



**ONEIDA COUNTY DEPARTMENT OF
WATER QUALITY & WATER POLLUTION CONTROL**

51 Leland Ave, PO Box 442, Utica, NY 13503-0442
(315) 798-5656 wpc@ocgov.net FAX 724-9812

Anthony J. Picente, Jr.
County Executive

Steven P. Devan, P.E.
Commissioner

April 25, 2013

Gregg Townsend, P.E.
Regional Engineer
NYS Department of Environmental Conservation
317 Washington Street
Watertown, NY 13601



Koon Tang, P.E., Director
Bureau of Water Permits
Division of Water
NYS Department of Environmental Conservation
625 Broadway, 4th Floor
Albany, NY 12233

Re: Oneida County Sewer District
Quarterly Progress Report – 1st Quarter 2013

Consent Order No. R6-20060823-67

Dear Mr. Townsend and Mr. Tang:

On behalf of Oneida County, I am providing for your review and comment Oneida County's Quarterly Progress Report for the 1st Quarter – 2013 as required per Section XIII – Reporting Requirements of the Consent Order. This document summarizes the status and progress of work completed between January 1, 2013 and March 31, 2013 in support of Consent Order compliance requirements.

Please feel free to contact me should you have any questions or need additional information.

Sincerely,

**THE ONEIDA COUNTY DEPARTMENT OF
WATER QUALITY & WATER POLLUTION CONTROL**

Steven P. Devan, P.E.
Commissioner

Enclosure: Quarterly Progress Report – 1st Quarter 2013 (dated April 25, 2013)

cc: Anthony J. Picente, Jr. - Oneida County Executive
Karl E. Schrantz, P.E. – O'Brien & Gere Engineers, Inc.
John Lagorga, P.E. - GHD Consulting Services, Inc.
Peter M. Rayhill, Esq. - Martin and Rayhill
Judy Drabicki, - NYSDEC
Joseph DiMura, P.E. – NYSDEC
Matthew Duffany, P.E. - NYSDEC
Michael O'Neil, P.E. - NYSEFC

**SANITARY SEWER COLLECTION SYSTEM
QUARTERLY PROGRESS REPORT
1ST QUARTER – 2013
ONEIDA COUNTY SEWER DISTRICT**

NYSDEC Consent Order R620060823-67



Prepared for

Oneida County Department of Water Quality
& Water Pollution Control

Steven P. Devan, P.E., Commissioner

51 Leland Avenue

Utica, NY 13502

April 25, 2013



Cazenovia, NY



Syracuse, NY



Utica, NY

**Sanitary Sewer Collection System
Quarterly Progress Report
1st Quarter - 2013
Oneida County Sewer District
NYSDEC Consent Order R620060823-67**

Prepared for:

**Oneida County Department of Water Quality &
Water Pollution Control**

Prepared by:

**O'Brien & Gere Engineers, Inc.
101 First Street
4th Floor
Utica, NY 13501**

April 25, 2013

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1.0 INTRODUCTION

1.1 HISTORICAL BACKGROUND

The Oneida County Sewer District (District) was formed in 1965 through an act by the former Oneida County Board of Supervisors. It is administered by Oneida County through the Oneida County Department of Water Quality and Water Pollution Control (WQ&WPC) which is responsible for the operation of the District's facilities and personnel. District facilities include 45 miles of interceptor sewers, the Sauquoit Creek and the Barnes Avenue Pumping Station, and the Water Pollution Control Plant. The District services 15 municipalities, nine of which are within the Sauquoit Creek Pumping Station (SCPS) Basin. These municipalities own and operate their own collection systems.

1.2 CONSENT ORDER

The New York State Department of Environmental Conservation (NYSDEC) and Oneida County (County) entered into a Consent Order (No. R620060823-67) due to sanitary sewer overflows (SSO) at the SCPS. In addition to the required mitigation of those SSOs, the Consent Order, with an effective date of December 12, 2011, requires the submission of Quarterly Progress Reports. The intent of this Quarterly Progress Report is to summarize the work that has been undertaken by the County between January 1, 2013 and March 31, 2013 (1st quarter of 2013) in support of the Consent Order compliance requirements.

2.0 ENGINEERING INVESTIGATIONS AND EVALUATIONS

During the 1st quarter of 2013, the County completed the following tasks related to engineering investigations and evaluations.

2.1 COLLECTION SYSTEM

2.1.1 Manhole Inspections

There were no manhole inspections completed during the 1st quarter of 2013.

2.1.2 Sanitary Sewer Televising

There are approximately 216 miles of sanitary sewer within the SCPS basin (30 miles of District interceptor sewer plus 186 miles of municipal sewer). The County has contracted with a firm (National Water Main Cleaning Co.) to perform closed circuit televising (CCTV) of these sanitary sewers. CCTV of the municipal sewers will conclude during the spring of 2013. Televising data is being collected electronically in the field using the nationally standardized Pipe Assessment and Certification Program (PACP) and incorporated into the County's data management software.

During the 1st quarter of 2013, approximately 4 miles of municipal sewers were televised. The focus of the CCTV project during the 1st quarter was on data delivery and QA/QC of previously completed televising. Including interceptor sewers, approximately 170 cumulative miles of sewer have been televised through the end of the 1st quarter 2013.

2.1.3 Dye Testing

There was no dye testing performed during the 1st quarter of 2013.

2.2 WATER POLLUTION CONTROL PLANT

As noted in the 4th Quarter Progress Report (2012), Oneida County submitted a report titled "Water Pollution Control Plant and Sauquoit Creek Pump Station Evaluation", and an addendum to that report to NYSDEC. NYSDEC subsequently issued a written approval of the report and Addendum No. 1 on November 28, 2012. As a result of NYSDEC's approval of the report and addendum, the County prepared a "Treatment System Supplement" that was submitted to NYSDEC on January 25, 2013. Also during the 1st quarter of 2013, the County worked with the Consultant Team to plan the design work required to address the recommendations presented in the report and its addendum.

3.0 MANAGEMENT PROGRAMS

3.1 COMPUTERIZED MANAGEMENT AND MAINTENANCE SYSTEM

The County purchased a Computerized Management and Maintenance System (CMMS) software system (Lucity – formerly GBA Master Series) in 2009. This software is used to manage the sewer system data (mapping, inspections, etc.) obtained to date by the County. At the same time that the software was acquired, the County invested in computer hardware upgrades to support the CMMS system. The County’s GIS Coordinator manages the system.

During the 1st quarter of 2013, the County continued to utilize the CMMS for tracking and documenting sewer rehabilitation work, and for verifying installed quantities on Contractor payment applications. The County also upgraded the server dedicated to this project, in order to address increasing data storage needs.

3.2 FLOW MONITORING PROGRAM

A proposed flow monitoring program was developed during the 1st quarter of 2012 and submitted on March 27, 2012 to NYSDEC in accordance with Schedule A – Section B.1 of the Consent Order. NYSDEC provided written approval of the program on August 24, 2012. During the 1st quarter of 2013, the County continued to work with DASNY to finalize the funding request (\$950,000) for the capital equipment procurement portion of the program. Additionally, the County began work on a draft bid specification for the procurement of flow monitoring equipment and services, in anticipation of the award of funding.

3.3 PRIVATE PROPERTY I/I REDUCTION PROGRAM

During the 2nd quarter of 2012, a proposed outline of a program to address private property I/I (PPII) sources from the sanitary sewer system in the SCPS basin was prepared in accordance with Schedule A – Section B.2 of the Consent Order. A document titled “Preliminary Planning Document – Private Property Inflow and Infiltration Reduction Program” was submitted to NYSDEC on June 29, 2012 for review and comment. The County, working through the Steering Committee, has solicited input from the municipalities to establish a working group of appropriate PPII-oriented community representatives to map out a phased implementation plan.

3.4 CAPACITY, MANAGEMENT, OPERATIONS AND MAINTENANCE PROGRAM

During the 2nd quarter of 2012, a proposed outline for a Capacity, Management, Operations, and Maintenance (CMOM) Program that includes the Satellite Municipalities within the SCPS basin was prepared in accordance with Schedule A – Section B.3 of the Consent Order. Submission of a document titled “Preliminary Planning Document – Proposed CMOM Framework – Sauquoit Creek Pumping Station Basin Communities” was submitted to NYSDEC on June 29, 2012 for review and comment. The County, working through the Steering Committee, has solicited input from the municipalities to establish a working group of appropriate CMOM-oriented community representatives to map out a phased implementation plan.

4.0 SCHEDULE/MILESTONE DATES

4.1 APPROVED SCHEDULE

The following table represents the approved schedule as defined by the Consent Order (note that there were no changes to this schedule during the 1st quarter of 2013):

Description	Consent Order, Schedule "A" Date
<u>Engineering Investigations, and Evaluations</u>	
Dye Testing and Storm Sewer Report	June 30, 2012
Manhole Evaluation Report – Phase II	June 30, 2012
SCPS Evaluation Report	August 31, 2012
WPCP Evaluation Report	August 31, 2012
Treatment System Supplement (Report)	60 days after approval of WPCP Evaluation Report
Sewer CCTV Inspection Report – Phase II	April 30, 2013
Sewer CCTV Inspection Report – Phase III	April 30, 2014
Collection System Supplement (Report)	May 31, 2014
<u>Management Programs</u>	
Flow Monitoring Program	March 31, 2012
Private Property I/I Reduction Program	June 30, 2012
CMOM Program	June 30, 2012
PPII Reduction Program Implementation	May 31, 2013
CMOM Implementation	May 31, 2013
Asset Management Plan	December 31, 2021
<u>Remedial Measures</u>	
Semi-Permanent Alternative-Construction	December 31, 2016
SSO Mitigation-Consent Order Compliance	December 31, 2021
<u>Reporting</u>	
Annual Work Plan	January 31, annually
Quarterly Progress Report	Quarterly

4.2 MILESTONES

During the 1st quarter of 2013, the following milestone dates were met:

- No specific schedule milestones were required to be met during the 1st quarter of 2013.

5.0 SEWER REHABILITATION

Design and construction for initial projects is being financed under CWSRF Project No. C6-6070-08-00. Projects are tracked by contract number. The following is a status update of the current sewer rehabilitation contracts.

5.1 CONTRACT 2 – SANITARY SEWER MANHOLE REHABILITATION – PHASE 2

After a short winter shutdown, Green Mountain Pipeline Services (GMPS) and their sub-contractor resumed work during the end of the 1st quarter of 2013. Due to favorable pricing afforded by GMPS bid prices, a construction change order was executed between the County and GMPS on September 4, 2012 that added 336 manholes to the original contract of 942 manholes. The completion date was extended through June 2013 in order to complete the additional work. Including the change order, this project will rehabilitate approximately 1,278 sanitary sewer manholes. Rehabilitation was initiated and/or completed at approximately 1,240 manholes through March 31, 2013. The remainder of the work will be completed during the first half of 2013.

5.2 CONTRACT 3 – SANITARY SEWER MAINLINE REHABILITATION – PHASE 1

The County's Contractor, Insituform Technologies, LLC (ITI) mobilized and began work in mid-October 2012. Work includes approximately 13 miles of sewer rehabilitation using cured in place pipe (CIPP) lining, open cut repairs, sewer joint grouting, CIPP short liners, and lateral grouting. Through the 1st quarter of 2013, nearly all of the work was complete. The only work not yet complete consists of a single CIPP lining segment where access issues are hindering completion, the sealing of approximately 40 laterals, and some minor punch list items. A change order to the Construction Contract was issued which extends the construction completion date through April 2013. Note that this time extension will have no impact on new construction contracts that will be issued in 2013.

5.3 CONTRACT 4 – SEWER SEPARATION – CLINTON/HENDERSON STREET, NY MILLS

Substantial completion on this project was achieved during the 4th quarter of 2012. Work included the separation of a short section of combined sewer, reconnection of sanitary laterals, and conversion of an abandoned sanitary sewer to a storm sewer, with construction of a short extension of storm sewer, with an outfall to Sauquoit Creek through Pietryka Park in the Village of New York Mills.

The project resulted in the removal of approximately 264,000 gallons per day (measured) of wet weather flow from the sanitary sewer system at a final contract cost of \$162,938. As of the end of the 1st quarter of 2013, several punch list items, mostly related to site restoration, remain and will be completed upon the return of favorable weather and drier working conditions in the spring of 2013.

5.4 CONTRACT 5 – SEWER SPOT REPAIRS – PHASE 1

During the 1st quarter of 2013, design on this project was completed. Plans, Specifications, and a Basis of Design Report were submitted to NYSDEC and NYSEFC for review. Planned work includes storm sewer and sanitary sewer repairs for the purpose of removing inflow (both direct and indirect) sources from the sanitary sewer system in locations determined from the results of prior dye testing. Repairs are planned for approximately 15 separate locations throughout the SCPS tributary area. In addition, the project has been expanded to include the replacement of four sanitary sewer manholes and the lining of four pipe segments utilizing an ultra-violet light cured CIPP (UV-CIPP) process. The four pipe segments were identified to be lined under Contract 3, but due to access limitations in the upstream manholes, lining was not able to be completed. UV-CIPP was selected at these four locations as a small-scale demonstration project in order to evaluate an alternate lining process. A construction schedule has not yet been formalized, but work is anticipated to be performed in the 3rd quarter of 2013.

6.0 ASSESSMENT OF REHABILITATION EFFECTIVENESS

During the 1st quarter of 2013, there was no mechanism (flow monitoring) in place to measure the effectiveness of sewer rehabilitation. See Section 3.2, above for a discussion of the status of flow monitoring. However, visual observations of the construction activities associated with Construction Contracts 2 and 3 note obvious removals of I/I sources. Additionally, and as noted in Section 5.3, approximately 264,000 gpd of measured inflow and infiltration is being removed continually through the new outfall at Sauquoit Creek constructed under Contract 4.

7.0 COMPLETED CAPITAL PROJECTS/FACILITY UPGRADES

During the 1st quarter of 2013, there were no capital projects or facility upgrades completed, although several sewer rehabilitation construction projects are ongoing. As noted in Sections 5.2, 5.3, and 5.4, the work associated with the current rehabilitation contracts is mostly complete, with the exception of minor work required under each contract.

8.0 I/I OFFSET PROJECTS/NEW FLOWS

During the 1st quarter of 2013, the following additions and subtractions to the I/I Offset Credit Bank were recorded by the County. All amounts are reported in gallons per day (gpd), after the application of the 5:1 offset ratio.

Community	Starting Balance	Credits Added	Credits Used	Ending Balance
Town of New Hartford	52,261	0	4636 Commercial Dr (Olive Garden)	8,575
			4752 Middle Settlement Road	3,480
			4752 Middle Settlement Road	23,040
Town of Paris	1,927	0	0	1,927
Town of Whitestown	5,037	0	0	5,037
Village of Clayville	0	0	0	0
Village of New Hartford	17,434	0	0	17,434
Village of New York Mills	364	NY Mills I/I Projects-App4	9,562	62,166
		Contract 4-Clinton Street Sewer Sep.	52,740	
			GAN-KAVOD, 10 Mill St.	500
Village of Oriskany	1,243	0	0	1,243
Village of Whitesboro	16,345	0	0	16,345
Village of Yorkville	316	0	0	316
Totals	94,927	62,302	35,595	121,634

9.0 KEY PERSONNEL CHANGES

Key personnel changes, as they relate to the SSO Mitigation/Consent Order compliance project, is interpreted to be those staff members, whose addition to or deletion from the project would be viewed by the County to either add resources, or be a detriment to progress. Project staff includes County, satellite community, and consultant team personnel. The following is a summary of changes.

9.1 COUNTY STAFF

During the 1st quarter of 2013, there were no changes of key personnel to report.

9.2 SATELLITE COMMUNITY STAFF

During the 1st quarter of 2013, there were no changes of key personnel to report.

9.3 CONSULTANT TEAM STAFF

During the 1st quarter of 2013, there were three changes of key personnel to report.

Karl Schrantz, PE and Brian Whittaker, PE took positions with O'Brien & Gere Engineers, Inc. (O'Brien & Gere). They were formerly with Shumaker Consulting Engineering & Land Surveying, P.C. (SCE), the project's lead engineering consultant. Mr. Schrantz had served as Program Manager for the overall SSO Mitigation Program since 2007, while Mr. Whittaker had led the collection system investigative efforts and engineering/construction administration tasks for collection system improvements. Due to these key personnel re-assignments within the project team, the County consented to SCE's assignment of the engineering contract to its partnering firm GHD Consulting Services, Inc. (GHD). GHD will now be the lead consultant on the project. Additionally, GHD will add O'Brien & Gere to the project team which in turn will allow Mr. Schrantz and Mr. Whittaker to continue in their previous project roles as Program Manager and Project Manager-Collection System, respectively through O'Brien & Gere. This contractual arrangement will enable the individual team members to remain intact and enable the project to move forward relatively seamlessly.

Additionally, John Lagorga, PE of GHD returned from his temporary work assignment in New Zealand (as discussed in the 3rd quarter-2012 report) to resume his duties as Project Manager for GHD on this project.

10.0 ADMINISTRATIVE ITEMS

10.1 WORK AUTHORIZATIONS

No authorizations for additional engineering work were acted upon by the County during the 1st quarter of 2013. The following Work Orders were prepared in the 1st quarter, for submission to the County for review and consideration during the 2nd quarter of 2013:

- WO24-Water Pollution Control Plant Upgrade and Expansion, Solids Handling Upgrades-Preliminary Design
- WO25-Sewer Rehabilitation-FY 2013 Engineering Services
- WO26-Sauquoit Creek Pumping Station Upgrade and New Forcemain-Preliminary Design
- WO27-CMOM Program Implementation-Phase 1
- WO28-Community Outreach
- WO29-Private Property I/I Reduction Program Implementation-Phase 1
- WO30-Program Administration-FY 2013

10.2 FUNDING APPLICATIONS

The following is a status summary of current funding activities:

10.2.1 Phase 5a – Pump Station and Forcemain Upgrades – Design and Permitting (CWSRF No. C6-6070-08-02)-\$3 Million

The financing application has been advanced through NYSEFC. A closing on the short-term financing is anticipated for late April/early May 2013.

10.2.2 WPCP Upgrade and Expansion, Solids Handling Upgrades-Preliminary Design (CWSRF No. C6-6070-08-06)-\$35 Million

The Oneida County Board of Legislators approved the financing/bond authorization for this funding on March 13, 2013. Due to the cost impact of this borrowing to the typical single family rate payer, approval from the NYS Office of the Comptroller is required prior to the actual borrowing. That request for approval process has been initiated.