

ONEIDA COUNTY DEPARTMENT OF WATER QUALITY & WATER POLLUTION CONTROL

51 Leland Ave, PO Box 442, Utica, NY 13503-0442

wpc@ocgov.net (315) 798-5656

FAX 724-9812

Anthony J. Picente, Jr. County Executive

Steven P. Devan, P.E. Commissioner

July 19, 2019

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

UNITED PARCEL SERVICE

Carol Lamb-Lafay, 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 – 2nd Quarter 2019

Consent Order No. R6-20060823-67

Dear Mr. Townsend and Ms. Lamb-Lafay:

On behalf of Oneida County, I am providing for your review and comment Oneida County's Quarterly Progress Report for the 2nd Quarter – 2019 as required per Section XIII – Reporting Requirements of the Consent Order. This document summarizes the status and progress of work completed between April 1, 2019 and June 30, 2019 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 – 2nd Quarter 2019

Anthony J. Picente, Jr. - Oneida County Executive ecc:

Peter M. Rayhill, Esq. - Oneida County Attorney

Karl E. Schrantz, P.E. – O'Brien & Gere Engineers, Inc. Howard LeFever, P.E. – GHD Consulting Services, Inc.

Randall Young - NYSDEC

Richard Coriale, P.E. – NYSDEC David Rarick, P.E. – NYSDEC

Michael O'Neil, P.E. - NYSEFC

SANITARY SEWER COLLECTION SYSTEM QUARTERLY PROGRESS REPORT 2ND QUARTER – 2019 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

July 19, 2019







Syracuse, NY

Utica, NY

Sanitary Sewer Collection System Quarterly Progress Report 2nd Quarter - 2019 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

July 19, 2019

TABLE OF CONTENTS

1.0 Introduction	2
1.1 Historical Background	2
1.2 Purpose	2
2.0 Engineering Investigations and Evaluations	3
2.1 Collection System	3
2.1.1 Manhole Inspections	3
2.1.2 Sanitary Sewer Televising	3
2.1.3 Dye Testing	3
2.2 Treatment Facilities	3
3.0 Management Programs	4
3.1 Computerized Management and Maintenance System	4
3.1.1 Asset Management	4
3.2 Flow Monitoring Program and Hydraulic Model	4
3.3 Private Property Inflow and Infiltration Reduction Program	5
3.4 Capacity, Management, Operations and Maintenance Program	5
4.0 Schedule/Milestone Dates	6
4.1 Approved Schedule	6
4.2 Milestones	7
4.3 Modified Order – June 28, 2018	
5.0 Sewer Rehabilitation	8
6.0 Assessment of Rehabilitation Effectiveness	9
7.0 Completed Capital Projects/Facility Upgrades	10
8.0 I/I Offset Projects/New Flows	11
9.0 Key Personnel Changes	12
9.1 County Staff	12
9.2 Satellite Community Staff	12
9.3 Consultant Team Staff	12
10.0 Administrative Items	13
10.1 Work Authorizations	13
10.2 Project Financing	13
10.2.1 FM Rehab, PS Rehab Construction Phase [Phase 5b] C6-6070-08-04	
10.2.2 STP Upgrades [Phase 6A] CWSRF No. C6-6070-08-05 - \$80 Million	
10.2.3 STP Upgrades [Phase 6B] C6-6070-08-15 - \$80 Million	13

Tables:

Table 2.1 2Q 2019

Table 5.1 2Q 2019



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 Pumping Station (SCPS), the Barnes Avenue Pumping Station, and the Water Pollution Control Plant (WPCP). The District services 15 municipalities, nine of which are within the SCPS Basin. These municipalities own and operate their own collection systems.

1.2 PURPOSE

The New York State Department of Environmental Conservation (NYSDEC) and Oneida County (County) entered 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 April 1, 2019 and June 30, 2019 (2nd Quarter of 2019) in support of the Consent Order compliance requirements.



2.0 ENGINEERING INVESTIGATIONS AND EVALUATIONS

During the 2^{nd} Quarter of 2019, the County completed the following tasks related to engineering investigations and evaluations.

2.1 COLLECTION SYSTEM

2.1.1 Manhole Inspections

The manhole inspection program was completed in 2012. There were no additional manhole inspections completed during the 2^{nd} Quarter of 2019.

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). In 2011, the County contracted with a firm (National Water Main Cleaning Co.) to perform closed circuit televising (CCTV) of these sanitary sewers. Televising data was collected electronically in the field using the nationally standardized Pipe Assessment and Certification Program (PACP) and incorporated into the County's data management software.

The 2011 initial televising contract resulted in approximately 79%, or 171-miles, of the 216-miles of sewers being televised. The remaining 21%, or 47-miles of sewers, were not inspected at that time due to: heavy debris in quantities beyond the scope of the contractual cleaning effort; small diameter pipe inhibiting effective CCTV inspections; lack of easement access to manholes and sewers; and buried manholes. These obstacles are primarily maintenance related and are being addressed through the District-wide Capacity, Management, Operations, and Maintenance (CMOM) program currently in various stages of implementation. Efforts are being made to CCTV and inspect additional sewers as a component of current and future sewer rehabilitation contracts.

During the 2^{nd} Quarter 2019, no additional televising was performed. Including the original CCTV contract, and subsequent CMOM and rehabilitation related CCTV, a total of approximately 195-miles of sewer, or 90% of the total sewers in the SCPS basin, have been televised.

2.1.3 Dye Testing

The dye testing program was completed in 2012. There was no additional dye testing performed during 2^{nd} Quarter 2019.

2.2 TREATMENT FACILITIES

Investigations, evaluations, and designs have been completed. Upgrades and new construction associated with the WPCP, SCPS, and New Force Main are in various stages of construction. Table 2.1 summarizes how the work has been segregated, and the status of each of the various planned construction contracts. Note: Contract numbers identified for the work at the WPCP and the SCPS/Force Main (C-1 through C-8), do not correlate to the sanitary sewer rehabilitation contracts (Contracts 2-16).



Oneida County Sewer District Summary of Contracts 2Q 2019

Water Pollution Control Plant and Sauquoit Creek Pumping Station/Force Main

Contract No.	Title of Contract	Components of System Addressed	Status of Design	Status of NYSDEC Review	Status of other Agency Reviews	Estimated Advertisement	Estimated ⁽¹⁾ Construction Start	Construction Progress	Estimated Construction Complete	
1	Incinerator No. 2 Demolition	Demolition of Incinerator No. 2	Final	Approved	n/a	Bidding occurred du	Bidding occurred during 1Q 2016; however, due to the outcome of bids, the demolition was add 2 by addendum on May 25, 2016.			
2	WPCP Solids Handling Upgrades	2 new egg-shaped digesters, 1 secondary digester w/gas holding cover, new waste activated sludge pumps, refurbish 4 gravity thickeners, new stand-by lime stabilization system, 2 new belt filter presses.	Final	Approved	n/a	Advertised April 4, 2016	Notice to Proceed September 27, 2016	Construction is substantially complete and all equipment is on-line. The Contractor, Owner, and Engineer are addressing some minor operational/startup issues.	April 2019	
3A	Electrical Equipment Pre-Purchase (Digester 15kV)	Pre-purchase of major electrical components such as switch gears, transformers, and supporting power distribution equipment.	Final	n/a	n/a	April 2017	Equipment delivery October 2017	Equipment has been installed and tested. Training has been provided to the Owner.	n/a	
4	Sauquoit Creek Force Main Upgrades	New 48-inch force main and rehabilitation of the existing force main, new flow metering and flow control vaults.	Final	Approved	Approved	Advertised December 15, 2017	July 2018	Began pipeline construction, negotiated Change Order No. 1 (approx. 9,000 feet of pipeline on piles), ongoing installation of trench support sheeting along railroad ROW, installed first two CARV units, installed sheeted jack/bore pits for CSX crossing (waiting for CSX flagger to complete the work).	March 2021	
5	Sauquoit Creek Pumping Station Upgrades	Replacement of existing pump station mechanical screen contained in a new screen building, 2 screenings washer/compactors and conveyor; replacement of existing standby generator capable of operating the station to pump peak flow during a power outage; electrical/HVAC upgrades; flow distribution structure at the WPCP.	Final	Approved	n/a	November 2016	July 2017	Note - Site and buildings impacted by 1/24/2019 ice jam/flooding: New Screenings Building: Facility is generally operational (SCADA, building access/security pending); new emergency generator fully operational; fiber optic duct bank installed (fiber installed by Northland Communications); interim site work completed (final sitework scheduled for Spring/Summer 2019); punch list items. Existing Pumping Station Building: Electrical, HVAC, and plumbing renovations nearly complete. Flood barriers/doors installed. Coordination of control system in support of the pending switchover of pumps to new VFDs and PLCs.	November 2019	

Oneida County Sewer District

Summary of Contracts 2Q 2019

Water Pollution Control Plant and Sauquoit Creek Pumping Station/Force Main

Contract No.	Title of Contract	Components of System Addressed	Status of Design	Status of NYSDEC Review	Status of other Agency Reviews	Estimated Advertisement	Estimated ⁽¹⁾ Construction Start	Construction Progress	Estimated Construction Complete
5.1	Barnes Avenue Pumping Station Upgrades	Relocation of pumping station to south side of CSX Railroad right-of-way; new, smaller, sustainable pumping station sized to accommodate actual flow rates.	0%	n/a	n/a	December 2019	April 2020	CSX continues to be non-responsive to numerous requests for site access via service road under NYS Route 8/12 bridge. Late Q3 2019 design start anticipated.	December 2020
6	WPCP Headworks Upgrades	New screening facility and pump station dedicated to sanitary flows from North Utica & Starch Factory Creek Interceptors; repurpose existing raw waste building for combined flow from City of Utica; new grit removal facilities; remodeling of the administrative building including new laboratory, control room, offices, training room, etc.	Final	Approved	Pending National Grid approval, Stage A submitted in February 2016	March 2017	September 2017	Influent Building: Building is nearly complete. New pumps and 2 bar screens are set in place. Installation of new interior piping, HVAC systems, plumbing, and electrical is ongoing. Pump and screen startup anticipated in Fall 2019. Grit Removal: Grit buildings No. 2 and 3 are nearly complete. Grit pumps and vortex grit removal trays are set in place. Interior piping, HVAC, plumbing, and electrical work ongoing. Refurbishment of Grit Building No. 1 is ongoing. Functional testing of grit washing equipment has been completed for 1 of 2 units. Administration Building: Significant rehabilitation of the building is complete. Waiting on Certificate of Occupancy from NYS. Electrical: New receiving structure/tower for 46kV equipment installed. New pre-fabricated Switchgear Building and Generator Buildings is installed and testing scheduled for July 2019. Grounding grid complete. New generator fuel system and controls are installed. Coordination with National Grid is ongoing. Anticipate energizing the new 46 kV equipment by August 1, 2019.	May 2020

Oneida County Sewer District Summary of Contracts 2Q 2019

Water Pollution Control Plant and Sauquoit Creek Pumping Station/Force Main

Contract No.	Title of Contract	Components of System Addressed	Status of Design	Status of NYSDEC Review	Status of other Agency Reviews	Estimated Advertisement	Estimated ⁽¹⁾ Construction Start	Construction Progress	Estimated Construction Complete
7	WPCP Primary Treatment Upgrade/Disinfection	New rectangular primary settling tanks to replace existing circular tanks; new high rate disinfection system for wet weather combined sewer flows; new HRD outfall.	Final	Submitted December 9, 2016	n/a	Advertised November 28, 2017	May 2018	HRD: Excavation, pile driving, and concrete tank complete for HRD tank. Backfill around tank complete. Initiating slide gate installation. Primary Settling Tanks No. 1 and 2: Demolition of existing tanks complete. Excavation and pile driving for new tanks complete. Concrete slab and wall work complete for equipment gallery area and tanks. Concrete deck and beam and stairwell work ongoing for tank area. Electrical conduit work for Electrical and Control Rooms ongoing. Disinfection Building: Fire alarm replaced. Building roof replaced. Electrical conduit work ongoing. Yard piping from building to HRD tank initiated. Administration and Operations Building: Demolition of one existing primary sludge degritting unit complete. Aeration Tank Distribution Structure: Relocation of yard piping complete.	December 2021
8	WPCP Secondary Treatment Process Upgrades	Replacement of existing blowers with more efficient units; refurbishment of the existing Blower Building including upgrades to electrical, HVAC, plumbing and structural systems; refurbishment of existing Aeration Tanks including replacement of existing diffusers and structural upgrades, refurbishment of existing Final Settling Tanks including replacement of existing clarifier mechanisms and structural upgrades; new Asset Management Building; upgrades to site wide civil infrastructure including stormwater, fencing and gates; revisions to site electrical system including demolition of existing substation.	Final	Submitted February 2019	n/a	Estimated October 2019 (Pending additional program funding)	Estimated January 2020	n/a	December 2021

3.0 MANAGEMENT PROGRAMS

3.1 COMPUTERIZED MANAGEMENT AND MAINTENANCE SYSTEM

The County purchased a Computerized Management and Maintenance System (CMMS) software system (Lucity) 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. The County's Geographic Information System (GIS) Coordinator manages the system.

The County continues to utilize the CMMS for tracking and documenting sewer rehabilitation work, and uploading and managing new PACP data provided by the County's CCTV and sewer rehabilitation contractors on a regular basis.

The Consultant Team utilizes the CMMS in support of the sanitary sewer rehabilitation design efforts to identify defects and develop rehabilitation methodologies.

3.1.1 Asset Management

The County continues to maximize the use of its current CMMS software. At the same time, the County, with the assistance of the Consultant Team, continues to assess ways to optimize the CMMS with the long-term expanded asset management needs for the wastewater system. In accordance with Schedule C, Section B.4 of the Consent Order, the Consultant Team developed a proposed asset management program for the Department of Water Quality and Water Pollution Control. Under a previous authorization, the Engineering Team assisted the County with the process of receiving proposals for a new CMMS. Several candidate vendors provided demonstrations of their systems. Based on the proposals and demonstrations received, the "Sprocket" CMMS system by Dematic is the preferred software application for the WPCP. Contract award is forthcoming.

3.2 FLOW MONITORING PROGRAM AND HYDRAULIC MODEL

The County worked closely with the Dormitory Authority of the State of New York (DASNY) to secure the \$950,000 Economic Development Assistance Program (EDAP) funding allocation to support the extensive flow monitoring program proposed by the County and approved by the NYSDEC on August 24, 2012.

The EDAP funds were ultimately made available by DASNY to the County in March 2014. Procurement of the flow monitoring equipment was advertised on June 9, 2014. Contract was awarded on September 10, 2014 to ADS Environmental Services, LLC (ADS). ADS completed the installation of 63 flow meters and five rain gauges in 2015. Two of the meters were installed to monitor flow to the County's Barnes Ave Pumping Station, and three are used to monitor flow in the City of Utica's combined sewers to aid in hydraulic model calibration and confirmation. There are 44 meters located in the Sauquoit Creek Pump Station (SCPS) drainage basin, and 14 meters located outside the SCPS basin. The flow meters and rain gauges have been consistently collecting flow data since their installation.

Flow metering reporting made available to the County by ADS indicates sanitary sewer rehabilitation, including manhole rehabilitation that has been completed to date, may be having a positive effect on the amount of I/I entering the sanitary sewer system. Raw flow monitoring data, consisting of 15-minute measurements of depth and velocity, are reviewed by ADS technicians who are able to assess the reliability of the data, and "scrub" out data that is deemed not accurate based on inconsistencies in the expected predictable relationship between depth, velocity, and rate of flow.

ADS technicians input the cleaned-up data into Sliicer, which is ADS' proprietary flow analyzing software. Sliicer enables the flow monitoring technician to define "typical" rain events for both summer and winter seasons, and analyze the rain event's effect on the flow in the sanitary sewer as measured by the flow monitors. This forms the basis of evaluating the quantity of Rain Derived I/I, or RDII.



ONEIDA COUNTY SEWER DISTRICT | QUARTERLY PROGRESS REPORT – 2ND QUARTER 2019

The 2019 1^{st} Quarter progress report presented an update of the flow monitoring data and RDII analysis for summer 2018 and winter 2019 events.

While higher precipitation in 2018 may have contributed to increases in RDII for some locations, there are also some limitations with the Q vs. i plots because they only consider total precipitation for an event and do not necessarily capture the intensity and duration of an event, which may also affect the RDII. For example, if the event had a high intensity over short duration, this could result in a higher RDII compared to a less intense, longer duration event of the same total precipitation.

The quantity of I/I removed due to sewer rehabilitation completed to date can be approximated by calculating the difference between the 2.3-inch rain lines projected to the y-axis. For example, a review of the plots for SCI-4 (meter installed in the Sauquoit Creek Interceptor, just before the SCPS) indicates a reduction of approximately 5.6 million gallons of RDII during winter storms (including rain on snow events), and 5.6 million gallons of RDII during summer storms. This data appears to support the anecdotal reports from County staff regarding fewer overflow events at the SCPS.

3.3 PRIVATE PROPERTY INFLOW AND INFILTRATION REDUCTION PROGRAM

The document titled "Preliminary Planning Document – Private Property Inflow and Infiltration Reduction Program" was submitted to the NYSDEC on June 29, 2012 as required by Schedule A - Section B.2 of the Consent Order. The County, working through the Steering Committee, created a working group of appropriate private property inflow and infiltration (PPII)-oriented community representatives to map out a phased implementation plan.

In support of a potential future pilot project to address private property I/I, lateral CCTV has, and continues to be, performed in select locations during the on-going sewer rehabilitation projects. CCTV data is received from the sewer rehabilitation contractor and reviewed for completeness. An engineering Work Order for continuation of the PPII program was submitted to the County and authorized in the 2nd Quarter 2019. Planning among the Consultant Team occurred regarding the 2019 program elements.

3.4 CAPACITY, MANAGEMENT, OPERATIONS AND MAINTENANCE PROGRAM

The document titled "Preliminary Planning Document – Proposed CMOM Framework – Sauquoit Creek Pumping Station Basin Communities" was submitted to the NYSDEC on June 29, 2012 as required by Schedule A – Section B.3 of the Consent Order. The County, working through the Steering Committee, created a working group of appropriate CMOM-oriented community representatives to map out a phased implementation plan.

Fats, Oils, and Grease (FOG) Program: The OCSD and Oneida County Department of Health (OCDOH) are collaborating on the implementation of the Fats, Oils, and Grease (FOG) program. Inspections of Food Service Establishments (FSEs) continued in 2Q 2019. Inspectors verify that proper plumbing fixtures are in place and that FSEs follow the local and County sewer use ordinance in not releasing fat-laden wash water or cooking oils to the sanitary sewer system. Inspectors look for evidence that FSEs are utilizing best management practices, tracking grease trap maintenance, and keeping grease hauling records. Information on each FSE will be entered in the County CMMS Lucity, so that it can be associated with the growing collection system database.

<u>Sauquoit Creek Interceptor Sewer Stabilization (Victoria Drive):</u> The Consultant Team has coordinated with the contractor regarding schedule for completion of the remaining punch list and contract closeout work. A meeting was held with the contractor on-site in late June. Work is to be completed in early July 2019.



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 2^{nd} Quarter of 2019):

	Consent Order,	
Description	Schedule "A" Date	Status
Engineering Investigations and Evaluations		
Due Testing and Stewar Course Depart	l 20, 2012	Complete,
Dye Testing and Storm Sewer Report	June 30, 2012	Submitted June 29, 2012
Manhole Evaluation Report – Phase II	June 30, 2012	Complete,
		Submitted June 29, 2012
SCPS Evaluation Report	August 31, 2012	Complete, Approved November 28, 2012
		Complete,
WPCP Evaluation Report	August 31, 2012	Approved November 28, 2012
Treatment System Supplement (Depart)	60 days after approval of	Complete,
Treatment System Supplement (Report)	WPCP Evaluation Report	Submitted January 25, 2013
Sewer CCTV Inspection Report – Phase II	April 30, 2013	Complete,
Tana at a mapagina mapana a masa n		Submitted April 25, 2013
Sewer CCTV Inspection Report – Phase III	April 30, 2014	Complete,
	May 31, 2014	Submitted April 29, 2014 Complete,
Collection System Supplement (Report)	(extension granted to July	Submitted June 30, 2014
concession system supplement (nepsit)	1, 2014)	Approved December 18, 2014
Management Programs	,	
Flow Monitoring Program	March 31, 2012	Complete,
Tiow Monitoring Frogram	Water 51, 2012	Approved August 24, 2012
Private Property I/I Reduction Program	June 30, 2012	Complete,
	,	Submitted June 29, 2012
CMOM Program	June 30, 2012	Complete, Submitted June 29, 2012
		Began implementation in
PPII Reduction Program Implementation	May 31, 2013	4 th Quarter 2012
CNACNA laveless exterior	Marco 24, 2042	Began implementation in
CMOM Implementation	May 31, 2013	4 th Quarter 2012
Asset Management Plan	December 31, 2021	In development
Remedial Measures		
		Modified Consent Order effective
Semi-Permanent Alternative-Construction	December 31, 2016	6/28/18 removed the requirement
	,	for construction of the semi-
SSO Mitigation Consent Order Compliance	Docombor 21 2021	permanent alternative.
SSO Mitigation-Consent Order Compliance Reporting	December 31, 2021	In progress
Annual Work Plan	January 31, Annually	Submitted annually
Quarterly Progress Report	Quarterly	Submitted quarterly
Z		

Note: I/I - Inflow and Infiltration



4.2 MILESTONES

During the 2^{nd} Quarter of 2019, the following milestone dates were met:

• Continuing to make progress toward compliance milestones.

4.3 MODIFIED ORDER – JUNE 28, 2018

	Consent Order,	
Description	Schedule "A" Date	Status
Remedial Measures		
Contract 10 – Sanitary Sewer Mainline Rehabilitation Phase V – Whitesboro (V), Whitestown (T) – Completion	August 31, 2018	Certificate of Compliance submitted to NYSDEC August 30, 2018.
Contract 12 – Sanitary Sewer Mainline Rehabilitation Phase VII – Yorkville (V) – Completion	July 31, 2019	Certificate of Compliance submitted to NYSDEC June 28, 2019.
Contract 13 – Sanitary Sewer Mainline Rehabilitation Phase VIII – New Hartford (T) – Completion	August 31, 2018	Certificate of Compliance submitted to NYSDEC August 30, 2018.
Contract 14 – Sanitary Sewer Mainline Rehabilitation Phase IX – New Hartford (T) – Completion	December 31, 2018	Certificate of Compliance submitted to NYSDEC December 21, 2018.
Contract 16 – Sanitary Sewer Mainline Rehabilitation Phase X –Whitestown (T) – Completion	July 31, 2019	Certificate of Compliance submitted to NYSDEC June 28, 2019.

ONEIDA COUNTY SEWER DISTRICT | QUARTERLY PROGRESS REPORT – 2ND QUARTER 2019

5.0 SEWER REHABILITATION

Sewer rehabilitation work financed under CWSRF Project No. C6-6070-08-00, C6-6070-08-10, and C6-6071-02-00 continued to progress. Projects are being tracked by contract number. The rehabilitation contracts are being undertaken in order to reduce the amount of inflow and infiltration entering the system due to defects in interceptor sewers, mainline sewers, lateral connections and manhole structures. Work under these sewer rehabilitation contracts typically includes: a mix of cured-in-place-pipe (CIPP) lining; pipe joint and lateral grouting; open cut repairs; spot repairs; manhole repairs/replacement; and supplemental CCTV inspections. The status and details of the rehabilitation contracts to date are presented in Table 5.1. Required work per the Consent Order is essentially complete. The Engineering Team continues to review available data and looks for additional sewer rehabilitation opportunities.



Oneida County Sewer District Summary of Contracts 2Q 2019

Sewer Rehabilitation Contracts

Contract No.*	Title of Contract	Project Location/Description	CWSRF Project No.	Status of Design	Status of DEC/EFC/COUNTY Review	Miles of Rehabilitation ⁽²⁾	Estimated I/I Reduction (gal/day)	Current Contract Amount (1)	Contractor	Contract Status
2	Sanitary Sewer Manhole Rehabilitation - Phase 2	<u>District-wide</u> : Rehabilitation of approximately 1,278 sanitary sewer manholes.	C6-6070-08-00	Final	Approved	47	5,411,910	\$ 1,529,131.73	Green Mountain Pipeline Services	Project Complete; Closed Out
3	Sanitary Sewer Mainline Rehabilitation - Phase 1	Villages of New York Mills, Oriskany, New Hartford, Whitesboro, and Yorkville; Towns of New Hartford and Whitestown	C6-6070-08-00	Final	Approved	13	1,503,360	\$ 1,916,428.54	Insituform	Project Complete; Closed Out
4	Sewer Separation - Clinton/Henderson Street, NY Mills	NY Mills: Storm/Sanitary sewer separation.	C6-6070-08-00	Final	Approved	2	264,000	\$ 155,007.51	JJ Lane Construction	Project Complete; Closed Out
5	Sewer Repairs and Rehabilitation	Villages of Whitesboro, New Hartford, Yorkville, New York Mills: Storm/Sanitary sewer repairs and rehabilitation; manhole replacement and UV-CIPP lining.	C6-6070-08-00	Final	Approved	1	120,000	\$ 411,841.66	Central Paving	Project Complete; Closed Out
6	Sanitary Sewer Mainline Rehabilitation - Phase 2	Villages of New Hartford and Clayville; Towns of New Hartford and Paris; City of Utica	C6-6070-08-00	Final	Approved	15	1,130,000	\$ 2,086,525.00	Green Mountain Pipeline Services	Project Complete; Closed out
7	Sanitary Sewer Mainline Rehabilitation - Phase 3	Towns of New Hartford and Whitestown: Glenhaven area (HHI-1 and WHN-31), the area west of the Whitesboro Parkway School and south of Clinton Street area (WHN-33), and Kellogg Road area (NHD-18)	C6-6070-08-00	Final	Approved	13	630,000	\$ 2,060,644.00	Green Mountain Pipeline Services	Project Complete; Closed out
8	Sanitary Sewer Mainline Rehabilitation - Phase 4	<u>Town of New Hartford:</u> Paris Road area (NHD-23)	C6-6070-08-00	Final	Approved	14	249,000	\$ 1,143,410.78	National Water Main Cleaning Co.	Project Complete: Closed Out
10	Sanitary Sewer Mainline Rehabilitation - Phase 5	Town of Whitestown and Village of Whitesboro: Area west of Henderson St., north of Mud Creek, south of Clinton St. and east of Clinton Rd; and areas of V. of Whitesboro that have not been previously rehabbed.	C6-6070-08-10	Final	Approved	17	1,120,000	\$ 3,429,370.00	Green Mountain Pipeline Services	Project Complete; Closed Out



Oneida County Sewer District

Summary of Contracts 2Q 2019

Sewer Rehabilitation Contracts

Contract No.*	Title of Contract	Project Location/Description	CWSRF Project No.	Status of Design	Status of DEC/EFC/COUNTY Review	Miles of Rehabilitation ⁽²⁾	Estimated I/I Reduction (gal/day)	Current Contract Amount (1)	Contractor	Contract Status
11	Sanitary Sewer Mainline Rehabilitation - Phase 6	Town of New Hartford/Hamlet of Washington Mills: Chapman Rd, Higby Rd., and Mohawk St. as well as side streets in Town of New Hartford (NHD-20).	C6-6070-08-10	Final	Approved	7	260,640	\$ 632,029.26	National Water Main Cleaning Co.	Project Complete; Closed Out
12 ⁽³⁾	Sewer Rehabilitation Project	Village of Yorkville: Areas of the Village not previously rehabbed (YKV-1).	C6-6071-02-00	Final	Approved	11	824,832	\$ 3,552,280.00	National Water Main Cleaning Co.	Construction complete. Closeout documentation pending.
13	Sanitary Sewer Mainline Rehabilitation - Phase 8	Town of New Hartford: <u>R</u> esidential subdivisions along Routes 12B and Merritt Place, situated south of Route 5B and Seneca Turnpike, and north of Sherrill Brook Park (NHD-6).	C6-6070-08-10	Final	Approved	5	280,000	\$ 802,838.50	National Water Main Cleaning Co.	Project Complete; Closed Out
14	Sanitary Sewer Mainline Rehabilitation - Phase 9	Town of New Hartford: Commercial district along Seneca Turnpike surrounding Sangertown Square Shopping Mall, south to a residential area situated between Seneca Turnpike and Clinton Rd., and a small residential area south of Clinton Rd. along Merritt Place (NHD-9).	C6-6070-08-10	Final	Approved	7	360,000	\$ 995,407.25	National Water Main Cleaning Co.	Construction complete. Closeout documentation pending.
16	Sanitary Sewer Mainline Rehabilitation - Phase 10	Town of Whitestown: Residential area along Westmoreland Rd. and West St., south of the NYS Thruway, and north of Clinton Rd. (WHN-34, WHN-35, WHN-12 & WHN-36).	C6-6070-08-10	Final	Approved	3	270,000	\$ 386,042.00	National Water Main Cleaning Co.	Construction complete. Closeout documentation pending.

^{* -} Contract 9 - Flow Monitoring Contract

BOLD - Value represents the Engineers estimate



^{(1) -} Values are subject to change upon submission of final contractor close-out documentation. Some entries are contract bid amounts and will be updated when project closes out.

⁽²⁾⁻ In order to estimate the manhole repairs in equivalent miles, the following calculation was used:

In the April 2012, Engineering Report, Sauquoit Creek Pumping Station Basin – Phase I-Mainline Pipe Rehabilitation – Contract No. 3, the length of line to be rehabilitated was 13-miles, and the corresponding flow to be removed is 1,503,360 gal/day, which calculates to 116,000 gpd/mile. Using the same 116,000 gpd/mile figure for Contract No. 2, an estimated 5,411,910 gal/day divided by 116,000 gpd/mile, is equivalent to 47-miles of rehabilitated sewers.

^{(3) -} Formerly Contract 12 - Sanitary Sewer Mainline Rehabilitation - Phase 7. Financed by the Village of Yorkville.

ONEIDA COUNTY SEWER DISTRICT | QUARTERLY PROGRESS REPORT – 2ND QUARTER 2019

6.0 ASSESSMENT OF REHABILITATION EFFECTIVENESS

See Section 3.2 above for a discussion of the status of flow monitoring and hydraulic model update. Based on the completed work, and using estimated values of inflow and infiltration (I/I) removals provided in the Offset Plan and/or the approved Basis of Design engineering reports for the respective projects, the estimated reductions in I/I for each rehabilitation contract are shown in Table 5.1.

ONEIDA COUNTY SEWER DISTRICT | QUARTERLY PROGRESS REPORT – 2ND QUARTER 2019

7.0 COMPLETED CAPITAL PROJECTS/FACILITY UPGRADES

Status of all capital projects and facility upgrades is provided in Table 2.1 and Table 5.1.

8.0 I/I OFFSET PROJECTS/NEW FLOWS

During the 2^{nd} Quarter of 2019, new 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	Location	Credits Used	Ending Balance
Town of New Hartford	1,862,541	0	309 Gracie Place (Applewood) 328.000-2-1 Lot 37	240	1,860,341
			26 Merrimac St. Ext. 328.014-1-16	440	
			Trailside Subdivision 316.015-3-1.8 Lot 8	320	
			112 Woods Edge Dr. (Cherrywood) 328.000-2-26 Site 206	320	
			311 Gracie Place (Applewood) 328.000-2-1 Lot 37	320	
			312 Gracie Place (Applewood) 328.000-2-1 Lot 37	240	
			2 Hosta Lane (Cherrywood) 328.000-2-26 Site #262	320	
Town of Paris	253,064	0		0	253,064
Town of Whitestown	1,054,274	0		0	1,054,274
Village of Clayville	59,069	0		0	59,069
Village of New Hartford	278,004	0		0	278,004
Village of New York Mills	166,523	0		0	166,523
Village of Oriskany	103,466	0		0	103,466
Village of Whitesboro	1,083,599	0		0	1,083,599
Village of Yorkville	160,282	0		0	160,282
Oneida County Business Park	43,027	0		0	43,027
Oneida County Sewer District	24,710	0		0	24,710
Totals	5,088,559	0		2,200	5,086,359

9.0 KEY PERSONNEL CHANGES

Key personnel changes, as they relate to the SSO Mitigation/Consent Order compliance project, are 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 2nd Quarter of 2019, Leroy Leuthauser, Chief Wastewater Treatment Plant Operator, retired from the Oneida County Water Quality and Water Pollution Control Plant. Dale Lockwood, III took over as Chief Wastewater Treatment Plant Operator on April 29, 2019.

9.2 SATELLITE COMMUNITY STAFF

During the 2nd Quarter of 2019, there were no changes of key personnel to report.

9.3 CONSULTANT TEAM STAFF

During the 2nd Quarter of 2019, Robert C. Ganley, P.E., Vice President, OBG, serving as Construction Program Manager for the Oneida County SSO Mitigation/Consent Order compliance project retired (June 2019). His contributions and dedication to the project were instrumental to the success of the project to date. Moving forward, the role of Construction Manager has been transitioned to Jason Pledger, CCM, Construction Project Manager, OBG Part of Ramboll.



10.0 ADMINISTRATIVE ITEMS

10.1 WORK AUTHORIZATIONS

The following work authorizations were issued during 2nd Quarter 2019:

Work Order 29.6 Private Property I/I Reduction Program Implementation – Phase 7 authorized May 8, 2019

10.2 PROJECT FINANCING

The following listing is from the CWSRF 2019 DRAFT Intended Use Plan (IUP), issued in May 30, 2018, for the County:

CWSRF PROJECT #	PROJECT NAME	TOTAL IUP AMOUNT
C6-6070-08-00 (Long-term financed)	I/I CORR [9 CONTRIBUTING COMMUNITIES] Phase 1 and 2a	(1)\$10,078,438 (includes \$4M Principal Forgiveness)
C6-6070-08-10 (Balance of unexpended funds from Original C6-6070-08-00 financing)	I/I CORR [9 CONTRIBUTING COMMUNITIES] Phase 1 and 2a	\$11,721,562
C6-6070-08-01 (Multi-year)	I/I CORR [SSO - 9 Contributing Communities] Phase 2b, 3, 4, 5, & 6	\$28,400,000
C6-6070-08-02 (Long-term financed)	FM, PS REHAB [DESIGN AND PERMITTING PHASE] Phase 5a	(1)\$2,524,071
C6-6070-08-03 (Multi-year)	I/I CORR [SSO Phase 4]	\$7,663,000
C6-6070-08-04	FM Rehab, PS Rehab [CONSTRUCTION PHASE] Phases 5b	\$97,000,000
(Annual List - Short-term financed)	FM Rehab, PS Rehab [CONSTRUCTION PHASE] Phase 5b	\$15,000,000
	Water Infrastructure Grant	\$5,000,000
C6-6070-08-05 (Annual List)	STP UP (Phases 6A)	\$80,000,000
C6-6070-08-15	STP UP (Phase 6B)	\$80,000,000
C6-6070-08-06 (Long-term financed)	STP UP [SOLIDS HANDLING SYSTEMS DESIGN AND CONSTRUCTION]	\$35,000,000

^{(1) -} CWSRF Project Financing has closed, is no longer listed in IUP, but reflect the amount Oneida County is now repaying.

10.2.1 FM Rehab, PS Rehab Construction Phase [Phase 5b] C6-6070-08-04

This financing was converted to Long Term Financing in May 2019.

10.2.2 STP Upgrades [Phase 6A] CWSRF No. C6-6070-08-05 - \$80 Million

Closing on this Short-term Financing (\$80M) occurred in May 2019.

10.2.3 STP Upgrades [Phase 6B] C6-6070-08-15 - \$80 Million

Closing on this financing is dependent on cashflow projections but is anticipated to be in the 2nd quarter of 2020.

