

MEMORANDUM

DATE: July 22, 2013

TO: Brian Dissette, City of South Haven
Roger Huff, City of South Haven
Amanda Morgan, City of South Haven

FROM: Christopher J. Cook, PE

CC: Cindy Clendenon, MDEQ
Marcus Tironi, MDEQ
Timothy R. Drews, P.E., PTOE, Abonmarche
Tony McGhee, Abonmarche
Daniel A. Dombos, PE, Abonmarche

RE: **City of South Haven – Sewer Study Progress Report**

The following will summarize our progress to-date on the City of South Haven Sewer Study:

UTILITY MAPPING

We have completed this work. This task entailed compiling City record drawings, maps and field data into a comprehensive sanitary sewer system map. We added data fields such as reference drawing; installation/rehabilitation date; and length, material and slope of pipe. We converted city GIS information into AutoCAD for presentation, modeling, field investigation and study purposes.

FIELD INVESTIGATION AND DATA REVIEW

We have completed field work on the sewer lines to determine the size and slope of key runs and mapping that information for the modeling effort. We completed further investigation of the sewers in the Peterson Ravine Interceptor upstream of Clinton Street to the city limits. A significant portion of the I/I appears to be coming from the Peterson Ravine interceptor and this is the basis for additional metering along the interceptor and its tributaries. An amendment to the S2 Grant was awarded to complete this work.

COMPUTER MODELING AND FLOW MONITORING

Computer modeling, using calibration methods to adjust and fine tune the model will ensure that the results closely match actual flows observed during metering. The results will be used to predict the system response during certain large scale wet weather events (25 year, 24 hour storm). Meters have been reset and have been measuring both dry weather and wet weather flows since June. After additional metering is completed the model will be recalibrated and re-run. That will be in the fall of 2013.

SMOKE TESTING

We completed smoke testing of several key areas in the south-central portion of the City in June 2012 and presented the results to the BPU at that time. With the recent reaction of the Kalamazoo St., Main and other Lift Stations to the recent rains we are proposing to complete additional smoke testing in the LS tributary areas to further identify connection points for Inflow. Generally, the west central portion of the city will be smoke tested. This was also part of the S2 amendment approval for completion this fall.

SEWER TELEVISION

This work has been completed. We have reviewed the results and prepared a summary of the findings for inclusion in the SRF Project Plan.

SRF PROJECT PLAN

We are roughly 70% complete with this task with the remaining work expected to be completed following the additional metering/modeling. It is expected that the final plan will be submitted to DEQ in the spring of 2014.

