

PLANNING ASSISTANCE TO STATES AGREEMENT

BETWEEN

THE DEPARTMENT OF THE ARMY

AND

CITY OF JONESBORO, ARKANSAS

FOR THE JONESBORO, ARKANSAS MASTER PLAN STUDY

THIS AGREEMENT is entered into this _____ day, of _____, 20____, by and between the Department of the Army (hereinafter the "Government"), represented by the District Engineer executing this Agreement, and the City of Jonesboro, Arkansas (hereinafter the "Sponsor"), represented by the Mayor executing the Agreement.

WITNESSETH, that

WHEREAS, Section 22 of the Water Resources Development Act ("WRDA") of 1974 (Public Law 93-251), as amended, authorizes the Secretary of the Army, acting through the Chief of Engineers, to assist the States, as therein defined, in the preparation of comprehensive plans for the development, utilization and conservation of water and related resources of drainage basins, watersheds or ecosystems located within the boundaries of such State;

WHEREAS, section 319 of the WRDA of 1990 (Public Law 101-640) authorizes the Secretary of the Army to collect fees from States and other non-Federal governmental entities for the purpose of recovering 50 percent of the cost of the program established by WRDA of 1974, Section 22;

WHEREAS, the Sponsor has reviewed the State's comprehensive water plans and identified the need for planning assistance as described in the Scope of Work incorporated into this agreement;

WHEREAS, the Sponsor has the authority and capability to furnish the cooperation hereinafter set forth and is willing to participate in the study cost-sharing and financing in accordance with the terms of this Agreement; and

WHEREAS, the Sponsor may provide up to 100 percent of its required contribution of Study Costs by the provision of services, materials, supplies or other in-kind services."

NOW THEREFORE, the parties agree as follows:

ARTICLE I - DEFINITIONS

For the purposes of this Agreement:

A. The term "Study Costs" shall mean all disbursements by the Government pursuant to this Agreement, from Federal appropriations or from funds made available to the Government by the Sponsor and all negotiated costs of work performed by the Sponsor pursuant to this Agreement. Study Costs shall include, but not be limited to: labor charges; direct costs; overhead expenses; supervision and administration costs; the costs of participation in Study Management and Coordination in accordance with Article IV of this Agreement; the costs of contracts with third parties, including termination or suspension charges; and any termination or suspension costs (ordinarily defined as those costs necessary to terminate ongoing contracts or obligations and to properly safeguard the work already accomplished) associated with this Agreement.

B. The term "estimated Study Costs" shall mean the estimated cost of performing the Study as of the effective date of this Agreement, as specified in Article III.A. of this Agreement.

C. The term "study period" shall mean the time period for conducting the Study, commencing with the release to the U.S. Army Corps of Engineers Memphis District of initial Federal funds following the execution of this Agreement and ending when the Memphis District provides the planning report to the Sponsor.

D. The term "Scope of Work"(SOW) means a description of the work to be performed. The SOW will be attached to this Agreement and not be considered binding on either party and is subject to change by the Government, in consultation with the Sponsor.

E. The term "fiscal year" shall mean one fiscal year of the Government. The Government fiscal year begins on October 1 and ends on September 30.

F. The term "negotiated costs" shall mean the costs of in-kind services to be provided by the Sponsor in accordance with the SOW.

ARTICLE II - OBLIGATIONS OF PARTIES

A. The Government, subject to receiving funds appropriated by the Congress of the United States (Congress), using funds and in-kind services provided by the Sponsor and funds appropriated by the Congress, shall expeditiously prosecute and complete the Study, in accordance with the provisions of this Agreement and Federal laws, regulations, and policies.

B. In accordance with this Article and Article III.A., III.B. and III.C. of this Agreement, the Sponsor shall contribute cash and in-kind services equal to fifty (50) percent of Study Costs. If agreeable to all parties, in-kind services may comprise up to 100 percent of the Sponsor's contributions. The in-kind services to be provided by the Sponsor, the estimated negotiated costs for those services, and the estimated schedule under which those services are to be provided are specified in the Scope of Work. Negotiated costs shall be subject to an audit by the Government to determine reasonableness, allocability, and allowability.

C. The Sponsor understands that the schedule of work may require the Sponsor to provide cash or in-kind services at a rate that may result in the Sponsor temporarily diverging

from the obligations concerning cash and in-kind services specified in paragraph B. of the Article. Such temporary divergences shall be identified in the quarterly reports provided for in Article III.A. of this Agreement and shall not alter the obligations concerning costs and services specified in paragraph B. of the Article or the obligations concerning payment specified in Article III of this Agreement.

D. If, upon the award of any contract or the performance of any in-house work for the Study by the Government, cumulative financial obligations of the Government and the Sponsor would exceed \$4,164,300, the Government and the Sponsor agree to defer award of that and all subsequent contracts, and performance of that and all subsequent in-house work, for the Study until the Government and the Sponsor agree to proceed. Should the Government and the Sponsor require time to arrive at a decision, the Agreement will be suspended in accordance with Article X., for a period of not to exceed six months. In the event the Government and the Sponsor have not reached an agreement to proceed by the end of their 6-month period, the Agreement may be subject to termination in accordance with Article X.

E. No Federal funds may be used to meet the Sponsor's share of Study Costs unless the Federal granting agency verifies in writing that the expenditure of such funds is expressly authorized by statute.

F. The award and management of any contract with a third party in furtherance of this Agreement which obligates Federal appropriations shall be exclusively within the control of the Government. The award and management of any contract by the Sponsor with a third party in furtherance of the Agreement which obligates funds of the Sponsor and does not obligate Federal appropriations shall be exclusively within the control of the Sponsor, but shall be subject to applicable Federal laws and regulations.

G. Notwithstanding any provision of this Agreement, this Agreement and the Government's obligations hereunder shall not be effective and will not commence until Federal funds have been appropriated and allocated to the District Engineer, U.S. Army Corps of Engineers Memphis District for the implementation of this study. In the event that Federal funds are allocated to the District Engineer for this study after the date that the parties hereto execute this Agreement, the effective date of this Agreement shall be the date that funding approval is provided to the District Engineer.

ARTICLE III - METHOD OF PAYMENT

A. The Government shall maintain current records of contributions provided by the parties, current projections of Study Costs, current projections of each party's share of Study Costs. At least quarterly, the Government shall provide the Sponsor a report setting forth this information. As of the effective date of this Agreement, estimated Study Costs are \$4,164,300 and the Sponsor's share of estimated Study Costs is \$2,082,150. In order to meet the Sponsor's cash payment requirements for its share of estimated Study Costs, the Sponsor must provide a cash contribution currently estimated to be \$0. The dollar amounts set forth in this Article are based upon the Government's best estimates, which reflect the scope of the study described in the SOW, projected costs, price-level changes, and anticipated inflation. Such cost estimates are subject to adjustment by the Government and are not to be construed as the total financial responsibilities of the Government and the Sponsor.

B. The Sponsor shall provide its cash contribution required under Article II.B. of this Agreement in accordance with the following provisions:

1. For purposes of budget planning, the Government shall notify the Sponsor by August 1 of each year of the estimated funds that will be required from the Sponsor to meet the Sponsor's share of Study Costs for the upcoming fiscal year.

2. No later than 60 calendar days prior to the scheduled date of the Government's issuance of the solicitation for the first contract for the Study or for the Government's anticipated first significant in-house expenditure for the Study, the Government shall notify the Sponsor in writing of the funds the Government determines to be required from the Sponsor to meet its required share of Study Costs for the first fiscal year of the Study. No later than 30 calendar days thereafter, the Sponsor shall provide the Government with the full amount of the required funds by delivering a check payable to "FAO, USAED, Memphis District - B1" to the District Engineer or verifying to the satisfaction of the Government that the Sponsor has deposited the required funds in an escrow account or other account acceptable to the Government, with interest accruing to the Sponsor, or presenting the Government with an irrevocable letter of credit acceptable to the Government for the required funds, or providing an Electronic Funds Transfer in accordance with the procedures established by the Government.

3. For the second and subsequent fiscal years of the Study, the government shall, no later than 60 calendar days prior to the beginning of the fiscal year, notify the Sponsor in writing of the funds the Government determines to be required from the Sponsor to meet its required share of Study Costs for that fiscal year, taking into account any temporary divergences identified under Article II.D. of this Agreement. No later than 30 calendar days prior to the beginning of the fiscal year, the Sponsor shall make the full amount of the required funds available to the Government through any of the funding mechanisms specified in paragraph B.2. of this Article.

4. The Government shall draw from the funds provided by the Sponsor such sums as the Government deems necessary to cover the Sponsor's share of contractual and in-house fiscal obligations attributable to the Study as they are incurred.

5. In the event the Government determines that the Sponsor must provide additional funds to meet its share of Study Costs, the Government shall so notify the Sponsor in writing. No later than 60 calendar days after receipt of such notice, the Sponsor shall make the full amount of the additional required funds available through any of the funding mechanisms specified in paragraph B.2. of this Article.

C. Within 90 days after the conclusion of the Study Period or termination of this Agreement, the Government shall conduct a final accounting of Study Costs, including disbursements by the Government of Federal funds, cash contributions by the Sponsor, and credits for the negotiated costs of the Sponsor, and shall furnish the Sponsor with the results of this accounting. Within 30 days thereafter, the Government, subject to the availability of funds, shall reimburse the Sponsor for the excess, if any, of cash contributions and credits given over its required share of Study Costs, or the Sponsor shall provide the Government any cash contributions required for the Sponsor to meet its required share of Study Costs.

ARTICLE IV - STUDY MANAGEMENT AND COORDINATION

To provide for consistent and effective communication, the Government's Project Manager for the Study and the Sponsor's designated representative shall communicate regularly until the end of the Study Period.

ARTICLE V - DISPUTES

As a condition precedent to a party bringing any suit for breach of this Agreement, that party must first notify the other party in writing of the nature of the purported breach and seek in good faith to resolve the dispute through negotiation. If the parties cannot resolve the dispute through negotiation, they may agree to a mutually acceptable method of non-binding alternative dispute resolution with a qualified third party acceptable to both parties. The parties shall each pay 50 percent of any costs for the services provided by such a third party as such costs are incurred. Such costs shall not be included in Study Costs. The existence of a dispute shall not excuse the parties from performance pursuant to this Agreement.

ARTICLE VI - MAINTENANCE OF RECORDS AND AUDIT

A. Within 60 days of the effective date of this Agreement, the Government and the Sponsor shall develop procedures for keeping books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to this Agreement. These procedures shall incorporate, and apply as appropriate, the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments at 32 C.F.R. Section 33.20. The Government and the Sponsor shall maintain such books, records, documents, and other evidence in accordance with these procedures and for a minimum of three years after the period of design and resolution of all relevant claims arising therefrom. To the extent permitted under applicable Federal laws and regulations, the Government and the Sponsor shall each allow the other to inspect such books, documents, records, and other evidence.

B. In accordance with 31 U.S.C. Section 7503, the Government may conduct audits in addition to any audit that the Sponsor is required to conduct under the Single Audit Act. Any such Government audits shall be conducted in accordance with Government Auditing Standards and the cost principles in OMB Circular No. A-87 and other applicable cost principles and regulations. The costs of Government audits shall be included in total Study Costs and cost shared in accordance with the provisions of this Agreement.

ARTICLE VII - RELATIONSHIP OF PARTIES

The Government and the Sponsor act in independent capacities in the performance of their respective rights and obligations under this Agreement, and neither is to be considered the officer, agent, or employee of the other.

ARTICLE VIII - OFFICIALS NOT TO BENEFIT

No member of or delegate to the Congress, nor any resident commissioner, shall be admitted to any share or part of this Agreement, or to any benefit that may arise therefrom.

ARTICLE IX - FEDERAL AND STATE LAWS

In the exercise of the Sponsor's rights and obligations under this Agreement, the Sponsor agrees to comply with all applicable Federal and State laws and regulations, including Section 601 of Title VI of the Civil Rights Act of 1964 (Public Law 88-352) and Department of Defense Directive 5500.11 issued pursuant thereto and published in 32 C.F.R. Part 195, as well as Army Regulations 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army."

ARTICLE X - TERMINATION OR SUSPENSION

A. This Agreement shall terminate at the conclusion of the Study Period, and neither the Government nor the Sponsor shall have any further obligations hereunder, except as provided in Article III.C.; provided, that prior to such time and upon 30 days written notice, either party may terminate or suspend this Agreement. In addition, the Government shall terminate this Agreement immediately upon the failure of the parties to extend the study under Article II.D. of the Agreement, or upon failure of the Sponsor to fulfill its obligation under Article III. of this Agreement. In the event that either party elects to terminate this Agreement, both parties shall conclude their activities relating to the Study and proceed to a final accounting in accordance with Article III.C. of this Agreement. Upon termination of this Agreement, all data and information generated as part of the Study shall be made available to both parties.

B. Any termination of this Agreement shall not relieve the parties of liability for any obligations previously incurred, including the costs of closing out or transferring any existing contracts.

ARTICLE XI - LIMITATION ON GOVERNMENT EXPENDITURE

In accordance with Section 22 of WRDA of 1974, as amended, Government financial participation in the cooperative preparation of comprehensive plans for development, utilization, and conservation of water and related resources pursuant to said authority shall be limited to the expenditure of not more than \$2,000,000 in any one year in any one State.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, which, subject to the provisions of Article II.G. of this Agreement, shall become effective upon the date it is signed by the District Engineer for the U.S. Army Corps of Engineers, Memphis District.

DEPARTMENT OF THE ARMY

CITY OF JONESBORO, ARKANSAS

BY: _____
Colonel, Corps of Engineers
District Engineer
Memphis District

BY: _____
Mayor

BY: _____
City Clerk

Attachment - Scope of Work

CERTIFICATE OF AUTHORITY

I, _____, do hereby certify that I am the principal legal officer of the City of Jonesboro, Arkansas and that the City of Jonesboro, Arkansas is a legally constituted public body with full authority and legal capability to perform the terms of the Agreement between the Department of the Army and City of Jonesboro, Arkansas in connection with the Jonesboro, Arkansas Master Plan Study, and that the person who has executed this Agreement on behalf of the City of Jonesboro, Arkansas has acted within his/her statutory authority.

IN WITNESS WHEREOF, I have made and executed this certification this ____ day of _____, 2____.

Phillip Crego
City Attorney

**SCOPE OF WORK
FOR
PLANNING ASSISTANCE TO STATES**

JONESBORO, ARKANSAS MASTER PLAN STUDY

1. GENERAL.

The following paragraphs describe the scope of work to be accomplished by the U.S. Army Corps of Engineers, Memphis District and the City of Jonesboro, Arkansas for the Jonesboro, Arkansas Master Plan, Planning Assistance to the States Study (PAS). Planning Assistance to the States provides authority for the Corps of Engineers to assist the states, local governments, and other non-Federal entities in the preparation of comprehensive plans for the development, utilization, and conservation of water and related land resources. The City of Jonesboro has requested planning assistance under the PAS program to assist in developing a comprehensive plan for long-term operations, maintenance, and improvements to the city's Municipal Separate Storm Sewer System (MS4). The PAS assistance would allow the City to be in a better position to manage storm water and its associated infrastructure within the community.

2. DETAILS OF STUDY.

This is a multi-year study and will be accomplished in four (4) years. The first phase of work will be accomplished in eighteen months. This phase will focus on master drainage planning for the Big Creek Basin and its tributaries. The second phase of work will be accomplished in twelve months and focus on Viney Slough Ditch and its tributaries. Phase three will focus on Little Bay Ditch and its tributaries and be completed within a twelve month period. The final phase of work will be completed in a six month period and will focus on miscellaneous channels and tributaries in the Valley View area. During the planning process, emphasis will be placed on developing a sustainable drainage system that not only mitigates flooding but also improves water quality, promotes environmental stewardship, and provides possible recreational opportunities.

The items to be included in the Master Drainage Plan study for each watershed is as follows:

1. Engineering description of the watershed drainage system and the major physical and institutional factors impacting drainage;
2. Classification of existing drainage ways to include both open-channels and piped networks as either primary, secondary, or tertiary drainage ways based on criteria to be established as part of study;
3. Recommendations for both short- and long-term maintenance of these classified facilities;
4. Re-delineation of drainage sub-basins from each point source discharge to a secondary drainage way;
5. Identification of existing rights-of-ways and easements associated with each drainage way;

6. Analysis of the adequacy of each drainage way to convey floodwaters without inundating, entering, or otherwise damaging private property or structures;
7. Methodology for prioritizing drainage improvement projects along the identified drainage ways so that the public is adequately protected from damages caused by floodwaters;
8. Hydrologic models (GIS compatible) for each drainage sub-basin;
9. Hydraulic models (GIS compatible) for each drainage way; and,
10. Conceptual designs with supporting models and analysis to mitigate flooding within the basins being studied.

Conceptual designs are to include:

1. Planning level maps with all recommended improvements identified;
2. Proposed rights-of-way for classified drainage ways including provisions for recreational trails, green spaces, and access for maintenance, as applicable;
3. Typical sections drawings for the classified drainage ways;
4. Recommendations for bank stabilization practices, grade checks, and vegetation management;
5. Budgetary cost estimates for plan implementation; and,
6. A recommended phasing plan for construction.

All modeling work and supporting documentation shall be done in accordance with the Federal Emergency Management Agency (FEMA) Guidelines and Specifications for Flood Hazard Mapping Partners with the intent of updating the Digital Flood Insurance Rate Maps (DFIRMs) for the City and requesting CLOMRs (Conditional Letter of Map Revisions) and LOMRs (Letter of Map Revisions) as part of the phased implementation of the Master Plan.

3. DETAILED PHASE OF WORK.

Phase 1 – Big Creek & Tributaries

The first phase of work will consist of master plan development within the Big Creek Watershed. Some of the sub-basins to be studied are Rogers Bayou, Big Creek Upper, Lost Creek, and Christian Creek. The tasks to be accomplished are listed in Table 1 below. Detailed descriptions of the items associated with each task are depicted in section 2 above, Details of Study. This phase of work will require eighteen months for completion.

TABLE 1

<u>Task</u>	<u>Item No.</u>	<u>Item Description</u>
A	1 and 4	Describe Drainage Network
B	2	Classify Drainageways
C	5	Identify ROW & Easements
D	8	Build HEC-Geo-HMS Model
E	9	Build HEC-Geo-RAS Model
F	6	Determine Drainageway Capacity
G	7	Determine Method to Prioritize Improvements
H	3	Recommend Maintenance
I	10	Develop Conceptual Designs
J		No items of work to be performed

Phase 2 – Viney Slough & Tributaries

The second phase of work will consist of master plan development within the Viney Slough Watershed. Some of the sub-basins to be studied are Viney Slough Tributary 10, Higginbottom Creek and other unnamed tributaries. The tasks to be accomplished are listed in Table 2 below. Detailed descriptions of the items associated with each task are depicted in section 2 above, Details of Study. This phase of work will require twelve months for completion.

TABLE 2

<u>Task</u>	<u>Item No.</u>	<u>Item Description</u>
A	1 and 4	Describe Drainage Network
B	2	Classify Drainageways
C	5	Identify ROW & Easements
D	8	Build HEC-Geo-HMS Model
E	9	Build HEC-Geo-RAS Model
F	6	Determine Drainageway Capacity
G		No items of work to be performed
H	3	Recommend Maintenance
I	10	Develop Conceptual Designs
J		Perform Craighead Forest Lake Dam Breach Analysis (Viney Slough Watershed)

Phase 3 – Little Bay Ditch & Tributaries

The third phase of work will consist of master plan development within the Little Bay Ditch Watershed. Some of the sub-basins to be studied are Whitemans Creek, Turtle Creek, Lateral No. 3, Butler Ditch, Murray Creek (Lateral 1), and Bridger Creek (Lateral 2). The tasks to be accomplished are listed in Table 3 below. Detailed descriptions of the items associated with each task are depicted in section 2 above, Details of Study. This phase of work will require twelve months for completion.

TABLE 3

<u>Task</u>	<u>Item No.</u>	<u>Item Description</u>
A	1 and 4	Describe Drainage Network
B	2	Classify Drainageways
C	5	Identify ROW & Easements
D	8	Build HEC-Geo-HMS Model
E	9	Build HEC-Geo-RAS Model
F	6	Determine Drainageway Capacity
G		No items of work to be performed
H	3	Recommend Maintenance
I	10	Develop Conceptual Designs
J		No items of work to be performed

Phase 4 – Valley View Area

The final phase of work will consist of master plan development within the Valley View Area. Some of the sub-basins to be studied are Main Ditch 1, Main Ditch 2, and Black Fork Creek. The tasks to be accomplished are listed in Table 4 below. Detailed descriptions of the items associated with each task are depicted in section 2 above, Details of Study. This phase of work will require six months for completion.

TABLE 4

<u>Task</u>	<u>Item No.</u>	<u>Item Description</u>
A	1 and 4	Describe Drainage Network
B	2	Classify Drainageways
C	5	Identify ROW & Easements
D	8	Build HEC-Geo-HMS Model
E	9	Build HEC-Geo-RAS Model
F	6	Determine Drainageway Capacity

G		No items of work to be performed
H	3	Recommend Maintenance
I	10	Develop Conceptual Designs
J		No items of work to be performed

4. **SCHEDULE OF WORK.** The Jonesboro, AR Master Plan study will be a multi-year study and consist of work performed as stated above. Work will begin as soon as practical following the effective date of the Planning Assistance to States Agreement between the Memphis District and the City of Jonesboro, AR and the date of receipt by the Memphis District of the sponsor's required share of funding or notification of intent to provide its share as in-kind services or a combination of cash and in-kind services. The non-Federal sponsor has an option to provide its share as one-hundred percent (100%) work-in-kind through the provision of services, materials, supplies or other in-kind-services necessary to prepare the plan. The non-Federal sponsor also has the option to provide its share as a combination of cash and work-in-kind. The PAS study will be cost shared on a 50/50 basis. Work-in-kind must begin after the Planning Assistance to States Agreement is executed. Such work-in-kind will be documented during the study process and subject to audit upon completion. The sponsor will provide work-in-kind through items of work associated with all phases of work. A PAS report will be completed at the end of each phase of work. The report will outline the findings of the study and development of the master plan.

5. **REQUIRED MEETINGS.** Close coordination will be maintained throughout the study process. Both formal and informal meetings will be held as needed. The City of Jonesboro will be provided regular updates as to the status of study progress. Submittals will be required at 30%, 60% and 90% completions during each phase of work. Review conferences will be conducted at 30%, 60% and 90% completion. Communication and coordination is necessary to ensure that goals and objectives will be met and a quality product developed within time and cost constraints.

6. **REPORTS.** Five hard copies and one digital copy of the PAS reports completed at the end of each phase of work will be provided to the City of Jonesboro upon completion.

**PLANNING ASSISTANCE TO STATES
STUDY SUMMARY SHEET**

FY: 2010	P2 #: 326132
DIVISION: MVD	STUDY NAME: Jonesboro, Arkansas Master Plan Study
PERFORMING DISTRICT: MVM	TYPE OF STUDY: Stormwater Management
STATE/TRIBE: Arkansas	SPONSOR: City of Jonesboro, Arkansas

SUMMARY OF STUDY SCOPE:

The scope of work consists of providing planning assistance for the City of Jonesboro in developing a comprehensive plan for long-term operations, maintenance, and improvements to the city's Municipal Separate Storm Sewer System and its associated infrastructure. The study will be accomplished through the joint efforts of the U. S. Army Corps of Engineers, Memphis District and the non-Federal sponsor, the City of Jonesboro, Arkansas. This is a multi-year study and will be accomplished in four years, contingent upon the allocation of Federal funds each year and the receipt of matching contributions by the non-Federal sponsor. The first phase of work will be accomplished in eighteen months. This phase will focus on master drainage planning for Big Creek and its tributaries. The second phase of work will be accomplished in twelve months and will focus on master drainage planning for Viney Slough Ditch and its tributaries. Phase three will be accomplished in twelve months and focus on master drainage planning for Little Bay Ditch and its tributaries. The final phase of work will be completed in a six month period and focus on miscellaneous channels and tributaries in the Valley View area. The total cost of the study is estimated to be \$4,164,300. The non-Federal sponsor is responsible for 50% of the total study costs and may provide in-kind services up to 100% of its required contribution of study costs through the provision of services, materials, supplies or other in-kind-services necessary to prepare the plan. Listed below is the total estimated cost for each phase of work. Work will begin as soon as practical following the effective date of the Planning Assistance to States Agreement between the Memphis District and the City of Jonesboro, Arkansas and the date of receipt by the Memphis District of the sponsor's required share of funding or notification of intent to provide its share as in-kind services or a combination of cash and in-kind services. A portion of the work to be accomplished in Phase 1 will be completed with Federal funds currently allocated for the study. The current available Federal funds are \$198,300. The non-Federal sponsor will be required to provide matching contributions. The work to be accomplished with these funds is within the Big Creek watershed. The following is a list of the items of work to be accomplished with available funds for Phase 1-Big Creek & Tributaries:

1. Describe Drainage Network
 - a. Engineering description of the watershed drainage system and the major physical and institutional factors impacting drainage
 - b. Recommendations for both short- and long-term maintenance of classified facilities
2. Classify Drainage Ways
 - a. Classification of existing drainage ways to include both open-channels and piped networks as either primary, secondary, or tertiary drainage ways on criteria to be established as part of the study
3. Identify ROW and Easements
 - a. Identification of existing rights-of-ways and easements associated with each drainage way

These items work will be completed within the first twelve months of Phase 1. The remaining work required in Phase 1 and subsequent phases of work will be completed contingent upon additional allocation of Federal funds and matching non-Federal contributions.

TOTAL ESTIMATED STUDY COSTS:	\$4,164,300
PHASE 1 – BIG CREEK & TRIBUTARIES	\$1,541,100
PHASE 2 – VINEY SLOUGH DITCH	\$1,107,700
PHASE 3 – LITTLE BAY DITCH	\$1,010,800
PHASE 4 - VALLEY VIEW AREA	\$504,700

**Non-Federal Sponsor
Work-in-Kind**

A summary of the non-Federal sponsor work-in-kind and estimated costs for work to be performed in Phase 1 for the City of Jonesboro, Arkansas Master Plan Study under the Planning Assistance to States Program are depicted in the table below. The non-Federal sponsor has agreed to provide the provision of services, materials, and supplies related to the scope of work as defined for Phase 1 of the study. These work-in-kind services are to be provided during Phase 1 of the study process and are depicted in the table below.

Phase 1 – Big Creek and Tributaries:

	Item of Work	Cost
A.	Describe Drainage Network	
	Collect Information	
	Collect General Information (news articles, photos, inspect sites)	\$5,750
	GIS Mapping	\$20,750
	Design Drawings/Surveys	\$3,125
	City Publications	\$3,125
	Courthouse Records	\$11,875
	FEMA-FIS	\$1,250
	Soils (digital NRCS soil mapping)	\$2,500
	Gaging	\$1,875
	Coordination on permits and floodplain studies	\$1,250
	GIS Analysis	
	Open Channels	\$21,250
	Storm Sewers	\$10,625
	Subbasins	\$6,875
	Institutional Factors	\$7,000
	Assemble Results	\$3,750
	Review Reports	\$2,500
	Subtotal	\$103,500
B.	Classify Drainageways	
	Collect Information	\$5,750
	Analyze Information	\$31,250
	Assemble Results	\$5,750
	Review Reports	\$1,250
	Subtotal	\$44,000
C.	Identify ROW and Easements	
	Analyze (Determine locations, review legal description, GIS mapping)	\$60,500
	Assemble Results	\$5,000
	Develop reports	\$17,500
	Subtotal	\$83,000
	Total In-Kind	\$230,500
	Contingencies (10%)	\$23,050
	Project Management (12%)	\$27,660
	Grand Total	\$281,210