

**SANITARY SEWER COLLECTION SYSTEM  
QUARTERLY PROGRESS REPORT  
4TH QUARTER – 2015  
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, 2015



Cazenovia, NY



Syracuse, NY



Utica, NY



**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

January 29, 2016

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

**UNITED PARCEL SERVICE**

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

Re: Oneida County Sewer District  
Quarterly Progress Report – 4th Quarter 2015

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 4th Quarter – 2015 as required per Section XIII – Reporting Requirements of the Consent Order. This document summarizes the status and progress of work completed between October 1, 2015 and December 31, 2015 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**

A blue ink handwritten signature, appearing to read "Steven P. Devan", written over a horizontal line.

Steven P. Devan, P.E.  
Commissioner

Enclosure: Quarterly Progress Report – 4th Quarter 2015

ecc: 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  
Steven Botsford, P.E. - NYSDEC  
Michael O'Neil, P.E. - NYSEFC

**Sanitary Sewer Collection System  
Quarterly Progress Report  
4TH Quarter - 2015  
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  
4<sup>th</sup> Floor  
Utica, NY 13501**

January 30, 2015

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## 1.0 INTRODUCTION

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### 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 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 SSO's, 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, 2015 and December 31, 2015 (4<sup>th</sup> Quarter of 2015) in support of the Consent Order compliance requirements.

## 2.0 ENGINEERING INVESTIGATIONS AND EVALUATIONS

During the 4<sup>th</sup> Quarter of 2015, 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 4<sup>th</sup> Quarter of 2015.

#### 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.

As a result of that initial televising contract, approximately 79%, or 171 miles of the 216 miles of sewers were 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 under development. It is anticipated that another 10-15% of the sewers will be inspected as a component of current and future sewer rehabilitation contracts.

During the 4<sup>th</sup> Quarter of 2015, approximately 1.5 miles of County-owned interceptor sewer televising was completed. Televising during 4<sup>th</sup> Quarter was performed along the Mud Creek Interceptor sewer between Presbyterian Home and Sangertown Mall. Including the original CCTV contract, and subsequent CMOM and rehabilitation related CCTV, this brings the total of televised sewers to approximately 176 miles of sewer, or 81% of the total sewers in the SCPS basin.

It is anticipated that up to 5 miles of CCTV could be completed during 2016 under the County's next two rehabilitation contracts, 10 and 11.

#### 2.1.3 Dye Testing

There was no dye testing performed during the 4<sup>th</sup> Quarter of 2015.

### 2.2 WATER POLLUTION CONTROL PLANT

During the 3<sup>rd</sup> Quarter of 2015, the biosolids design (plans, specifications, and Basis of Design Report) was completed for 4<sup>th</sup> Quarter submission to NYSDEC for regulatory review and comment. The design includes the construction of two new egg-shaped anaerobic primary digesters, a secondary digester, digester gas cleaning, and combined heat and power (CHP) generation with new microturbines. The anaerobic digestion approach to sludge stabilization is a deviation from the original concept submitted in the 2012 "Water Pollution Control Plant and Sauquoit Creek Pump Station Evaluation." The NYSDEC approved the anaerobic digester concept in a letter dated May 30, 2014. The major components of the design include:

- Replacement of existing waste activated sludge pumps
- Refurbishment of all four gravity thickeners. The thickeners, which currently thicken mixed primary and waste activated sludge, will be reconfigured. Two thickeners will be dedicated to primary sludge only. Two new gravity belt thickeners will be installed for waste activated sludge thickening only. The remaining two

existing gravity thickeners will be converted to sludge blend tanks, for combining thickened primary sludge and waste activated sludge.

- Two new egg-shaped primary digesters. Egg shaped tanks were chosen due to efficiency and improved O&M (less cleaning and grit accumulation) than traditional tanks.
- One new secondary digester with a gas holding cover
- A new standby post-lime stabilization system as backup to the anaerobic digesters
- Two new belt filter presses and reconfiguration of two existing belt filter presses
- The design of select components of the solids handling upgrades is anticipated to be finalized and made ready for NYSDEC review during the 4<sup>th</sup> Quarter of 2015. It is anticipated that all biosolids upgrades will be bid as a single package in early 2016.
- Incinerator modifications will be refurbished only to the extent necessary to comply with new federal sewage sludge incinerator (SSI) regulations (40 CFR Part 60, Subpart M). The incinerators will not be upgraded for long-term operations as anaerobic digesters will eventually replace the incinerators. Incinerator improvements include new mercury scrubbers on Unit Nos. 1 and 3. Bids were received for the procurement of scrubber equipment during the 1<sup>st</sup> Quarter of 2015. A purchase order for the equipment was issued by the County in April 2015. In June 2015, separate General and Electrical Construction contracts for the installation of the scrubbers were advertised. These General and Electrical Construction Contracts were awarded in July 2015. Scrubber equipment arrived onsite in October 2015. Contractors mobilized for the installation of the new scrubber equipment in December 2015. The County understands that the incinerator upgrades are required to be fully operational by March 2016 per the SSI regulations. The digesters would not be operational by that time; which dictates the need to upgrade the incinerators.

During the 3<sup>rd</sup> Quarter of 2015, the 30% design for the WPCP expansion/upgrade was completed by the Consultant Team. The Basis of Design Report for the WPCP expansion/upgrade was submitted to the NYSDEC in September 2015. The proposed WPCP upgrades generally include:

- A new screening facility and pump station, dedicated to sanitary flows from the North Utica and Starch Factory Creek Interceptors. The design for this new pump station was approximately 60% complete by the end of the 4<sup>th</sup> Quarter of 2015.
- The existing Raw Waste Building will be repurposed for combined flows from the City of Utica only. The design for refurbishing the existing Raw Waste Building was approximately 60% complete by the end of the 4<sup>th</sup> Quarter of 2015.
- New grit removal facilities. Separate banks will be installed for combined sewer and sanitary sewer flows. The grit removal design was approximately 60% complete by the end of the 4<sup>th</sup> Quarter of 2015.
- New rectangular primary settling tanks to replace the existing circular primary settling tanks. The design for the new primary settling tanks was approximately 50% complete by the end of the 4<sup>th</sup> Quarter of 2015.
- A new high rate disinfection system for wet weather combined sewer flows which exceed the capacity of the existing secondary treatment system. No sanitary flows will be directed to the new high rate disinfection system. The design for the new disinfection facilities was approximately 50% complete by the end of the 4<sup>th</sup> Quarter of 2015.
- Replacement of the existing blowers with more efficient units, and replacement of existing aeration tank diffusers. This design is approximately 30% complete through the 4<sup>th</sup> Quarter of 2015.
- Refurbishment of the existing final settling tanks. This design is approximately 30% complete through the 4<sup>th</sup> Quarter of 2015.

The upgrades at the WPCP will also address “physical condition” improvements, not related to SSO and CSO mitigation, to maintain the integrity of the existing facilities and process equipment, such as electrical, HVAC,

structural, and hydraulic infrastructure. Planned improvements also include security upgrades and fire protection in select buildings. These “physical condition” upgrades are being designed concurrently with the process design for the impacted areas of the WPCP.

Oneida County and the Consultant Team met with the NYSDEC on October 15, 2015 to review the 30-percent Basis of Design Report and to discuss initial questions offered by NYSDEC. A follow-up meeting was held on November 10, 2015. Formal written comments are pending from NYSDEC.

The County and Consultant Team understand the NYSDEC has not finalized the future phosphorus effluent limit for the WPCP. As part of the final design phase for the upgrades and expansion of the WPCP, the Consultant Team will develop a comparison of appropriate phosphorus removal technologies based on an anticipated effluent phosphorus limit in the range of 0.2 mg/L to 1.0 mg/L. Sampling of plant influent, primary effluent and final effluent began at the beginning of October 2015 and will continue into 2016. Samples are collected weekly by WPCP staff and submitted to Pace Analytical Laboratory for analysis of various forms of phosphorus. The Consultant Team is compiling the data in order to better characterize the WPCP’s influent and effluent phosphorus concentrations and evaluate phosphorus removal technologies.

### 2.3 SAUQUOIT CREEK PUMP STATION/FORCE MAIN

During the 4<sup>th</sup> Quarter of 2015, the Consultant Team (lead by Brown and Caldwell) continued with final design on the SCPS and force main upgrades as well as advancing the design toward 90% completion. A second Peer Review was prepared in November for the force main upgrades by the Consultant Team (lead by O’Brien and Gere (OBG)). Those comments are being addressed by Brown and Caldwell. Additionally, a formal Peer Review of the Pump Station upgrades was performed by OBG in November 2015. Those comments are also being addressed by Brown and Caldwell.

The major components of the design include:

- Replacement of the existing pump station mechanical screen with two new redundant screens housed in a new screen building. Two screenings washer/compactors will be provided and a screenings conveyor system will carry screenings to a dumpster area.
- Replacement of the existing standby generator with a new outdoor standby generator capable of operating the station to pump peak flow during a power outage.
- Upgrades to the existing pump station electrical and HVAC systems.
- New 48-inch force main and rehabilitation of the existing force main. New flow metering and flow control vaults are being provided along the force main route.
- New split flow distribution structure at the WPCP to be used to distribute 5 mgd of flow directly to the WPCP aeration tanks.

The County and Consultant Team have been coordinating with the project land surveyor regarding acquisition of future construction and permanent easements in conjunction with the new force main construction. Easements are required from 35 different parcels along the force main route. Easement and title/abstract work is underway at this time.

The wetland permitting process is also in progress. The Joint Application for Permit along with supporting documentation was submitted on October 30, 2015 to NYSDEC and US Army Corps of Engineers (ACOE). The permit is required for the new force main that will be constructed parallel to the existing force main. A joint project meeting with both agencies was held at NYSDEC offices in Utica on December 15, 2015 to review the application and supporting documents. During this meeting, the representative from ACOE requested revised and additional information in support of the application review. The Consultant Team (lead by OBG) is currently performing this additional field work and analysis in support of the ACOE request.



### 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. 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 as a means 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

The County worked closely with the Dormitory Authority of the State of New York to secure the \$950,000 Economic Development Assistance Program (EDAP) funding allocation that will support the extensive flow monitoring program proposed by the County and approved by NYSDEC on August 24, 2012. The process for acquiring this funding was very tedious but progressed through the various review processes within the State Government in Albany. In the absence of the EDAP funding, the County made the decision in September 2013 to proceed with the finalization of bidding documents for the procurement of the flow monitoring equipment using various sources of interim borrowing within the District operating budget.

Funding was allocated in March 2014 and bidding documents for procurement of the flow monitoring equipment were advertised on June 9, 2014. Contract was awarded on September 10, 2014 to ADS Environmental Services, LLC (ADS). ADS completed the installation of 59 flow meters and five rain gauges during the 1<sup>st</sup> Quarter of 2015. During the 2<sup>nd</sup> Quarter of 2015 an additional four flow meters were installed. Two of the meters were installed to monitor flow to the County's Barnes Ave Pumping Station, and the other two are used to monitor flow in two of the City of Utica's combined sewers to aid in hydraulic model calibration and confirmation. All flow meters and rain gauges have been reliably collecting flow data since the 2<sup>nd</sup> Quarter of 2015.

A training session was held October 27th and 28th, 2015 to familiarize the County staff in the use of ADS' "Sliicer" software, which will be used to analyze dry and wet weather flow, and allow the County to assess the effectiveness of I/I removal projects. The Sliicer program will also allow the County to compare the flow meter data obtained as a result of the 2008 temporary flow monitoring program to data collected through the current flow monitoring program, particularly in those areas where sewer rehabilitation has occurred. The software allows the data to be compared on a rainfall vs. flow basis to determine the sewer's response to rainfall derived I/I, regardless of the magnitude of the rain event.

#### 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.

Conceptual design of a pilot PPII reduction project was completed in the 4<sup>th</sup> Quarter of 2015. This conceptual design and a project estimate will be presented to the Town of Paris for review during the 1<sup>st</sup> Quarter of 2016, and project financing will be sought.

A full Steering Committee meeting was held on December 15, 2015 and was attended by members of the PPII working group members. The meeting re-capped achievements of 2015 and identified objectives for 2016.

### **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.

A full Steering Committee meeting was held on December 15, 2015 and was attended by members of the CMOM working group members. The meeting re-capped achievements of 2015 and identified objectives for 2016.

## 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 4<sup>th</sup> Quarter of 2015):

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 (extension granted to July 1, 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

Note: I/I – Inflow and Infiltration

### 4.2 MILESTONES

During the 4<sup>th</sup> Quarter of 2015, the following milestone dates were met:

- No specific milestones defined/requested during the 4<sup>th</sup> Quarter of 2015.

## 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 COMPLETED SEWER REHABILITATION CONTRACTS

Contract No.	Contract Title	Contract Description
2	Sanitary Sewer Manhole Rehabilitation – Phase 2	Rehabilitation of approximately 1,278 sanitary sewer manholes throughout the District.
3	Sanitary Sewer Mainline Rehabilitation – Phase 1	Rehabilitation of approximately 13 miles of sanitary sewers within the villages of New York Mills, Oriskany, New Hartford, Whitesboro, and Yorkville and the towns of New Hartford and Whitestown
4	Sewer Separation – Clinton/Henderson Street, NY Mills	Storm/Sanitary sewer separation
5	Sewer Repairs and Rehabilitation	Storm/Sanitary sewer repairs and rehabilitation; manhole replacement and UV-CIPP lining
6	Sanitary Sewer Mainline Rehabilitation – Phase 3	Rehabilitation of approximately 15 miles of sanitary sewer within the villages of New Hartford and Clayville, towns of New Hartford and Paris and the City of Utica.
7	Sanitary Sewer Mainline Rehabilitation – Phase 4	Rehabilitation of approximately 13 miles of sanitary sewer within the Towns of New Hartford and Whitestown.

### 5.2 CONTRACT 5 – SEWER REPAIRS AND REHABILITATION

All contractual work under Contract 5 has been completed. During the 4<sup>th</sup> Quarter of 2015, the County took advantage of unexpended funds within the construction contract and authorized the contractor to improve access to a severely overgrown easement section of the County-owned Mud Creek Interceptor Sewer (between Jay-K Lumber and Presbyterian Home). The area was overgrown with brush and small scrub trees making access to the interceptor sewer impossible for inspection and maintenance purposes. An access point has now been created for inspection/cleaning/televising. Refer to Section 2.1.2 which refers to subsequent cleaning and CCTV work that was completed during the 4<sup>th</sup> Quarter on the Mud Creek Interceptor Sewer (between Presbyterian Home and Sangertown Mall) by which a significant amount of capacity inhibiting debris was found and removed from this segment of sewer. Minor lawn restoration remains, and will be completed when the weather allows in Spring 2016 Project closeout will occur after this restoration is complete.

### 5.3 CONTRACT 6 - SANITARY SEWER MAINLINE REHABILITATION – PHASE 2

Contract 6 work is complete; it will be closed out in the 1<sup>st</sup> Quarter of 2016 pending receipt and validation of post-rehabilitation CCTV data.

**5.4 CONTRACT 7 - SANITARY SEWER MAINLINE REHABILITATION – PHASE 3**

Contract 7 is complete; it will be closed out in the 1<sup>st</sup> Quarter of 2016, pending receipt and validation of post-rehabilitation CCTV data.

**5.5 CONTRACT 8 - SANITARY SEWER MAINLINE REHABILITATION – PHASE 4**

On February 12, 2015, bids for Contract 8 were opened, with the low bid submitted by National Water Main Cleaning Company (NWMC). On March 15, 2015, the County awarded Contract 8 to NWMC. Contract 8 rehabilitation will occur within NHD-23 sewershed in the Town of New Hartford, and will consist of mainly pipe grouting, lateral grouting, open cut, and spot repairs. A small amount of CIPP lining will also be performed. Approximately 13,700 LF of sanitary sewer will be televised and then rehabilitated as necessary. A total of 14 miles of pipe in the Town of New Hartford will be rehabilitated under Contract 8. In addition to New York State Environmental Facilities Corporation (NYSEFC) funding for Contract 8, a portion of the work was planned to be funded directly by the Town of New Hartford through its sewer fund. During subsequent discussions with the town, it has indicated it no longer has the funds available in its sewer fund for this work. The portion of Contract 8 that was set aside for the town has been added back in to the base bid by Change Order.

A Notice to Proceed was issued to NWMC on July 21, 2015 and construction began on July 28, 2015. Through the end of the 4<sup>th</sup> Quarter of 2015, approximately 198 pipe segments in NHD-23 had all of their joints tested, and as a result approximately 85 sewer joints were sealed, approximately 550 lineal feet of sewer was lined, 4 manholes had leaks sealed using drill and grout, and approximately 415 laterals were tested and sealed. Work on Contract 8 is anticipated to continue through the 2<sup>nd</sup> Quarter of 2016.

**5.6 CONTRACT 10 - SANITARY SEWER MAINLINE REHABILITATION – PHASE 5**

On August 11, 2015, bids for Contract 10-Sanitary Sewer Mainline Rehabilitation Phase 5 were opened, with the low bid submitted by Green Mountain Pipeline Services, Inc. (GMPS). On September 9, 2015, the County awarded Contract 10 to GMPS.

Contract 10 rehabilitation work will occur in the sewershed known as WHN-32, and the Village of Whitesboro. WHN-32 is generally located west of Henderson Street, north of Mud Creek, south of Clinton Street and east of Clinton Road in the Town of Whitestown and contains approximately 7.1 miles of pipe. It is anticipated that up to an additional 10 miles of pipe will be rehabilitated in areas of the Village of Whitesboro where rehabilitation has not previously been completed. Contract 10 is similar in scope to Contract 7, consisting of a mix of CIPP lining, pipe joint and lateral grouting, open cut repairs, spot repairs, and supplemental CCTV inspections.

It is anticipated that construction of Contract 10 will begin during the spring of 2016.

**5.7 CONTRACT 11 - SANITARY SEWER MAINLINE REHABILITATION – PHASE 6**

On October 27, 2015, bids for Contract 11-Sanitary Sewer Mainline Rehabilitation Phase 6 were opened, with the low bid submitted by National Water Main Cleaning Company (NWMC). On December 9, 2015, the County awarded Contract 11 to NWMC.

Contract 11 is similar in scope to previous mainline rehabilitation contracts, consisting of a mix of pipe joint and lateral grouting, open cut repairs, CIPP spot liner repairs, and supplemental CCTV inspections. There is no full length CIPP lining in Contract 11. Contract 11 rehabilitation work will occur in the sewershed known as NHD-20. NHD-20 is generally located in the hamlet of Washington Mills, in the area of Chapman Road, Higby Road, and Mohawk Street and side streets in the Town of New Hartford and contains approximately 7.3 miles of pipe.

Contract 11 work is expected to commence in spring of 2016.

**5.8 CONTRACT 12 - SANITARY SEWER MAINLINE REHABILITATION – PHASE 7**

Design of Contract 12-Sanitary Sewer Mainline Rehabilitation Phase 7 progressed during the 4<sup>th</sup> Quarter of 2015.

Contract 12 rehabilitation work is anticipated to occur in the Village of Yorkville within areas of sewershed YKV-1, not previously rehabilitated under other contracts. Contract 12 is similar in scope and size to Contract 10.

Contract 12 is tentatively scheduled to be put out to bid during late 1<sup>st</sup> Quarter or early 2<sup>nd</sup> Quarter of 2016, with construction occurring during the 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> Quarters of 2016.

## 6.0 ASSESSMENT OF REHABILITATION EFFECTIVENESS

During the 4<sup>th</sup> Quarter of 2015, the physical measurement mechanism (flow monitoring) for measuring the effectiveness of sewer rehabilitation was fully implemented; analysis of flow data has not been completed. See Section 3.2 above for a discussion of the status of flow monitoring. 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 for Contracts 2, 3, 4, 5, 6, 7, 8, 10 and 11, the reductions in I/I are estimated to be:

Contract 2 – Sanitary Sewer Manhole Rehabilitation, Phase 2	5,411,910 gpd
Contract 3 – Sanitary Sewer Mainline Rehabilitation, Phase 1	1,503,360 gpd
Contract 4 – Sewer Separation – Clinton/Henderson St (NY Mills)	264,000 gpd
Contract 5 – Sewer Repairs and Rehabilitation	120,000 gpd
Contract 6 – Sanitary Sewer Mainline Rehabilitation Phase II	1,130,000 gpd
Contract 7 – Sanitary Sewer Mainline Rehabilitation Phase III	630,000 gpd
Contract 8 – Sanitary Sewer Mainline Rehabilitation Phase IV (partially complete)	249,000 gpd (upon completion)
Contract 10 – Sanitary Sewer Mainline Rehabilitation Phase V (to begin Spring 2016)	1,120,000 gpd (upon completion)
Contract 11 – Sanitary Sewer Mainline Rehabilitation Phase VI (to begin Spring 2016)	260,640 gpd (upon completion)

## 7.0 COMPLETED CAPITAL PROJECTS/FACILITY UPGRADES

Contract 2 – Sanitary Sewer Manhole Rehabilitation: Project was completed/closed in 2014.

Contract 3 – Mainline Sewer Rehabilitation – Phase 1: Project was completed/closed in June 2015.

Contract 4 – Clinton Street Sewer Separation-New York Mills: Project was completed/closed in November 2014.

The following projects are complete with respect to construction. The County is in the process of administrative contractual closeout.

Contract 5 – Sewer Repairs and Rehabilitation

Contract 6 – Sanitary Sewer Mainline rehabilitation – Phase 3

Contract 7 – Sanitary Sewer Mainline Rehabilitation – Phase 4

8.0 I/I OFFSET PROJECTS/NEW FLOWS

During the 4<sup>th</sup> Quarter of 2015, 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	505,317		305 Gracie Place, Lot #4 Applewood (328.000-2-1)	320	489,429
			38 Overland Dr. Cherrywood (328.000-2-26)	240	
			Homewood Suites Woods Park Dr.	14,628	
			304 Gracie Place Applewood (328.001-2-1)	320	
			10 Stanhope Ct., Lot 10 (328.015-5-10)	380	
Town of Paris	96,680			0	96,680
Town of Whitestown	135,426			0	135,426
Village of Clayville	28,829			0	28,829
Village of New Hartford	59,510			0	59,510
Village of New York Mills	163,787			0	163,787
Village of Oriskany	103,466			0	103,466
Village of Whitesboro	163,599			0	163,599
Village of Yorkville	160,282			0	160,282
Oneida County Business Park	43,027			0	43,027
Oneida County Sewer District	24,710			0	24,710
<b>Totals</b>	<b>1,484,633</b>	<b>0</b>		<b>15,888</b>	<b>1,468,745</b>

## 9.0 KEY PERSONNEL CHANGES

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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 4<sup>th</sup> Quarter of 2015, Mr. Frank Prokosch, Maintenance Supervisor, a 40-year employee of the WPCP retired.

### 9.2 SATELLITE COMMUNITY STAFF

During the 4<sup>th</sup> Quarter of 2015, there were no changes of key personnel to report.

### 9.3 CONSULTANT TEAM STAFF

During the 4<sup>th</sup> Quarter of 2015, Frank Prokosch retired from his position at the WPCP. He was subsequently hired as a Technical Assistant by Lynstaar Engineering, the project WBE electrical/mechanical engineering firm, in order for the project to retain his nearly 40 years of institutional knowledge of the Oneida County WPCP operations.



**10.0 ADMINISTRATIVE ITEMS**

**10.1 WORK AUTHORIZATIONS**

No new work orders were authorized during the 4<sup>th</sup> Quarter of 2015.

**10.2 PROJECT FINANCING**

The following listing is from the CWSRF 2016 Final Intended Use Plan (IUP), issued in November 2015 for the County:

CWSRF PROJECT #	PROJECT NAME	TOTAL IUP AMOUNT
<b>C6-6070-08-00</b> <b>(Long-term financed)</b>	I/I CORR [9 CONTRIBUTING COMMUNITIES] Phase 1 and 2a	*\$10,078,438 (includes \$4M Principal Forgiveness)
<b>C6-6070-08-01</b> <b>(Multi-year)</b>	I/I CORR [SSO - 9 Contributing Communities] Phase 2b-3	\$59,500,000
<b>C6-6070-08-02</b> <b>(Long-term financed)</b>	FM, PS REHAB [DESIGN AND PERMITTING PHASE] Phase 5a	*\$2,524,071
<b>C6-6070-08-03</b> <b>(Multi-year)</b>	I/I CORR [SSO] Phase 4	\$9,520,000
<b>C6-6070-08-04</b> <b>(Annual List - closing on STF pending)</b>	Wastewater Improvements [CONSTRUCTION PHASE] Phases 5b and 6c	\$117,000,000
<b>C6-6070-08-05</b> <b>(Annual List)</b>	STP UP (Phases 6a and 6d)	\$110,600,000
<b>C6-6070-08-06</b> <b>(Annual List - STF)</b>	STP UP [SOLIDS HANDLING SYSTEMS DESIGN AND CONSTRUCTION]	\$35,000,000

\* - CWSRF Project Financing have closed, are no longer listed in IUP, but reflect the amount Oneida County is now repaying.

**10.2.1 Construction of the Sauquoit Creek Pump 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 is being coordinated with NYSEFC and will occur based on projected cash flow need.