

GENERAL SCOPE OF ENGINEERING SERVICES

For the Development of Public Meeting Displays

Basic engineering and office services for the development of story boards for twenty (20) roadway improvement projects shall include, but not be limited to, the services described in this document. Task Nos. 1 and 2 can be completed within eight (8) weeks from Notice-To-Proceed (NTP). Task 4 can be completed within two (2) weeks from last Public Meeting. **Exhibit A** (attached to this document) contains the estimated man-hours to perform the scope of work as listed below. The Basic Services shall include the following tasks:

Task 1 — Site Assessment

Field Inventory:

The Engineer will conduct a field inventory visit to each site. The sites are listed in **Exhibit B** (provided by the City of Jonesboro). During this field visit, The Engineer will list all existing relevant physical features which could be impacted by the proposed project that are noteworthy. For example, major utility features, cultural features and potential environmental features will be noted for future talking points. For proposed intersection improvement projects, the Engineer will observe existing traffic operations and identify any operational deficiencies associated with the existing geometric layout of the intersection. The Site Assessment would also include the preparation of an Opinion of Probable Cost for approximately 13 projects. This cost would be based on existing preliminary sketches and description of projects and used for budget purposes only. The cost will include construction, utilities and anticipated Right-of-Way (R.O.W.) costs. The City will assist the Engineer with R.O.W. requirements and utilities in the area. It should be pointed out that these costs are preliminary in nature only and until construction plans are fully developed the exact impact to R.O.W. and utilities is uncertain. Projects where AHTD has already developed an opinion of cost are not included in this task.

Task Deliverables:

1. Inventory of relevant utilities, cultural features (parks, schools, civic centers, etc.) and any operational deficiencies that may be observed during site visit.
2. Opinion of Probable Cost.

(This does not include a complete inventory of utilities in the area.)

Task 2 — Development of Story Boards

Story Boards:

After conducting the site assessment, Fisher Arnold will prepare a one story board for each of the 20 listed projects. The story board will show the site limits, proposed typical section rendering, opinion of probable costs and bullet points of why the job is needed. The information will be placed on foam boards for use at various public meetings. Additionally, FA will produce 11"x17" bond sheets of the same information displayed on the boards to provide at the public meetings. The story board development stage will consist of the following:

- Show project limits on aerial photography (photography to be provided by the City of Jonesboro)
- Prepare proposed typical section rendering
- Prepare bullet list stating reasons why job is needed
- Prepare opinion of probable costs
- Print and Submit information to City to review
- Address City review comments
- Prepare boards with above City approved information

Task Deliverables:

1. Twenty (20) Story Boards (24"x36" foam boards).

Task 3 — Project Administration / Meetings

Project Meetings:

One general project meeting will be conducted with the City when appropriate, to provide detailed updates on the project status, answer questions, and resolve problems.

Progress Reports:

As part of this task, the Engineer will prepare and submit monthly progress reports to the City. The progress reports will provide a written description, detailing the work completed for each task that month and will note and explain any variations in the project schedule. The progress reports will also note any technical, management, or coordination problems that have arisen and will note what work is expected to be completed for the upcoming month. The report will also provide the percentage of work completed (as determined by man hours) for each task during that month. Progress reports will be accompanied by the Engineer's monthly invoice.

Public Meetings:

As part of this task, the Engineer will prepare and attend two (2) public meetings to present the proposed list of projects.

Task 4 — Project Priority List

The Engineer will assist the City in their effort of preparing and assigning priorities with regards to the list of projects to be incorporated into the transportation program based upon the estimated budget and time to complete each project. This will include the preparation of a cost outlay model/graph that shows projects, years and cash expenditures over a 6 to 10 year period. The Engineer and the City will collaborate in regards to the data, priority and costs of the twenty (20) projects that will be incorporated into the charts.

Task Deliverables:

1. Assist the City with the creation of a table/list with estimated timeline and budget to complete each project (based upon the required phases for each project – i.e., NEPA, Design, Right-Of-Way, Utility Relocation and Construction).
2. Prepare a graph/chart displaying projects and anticipated time schedule and costs.

Exhibit A - Fisher Arnold Man-hour Estimate
Development of Story Boards for City of Joneboro Various Transportation Projects
May 20, 2015

Item No.	Activities	Man-hours				
		P	PM	D	CAD	C
Task 1 - Site Assessment						
A	Project Site Visits	18	25			
B	Preparation of Site Inventory	2	8			
C	Preparation of Opinion of Cost (13 sites)	12	72		8	4
Task 1 Manhour Subtotal		32	105	0	8	4
Task 2 - Development of Story Boards (20 boards)						
A	Prepare Project Site Limit Maps		4		40	
B	Prepare Proposed Typical Section Renderings		4	8	40	
C	Prepare Opinion of Probable Costs	4	16			
D	Prepare Project Highlights		8			
E	Print & Submit Diagrams to City				4	
F	Address City Comments		8		8	
G	Prepare Story Boards			40	40	
Task 2 Manhour Subtotal		4	40	48	132	0
Task 3 - Project Administration / Meetings						
A	Project Administration	4	8			
B	Project Kick-off Meeting (see footnote no. 1)					
C	General Project Meeting (1 meeting)	8	8			
D	Public Meetings (attend 2 public meetings)	16	16			
Task 3 Manhour Subtotal		28	32	0	0	0
Task 4 - Project Priority List						
A	Assist Jonesoboro in their creation of project list with associated timeline and estimated budget for the development of the transportation program.	30	42		20	20
Task 4 Manhour Subtotal		30	42	0	20	20
Total Manhours		94	219	48	160	24

Footnotes:

- 1) Time for kick-off meeting is considered incidental to site visits (Task 1A).

LABOR SUMMARY:

POSITION	MANHOURS	RATE	COSTS
PRINCIPAL (P)	94	\$175	\$16,450
PROJECT MANAGER (PM)	219	\$150	\$32,850
DESIGNER (D)	48	\$100	\$4,800
CAD TECHNICIAN (CAD)	160	\$80	\$12,800
CLERICAL (C)	24	\$60	\$1,440
TOTAL LABOR			\$68,340

EXPENSES:

Trips (8 trips x 200 mi/trip x \$.56/mi =)	\$896.00
Delivery	\$100.00
Foam Boards	\$200.00
Plotting	\$250.00
Total Expenses	\$1,446.00

TOTAL LABOR AND EXPENSE = **\$69,786.00**