**United States Department of Agriculture** **OMB No. 0578-0030**
**Natural Resources Conservation Service** **NRCS-PDM-20**

# DAMAGE SURVEY REPORT (DSR)
## Emergency Watershed Protection Program – Recovery

**Section 1A**

NRCS Entry Only
Eligible: YES _____ NO _____
Approved: YES _____ NO _____
Funding Priority Number (from Section 4) _____
Limited Resource Area: YES ____ NO _____

Date of Report: 10/28/05

DSR Number: 019-05-041R Project Number: Indian Bayou, IB

**Section 1B Sponsor Information**

Sponsor Name: Gravity Drainage Board GDD 8 W 1

Address: 2841 Gross Road

City/State/Zip: Lake Charles, LA 70611

Telephone Number: (337) – 855- 4388 Fax: (337) – 855- 4388

**Section 1C Site Location Information**

County: Calcasieu Parish State: LA Congressional District: 06

Latitude: Start: N 30.3351 End: N30.33958 Longitude: Start: W 93.2554 End: W93.25453
Section: 26 Township: 8S Range: 9W

UTM Coordinates: _____

Drainage Name: Indian Bayou, Reach IB-1 Reach: IB-1, 2000'

Damage Description: Trees, branches and other debris in channel causing blockage and increased flooding to homes upstream

**Section 1D Site Evaluation**

All answers in this Section must be YES in order to be eligible for EWP assistance.

| **Site Eligibility** | **YES** | **NO** | **Remarks** |
|---|---|---|---|
| Damage was a result of a natural disaster?* | X | | Hurricane Rita wind and storm damage |
| Recovery measures would be for runoff retardation or soil erosion prevention?* | X | | Reduce upstream flooding , streambank erosion, and scour erosion |
| Threat to life and/or property?* | X | | Reduce flooding upstream of channel blockage where homes and school is located |
| Event caused a sudden impairment in the watershed?* | X | | Hurricane deposited debris in channel that will likely cause flooding after next major rainfall event |
| Imminent threat was created by this event?** | X | | Flood damage to homes and school likely after next major rainfall event. |
| For structural repairs, not repaired twice within ten years?** | X | | No evidence of repairs to pipes culverts or roads in past several years |
| **Site Defensibility** | | | |
| Economic, environmental, and social documentation adequate to warrant action? (Go to pages 3, 4, 5 and 6 ***) | X | | See attached documentation |
| Proposed action technically viable? (Go to Page 9 ***) | X | | See attached documentation |

Have all the appropriate steps been taken to ensure that all segments of the affected population have been informed of the EWP program and its possible effects? YES _X____ NO _____
Comments: _____

* Statutory
** Regulation
*** DSR Pages 3 through 6 and 9 are required to support the decisions recorded on this summary page. If additional space is needed on this or any other page in this form, add appropriate pages.

DSR NO: __019-05-041R____

## Section 1E Proposed Action

Describe the preferred alternative from Findings: Section 5 A:
Remove downed trees, branches and other debris from one side of channel and haul debris from site to land fill

Total installation cost identified in this DSR: Section 3: $69,400.00

## Section 1F NRCS State Office Review and Approval

Reviewed By: _____ Date Reviewed: _____
State EWP Program Manager

Approved By: _____ Date Approved: _____
State Conservationist

### PRIVACY ACT AND PUBLIC BURDEN STATEMENT

NOTE: The following statement is made in accordance with the Privacy Act of 1974, (5 U.S.C. 552a) and the Paperwork Reduction Act of 1995, as amended. The authority for requesting the following information is 7 CFR 624 (EWP) and Section 216 of the Flood Control Act of 1950, Public Law 81-516, 33 U.S.C. 701b-1; and Section 403 of the Agricultural Credit Act of 1978, Public Law 95-334, as amended by Section 382, of the Federal Agriculture Improvement and Reform Act of 1996, Public Law 104-127, 16 U.S.C. 2203. EWP, through local sponsors, provides emergency measures for runoff retardation and erosion control to areas where a sudden impairment of a watershed threatens life or property. The Secretary of Agriculture has delegated the administration of EWP to the Chief or NRCS on state, tribal and private lands.

Signing this form indicates the sponsor concurs and agrees to provide the regional cost-share to implement the EWP recovery measure(s) determined eligible by NRCS under the terms and conditions of the program authority. Failure to provide a signature will result in the applicant being unable to apply for or receive a grant the applicable program authorities. Once signed by the sponsor, this information may not be provided to other agencies. IRS, Department of Justice, or other State or Federal Law Enforcement agencies, and in response to a court or administrative tribunal.

The provisions of criminal and civil fraud statutes, including 18 U.S.C. 286, 287, 371, 641, 651, 1001; 15 U.S.C. 714m; and 31 U.S.C. 3729 may also be applicable to the information provided. According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0578-0030. The time required to complete this information collection is estimated to average 117/1.96 minutes/hours per response, including the time for reviewing instructions, searching existing data sources, field reviews, gathering, designing, and maintaining the data needed, and completing and reviewing the collection information.

### USDA NONDISCRIMINATION STATEMENT

"The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.)

Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination write USDA, Director of Civil Rights, 1400 Independence Avenue, SW, Washington, DC 20250-941 0 or call (800)795-3272 (voice) or (202)720-6382 (TDD). USDA is an equal opportunity provider and employer.

### Civil Rights Statement of Assurance

The program or activities conducted under this agreement will be in compliance with the nondiscrimination provisions contained in the Titles VI and VII of the Civil Rights Act of 1964, as amended; the Civil Rights Restoration Act of 1987 (Public Law 100-259); and other nondiscrimination statutes: namely, Section 504 or the Rehabilitation Act of 1973, Title IX of the Amendments of 1972, the Age Discrimination Act of 1975, and the Americans with Disabilities Act of 1990. They will also be in accordance with regulations of the Secretary of Agriculture (7 CFR 15, 15a, and 15b), which provide that no person in the United States shall on the grounds of race, color, national origin, gender, religion, age or disability, be excluded from participation in, be denied the benefits of, or otherwise subjected to discrimination under any program or activity receiving Federal financial assistance from the U.S. Department of Agriculture or any agency thereof.

DSR NO: ____019-05-041R_____

## Section 2 Environmental Evaluation

| 2A Resource Concerns | 2B Existing Condition | 2C Alternatives and Effects | | |
|---|---|---|---|---|
| | | **Proposed Action** | **No Action** | **Alternative** |
| | | **Remove logs & debris from one side of channel and haul to landfill** | **Leave logs and debris in channel** | **Remove logs and debris and deposit in adjacent floodplain** |
| | | **2D Effects of Alternatives** | | |
| **Soil** | | | | |
| Bank Erosion | Stable except for exposed soil around uprooted trees on stream bank | Cause temporary increase in bank erosion from removal of root mass and construction activities. | Erosion from root mass will stabilize, but increased upstream flooding will cause additional bank erosion and undercutting | Cause temporary increase in bank erosion from removal of root mass and construction activities on both sides of channel. |
| Compaction | No compaction | Heavy equipment will cause moderate soil compaction at access points along channel | No compaction | Heavy equipment will cause some soil compaction at access points along channel |
| **Water** | | | | |
| Flooding | Property upstream of debris is subject to damages from flooding after next rainfall event | Upstream flooding will be reduced and damages to property will be minimized. | Property upstream of debris blockage will be subject to damages from next heavy rainfall event | Upstream flooding will be reduced and damages to property will be minimized from heavy rainfall events |
| Inadequate outlets | Debris is blocking outlets | Outlets will be opened, flooding will be reduced | Debris will accumulate and flooding will increase | Outlets will be opened, and flooding will be reduced |
| Excessive Sediments and turbidity | Water in stream is brown and turbid. Mod. sediment | Heavy equipment and removal of root mass will cause short term increase in sediment and turbidity. | Sed.and turbidity will increase as result of stream bank erosion and scour damage from flooding | Disturbance and removal of root mass will cause short term increase in sediment and turbidity |
| Stream health (including SVAP)) | 5.2 (poor) See attached SVAP | 5.5 (poor) See attached SVAP | 5.0 (poor) See attached SVAP | 5.5 (poor) See attached SVAP |
| **Air** | | | | |
| Particulate Matter less than PM 10 | No particulate matter is being generated by debris in channel | Slight increase in particulate matter as result of equipment and removal. | No change in particulate matter | Slight increase in particulate matter as result of equipment and removal |
| **Plant** | | | | |
| Productivity, Health and Vigor of Riparian Vegetation | Many riparian trees are wind blown. Natural regeneration will occur where the canopy has been opened to sunlight | Some standing and downed trees will be removed for equipment access and hauling. Natural regeneration will restore buffers over time | No trees will be disturbed by removal. Natural regeneration will occur in areas where the canopy has been opened to light | Some standing and downed trees will be removed for equipment access and left near channel. Natural regeneration will restore buffers over time |
| Productivity, Health and Vigor of Stream Aquatic Vegetation | Aquatic plants are limited to filamentous algae and phytoplankton. Very little rooted submergent or emergent vegetation. | Project will not significantly impact aquatic vegetation. Some decrease in algae from improved flow and slight increase in submergent vegetation with clearer water | Stream aquatic growth will be the same as existing condition with excessive algae growth and limited submergent vegetation | Project will not significantly impact aquatic vegetation. Some decrease in algae from improved flow and slight increase in submergent vegetation with clearer water |
| **Animal** | | | | |
| Inadequate Cover/Shelter for Stream Fisheries (also see SVAP under "Water" | Abundant fish cover and shelter is provided by downed trees and other debris in and by overhanging canopy. | Debris will be removed and result in less instream cover and reduced shading from overhangs, but adequate amounts will remain. | Fish cover and shelter will remain the same. Water quality and quantity will remain the most limiting factors for fisheries | Debris will be removed and result in less instream cover and reduced shading from overhanging cover, but adequate amounts will remain |
| Inadequate Cover/Shelter for Wildlife along Stream Corridor | Riparian forest buffers are extensive in undeveloped segments of the stream channel. Buffers and travel corridors are limited in areas of urban development | Slight reduction in cover on excavated side of channel where some trees will be removed for access. No impact in the urban areas already devoid of cover | Extensive riparian forest buffers will remain along stream channel. Buffers and travel corridors will remain limited urban areas | Slight reduction in cover on excavated side of channel where some trees and cover will be removed for access. Removed debris will provide habitat. |
| **Other** | | | | |
| Aesthetics | Interspersed trees and natural areas in proximity to homes results in attractive landscape except for impacts of tree and property damage | Access will reduce the amount of forest cover on excavated side of channel in forested segments, but will not have a noticeable impact on the overall visual aspects | The landscape will remain the same except for any changes that may be caused by flooding | Access will reduce the amount of forest cover on both sides of channel in forested segments, but will not have a noticeable impact on the overall urban environment. |
| **Mosquito and Insect Vectors** | There are a pools of stagnant of water that provide habitat for mosquitos. | The number of stagnant pools providing habitat for mosquito will be reduced. | Stagnant pools providing habitat for mosquitos will remain the same or increase. | The number of stagnant pools providing habitat for mosquito will be reduced. |

**Section 2E Special Environmental Concerns**

| Resource Consideration | Existing Condition | Alternatives and Effects | | |
|---|---|---|---|---|
| | | Proposed Action | No Action | Alternative |
| Clean Water Act Waters of the U.S. | Poor Water Quality, Low DO, High BOD | Improved water quality. CWA 404 Permit required. Water Quality Certification possible. | Decreased water quality. Increased blockage and flooding | Improved water quality. CWA 404 Permit required. Water Quality Certification possible. |
| Coastal Zone Management Areas | N/A | N/A | N/A | N/A |
| Coral Reefs | N/A | N/A | N/A | N/A |
| Cultural Resources | Use FOTG guidance. State level review needed | Same as existing | Same as existing | Same as existing |
| Endangered and Threatened Species | Use FOTG guidance USFWS/LDWF list shows species in parish, but none are likely in project area | No impacts | No impacts | No impacts |
| Environmental Justice | Not a factor in this project area | Not a factor in this project area | Not a factor in this project area | Not a factor in this project area |
| Essential Fish Habitat | No essential fish habitat within this project area | No essential fish habitat within this project area | No essential fish habitat within this project area | No essential fish habitat within this project area |
| Fish and Wildlife Coordination | No stream modification proposed | Will coordinate if issues arise in CWA 404 permit application process | N/A | Will coordinate if issues arise in CWA 404 permit application process |
| Floodplain Management | Project boundary is within 100 year floodplain | Improve drainage and reduce level of flooding to pre hurricane conditions | N/A | If selected, project will improve drainage and reduce level of flooding to pre-storm conditions |
| Invasive Species | Chinese Tallow trees along channel in several segments | Will remove some invasive trees at access locations and allow increased control opportunities | Will likely increase | Will remove some invasive trees at access locations and allow increased control opportunities |
| Migratory Birds | Provides habitat for neotropical migrants | Slightly reduce habitat for neotropical migrants where trees are removed | Continue to provide same level of habitat | Slightly reduce habitat for neotropical migrants where trees are removed |
| Natural Areas | Use FOTG guidance. No natural areas identified in project area | Use FOTG guidance. No natural areas identified in project area | Use FOTG guidance. No natural areas identified in project area | Use FOTG guidance. No natural areas identified in project area |
| Prime and Unique Farmlands | Use FOTG guidance and soil survey. Gy soil occurs in project area Gy soil project area, but not prime in urban area | Gy soil occurs in project area, but not prime when in urban area | Gy soil occurs in project area, but not prime when in urban area | Gy soil occurs in project area, but not prime when in urban area |
| Riparian Areas | Downed timber has reduced and altered forested riparian habitat | Some standing timber will be removed at access points on one side of channel. Will restore naturally | Downed timber and altered forest riparian area will remain until natural process restores habitat | Some standing timber will be removed at access points on both side of channel. Will restore naturally |
| Scenic Beauty | Use FOTG guidance. Downed timber has reduced aesthetics of stream and riparian areas | Stream aesthetics will be restored, Riparian habitat will not be noticeably impacted | Downed timber in stream and along riparian areas will continue to reduce aesthetics. | Stream aesthetics will be restored, Riparian habitat will not be noticeably impacted |
| Wetlands | Downed timber and debris has altered wetland functions and values | Removal of debris will restore nature wetland functions and values to pre-storm conditions | Wetland functions and values will remain altered. | Removal of debris will restore nature wetland functions and values to pre-storm conditions |
| Wild and Scenic Rivers | Use FOTG guidance. No listed streams affected by project | No impact on listed streams or rivers | No impact on listed streams or rivers | No impact on listed streams or rivers |

Completed By: Steve Tully, Biologist Date:10/28/2005

DSR NO: __019-05-041R_____

**Section 2F Economic**

**This section must be completed by each alternative considered (attach additional sheets as necessary).**

| | Future Damages ($) | Damage Factor (%) | Near Term Damage Reduction |
|---|---|---|---|
| Properties Protected (Private) | | | |
| **45 Houses @ $175,000** | **$7,875,000** | **10** | **$787,500** |
| | | | |
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| Properties Protected (Public) | | | |
| **Concrete bridge @ Coffey Rd** | **$250,000** | **20** | **$ 50,000** |
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| Business Losses | | | |
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| Other | | | |
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| Total Near Term Damage Reduction $ | | | **837,500** |
| Net Benefit (Total Near Term Damage Reduction minus Cost from Section 3) | | | **$ 768,100** |

Completed By: ____David Williams/Daniel Claussen_____ Date: _____10/28/05_____

DSR NO: ____019-05-041R_____

**Section 2G Social Consideration**

**This section must be completed by each alternative considered (attach additional sheets as necessary).**

| | YES | NO | Remarks |
|---|---|---|---|
| Has there been a loss of life as a result of the watershed impairment? | | X | |
| Is there the potential for loss of life due to damages from the watershed impairment? | X | | Emergency vehicle access to areas affected could be restricted. |
| Has access to a hospital or medical facility been impaired by watershed impairment? | | X | |
| Has the community as a whole been adversely impacted by the watershed impairment (life and property ceases to operate in a normal capacity) | X | | Impairment increases flooding impact throughout community |
| Is there a lack or has there been a reduction of public safety due to watershed impairment? | X | | Future events could impact nearby roadways, bridges and access to emergency services. |

Completed By: _____David Williams_____ Date: _____10/28/05_____

DSR NO: ___019-05-041R_____

**Section 2H Group Representation and Disability Information**

**This section is completed only for the preferred alternative selected.**

| Group Representation | Number |
|---|---|
| American Indian/Alaska Native Female Hispanic | 0 |
| American Indian/Alaska Native Female Non-Hispanic | 0 |
| American Indian/Alaska Native Male Hispanic | 0 |
| American Indian/Alaska Native Male Non-Hispanic | 0 |
| Asian Female Hispanic | 0 |
| Asian Female Non-Hispanic | 1 |
| Asian Male Hispanic | 0 |
| Asian Male Non-Hispanic | 0 |
| Black or African American Female Hispanic | 0 |
| Black or African American Female Non-Hispanic | 0 |
| Black or African American Male Hispanic | 0 |
| Black or African American Male Non-Hispanic | 0 |
| Hawaiian Native/Pacific Islander Female Hispanic | 0 |
| Hawaiian Native/Pacific Islander Female Non-Hispanic | 0 |
| Hawaiian Native/Pacific Islander Male Hispanic | 0 |
| Hawaiian Native/Pacific Islander Male Non-Hispanic | 0 |
| White Female Hispanic | 0 |
| White Female Non-Hispanic | 49 |
| White Male Hispanic | 0 |
| White Male Non-Hispanic | 50 |
| Total Group | 100 |

Census tract(s) _____22.01, Block 2007_____

Completed By: _____Pat Rehkop _____ Date: _____10/19/05_____

Section 2I. Required consultation or coordination between the lead agency and/or the RFO and another governmental unit including tribes:

Easements, permissions, or permits:

Access to channel from private properties will require easements/permission to be obtained by sponsor. Recommend consultation of contractor for Right of Way access to stream to accommodate equipment being used. Coordination will be handled by NRCS representative to reduce amount of impact to surrounding environment. Physical access can be gained from either east or west side of channel; however, access should be limited to one side or the other, not both.

404 PERMIT REQUIRED

CWA permit, Water Quality certification possibly needed because of potential of grubbing stumps.

Mitigation Description:

Accessing debris will be from one side of channel, but contractor may alternate from one side to the other depending on ease of access and minimizing impacts to riparian buffers. Debris will be removed from project area and disposed of in an approved landfill. Proposed action will restore hydraulic function to downstream wetlands and eliminate stagnant pools in channel. Action will be completed without interruption to reduce impacts to wildlife.

Agencies, persons, and references consulted, or to be consulted:

Corps of Engineers, New Orleans District

LA DEQ
LDWF

DSR NO: ___019-05-41R____

**Section 3 Engineering Cost Estimate**

Completed By: _____David Williams_____ Date: _____10/21/05_____

**This section must be completed by each alternative considered (attach additional sheets as necessary).**

| Proposed Recovery Measure (including mitigation) | Quantity | Units | Unit Cost ($) | Amount ($) |
|---|---|---|---|---|
| Mobilization/Demobilization | 1 | LS | NA | $ 5,000 |
| Channel Obstruction Removal | 2,000 | LF | $32.00 | 64,000 |
| Seeding, sprigging, mulching | 1 | AC | $400 | 400 |
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| | | | | |
| | | | Total Installation Cost (Enter in Section 1F)$ | 69,400 |

Unit Abbreviations:
AC Acre
CY Cubic Yard
EA Each
HR Hour
LF Linear Feet
LS Lump Sum
SF Square Feet
SY Square Yard
TN Ton
Other (Specify)

DSR NO: ____019-05-041R_____

**Section 4 NRCS EWP Funding Priority**

Complete the following section to compute the funding priority for the recovery measures in this application

(see instructions on page 10).

| **Priority Ranking Criteria** | **Yes** | **No** | | **Ranking Number Plus Modifier** |
|---|---|---|---|---|
| 1. Is this an exigency situation? | X | | | 1e |
| 2. Is this a site where there is serious, but not immediate threat to human life? | | | | |
| 3. Is this a site where buildings, utilities, or other important infrastructure components are threatened? | | | | |
| 4. Is this site a funding priority established by the NRCS Chief? | | | | |
| **The following are modifiers for the above criteria** | | | **Modifier** | |
| a. Will the proposed action or alternatives protect or conserve federally-listed threatened and endangered species or critical habitat? | | | | |
| b. Will the proposed action or alternatives protect or conserve cultural sites listed on the National Register of Historic Places? | | | | |
| c. Will the proposed action or alternatives protect or conserve prime or important farmland? | | | | |
| d. Will the proposed action or alternatives protect or conserve existing wetlands? | | | | |
| e. Will the proposed action or alternatives maintain or improve current water quality conditions? | | | e | |
| f. Will the proposed action or alternatives protect or conserve unique habitat, including but not limited to, areas inhabited by State-listed species, fish and wildlife management area, or State identified sensitive habitats? | | | | |

Enter priority computation in Section 1A, NRCS Entry, Funding priority number.

Remarks:

DSR NO: 019-05-041R

**Section 5A Findings**

**Finding: Indicate the preferred alternative from Section 2 (Enter to Section 1E):**

*I have considered the effects of the action and the alternatives on the Environmental Economic, Social; the Special Environmental Concerns; and the extraordinary circumstances (40 CFR 1508.27). I find for the reasons stated below, that the preferred alternative:*

X Has been sufficiently analyzed in the EWP PEIS (reference all that apply)
Chapter 5.2.2.1.2
Chapter _____
Chapter _____
Chapter _____
Chapter _____

____ May require the preparation of an environmental assessment or environmental impact statement. The action will be referred to the NRCS State Office on this date:

NRCS representative of the DSR team

Title: Brian A. Beaumont Date: 11/3/05 ~~10/21/05~~

**Section 5B Comments:**

**Section 5C** **Sponsor Concurrence:** George Wilkinson

**Sponsor Representative** DISTRICT BOARD PRESIDENT

Title: GEORGE WILKINSON Date: 11-3-05

**Section 6 Attachments:**

A. Location Map
B. Site Plan or Sketches
C. Other (explain)

## INSTRUCTIONS FOR COMPLETING THE NRCS-PDM-20, DSR

| | Explanation of Requested Item | Who Completes |
|---|---|---|
| **Section 1** | Enter Site Sponsor, Location, Evaluation, Selected Alternative, and Reviewed and Approval Signatures. | NRCS completes with voluntary assistance from Sponsor except for NRCS only portion of Section 1A. |
| **1A** | Enter the Date, DSR Number, Project Number. For NRCS only enter Eligible Yes/No, Approved Yes/No, Funding Priority Number, and Limited Resource Area Yes/No. | |
| **1B** | Enter Sponsor Name, Address, Telephone, Fax | |
| **1C** | Enter site location County, State, Congressional District, Latitude, Longitude, Section, Township, Range, UTM Coordinates, Drainage Name, Reach within drainage, and Damage Description. | |
| **1D** | Enter Yes/No and any Remarks for the Site Evaluation information. Any No response means the site is not eligible for EWP assistance and no further information is necessary to complete the DSR. (See NEWPPM 390-502.03 and 390-502-04)<br>Enter Yes/No regarding whether the affected public has been informed of the EWP program. | |
| **1E** | Enter the proposed treatment and the cost of installation. | NRCS only. |
| **1F** | NRCS Review and Approval. | |

| | Explanation of Requested Item | Who Completes |
|---|---|---|
| **Section 2** | Use available natural resource, economic, and social, information, including the EWP Programmatic Environmental Impact Statement (PEIS), to briefly describe the effects of the alternatives to the proposed action including the "no action" alternative. The no action alternative is the predicted future condition if no action is taken. Typically, the proposed action and no action are the alternatives considered for EWP recovery measures due to the focus on repairing or preventing damages within a watershed. However, in cases where additional alternatives are considered, include all pertinent information to adequately address the additional alternatives (e.g., proposed action would be bio-engineering for bank stabilization, no action alternative, and an additional alternative may be riprap for bank stabilization).<br>Do not leave blanks where a consideration is not applicable, use NA to indicate the factor was considered but not applicable for the alternative. | NRCS completes with voluntary assistance from Sponsor. |
| **2A** | List all resource concerns which are relevant to the area of the proposed action and alternatives. Refer to the National Bulletin 450-5-8 TCH-COMPLETING AND FILING MEASEMENT UNITS FOR RESOURCE CONCERNS IN THE FIELD OFFICE TECHNICAL GUIDE (FOTG). Note: the affected area may extend beyond the construction foot print (e. g. where water quality or water rights are affected downstream of the site.) | |
| **2B** | Provide a brief description of the present condition of each resource concern listed in 2A. Quantify conditions where possible. Reference accompanying photographic documentation. | |
| **2C** | Briefly summarize the practice/system of practices being proposed, as well as the "no action" alternative is predicted future condition if no action is taken. | |
| **2D** | Document the efforts of the proposed action and alternatives for the considerations listed in 2A. Reference applicable quality criteria, information in the CPPE, and quantify effects whenever possible. Consider both long-term and short-term effects. Consider any effects which may be individually minor but cumulatively significant at a larger scale or over an extended time period. Clearly define the differences between proposed action, no action, and the other alternatives. | |

| | | |
|---|---|---|
| **2E** | Enter Special Environmental Concerns for Clean Water Act Waters of the U.S., Coastal Zone Management Areas, Coral Reefs, Cultural Resources, Endangered and Threatened Species, Environmental Justice, Essential Fish Habitat, Fish and Wildlife Coordination, Floodplain Management, Invasive Species, Migratory Birds, Natural Areas, Prime and Unique Farmlands, Riparian Areas, Scenic Beauty, Wetlands, and Wild and Scenic Rivers for each alternative considered. In the case where the selected alternative from Section 5A impacts a Special Environmental Concern, additional information, coordination, permitting or mitigation may be required and adequate documentation should be prepared and attached to the DSR to identify how NRCS or the Sponsor addressed the concern. | |
| **2F** | Identify Property Protected both private and public, business losses and other economic impacts considered for each alternative. Enter the dollar value of the potential future damages if no action is taken in the Future Damage (5) column. This would be the estimate of the value lost if the EWP recovery measure is not installed. Use the repair cost or damage dollar method to determine the estimate of future damages. The repair cost method uses the costs to return the impaired property, good, or services based on their original pre-event condition or value. The damage dollar method uses an estimate of the future damage to value (e.g. if the structure is condemned, then enter the value of the structure). Enter the estimated amount based upon existing information or information furnished by the sponsor, contractors or others with specific knowledge for recovery from natural disasters for each alternative considered. Often market values for properties or services can be obtained from personnel at the local county/parish tax assessment office.<br>The DSI team needs to determine the Damage Factor (%) which is a coefficient that indicates the degree of damage reduction to a property that is attributed to the effect of the proposed EWP recovery measures. Use an appropriate estimate of how much of the damage the EWP recovery measure will avoid for the alternative being considered. If the recovery measures from a single site will prevent 100 percent of the damage use 100 percent.<br>The Near Term Damage Reduction is the Future Damage ($) times the Damage Factor (%). Sum the Near Term Damage Reduction values to calculate the Total Near Term Damage Reduction.<br>Enter the Net Benefit which is computed by subtracting the Cost from section 3 from the total near term damage reduction.<br>The economic section must be completed for each alternative considered. Attach additional sheets as necessary. | |
| **2G** | Enter information to describe the potential social impacts and considerations for each alternative. Answer Yes or No and any remarks necessary to adequately address each question.<br>The information may be obtained through interviews with community leaders, government officials or sponsors.<br>Factors such as road closures, loss of water, electricity, access to emergency services are used when answering whether the community as a whole has been impaired.<br>This information is part of the environmental evaluation portion of the DSR but may be pertinent in Section 4 regarding priorities.<br>The Social Considerations Section must be completed for each alternative considered. Attach additional sheets as necessary. | |
| **2H** | Enter the Group Representation for the preferred alternative. Use the most recent census tract information based upon where the EWP recovery measures are located. | Sponsor completes. |

| | | |
|---|---|---|
| **2I** | Enter whether easement, permissions, or permits, and mitigation will require consultation or coordination for the selected alternative (e.g., Clean Water Act section 404 permit, Endangered Species Act section 10 permits, and any State or county permits or requirements). Describe mitigation to be applied that will offset any adverse impacts and attach any documentation from other agencies regarding mitigation requirements. | NRCS completes with voluntary assistance from Sponsor. |

| | **Explanation of Requested Item** | **Who Completes** |
|---|---|---|
| **Section 3** | Enter Proposed Recovery Measure(s) including Quantity, Units, Unit Cost, and Total Amount Cost.<br>Enter sum of all Proposed Recovery Measure Costs to calculate Total Costs. Enter Total Installation Costs in Section 1F.<br>The Engineering Cost Estimate must be completed for each alternative considered. Attach additional sheets as necessary. | NRCS completes with voluntary assistance from Sponsor. |

| | **Explanation of Requested Item** | **Who Completes** |
|---|---|---|
| **Section 4** | This section is used to determine the Funding Priority for the preferred alternative and sequence for initiating recovery measures. Enter Yes/No for questions 1 through 4 and enter the number (exigency 1, serious threat to human life 2, etc.) in the right column, Ranking Number Plus Modifier. Complete the Modifier portion by placing the alphabetic indicator a. through f. in the Modifier column. Complete the Ranking Number Plus Modifier column by entering the alphabetic indictor(s) that exists within the site. The number of the site designates the priority (e.g., a site with a designation of 2 is a higher priority that a site with a designation of 3). The modifiers increase the priority for the same numeric site (e.g., a site with a designation of 1a, would be a higher priority than a site with a designation of 1, a site with a designation of 2bc would be a higher priority than a site designated as 2b). Enter the Funding Priority in Section 1A. | NRCS completes with voluntary assistance from Sponsor. |

| | **Explanation of Requested Item** | **Who Completes** |
|---|---|---|
| **Section 5** | Enter the Findings, Rationale Supporting Findings, NRCS Representative signature and Comments, and Concurrence signature by the Sponsor(s). | NRCS completes. |
| **5A** | Indicate the preferred alternative and check the applicable finding being made. The NRCS Representative signs indicating the Finding selected. If the proposed action was adequately addressed in the PEIS, check all appropriate chapter paragraphs. | |
| **5B** | Explain the rationale for making the finding. Cite any references, analysis, data, or documents which support the finding. Add any additional pages or documents as necessary. To find that an action has been sufficiently analyzed in an existing NRCS environmental document, the document must cover an adequate description of the action proposed for implementation. | |
| **5C** | Enter any additional Comments. | |
| **5D** | Sponsor(s) review and concurrence. | Sponsor(s) signature. |

| | | |
|---|---|---|
| **Section 6** | Include attachments for location map, site sketch or plan and other information as needed. | NRCS completes with voluntary assistance from Sponsor. |

# SECTION 6

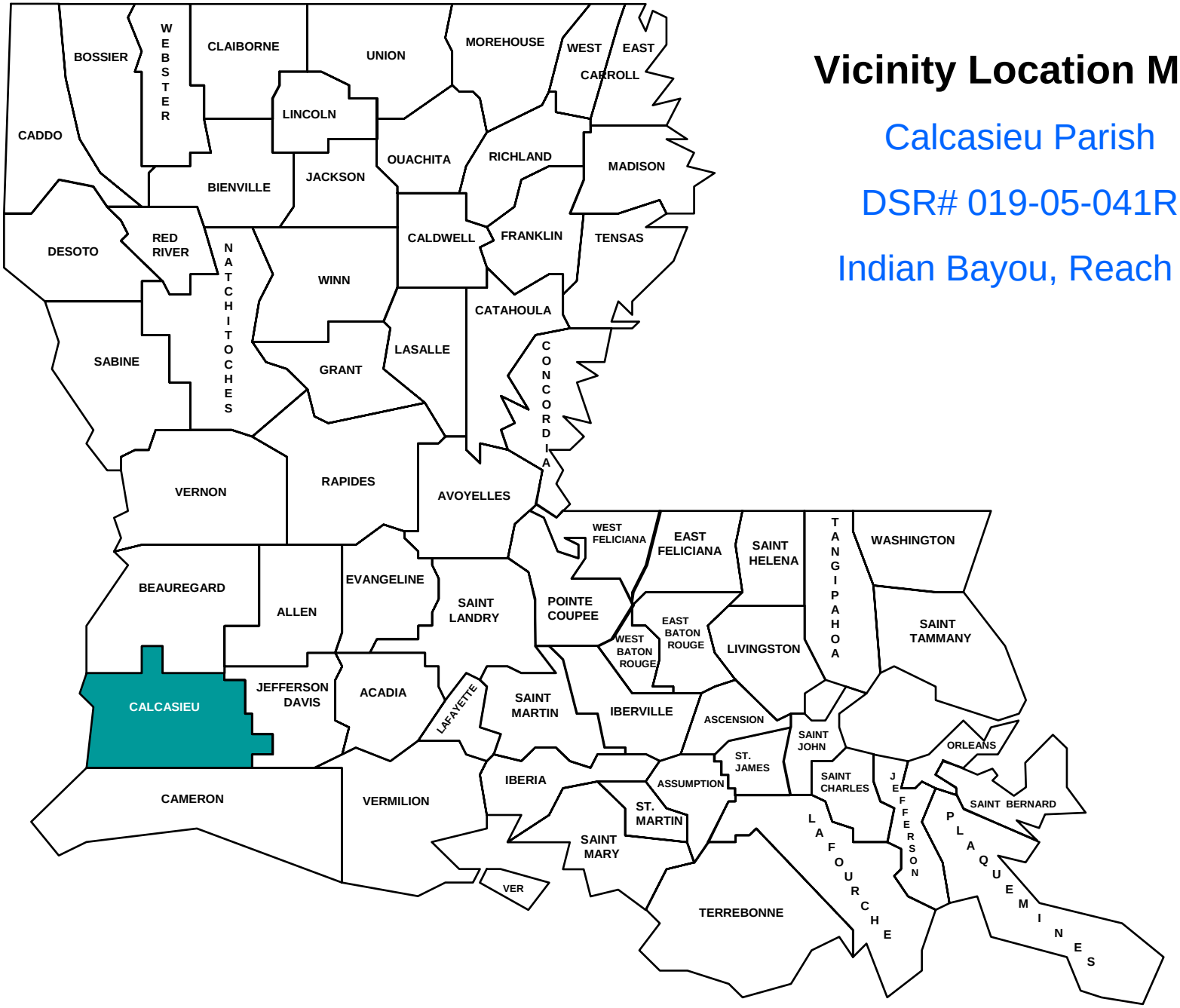
# ATTACHMENTS

# Vicinity Location Map

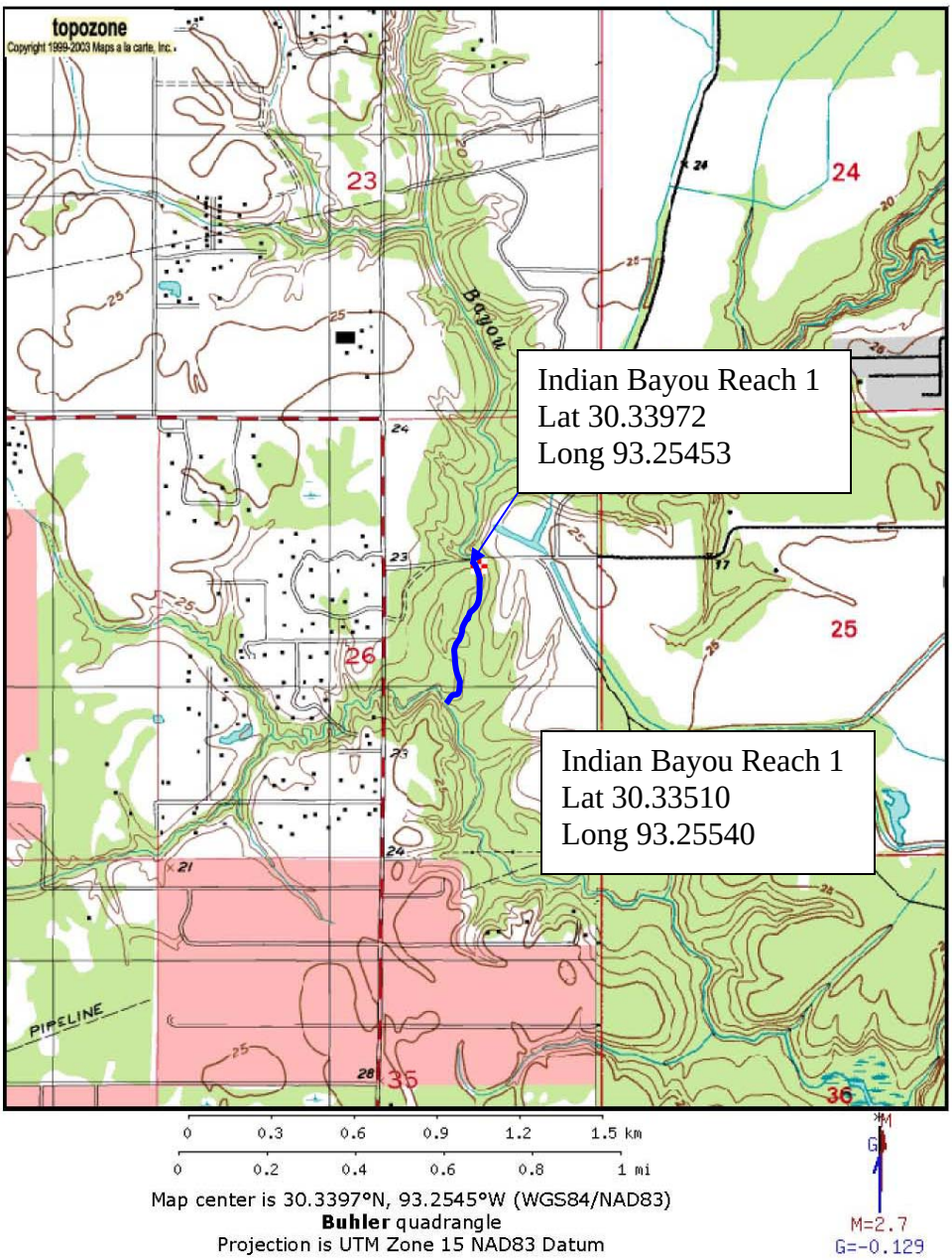
Calcasieu Parish

DSR# 019-05-041R

Indian Bayou, Reach 1



TOPO MAP
DSR 019-05-041R
Channel Indian Bayou Reach 1
South of Coffey Rd. to L-5 Confluence
Calcasieu Parish
Estimated Reach Length 2,000 LF



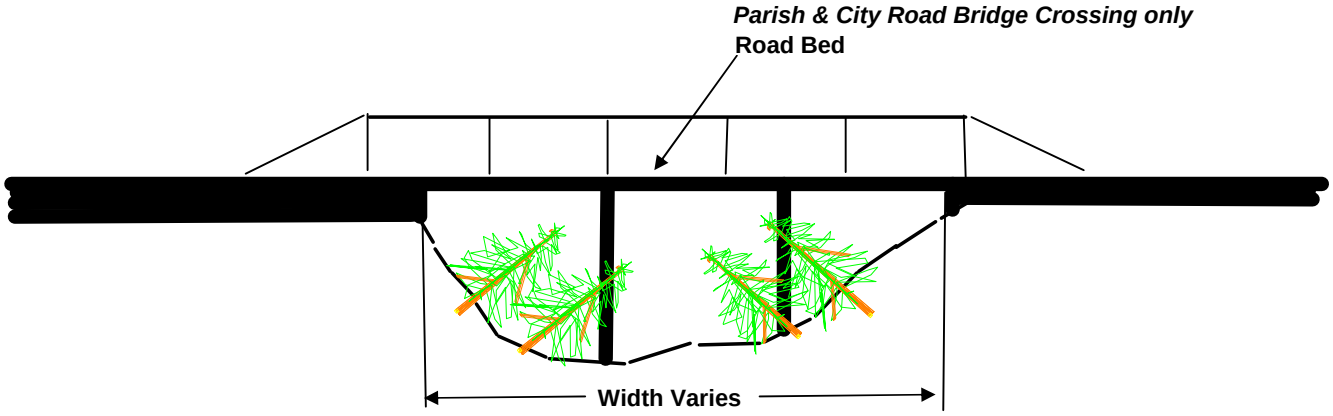

http://www.topozone.com/print.asp?z=15&n=3356457.5044066&e=475535.17587374&size=s&u=5&lay...

**DSR NO: 019-05-01R**

**CHANNEL: Indian Bayou Reach 1**

**Gravity Drainage District #8**

**Debris Removal**




**Note:** Contract is to remove Debris from upstream and downstream Bridge which includes underside of bridge
**Exception:** All Crossing which cross State or Federal highways are not included in contract

Typical Road Bridge Crossing
**Not to Scale**

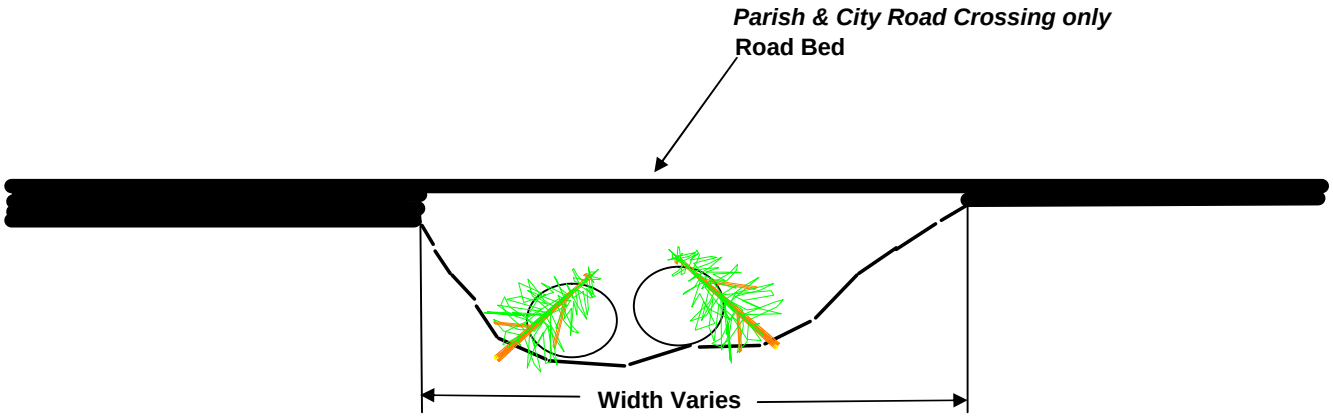
Notice:
48 Hours Before Digging
Call 1-800-272-3020

**DSR NO: 019-05-01R**

**CHANNEL: Indian Bayou Reach 1**

**Gravity Drainage District #8**

**Debris Removal**




**Note:** Contract is to remove Debris from upstream and downstream Culverts which includes inside of culverts
**Exception:** All Crossing which cross State or Federal highways are not included in contract

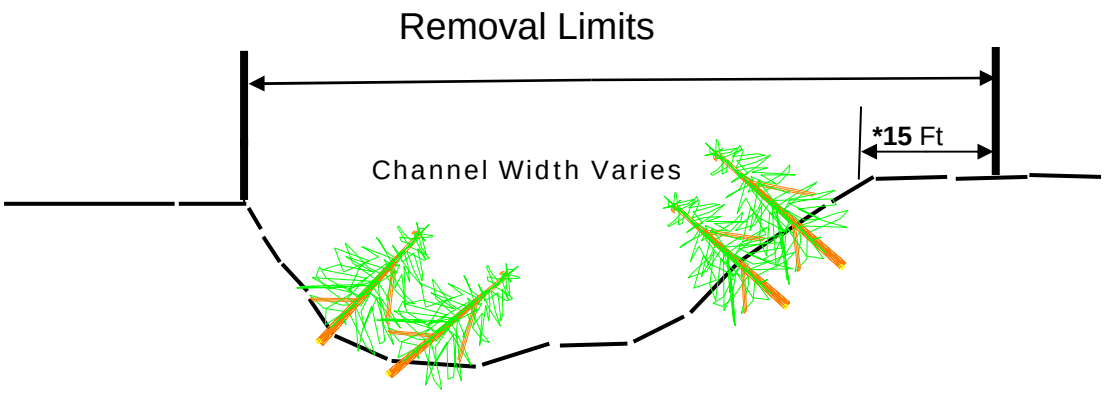
Typical Road Culvert type Crossing
**Not to Scale**

Notice:
48 Hours Before Digging
Call 1-800-272-3020

**DSR No:019-05-055R**
**CHANNEL: Indian Bayou Reach 1**
**Gravity Drainage District #8**

**Debris Removal**

**West Side** **East Side**




Typical Section Not to Scale

Notice:
48 Hours Before Digging
Call 1-800-272-3020

***Note** :Rights of way on east side. Chipping debris and depositing outside of channel may be allowed with NRCS approval prior to performing.*

***Exception** it may be possible that trees which were located outside of the the rightaway may have fallen into the right of way, these trees will be remove which may be located outside of the right of way.*

# Channel Obstruction Evaluation

## SITE INFORMATION

| | | | |
|---|---|---|---|
| Parish: | CALDWELL | Site: | INDIAN BAYOU |
| City: | MOSS BLUFF | | |
| Sponsor: | DIST. 8, WARD 1 | Reach: | From - COFFEY RD BRIDGE |
| Date: | 10/19/05 | IB-1 | To - D/S ~~[illegible]~~ 2000' to |
| Evaluation Team: | Steve Tully, David Williams | | Confluence w/ IB-5 |

## PHOTO NUMBERS AND BRIEF DESCRIPTION

| Photo # | Description |
|---|---|
| #7-19 | (See Attached) |
| | |
| | |

## WAYPOINTS

(CIRCLE location and record in Decimal Degrees

| | |
|---|---|
| (Start Work (D/S end)) | N 30.3351 |
| Midstream | |
| End Work (U/S end) | W93.2554 |

## NEARBY AND UPSTREAM STRUCTURES

(Fill in Numbers, Values, and Size

~~See Upper Indian Bayou [illegible] Above Bridge~~

| CHURCHES | | SCHOOLS | | PUBLIC FACILITIES | |
|---|---|---|---|---|---|
| No. of Churches | | No. of Schools | | No. of Public Facilities | |
| **HOMESITES** | | **BUSINESSES** | | | |
| No. of Homesites | | No. of Businesses | | | |
| Average Value of Homes ( X $1,000 ) | | Size of Businesses | | S M L | |

## STREAM CROSSINGS

(CIRCLE type and write material, size and length

| TYPE | MATERIAL | NUMBER, SIZE, & LENGTH |
|---|---|---|
| Bridge | Concrete | 1, 40' x 100' |
| Culverts | | |
| Other or None | | |

## UTILITIES

(CHECK the location of the utilities in the area and CIRCLE stream orientation)

| | | | |
|---|---|---|---|
| None Apparent | Overhead (Power, Cable, etc.) | U/S | D/S |
| | Buried (Gas, Sewer, water, etc.) | U/S | D/S |
| | Elevated Cross channel (Water, Gas, etc.) | U/S | D/S |
| Remarks: | | | |

## CHANNEL CHARACTERISTICS

(CHECK appropriate box for slope and fill in dimensions informatio

| SLOPES | | DIMENSIONS | | FLOW |
|---|---|---|---|---|
| | | | | Is Water Flowing? |
| ✓ | 1.5 : 1 or steeper | Top Width (ft.) | 50' | YES (NO) ✓ |
| | 1.5 : 1 through 3 : 1 Slope | Bottom Width (ft.) | 20' | Is debris accumulating? (i.e. Leaves, Trash) |
| | Flatter than 3 : 1 | Depth (ft.) | ~~[illegible]~~ 12' | (YES) minor NO |

## STATEMENT OF PROBLEM

(CHECK the boxes as needed, and CIRCLE the size of debris that applies)

| DEBRIS | IN CHANNEL | ACROSS CHANNEL | SIZE OF DEBRIS | | | BLOCKAGE % of X-Section Obstructed: | |
|---|---|---|---|---|---|---|---|
| Pine Trees | ✓ | ✓ | Light | Moderate | (Heavy) | Less than 25% | 26%-50% |
| Hardwoods | ✓ | ✓ | | | | 51%-75% | (76%-100%) |
| Shrubs | | | | | | | |

Other (explain) Debris blockage is intermittent & variable over reach. Where blockages exist, obstruction is moderate to heavy.

## WORK METHOD AND LOCATION

(CHECK the box that best applies,

| | |
|---|---|
| | Within Channel Floating Equipment (i.e. Barge or Marsh Buggy) |
| | Within Channel Non - Floating Equipment (Excavator/Track-hoe, Spider, etc) |
| ✓ | From Top Banks |

## ACCESS TO SITE

(Explain access issues and possible difficulties)

Access route starting @ Coffey Rd bridge. Access path will need to be cleared in floodplain through standing & down trees. Recommend access ~~through~~ from east bank only.

| | | |
|---|---|---|
| Calcacieu Parish<br>Channel Reach IB-1, Indian Bayou<br>Reach from Coffey Rd bridge to<br>confluence with lateral I-5 | **DSR No:** 019-05-041R | Selected Alternative |
| | **Section 5 Engineering Cost Estimate Worksheet** | |
| **Completed By:** Brandon Samson | | **Date:** 4-Nov-05 |

## Type of Work: Debris Removal

## Location of Work:

| Township(s) | Range(s) | Section(s) | Quadrangle(s) |
|---|---|---|---|
| 8S | 9W | 26 | Buhler NE |

| | *I-1* | | | | | |
|---|---|---|---|---|---|---|
| | ***Latitude*** | ***Longitude*** | ***Latitude*** | ***Longitude*** | ***Latitude*** | ***Longitude*** |
| **Downstream Start:** | 30.33510 | -93.25540 | | | | |
| **Upstream End:** | 30.33958 | -93.25453 | | | | |

**Estimated Length of Work Segment (ft):** 2,000

| Item No. | Proposed Recovery Measure | Quantity | Units | Unit Cost | Amount |
|---|---|---|---|---|---|
| 1 | Mobilization & Demobilization | 1 | LS | $500.00 | $5,000 |
| 2 | Channel Obstruction Removal | 2,000 | LF | $32.00 | $64,000 |
| 3 | Seeding, Sprigging and Mulching | 1 | AC | $400.00 | $400 |
| 4 | | | | | $0 |
| 5 | | | | | $0 |

**Note:** Estimated cost of debris removal includes labor and hauling of material to landfill.

**Total Estimated Construction Cost** **$69,400**

**Performance Time:**

| Production Rate | Segment Length | Production Time | Contract Time |
|---|---|---|---|
| 300 Ft/Day | 2,000 Ft | 6.67 Days | 7 Days |

**Estimated Cost of Equipment with Labor** ***(Per Mike Kennedy's Email 09/22/04)***

| Description of Work: | Cost per LF |
|---|---|
| Heavy with Complexities | $32.00 |

**Estimated Cost of Seeding with Labor**

| Segment Length | Segment Width | No.of Segment | Acres | Cost per Ac | **Total Cost** |
|---|---|---|---|---|---|
| 2,000 Ft. | 15 Ft. | 2 | 1 | $400 | $400 |

**Comments:**

Alternative involves accessing from both sides of channel and clearing access route parallel to channel in lower floodplain (low bank). Recommend larger tree trunks (18-24" dia.) be cut into 10-12' lengths and left in flood plain. Clearing route for access by construction equipment will involve moving numerous down tree trunks; debris already in flood plain but not obstructing channel should be left in flood plain. Leave all possible root wads intact.