



March 22, 2016

Mr. Craig Light, PE
City of Jonesboro, Arkansas
300 South Church St.
Jonesboro, AR 72401

RE: City of Jonesboro Flood Study Phase 2

Dear Mr. Light:

We are pleased to provide you with an estimate for surveying services for gathering the field information needed to be utilized in the City of Jonesboro Phase 2 Flood Study. This estimate was prepared using the information you provided to us in our meeting March 17. You have identified approximately 20 bridges, 57 culverts and 76 isolated channel sections that will be included in this scope of work.

The isolated channel sections will include all grade breaks along the section. It will extend a minimum of 50 feet from the top of bank unless an obstruction such as a solid fence or house is encountered. It will also include any spoil that is present from the top of bank to where the spoil ties back to natural ground. The section will not extend more than 250 feet from the centerline of the channel.

Bridge locations will included, from the upstream side a sketch with dimensions including guardrails, piles, and any other obstructions. Photographs will be taken of upstream and downstream sides of the bridge, any scour that has occurred on the downstream side and any elevated pipeline crossings near the bridge. An isolated channel section will be taken 1 to 2 channel top widths above the bridge perpendicular to the main channel.

Culvert locations will included, from the upstream side a sketch with dimensions including headwalls, wing-walls and any other obstructions. Photographs will be taken of upstream and downstream sides of the culvert, any scour that has occurred on the downstream side and any elevated pipeline crossings near the culvert. An isolated channel section will be taken 1 to 2 channel top widths above the bridge perpendicular to the main channel.

All sketches will be drawn on a standard template providing you with the information requested as well identifying the photographs that accompany the structure. They will be scanned and turned into a PDF. All photographs will be in a JPEG Format. The isolated channel sections will be delivered in comma separated value format as points including the point number, northing, easting, elevation and description. The horizontal datum for these points will be NAD 1983, Arkansas State Plane and the vertical datum will be NAVD 1988.



Associated Engineering, LLC

103 S. Church Street – P.O. Box 1462 – Jonesboro, AR 72403 – Phone: (870) 932-3594 – Fax: (870) 932-1554

It will take approximately 10 weeks to gather the requested information. The fees for these services will not exceed be \$74,640.00 (seventy-four thousand and six hundred and forty dollars and no cents).

Thank you for the opportunity to submit this proposal. Please review this estimate and contact me if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read 'John M. Easley'.

John M. Easley, PE PS
Associated Engineering, LLC

A handwritten signature in blue ink, appearing to read 'Patrick W. Lemley'.

Patrick W. Lemley, PS
Associated Engineering, LLC