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January 30, 2024

Mr. James Clark  
Public Works Director  
City of Tontitown  
P.O. Box 305  
Tontitown, AR 72770

Re: South Barrington Road  
Stormwater Study

Dear Mr. Clark:

In developing the City of Tontitown's Stormwater Master Plan (SWMP) Phase 1 report, Garver compiled historical data, news reports, and public comments to identify areas of concern throughout the City. Based on this Phase 1 report, the City has indicated that Garver should perform a detailed study of Model No. 3, the tributary to Little Wildcat Creek along South Barrington Road.

The fee for performing this detailed study is estimated to be \$46,650, based on the scope included with this letter as Appendix A. We request that the City Council authorize Garver to proceed with this next phase of the SWMP.

Please call me if you have any questions.

Sincerely,

GARVER

Larry Gregory, PE  
Project Manager

Attachments: As Stated

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**APPENDIX A – SCOPE OF SERVICES FOR CITYWIDE COMPREHENSIVE STORMWATER MASTER PLAN – PHASE 2**

**1. General**

The SMP project will be performed in two (2) phases. This scope of services document discusses the scope of Phase 2 only and is in addition to the Phase 1 scope. **Figure 1** shows a flow chart of the overall project process.

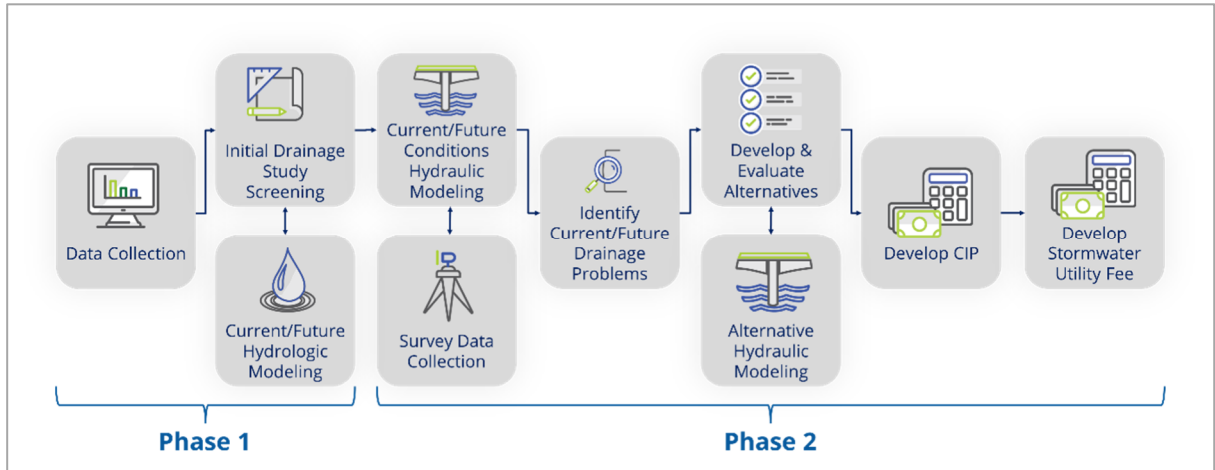


Figure 1. SMP Project Process

**2. Hydraulic Modeling**

The following locations have been selected for study in Phase 2, with Model No. 3 being addressed with this Scope:

Model Number	Stream/Location	Model Extents	Model Type
1	Brush Creek - Brush Creek Road	From downstream of Highway 112 to just downstream of Brush Creek Road (west crossing)	1D HEC-RAS
2	Wildcat Creek - S. Pianalto Road	From upstream of Kelly Road to downstream of Harmon Road	1D HEC-RAS
3	Tributary to Wildcat Creek - S. Barrington Road	From upstream of Taldo Loop to confluence with Wildcat Creek	1D HEC-RAS
4	Bushy Creek – Sbanotto Ave/Ardenemagni Road	From upstream of Morsani Avenue to downstream of Maestri Road	1D HEC-RAS
5	Tributary to Bushy Creek - Morsani Ave/Klenc Road	From downstream of private drive to confluence with Bushy Creek	2D HEC-RAS
6	Unnamed Tributary to Brush Creek - Liberty Avenue	From downstream of Highway 412 to confluence with Brush Creek	1D HEC-RAS

### **3. Survey Data Collection**

Survey needs for this project will be based on the modeling areas and methods identified in Task 2 and Task 4. Where applicable, existing topographic and elevation data from LIDAR and as-built drawings will be used. However, depending on the level of detail required, survey will be collected for stream or ditch cross sections, structure information, and other required elevation data needed to develop the hydraulic modeling.

Property surveys are not anticipated for the completion of the project and not included in this scope of services.

### **4. Hydraulic Modeling and Alternative Evaluation**

#### **4.1. Hydraulic Modeling**

Hydraulic modeling will be conducted using the methods determined from the plan of action in Task 2. Current hydraulic conditions will be modeled first. Model results will be calibrated and/or validated to high water marks and observed flood data when possible. All hydraulic models will be provided to the City as a product of the SMP.

##### **A. Model 3 – Tributary to Wildcat Creek 1D HEC-RAS:**

A new 1D HEC-RAS model will be developed for Tributary to Wildcat Creek from upstream of Taldo Loop to confluence with Wildcat Creek. Existing Conditions will be modeled based on project survey and lidar. Proposed alternatives will be developed for the S. Barrington Road crossing.

#### **4.2. Develop and Evaluate Improvement Alternatives**

Conceptual potential solutions will be identified for the current and future drainage problems identified in Phase 1. Conceptual proposed analysis will be limited to two per project site. Drainage improvement solutions may include structural and non-structural solutions or a combination thereof. These types are described below.

##### **A. Structural improvements:**

- Storm system infrastructure improvements (additional or upsizing of pipes, etc);
- Stream crossing structure improvements (culverts or bridges);
- Channel improvements (clearing, widening, channelization);
- Detention or retention ponds

##### **B. Non-structural improvements:**

- Improved regulations or development requirements
- Improved flood maps and information
- Public education
- Maintenance of drainage infrastructure

#### 4.3. Alternative Hydraulic Modeling

As part of the process of evaluating improvement alternatives, proposed alternatives will be analyzed in the applicable hydraulic models. The proposed alternative results will be utilized to evaluate the effectiveness of the proposed improvements.

### **5. Conceptual Exhibits and Cost**

Conceptual Exhibits and Planning Level Cost Estimates for up to two (2) proposed improvement alternatives will be developed for the purposes of planning, budgeting, and prioritizing. Garver will include mapping level property lines in the concept layouts as provided by the owner. Any information provided by Owner to Garver is assumed as correct.

### **6. Project Management**

#### 1. Project Meetings

Several meetings will occur between Garver and the City during this project, including the following:

- The Project Manager (PM) and H&H Task Lead (TL) will attend one (1) kick off meeting for Phase 1 with City personnel to discuss project scope, schedule, budget, and data to be acquired from the City.
- The PM and TL will attend two (2) City Council meeting to provide an overview of the project.
- The PM and TL and appropriate task leaders will attend up to two (2) progress meetings during Phase 1 to provide status reports, discuss specific tasks, and determine adequate drainage criteria and CIP prioritization criteria.
- The PM will attend weekly status update meetings via Teams.
- Meeting minutes will be provided by the PM to City personnel within 5 business days following each meeting.

#### 2. Project Administration

The PM will provide monthly project status reports to the City with a monthly invoice. This status report may include progress of work completed during the last month, work to be completed within the next month, and other important information.

#### 3. Quality Control/Quality Assurance (QAQC)

Garver places a strong emphasis on QAQC processes. Therefore, a detailed QAQC plan will be developed by the PM and QAQC task leaders. All personnel performing work on this project will be required to read and acknowledge the QAQC plan.

### **7. Project Deliverables**

The following will be submitted to the Owner, or others as indicated, by Garver:

- A. Digital files of all hydraulic models;
- B. Three copies of the Conceptual Design with opinion of probable construction cost for each project;

- C. Report detailing the methodology and findings of Phase 2;
- D. Electronic files as requested.

**8. Extra Work**

The following items are not included under this agreement but will be considered as extra work:

- A. Preliminary or final design of proposed alternatives for drainage improvement.
- B. Project bidding or construction phase services.
- C. Submittals or deliverables in addition to those listed herein.
- D. Geotechnical data collection.
- E. Coordination with FEMA, including any Letter of Map Changes.
- F. Preparation of a Storm Water Pollution Prevention Plan (SWPPP). The construction contract documents will require the Contractor to prepare, maintain, and submit a SWPPP to DEQ.
- G. Environmental Handling and Documentation, including wetlands identification or mitigation plans or other work related to environmentally or historically (culturally) significant items.
- H. Additional study or modeling not included in this scope of services.
- I. Additional concept exhibits or cost estimates not included in this scope of services.
- J. Property or Utility Surveys.
- K. Specific grant assistance
- L. BMPs for maintenance of infrastructure
- M. Future updates of hydraulic models due to development after the SMP has been completed.
- N. Appraisal Services

Extra Work will be as directed by the Owner in writing for an additional fee as agreed upon by the Owner and Garver.

**9. Schedule**

Garver shall begin work on Model No. 3 under this Agreement within ten (10) days of a Notice to Proceed and shall complete the work in accordance with the schedule below:

Phase Description	Calendar Days
Survey Data Collection	45 days from approval of Phase 2 contract
Existing Hydraulic Modeling	30 days from completion of survey
Alternative Development/Modeling	30 days from completion of existing hydraulic modeling
Conceptual Exhibits and Costs	30 days from completion of Alternative Development

**ATTACHMENT B  
FEE ESTIMATE**

**City of Tontitown  
Stormwater Master Plan - Phase 2**

**Site 3 - S. Barrington Road**

WORK TASK DESCRIPTION	E-5	E-3	E-1	S-6	S-5	2-Man Crew (GPS Survey)
	\$239.00	\$168.00	\$120.00	\$206.00	\$181.00	\$227.00
	hr	hr	hr	hr	hr	hr
<b>1. Project Management</b>						
Meetings with City	2	4				
Bi-Weekly status meetings (16)		6				
Overall Project Administration	2	8		2		
Overall Project Scheduling & Coordination	2	4		2		
Prepare Monthly Invoices		3		1		
Project Quality Plan	2	3				
Preliminary Development Discussions		6				
<b>Subtotal - Project Management</b>	<b>8</b>	<b>34</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>
<b>2. Survey</b>						
Cross Sections				2	4	10
Structures				2	4	10
Processing Survey Data					8	
<b>Subtotal - Survey</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>16</b>	<b>20</b>
<b>3. Hydraulic Modeling</b>						
Apply Hydrology		4	4			
Existing Conditions (1D HEC-RAS)		4	30			
Proposed Conditions (North site) (2 alternatives)		6	30			
Proposed Conditions (South site) (2 alternatives)		6	30			
QA/QC and revisions	6	8	10			
Hydraulic Report		8	8			
<b>Subtotal - Hydraulic Modeling</b>	<b>6</b>	<b>36</b>	<b>112</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>4. Exhibits and Conceptual Costs</b>						
Conceptual Exhibit	8		40			
Conceptual Cost Estimate	4		8			
<b>Subtotal - Exhibits and Conceptual Costs</b>	<b>12</b>	<b>0</b>	<b>48</b>	<b>0</b>	<b>0</b>	<b>0</b>

<b>Hours</b>	<b>26</b>	<b>70</b>	<b>160</b>	<b>9</b>	<b>16</b>	<b>20</b>
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<b>Salary Costs</b>	\$6,214.00	\$11,760.00	\$19,200.00	\$1,854.00	\$2,896.00	\$4,540.00
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**SUBTOTAL - SALARIES: \$46,464.00**

**DIRECT NON-LABOR EXPENSES**

Document Printing/Reproduction/Assembly \$50.00

Travel Costs \$136.00

**SUBTOTAL - DIRECT NON-LABOR EXPENSES: \$186.00**

**SUBTOTAL: \$46,650.00**

**SUBCONSULTANTS FEE: \$0.00**

**TOTAL FEE: \$46,650.00**