative similar to the Summary Matrix table (Table 2) included in the Table section of The Kansas Lane Connector Build Alternatives Development and Screening Final Report dated October 23, 2002. The details that are not included in the Summary of Impacts by Alternative (page xi-xii) can be combined into a summary matrix table. There was inconsistency throughout the Affected Environment section. Some areas were addressed specifically while other areas were addressed generally such as jurisdictional wetlands. We recommend that you address each alternative specifically when speaking of wetlands (how much will be impacted, specific vegetation being affected, hydrology being affected, and soils). In the Environmental Consequences section, compensatory mitigation (Section 4.19.2.3) requires some changes. In the second paragraph of Section 4.19.2.3, the sentence: "Thus, some form of mitigation may be required." should be changed to "Thus, some form of mitigation will be required."

We highly recommend that you consider a fourth alternative for this project. This alternative would involve beginning at the Southern terminus with either the Southern or Central alternative. After crossing Bayou Desiard, the Southern alternative would be followed around the bottom of the wetland area. At the edge of the wetland area, the Central alternative would be chosen to pass southwesterly in front of the two apartment complexes to end at the Northern terminus. This alternative would minimize future development of the major wetland areas including the Chauvin Swamp. Initially this alternative would impact more wetland area, but would minimize future secondary impacts of development within the wetland areas on either side of the highway.

Your staff should contact the Caddo Nation of Oklahoma to solicit their views on this project. Documentation of this additional consultation should be included in the Final Impact Statement (FEIS). Documentation of coordination with the Louisiana Division of Archaeology needs to be included in the FEIS. Please forward a copy of the "Intensive Cultural Resources Survey Report" conducted by Earth Search, 2003 to Mr. Joe Greenleaf of my staff at this address.

Thank you for the opportunity to comment. If you have any questions, please contact Ms. Susan A. Jarvis of this office, telephone (601) 631-5146, fax (601) 631-5459 or e-mail address: regulatory@mvk02.usace.army.mil. In any future correspondence, please refer to the identification No. 200002790.

I am forwarding a copy of this letter to Mr. Derek J. Green, Senior Project Manager, ARCADIS G&M, Incorporated, 5608 Parkcrest Drive, Suite 300, Austin, Texas 78731.

Sincerely,

1 ilmel Pilla fzabeth S. Guynes Chief, Regulatory Branch

# United States Department of the Interior OFFICE OF THE SECRETARY Washington, D.C. 20240 OFFICE OF ENVIRONMENTAL POLICY AND COMPLIANCE 1849 C STREET, NW, Room MIB-2342 Washington, DC 20240 PHONE: 202/208-4169 FAX: 202/208-6970 January 20, 2004 Date: Vincent G. Russo, Jr. To: LA-DOT Tele: 225-248-4190 FAX: 225-248-4188 **Madeline Rogers Arcadis Consulting** Phone: 225-292-1004 4, including this cover sheet. Pages: 225-292-5210 Fax #: Ethel Smith From:

Subject: Kansas Lane Connector Project, Quachita Parish, LA [ER 03/711]

> Attached is the Department of the Interior's comment letter dated January 20, 2004, for the above referenced project. Please note that these comments involve the U.S. Fish and Wildlife Service <u>only</u>. We will provide a supplemental letter for the National Park Service (NPS) comments when they become available.

We appreciate your patience.

cc: Anita Jackson/NPS/ATL FAX: 404-562-3257

PEP



United States Department of the Interior

OFFICE OF THE SECRETARY Washington, D.C. 20240

JAN 2 0 2004

Mr. Vincent G Russo, Jr. Environmental Engineer Administrator Louisiana Department of Transportation and Development P.O. Box 94245 Baton Rouge, Louisiana 70804-9245

Dear Mr. Russo:

The Department of the Interior has reviewed the Draft Environmental Impact Statement (DEIS) for the proposed Kansas Lane Connector Project, Ouachita Parish, Louisiana (State Project No. 700-37-0110) [Federal Aid Project No. HP-T021(18)]. We provide the following comments regarding U.S. Fish and Wildlife Service (FWS) concerns in accordance with the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.), the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), and the National Environmental Policy Act (83 Stat. 852; 42 U.S.C. 4321 et seq.).

#### **General Comments**

Recently, the Louisiana Department of Transportation and Development (DOTD) and the Federal Highway Administration contracted with Baker Engineering and Energy to draft a Manual of Standard Practice for DOTD's planning/environmental process. Chapter Five of that Manual, entitled "Managing the NEPA Process," stresses the need to refine project alternatives and to identify a preferred project alternative for agency concurrence prior to developing a DEIS. Cooperating agency concurrence on the Preferred Alternative recommendation is the second of three concurrence points identified in the Interagency NEPA and Section 404/10 Concurrent Process for Transportation Projects that require an EIS. In contrast to that guidance, the subject DEIS describes three "build alternatives," and indicates that a Preferred Alternative will not be selected until after the DEIS has undergone public review.

As a cooperating agency, the FWS has been actively involved in the NEPA process for the subject project since the inception of planning. By letter dated September 4, 2002, the FWS concurred with your findings that Preliminary Alternatives 2, 3, and 7 should be considered as the three build alternatives for evaluation in the DEIS, and we are pleased that those alternatives are identified in the DEIS. Unfortunately, however, the DEIS does not provide sufficient detail regarding project design and environmental impacts to enable us to adequately assess project impacts, or to identify a preferred project alternative from the three build alternatives. The final EIS should, therefore, include a table, similar to the Summary Matrix included in the October 23, 2002, Final Screening Report, which details the impacts

Mr. Vincent G. Russo, Jr.

associated with the three build alternatives, as well as the no-build alternative. Additionally, the Environmental Consequences section of the EIS should be revised to clearly explain the direct, indirect, and cumulative project impacts associated with each build alternative under consideration, as well as those associated with the preferred or selected plan.

As noted below, and absent sufficient information on the locations of controlled access points, elevated grades, and their associated impacts in the DEIS, the FWS recommends that a combination of the southern and central alignments, utilizing the central alignment from Forsythe Avenue Extension/US 165 to the point where it joins the southern alignment, then following the southern alignment to Kansas Lane/US 80, be evaluated as the preferred or selected alternative in the final EIS.

#### **Specific Comments**

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Section 2.5.1 Roadway Design Criteria - This section refers to the use of controlled access on portions of the three build alternatives; however, a figure depicting where the controlledaccess areas would be located is not provided. We recommend that the final EIS include a map showing the locations for controlled-access under each project alternative. Additionally, we recommend that the details relating to the direct, indirect, and cumulative impacts of those features be described in the final EIS.

Section 2,5.3 Detailed Study Alternatives - Figures 2-6, 2-7, and 2-8 are described in the DEIS as depicting the location of the alternative alignments and the line and grade at which they would be constructed; however, only the alignment locations are shown. Those figures should be revised to identify where the proposed road would be elevated and where it would be built at grade for each of the alternatives under consideration.

Section 4,20 Protected Species - The FWS's January 18, 2001, scoping comments stated that no Federally-listed threatened, endangered, or candidate species occur within the proposed highway corridor. That statement is still applicable; therefore, no further consultation will be required unless there are changes in the scope or location of the project, or project construction has not been initiated within one year of this letter. If the project is not initiated within one year, follow-up consultation should be conducted with the Service's Louisiana Field Office (337-291-3100) prior to making expenditures for construction.

If you or your staff have any questions regarding these comments, please contact Patti Holland, U.S. Fish and Wildlife Service on 337/291-3121.

Mr. Vincent G. Russo, Jr.

We appreciate the opportunity to provide these comments, and apologize for the lateness of them.

Sincerely,

Sanchaed NAR Willie B Taylor



Director, Office of Environmental Policy and Compliance



UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL MARINE FISHERIES SERVICE Southeast Regional Office 9721 Executive Center Drive North St. Petersburg, Florida 33702

August 26, 2003 F/SER44/RH:jk 225/389-0508

Mr. Vincent G. Russo, Jr. Environmental Engineer Administrator Louisiana Department of Transportation and Development Post Office Box 94245 Baton Rouge, Louisiana 70804-9245

Dear Mr. Russo:

The National Marine Fisheries Service (NOAA Fisheries) has received the Draft Environmental Impact Statement (DEIS) titled "KANSAS LANE CONNECTOR; Monroe, Louisiana" for State Project No. 700-37-0110. This DEIS was transmitted for our review and comment by your letter dated August 19, 2003. The Louisiana Department of Transportation and Development is proposing to construct a roadway connecting U.S. Highway 165 to Kansas Lane in Ouachita Parish, Louisiana.

Based on our review of the DEIS and knowledge of the project area, the resources to be affected are not ones for which NOAA Fisheries is responsible. Therefore, we have no comments regarding information provided in the DEIS and take no position relative to the project.

Sincerely,

Rich Hartun

Assistant Regional Administrator

c: F/SER4 Files





#### Vice President for Business Affairs

700 University Avenue Monroe, LA 71209-2000 ph. (318) 342-1961 fax: (318) 342-1966

October 31, 2003

Vincent G. Russo Environmental Engineering Administrator P.O. Box 94245 Baton Rouge, LA 70804

Dear Mr. Russo:

On behalf of the University of Louisiana at Monroe, I want to express my appreciation for the opportunity to comment on the Kansas Lane Connector project. The university does support the Kansas Lane project.

After review of the three proposed routes, the University is in opposition of the Southern route due to its proximity to the university's recreational facilities. Representative Katz's alternative to the three presented appears to be the route which will have the least impact on residents as well as other factors you identified.

I will be happy to discuss this with you if you so desire.

Sincerely,

Nick J. Bruno, Ph.D. (1914) Vice President for Business Affairs

mt



# Federal Emergency Management Agency

Region VI Federal Regional Center 800 North Loop 288 Denton, Texas 76209-3698

# Region VI Federal Insurance and Mitigation Administration

# **Public Notice Review**

Re: State Project No. 700-37-0110 Federal Aid Project No. HP-T021 (018) Ouachita Parish

We offer the following comments: 

Please contact Ouachita Parish Floodplain Administrator (phone number 318-428-2704) for a determination as to whether a Floodplain Development Permit is needed in Ouachita Parish project areas.

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If further information is required, please write to the address above or call (940) 898-5463.

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

STATED STATES. JOHN HENTAL PROTECTION

REGION 6 1445 ROSS AVENUE, SUITE 1200 DALLAS, TX 75202-2733

October 16, 2003

Mr. Vincent G. Russo, Jr.
Environmental Engineer
Louisiana Department of Transportation and Development
P.O. Box 94245
Baton Rouge, LA 70804-9245

Dear Mr. Russo:

In accordance with our responsibilities under Section 309 of the Clean Air Act, the National Environmental Policy Act (NEPA), and the Council on Environmental Quality Regulations (CEQ) for Implementing NEPA, the U.S. Environmental Protection Agency (EPA) Region 6 office in Dallas, Texas, has completed its review of the Draft Environmental Impact Statement (DEIS) for the Kansas Lane Connector, Ouachita Parish, Louisiana.

EPA classified your DEIS and proposed action as "LO," i.e., EPA has "Lack of Objections" to the proposed alternative. Our classification will be published in the <u>Federal</u> <u>Register</u> according to our responsibility under Section 309 of the Clean Air Act, to inform the public of our views on proposed Federal actions.

EPA appreciates the opportunity to review the DEIS. We request that you send our office one (1) copy of the Final EIS at the same time that it is sent to the Office of Federal Activities (2251A), EPA, 1200 Pennsylvania Avenue, N.W., Washington, D.C. 20044.

Sincerely yours,

Q. A.Z.

Michael P. Jansky, P.E. Regional 309 Coordinator (6ENXP)

Natural Resources Conservation Service 3737 Government Street Alexandria, LA 71302

September 24, 2003

Mr. Vincent G. Russo, Jr. Environmental Engineer Administrator LA Dept. of Transportation and Development P. O. Box 94245 Baton Rouge, Louisiana 70804-9245

Dear Mr. Russo:

Re: STATE PROJECT NO. 700-37-0110 F.A.P. NO. HP-T021(018) KANSAS LANE CONNECTOR OUACHITA PARISH

Thank you for providing our agency with the opportunity to respond to your letter, dated August 12, 2003, wherein you requested views and comments on the above project.

NRCS has no objection to the proposed project and although it appears there will be no impact on our work in the immediate vicinity, some wetlands will be impacted.

Should you have questions regarding the above comments, please feel free to contact Terry May, District Conservationist in the Monroe Field Office, at (318) 373-4467.

Sincerelv.

E/J. Giering III, P.E. State Conservation Engineer

cc: Terry May, District Conservationist, Monroe FO

# KANSAS LANE CONNECTOR Compilation of Agency Comments Received From Public Hearing (10/16/03) through October 31, 2003

DATE	NAME	MEDIUM	COMMENT	RESPONSE
09-17-03	Elizabeth S. Guynes	Written	Would like the EIS to include a table similar to Table 2 of the Kansas Lane Connector Build Alternatives Development and Screening Final	The impacts summary matrix
	Chief Regulatory Branch	Comments	Report dated October 23, 2002. This table would be more detailed and describe all areas to the same degree of detail. The DEIS affected	contained in the Executive
	Vicksburg District USACE		environment section is inconsistent in describing some areas specifically while others were addressed generally. Requested that each	Summary has been edited to
			alternative be addressed specifically when speaking of amount of wetlands impacted, specific vegetation, hydrology, and soils affected.	include land use, community
			Request some language change in regards to the mitigation of wetlands in the Environmental Consequences section. Requested change to	cohesion, environmental justice,
			Section 4.19.2.3 from "mitigation MAY be required" to "mitigation WILL be required". Request that the EIS consider a fourth alternative	aesthetic and visual quality, plant
			that would follow the Central or Southern Alternatives south of Bayou Desiard and then move toward the southwestern side of the apartments	species, terrestrial wildlife, and
			along Bon Aire Drive. The USACE feels that although the initial impacts to wetlands might be greater, the long-term impacts due to future	water quality impacts. The
1			development would be minimized. Suggests the staff should contact the Caddo Nation of Oklahoma to solicit their views of the project, and	Affected Environment Chapter
			requests that the correspondence be included in the FEIS as well as coordination with the Louisiana Division of Archaeology.	(Chapter 3) is intended to be a
				general description of existing
				conditions within the study area.
				The Affected Environment
				section has been edited with
				more detailed descriptions of the
ł	1			Build Alternative and Preferred
				Alternative impacts on the
				amount of wetlands, specific
				vegetation, hydrology, and soils
				impacted. The second paragraph
				of Section 4.19.2.3 has been
				edited from "Thus, some form of
				mitigation MAY be required" to
				"Thus, some form of mitigation
				WILL be required". The
				recommended fourth alternative
				(combination Southern+Central
				Alternative) for the purpose of
				minimizing secondary
				development in the wetland areas
				has been evaluated. The Caddo
				Nation of Oklahoma was sent a
				copy of the DEIS on August 19,
				2003. Documentation of
				coordination with the Louisiana
		1		Division of Archaeology has
				been included in the FEIS.

# KANSAS LANE CONNECTOR Compilation of Agency Comments Received From Public Hearing (10/16/03) through October 31, 2003

DATE	NAME	MEDIUM	COMMENT	RESPONSE
1/20/04	USFWS (Submitted via	Draft Written	Concern that Preferred Alternative Selection process is not in concurrence with LDOTD and FHWA Manual entitled "Managing the NEPA	To date, final correspondence
	Controlled Correspondence	Comment	Process". This document identifies Preferred Alternative recommendation prior to development of the DEIS. In contrast to the document, the	from the National Park Service
	through the Department of the	(Comments	DEIS recommends three Build Alternatives and indicates that a Preferred Alternative will not be selected until after public review of the	(NPS) that would include
	Interior).	reflect	DEIS. States that DEIS does not provide sufficient detail regarding project design and environmental impacts. FEIS should include a table	comments has not been received.
		USFWS	similar to the Summary Matrix in the October 23, 2002, Final Screening Report. Environmental Consequences section should be revised to	The LDOTD and FHWA have
		only).	explain direct, indirect, and cumulative impacts by each Build Alternative as well as the Preferred Alternative. Recommends a combination of	followed the NEPA/404 process
		Facsimile	the Southern and Central Alternatives for FEIS. Wants a figure showing controlled access locations for each alternative as well as descriptions	throughout the course of this
		cover sheet	of direct, indirect cumulative impacts of controlled access features. Additionally, Figures 2-6, 2-7, and 2-8 should be revised to show where	project. This process is
		stated that a	alignments would be elevated. If the project is not initiated within 1 year, follow-up consultation should be conducted with the USFWS.	consistent with procedures
		supplemental		described in referenced guidance
		letter from		document. The Impacts Matrix
		the National		and Affected Environment
		Park Service		Section have been modified as
		(NPS)		requested. Environmental
		detailing		Consequences section has also
		comments		been modified. Additional
1		would be		Alternative has been considered
		provided		as requested. A copy of the DEIS
		when		was submitted to the Caddo
		available.		Nation of Oklahoma. (See above
				response.) To date, the tribe has
				not commented. Figure 2-11
				shows control of access locations
				for the Preferred Alternative.
				Currently, the only elevated
				portion for each of the Build
1				Alternatives incorporated into
				the preliminary design is the
				bridge span crossing Bayou
				Desiard. Follow-up consultation
				will be conducted with the
				USFWS if the project is not
				initiated within 1 year.
10-06-03	Name Unreadable	Written	Letter requests that the staff contact the Ouachita Parish Floodplain Administration for determination if a Floodplain Development Permit is	The Ouachita Parish Floodplain
	Reviewer, Region VI Federal	Comment	needed for Ouachita Parish project areas.	Administration has been
	Insurance and Mitigation			contacted and a floodplain
	Administration of FEMA			development permit will have to
				be obtained and a Drainage
ł				Impact Statement must be
				submitted prior to construction.

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LDOTD/2135.1-13/M/DECEMBER 2003/1-Agency Comments/bm

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# KANSAS LANE CONNECTOR Compilation of Agency Comments Received From Public Hearing (10/16/03) through October 31, 2003

DATE	NAME	MEDIUM	COMMENT	RESPONSE
10-16-03	Michael P. Jansky, PE, Regional 309 Coordinator, Environmental Protection Agency	Written Comment	EPA has classified the Kansas Lane Connector as "LO" or "Lack of Objections" under Section 309 of the Clean Air Act of the National Environmental Policy Act (NEPA) and that their classification will be published in the Federal Register as such.	Comment Acknowledged.
09-24-03	E.J. Giering III, PE, State Conservation Engineer Natural Resources Conservation Service	Written Comment	NRCS has no objections to the Kansas Lane Connector and states that although there are no apparent impacts to wetlands in the immediate vicinity, some wetlands will be impacted.	Comment Acknowledged; The USACE is a cooperating agency in this project to ensure that adequate consideration is given to wetland issues.
08-26-03	Miles M. Croom, Assistant Regional Administrator, U.S. Department of Commerce	Written Comment	National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Southeast Regional Office. NOAA Fisheries is not responsible for the resources that will be affected by the Kansas Lane Connector and therefore has no comment on the information in the DEIS and takes no position relative to the project.	Comment Acknowledged.
### **APPENDIX A-2**

Concurrence Letters for Project Purpose and Need

MAY-13-2003 TUE 11:02 AM

ARCADIS G&M

FAX NO. 5124512930

P. 02

MAR-11-2002 15:24

DEPT. OF TRANSPORTATION

P.02/03



# United States Department of the Interior

FISH AND WILDLIFE SERVICE 646 Cajundome Blvd, Suite 400 Lafayette, Louisiana 70506

March 5, 2002

Mr. Vincent G. Russo Environmental Engineer Administrator Louisiana Department of Transportation and Development P. O. Box 94245 Baton Rouge, Louisiana 70804-9245

Dear Mr. Russo:

Please reference your February 14, 2002, letter regarding State Project No. 700-37-0110/Federal Aid Project HP-T021(018). That project proposes the construction of the Kansas Lane Connector; a roadway to improve access between U.S. Highway 80/Desiard Street (US 80) and the existing Kansas Lane to the south and U. S. Highway 165 (US 165) and Forsythe Avenue Extension to the north. The proposed project is partially located within the City limits of Monroe and the remainder is within Ouachita Parish, Louisiana. Your letter requested our participation at an interagency meeting to be held in Monroe on March 7, 2002. The purpose of that meeting is to update State and Federal agencies on the project planning process and schedule, and to provide preliminary information regarding potential project alternatives. Unfortunately, Service personnel have made prior commitments and will not be able to attend the March 7, 2002, meeting.

To facilitate the project planning process, however, we are pleased to provide the following comments in response to the February 15, 2002, Purpose and Need document prepared by Arcadis G&M, Incorporated. The Service has reviewed the information provided, and offers the following comments in accordance with provisions of the National Environmental Policy Act (NEPA); (83 Stat. 852; 42 U.S.C. 4321 et seq.) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.).

The Purpose and Need Statement provides sufficient justification for improved access between Kansas Lanc at U.S. 80 and US 165. Currently, the only opportunity to for vehicles to bypass traffic congestion in that area of Monroe is to divert through smaller roadways within residential areas and the University of Louisiana at Monroe's campus. The Service concurs with the findings of the Purpose and Need Statement, which concludes that the proposed Kansas Lane Connector is warranted.

We look forward to further cooperation with you and your staff in developing the Kansas Lane Connector project, and we appreciate the opportunity to provide these comments. If you need further information, please contact Patti Holland (337/291-3121) of this office.

Russell C. Watson

Acting Field Supervisor

MAR-11-2002 15:25

QC:

DEPT. OF TRANSPORTATION

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EPA, Dallas, TX Corps of Engineers, Eastern Regulatory Functions Branch, Vicksburg, MS LA Dept. of Wildlife and Fisheries, Baton Rouge, LA Federal Highway Administration, Baton Rouge, LA



#### DEPARTMENT OF THE ARMY

VICKSBURG DISTRICT, CORPS OF ENGINEERS 4155 CLAY STREET VICKSBURG, MISSISSIPPI 39183-3435

RFC ED/

MAR 2 5 2002

ARCADIS Geraghty & Miller

REPLY TO ATTENTION OF:

http://www.mvk.usace.army.mil/

March 20, 2002

Operations Division Regulatory Branch

SUBJECT: Purpose and Need-Kansas Lane Connector Environmental Impact Statement (EIS) Monroe, Louisiana, State Project No. 700-37-0110, Federal Aid Project No. HP T021(018)

Ms. Wendy Gasteiger Travis, AICP Project Environmental Manager ARCADIS G&M, Incorporated 5608 Parkcrest Drive Suite 300 Austin, Texas 78731-4947

Dear Ms. Travis:

I am responding to your letter of February 15, 2002, concerning the subject project. We appreciated the opportunity to attend and participate in the interagency meeting of March 7, 2002, to discuss continued development of the project.

You asked for concurrence with the project's purpose and need statement as part of the process outlined by the NEPA/404 Concurrent Process Agreement. We have reviewed all the information that you provided and hereby concur with the purpose and need for the project.

Thank you for the opportunity to comment. If you have any questions, please contact Mr. Philip Hollis, telephone (601) 631-5491, fax (601) 631-5459, email: regulatory@smtp.lmk.usace.army.mil.

Sincerely,

Elizabeth S. Guynes Chief, Regulatory Branch



### **APPENDIX A-3**

Correspondence from USACE and USFWS Regarding Selection of Build Alternatives



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# United States Department of the Interior

FISH AND WILDLIFE SERVICE 646 Cajundome Blvd. Suite 400 Lafayette, Louisiana 70506

# RECEIVED

APR 0 4 2002 ARCADIS Geraghly & Miller

April 1, 2002

Mr. Vincent G. Russo Environmental Engineer Administrator Louisiana Department of Transportation and Development P. O. Box 94245 Baton Rouge, Louisiana 70804-9245

Dear Mr. Russo;

Please reference a March 4, 2002, letter from Arcadis, Geraghty and Miller, Inc., requesting our comments on the preliminary alternatives for the Kansas Lane Connector project [State Project No. 700-37-0110/Federal Aid Project HP-T021(018)]. During the current plan-formulation phase for this project, eight preliminary project alternatives are to be screened. "The U. S. Fish and Wildlife Service has reviewed the information provided, and offers the following comments in accordance with provisions of the National Environmental Policy Act (NEPA; 83 Stat. 852; 42 U.S.C. 4321 et seq.), and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.).

Each of the proposed project alternatives would, to varying degrees, adversely affect forested wetland habitat. In assessing the value of such habitat, the Service evaluates its rarity, value to fish and wildlife, and the potential feasibility of mitigating unavoidable adverse impacts. The forested wetlands within the area that would be impacted by the proposed Kansas Lane Connector alternatives are of moderate to high habitat value. As evident in the following evaluation, the preliminary alternatives essentially fall into two major categorics; those that would have unacceptable adverse impacts on forested wetlands within the Chauvin Swamp, and those that would have unacceptable impacts on existing residential/urban development. On that basis of evaluation, we have identified two new project alternatives that would, if implemented, result in minimal adverse impacts on both fish and wildlife habitat and existing residential/urban development. We request that those new alternatives (Alternatives A-B-C-Q-R-O-J-P and A-B-C-Q-R-N-G-H-P) be fully formulated and evaluated during the current alternative-screening phase of project development.

The following comments pertain to the eight preliminary alternative alignments as well as the two recommended additional alignments. We have briefly addressed each alternative, and have ranked them to aid in selecting those project alternatives that should be carried forward to the next project planning phase.

#### Alternative 1 (A-B-C-D-P)

Potential adverse wetland impacts associated with this alternative are greater than any other

P. 05

alternative. The Service would strongly oppose implementation of this project alternative, and rank it the least-preferable (Service ranking # 10) of all alternatives currently under consideration. We recommend that it be eliminated from further consideration as a viable project alternative.

# Alternative 2 (A-B-C-Q-F-G-H-P)

This alternative would result in moderately low wetland impacts; however, less-damaging options available, so we rank it # 6. We recommend that it be screened-out from further study.

#### Alternative 3 (A-B-C-Q-I-J-P)

This alternative would have relatively low wetland impacts, and would require minimal relocation of existing residential development. Given its potential feasibility, we would rank it # 3, and strongly recommend that it be retained for further evaluation.

#### Alternative 4 (A-B-E-F-G-H-P)

The Service ranks this alternative # 8, due to its significant wetland impacts and adverse impacts on existing residential/urban development. We would not support its implementation, and recommend that it be dropped from further consideration as a viable alternative.

#### Alternative 5 (A-B-E-I-J-P)

This alternative would have minimal wetland impacts; however, we believe that any alternative utilizing proposed Segment E would likely be infeasible due to the cost of relocating existing development. Accordingly, we recommend that it be screened-out from further planning, and assign it a Service ranking of # 5.

#### Alternative 6 (A-K-L-H-P)

Due to its exceptionally high potential wetland impacts and its equally significant impacts on existing development, the Service believes that this alternative is infeasible, and would strongly oppose its implementation. We rank this project alternative # 9, and recommend it be eliminated from further study.

#### Alternative 7 (A-K-M-N-G-H-P)

While impacts of this alternative to wetland habitat would be minimal, it may not be feasible due to its potential adverse impacts to existing development. Nevertheless, we rank it # 4, and recommend that it be carried forward for further planning and evaluation.

#### Alternative 8 (A-K-M-O-J-P)

Despite the fact that this alternative would have the least wetland impacts, we believe that it would be infeasible due to its potential impact on existing development. Accordingly, we rank it # 7, and recommend that it be dropped from further study.

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#### Service Proposed Alternatives (A-B-C-O-R-O-J-P) and (A-B-C-O-R-N-G-H-P)

Based on our evaluation of the potential project alternatives, we believe that two additional roadway alignments (as depicted on the enclosed map) warrant further consideration during future planning of the Kansas Lane Connector Project. Those alignments would include a new roadway segment (Segment R) that loops through open fields south of the existing Chauvin Swamp forested wetland complex. Although they would require more roadway curvature, those alternatives would result in the least amount of fish and wildlife habitat impacts while minimizing the impacts associated with existing development. Accordingly, the Service ranks the additional alternative alignments (A-B-C-Q-R-O-J-P) and (A-B-C-Q-R-N-G-H-P) as # 1 and # 2, respectively. We realize that the additional curves may require reduced speed limits to ensure safety; however, the roadway location within the University of Louisiana at Monroe would likely necessitate a lower speed limit anyway.

In summary, we recommend that Alternatives 3 (A-B-C-Q-I-J-P), 7 (A-K-M-N-G-H-P), and the two alignments proposed by the Service (A-B-C-Q-R-O-J-P) and (A-B-C-Q-R-N-G-H-P) be carried forward for further project planning and evaluation. We would strongly oppose further consideration of Alternatives1 and 6, and do not support further evaluation of Alternatives 2, 4, 5, and 8.

We appreciate the opportunity to provide these comments, and look forward to further planning of the Kansas Lane Connector Project. If you need further information, please contact Patti Holland (337/291-3121) of this office.

Incetely.

Acting Supervisor Louisiana Field Office

CC;

EPA, Dallas, TX Corps of Engineers, Eastern Regulatory Functions Branch, Vicksburg, MS LA Dept. of Wildlife and Fisherics, Baton Rouge, LA Federal Highway Administration, Baton Rouge, LA

# MAY-13-2003 TUE 11:04 AM ARCADIS G&M

FAX NO. 5124512930

P. 07





#### DEPARTMENT OF THE ARMY

VICKSBURG DISTRICT, CORPS OF ENGINEERS 4155 CLAY STREET VICKSBURG, MISSISSIPPI 39183-3435

#### RECEIVED

REPLY TO ATTENTION OF:

http://www.mvk.usace.army.mll/ July 16, 2002

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ARCADIS Geraghty & Miller

Operations Division Regulatory

SUBJECT: Alternatives for Kansas Lane Connector, Monroe, Louisiana, State Project No. 700-37-0110, Federal Aid Project No. HP T021(018)

Mr. Derek Green ARCADIS G&M, Incorporated 5608 Parkcrest Drive Suite 300 Austin, Texas 78731-4947

Dear Mr. Green:

I am responding to your letter of June 19, 2002, concerning the subject project. We appreciate the opportunity to participate in the continued development of the project.

You asked for concurrence with alternatives selected for further study as part of the process outlined by the NEPA/404 Concurrent Process Agreement. We have reviewed all the information that you provided and hereby concur with the alternatives which merit further or detailed analysis. However, I believe that there should be a minor modification made to alternative 7 to further avoid forested areas. This modification can be referred to as a southern alternative, which would generally follow alternative 7 as shown on the referenced document's figure 1. All comments or recommendations by agencies with special expertise should also be incorporated into the alternatives analysis and screening process.

Thank you for the opportunity to comment. If you have any questions, please contact Mr. Philip Hollis, telephone (601) 631- 5491, fax (601) 631-5459, or e-mail address: regulatory@mvk02.usace.army.mil. I am forwarding a copy of this letter to Mr. Vincent G. Russo, Environmental Engineer Administrator, Louisiana Department of Transportation and Development, Post Office Box 94245, Baton Rouge, Louisiana 70804-9245.

Sincerely,

Elisit S. Jum

Elizabeth S. Guynes Chief, Regulatory Branch





# United States Department of the Interior

FISH AND WILDLIFE SERVICE 646 Cajundome Blvd. Suite 400 Lafayette, Louisiana 70506

July 11, 2002

Mr. Vincent G. Russo Environmental Engineer Administrator Louisiana Department of Transportation and Development P. O. Box 94245 Baton Rouge, Louisiana 70804-9245

Dear Mr. Russo:

Please reference the proposed Kansas Lane Connector project [State Project No. 700-37-0110/Federal Aid Project HP-T021(018)]. That project would improve access between U.S. Highway 80/Desiard Street (US 80) and the existing Kansas Lane to the south, and U. S. Highway 165 (US 165) and Forsythe Avenue Extension to the north. The proposed project area is partially within the City limits of Monroe and the remainder is within Ouachita Parish, Louisiana. We have received a June 5, 2002, letter from Arcadis, Inc., transmitting the Draft Kansas Lane Connector Preliminary Alternatives Development document for our review and comment. Specifically, that letter requested that the Service provide input as to which build alternatives should be studied in more detail in the Environmental Impact Statement (EIS). The Service has reviewed the information provided, and offers the following comments in accordance with provisions of the National Environmental Policy Act (NEPA); (83 Stat. 852; 42 U.S.C. 4321 et seq.), and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.).

The Service agrees that Alternatives 1 and 6 should be eliminated from further evaluation due to significant wetland impacts. We also agree that Alternatives 4 and 5 are unrealistic due to conflicts with existing development located within Segment E. In considering potential conflicts with existing development, we conclude that Alternatives 7 and 8, both of which incorporate Segment M, would also be infeasible. According to Table 1 of the draft document, Segment M is the only roadway segment that has severe integrity, cohesion, and isolation concerns. Accordingly, we believe that each of the alternatives that incorporate Segment M should be eliminated from further consideration for the same reasons used to eliminate the alternatives which utilize Segment E, and we specifically recommend that Alternative 8 be eliminated for that reason, rather than for the stated roadway curvature concerns, because the curve connecting Segments C and Q is more acute than those in Segment O.

We are pleased that the intermediate alternatives evaluation included Alternatives 9 and 10, both of which respond to our April 1, 2002, recommendation. The draft document recommends elimination of those alternatives because of their proximity to the University of Louisiana at Monroe's baseball fields and because their alignments would require speeds below 45 miles-per-hour (mph). It is our understanding that the purpose and need of the Kansas Lane Connector is to provide a new location roadway that would reduce traffic congestion along US Highway 80 and US Highway 165 to improve area-wide mobility and safety. A design speed of 45 mph, which limits project alternatives, was not identified when agency concurrence regarding project purpose and need was sought. Nevertheless, we believe that a roadway accommodating speeds of 45 mph could be designed by slightly modifying

Alternatives 9 and 10 to shift Segment R northward, and thereby, straighten the roadway enough to meet that design speed criterion. That modification would also eliminate the stated conflicts with the university infrastructure. The enclosed map depicts a modification of Segment R that would avoid impacts to the university recreational facility, while alleviating the roadway curvature/design speed concerns.

In summary, we recommend that Alternatives 2, 3, and the above-described modification of Alternatives 9 and 10 be considered as the build alternatives for further evaluation in the EIS. We would be pleased to meet with your design team to discuss this issue, and appreciate the high degree of consideration afforded to our concerns to this point in the planning process. If you need further information regarding our recommendations, please contact Patti Holland (337/291-3121) of this office.

Sincerely. Russell C. Watson

Acting Supervisor Louisiana Field Office

Enclosure

cc: EPA, Dallas, TX

Corps of Engineers, Regulatory Functions Branch, Vicksburg, MS LA Dept. of Wildlife and Fisheries, Baton Rouge, LA Federal Highway Administration, Baton Rouge, LA





# United States Department of the Interior

FISH AND WILDLIFE SERVICE 646 Cajundome Blvd. Suite 400 Lafayette, Louisiana 70506

September 4, 2002

Mr. William A. Sussman Division Administrator U.S. Department of Transportation Federal Highway Administration 5304 Flanders Drive, Suite A Baton Rouge, Louisiana 70808



Dear Mr. Sussmann:

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Please reference your August 19, 2002, letter regarding Federal Project No: **EIP-T021(018)** and State Project No: 700-94-0003. That project would improve access between U.S. Highway 80/Desiard Street (US 80) and the existing Kansas Lane to the south, and U. S. Highway 165 (US 165) and Forsythe Avenue Extension to the north. The proposed project area is partially within the City limits of Monroe and the remainder is within Ouachita Parish, Louisiana. Your letter states that the project alternatives have been adjusted to accommodate our recommendations and requests that the Service provide concurrence on the selection of three corridor alternatives to be studied in more detail in the Environmental Impact Statement. The Service has reviewed the information provided, and offers the following comments in accordance with provisions of the National Environmental Policy Act (NEPA); (83 Stat. 852; 42 U.S.C. 4321 et seq.), and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.).

We appreciate your continual positive consideration of our comments and suggested project alternatives. Accordingly, we concur with your findings that alternatives 2, 3, and 7 should be considered as the three build corridor alternatives for further evaluation in the forthcoming draft Environmental Impact Statement.

We look forward to meeting with you at the September 5, 2002, project meeting in Monroe to further the project planing process. Please contact Patti Holland (337/292-3121) of this office if we can be of further assistance prior to that meeting.

Sincerely.

Russell C. Watson Acting Supervisor Louisiana Field Office



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cc:

EPA, Dallas, TX Corps of Engineers, Regulatory Functions Branch, Vicksburg, MS LA Dept. of Wildlife and Fisheries, Baton Rouge, LA Federal Highway Administration, Baton Rouge, LA

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### **APPENDIX A-**4

Responses to Scoping Letter

KW/MA



CULTURAL DEPARTMENT

September 12, 2001

LA DOTD Environmental Engineer Administrator Attn: Vincent G. Russo P.O. Box 94245 Baton Rouge, LA 70804-9245

Dear Mr. Russo,

RE: State Project: # 700-37-0110; F.A.P. #HP-T021 (018) Kansas Lane Connector, Ouachita Parish

I am in receipt of your letter dated September 4, 2001, in which you are soliciting views from different federal, state and local organizations, and individuals for the above-mentioned project in Ouachita Parish. Your letter states that a Public Meeting will be held on Monday, September 25, 2001 at the Monroe Civic Center, in which the public will have the opportunity to comment, and express views and concerns.

The information provided on the second page of the announcement gives general information about the location of the project, as well the processing of an Environmental Impact Statement. Based on the information provided, it is determined that the Chitimacha Tribe of Louisiana was not in that area, and as such, we would recommend that you contact the Caddo Tribe of Oklahoma, as they have aboriginal ties with that area.

The Chitimacha Tribe of Louisiana appreciates your compliance with federal and state laws of notification and consultation.

Sincerely,

S.Leaden, M.Ed.

Kimberly S. Walden, M.Ed. Cultural Director



ADAI CADDO INDIAN TRIBE 4500 Highway 485, Robeline, Louisiana 71469 (318)472-8680 Fax (318)472-8684

State of Louisiana Department of Transportation and Development Vincent G. Russo, Jr. Post Office Box 94245 Baton Rouge, Louisiana 70804-9245

Re: State Project # 700-37-0110 Kansas Lane Connector- Ouachita Parish

November 15, 2001

Dear Mr. Russo,

As per your inquiry on the above subject project, our tribe is not aware of any spiritual or historical sites in this area. If you encounter any archaeological findings of a site presence during your site study and construction phase, please let us know as soon as possible. If you can, please notify the Caddo Tribe of Binger,Oklahoma of your project interest for their assissments of your interest in this site.

Sincerely,

Chief R/Davis Chief and Tribal Chairman Caddo Adai Tribe of Louisiana

State of Louisiana

James H. Jenkins, Jr. Secretary

Department of Wildlife & Fisheries Post Office Box 98000 Baton Rouge, LA 70898-9000 (225) 765-2800

M.J. "Mike" Foster, Jr. Governor

September 20, 2001

Mr. Vincent G. Russo, Jr. LA DOTD Environmental Engineer Administrator P.O. Box 94245 Baton Rouge, LA 70804-9245

RE: Solicitation of Views, State Project No. 700-37-0110, Kansas Lane Connector, Ouachita Parish

Dear Mr. Russo:

Personnel of the Habitat Section of the Fur and Refuge Division have reviewed the preliminary data for the captioned project. In reviewing our database, no rare, threatened, or endangered species or critical habitats were found within the area of the captioned project that lies in Louisiana. No state or federal parks, wildlife refuges, scenic streams, or wildlife management areas are known at the specified site within Louisiana's boundaries.

The Louisiana Natural Heritage Program has compiled data on rare, endangered, or otherwise significant plant and animal species, plant communities, and other natural features throughout the state of Louisiana. Heritage reports summarize the existing information known at the time of the request regarding the location in question. They should not be considered final statements on the biological elements or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments. The Louisiana Natural Heritage Program requires that this office be acknowledged in all reports as the source of all data provided here. If you have any questions or need additional information, please call Louisiana Natural Heritage Program Data Manager Jill Kelly at 225-765-2643.

Sincerely,

Darry,

Gary Lester, Coordinator Natural Heritage Program

GDL:gdl enclosure: Invoice # 01092001

713 266 8652 P.02

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State of Louisiana

James H. Jenkins, Jr. Secretary

Department of Wildlife & Fisheries Post Office Box 98000 Baton Rouge, LA 70898-9000 (225) 765-2800

October 22, 2001

Ms. Madeline Rogers Arcadis Geraghty and Miller, Inc. 2900 West Fork Drive, Suite 540 Baton Rouge, LA 70827

RE: State Project No. 700-37-0110, Kansas Lane Connector

Dear Ms. Rogers;

Personnel of the Habitat Section of the Fur and Refuge Division have reviewed the preliminary data for the captioned project. Our database indicates a 1977 observation of bigeye shiner (Norropis boops) and a 1966 observation of paddlefish (Polyodon spathula) in the surrounding waters. While no legal protection is afforded these species, they are considered rare in Louisiana. In reviewing our database, no other rare, threatened, or endangered species or critical habitats were found within the area of the captioned project that lies in Louisiana. No state or federal parks, wildlife refuges, scenic streams, or wildlife management areas are known at the specified site within Louisiana's boundaries.

The Louisiana Natural Heritage Program has compiled data on rare, endangered, or otherwise significant plant and animal species, plant communities, and other natural features throughout the state of Louisiana. Heritage reports summarize the existing information known at the time of the request regarding the location in question. They should not be considered final statements on the biological elements or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments. The Louisiana Natural Heritage Program requires that this office be acknowledged in all reports as the source of all data provided here. If you have any questions or need additional information, please call Louisiana Natural Heritage Program Data Manager Jill Kelly at

Sincerely,

Gary Lester, Coordinator Natural Heritage Program

RECEIVED

OCT 2 5 2001 ARCADIS Genighty & Miller

M.J. "Mike" Foster, Jr. Governor



# State of Louisiana



Department of Environmental Quality

M.J. "MIKE" FOSTER, JR. GOVERNOR

J. DALE GIVENS SECRETARY

September 26, 2001

Mr. Vincent Russo, EEA LA DOTD P. O. Box 94245 Baton Rouge, LA 70804-9245

RE: SOV 700-37-0110; Agency Scoping Meeting; Ouachita Parish Proposed 'The Kansas Lane Connector' New Location Roadway

Dear Mr. Russo:

The Department of Environmental Quality has received your request for comments on the above referenced project.

There were no objections based on the limited information submitted to us. Should you encounter a problem during the implementation of this project, please make the appropriate notification to this Department.

The Office of Environmental Services has made the following comments:

Please see the letter from the Office of Environmental Services, Permits Division.

"Any approval, or letter of no objection, granted by LDEQ is relevant only to the granting of funds for the proposed project. This does not relieve the applicant of his responsibility for obtaining any other permits or approvals necessary from LDEQ or other State, Local, or Federal agencies, nor does it influence the Department's ultimate decision on those permits or approvals. A copy of our brochure 'Construction Nonpoint Source Pollution Program' is enclosed." September 26, 2001 Page 2

Please forward all future SOV's to the following address and we will expedite it as quickly as possible. When submitting large proposals please provide triplicate copies.

> Mrs. Lisa Miller Department of Environmental Quality P. O. Box 82231 Baton Rouge, LA 70884-2231

Should you need any additional information please call me at (225) 765-0723.

5 Sincerely,

Lisa L. Miller Contracts & Grants

LLM/nos Enclosures





# State of Louisiana



Department of Environmental Quality

M.J. "MIKE" FOSTER, JR. GOVERNOR SEP 1 1 2001

J. DALE GIVENS SECRETARY

Mr. Vincent G. Russo, Jr., Environmental Engineer Administrator LA DOTD P. O. box 94245 Baton Rouge, LA 70804-9245

# RE: Project No. 700-37-0110; proposed 'The Kansas Lane Connector' new location roadway; LA DOTD; Agency Scoping Meeing; Ouachita Parish

Dear Mr. Russo:

The Department of Environmental Quality (DEQ), Office of Environmental Services (OES), has received your request for comments dated September 4, 2001, regarding the above referenced project. Based on an in-house review of the information you have submitted to this Department, the OES has no objection to the implementation of the proposed project, provided that the issues listed below are satisfied if required. Please note that no field investigation was conducted on this project.

Please note that any project that results in a discharge to waters of the state may require submittal of a Louisiana Pollutant Discharge Elimination System permit application.

This Office recommends that you investigate the following requirements that may impact your proposed project:

- 1. if any of the proposed work is located in wetlands or other areas subject to the jurisdiction of the U.S. Army Corps of Engineers, you should contact the Corps in order to apply for any necessary permits;
- 2. if a permit is required from the Corps, a Water Quality Certification from OES may also be required;
- 3. all precautions should be observed to protect the groundwater of the region (SEE ATTACHMENT);
- 4. all precautions should be observed to control nonpoint source pollution from construction activities (SEE ATTACHMENT); and
- 5. the Department of Environmental Quality (DEQ), has a stormwater general permit for construction areas equal to or greater than five acres. It is recommended that you contact Jan Cedars at (225) 765-2784 to determine if your proposed improvements are covered under that general permit.



Mr. Russo Page Two (2)

If you have any questions, please contact the Contracts and Grants Section at (225) 765-0723.

Sincerely,

Sim Delohourses

Jim Delahoussaye Environmental Scientist Manager Permits Division

JD\ar Attachment

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c:

Northeast Regional Office Surveillance Division



M.J."MIKE" FOSTER, JR. GOVERNOR

#### DEPARTMENT OF NATURAL RESOURCES OFFICE OF CONSERVATION <u>MEMORANDUM</u>

JACK C. CALDWELL SECRETARY

PHILIP N. ASPRODITES COMMISSIONER OF CONSERVATION

November 19, 2001

TO: Mr. Vincent G. Russo, Jr. Environmental Engineer Administrator Louisiana Dept. of Transportation and Development Post Office Box 94245

Baton Rouge, Louisiana 70804-9245

FROM: J Felix J. Boudreaux, Assistant Commissioner of Conservation

RE:

Kansas Lane Connector, Environmental Impact Study State Project No. 700-37-0110

Dear Mr. Russo:

A review of the October 18, 2001 EIS for the proposed Kansas Lane Connector, located in Ouachita Parish, Louisiana, indicates several gas and condensate wells that are either producing or P&A within the study area. These wells, although within the study area, do not seem to impact the "possible connectors" as shown on the exhibit, University of Louisiana at Monroe, Campus Plan, included within the EIS. However, as the proposed route of the project is finalized, the Office of Conservation would recommend that the selected contractor review the files in the Office of Conservation, Monroe District Office, to determine if there are any wells that would impact the selected route. A manual review of the files to determine the permitted location and current status, as well as a review of the data on the Department of Natural Resources website <u>www.dnr.state.la.us</u> may assist the contractor in locating any well that may impact the route of the proposed Kansas Lane Connector project.

The Office of Conservation Monroe District Office is located at 122 St. John Street, Monroe, La. 71202, Telephone 318-362-3111. Should you have any questions, or require additional assistance please contact Michael Killeen at 225-342-5525.

cc: Charles McGough, District Manager, Monroe District Office Michael Killeen, Director Geological Division FJB/her



# United States Department of the Interior

FISH AND WILDLIFE SERVICE 646 Cajundome Blvd. Suite 400 Lafayette, Louisiana 70506

September 24, 2001

Mr. Vincent G. Russo, Jr. Environmental Engineer Administrator Louisiana Dept. of Transportation and Development Post Office Box 94245 Baton Rouge, Louisiana 70804-9245

Dear Mr. Russo:

Please reference your September 4, 2001, letter announcing a September 25, 2001, scoping meeting for the proposed Kansas Lane Connector Environmental Impact Study (EIS) [Federal Aid Project No. HP-T021(018), State Project No. 700-37-0110]. The proposed project represents one segment of the proposed inter-loop project connecting Forsythe Avenue with Kansas Lane. That segment involves the construction of a new highway from the junction of U.S. Highway 165 and Forsythe Avenue to the junction of U.S. Highway 80 and Kansas Lane in Monroe, Ouachita Parish, Louisiana. According to your letter, the purpose of the meeting is to describe the project planning process and schedule for completing the EIS, and to gather scoping-level comments from interested parties to ensure that the study team addresses all environmental issues. Unfortunately, we will be unable to participate at the forthcoming meeting, so we are submitting this letter to provide Fish and Wildlife Service input to the EIS scoping process. The following comments are provided in accordance with the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.), the Fish and Wildlife Coordination Act (48 Stat 401, as amended; 16 U.S.C. 661 et seq.), and the National Environmental Policy Act (NEPA) of 1969.

Via our January 18, 2001 letter, the Service agreed to serve as a cooperating agency in the NEPA compliance process for the proposed project. That letter also stated that no Federally listed threatened or endangered species were present in the proposed project area. We also attended a planning meeting on September 28, 1999, at which Service concerns regarding the proposed project's potential direct and secondary impacts to forested wetland habitat, and the need to avoid, reduce, and/or compensate for those impacts was identified. In furtherance of that input, we recommend that the EIS thoroughly address the justification and need for this segment of the overall inter-loop project that would connect Forsythe Avenue with Kansas Lane. Those inner-city arteries currently connect via U.S. Highway 165, a four-lane highway. Traffic flow through the University of Louisiana at Monroe is currently serviced by Bon Aire Road, and there is no development north and east of the University that would be serviced by the proposed loop segment. The independent utility and economic benefits of the proposed highway segment, beyond those already in place, should be clearly explained in the EIS.

Measures to minimize project impacts to wetland habitats should also be addressed in the EIS. The Service strongly recommends that the EIS evaluate a roadway alignment that traverses nonwetlands wherever possible and, when wetland impacts are not avoidable, the roadway alignment should follow the wetland interface on much as possible to reduce these impacts.

At the September 28, 1999 meeting, it was stated that the proposed highway segment would involve the construction of 5 lanes (four travel lanes and a turning lane). The Service is concerned that the proposed turning lane could induce secondary habitat losses within the undeveloped forested wetland area located to the northeast of the proposed highway. Accordingly, we recommend that the alternative of a 4-lane road with controlled access restrictions be fully formulated and evaluated as a project alternative in undeveloped wetland areas. Additionally, we recommend that construction of a 4-lane elevated highway in those undeveloped areas be fully evaluated in the EIS as a project alternative designed to minimize wetland impacts.

The proposed highway would require that a bridge be constructed over Bayou Desiard. Design features that would ensure that the discharge capacity of Bayou Desaird and its adjacent flood plain are not adversely impacted should be addressed in the EIS.

We appreciate the opportunity to provide comments in the early planning stages of this proposed project. If you need further assistance, please contact Patti Holland (337/291-3121) of this office.

Sincerely. RusselTC Acting Field Supervisor

cc: Corps of Engineers, Vicksburg, MS LDWF, Baton Rouge, LA EPA, Dallas, TX FHWA, Baton Rouge, LA

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# **OUACHITA COUNCIL OF GOVERNMENTS**

Monroe

West Monroe

**Ouachita Parish** 

# 1913 STUBBS AVENUE MONROE, LOUISIANA 71201

October 16, 2002

## RECEIVED

OCT 2 1 2002

Ms. Lucy Cobb Arcadis G&M, Inc. 2900 Westfork Drive Suite 540 Baton Rouge, Louisiana 70827

ARCADIS Geragiity & Miller

Subject: Alternatives - Kansas Lane Connector Environmental Impact Statement (EIS) Monroe, Louisiana, State Project No. 700-37-0110, Federal Aid Project No. HP-T021(018)

Dear Ms. Cobb:

This letter represents a request from the Ouachita Council of Governments (MPO for the Monroe area) to your organization concerning the Kansas Connector EIS for Monroe, Louisiana.

OCOG is asking that you add a fourth alternative to the list of three alternatives. This is the alternative which has been proposed by the Monroe Chamber of Commerce as delineated on the attached map.

Thank you for your consideration of this request.

Sincerely,

 $a a \in$ 

David A. Creed Executive Director

DAC:lc Enc.

Cc: Lori Reneau Kay Katz Terry Denmon





# STATE OF LOUISIANA HOUSE OF REPRESENTATIVES

207C Louisville Avenue Monroe, Louisiana 71201-5823 Telephone: (318) 340-0800 Fax: (318) 340-0911 email: larep016@legis.state.la.us.

Health and Welfare Municipal, Parochial & Cultural Affairs Transportation, Highways and Public Works

October 18, 2002

# RECEIVED

OCT 2 1 2002

ARCADIS Geraghty & Miller

Ms. Lucy Cobb Arcadis G&M, Inc. 2900 Westfork Drive, Suite 540 Baton Rouge, LA 70827

RE: Alternatives—Kansas Lane Connector Environmental Impact Statement (EIS) Monroe, LA, State Project No. 700-37-0110, Federal Aid Project No. HP-T021(018)

Dear Ms. Cobb:

I am requesting that you add a fourth alternative to the list of three alternatives for the Kansas Connector EIS for Monroe, Louisiana. This is the alternative that has been proposed by the Monroe Chamber of Commerce as delineated on the attached map.

If I can be of any assistance, please do not hesitate to contact me.

Sincerely, Káy Kellogg Katz

Kay Kellogg Katz District 16

Cc: Monroe Chamber of Commerce David Creed Byron J. "Barney" O'Quinn

KAY KELLOGG KATZ District 16



**City of Monroe**, **Houisiana** MAYOR - COUNCIL GOVERNMENT

ENGINEERING SERVICES DEPARTMENT CIVIL ENGINEERING DIVISION 400 LEA JOYNER EXPRESSWAY P. O. BOX 123 MONROE, LOUISIANA 71210-0123 -513-529-7374-318-329-2211

October 28, 2002

#### RECEIVED

Mrs. Lucy Cobb Arcadis G&M, Inc. 2900 Westfork Drive Suite 540 Baton Rouge, Louisiana 70827

OCT 3 0 2002

ARCADIS Geraghty & Miller

NOV 4 - 2002

RECEIVED

ARCADIS Geraghty & Miller

Subject: Alternatives-Kansas Lane Connector Environmental Impact Statement (EIS) Monroe, Louisiana, State Project No. 700-37-0110 Federal Aid Project No. HP-T021 (018)

Dear Ms Cobb:

This letter recommends a more direct route for the Kansas Lane Connector as the southern more westerly alternative; with limited access and a free-flow right turn to US 165 North bound to move traffic.

Sincerely,

(Isa) Asa Ray, P.E

City Engineer

AMR/nl

cc: Representative Kay Kellogg Katz Terry Denmon, P.E.

#### **APPENDIX A-5**

Correspondence Received from Louisiana Division of Archaeology and State Historic Preservation Office

RECEIVED

JUL 1 6 2984



STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT P.O. Box 94245 Baton Rouge, Louisiana 70804-9245 www.dotd.louisiana.gov May 10, 2004



JOHNNY B. BRADBERRY SECRETARY

The Final Report has been reviewed and accepted.

Pam Breaux

State Historic Preservation Officer

KATHLEEN BABINEAUX BLANCO GOVERNOR

> STATE PROJECT NO. 700-37-0110 F.A.P. NO. HP-T021(018) NAME: KANSAS LANE CONNECTOR PARISH: OUACHITA

Ms. Pam Breaux State Historic Preservation Officer Department of Culture, Recreation and Tourism Office of Cultural Development P.O. Box 44247, Capitol Station Baton Rouge, LA 70804

SUBJECT: Final Cultural Resources Survey

Dear Ms. Breaux:

Enclosed for your library are two copies of the final Cultural Resources Survey titled "Intensive Cultural Resources Survey, Kansas Lane Connector, Ouachita Parish, Louisiana" prepared by Earth-Search, Inc. for the above-captioned project.

If you have any questions or comments, please call me at (225) 242-4505.

Sincerely,

Vincent G. Russo, Jr. Environmental Engineer Administrator

Élizabeth L. Davoli Environmental Impact Specialist

Enclosures VGR/ELD/ld cc: Mr. Wayne Nguyen



### **APPENDIX A-6**

Prime Farmland Rating Form

Calavitta							NF	RCS-CPA-1	
		MLAND CONV	ERSION	IMPACT RAT	TING			(Rev. 1-91)	
reginested -		FOR CORRIDO	OR TYPE	PROJECTS					
Farmland Conner		3. Date of Land Evaluation Request							
ration Fire KANKIN		8/28/02 Sheet 1 of					·		
	Ellive Exh	FHWA							
			6. County and State Ouachita Parish, LA						
			1. Date Request Received by NRCS 2. Person Completing Form						
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11+001W	Ann Allen	itional parts of this for	m).	YES NO					
Seil Seienchist		6. Farmable Land in Government Jurisdiction			7. Amount of Farmland As Defined in FPPA				
		Acres:	%		Acres:		15:	%	
		9. Name of Loo	ai Site Asse	ssment System		10. Date	Land Evaluation Re	turned by NRC	
RECEIVED			Alternative		ve Corri	orridor For Segment			
				Corridor A	Corr	idor B	Corridor C	Corridor I	
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1. Area in Nonurban Use			15						
2. Perimeter in Nonurban Use			10						
3. Percent Of Corridor Being Farmed			20		ļ				
4. Protection Provided By State And Local Government			20		ļ				
5. Size of Present Farm Unit Compared To Average			10						
Creation Of Nonfarmable Farmland Availability Of Farm Support Services			5				+		
8. On-Farm Investments			20				1		
9. Effects Of Conversion On Farm Support Services		25		1		1			
10. Compatibility With Existing Agricultural Use			10						
TOTAL CORRIDOR ASSESSMENT POINTS			160	0	0		0	0	
PART VII (To be completed by	Federal Agency)								
Relative Value Of Farmland (From Part V)			100						
Total Corridor Assessment (From Part VI above or a local site				<u> </u>		+			
assessment)		160	0	0		0	0		
TOTAL POINTS (Total of above 2 lines)			260	0	0		0	0	
1. Corridor Selected: 2. Total Acres		f Farmlands to be	3. Date Of Selection:		4. Was A Local Site Assessment Used?				
	Converted by	Converted by Project:							
	1				1				

Signature of Person Completing this Part:

DATE

NOTE: Complete a form for each segment with more than one Alternate Comdor

\* All soils inside city limits or immediately adjacent to the city limits are considered to be Nonprime Farmland. Thurman Allen, soil scientist, NRCS

### **APPENDIX A-7**

Correspondence from USACE and USFWS Regarding Cooperating Agencies
Reference Lettre



### U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION 5304 FLANDERS DRIVE, SUITE A BATON ROUGE, LOUISIANA 70808

January 8, 2001

IN REPLY REFER TO FAP HP-T021(018) SP No 700-37-0110 Kansas Lane Connector Ouachita Parish

RE: Environmental Impact Statement

Colonel Robert Crear, Commander Department of the Army Vicksburg District, Corps of Engineers 4155 Clay Street Vicksburg, Mississippi 39180-3415

Attention: Mr. Michael F. McNair Chief, Permit Section Regulatory Branch

Dear Colonel Crear:

The Federal Highway Administration (FHWA), in cooperation with the Louisiana Department of Transportation and Development, is preparing an environmental impact statement (EIS) for the subject project. Since the project will almost certainly require a section 404 permit and because of your agency's legal jurisdiction over such permits we are requesting you to be a cooperating agency.

The proposed project involves construction of a new highway facility on an alignment to be determined. The proposed project, known locally as the Kansas Lane Connector, is generally located in the northeast quadrant of Monroe, Louisiana. The western terminus of the proposed project will be in the vicinity of the junction of U.S. Highway 165 and Forsythe Avenue and the eastern terminus will be in the vicinity of the junction of U.S. Highway 80 and Kansas Lane. The approximate length of the project is 4.3 kilometers (2.7 miles). Final length will depend on the alternative selected. Enclosed is a drawing of the logical termini.

How to the file

Your agency's involvement should entail those areas under its jurisdiction, and no direct writing or analysis will be necessary for the document's preparation. The following are activities we will take to maximize interagency cooperation:

- 1) Invite you or your representative to coordination meetings.
- 2) Consult with you on any relevant technical studies that will be required for the project.
- 3) Organize joint field reviews with you.
- 4) Provide you with project information, including study results.
- 5) Encourage your agency to use the above documents to express your views on subjects within your jurisdiction.
- 6) Include information in the project environmental documents that cooperating agencies need to discharge their National Environmental Policy Act (NEPA) responsibilities and any other requirements regarding jurisdictional approvals, permits, licenses, and/or clearances.

Please involve all appropriate sections within the Corps of Engineers.

You have the right to expect that the EIS will enable you to discharge your jurisdictional responsibilities. Likewise you have the obligation to inform us if, at any point in the process, your needs are not being met. We expect that at the end of the process the EIS will satisfy your NEPA requirements including those related to project alternatives, environmental consequences, and mitigation. Further, we intend to utilize the EIS as our decision making document and as the basis for any required permit applications. We expect the permit application to proceed concurrently with the EIS approval process.

We look forward to your response to the request and your role as a cooperating agency on this project. If you have any question or would like to discuss in more detail the project or our agency's roles and responsibilities during the preparation of this EIS, please contact Mr. William Farr at (225) 757-7615.

Sincerely yours,

\s\ William A. Sussmann William A. Sussmann Division Administrator

Enclosure cc: Mr. Vincent Russo han:sb S:\project working\t021018.010108.han.coop.b.doc

Reference Lette



### U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION 5304 FLANDERS DRIVE, SUITE A BATON ROUGE, LOUISIANA 70808

January 9, 2001

IN REPLY REFER TO FAP HP-T021(018) SP No 700-37-0110 Kansas Lane Connector Ouachita Parish

RE: Environmental Impact Statement

U.S. Fish and Wildlife Service 646 Cajun Dome Blvd. Suite 400 Lafayette, Louisiana 70506

Attention: Mr. David Fruge

Dear Mr. Fruge

The Federal Highway Administration (FHWA), in cooperation with the Louisiana Department of Transportation and Development, is preparing an environmental impact statement (EIS) for the subject project. Since the project will involve coordination of potential impacts to endangered species and because of your agency's legal jurisdiction over the Endangered Species Act we are requesting you to be a cooperating agency.

The proposed project involves construction of a new highway facility on an alignment to be determined. The proposed project, known locally as the Kansas Lane Connector, is generally located in the northeast quadrant of Monroe, Louisiana. The western terminus of the proposed project will be in the vicinity of the junction of U.S. Highway 165 and Forsythe Avenue and the eastern terminus will be in the vicinity of the junction of U.S. Highway 80 and Kansas Lane. The approximate length of the project is 4.3 kilometers (2.7 miles). Final length will depend on the alternative selected. Enclosed is a drawing of the logical termini.

Your agency's involvement should entail those areas under its jurisdiction, and no direct writing or analysis will be necessary for the document's preparation. The following are activities we will take to maximize interagency cooperation:

- 1) Invite you or your representative to coordination meetings:
- Consult with you on any relevant technical studies that will be required for the project:
- 3) Organize joint field reviews with you;
- 4) Provide you with project information, including study results:
- 5) Encourage your agency to use the above documents to express your views on subjects within your jurisdiction: and
- 6) Include information in the project environmental documents that cooperating agencies need to discharge their National Environmental Policy Act (NEPA)

responsibilities and any other requirements regarding jurisdictional approvals,

permits, licenses, and/or clearances.

Please involve all appropriate sections within the U.S. Fish and Wildlife Service.

You have the right to expect that the EIS will enable you to discharge your jurisdictional responsibilities. Likewise you have the obligation to inform us if, at any point in the process, your needs are not being met. We expect that at the end of the process the EIS will satisfy your NEPA requirements including those related to project alternatives, environmental consequences, and mitigation.

We look forward to your response to the request and your role as a cooperating agency on this project. If you have any question or would like to discuss in more detail the project or our agency's roles and responsibilities during the preparation of this EIS, please contact Mr. William Farr at (225) 757-7615.

Sincerely yours,

\s\ William A. Sussmann

William A. Sussmann Division Administrator

#### Enclosure

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cc: Mr. Vince Russo, LDOTD Environment

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# United States Department of the Interior

FISH AND WILDLIFE SERVICE 646 Cajundome Blvd. Suite 400 Lafayette, Louisiana 70506 January 18, 2001



Lerter

Mr. William A. Sussman Division Administrator Federal Highway Administration P. O. Box 3929 Baton Rouge, Louisiana 70821-3929

Dear Mr. Sussman:

Please reference your January 9, 2001, letter regarding Federal Aid Project No. HP-T021(018), State Project No. 700-37-0110. The proposed project involves the construction of a new highway from the junction of U.S. Highway 165 and Forsythe Avenue to the junction of U.S. Highway 80 and Kansas Lane in Monroe, Ouachita Parish, Louisiana. The U.S. Fish and Wildlife Service has reviewed your request to be a cooperating agency, and submits the following comments in accordance with provisions of the National Environmental Policy Act (NEPA) of 1969 and the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

The Service agrees to serve as a cooperating agency in the proparation of the necessary NEPA documents for the proposed highway project. Our role as a cooperating agency in this matter will be limited to: 1) participating in meetings and field trips to obtain baseline information on project-area fish and wildlife resources; 2) evaluating the proposed project's impacts to fish and wildlife resources, and assisting in the development of measures to avoid, minimize, and/or compensate for those impacts; and 3) providing any necessary assistance in the assessment and documentation of impacts to Federally listed threatened or endangered species and their critical habitat.

According to our current data, no Federally listed threatened or endangered species presently occur within the proposed project area. If there are changes in the scope or location of the project, or if the project has not been initiated within 1 year, follow-up endangered species consultation should be promptly initiated with this office prior to making expenditures for construction.



COPY FARD to CDOTO 2/4/01, WY We appreciate the opportunity to be a cooperating agency and to make comments in the planning stages of the proposed project. If you have any questions regarding our comments, please contact Brigette Decoteau of this office (337/291-3108).

Sincerely,

in h. Friege

David W. Frugé Field Supervisor

cc: LDWF, Natural Heritage Program, Baton Rouge, LA

DEPARTMENT OF THE ARMY

Polipionice 20ther attracted

VICKSBURG DISTRICT, CORPS OF ENGINEERS 4155 CLAY STREET VICKSBURG, MISSISSIPPI 39183-3435

REPLY TO ATTENTION OF:

http://www.mvk.usace.army.mil/ January 30, 2001

Operations Division Regulatory Branch

SUBJECT: FAP HP-T021(018) SP No 700-37-0110, Kansas Lane Connector, Ouachita Parish, Louisiana, Environmental Impact Statement

Mr. William A. Sussmann, Division Administrator U.S. Department of Transportation Federal Highway Administration 5304 Flanders Drive, Suite A Baton Rouge, Louisiana 70808

Dear Mr. Sussmann:

I am responding to your request of January 8, 2001, that the Vicksburg District be a cooperating agency in the development of the subject Environmental Impact Statement.

We are pleased to participate as a cooperating agency. Mr. Philip Hollis, telephone (601) 631-5491, telefax (601) 631-5459, email regulatory@smtp.lmk.usace.army.mil, will be the point of contact for this coordination. If you have any questions or need someone from our office to attend a meeting, please contact Mr. Hollis.

Sincerely,

Elí zabeth S. Guynes

Chie Regulatory Branch

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### **APPENDIX A-8**

Comments from Cooperating Agencies on Selection of Preferred Alternative



# United States Department of the Interior

FISH AND WILDLIFE SERVICE 646 Cajundome Blvd. Suite 400 Lafayette, Louisiana 70506

August 25, 2004

Mr. Vincent G. Russo Environmental Engineer Administrator Louisiana Department of Transportation and Development P. O. Box 94245 Baton Rouge, Louisiana 70804-9245

Dear Mr. Russo:

Please reference a July 15, 2004, letter from Arcadis G & M, Inc. (Arcadis) regarding State Project No. 700-37-0110/Federal Aid Project HP-T021(018). That project proposes the construction of the Kansas Lane Connector; a roadway to improve access between U.S. Highway 80/Desiard Street (US 80) and the existing Kansas Lane to the south, and U. S. Highway 165 (US 165) and Forsythe Avenue Extension to the north. The above-referenced letter requested Fish and Wildlife Service concurrence with the recommended preferred alternative. The Service has reviewed the information provided and offers the following comments in accordance with provisions of the National Environmental Policy Act (83 Stat. 852; 42 U.S.C. 4321-4347) (NEPA) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.).

By letters dated April 1, and July 11, 2002, the Service recommended that the Environmental Impact Study EIS for the proposed project fully evaluate the use of alternatives that would incorporate Segment R, a loop to the south following the edge of previously developed areas. In a letter dated August 19, 2002, the Federal Highway Administration agreed to adjust Alternatives 2 and 3 to include the requested Segment R. Alternatives 2 and 3 were subsequently selected as alternatives warranting further review; however, the Draft EIS did not incorporate Segment R into Alternatives 2 and 3 as previously agreed. Instead, the Draft EIS included Segment R into Alternatives 9 and 10. During a July, 28, 2004, teleconference, representatives of your agency and Arcadis stated that Segment R, and thereby, Alternatives 9 and 10, were eliminated from further consideration because the design speed of 45 miles per hour could not be maintained within the curvature of Segment R.

Each of the proposed project alternatives would, to varying degrees, adversely affect forested wetland habitat. The July 15, 2004, letter and attachments indicate that the preferred Alternative (i.e., Northern Alternative) would directly impact approximately 28 acres of forested flood plain wetlands comprised of mature bottomland hardwoods and cypress/tupelo swamp. In addition to those direct impacts, construction of the proposed roadway along the preferred alignment would effectively divide and fragment the Chauvin Swamp, and would disrupt the existing hydrology of that area.

A site inspection was conducted on August 18, 2004, to assess the value of the forested wetlands

where the roadway would traverse the Chauvin Basin. The first 500 to 700 feet of each end of the forested tract contains wet bottomland hardwoods that are subject to a temporary flooding regime. The central portion of the forested area is characterized by seasonally to sem-permanently flooded bald cypress/water tupelo swamp. Water marks on tress along the edge of that swamp indicate average water levels during the wet season of 2.5 feet. Toward the center of the swamp, depths likely increase. Because of the documented hydrologic and functional values of the Chauvin Basin swamp, the Service recommends that the approximately 1,500-foot-long section of the roadway traversing the lower elevations of the Chauvin Basin swamp be bridged as shown on the attached map. If it is determined that the construction of a bridge in that area is cost prohibitive, then the Service suggests that a modification of the Section R alignment containing less curviture be evaluated (see attached map) as the least-damaging alternative.

During the July 28, 2004, teleconference, the issue of roadway access was discussed. The regulatory and resource agencies recommended that the preferred-alternative alignment be revised to contain greater control of access. At the site visit on August 18, 2004, a map detailing the requested access controls was distributed. The Service supports the revised proposal for controlled access of all roadway sections located adjacent to forested wetland areas as depicted on that map.

During the site visit, the option of adding an intersection for access to the University of Louisiana at Monroe was also evaluated. The requested intersection would be located at the point where the preferred roadway alignment comes closest to the field located between the church and the fraternity houses. Because wetland impacts would be minimal, the Service would not object to construction of that requested intersection.

In summary, the Service would concur with the your choice of the Northern Alignment as the preferred alignment, provided that a bridge is constructed through the deepwater swamp to minimize impacts to area hydrology, and that the revised proposal for greater control of access is formally adopted as an integral feature of the preferred alignment.

We appreciate the opportunity to provide these comments, and look forward to participating in further planning of the proposed Kansas Lane Connector Project. If further information is needed, please contact Patti Holland (337/291-3121) of this office.

Russell C. Watson Supervisor Louisiana Field Office

Arcadis G & M, Baton Rouge, LA
Corps of Engineers, Eastern Regulatory Functions Branch, Vicksburg, MS
Federal Highway Administration, Baton Rouge, LA
EPA, Dallas, TX
LA Dept. of Wildlife and Fisheries, Baton Rouge, LA

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### DEPARTMENT OF THE ARMY

VICKSBURG DISTRICT, CORPS OF ENGINEERS 4155 CLAY STREET VICKSBURG, MISSISSIPPI 39183-3435 RECEIVED

SEP 1 n 2004 ARCADIS Genghty & Miller

REPLY TO ATTENTION OF:

September 7, 2004

Operations Division Regulatory

SUBJECT: Comments and Concurrence on the Preferred Alternative Report, Kansas Lane Connector, Monroe, Louisiana, State Project No. 700-37-0110, Federal Aid Project No. HP T021 (018)

Ms. Madeline Rogers Project Scientist ARCADIS G&M, Incorporated 2900 West Fork Drive, Suite 540 Baton Rouge, Louisiana 70827

Dear Ms. Rogers:

I am responding to your letter of July 15, 2004 concerning the subject project. We appreciate the opportunity to participate in the continued development of this project.

A field site visit was conducted, August 18, 2004, to check designated areas being considered for limited access from the Kansas Lane Connection. Further consideration of these areas is necessary as the project progresses into the final stages. The additional limited access areas would be finalized after further wetland delineation studies. Although, I concur with the selection of the Preferred Alternative for this project, further discussion on limited access and avoidance issues remain.

If you have any questions, please contact Ms. Susan A. Jarvis of this office, telephone (601) 631-5146, fax (601) 631-5459 or e-mail address: regulatory@mvk02.usace.army.mil. In any future correspondence, please refer to the identification No. MVK-2000-1263.

I am forwarding a copy of this letter to Mr. Vincent Russo, Environmental Engineer Adminstrator, Louisiana Department of Transportation and Development, Post Office 94245, Baton Rouge, Louisiana 70804-9245.

Sincerely,

Elízabeth S. Guynes Chief, Regulatory Branch

### **APPENDIX A-9**

Public Comments Summary and Responses on DEIS

### TOPIC: Favoring Combination of Central Build Alternative South of Bayou Desiard Linking with the Northern Alternative North of Bayou Desiard

DATE	NAME	MEDIUM	COMMENT	
10-16-03	Rep. Katz	Oral Comment	Preference for a combination of the Central Alternative at US Hwy. 80 linking with the Northern Alternative north of Bayou Desiard.	This al Enviro
10-31-03	Rep. Katz	Website	Preference for a combination of the Central Alternative at US Hwy. 80 linking with the Northern Alternative north of Bayou Desiard. This combination of the Central+Northern Alternative appears to disturb the fewest number of people.	See ab maps r disturb conduc Centra 43 tota result includ homes about will re the No family
10-17-03	Tracey Hutson	Written Comment	Preference for combination of Central and Northern Alternatives because this combination will affect least amount of residents and is most logical. Identifies possible congestion impacts at the Garrett Road and I-20 interchange and at Garrett Road and the railroad crossing. Recommends that Kansas Lane Connector Project be completed in conjunction with improvements to these intersections.	Comm residen Conne develo planne areas. Garret
10-31-03	Nick J. Bruno	Written Comment	In favor of the project. Prefers combination of Central and Northern Alternatives due to minimal impacts relative to other alternatives. Opposes Southern Alternative due to proximity to the University of Louisiana at Monroe's (ULM's) recreational facilities.	Comm resider
10-16-03	Carl Owens	Written Comment	In favor of combination Central/Northern Alternative.	Comm
10-16-03	John Schween	Oral Comment	Past Chairman of the Chamber of Commerce. Feels combination of Central and Northern Alternatives displaces fewest people.	See at
10-16-03	Eric Hogan	Oral Comment	In general favor of the project due to the economic benefits and traffic improvements it will bring. Prefers the Central and Northern combination. Represents Monroe Chamber of Commerce. Central-Northern combination route seems to have the least impact.	Comm reside
10-16-03	Mayor Jamie Mayo	Oral Comment	Very supportive of the project and stands in support of the Central to Northern Alternative. Notes that no one wanted I-20 to be built and that it displaced a lot of people. However, since the completion of I-20, it has brought much progress to an otherwise agricultural community. Kansas Lane Connector would be a major economic boost to Monroe and Ouachita Parish.	Comm

#### RESPONSE

Iternative has been considered in the Final onmental Impact Statement (FEIS).

bove comment. Although a visual assessment of the may indicate that the fewest number of people are bed by the Central+Northern Alternative, field studies incted by the design engineers indicate that the al+Northern combination will result in approximately cal displacements while the Northern Alternative will in about 32 total displacements. Total displacements de apartment units. With respect to single-family s, the Central+Northern combination will result in 13 total displacements while the Northern Alternative esult in approximately 8 displacements. Therefore, orthern Alternative will impact the fewest singley and apartment residents.

nents acknowledged. See above response regarding ential displacements. Construction of the Kansas Lane ector is compatible with local and regional opment plans for system linkage with respect to ed improvements to the Garrett Road and the I-20 . Completion time for the Kansas Lane Connector and ett Road will be contingent on funding.

nents acknowledged. See above response regarding ntial displacements.

nent acknowledged.

oove response regarding residential displacements.

nents acknowledged. See above response regarding ntial displacements.

nents acknowledged.

TOPIC: In Favor of Project No Preference on Build Alternative.

DATE	NAME	MEDIUM	COMMENT	
10-14-03	Terrence P. Jones State Farm Insurance	Written Comment	Desires a speedy decision process and trusts that the process will consider negative impacts to human and natural environment. Recognizes that adequate transportation is crucial to the efficient operation of business.	Comm Policy project decision impact public LDOT
10-31-03	Doyle Parker	Written Comment	Wants a five-lane connector with a turn lane from mall north to US Hwy. 165.	Comm presen the RC concep limited Bon A
				the int Railro
No Date	Earl Banks	Written Comment	Kansas Lane Connector is needed and should have been completed years ago. Prefers to connect Forsythe and cross the Ouachita River rather than going the long way to cross the River.	Comm crossin this pr
9-17-03	Joe Ledoux	Written Comment	Favors a quick route from Highway 165 North to I-20 at Garrett Road and back. Favors the least expensive of the three alternatives.	Comm estima The le Alterr
10-16-03	Joseph Hakim	Oral Comment	In favor of the project. Feels that if the people love the area they will relocate to other places within the area. The reduced traffic on the other service streets will reduce the maintenance costs on those streets.	Comn
10-16-03	Tom Duzan	Oral Comment	Community needs to build the project and then the Northern Loop so that the area will not stagnate.	Comn

#### RESPONSE

nents acknowledged. The National Environmental y Act (NEPA) mandates that all federally funded cts take a balanced approach to transportation on-making that takes into account the potential cts on the human and natural environment and the c's need for safe and efficient transportation. The TD and FHWA hope to complete a Record of ion (ROD) by Summer 2005.

nent acknowledged. Final construction details will be nted at the Design Hearing to be conducted following OD issuance and completion of final design. The eptual design shown on Figure 2-11 shows a five-lane ed access roadway between the southern terminus to Aire Drive. The roadway then narrows to four lanes to itersection with the Arkansas-Louisiana-Mississippi oad.

nents acknowledged. Any project involving a ing over the Ouachita River is currently unrelated to roject.

nents acknowledged. The Preferred Alternative was ated to have a total construction cost of \$16,349,000. east costly Build Alternative was the Southern native at \$16,028,000.

nents acknowledged.

nent acknowledged.

DATE	NAME	MEDIUM	COMMENT	
10-16-03	Terry Brown	Oral Comment	Believes that all alternatives are unacceptable, especially the Central and Northern Alternatives because they impact her home. She owns the swamp area north of the university but believes that human impacts should be considered more strongly than wetland or wildlife issues.	Comm that co enviro proces
10-26-03	Terry A. Brown	Written Comment	Prefers improvements to US Hwy. 165 between US 80 and Forsythe Ext. to relieve congestion. Questions reduction in travel times mentioned in project Purpose and Need. Takes issue with DEIS assertion that the Northern Alternative will not diminish the quality of life for the residents on this route. Concerned about noise impacts. Calls new road unnecessary, but if built would prefer Northern Alternative. Feels that the Central Alternative makes the least sense from economic and human cost perspectives. Supports environmental concerns but states that avoiding the use of a few unoccupied acres of woods to displace 55 homes is not desirable. Feels that traffic traveling away from the university should be routed on a new alignment through the woods bypassing Bon Aire Drive. Calls land and right-of-way cost estimates for all alternatives "grossly inadequate."	Traffic improv six lan the Fo volum improv Conne area no based contro 45 mil accord <i>Policy</i> barrier Altern been r All otl
10-24-03	Dorothy Stovall	Written Comment	Does not agree that traffic congestion will be relieved by construction of new road. Objects to interruptions to ULM and residential communities.	Comm traffic
10-29-03	Robert Wilson Virginia Wilson	Written Comment	Prefers instead for funds to be directed toward the improvements of existing major highways and other connections to US Hwy. 165, I-20, and the airport. Identifies the need for a loop around the City of Monroe.	Alloca Kansa purpos Kansa conne I-20.

### RESPONSE

nents acknowledged. The NEPA process mandates onsideration be given to both the natural and human onments during the transportation decision-making ss.

studies indicate that even with planned vements to US 165 (widening of US 165 from four to nes), US 165 will still be heavily congested north of orsythe Extension and South of US 80. Traffic ne on US 165 between Forsythe and US 80 will show vement with the construction of the Kansas Lane ector. It can be assumed that travel times between the ear the mall to Forsythe Extension will be reduced on the fact that Kansas Lane will be a direct, partial ol of access roadway with design and posted speeds of les per hour. Noise impacts were re-evaluated in dance with LDOTD's 2004 Louisiana Traffic Noise . Results of the noise analysis indicate that a noise is neither reasonable nor feasible for the Preferred native. Land and right-of-way cost estimates have evised from those presented at the Public Hearing. her comments acknowledged.

nents acknowledged. See above comment regarding congestion.

ated funding was provided for construction of the as Lane Connector only and can only be used for that use under the current funding arrangements. The as Lane Connector is the last of a five-segment project ecting the northern and eastern sides of Monroe and

DATE	NAME	MEDIUM	COMMENT	<u> </u>
10-15-03	Claude Baggett Alice Baggett	Written Comment	Advantages are recognized in connecting Kansas Lane to Highway 165 at the Forsythe Extension if and only if the bottleneck at the mall and Garrett Road can be improved at the same time. Feels that Monroe would be better served by an Interstate Bypass, which would cross the Ouachita River on the north side of Monroe and intersect I-20 at Millhaven Road or on the West Side of the airport. Calls the Kansas Lane Connector an interim, partial fix that will only improve traffic on Desiard at ULM even though most truck traffic will continue to use Highway 165. Objects most to the southern route because of location of their home. Feels that environmental and archeological assessment methods used in developing this DEIS are superficial and entirely arbitrary because artifacts have been found by residents in the area. Finds fault and unfairness in the way property values are assessed in impact analyses and should consider condition of the project and sees this as an opportunity for homeowners to sue.	Plan Lam exp reli- Cor ack five side ther bec The bec The typ Kan acc pro esti bas cos pro acq ack Bu: acc pro ack
10-16-03	Helen Eggleston	Oral Comment	Central route would displace home. Against the entire project because the acquisition of property for project is not what the value of the home is worth.	See
No Date		Written Comment	Prefers No Build Alternative, but combination of Northern and Central Alternatives is second choice.	Co
10-31-03	A. Lane Howell	Written Comment	"You cannot build a city by destroying parts of it." Try other alternatives before killing an area that is beautiful and valuable.	Cor alte

#### RESPONSE

ns are underway to connect Garrett Road and Kansas ne to create a direct access from the mall and I-20. It is ected that this project will provide some congestion ef at the Pecanland Mall and Garrett Road areas. mments regarding the interstate bypass are nowledged. The Kansas Lane Connector is the last of a e-segment project connecting the northern and eastern es of Monroe and I-20. Traffic studies indicate that re will be an increase in traffic on existing Kansas Lane ause Kansas Lane is currently an underutilized roadway. erefore, it is not expected that most truck traffic or other es of vehicles will continue to use US 165 once the nsas Lane Connector is constructed. Environmental and haeological assessments have been completed in ordance with NEPA requirements. Cost estimates for perty acquisition have been revised from the initial imates; however, costs for the EIS are only estimates sed on the amount of property acquired and the average sts of housing in the area. Accurate and fair-market perty assessments will be made for property to be uired when the roadway design is finalized. The DEIS cnowledges visual and noise impacts resulting from the ild Alternatives. Noise impacts were re-evaluated in cordance with LDOTD's 2004 Louisiana Traffic Noise licy. Results of the noise analysis indicate that a noise rier is neither reasonable nor feasible for the Preferred ernative.

mment regarding Central Alternative acknowledged. e above response regarding property assessment costs.

mment regarding project preferences acknowledged. mment acknowledged. All reasonable and feasible ernatives for this project have been considered.

DATE	NAME	MEDIUM	COMMENT	
10-31-03	Cherry Phillips	Written Comment	Took issue with the fact that the Central Alternative proposed by elected official was not one of the ten original routes. Claims that funding was allocated for the project before the need was established. Opposes building another bridge across Bayou Desiard. Claims that bridge would increase trash, noise, neighborhood disruptions, aesthetics and would hinder recreational boat traffic. Claims that the project would cost the City approximately \$100,000 annually in lost property taxes and the City would have to bear maintenance costs and cost overruns. The Kansas Lane Connector will not alleviate congestion on US Hwy. 165; funds for Kansas Lane Connector are better spent improving US Hwy. 165; opposes alternative that would affect Rep. Charles Jones' new house. Asked what happened to the loop study and the Ouachita River Bridge.	The ac propo Septer that sa would Altern Kansa 1970s regard ackno phase constr regard volum traffic scenar constr conge Forsy 12.) T indepo would
10-30-03	Gilmer P. Hingle	Written Comment	Identical content to letter from Cherry Phillips; see above entry.	Comn
10-16-03	Charline H. Brown	Written Comment	Prefers No Build Alternative; strongly dislikes the Central and Northern Alternatives. If built, the Southern Alternative is preferred.	Comn
10-01-03	Ms. Rodney Salmon	Hotline	Resident of the Town and Country Subdivision, which is a quiet neighborhood with lots of children. Wanted to know when construction would begin and also mentioned that, overall, she was opposed to the project; however, if she had to choose an alternative she would be in favor of the Central Alternative because it is the most distant from her neighborhood. Also wanted to call attention to a historical resource in the Ingleside Neighborhood.	The T from t South impace of the the de acquis Follow for co betwe oppos the In result

#### RESPONSE

djustment to the Central Alternative was initially sed at the Local Officials Meeting held on mber 5, 2002. It was mentioned at the Public Meeting ame evening that the revision proposed early that day likely be considered as an additional Build native for evaluation in the FEIS. The need for the as Lane Connector project was proposed in the early prior to the allocation of funding. Comment ling opposition to the bridge across Bayou Desiard is wledged. Every effort will be made during the design to mitigate negative impacts resulting from the ruction of a bridge over Bayou Desiard. Comment ling lost revenue acknowledged. The traffic study ne/capacity ratios indicate a consistent increase in congestion on US 165, especially with the No Build rio through the design year 2030. However, ruction of the Kansas Lane Connector will help lower estion levels on US 165 between US 80 and the the Extension. (See Traffic Technical Report Page The Ouachita Loop Study was a separate and endent project. Any movements to revive the project need to originate from the local Municipal Planning ization (MPO).

nent acknowledged. See above response. nents acknowledged.

Fown and Country Subdivision is situated far enough the nearest Build Alternatives (the Northern and nern Alternatives) to not experience any negative ets as a result of the project. Following the approval e FEIS and issuance of a ROD, the project will go into esign phase. The design phase and right-of-way sition will take approximately three to five years. wing right-of-way acquisition, the project will be let onstruction and the construction will likely take een two and three years. Comment regarding overall sition to the project acknowledged. Impact studies on ngleside Plantation Home have already been conducted ting in a "No Adverse Effect".

DATE	NAME	MEDIUM	COMMENT	
10-16-03	Dr. Christian Ulrich	Oral Comment	No alternative is acceptable. Completely opposed to project for several reasons because the project will require the purchase of 50 acres of land and displace about 35 families. The amount of budgeted dollars is thirteen million, the actual cost would be at least seventeen million. Construction would be with local dollars, making future road maintenance a burden on the city and parish, money, which the city and parish does not have. Is concerned about the loss of property tax revenue resulting from the project. Is also concerned about displaced retirees and the loss of tax base from this group. Therefore, he does not feel that the project is friendly to retirees. Feels that traffic problems will only be solved temporarily. Wants to see an elevated highway and overpass over the railroad track on Highway 165 because he feels that this would reduce traffic congestion, no need to purchase land or homes, no loss of tax revenue and cost to local government for maintenance. Also feels that Central Avenue should be improved in order to get truck traffic from the industrial area near the airport to the main traffic corridors. Is also concerned about the noise impacts as well as impacts to Bayou Desiard and surrounding neighborhoods caused by construction of the Kansas Lane Connector. Most important consideration is the conversion of tax revenues to a tax liability.	Comm be the constr studie Centra 43 tota result includ homes in abc will re the No family
10-21-03	Dr. Christian Ulrich	Hotline	Called attention to a statement in the DEIS regarding the Central Alternative impacting an area described as a vacant lot on the north side of Bayou Desiard. Dr. Ulrich reported that this property was undergoing development and he stated that if the Central Alternative were shifted slightly to the west it would be crossing in a vacant lot. Students going to and from ULM would continue to use Bon Aire Dr. as their primary route making conditions on Bon Aire Dr. worse than they are now. He also explained that the project is a mistake and that neighborhoods would be destroyed. He stated that traffic would not be improved as stated in the DEIS. Dr. Ulrich restated his opposition to the project and stood by his suggestion that an overpass at the railroad tracks on US Hwy. 165 is a better solution.	origin federa terms expec taxes comm Conne US 16 Exten Comm track = Fundi for the for im Furthe indica aerial Hill. projec struct has th has on oppos mode attribu Kansa acces above Comm

#### RESPONSE

nents acknowledged. Approximately 50 acres would maximum amount of acreage required for ruction of the Preferred (Northern Alternative). Field s conducted by the design engineers indicates that the al-Northern combination will result in approximately al displacements while the Northern Alternative will in about 32 total displacements. Total displacements le apartment units. With respect to single-family s only, the Central-Northern combination will result out 13 displacements while the Northern alternative esult in approximately 8 displacements. Therefore, orthern Alternative will impact the fewest singley and apartment residents. Construction funds would ate from a variety of sources primarily consisting of al and state funds. While some revenue will be lost in of property taxes as a result of the project, it is ted that the project will increase sales taxes as well as paid by businesses that want to locate in the nercial/retail areas served by the Kansas Lane ector. Traffic studies indicate that congestion on 55 would be reduced between US 80 and the Forsythe sion with construction of the Kansas Lane Connector. nent regarding elevating US 165 over the railroad and the widening of Central Avenue is acknowledged. ing for the Kansas Lane Connector is dedicated solely e construction of the Connector and cannot be used provements to US 165.

er research and subsequent calls to the Hotline ated that the previously vacant lot shown on the 2001 photograph was being developed by Mr. & Mrs. Fred Efforts will be made during the design phase of the et to minimize impacts to residences and other ures. The Preferred (Northern) Alternative actually he least damaging impact to neighborhoods in that it nly minimal impacts to community cohesion as sed to the other Build Alternatives which have rate to severe impacts. It is likely that congestion uted to ULM students would be reduced because the as Lane Connector will provide more direct s/egress to/from the north side of the campus. See e response regarding traffic congestion on US 165. nents regarding opposition to the project and the ruction of an elevated portion of US 165 are wledged.

DATE	NAME	MEDIUM	COMMENT	
10-16-03	Gloria Walker	Oral Comment	Concerned about senior citizens and children in and near the project area although she is not directly impacted.	The N
				minim
				enviro
10-16-03	Michael Hayward	Oral Comment	Believes the project is all about money and is only being considered because of the traffic flow into the Pecanland	As sta
			Mall. Does not believe the project is about relieving traffic but rather funneling traffic into commercial centers. Feels	reasor
			that the majority of people in the area are opposed to the project.	provid
				and co
				there
				nroiec
				Conne
				betwe
				impro
1				receiv
				indivi
				projec
				since
10-16-03	Tony Bruscato	Oral Comment	His neighborhood will be impacted by project. Doesn't like the project due to the amount of traffic it will bring to the	If pos
10 10 05			university area. Views the university as the major asset to the city and parish. Does not like any of the alternative	phase
			choices; however, if the public wants it then would choose to push the alternative as far north of the university as	while
			possible into the woods and wetlands so that maximum protection can be afforded to the university.	acces
10-16-03	David Watson	Oral Comment	Would be displaced by Central Alternative and, if chosen (the Central Alternative), he will leave parish. Felt that	Comr
			decision for the alternative alignment had already been made.	had n
				Hear
				each
				deter
				This
				the le
		Oral Commont	States the majority of people do not want the project. Feels that funding should be spent on a fourth bridge project	Com
10-16-03	Chuck James	Oral Comment	across the Quachita Suggested that a route from the airport up Love Road and around the wetlands to the river and	over 2
			the fourth bridge is a better solution. Suggested that the black community get the NAACP involved and fight the	the pr
			project.	since
				cross
				this p

### RESPONSE

VEPA approach to transportation planning attempts to nize impacts to the entire natural and human onment including senior citizens and children. ated in the project Purpose and Need, one of the ns for construction of the Kansas Lane Connector is to de a more direct route between northern residential ommercial office areas, eastern residential areas and outhern retail, commercial, and industrial areas. While are certainly some economic benefits as a result of the ct. traffic studies indicate that the Kansas Lane ector will reduce traffic congestion along US 165 een US 80 and the Forsythe Extension while oving areawide mobility and safety. Comments ved on the DEIS indicate that there are over 200 iduals who have not expressed opposition to the ct. Nineteen individuals have expressed opposition the publication of the DEIS. ssible, every effort will be made during the design of the project to minimize negative impacts to ULM perhaps providing beneficial alternate routes of

is/egress to and from the campus. ment acknowledged. The decision for the alignment not been made as of the October 16, 2003, Public ing. However, since the Public Hearing, the ntages/disadvantages (See Chapter 2 of this report) of alternative were carefully evaluated in order to mine the least damaging, most practicable alternative. evaluation indicated that the Northern Alternative was east damaging, most practicable alternative. ments received on the DEIS indicate that there are 200 individuals who have not expressed opposition to

200 individuals who have not expressed opposition to roject. Only 19 individuals have expressed opposition the publication of the DEIS. Any funding involving a sing over the Ouachita River is currently unrelated to project.

#### **TOPIC:** In Favor of Southern Alternative

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DATE	NAME	MEDIUM	COMMENT	
10-25-03	Sharon Harrison	Written Comment	Does not want to give up bayou property. Seeks resolution in selection of alternative for project so that two-year old	Con
			home remodeling plans can be implemented.	loca

#### **TOPIC:** In Favor of Central Alternative

DATE	NAME	MEDIUM	COMMENT	
10-31-03	George A Varino	E-mail	Called to say that he was in favor of the Central Alternative.	Con
		Hotline		Pref
10-31-03	Albert Ellis	Hotline	Mr. Ellis stated that he was a property owner on Ingleside Drive and was in favor of the Central Alternative.	Con

#### **TOPIC:** In Favor of Northern Alternative

DATE	NAME	MEDIUM	COMMENT	
10-28-03	Joan H. Williams	Written Comment	Northern Alternative appears to have the least relocation impacts and would provide better emergency service access to the Cypress Point Area. Objects to Southern Alternative because of impacts to historic properties and limitations posed to growth of the ULM campus.	Cor
10-16-03	Bob Mitcham	Oral Comment	In general favor of the project. Believes the Northern Alternative is most logical. Feels the project is good for the community.	Cor
10-28-03	Bob I. Mitcham, III Joy Mitcham	Written Comment	In general favor of Kansas Lane Connector. Sees Northern Alternative as most logical choice and least intrusion to existing residences. Suggests consideration of fourth alternative that would consist of combining Northern and Central Alternatives as proposed by Senator Katz at the October 16, 2003 Public Hearing.	Cor Cen FEI
10-31-03	Lucy Humble Jack Humble	Written Comment	Favor the Northern Alternative. Feel that the Bon Aire Drive area is suited for extension. Feels that the project was planned for a crossing at the Baptist Children's Home for many years and the crossing would be at a straight angle. Object to the displacement of older residents on Kentucky and Virginia Streets. Generally in support of Kansas Lane Connector. Favors choosing the alternative that will inconvenience the fewest families and that will have least impact on ULM's ability to expand behind the practice fields. Also favors the alternative that will help the most people with traffic access, for shopping at the mall, and for getting around the city.	Cor that the Alte
10-30-03	Paul Kapp	Written Comment	Northern Alternative would be extremely useful to residents of Cypress Point for accessing the mall and places south of Bayou Desiard. Northern Alternative would enhance police protection, fire protection, and ambulance access. Bon Aire Drive is not large enough to handle the traffic from the Cypress Point subdivision and the current routing of residents through campus in order to go to town. Northern route would be most beneficial for ULM in terms of traffic reduction. Calls constraints on ULM illogical as what is proposed in the Southern Route. Northern route affects the fewest people.	Cor indi the mos
10-16-03	Ann B. Kapp	Letter	Southern Alternative is undesired because of adverse impacts to historic property and family homes along Fennell Drive.	Cor
10-30-03	Ann Kapp	Written Comment	Northern Alternative would provide needed access to residents in Cypress Point Subdivision. Agrees that the Kansas Lane Connector would be an overall asset to the future of Monroe. Decision should be based on what is best for the most people versus responding to political pressure. Wants route that will disturb the least number of residents.	Cor rest

### RESPONSE

nments acknowledged. A Record of Decision on the ation of the alignment is expected by Summer 2005.

### RESPONSE

mment acknowledged. A Record of Decision on the ferred Alternative is expected by Spring 2003. nment acknowledged.

### RESPONSE

nments acknowledged.

nment acknowledged.

nments acknowledged. The combination ntral+Northern Alternative has been considered in the S.

mments acknowledged. The NEPA process requires t all of these factors be taken into consideration during evaluation process. The Northern (Preferred) ernative results in the fewest total relocations.

mments acknowledged. Results of the impact analysis icated that, of all of the Build Alternatives evaluated, Northern (Preferred) Alternative is the least damaging, st practicable alternative.

nment acknowledged.

mments acknowledged. The Northern Alternative will ult in the fewest total relocations.

DATE	NAME	MEDIUM	COMMENT	
10-16-03	Ann Kapp	Oral Comment	Opposed to Southern Alternative; supports Northern Route because it has the fewest human impacts. Central Alternative is second choice but does not think this route would be beneficial. Disputes DEIS statement that project will make emergency services more accessible. Takes issue with the area south of Bayou Desiard being referenced as the Ingleside/Fennell Street subdivision when proper reference is the "Fennell Subdivision".	Cor wou part Cyr
8-15-03	Paul Kidd, Jr.	Hotline Call	Inquired about future public meetings and expressed opposition to the two Build Alternatives that went through the Ingleside Neighborhood.	Mr. Pub Cer
10-01-03	Sandra Lochala	Hotline Call	Mrs. Lochala said that she and her husband own property north of Bon Aire Drive near Old Sterlington Road that has been in the family for 43 years. They had plans to retire there. She also stated that she lives in Texas and just found out about the project. Mrs. Lochala then stated that many or her neighbors also did not know about the project. She stated that she is in overall in favor of the project, but she supports the Northern Alternative and opposes the Southern and Central Alternatives.	All the Add add the rega
10-16-03	John Matherne	Oral Comment	Human impacts should be primary consideration. Concerned about aesthetic and environmental impacts to Bayou Desiard. Stated that an alternative should give easy access in and out of the Cypress Point subdivision to reduce traffic along Bon Aire Drive. Concerned about homeowners to be impacted; opposed to Central and Southern Alternatives and only the Northern Alternative "makes sense".	The bot con resu

#### **TOPIC:** Opposed to Central Alternative

DATE	NAME	MEDIUM	COMMENT	
10-29-03	Congregation of Saint Matthew Catholic Church Petition with 173 Names (not all signatures) to be included in an Appendix of FEIS.	Written Comment	Would like to add their voices to those of the Anti-Central Coalition. Objects to Central Alternative for following reasons: (1) alternative was not part of original 10 alternatives from which final selection would be chosen; (2) relative cost of this alternative is more than the other alternatives; (3) Central and Southern Alternatives displace more residents than Northern Alternative; (4) alternative will result in longest bridge of the identified alternatives and will result in greater impacts to homes and the wildlife and natural habitat in the area; and (5) due to relatively short time between the unveiling of the Central Alternative and the end of the public input period, inadequate time was provided in order for residents to adequately protest this alternative. Petition submitted with letter.	The prop Sep Mee that corr corr ack

#### RESPONSE

mments acknowledged. The Kansas Lane Connector uld provide a more direct route for emergency services, ticularly to residents on Bon Aire east of ULM and the press Point Neighborhood.

Kidd was informed of the upcoming October 16, 2003, blic Hearing. Comment regarding opposition to the ntral and Southern Build Alternatives are acknowledged. I public meetings were advertised in the legal section of Monroe Star and three other area newspapers.

ditionally, newsletter mailouts were sent out to lresses obtained from the City of Monroe announcing project status and public meeting dates. Comment arding preference for the Northern Alternative nowledged.

e NEPA process ensures that consideration is given to h the human and natural environments. Additional nments acknowledged. The Northern Alternative ulted in the fewest total relocations.

### RESPONSE

e adjustment to the Central Alternative was initially posed at the Local Officials Meeting held on otember 5, 2002. It was mentioned at the Public reting that same evening that the revision proposed early t day would likely be considered. The standard nment period was allowed for the submission of nments regarding the project. Other comments mowledged.

DATE	NAME	MEDIUM	COMMENT	
9-17-03	Reverend Kenneth Young and Mrs. Young	Hotline Call	The Young's expressed concern that the Central Alternative will impact the First Southern Methodist Church which they recently purchased.	Com
9-24-03	Reverend Kenneth Young and Mrs. Young	Hotline Call	Wanted to know when a decision would be made on the Preferred Alternative. Also wanted to know on which end of the project area would construction begin.	The I Prefe 2005 begin depen the a
10-20-03	Reverend Kenneth Young and Mrs. Young	Written Comment	Central Alternative would affect lot behind God's House (former Southern Methodist) church building owned by the church. Plans to use this lot for immediate expansion of church facility. Would like to see human interests considered before trees and potential black bear habitat and other environmental concerns. Feels that the statement made at the Public Hearing that no churches would be impacted is incorrect. Preservation of church building would be best for the good of the public. Central Alternative would destroy plans for church ministry and education to the university students. Foresees traffic problems in the Forsythe Park area due to Central Alternative particularly since there is no outlet for traffic. Feel that Central Alternative is bad for the community.	Impa of the Alter inter- envin proco the F Alter
10-28-03	10 Members of Anti- Central Coalition	Written Comment	With the exception of Kenneth Bolden, members of Anti-Central Coalition sent letters stating the following: Opposes Central alternative due to cost, displacement of residents, and destruction of Bayou views and property value.	Com
10-30-03	Members of the Anti- Central Coalition (David Watson, Ann Watson, Jamie Gardner, Hazel DeWitt, Harriet Simmons, Eileen Stephan, Leon Stephan, Bonnie Cox, Kenneth Bolden, Eugene Cox, Kurt Bolden)	Written Comment	Central Alternative was not part of original ten alternatives, is more costly than the other alternatives, displaces more residents, adversely affects many homes and wildlife/natural habitat due to the bridge crossing at Bayou DeSiard; feel that citizens have not had adequate time to protest the Central Alternative following its unveiling.	The a prop Septe Meet that o com ackn
10-31-03	Kurt Bolden	Written Comment	Also a member of the Anti-Central Coalition; same concerns as listed above.	See a
No Date	K.D.B.	Letter	Opposes Central alternative due to cost, displacement of residents, and destruction of Bayou views and property value.	See

### RESPONSE

ment acknowledged.

Northern Alternative was recommended as the erred Alternative in July 2004. A ROD on the erred Alternative may not be issued until Summer 5. Decisions regarding the area where construction will n cannot be made at this time. This decision would end on many factors based on conditions in and around alignment at the time of construction.

acts to the church building are not expected as a result ne Northern Alternative selection as the Preferred rnative. Regarding the consideration of human rests, NEPA mandates that both the natural and human ronments be considered in the transportation planning cess. Comments regarding future traffic problems in Forsythe Park area and the undesirability of the Central rnative are acknowledged.

ment acknowledged.

adjustment to the Central Alternative was initially bosed at the Local Officials Meeting held on tember 5, 2002. It was mentioned at the Public eting that same evening that the revision proposed early day would likely be considered. The standard iment period was allowed for the submission of iments regarding the project. Other comments nowledged.

above response. above response

DATE	NAME	MEDIUM	COMMENT	
10-16-03	Fred Hill Mrs. Fred Hill	Hotline	Objects to Central Alternative because of number of residential relocations, angle of bridge crossing, and cost compared to other alternatives. New construction of home began when Central Alternative was not being considered as an option. Would not have begun construction had the possibility of Central Alternative been identified at that time.	Comm project Altern Meet the Propo a RO reaso origin Altern electe
10-16-03	Fred Hill, Pam Hill	Written Comment	Supports Northern Alternative; objects to Central Alternative for reasons listed above.	Com
10-20-03	Pam Hill	Written Comment	Does not want the project to go through, but if it does would prefer the Northern Alternative. She and her husband have been to all the meetings and waited to begin construction on their home on Bon Aire Drive. Feels that the Central alternative had been adjusted since the September 2002 meeting, after which they started construction. She feels more displacements will be required for the Central Alternative than the Northern. Also, she states the Northern Alternative has been studied before and has been planned as a feasible option.	Comm advar ackno to be above Alter
10-24-03	Fred Hill Pam Hill	Written Comment	Central Alternative would come close to or directly impact new retirement home; proceeded with plans to build home because all routes proposed prior to Oct. 16 did not come near property; Central Alternative destroys the most houses and costs more; only 15 days were given to protest the Alternative. Requested that route selection not be politically motivated. Central route is the least desirable of the three Build Alternatives.	See a Alter menti that a earlie likely Build the D The e 2003
10-16-03	Brian Harkins	Oral Comment	Concerned about the human impacts that have not been addressed. Worries that a four-lane road impacting Bon Aire Drive will prove to be undesirable to homeowners. Human impacts warrant more consideration. Recommends alignment that does not pass along Bon Aire Drive in front of apartment complexes.	Com that i consi

#### RESPONSE

ments regarding relocations, bridge crossing, and ect cost acknowledged. The adjustment to the Central mative was initially proposed at the Local Officials ting held on September 5, 2002. It was mentioned at Public Meeting that same evening that the revision osed early that day would likely be considered. Until DD is issued, consideration may be given to any onable alternative suggestions in addition to the nal proposed Preliminary Alternatives. The Central mative was modified based on comments provided by ed and local officials.

ment acknowledged.

ment regarding opposition to the project and ntages to selection of the Northern Alternative are owledged. The Northern Alternative was determined the least damaging, most practicable alternative. See e response regarding adjustment to the Central native.

above response regarding adjustment of the Central mative. Other comments acknowledged. It was tioned during the September 5, 2002, Public Meeting an adjustment was proposed to the Central Alternative er that day at the Local Officials Meeting which would y be considered. The formal comment period for the d Alternatives is 45 days following the publication of DEIS. The DEIS was published on August 5, 2003. end of the formal comment period was October 31,

ments acknowledged. The NEPA process requires impacts to both the human and natural environment be idered.

### **TOPIC:** Opposed to Southern Alternative

DATE	NAME	MEDIUM	COMMENT	
No Date	Jean Halsell	Written	Southern Alternative would result in undesired adverse effects to historic property along Fennell Drive.	Comn
		Comment		
10-31-03	Jodi Perry	Written Comment	Finds Southern Alternative turn to the west after crossing Desiard Street illogical compared to going straight across the Bayou. Concerned with the proximity of highway so near to ULM practice fields as an obstacle to future expansion. Called attention to "excellent" points made by Mr. Bruscato on the topic of ULM at the public meeting and encouraged that these points be considered when making a decision.	desigr Addit: (North in that access the ar
10-23-03	Carolyn	Hotline call	In favor of project for the Northern and Central Alternatives.	Comn

### RESPONSE

ment acknowledged.

iments acknowledged. Efforts will be made during the gn phase to minimize direct impacts to ULM. itionally, the selection of the Preferred Alternative thern Alternative) would likely be beneficial to ULM at it would provide a more direct means of ss/egress to the north side campus without impacting rea near the practice fields. ment acknowledged.