



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

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Anthony J. Picente, Jr.
County Executive

Steven P. Devan, P.E.
Commissioner

January 30, 2018

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 – 4th Quarter 2017

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 4th Quarter – 2017 as required per Section XIII – Reporting Requirements of the Consent Order. This document summarizes the status and progress of work completed between October 1, 2017 and December 31, 2017 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 – 4th Quarter 2017

cc: Anthony J. Picente, Jr. - Oneida County Executive
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.
Judy Drabicki, - NYSDEC
Joseph DiMura, P.E. - NYSDEC
Richard Coriale, P.E. – NYSDEC
Michael O'Neil, P.E. - NYSEFC

**SANITARY SEWER COLLECTION SYSTEM
QUARTERLY PROGRESS REPORT
4TH QUARTER – 2017
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**

January 30, 2018



Cazenovia, NY



Syracuse, NY



Utica, NY

**Sanitary Sewer Collection System
Quarterly Progress Report
4th Quarter - 2017
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**

January 30, 2018

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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 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 October 1, 2017 and December 31, 2017 (4th Quarter of 2017) in support of the Consent Order compliance requirements.

2.0 ENGINEERING INVESTIGATIONS AND EVALUATIONS

During the 4th Quarter of 2017, 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 4th Quarter of 2017.

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 4th Quarter 2017, additional televising was not performed; however, including the original CCTV contract, and subsequent CMOM and rehabilitation related CCTV, a total of approximately 193-miles of sewer, or 89% 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 4th Quarter 2017.

2.2 TREATMENT FACILITIES

Most of the investigations and evaluations have been completed. The WPCP, SCPS and New Force Main are in various stages of design, review, bidding, and 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 2-14).

A phosphorus evaluation was conducted to characterize the WPCP seasonal influent and effluent phosphorus concentrations, and to evaluate phosphorus removal technologies. A draft report was submitted to the County for review and comment in December 2017.

Table 2.1

Oneida County Sewer District									
Summary of Contracts 4Q 2017									
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 DEC 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 during 1Q 2016; however, due to the outcome of bids, the demolition was added to Contract 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	Demo of Incinerator No. 2 complete. Lime stabilization building and equipment installation complete, waiting for final electrical, instrumentation & startup. Erection of steel tanks (Primary digesters) is complete, mech. equipment install on-going. Secondary Digester tank complete, mech. equipment and cover install on-going. Mechanical installation of New Belt Filter Presses, Gravity Belt Thickeners and Sludge Blend Tanks on-going. Installation of new Gravity Thickeners is complete and equipment field tested.	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	Concrete foundation installed, new conduits fun for 15kV unit substation	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	May 2018	n/a	December 2020



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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	Submittals reviewed. Conduit, piping and HVAC beginning installation. Site dewatering system continued operation. Excavation continued on new Screening Building. Emergency generator pad installed and prepared for January generator installation. Installed bypass piping. Coordinated with Nat'l Grid and installed new electrical service.	November 2018
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 2018	May 2019	n/a	January 2019
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	Secant Pile Wall for influent building excavation support is complete, installing tie backs. Excavation and pile foundations complete for both Grit buildings, concrete placement ongoing.	May 2020
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	April 2018	n/a	December 2021
8	WPCP Secondary Treatment Process Upgrades	Replacement of existing blowers with more efficient units, replacement of existing aeration tank diffusers, refurbishment of the existing final settling tanks	30%	Estimated submittal December 2018	n/a	January 2019	May 2019	n/a	December 2021

* - Estimated construction start = Notice to Proceed



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.

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. As a result, the County has begun to explore potential alternative software. It is anticipated this research of alternative software systems will continue as opportunities become available.

3.2 FLOW MONITORING PROGRAM AND HYDRAULIC MODEL

In 2010, a hydrologic (HSPF) and hydraulic (SWMM) model of the sewer collection system tributary to Sauquoit Creek Pumping Station (SCPS) was developed in order to evaluate control methods for reducing sanitary sewer overflow (SSO) at SCPS. This effort included the analysis of data from 30+ flow meters collected over a period of nine months during 2008. The model was calibrated to the flow meter data and then used to simulate flow conditions for a typical year. The results from the simulations were used to evaluate engineering alternatives. Since then, I/I removal projects have been completed in the collection system.

The County worked closely with the Dormitory Authority of the State of New York (DASNY) to secure an \$950,000 Economic Development Assistance Program (EDAP) funding allocation to support the extensive flow monitoring program proposed by the County and approved by 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 in June 2014. Contract was awarded in September 2014 to ADS Environmental Services, LLC (ADS). In 2015, ADS completed the installation of 63 flow meters and five rain gauges within the collection system, at the same approximate locations the meters were installed in 2008. Two of the meters were installed to monitor flow to the County's Barnes Ave Pumping Station. Two others monitor flow in two of the City of Utica's combined sewers to aid in hydraulic model calibration and confirmation. The flow meters and rain gauges have been consistently collecting flow data since their installation.

To further support the Consent Order flow data documentation and assessment requirements, the County's engineering consultants completed the calibration of an update to the original 2010 hydraulic model utilizing 2015-2016 flow meter and rain gauge data. Typical year simulations were run. The results of the simulations are being statistically compared and used to evaluate the effectiveness of the I/I removal projects upstream of the SCPS completed through the end of 2016. A Technical Memorandum (TM) will be available in January 2018 which will summarize the evaluation and findings.

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 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 pilot project to address private property I/I, lateral CCTV is being performed in select locations during the on-going sewer rehabilitation projects. CCTV data is received from the sewer rehabilitation contractor and reviewed for completeness. Analysis continues to identify I/I defects.

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 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.

OCSD and Oneida County Department of Health (OCDOH) are collaborating on the implementation of the Fats, Oils, and Grease (FOG) program. OCDOH distributed a letter and FOG informational brochure to food service establishments (FSE) during the 4th Quarter 2017, informing FSEs of upcoming facility inspections. OCDOH regular inspections of FSEs will include a FOG component beginning in 2018. Inspectors will verify that FSEs are in compliance with the local and County sewer use ordinance in not releasing fat-laden wash water or cooking oils to the sanitary sewer system. Inspectors will look for evidence that FSEs are utilizing best management practices, tracking grease trap maintenance and keeping grease hauling records.

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 4th Quarter of 2017):

Description	Consent Order, Schedule "A" Date	Status
<u>Engineering Investigations and Evaluations</u>		
Dye Testing and Storm Sewer Report	June 30, 2012	Complete, 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
WPCP Evaluation Report	August 31, 2012	Complete, Approved November 28, 2012
Treatment System Supplement (Report)	60 days after approval of WPCP Evaluation Report	Complete, Submitted January 25, 2013
Sewer CCTV Inspection Report – Phase II	April 30, 2013	Complete, Submitted April 25, 2013
Sewer CCTV Inspection Report – Phase III	April 30, 2014	Complete, Submitted April 29, 2014
Collection System Supplement (Report)	May 31, 2014 (extension granted to July 1, 2014)	Complete, Submitted June 30, 2014 Approved December 18, 2014
<u>Management Programs</u>		
Flow Monitoring Program	March 31, 2012	Complete, 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
PPII Reduction Program Implementation	May 31, 2013	Began implementation in 4 th Quarter 2012
CMOM Implementation	May 31, 2013	Began implementation in 4 th Quarter 2012
Asset Management Plan	December 31, 2021	In development
<u>Remedial Measures</u>		
Semi-Permanent Alternative-Construction	December 31, 2016	A formal request to modify this date and eliminate the semi- permanent alternative was submitted to NYSDEC on 9/6/2016. Discussions between the NYSDEC and County are on- going.

Description	Consent Order, Schedule “A” Date	Status
SSO Mitigation-Consent Order Compliance	December 31, 2021	In progress
Reporting		
Annual Work Plan	January 31, Annually	Submitted annually
Quarterly Progress Report	Quarterly	Submitted quarterly

Note: I/I – Inflow and Infiltration

4.2 MILESTONES

During the 4th Quarter of 2017, the following milestone dates were met:

- Continuing to make progress toward compliance milestones.
- The original Schedule “A” date for the completion of construction of the Semi-Permanent Alternative was December 31, 2016. A formal request was submitted to the NYSDEC in September 2016 to eliminate the Semi-Permanent Alternative and to modify the December 31, 2016 Consent Order interim milestone date. The Semi-Permanent Alternative was found to no longer provide the value originally anticipated due to enhancements to the project construction schedule at the WPCP, and the benefits seen from the progression of sewer rehabilitation contracts. During subsequent conversations with the Regional Water Engineer, the request was made to provide the dollar equivalents in expedited sewer rehabilitation contracts (to be completed in 2017) for the planned savings that would be realized from the Semi-Permanent Alternative. Discussions between NYSDEC and the County are on-going with regard to elimination of the Semi-Permanent Alternative and Consent Order modification.
- During the 4th Quarter, County publicly advertised for bid Contracts C4 (Sauquoit Creek Force Main Upgrades) and C7 (Primary Settling Upgrades and New High Rate Disinfection), whose schedule advancements support the elimination of the semi-permanent alternative.

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.

Table 5.1

Oneida County Sewer District										
Summary of Contracts 4Q 2017										
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	<u>Villages of New York Mills, Oriskany, New Hartford, Whitesboro, and Yorkville; Towns of New Hartford and Whitestown</u>	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	<u>NY Mills</u> : 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	<u>Villages of Whitesboro, New Hartford, Yorkville, New York Mills</u> : 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	<u>Villages of New Hartford and Clayville; Towns of New Hartford and Paris; City of Utica</u>	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	<u>Towns of New Hartford and Whitestown</u> : 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	<u>Town of Whitestown and Village of Whitesboro</u> : 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 is under construction; Project on winter weather delay, punchlist completion will occur in Spring 2018.



Table 5.1

Oneida County Sewer District										
Summary of Contracts 4Q 2017										
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	<u>Town of New Hartford/Hamlet of Washington Mills:</u> Chapman Rd, Higby Rd., and Mohawk St. as well as side streets in T. 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	<u>Village of Yorkville:</u> 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.	Project under construction; Completion delayed due to winter weather conditions, completion expected in Spring 2018.
13	Sanitary Sewer Mainline Rehabilitation - Phase 8	<u>Town of New Hartford:</u> residential 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 is under construction; Project on winter weather delay, punchlist completion will occur in Spring 2018.
14	Sanitary Sewer Mainline Rehabilitation - Phase 9	<u>Town of New Hartford:</u> 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.	Project is under construction; Project on winter weather delay, punchlist completion will occur in Spring 2018.
16	Sanitary Sewer Mainline Rehabilitation - Phase 10	<u>Town of Whitestown:</u> 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	Submitted for EFC/County review in December 2017	3	270,000	\$ 520,000.00	TBD	Project expected to be publicly bid 1Q 2018.

* - Contract 9 - Flow Monitoring Contract

(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.

BOLD - Value represents the Engineers estimate



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.

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 4th Quarter of 2017, 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	Location	Credits Used	Ending Balance
Town of New Hartford	1,588,381	0	212 Jack's Way Applewood Lot 25 (328.000-2-1)	320	1,587,181
			306 Gracie's Way Applewood Lot 30 (328.000-2-1)	320	
			48 Cherrywood Blvd Cherrywood (328.000-2-26)	240	
			29 Hosta Lane Cherrywood (328.000-2-26)	320	
Town of Paris	253,064	0		0	253,064
Town of Whitestown	854,274	0		0	854,274
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	163,599	0		0	163,599
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	3,694,399			3,920	3,693,199

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 4th Quarter of 2017, there were no changes of key personnel to report.

9.2 SATELLITE COMMUNITY STAFF

During the 4th Quarter of 2017, there were no changes of key personnel to report.

9.3 CONSULTANT TEAM STAFF

During the 4th Quarter of 2017, there were no changes of key personnel to report.

10.0 ADMINISTRATIVE ITEMS

10.1 WORK AUTHORIZATIONS

New work orders were not authorized during the 4th Quarter of 2017.

10.2 PROJECT FINANCING

The following listing is from the CWSRF 2018 Final Intended Use Plan (IUP), issued in December 2017 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 (Annual List – Category B)	FM Rehab, PS Rehab [CONSTRUCTION PHASE] Phases 5b	\$97,000,000
C6-6070-08-04 (Annual List – Category D)	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)	\$43,000,000
C6-6070-08-06 (Annual List – STF)	STP UP [SOLIDS HANDLING SYSTEMS DESIGN AND CONSTRUCTION]	\$35,000,000
C6-6070-08-15 (Multi-year)	STP UP	\$87,000,000

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

10.2.1 Construction of the Sauquoit Creek Pumping Station, New Force Main and WPCP Solids Handling Upgrades (CWSRF No. C6-6070-08-04) - \$117 Million

Financing has been approved by NYSEFC. Closing on the Short-Term Financing occurred on September 21, 2017.

10.2.2 Planning, Design, and Construction of I/I Correction to Improve Mohawk River (CWSRF No. C6-6070-08-10) - \$11.58 Million

Conversion from short-term to long-term financing closed during the 4th Quarter of 2017.

10.2.3 STP UP [Solids Handling Systems Design and Construction] (CWSRF No. C6-6070-08-06) - \$35 Million

Conversion from short-term to long-term financing closed during the 4th Quarter of 2017.

10.2.4 STP UP [Phase 6a] (CWSRF No. C6-6070-08-05 and C6-6070-08-15) - \$130 Million

Bond authorization for increase in financing amount was approved by the Oneida County Board of Legislators on November 22, 2017. An application for CWSRF financing will be prepared and submitted in the 1st Quarter of 2018. Increased amount of bond authorization is \$160 million.