

**Maumee Watershed Conservancy District
Hancock County Flood Diversion**

***MONTHLY PROGRESS REPORT #7
FOR STANTEC CONSULTING SERVICES INC.***

Period Covered:

11-March-2017 thru 7-April-2017

Submitted by:

**Stantec Consulting Services Inc.
4540 Heatherdowns Boulevard, Suite A
Toledo, Ohio 43614**

**Telephone: (419) 380-8910
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I. Invoice Summary and Project Financial Status

- Invoice Number 1184330 totaling \$46,043.47 for the Phase 2 Proof of Concept efforts is submitted for consideration.
- The above invoice includes two (2) subconsultant invoices. Invoices from Stormwater Engineering (\$3,738.90) and Hart (\$6,213.68) are attached for your records.
- A second invoice, Invoice Number 1184224 totaling \$12,119.50, for the authorized Supplemental Services related to field investigations for permitting and aerial survey, is also submitted for consideration. This invoice includes time applied by Stantec staff, as well as one (1) subconsultant invoice from the Mannik & Smith Group (\$8,960.50).
- A third invoice, Invoice Number 1184225 totaling \$2,563.00 for the initial stages of preliminary engineering related to the proposed Hydraulic Improvements.
- To-date approximately 73.04% of the total authorized funds for the Program have been invoiced.

II. Major Issues and Decisions

Data Collection & Analysis

- Additional QA and calibration continues for the “typical storm” event. The Proof of Concept report is, however, based upon the SCS Type II Storm as a direct comparison to the prior efforts by USACE.
- Authorized additional analyses by Applied Weather Associates (AWA) to review radar data available from the 2007 rain event to extract more refined information related to hydrology and enable further calibration of the models. The additional information should be available for Stantec staff by May 5th.
- Coordinated closely with Jack Faucett Associates (Faucett) for their review and update of the BCR for the proposed program of improvements. Additional notes in this regard are provided below.
- An online business survey was completed in coordination with the Chamber of Commerce. An additional agri-business survey was developed with the Farm Bureau and was provided for consideration. The Farm Bureau has declined to provide the link or hard copies to their members.
- Coordinated with HART for the addition of documents to Program webpage (www.hancockcountyflooding.com).

Concept Refinement

- Finalized refinements technically feasible alternatives, as presented within the Draft Proof of Concept report and consolidated information into the Final Report. The Final Proof of Concept Report was posted to the Program webpage on April 4th and hard copies were distributed to the District, County and City.
- The final report, includes the updated BCR analysis for the Hydraulic Improvements to the Blanchard River and for the overall Program.

Permitting

- Continued coordination with Mannik & Smith Group (MSG) for Section 106 consultation with SHPO.

- MSG and Stantec staff collaborated for refinement of formal work plan for permit coordination to follow the steps necessary to provide permitting for the preferred alternative/recommended plan once selected.
- Stantec staff are continuing the draft report for the previously completed wetland delineations and threatened and endangered species investigations. This report will be amended later to correspond to the final design documents and utilized for permitting of the proposed improvements.
- The invoice provide by MSG primarily includes the hourly rates and expenses for the Work Plan development and SHPO coordination, as well as finalization of the summary report for the initial field work east of I-75.

Aerial Survey

- Low-level flights for aerial mapping are complete. Post-processing of the raw data is underway to develop the bare earth DEM as part of the original basic services. DEMs should be available for use by Stantec in early May.

Hydraulic Improvements Preliminary Engineering

- Began coordination for field efforts to commence in May, including issuance of subconsultant agreements with TTL (soil borings), MSG (architectural & historical surveys) and Bockrath Associates (ground level boundary & topo surveys).
- Established work plans and listing for right-of-entry notifications for field efforts.
- Held conference call for commencing discussions with the Norfolk-Southern RR regarding recommended bridge modifications. Additional follow-up will be on-going for the next several months.

III. Schedule

Task	Proposed Timeline	Current Status	Anticipated Timeline
A. Data Collection & Analysis			
A.1 – Update Hydraulic Modeling, H&H Data Collection & Analysis	9/9/2016	Complete	N/A
A.2 – Economics Impact Analysis	9/30/2016	Complete	N/A
A.3 – Geotechnical Borings	10/28/2016	Complete	N/A
A.4 – Surveying	9/23/2016	Complete	N/A
A.5 – Pre-Permitting, Mussel Recon, Cultural	10/28/2016	Complete	N/A
A.6 – Transportation	9/30/2016	Complete	N/A
A.7 – Precipitation Modeling	10/31/2016	Complete	N/A
A.8.A – Wetland Delineations & Habitat Assessment (Supplemental Task)	1/31/2017	On Hold	4/15/17
A.8.B – Archaeological Survey	1/31/2017	On Hold	4/15/17
A.9 – Aerial Survey	12/31/2016	Complete	N/A

Task	Proposed Timeline	Current Status	Anticipated Timeline
B. - Concept Refinement			
B.1 – Project Adjustments & Improvements	10/14/2016	Complete	N/A
B.2 – Model Refinement	10/14/2016	SCS Type II analysis for Final Report is complete; Typical storm analysis is on-going	7/31/17
B.3 – Estimating & BCR Analysis	10/14/2016	Formal BCR Completed within Final Report	N/A
B.4 – Permitting Coordination	10/31/2016	Complete	N/A
B.5 – Report & Presentation	10/31/2016	Final report provided on April 4, 2017	N/A
C – Supplemental #1			
C.1 – Wetland Delineation & Habitat Assessment	1/31/2017	Field Work and Report Complete for Diversion Channel	N/A
C.2 – Archaeological Survey	1/31/2017	Field Work and Report for Diversion Channel Complete for areas East of I75	N/A
C.3 – Aerial Surveying	12/31/2016	Aerial Imagery Complete; Processing Nearly Complete	5/31/2017
D – Hydraulic Improvements			
D.1 – Site Assessment & Survey	7/31/2017	Starting	7/31/2017
D.2 – Cultural and Historic Resources	12/31/2017	Starting	12/31/2017
D.3 – Program Management	On-Going	On-Going	On-Going

Respectfully Submitted

STANTEC CONSULTING SERVICES INC.

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APPROVAL OF PAYMENT:

On behalf of the Maumee Watershed Conservancy District and in accordance with the Memorandum of Agreement, I hereby recommend payment in favor of Stantec Consulting Services Inc. by the Hancock County Commissioners in the amount of \$ 60,725.97.

Clark Lynn Army, General Manager

Date