



## INTEROFFICE MEMORANDUM

December 19, 2017

**TO:** Master Files

**FROM:** *JF* John Fleming, Division Head, Environmental Division *hprince*

**SUBJECT:** Job Number 110617  
FAP Number NHPP-0068(42)  
Fifteenmile & Cutoff Bayous Strs. & Apprs. (S)  
Bridge Numbers 02453 & M3290  
St. Francis County  
Tier 2 Categorical Exclusion

The Environmental Division has reviewed the referenced project and it falls within the definition of a Tier 2 Categorical Exclusion under 23 Code of Federal Regulations, Section 771.117, and the ARDOT/FHWA Memorandum of Agreement on the processing of Categorical Exclusions. A public hearing will not be offered for this project.

The purpose of this project is to replace two bridges in St. Francis County: Bridge No. 02453 on Highway 79, and Bridge No. M3290 on Highway 50. The total length of the project is 0.30 mile. A project location map is attached.

Highway 79 currently has two 10-foot paved lanes and 5-foot paved shoulders. The existing right of way width averages 123 feet. Highway 50 currently has two 10-foot paved lanes and no shoulder. The existing right of way width averages 80 feet.

Proposed roadway improvements for Highway 79 will include two 12-foot wide paved travel lanes with 8-foot wide paved shoulders. Improvements to Highway 50 will include two 11-foot wide paved travel lanes with 4-foot paved shoulders. The bridges will be replaced on existing location with detours to maintain traffic. Information about the existing and proposed bridges is provided in Tables 1 and 2. The new right of way width will average 125 feet on Highway 79 and 102 feet on Highway 50. Approximately 0.15 acre of additional right of way will be acquired for this project.

There are no relocatees, environmental justice issues, or prime farmlands associated with this project. No impacts to cultural resources are anticipated; concurrence from the State Historic Preservation Officer is attached.

Route	Bridge Number	Stream	Sufficiency Rating	Existing Structure
79	02453	Fifteenmile Bayou	49.7, FO	26' x 218', w-beam spans, RC deck
50	M3290	Cutoff Bayou	37.9, SD	28' x 360', steel spans, timber deck

Route	Stream	Proposed Structure	Detour
79	Fifteenmile Bayou	40' x 240' Integral W-Beam Unit, trestle bents on concrete filled steel shell piles	50 ft. south
50	Cutoff Bayou	30' x 385' Cont. Comp, trestle bents on concrete filled steel shell piles.	50 ft. north

Design data for this project is as follows:

Route	Design Year	Average Daily Traffic	Percent Trucks	Design Speed
79	2018	2,100	14	60 mph
	2038	2,700	14	60 mph
50	2018	65	15	55 mph
	2038	70	15	55 mph

Based upon the ARDOT's *Policy on Highway Traffic Noise Abatement*, a noise analysis is not required for this project. This project does not involve added capacity, construction of new through lanes or auxiliary lanes, changes in the horizontal or vertical alignment of the roadway, or exposure of noise sensitive land uses to a new or existing highway noise source.

The U.S. Fish and Wildlife Service IPaC website lists pallid sturgeon (*Scaphirhynchus albus*), Fat Pocketbook (*Potamilus capax*), Rabbitsfoot (*Theiladerma cylindrica*), and Scaleshell (*Leptodea leptodon*) as potentially occurring at or near the project location. A freshwater mussel survey was conducted by ARDOT personnel on 26 July 2017 resulting in no federally protected species being present. The proposed project area is void of all species' specific habitat, and a 'no effect' determination was made. The official species list is attached.

Temporary impacts to forested wetlands, due to construction of the detour at Fifteenmile Bayou, are estimated at 0.7 acre. Stream impacts resulting from the two bridge replacements are estimated to be less than 0.1 acre. The ARDOT proposes the use of 9.1 wetland credits to mitigate the 0.7 acre of wetland impacts. The wetland credits will be mitigated at the Glaise Creek Mitigation Bank located in Woodruff County. Construction of the proposed project should be allowed under the terms of a Nationwide Permit 23 for Approved Categorical Exclusions.

St. Francis County participates in the National Flood Insurance Program. The project lies within the Zone A, Special Flood Hazard Area. The final project design will be reviewed to confirm that the design is adequate and that the potential risk to life and property are minimized. Adjacent properties should not be impacted nor have a greater flood risk than existed before construction of the project. None of the encroachments will constitute a significant floodplain encroachment or a significant risk to property or life.

Attachments:

Project Location Map  
SHPO Clearance  
USFWS Species List  
Environmental Study Checklist  
Design Sheets

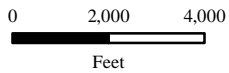
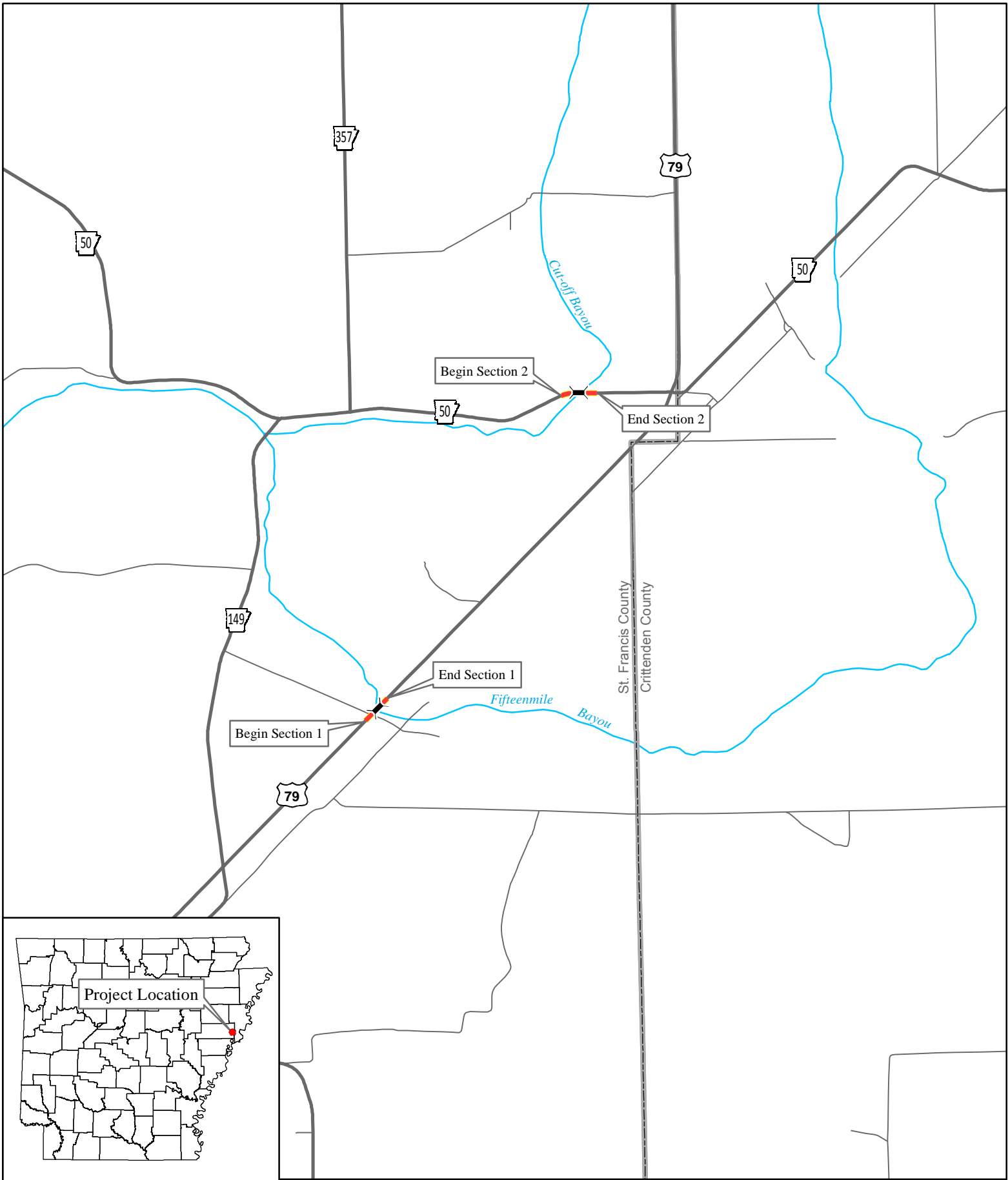
Approved:



Kevin Thornton  
Assistant Chief Engineer-Planning


JF:SL:fc

c: Bridge  
Program Management  
Right of Way  
Roadway Design  
District 1  
FHWA



ArDOT - Environmental GIS - Strawn  
November 30, 2017

Job 110617  
Fifteenmile & Cutoff Bayous  
Strs. & Apprs. (Hwy. 50)  
St. Francis County

 Project Location



ARKANSAS DEPARTMENT OF TRANSPORTATION

ARDOT.gov | IDriveArkansas.com | Scott E. Bennett, P.E., Director

10324 Interstate 30 | P.O. Box 2261 | Little Rock, AR 72203-2261

Phone: 501.569.2000 | Voice/TTY 711 | Fax: 501.569.2400

99732  
FHWA

December 8, 2017

Ms. Stacy Hurst  
Arkansas Historic Preservation Program  
1100 North Street  
Little Rock, AR 72201

AHPP

DEC 08 2017

RECEIVED  
AHTD

DEC 13 2017

ENVIRONMENTAL  
DIVISION

Re: Job Number 110617  
Fifteen Mile & Cut-off Bayous  
Str. & Apprs. (S)  
St. Francis County

Dear Ms. Hurst:

Enclosed for your review is a Project Identification Form regarding the above referenced project. Please provide your effect finding as soon as possible. If you have any questions, contact Richard Jenkins of my staff at 569-2357.

Sincerely,

John Fleming  
Division Head  
Environmental Division

JF:DW:RJ:ym

Enclosure  
PIF

Date 12/8/2017  
No known historic properties will be affected by this undertaking. This effect determination could change should new information come to light.  
  
Arkansas State Historic Preservation Officer



## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Arkansas Ecological Services Field Office  
110 South Amity Suite 300  
Conway, AR 72032-8975  
Phone: (501) 513-4470 Fax: (501) 513-4480  
<http://www.fws.gov/arkansas-es>

In Reply Refer To:

December 11, 2017

Consultation Code: 04ER1000-2018-SLI-0252

Event Code: 04ER1000-2018-E-00416

Project Name: Job 110617 Fifteenmile & Cutoff Bayous Strs. & Apprs. (S)

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies endangered, threatened, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.). **This letter only provides an official species list and technical assistance; if you determine that listed species and/or designated critical habitat may be affected in any way by the proposed project, even if the effect is wholly beneficial, consultation with the Service will be necessary.**

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found on our website.

**Please visit our website at <http://www.fws.gov/arkansas-es/IPaC/home.html> for species-specific guidance to avoid and minimize adverse effects to federally endangered, threatened, proposed, and candidate species.** Our web site also contains additional information on species life history and habitat requirements that may be useful in project planning.

**If your project involves in-stream construction activities, oil and natural gas infrastructure, road construction, transmission lines, or communication towers, please review our project**

specific guidance at <http://www.fws.gov/arkansas-es/IPaC/ProjSpec.html>.

The karst region of Arkansas is a unique region that covers the **northern third of Arkansas** and we have specific guidance to conserve sensitive cave-obligate and bat species. **Please visit <http://www.fws.gov/arkansas-es/IPaC/Karst.html> to determine if your project occurs in the karst region and to view karst specific-guidance.** Proper implementation and maintenance of best management practices specified in these guidance documents is necessary to avoid adverse effects to federally protected species and often avoids the more lengthy formal consultation process.

**If your species list includes any mussels, Northern Long-eared Bat, Indiana Bat, Yellowcheek Darter, Red-cockaded Woodpecker, or American Burying Beetle, your project may require a presence/absence and/or habitat survey prior to commencing project activities.** Please check the appropriate species-specific guidance on our website to determine if your project requires a survey. We strongly recommend that you contact the appropriate staff species lead biologist (see office directory or species page) prior to conducting presence/absence surveys to ensure the appropriate level of effort and methodology.

**Under the ESA, it is the responsibility of the Federal action agency or its designated representative to determine if a proposed action "may affect" endangered, threatened, or proposed species, or designated critical habitat, and if so, to consult with the Service further.** Similarly, it is the responsibility of the Federal action agency or project proponent, not the Service, to make "no effect" determinations. If you determine that your proposed action will have "no effect" on threatened or endangered species or their respective critical habitat, you do not need to seek concurrence with the Service. Nevertheless, it is a violation of Federal law to harm or harass any federally-listed threatened or endangered fish or wildlife species without the appropriate permit.

Through the consultation process, we will analyze information contained in a biological assessment that you provide. If your proposed action is associated with Federal funding or permitting, consultation will occur with the Federal agency under section 7(a)(2) of the ESA. Otherwise, an incidental take permit pursuant to section 10(a)(1)(B) of the ESA (also known as a habitat conservation plan) is necessary to harm or harass federally listed threatened or endangered fish or wildlife species. In either case, there is no mechanism for authorizing incidental take "after-the-fact." For more information regarding formal consultation and HCPs, please see the Service's Consultation Handbook and Habitat Conservation Plans at [www.fws.gov/endangered/esa-library/index.html#consultations](http://www.fws.gov/endangered/esa-library/index.html#consultations).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, **the accuracy of this species list should be verified after 90 days.** This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and

implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. **Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.**

Attachment(s):

- Official Species List



## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Arkansas Ecological Services Field Office**

110 South Amity Suite 300

Conway, AR 72032-8975

(501) 513-4470

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## Project Summary

Consultation Code: 04ER1000-2018-SLI-0252

Event Code: 04ER1000-2018-E-00416

Project Name: Job 110617 Fifteenmile & Cutoff Bayous Strs. & Apprs. (S)

Project Type: TRANSPORTATION

Project Description: Replace Hwy 50 Bridge over Cut-Off Bayou and Hwy 79 Bridge over Fifteen Mile Bayou.

Project Location:

Approximate location of the project can be viewed in Google Maps:

<https://www.google.com/maps/place/35.00701072790872N90.41284561157228W>



Counties: St. Francis, AR

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## Endangered Species Act Species

There is a total of 4 threatened, endangered, or candidate species on this species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

### Fishes

NAME	STATUS
Pallid Sturgeon <i>Scaphirhynchus albus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/7162">https://ecos.fws.gov/ecp/species/7162</a>	Endangered

### Clams

NAME	STATUS
Fat Pocketbook <i>Potamilus capax</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/2780">https://ecos.fws.gov/ecp/species/2780</a>	Endangered
Rabbitsfoot <i>Quadrula cylindrica cylindrica</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5165">https://ecos.fws.gov/ecp/species/5165</a>	Threatened
Scaleshell Mussel <i>Leptodea leptodon</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/5881">https://ecos.fws.gov/ecp/species/5881</a>	Endangered

### Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

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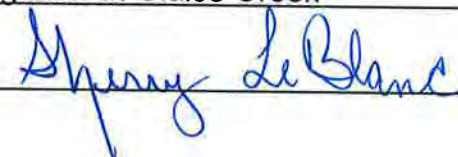
# ARDOT ENVIRONMENTAL IMPACTS ASSESSMENT FORM

ARDOT Job Number 110617 FAP Number NHPP-0068(42)  
 Job Title Fifteenmile & Cutoff Bayous Strs. & Apprs. (S)

Environmental Impacts	None	Minor	Significant	Comments
Air Quality	X			
Construction Impacts		X		Temporary during construction
Cultural Resources	X			
Economic	X			
Endangered Species	X			
Energy Resources	X			
Environmental Justice/Title VI	X			
Fish and Wildlife		X		Temporary during construction
Floodplains		X		Permit required
Forest Service Property	X			
Hazardous Materials/Landfills	X			
Land Use Impacts	X			
Migratory Birds		X		Migratory Bird SP
Navigation/Coast Guard	X			
Noise Levels	X			
Prime Farmland	X			
Protected Waters	X			
Public Recreation Lands	X			
Public Water Supply/WHPA	X			
Relocates	X			
Section 4(f)/6(f)	X			
Social	X			
Underground Storage Tanks	X			
Visual Impacts	X			
Stream Impacts		X		
Water Quality		X		Temporary during construction
Wetlands		X		NW 23
Wildlife Refuges	X			

Section 401 Water Quality Certification Required? No  
 Short-term Activity Authorization Required? Yes  
 Section 404 Permit Required? Yes Type NWP 23

Remarks: Wetland Mitigation at Glaise Creek

Signature of Evaluator  Date December 18, 2017

**ROADWAY DESIGN REQUEST**Job Number 110617 FAP No. \_\_\_\_\_ County St. FrancisJob Name Fifteenmile & Cutoff Bayous Strs. & Apprs. (S)Design Engineer Stephen Sichmeller Environmental Staff \_\_\_\_\_Brief Project Description Replacement of 2 bridges

## A. Existing Conditions:

Roadway Width:  $\frac{(1)20'}{(2)20'}$  Shoulder Type/Width:  $\frac{(1)None}{(2)Paved/5'}$   
 Number of Lanes and Width:  $\frac{(1)2-10'}{(2)2-10'}$  Existing Right-of-Way:  $\frac{(1)80'}{(2)123'}$   
 Sidewalks? No Location: \_\_\_\_\_ Width: \_\_\_\_\_  
 Bike Lanes? No Location: \_\_\_\_\_ Width: \_\_\_\_\_

## B. Proposed Conditions:

Roadway Width:  $\frac{(1)22'}{(2)24'}$  Shoulder Type/Width:  $\frac{(1)Paved/4'}{(2)Paved/8'}$   
 Number of Lanes and Width:  $\frac{(1)2-11'}{(2)2-12'}$  Proposed Right-of-Way:  $\frac{(1)102'}{(2)125'}$   
 Sidewalks? No Location: \_\_\_\_\_ Width: \_\_\_\_\_  
 Bike Lanes? No Location: \_\_\_\_\_ Width: \_\_\_\_\_

## C. Construction Information:

If detour: Where: Cutoff Bayou Length: 1,179'  
 Where: Fifteenmile Bayou Length: 1,014'

## D. Design Traffic Data:

Hwy. 50:  
 2018 ADT: 65 2038 ADT: 70 % Trucks: 15  
 Design Speed: 55 m.p.h.  
 Hwy. 79:  
 2018 ADT: 2,100 2038 ADT: 2,700 % Trucks: 14  
60 m.p.h.

E. Approximate total length of project: 0.30 mile(s)F. Justification for proposed improvements: Bridges are structurally deficientG. Total Relocates: 0 Residences: 0 Businesses: 0H. Have you coordinated with any outside agencies (e.g., FHWA, City, County, etc.)? No

Agency/Official	Person Contacted	Date

<sup>(1)</sup> Hwy. 50 (Site 1)<sup>(2)</sup> Hwy. 79 (Site 2)

**BRIDGE INFORMATION – PRELIMINARY OR FINAL (Choose One)**

Job Number: 110617 FAP Number: 9990 County: St. Francis  
 Job Name: Fifteenmile & Cutoff Bayous Strs. & Apprs.  
 Design Engineer: Weston Conard Environmental Staff: Sherry Leblanc

**A. Description of Existing Bridge:**

1. Bridge Number M3290 over Cutoff Bayou
2. Location: Rte.: 50 Section: 1 Log Mile: 20.82
3. Length: 360 ft Br. Rdwy. Width: 28.3 ft Deck Width (Out-to-Out): 29.2 ft
4. Type Construction: (15) – 24' steel beam spans w/ timber and concrete deck; supported by timber cap on timber piles
5. Deficiencies: Delamination and spalls in deck. Decay, Section Loss, and Splits in timber piles & cap
6. HBRRP Eligibility: Qualif. Code: SD Sufficiency Rating: 37.9
7. Are any Condition Component Ratings at 3 or less? No

**B. Proposed Improvements:**

1. Length: 385 ft Br. Rdwy. Width: 30 ft Deck Width (Out-to-Out): 33.17 ft
2. Travel Lanes: (2) – 11' Lanes
3. Shoulder Width: 4' Shoulders on the Bridge
4. Sidewalks? N/A Location: \_\_\_\_\_ Width: \_\_\_\_\_ ft

**C. Construction Information:**

1. Location in relation to existing bridge: Same Location
2. Superstructure Type: Cont. Comp. W-Beam Unit
3. Span Lengths: 49' – 49' – 62' – 62' – 62' – 49' – 49'
4. Substructure Type: Trestle bents on concrete filled steel shell piles.
5. Ordinary High Water Elev. (OHW): \_\_\_\_\_ No. of Bents inside OHW Contours: \_\_\_\_\_
6. Concrete Vol. below OHW: TBD yd<sup>3</sup> Vol. Bent Excavation: \_\_\_\_\_ yd<sup>3</sup> Vol. Backfill \_\_\_\_\_ yd<sup>3</sup>
7. Is Channel Excavation below OHW Required? No Surface Area: \_\_\_\_\_ ft<sup>2</sup> Volume: \_\_\_\_\_ yd<sup>3</sup>
8. Is Fill below OHW Req'd.? No Surface Area: \_\_\_\_\_ ft<sup>2</sup> Volume: \_\_\_\_\_ yd<sup>3</sup>
9. Is Riprap below OHW Required? No Volume: \_\_\_\_\_ yd<sup>3</sup>

**D. Work Road Information:**

1. Is Work Road(s) required? Yes Location: TBD Top Width: \_\_\_\_\_ ft
2. Is Fill below OHW required? TBD Surface Area: \_\_\_\_\_ ft<sup>2</sup> Volume \_\_\_\_\_ yd<sup>3</sup>
3. Are Pipes required to meet Backwater Criteria? TBD Waterway Opening: \_\_\_\_\_ ft<sup>2</sup>

**E. Detour Information:**

1. Is a detour bridge required? Yes Location in relation to Existing Br.: 47' Upstream
2. Length: 267 ft Br. Rdwy. Width: 24 ft Deck Elevation: 202.8
3. Volume of Fill below OHW: TBD yd<sup>3</sup> Surface Area: \_\_\_\_\_ ft<sup>2</sup>

**F. Coordination with Outside Agencies (e.g., FHWA, City, County, C of E, USCG):**

Has Bridge Division coordinated with any outside agencies? No

Agency	Person Contacted	Date

**BRIDGE INFORMATION – PRELIMINARY OR FINAL (Choose One)**

Job Number: 110617 FAP Number: 9990 County: St. Francis  
 Job Name: Fifteenmile & Cutoff Bayous Strs. & Apprs.  
 Design Engineer: Weston Conard Environmental Staff: Sherry Leblanc

**B. Description of Existing Bridge:**

1. Bridge Number 02453 over Fifteenmile Bayou
2. Location: Rte.: 79 Section: 17 Log Mile: 7.47
3. Length: 218 ft Br. Rdwy. Width: 25.9 ft Deck Width (Out-to-Out): 32 ft
5. Type Construction: (6) – 36' w-beam spans with RC deck, supported by concrete caps on concrete piles
5. Deficiencies: Delamination and spalls in deck. Corrosion and section loss in beams. Cracking and exposed rebar in substructure. Narrow roadway.
6. HBRRP Eligibility: Qualif. Code: FO Sufficiency Rating: 49.7
7. Are any Condition Component Ratings at 3 or less? No

**B. Proposed Improvements:**

1. Length: 240 ft Br. Rdwy. Width: 40 ft Deck Width (Out-to-Out): 43.17 ft
2. Travel Lanes: (2) – 12' Lanes
3. Shoulder Width: 8' Shoulders
4. Sidewalks? N/A Location: \_\_\_\_\_ Width: \_\_\_\_\_ ft

**C. Construction Information:**

1. Location in relation to existing bridge: Same Location
5. Superstructure Type: Integral W-Beam Unit
6. Span Lengths: 75'-90'-75'
7. Substructure Type: Trestle bents on concrete filled steel shell piles.
5. Ordinary High Water Elev. (OHW): \_\_\_\_\_ No. of Bents inside OHW Contours: 2
6. Concrete Vol. below OHW: TBD yd<sup>3</sup> Vol. Bent Excavation: \_\_\_\_\_ yd<sup>3</sup> Vol. Backfill \_\_\_\_\_ yd<sup>3</sup>
7. Is Channel Excavation below OHW Required? No Surface Area: \_\_\_\_\_ ft<sup>2</sup> Volume: \_\_\_\_\_ yd<sup>3</sup>
8. Is Fill below OHW Req'd.? No Surface Area: \_\_\_\_\_ ft<sup>2</sup> Volume: \_\_\_\_\_ yd<sup>3</sup>
10. Is Riprap below OHW Required? No Volume: \_\_\_\_\_ yd<sup>3</sup>

**D. Work Road Information:**

1. Is Work Road(s) required? Yes Location: TBD Top Width: \_\_\_\_\_ ft
2. Is Fill below OHW required? TBD Surface Area: \_\_\_\_\_ ft<sup>2</sup> Volume \_\_\_\_\_ yd<sup>3</sup>
3. Are Pipes required to meet Backwater Criteria? TBD Waterway Opening: \_\_\_\_\_ ft<sup>2</sup>

**E. Detour Information:**

1. Is a detour bridge required? Pipes Location in relation to Existing Br.: \_\_\_\_\_
2. Length: \_\_\_\_\_ ft Br. Rdwy. Width: \_\_\_\_\_ ft Deck Elevation: \_\_\_\_\_
3. Volume of Fill below OHW: TBD yd<sup>3</sup> Surface Area: \_\_\_\_\_ ft<sup>2</sup>

**F. Coordination with Outside Agencies (e.g., FHWA, City, County, C of E, USCG):**

Has Bridge Division coordinated with any outside agencies? No

Agency	Person Contacted	Date