# ARKANSAS STATE HIGHWAY <br> <br> AND <br> <br> AND TRANSPORTATION DEPARTMENT 

Dan Flowers
Director
Phone (501) 569-2000 Fax (501) 569-2400

P.O. Box 2261

Little Rock, Arkansas 72203-2261
WWW.ARKANSASHIGHWAYS.COM

September 22, 2008
Ms. Sandra Otto
Division Administrator
Federal Highway Administration
3128 Federal Office Building
Little Rock, Arkansas 72201

Re: AHTD Job Number 012091
FAP Number NH-2027(3)
Hwy. 48- Sheridan Bypass
NEPA Study
Dallas and Grant Counties
Tier Three Categorical Exclusion
Dear Ms. Otto:
The Environmental Division has reviewed the referenced project and it falls within the definition of a Tier 3 Categorical Exclusion as defined by the AHTD/FHWA Memorandum of Agreement on the processing of Categorical Exclusions. The following information is included for your review and, if acceptable, approval as the environmental documentation for this project.

The purpose of this project is to widen highway 167 from Highway 48 to the future location of the Sheridan Bypass and replace seven bridges. Total length of this project is 11.9 miles ( 19.2 kilometers).

The existing Highway 167 consists of two 12 -foot (3.6-meter) wide travel lanes with eight-foot ( 2.4 meter) wide shoulders. The existing right of way along the route is

AHTD Job Number 012091
Tier Three Categorical Exclusion
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130 feet (40 meters). The existing bridge structure locations and descriptions are listed in Table 1.

| Table 1 |  |  |  |
| :---: | :---: | :---: | :---: |
| Bridge No. | Sufficiency Rating | Stream | Existing Structure |
| 1356 | NQ 60.1 | Saline River Relief | $28^{\prime} \times 166^{\prime}(8.5 \mathrm{~m} \times 50.6 \mathrm{~m})$ <br> reinforced concrete deck girders (RCDG) supported by concrete pile bents |
| 1355 | NQ 60.1 | Saline River Relief | $28^{\prime} \times 265^{\prime}(8.5 \mathrm{~m} \times 80.7 \mathrm{~m})$ <br> RCDG supported by concrete pile bents |
| 1354 | NQ 60.1 | Saline River Relief | $28^{\prime} \times 199 .^{\prime}(8.5 \mathrm{~m} \times 60.6 \mathrm{~m})$ <br> RCDG supported by concrete pile bents |
| 1350 | NQ 62.1 | Gamble Creek | $28^{\prime} \times 481^{\prime}(8.3 \mathrm{~m} \times 146.6 \mathrm{~m})$ <br> RCDG supported by concrete pile bents |
| 1351 | NQ 62.1 | Gamble Creek Relief | $28^{\prime} \times 151(8.5 \mathrm{~m} \times 46.0 \mathrm{~m})$ <br> RCDG supported by concrete pile bents |
| 1352 | NQ 70.1 | Gamble Creek | $28^{\prime} \times 91^{\prime}(8.5 \mathrm{~m} \times 27.7 \mathrm{~m})$ <br> RCDG supported by concrete pile bents |
| 1353 | NQ 58.9 | Gamble <br> Creek | $28^{\prime} \times 91^{\prime}(8.5 \mathrm{~m} \times 27.7 \mathrm{~m})$ <br> RCDG supported by concrete pile bents |

The proposed improvements will consist of four 12-foot (3.6-meter) wide paved travel lanes, an 11 -foot ( 3.3 -meter) continuous turn lane and eight foot ( 2.4 meter) wide shoulders. The new right of way will vary between $140^{\prime}$ to $260^{\prime}$ ( 42.6 m to 79.2 m ). A description and location of the proposed bridge structures are listed in Table 2. Design data for this project is found in Table 3.

There are no endangered species, cultural resources or environmental justice issues associated with this project. Approximately 35 ( 14 hectares) of prime farmland will be acquired for right of way. Form NRCS-CPA-106, the Farmland Conversion Impact Rating, is enclosed. Field inspections found evidence of five possible underground storage tanks sites. Underground storage tanks will be removed in accordance with Arkansas Department of Environmental Quality regulations. One business and one residential owner will be relocated as a result of this project. Public law 91-646, Uniform Relocation Assistance Act of 1970, as amended, will apply. A public involvement

AHTD Job Number 012091
Tier Three Categorical Exclusion
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meeting was held for this project on June 24, 2008; a synopsis of the meeting is enclosed. A noise analysis is also enclosed.

| Table 2 <br> Proposed Bridge Information |  |  |
| :---: | :---: | :---: |
| Bridge No. | Stream | Proposed Structure |
| 1356 | Saline River Relief | $75^{\prime} \times 182^{\prime}(22.8 \mathrm{~m} \mathrm{x} 55.5 \mathrm{~m})$ <br> concrete girders on concrete pile bents |
| 1355 | Saline River Relief | $75^{\prime} \times 302^{\prime}(22.8 \mathrm{~m} \times 92.0 \mathrm{~m})$ <br> concrete girders on concrete pile bents |
| 1354 | Saline River Relief | $75^{\prime} \times 242^{\prime}(22.8 \mathrm{~m} \times 73.8 \mathrm{~m})$ <br> concrete girders on concrete pile bents |
| 1350 | Gamble Creek | $75^{\prime} \times 542^{\prime}(22.8 \mathrm{~m} \times 165.2 \mathrm{~m})$ <br> concrete girders on concrete pile bents |
| 1351 | Gamble Creek Relief | $75^{\prime} \times 180^{\prime}(22.8 \mathrm{~m} \times 54.9 \mathrm{~m})$ <br> concrete girders on concrete pile bents |
| 1352 | Gamble Creek | $75^{\prime} \times 111^{\prime}(22.8 \mathrm{~m} \times 33.8 \mathrm{~m})$ <br> concrete girders on concrete pile bents |
| 1353 | Gamble Creek | $75^{\prime} \times 111^{\prime}(22.8 \mathrm{~m} \times 33.8 \mathrm{~m})$ <br> concrete girders on concrete pile bents |


| Table 3 <br> Design Information |  |  |  |
| :---: | :---: | :---: | :---: |
| Design Year | Average Daily Traffic | Percent <br> Trucks | Design Speed |
| 2009 | 5,300 | 22 | $60 \mathrm{mph}(100 \mathrm{kmph})$ |
| 2029 | 7,000 | 22 | $60 \mathrm{mph}(100 \mathrm{kmph})$ |

Construction of this project will impact approximately 39 acres(15.7) of wetlands and have multiple waters of the United States stream crossings. The wetland impacts are unavoidable and will be mitigated at the Middle Ouachita River Mitigation Bank.

## AHTD Job Number 012091

Tier Three Categorical Exclusion
Page 4 of 4
Constaction should be alloved under the terms of an Individual Section 404 Permat. A Wetlands Assessment is enelosed.

If you have any questions, please contact the Envirommental Division at 5692281 .


Sincerely,

Finclozures
L.PM:JB:th
c. Programs and Contraces

Right of Way
Roadway Design
District Two
District Seven


## The Department of Arkansas Heritage

Mike Beebe Offeror

Cathie Mathews Director:

Arkansas Arts Council Arkansas Natal Heriksta Commission

Delia Cultural Center

Historic Atone Museum
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Mcuac Teraphary Cultural Conte

Old stane House Museum


Arkansas Historic Preservation Program

1500 Tor Building 323 Center Street
Listee Rock, AR 72201
(501) 324-9880
flux: (301) 324-9104
fd: (501) 324-98. 1
email:
infogarkanayspreservation, in: website: www.arkangsicxyraciaticacgem

September 10, 2008
Mr. Lynn P. Malbrough
Division Head
Environmental Division
Arkansas State Highway and Transportation Department
P.O. Box 2261

Little Rock, Arkansas 72203-2261

RE: Multi County - Sheridan<br>Report Entitled "A Cultural Resources Survey of<br>AHTD Job Number 012091, Hwy. 48 - Sheridan<br>Bypass, State Highway 167, Grant and Dallas<br>Counties, Arkansas"<br>AHPP Project Number 66379

Dear Mr. Malbrough:
My staff has reviewed the referenced cultural resources survey report. It is thorough, comprehensive, and well written. We also concur with the findings and conclusions presented therein. With the stipulation that Structure M (a property that is eligible for inclusion in the National Register of Historic Places) be avoided and protected and that archeological monitoring be done during construction, we have no objection to the proposed undertaking.

Thank you for your interest and concern for the cultural heritage of Arkansas. If you have any questions, please contact George McCluskey of my staff at (501) 324-9880.

Sincerely,
Tranceotnes char
Frances McSwain
Deputy State Historic Preservation Officer
cc: Federal Highway Administration Quepuw Tribe of Oklahoma Tunica-Blloxi Tribe of Louisiana, Inc.

## FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS



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| 8. Total Acies To Ole Corverted Indirectly, Or To Receeve Serviose |  |  |  |  |  |
| C. Tolal Acress In Carridor |  | 0 | 0 | 0 | 0 |
|  |  |  |  |  |  |
| A. Total Acres Prime And Uniqua Farmiand |  | 34.92 |  |  |  |
| B. Total Acres Stavewide And Local Important Farmiand |  |  |  |  |  |
| C. Percantage Of Fanmisnd in County Or Local Goyt Unit To Be Cuiverted |  |  |  |  |  |
| D. Perombage Of Fammand in Govt. Auriadiction Win Same Or itigher Belativa Value |  |  |  |  |  |
| PART V (To be coniplefad by AMCSI) Land Evatuation Infermation Citievion Pelative <br>  |  |  |  |  |  |
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| 2. Permeter in Nonurban Use | 10 | 18 |  |  |  |
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| E. Creation Of Nentarmatio Farmiand | 75 | 0 |  |  |  |
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ONE

NOTB Complete a form for each segment with more than one Altemate Corridor

# PUBLIC INVOLVEMENT MEETING SYNOPSIS 

Job Number 012091
Hwy. 48-Sheridian bypass NEPA Study (Hwy. 167)
Dallas and Grant Counties
June 24, 2008

An open forum public involvement meeting for the proposed Highway 167 improvement was held at the Hope Pentecostal Church in Sheridan, Arkansas from 4:00 p.m.-7:00 pm on June 24, 2008. Media news releases, flyers, and radio public service announcements were utilized to inform the general public of the meeting. Special efforts to involve minorities and the public in the meeting included the following:

- Displays advertisement placed in the Sheridan Headlight on Wednesday, June 11, 2008 and Wednesday, June 18, 2008.
- Distribution of flyers in the area.
- Outreach to minority minister letters.

The following information was available for inspection and comments.

- Displays including aerial photographs at a scale of 1 inch equals 1,500 feet, that illustrated the project location.
- Preliminary plans at a scale of one-inch equals ten feet.

Handouts for the public included a comment sheet and a small-scale map illustrating the project alternatives, which was identical to the aerial photograph display. Copies of the handouts are attached.

Table 1 describes the results of the public participation at the meeting.

| TABLE 1 |  |
| :--- | :---: |
| Public Participation | Totals |
| Attendance at meeting (including AHTD staff) | 65 |
| Comments received at meeting | 6 |
| Additional comments received after meeting | 24 |
| Total comments received | 30 |

AHTD staff reviewed all comments received and evaluated their contents. The summary of comments listed below reflects the personal perception or opinion of the person or organization making the statement. The sequencing of the comments is
random and is not intended to reflect importance or numerical values. Some of the comments were combined and/or paraphrased to simplify the synopsis process.

An analysis of the responses received as a result of the public survey is shown in Table $\overline{2}$.

| Table 2 |  |
| :--- | :---: |
| Survey Results | Totals |
| Widening of Highway 167 needed | 21 |
| Widening of Highway 167 not needed | 8 |

The following is a listing of comments concerning issues associated with this project:

- Eight individuals thought the curve south of Highway 35 at Crossroads should be straightened. Three individuals in this area were concerned about their truck repair business; about the ability to get trucks and trailers in and out of their businesses safely and having enough remaining property to maneuver the trucks. They requested the curve be straightened by taking open land to the west, thus minimizing the impacts to their property.
* Nine individuals were concerned that too much frontage/land would be taken. Four individuals suggested shifting the ROW to the west side to avoid greater impacts to businesses and homes.
- One individual thought a signal was needed at Highway 35/167 at Crossroads.
- Two individuals thought there was not enough traffic to warrant four lanes.
- One individual was concerned about his cattle stock pond.
- One individual was concerned about the cost.
- One individual was concerned about water well on east side of road.
- One individual said archeological and civil war artifacts could be found up and down the highway.
- One individual said there was asbestos in old Wilson Store.
- One individual was concerned about his septic tank.

Attachments: Blank comment form
Small-scale project location handout
JB;
RJ RJ
$B P B P$

# Arkansas State Highway and Transportation Department (AHTD) 

## Citizen Comment Form

AHTD Job Number 012091
Hwy. 48- Sheridan Bypass NEPA Study (Hwy. 167)
Dallas \& Grant Counties
LOCATION:
Hope Pentecostal Church
19 Grant Road
Sheridan, AR
4:00-7:00 P.M.
Tuesday, June 24, 2008

Make your comments on this form and leave it with AHTD personnel at the meeting or mail it within 15 days to: Arkansas State Highway and Transportation Department, Environmental Division, Post Office Box 2261, Little Rock, Arkansas 72203-2261.

Yes No
Do you feel there is a need for the proposed widening of Highway 167 from Highway 48 to the Sheridan Bypass? Comment (optional)
$\qquad$
$\qquad$
$\qquad$

Do you know of any historical sites, family cemeteries, or archaeological sites in the project area? Please note and discuss with staff. $\qquad$
$\qquad$
$\qquad$
$\square \quad \square \quad$ Do you know of any environmental constraints, such as endangered species, hazardous waste sites, existing or former landfills, or parks and public lands in the vicinity of the project? Please note and discuss with AHTD staff. $\qquad$
$\qquad$
$\qquad$
$\square \quad \square$
Do you feel that the proposed widening of Hwy. 167 will have any impacts ( $\square$ Beneficial or $\square$ Adverse) on your property and/or community (economic, environmental, social, etc.)? Please explain. $\qquad$
$\qquad$
$\qquad$
(Continued on back)

Yes No
$\square \quad \square \quad$ Do you have a suggestion that would make this proposed project better serve the needs of the community? $\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

It is often necessary for the AHTD to contact property owners along potential routes. If you are a property owner along or adjacent to the route under consideration, please provide information below. Thank you.
Name : $\qquad$
Address: $\qquad$ Phone: (__ ) $\qquad$ -- $\qquad$

E-mail: $\qquad$

Please make additional comments here. $\qquad$
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Job 012091
Hwy. 48 - Sheridan Bypass NEPA Study
Dallas, Grant County

## Notes:

$\square$
$\qquad$

## Noise Analysis

No. Millerville-Sheridan Bypass (S)
AHTD Job Number 012091
Grant County

Noise predictions have been made for this project utilizing the Federal Highway Administration's Traffic Noise Model 2.5 procedures, existing and proposed roadway information, existing traffic data and the traffic projections for the design year of 2025. The noise investigation reveals that the 67 dBA Leq design year noise abatement criteria (NAC) will occur 157 feet ( 48 meters) from the centerline of the proposed project. The proposed cross-section consists of four 12 -foot ( 3.6 meter) wide travel lanes and an 11 -foot ( 3.3 meter) wide continuous turn- lane with 8 -foot ( 2.4 meter) wide shoulders. Forty sensitive receptors located along the proposed project location are predicted to experience noise levels which will approach or exceed 67 dBA during the design year. The term "approach" is considered to be one dBA less than the NAC.

Any noise abatement efforts using barrier walls or berms are not warranted for this project. This is due to the low density of development and to the need to provide direct access to adjacent properties. In order to provide direct access to adjacent properties, breaks in the barrier walls or berms would be required. These necessary highway access breaks would render any noise barrier ineffective.

To avoid noise levels in excess of design levels, any future receptors should be located a minimum of 170 feet ( 52 meters) from the centerline of the proposed project location. This distance should be used as a general guide and not a specific rule, since the noise will vary depending upon the roadway grades and other noise contributions.

Any excessive project noise, due to construction operations, should be of short duration and have a minimum adverse effect on land uses or activities associated with this project area.

In compliance with Federal guidelines, a copy of this analysis will be transmitted to the Southeast Arkansas Economic Development District for possible use in present and future land use planning.

# wETLANDS ASSESSMENT 

## PURSUANT TO SECTION 404

## CLEAN WATER ACT

## AHTD JOB NUMBER 012091 <br> HWY. 48 - SHERIDAN BYPASS NEPA STUDY (HWY. 167) DALLAS and GRANT COUNTIES

This analysis finds that there is no practicable alternative to construction in wetlands adjacent to Highway 167 in Dallas and Grant Counties. This finding is in accordance with Executive Orders 11990 on Protection of Wetlands and 11988 on Management of Floodplains.

## Description of the Project

Refer to the Categorical Exclusion for the description of the project.

## Project Area

This project is located in the West Gulf Coastal Plain (Coastal Plain) Natural Division (State of Arkansas 1974) and the Gulf Coastal Plain Ecoregion (State of Arkansas 1987). The impact areas along the project are open water/vegetated borrow ditches, bottomland hardwood wetlands, and herbaceous wetlands. The bottomland hardwood wetlands are primarily associated with river and/or stream floodplains. The majority of impacts are in the open water/vegetated borrow ditches. See attached wetland location map.

## Description of Wetlands

Wetlands affected by this project are open water/vegetated borrow ditches, bottomland hardwood wetlands, and herbaceous wetlands. Dominant vegetation in the borrow ditches includes button bush (Cephalanthus occidentalis), black willow (Salix nigra), bald cypress (Taxodium distichum), and smartweed (Polygonum spp.). Figure 1 shows typical photographs of the vegetated borrow ditch wetlands.

The dominant vegetation in the bottomland hardwood wetlands includes bald cypress, willow oak (Quercus phellos), water oak (Quercus nigra), overcup oak (Quercus lyrata), sweet gum (Liquidambar styracilflua), green ash (Frankinus pennsylvanica), and American elm (Ulmus americana). Figure 2 shows typical photographs of the bottomland hardwood wetlands.

The dominant vegetation in the herbaceous wetlands includes soft rush (Juncus spp.) and various sedges (Carex spp.). Figure 3 shows a typical photograph of the herbaceous wetlands.

## Alternatives Considered

The Do-Nothing Alternative would not alleviate the traffic volume problems associated with Highway 167. The widening will be on existing alignment. Wetlands are on both sides of Highway 167 in the project area. No other alignment alternatives were considered. New location alignments would have greater impacts to the surrounding wetlands and streams.


Figure 1a. Typical Photograph of Vegetated Borrow Ditch Wetlands.


Figure 1b. Typical Photograph of Vegetated Borrow Ditch Wetlands.


Figure 2a. Typical Photograph of Forested Wetlands Behind Borrow Ditch.


Figure 2b. Typical Photograph of Forested Wetlands.


Figure 3. Typical Photograph of Herbaceous Wetlands.
Impacts
Construction of this project will permanently impact approximately 45 acres (18 hectares) of wetlands. The raajority of wetland impacts will be to vegetated and open water borrow ditches. There will be approximately 40 acres ( 16 hectares) of wetland impacts to vegetated/open water borrow ditch wetlands. There will be approximately 2 acres ( 1 hectare) of wetland impacts to bottomland hardwood wetlands. There will be approximately 3 acres ( 1 hectare) of wetland impacts to herbaceous wetlands.

Water quality will be temporarily impacted during construction due to the placement of permanent and temporary fill and excavation during channel improvements. Water quality will not be permanently impacted by construction of this project, and it is expected to return to normal levels immediately following completion of the project.

## Mitigation

Mitigation for unavoidable wetlands impacts due to the proposed project is offered at the Middle Ouachita River Mitigation Bank (MORMB). Mitigation credits were calculated on impacting 40 acres of vegetated borrow ditch wetlands, 2 acres of bottomland hardwood wetlands, and 3 acres of herbaceous wetlands. Mitigation credits were calculated using the Charleston Method. Total mitigation credits debited from the MORMB will be at a ratio of 2.5:1 acres.

## Conclusion

Construction in wetlands discussed in this document is unavoidable. Construction of the proposed project should not permanently impact the functional integrity of the wetland system in the project area. Construction should be allowed under the terms of an Individual Permit.

## LITERATURE CITED

State of Arkansas
1974 Arkansas Natural Area Plan. Arkansas Department of Planning. Little Rock, Arkansas. 247p.

State of Arkansas
1985 Physical, Chemical, and Biological Characteristics of Least-Disturbed Reference Streams in Arkansas Ecoregions, Volume II: Data Analysis. Arkansas Department of Pollution Control and Ecology. 148p.

# Job 012091 <br> Calculating Required Mitigation Credits (Debits) - Middle Ouachita River 

## Definitions

Cumulative impact factor, $\Sigma \mathrm{AA}_{\mathrm{i}}$ stands for the sum of the acres of adverse impacts to aquatic areas for the overall project. When computing this factor, round to the nearest tenth decimal place using even number rounding. Thus 0.01 and 0.050 are rounded down to give a value of zero while 0.051 and 0.09 are rounded up to give 0.1 as the value for the cumulative impact factor. The cumulative impact factor for the overall project must be used in each area column on the Required Mitigation Credits Worksheet.

1986 Duration means the length of time adverse impacts will last (in years).
Dominant impact factors include fill, impound, drain, dredge, clear, and shade.
Existing Condition means the degree of disturbance.
Fully functional means the system type is functionally naturally. Examples: pristine wetlands or riverine habitats, wetlands with no effective drainage.
Slightly impaired means site disturbances have occurred but functional recovery could be reversed through natural processes, such as clear-cut wetlands, utility corridors, wetlands with ditches that impair but don't eliminate wetland hydrology.
Impaired means functional recovery from disturbance is unlikely to occur naturally. Bedded pine monoculture, severely fragmented areas, channelized streams. Vegetated ditches are here included.
Very impaired means full recovery would require major restoration effort. Filled areas, drained wetlands.

Lost Type categories are based on the suite of functions that they perform.

| Type $\boldsymbol{A}$ includes: | Riverine systems including headwaters and riparian zones <br> Bottomland hardwoods |
| :--- | :--- |
| Type $\boldsymbol{B}$ includes: | Seeps and bogs <br> Savannahs and flatwoods |
|  | Depressions |
| Type $\boldsymbol{C}$ includes: | Pocosins and bays <br> Man-made lakes and ponds |
|  | Vegetated lake littoral <br> Impoundments |

Other habitat types need to be evaluated and assigned a category ranking. Farmed wetlands and vegetated ditches are here defined as Type C. Scrub-Shrub wetlands are here defined as Type B.

Priority Category means designated areas of aquatic systems that provide functions of recognized importance because of their inherent functions, their position in the landscape, or their rarity.

Primary priority areas provide important contributions to biodiversity or high levels of functions contributing to landscape or human values. Examples include Wild and

Scenic Rivers, Heritage or TNC natural areas, national wildlife refuges, old growth communities, etc.
Secondary priority areas include bay forest, high elevation seep, pond cypress pond, upland depression swamp forest, etc.
Tertiary priority areas include cypress-tupelo swamps, bottomland hardwood, pine flatwoods, etc.

## Calculation of Debits

ADVERSE IMPACT FACTORS FOR WETLANDS AND OTHER WATERS OF THE U.S. EXCLUDING STREAMS

| FACTORS | OPTIONS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lost Type | $\begin{gathered} \hline \text { Type C } \\ 0.2 \end{gathered}$ |  | $\begin{gathered} \text { Type B } \\ 2.0 \\ \hline \end{gathered}$ |  | $\begin{gathered} \hline \text { Type A } \\ 3.0 \\ \hline \end{gathered}$ |  |
| Priority Category | Tertiary 0.5 |  | Secondary 1.5 |  | $\begin{gathered} \hline \text { Primary } \\ 2.0 \\ \hline \end{gathered}$ |  |
| Existing Condition | $\begin{gathered} \hline \text { Very Impaired } \\ 0.1 \\ \hline \end{gathered}$ | $\begin{gathered} \text { Impaired } \\ 1.0 \\ \hline \end{gathered}$ |  | $\begin{gathered} \hline \text { Slightly Impaired } \\ 2.0 \\ \hline \end{gathered}$ | Fully Functional 2.5 |  |
| Duration | $\begin{gathered} \hline \text { Seasonal } \\ 0.1 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 0 \text { to } 1 \\ 0.2 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 1 \text { to } 3 \\ 0.5 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 3 \text { to } 5 \\ 1.0 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 5 \text { to } 10 \\ 1.5 \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Over } 10 \\ 2.0 \\ \hline \end{gathered}$ |
| Dominant Impact | $\begin{gathered} \hline \text { Shade } \\ 0.2 \end{gathered}$ | $\begin{gathered} \hline \text { Clear } \\ 1.0 \end{gathered}$ | $\begin{gathered} \hline \text { Dredge } \\ 1.5 \end{gathered}$ | $\begin{gathered} \hline \text { Drain } \\ 2.0 \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Impound } \\ 2.5 \end{gathered}$ | $\begin{aligned} & \hline \text { Fill } \\ & 3.0 \\ & \hline \end{aligned}$ |
| Cumulative Impact | $0.05 \times \sum \mathrm{A}_{\mathrm{i}}$ |  |  |  |  |  |

## REQUIRED MITIGATION CREDITS WORKSHEET

| Factor | Area 1 Vegetated Borrow Ditch | Area 2 Bottomland Hardwoods | Area 3 Herbaceous Wetland |
| :---: | :---: | :---: | :---: |
| Lost Type | $\begin{gathered} \text { Type C } \\ 0.2 \\ \hline \end{gathered}$ | $\begin{gathered} \text { Type A } \\ \mathbf{3 . 0} \\ \hline \end{gathered}$ | $\begin{gathered} \text { Type C } \\ 0.2 \\ \hline \end{gathered}$ |
| Priority Category | $\begin{gathered} \text { Tertiary } \\ 0.5 \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Tertiary } \\ 0.5 \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Tertiary } \\ 0.5 \\ \hline \end{gathered}$ |
| Existing Condition | $\begin{gathered} \hline \text { Impaired } \\ 1.0 \\ \hline \end{gathered}$ | Slightly Impaired 2.0 | $\begin{aligned} & \text { Impaired } \\ & 1.0 \end{aligned}$ |
| Duration | Over 10 2.0 | Over 10 2.0 | Over 10 2.0 |
| $\begin{gathered} \text { Dominant } \\ \text { Impact } \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \text { Fill } \\ & 3.0 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Fill } \\ & \mathbf{3 . 0} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Fill } \\ & \mathbf{3 . 0} \\ & \hline \end{aligned}$ |
| Cumulative Impact | 2.2 | 2.2 | 2.2 |
| Sum of $r$ Factors | $\mathrm{R}_{1}=8.9$ | $\mathrm{R}_{2}=12.7$ | $\mathrm{R}_{3}=8.9$ |
| Impacted Area | $\mathrm{A}_{1}=40$ | $\mathrm{A}_{2}=2$ | $\mathrm{A}_{3}=3$ |
| $\mathrm{R} \times \mathrm{A}=$ | 356.0 | 25.4 | 26.7 |

Total Required Credits $=\Sigma(\mathbf{R} \times \mathbf{A A})=408.1$

The average credits per acre in the Middle Ouachita River Mitigation Bank is 3.6. The equivalent acreage ratio (113.4 acres of mitigation/45 acres impacted) is 2.5:1.








AHT'D ENVIRONMENTAL IMPACTS ASSESSMENT FORM
AHTD Job Number $\qquad$ 012091 FAP Number Job Title Aishavy 4\&-Sher. dais Bypass


Section 401 Water Quality Certification Required?
Short-term Activity Authorization Required?
Section 404 Permit Required?
yes
yes
yes

TypeToderival Amity and replete 7 brides

Signature of Evaluator
 Date

$$
1 / 3 / 08
$$

Date Submitted: April 30, 2008
Date Revised:

## ROADWAY DESIGN REQUEST

Job Number 020424 FAP Number

$\qquad$
County GrantJob Name SALINE RIVER-NOMILLERVILLE (S)Design Engineer Martin Cruce Environmental Staff
Brief Project Description: Roadway Improvement-Widen Lanes and Shoulders
A. Existing Conditions:

1. Roadway Width:

$\qquad$
Metrie: ..... English: $24^{\prime}-36^{\prime}$ ..... English: $24^{\prime}-36^{\prime}$

$\qquad$
English: 8.
2. Shoulder Width:
Meric
Meric 3. Number of Lanes and Width:
Metrie:
Metrie: Englịh Englịh ..... 130' ..... 130'
B. Proposed Conditions:

1. Roadway Width: Metric:

$\qquad$
English ..... $59^{*}$
2. Shoulder Width: Metric

$\qquad$
English:
83. Number of Lanes and Width:Metrie
$\qquad$ English: 4 @ $12^{\prime}$ and 1 @11
4. Average Right-of-Way: Metric:

$\qquad$
English: Varies $140^{\prime \prime}-260^{\prime \prime}$
C. Construction Information:If detour: Where:
$\qquad$ Length: English $\qquad$
D. Design Data:
2009 ADT: 4700 ..... 2029 ADT: 6200
Trucks ..... $24 \%$
Desigm Speed:

$\qquad$
$\mathrm{km} / \mathrm{h}$
$\qquad$
m.p.h.
E. Approximate tolal letigth of project:

$\qquad$
kilometer(s) 4.9 mile(s)
F. Justification for proposed improvements: Increase Capacity
G. Total Relocatees: $0 \quad$ Residences: 0 Businesses: 0 ..... 0
H. Have you coordinated with any of the following: (Provide name and date)
City and or County Officials:
$\qquad$
State Agency:
Federal Agency:
$\qquad$

Date Submitted: April 30, 2008
Date Revised:

## ROADWAY DESIGN REQUEST

Iob Number 020425 FAP Number

$\qquad$
County Grant Job Name NOMILLERVILLE-SHERIDAN BYPASS (S) Design Engineer Martin Cruce Environmental StaffBrief Project Description: Roadway Improvement-Widen Lanes and ShouldersA. Existing Conditions:

1. Roadway Width:
2. Shoulder Width:
3. Number of Lanes and Width:
4. Existing Right-of-Way:
B. Proposed Conditions:
5. Roadway Width:
6. Shoulder Width:
8
7. Number of Lanes and Width:
Metric: $\qquad$ English: 4@12' and 1 @ 11.
8. Average Right-of-Way:
Metric: $\qquad$ Englisk: Varies $160^{\prime}-210^{\prime}$
C. Construction Information:
If detour: Where:
$\qquad$ Length: English $\qquad$
D. Design Data:

2009 ADT: 6500 2029 ADT: 8500 Trucks 21\%
Design Speed:

$\qquad$
$\mathrm{km} / \mathrm{h}$
$60 \mathrm{~m} . \mathrm{ph}$.
E. Approximate total length of project: kilometer(s) 4.1 ..... mile(s)
F. Justification for proposed improvements: Increase Capacity
G. Total Relocatees: $\quad 2 ?$ Residences:

$\square$
Businesses:

$\qquad$
H. Have you coordinated with any of the following: (Provide name and date)

City and or County Officials:
State Agency:
Fiederal Agency: $\qquad$

## BRIDGE INFORMATION-PRELIMINARY

Job Number: 020424 FAP Number: 9990 County: Grant Job Name: Saline River - No, Millerville (S) Design Engineer: Bryan Freeling Environmental Staff: $\qquad$
A. Description of Existing Bridges):

JUL - 12008

1. Bridge Number: 1350 over Gamble Slough
2. Location: Rte. 167 Section: 10

Log Mile: 0.55
ENVIRONMENTAL
3. Length: $481.00 \mathrm{ft} ; \mathrm{Br}$. Rdwy. Width: 28.00 ft ; Deck Width (Out to Out): 31.500 fPIVISION
4. Type Construction: RCDG spans supported by concrete pile bents
5. Deficiencies: Too Narrow
6. HBRRP Eligibility: Qualify. Code NQ ; Suffr. Rating 62.1
B. Proposed Improvements:

1. Length: $542.13 \mathrm{ft} ;$ Br. Rdwy. Width: $\mathbf{7 5 . 0 0} \mathrm{ft}$; Deck Width (Out to Out): $\mathbf{7 8 . 1 7 0 \mathrm { ft }}$
2. Travel Lanes: No. 4; Width 12 ft
3. Shoulder Width: Left: 8.00 ft ; Right: 8.00 ft
4. Sidewalks? no $\qquad$ ; Location: $\qquad$ ; Width: $\qquad$ ft
C. Construction Information:
5. Location in relation to existing bridge: Approx. $24^{\prime}$ East of Existing C.L.
6. Superstructure Type: Cont. Prestressed Concrete Girder
7. Span Lengths: 3 Units @ $180^{\prime}$ ( $60^{\prime}-60^{\prime}-60^{\prime}$ )
8. Substructure Type: Concrete Pile Bent
9. Ordinary High Water Elevation:
10. Number bents inside Ordinary High Water (OHW) Contours:
11. Concrete Volume below OHW: yd; Volume bent excavation: $\qquad$ yd; Is backfill req'd?
12. Is Channel Excavation Required? _; Surface Area:___ft2; Volume: ___ yd
13. Is Fill below OHW req'd? _; Surface Area: $\qquad$ f 2 ; Volume: $\qquad$
14. Is Riprap required? $\qquad$ ; Volume: $\qquad$ yd 3
D. Work Road Information:
15. Is Work Roads) required? TBD ; Location: __ft_ ; Top Width: _ft
16. Is fill below OHW req'd? ___ Surface Area: $\qquad$ fl; Volume: $\qquad$ yd 3
17. Are Pipes required to meet Backwater Criteria? _ Waterway opening: ___ft
E. Detour Information:
18. Is a detour bridge required? No
19. Location in relation to existing Bridge. $\qquad$
20. Length: $\qquad$ ft; Br. Rdwy. Width: $\qquad$ ft ; Deck Elevation: yd; Surface Area: $\qquad$ ft 2
F. Coordination with Outside Agencies (e.g. , FHWA, City, County, C of E, USCG) Has Bridge Div. coordinated with any outside agencies? $\qquad$

| Agency | Person Contacted | Date |
| :--- | :--- | :--- |
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Job Number: 020424 FAP Number: 9990 County: Grant

AHTD
Job Name: Saline River - No. Millerville (S)
Design Engineer: Bryan Freeing
Environmental Staff:
$\longrightarrow \mathrm{JuL}-1$
2008
A. Description of Existing Bridges):

1. Bridge Number: 1351 over Gamble Slough Relief
2. Location: Rte. 167

Section: 10
Log Mile: 0.81
3. Length: 151.00 ft ; Br. Rdwy. Width: 28.00 ff ; Deck Width (Out to Out): 31.500 ft
4. Type Construction: RCDG spans supported by concrete pile bents
5. Deficiencies: Too Narrow
6. HBRRP Eligibility: Qualif. Code $\qquad$
B. Proposed Improvements:

1. Length: $180.13 \mathrm{ft} ;$ Br. Rdwy. Width: 75.00 ft ; Deck Width (Out to Out): 78.170 ft
2. Travel Lanes: No. 4; Width 12 ft
3. Shoulder Width: Left: 8.00 f ; Right: 8.00 ft
4. Sidewalks? no $\qquad$ ; Location: $\qquad$ ; Width: $\qquad$ ft
C. Construction Information:
5. Location in relation to existing bridge: Approx. $24^{\prime}$ East of Existing C.L.
6. Superstructure Type:

Cont. Ptestressed Concrete Girder
3. Span Lengths: 1 Units @ $180^{\circ}$ ( $60^{\circ}-60^{\prime}-60^{\circ}$ )
4. Substructure Type: $\qquad$
5. Ordinary High Water Elevation: $\qquad$
6. Number bents inside Ordinary High Water (OHW) Contours: $\qquad$
7. Concrete Volume below OHW: $\qquad$ yd; Volume bent excavation: yd; Is backfill req'd? _
8. Is Channel Excavation Required? _ S Surface Area:___f2; Volume: ___ yd 3
9. Is Fill below OHW req"d? _ Surface Area: $\qquad$ $\mathrm{ft2}$; Volume: $\qquad$ yd 3
10. Is Riprap required? $\qquad$ ; Volume: $\qquad$ yd 3
D. Work Road Information:

1. Is Work Road (s) required? TBD ; Location: __f _Top Width: _fl
2. Is fill below OHW req" d ? _ Surface Area: ___ fl; Volume: __y yd 3
3. Are Pipes required to meet Backwater Criteria? ___ Waterway opening: $\qquad$ fl
E. Detour Information:
4. Is a detour bridge required? No
5. Location in relation to existing Bridge.
6. Length: $\qquad$ ft ; Br. Rdwy. Width: $\qquad$ ft; Deck Elevation:
7. Volume of Fill below OHW: $\qquad$ yd3; Surface Area: $\qquad$ fit
F. Coordination with Outside Agencies (egg., FHWA, City, County, C of E, USCG) Has Bridge Div, coordinated with any outside agencies? $\qquad$

| Agency | Person Contacted | Date |
| :--- | :--- | :--- |
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Job Number: 020424 FAP Number: 9990 County: Grant Job Name: Saline River - No. Millerville (S)
Design Engineer: Bryan Freeling Environmental Staff:
RECEIVED AHTD
A. Description of Existing Bridge (s):

1. Bridge Number: 1352 over Gamble Creek

ENVIRONMENTAL
2. Location: Rte. 167 Section: 10

Log Mile: 1.35
DIVISION
3. Length: $91.00 \mathrm{ft} ; \mathrm{Br}$. Rdwy. Width: 28.00 ft ; Deck Width (Out to Out): 31.500 ft
4. Type Construction: RCDG spans supported by concrete pile bents
5. Deficiencies: Too Narrow
6. HBRRP Eligibility: Qualify. Code $\qquad$
B. Proposed Improvements:

1. Length: $111.00 \mathrm{ft} ; \mathrm{Br}$. Rdwy. Width: 75.00 ft ; Deck Width (Out to Out): 78.170 ft
2. Travel Lanes: No. 4; Width 12 ft
3. Shoulder Width: Left: $8.00 \mathrm{ft} ;$ Right: 8.00 ft
4. Sidewalks? no $\qquad$ ; Location: $\qquad$ ; Width: $\qquad$ ft
C. Construction Information:
5. Location in relation to existing bridge: Approx. 24' East of Existing C.L.
6. Superstructure Type: Integral W -Beam Unit
7. Span Lengths: 1 Unit @ $110^{\prime}$ ( $35^{\prime}-40^{\prime}-35^{\prime}$ )
8. Substructure Type: Concrete Pile Bent
9. Ordinary High Water Elevation: $\qquad$
10. Number bents inside Ordinary High Water (OHW) Contours: $\qquad$
11. Concrete Volume below OHW. yd. Volume bent excavation $\qquad$ yd; Is backfill req'd?
12. Is Channel Excavation Required? _; Surface Area:___ft2; Volume: yd 3
13. Is Fill below OHW req'd? _; Surface Area: $\qquad$ ft; Volume: $\qquad$ yd 3
14. Is Riprap required? $\qquad$ ; Volume: $\qquad$ yd 3
D. Work Road Information:
15. Is Work Roads) required? TBD ; Location: __f _f_ Top Width: _f ft
16. Is fill below OHW req'd? ___ Surface Area: ___ fl2; Volume: ___ yd 3
17. Are Pipes required to meet Backwater Criteria? ___ Waterway opening: ___ ft 2
E. Detour Information:
18. Is a detour bridge required? No
19. Location in relation to existing Bridge.
20. Length: __ft Br. Rdwy. Width: $\qquad$
$\qquad$
21. Volume of Fill below OHW: $\qquad$ yd; Surface Area: $\qquad$ ft 2
F. Coordination with Outside Agencies (e.g. , FHWA, City, County, C of E, USCG) Has Bridge Div. coordinated with any outside agencies? $\qquad$

| Agency | Person Contacted | Date |
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Job Number: 020424 FAP Number: 9990 County: Grant
Job Name: Saline River - No. Millerville (S) Design Engineer: Bryan Feeling Environmental Staff: $\qquad$
A. Description of Existing Bridges):

1. Bridge Number: 1353 over Gamble Creek

## RECEDED AHTD

2. Location: Rte. 167 Section: 10 Log Mile: 1.65
3. Length: 91.00 ft ; Br. Rdwy. Width: 28.00 ft ; Deck Width (Out to Out): $31.5(\mathrm{~d}) \mathrm{ft}-12008$
4. Type Construction: RCDG spans supported by concrete pile bents
5. Deficiencies: Too Narrow
6. HBRRP Eligibility: Qualif. Code _NQ ; Suffr. Rating 58.9
B. Proposed Improvements:
7. Length: $\underline{111.00 \mathrm{ft} ; \text { Br. Rdwy. Width: } \overline{75.00} \mathrm{ft} \text {; Deck Width (Out to Out): } 78.170 \mathrm{ft}}$
8. Travel Lanes: No. 4 ; Width 12 ft
9. Shoulder Width: Left: 8.00 ft ; Right: 8.00 ft
10. Sidewalks? no $\qquad$ ; Location: $\qquad$ ; Width: $\qquad$ ft
C. Construction Information:
11. Location in relation to existing bridge: Approx. 24 East of Existing C.L.
12. Superstructure Type: Integral W-Beam Unit
13. Span Lengths: 1 Unit @ $110^{\prime}\left(35^{\prime}-40^{\prime}-35^{\prime}\right)$
14. Substructure Type: Concrete Pile Bent
15. Ordinary High Water Elevation:
16. Number bents inside Ordinary High Water (OHW) Contours:
17. Concrete Volume below OHW: $\qquad$ yd3; Volume bent excavation: $\qquad$ yd; Is backfill req'd?
18. Is Channel Excavation Required? _ Surface Area: ft; Volume: yd 3
19. Is Fill below OHW req'd? _; Surface Area: f 2 ; Volume: $\qquad$ yd 3
20. Is Riprap required? $\qquad$ ; Volume: $\qquad$ yd 3
D. Work Road Information:
21. Is Work Roads) required? TBD ; Location: __ ft __ Top Width; _ft
22. Is fill below OHW req'd? __ ; Surface Area: ___ fla; Volume: ___ yd
23. Are Pipes required to meet Backwater Criteria? ___ Waterway opening: ___ fth
E. Detour Information:
24. Is a detour bridge required? No
25. Location in relation to existing Bridge.
26. Length: $\qquad$ $\mathrm{ft} ; \mathrm{Br}$. Rdwy. Width: $\qquad$ ff ; Deck Elevation:
27. Volume of Fill below OHW: $\qquad$ yd; Surface Area: $\qquad$ ft 2
F. Coordination with Outside Agencies (egg., FHWA, City, County, C of E, USCG) Has Bridge Div, coordinated with any outside agencies? $\qquad$

| Agency | Person Contacted | Date |
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Job Number: 070291
FAP Number: 9990 County: Cleveland \& Dallas
Job Name: Saline River - South (S)
Design Engineer: Bryan Freeling
Environmental Staff:
A. Description of Existing Bridges):

JUL - 12008

1. Bridge Number: 1354 over Saline River Relief
2. Location: Rte. 167 Section: 8 \& 9

Log Mile: 3.68
ENVIRONMENTAL
3. Length: $199,00 \mathrm{ft}$; Br. Rdwy. Width: 28.00 ft ; Deck Width (Out to Out): 31.500 ft DIVISION
4. Type Construction: RCDG spans supported by concrete pile bents
5. Deficiencies: Too Narrow
6. HBRRP Eligibility: Qualif. Code _NQ; Suffr. Rating 60.1
B. Proposed Improvements:

1. Length: $242.13 \mathrm{ft} ; \mathrm{Br}$. Rdwy. Width: $\mathbf{7 5 . 0 0} \mathrm{ft}$; Deck Width (Out to Out): $\mathbf{7 8 . 1 7 0 \mathrm { ft }}$
2. Travel Lanes: No. 4; Width 12 ft
3. Shoulder Width: Left: 8.00 ft ; Right: 8.00 ft
4. Sidewalks? Do $\qquad$ ; Location: $\qquad$ ; Width: $\qquad$ ft
C. Construction Information:
5. Location in relation to existing bridge: Not set at this time.
6. Superstructure Type: Cont. Prestressed Concrete Girder
7. Span Lengths: 1 Units @, $240^{\prime}$ ( $\left.60^{\circ}-60^{\circ}-60^{\prime}-60^{\prime}\right)$
8. Substructure Type: Concrete Pile Bent
9. Ordinary High Water Elevation:
10. Number bents inside Ordinary High Water (OHW) Contours: $\qquad$
11. Concrete Volume below OHW: $\qquad$ yd; Volume bent excavation: $\qquad$ yd; Is backfill req'd? _
12. Is Channel Excavation Required? _; Surface Area: $\qquad$ yd 3
13. Is Fill below OHW req'd? _ ; Surface Area: $\qquad$ f 2 ; Volume: $\qquad$ yd 3
14. Is Riprap required? $\qquad$ ; Volume: $\qquad$ yd 3
D. Work Road Information:
15. Is Work Roads) required? TBD ; Location $\qquad$ ft ; Top Width: __ft
16. Is fill below OHW req'd? ; Surface Area: ft; Volume: $\qquad$ yd
17. Are Pipes required to meet Backwater Criteria? ___ Waterway opening: ___fla

## E. Detour Information:

1. Is a detour bridge required? No
2. Location in relation to existing Bridge. $\qquad$
3. Length: $\qquad$ $\mathrm{ft} ; \mathrm{Br}$. Rdwy. Width: $\qquad$ ft ; Deck Elevation:
4. Volume of Fill below OHW: $\qquad$ yd; Surface Area: $\qquad$ ft 2
F. Coordination with Outside Agencies (e.g. , FHWA, City, County, C of E, USCG) Has Bridge Div, coordinated with any outside agencies? $\qquad$

| Agency | Person Contacted | Date |
| :--- | :--- | :--- |
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Job Number: 070291 FAP Number: 9990 Comty: Cleveland \& Dallas Job Name: Suline River - South (S) RECEVED
Design Enginecr: Bryan Freeling Environmental Staff: AHTD
A. Description of Existing Bridge(s):

1. Bridge Number: 1355 over Saline River Relief
2. Location: Rte. 167 Section: 8 \& 9

Log Mike: 3.18
3. Length: 265.00 ft ; Br. Rdwy. Width: 28.00 ft ; Deck Width (Out to Out): 31.500 f
4. Type Construction: $\operatorname{RCDG}$ spans supporied by concrete pile bents
5. Deficiencies: Too Narrow
6. HBRRP Eligibility: Qualif, Code_NQ ; Suff. Rating 60.1
B. Proposed Improvernents:

1. Length: 302.17 ft ; Br . Rdwy. Width: 75.00 ft ; Deck Width (Out to Out): 78.170 ft
2. Travel Lanes: No. 4; Width 12 n
3. Shoulder Width: Left: 8.00 ft ; Right: 8.00 f
4. Sidewalks? no $\qquad$ ; Location: $\qquad$ ; Width: $\qquad$ ft
C. Construction Information:
5. Location in relation to existing bridge: Not set at this time .
6. Superstructure Type: Cont Prestressed Concrete Girder
7. Span Lengths: 1 Units (a) $300^{\circ}$ ( $60^{\circ}-60^{\circ}-60^{\circ}-60^{\circ}-60^{\circ}$ )
8. Subsiructure Type: Concrete Pile Bent
9. Ordinary High Water Elevation: $\qquad$
10. Number bents inside Ordinary High Water (OHW) Contours: $\qquad$
11. Concrete Volume below OHW; $\qquad$ yd3; Volume bent excavation: yd3; Is backfill req'd? $\qquad$
12. 15 Channel Excavation Required? _ Surface Area:___ fi2; Volume: ___yd3
13. Is Fill below OHW req'd? _ ; Surface Area: ___ ft2; Volume: ___ yd3
14. Is Riprap required? $\qquad$ ; Volume: $\qquad$ yd3
D. Work Road Information:
15. Is Work Road(s) required? _TBD ; Location: __f _for Top Width: _f
16. Is flll below OHW req'd? ___ Surface Area: $\qquad$ f2; Volume: ___yd3
17. Are Pipes required to meet Backwater Criteria? ___ Waterway oponing: ___ it
E. Detour Information:
18. Is a detour bridge required? No
19. Location in relation to existing Bridge. $\qquad$
20. Length: $\qquad$ ft ; Br. Rdwy. Width: $\qquad$ ft Deck Elevation:
21. Volume of Fill below OHW: $\qquad$ yd3; Surface Area: $\qquad$ 0
F. Coordination with Outside Agencies (c.g. , FHWA, City, County, C of E, USCG)

Has Bridge Div, coordinated with any outside agencies?

| Arency | Person Contacted | Date |
| :--- | :--- | :--- |
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## A．Description of Existing Bridge（s）：

1．Bridge Number： 1356 over Saline River Relief JUL $=12008$
2．Location：Rte． 167 Section： 8 \＆ $9 \quad$ Log Mile： 2.65
3．Length： $166.17 \mathrm{ft} ; \mathrm{Br}$ ．Rdwy．Width： 28.00 ft ；Deck Width（Out to Out）： 31.50 万人⿻
4．Type Construction：RCDG spans supported by concrete pile bents
5．Deficiencies：Too Narrow
6．HBRRP Eligibility：Qualif．Code NQ；Suff．Rating 60．1
B．Proposed Improvements：
1．Length： $182.13 \mathrm{ft} ; \mathrm{Br}$ ．Rdwy．Width： 75.00 ft ；Deck Width（Out to Out）： 78.170 ft
2．Travel Lanes：No．4；Width 12 ft
3．Shoulder Width：Left： $8.00 \mathrm{ft} ;$ Right： 8.00 ft
4．Sidewalks？no $\qquad$ ；Location： $\qquad$ ；Width： $\qquad$ ft

## C．Construction Information：

1．Location in relation to existing bridge：Not set at this time．
2．Superstructure Type：Cont．Prestressed Concrete Girder
3．Span Lengths： 1 Units＠ $180^{\prime}$（ $60^{\circ}-60^{\circ}-60^{\prime}$ ）
4．Substructure Type：Concrete Pile Bent
5．Ordinary High Water Elevation： $\qquad$
6．Number bents inside Ordinary High Water（OHW）Contours：
7．Concrete Volume below OHW： yd3；Volume bent excavation： yd3；Is backfill req＇d？
8．Is Channel Excavation Required？＿；Surface Area：＿＿＿f2；Volume： yd3
9．Is Fill below OHW req＇d？
＿；Surface Area： $\qquad$ $\mathrm{ft2}$ ；Volume： $\qquad$ yd3
10．Is Riprap required？ $\qquad$ ；Volume： yd3

D．Work Road Information：
1．Is Work Road（s）required？TBD ；Location：＿＿＿ft ；Top Width：＿ft
2．Is fill below OHW req＇d？ $\qquad$ ；Surface Area： $\qquad$ $\mathrm{ft2}$ ；Volume： $\qquad$ yd3
3．Are Pipes required to meet Backwater Criteria？＿＿＿Waterway opening：＿＿＿f2
E．Detour Information：
1．Is a detour bridge required？No
2．Location in relation to existing Bridge． $\qquad$
3．Length： $\qquad$ ft $; \mathbf{B r}$ ．Rdwy．Width： $\qquad$ ft ；Deck Elevation：
4．Volume of Fill below OHW： $\qquad$ yd3；Surface Area： $\qquad$ ft 2

F．Coordination with Outside Agencies（e．g．，FHWA，City，County，C of E，USCG） Has Bridge Div，coordinated with any outside agencies？ $\qquad$

| Agency | Person Contacted | Date |
| :--- | :--- | :--- |
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