

WESTCHESTER COUNTY

ANNUAL MUNICIPAL SEWER MAINTENANCE AND REPAIR REPORT FORM  
IN COMPLIANCE WITH THE COUNTY SEWER ACT  
(Laws of Westchester County Chapter 824)

Submitted on behalf of the Village of Scarsdale

**Date:** October 8, 2021

**Report Year:** 2020

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MAINTENANCE:

1. Set Forth the Maintenance Schedule in effect for Municipal Sanitary Sewer System for Report Year.

The Village of Scarsdale maintains an annual budget, which supports the maintenance and necessary repairs to the Village's sanitary sewer system. During each year's budget submittal process and subsequent review workshops, engineering staff presents a five-year capital plan for maintenance and repair of sanitary sewers. As a result, for each fiscal year, the Village solicits bids and awards contracts for pipe flushing/CCTV televising, cured in place lining and point repair work. VM 1268 awarded on August 14, 2020, to National Watermain Cleaning Company, is a two-year contract for such service.

The Village performs spot checks in various portions of the system on a rotating basis. Flushing and cleaning are done where necessary to keep lines clean. When field visual inspection cannot determine the cause of a problem, the Village may retain a private contractor(s) to televise, flush and clean sanitary sewer lines.

2. Describe method used to establish maintenance priorities.

The priority areas for maintenance and repair are often based on repetitive complaints, history and frequency of sewer backups or emergency repair work, discoveries from planned maintenance activities, and results obtained from CCTV and CMOM televised inspections. The public works and engineering staff field inspect problematic areas, televise main lines (flush as necessary), visually inspect manhole flow rates during peak flows times and during wet conditions. The Public Works Deputy Foreman maintains a list of problematic areas which he and his staff monitor regularly. Data from the 2017-2018 SSES study in the Mamaroneck District and 2020 study in the Hutchinson River District are also used as guidance for determining problematic areas in those districts.

3. Describe Maintenance Activities Conducted in the Report Year (enumerate linear feet and number of manholes maintained and approximate percentage of total system):

- a. Inspected (describe method used such as TV, smoke testing, dye testing, etc.)

Methods of inspection used throughout the year include CCTV television inspection and visual inspection. In 2020, the Village cleaned and televised approximately 14,400 linear feet sanitary sewer piping in the Hutchinson River Sewer District as part of the SSES with H2M Architects + Engineers and another 15,000 linear feet in the Bronx River Valley and Mamaroneck Valley Sewer districts with contractor National Watermain Cleaning Company. Village DPW staff flushed an estimated 5,000 linear feet of pipe. As a percentage of the total system, this figure is the following:

34,400 lf @ (1 mile/5280 lf) = 6.51 miles of pipe (approximately 7.63 % of system)

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b. Preventative Maintenance (describe activities)

Preventative maintenance includes point repairs, sewer lining (cured-in-place), root control and manhole repair and sealing.

Public works staff maintain a program for JetVac pipe flushing, chemical root treatment and cutting in areas of known problem areas. The sanitary sewer mains in these areas are regularly cleaned to help prevent reduced flows and clogged lines. As noted above, approximately 34,400 linear feet of sanitary sewer was flushed during year 2020.

The Village maintains a policy that when new homes are constructed or demolished and rebuilt, applicants must replace their sanitary sewer laterals from main up to the dwelling. Additionally, during routine final inspections, Village staff inspect and evaluate whether sump pumps are installed and properly connected to a non-sanitary discharge source.

c. Cleaning (identify methods used)

The Village owns and operates one Sewer Jetvac truck to routinely flush sanitary sewer mains. Methods used include pressure flushing, root cutting and vacuum debris removal. When manholes are inspected, any accumulated debris that may be found atop the manhole shelf or within the channel, are removed and disposed of. Contract VM 1268 provides a means for an outside contractor to assist with cleaning, root cutting, FOG removal and CCTV activities.

#### **REPAIR AND REHABILITATION:**

1. Set Forth the linear feet of sewer repaired or rehabilitated in the report year, the methods used and enumerate the footage as a percentage of the total sewer system.

The Village of Scarsdale publicly bid, contracted, and completed 3,034 linear feet of cured-in-place lining of sanitary sewer mains, the majority of which was performed in the Mamaroneck Valley Sewer district as remediation from SSES findings. Another 16 cured in place point repairs (4-foot sections) were performed in that same district. The Village performed pressurized grout injection rehabilitation to approximately 9,000 linear feet of pipe. Work was performed under prior contract VM 1222. The Village also awarded contract VM 1258 to Westchester Hills Corp. for which 166 linear feet of sanitary sewer pipe was excavated and replaced in 5 areas.

Through both contracts, approximately 12,264 linear feet (2.33 miles) or 2.8 % of the sanitary sewer was rehabilitated.

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2. Set forth the number of manholes repaired or reconstructed in the report year and give the approximate percentage of the total number of manholes in the system.

The Village of Scarsdale Department of Public Works performed minor repairs on approximately 238 manholes. In addition, approximately 80 manhole casting were raised to proper road grade during the process of resurfacing.

There are approximately 1502 sanitary sewer manholes in the Village. As a percentage the amount rehabilitated is approximately 21.2 %.

3. Set forth the approximate amount of inflow/infiltration removed from the sewer system in the report year.

As noted above, 12,264 linear feet of sanitary sewer pipe was rehabilitated via cured in place lining, pressurized grout injection or through excavation and replacement. Most of these repairs were performed in the Mamaroneck Valley Sanitary Sewer District. In addition, approximately 30 sanitary sewer laterals were replaced by property owners and developers. Through routine inspection, code enforcement and findings from smoke testing performed in the Hutchinson River Sewer District, driveway drains, roof leader downspouts, yard drains and sump pump connections to the sanitary sewer were remediated. The Village assumes that this work inherently has removed additional inflow/infiltration from the three sanitary sewer districts.

4. Set forth the techniques used to discover illegal storm water connections to the sanitary sewer system and actions taken during the report year to remove illegal connections.

As part of the SSES study performed by H2M Architects + Engineers 14,400 linear feet of sanitary sewer was smoke tested in the Hutchinson River Sewer District.

During routine final inspections on newly constructed and renovated homes, the Building and Engineering Department staff inspects for illicit plumbing fixtures and connections. As issues are discovered, property owners are issued violation notices to remediate. The Village annually revisits its code and makes modifications as it sees fit.

#### **SEWER SYSTEM EVALUATION STUDY (SSES):**

1. Identify the most recent SSES done for the Municipal Sanitary Sewer System and submit a copy with this Report or an online site for accessing the report.

For calendar report year 2020, the Village awarded a contract to H2M Architects + Engineers to conduct an SSES study for the Hutchinson River Sewer District. The work was performed with final deliverables received and presented in 2021. **As the reports and appendices are voluminous in file size and pages, the Village can share the full report and final deliverables to WCDEF via file sharing in PDF format. Please provide the Village with a file transfer link.**

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2. Describe activities in the report year undertaken to implement SSES findings. (This may include cross references to MAINTENANCE and REPAIR and REHABILITATION sections of this report).
- A. As the findings for the SSES report for the Hutchinson River Sewer District were reported in 2021, rehabilitation activities and code enforcement are presently underway. The same holds true for the 2017 SSES study and findings for the Mamaroneck Valley Sewer District with continued remediation work.
  - B. Through 2020 to date, the Village continues to provide updates to WCDEF and plaintiff's counsel for ongoing Save the Sound litigation.
  - C. The Village has been and continues to be diligent in handling inflow and infiltration when detected through its inspection and code enforcement practices along with annual maintenance, repair, and rehabilitation programs. Continuous televised inspections, CIPP lining, and recently enacted regulations for newly constructed or reconstructed dwellings requiring the replacement of sanitary sewer laterals all contribute to reducing the amount of storm water and/or groundwater entering the Village's sanitary sewer system.

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#### Implementation of Westchester County Policy for Removal of Inflow and Infiltration

The County of Westchester Planning Board has the authority under the County Charter, the NY General Municipal Law, and the NY State Environmental Quality Review Act to comment on certain proposed real property development subject to approval by municipal authorities that will add sanitary sewage flow to the sanitary waste treatment facilities operated by the WCDEF. Where WCDEF has experienced inflow and infiltration related flow conditions at its facilities exceeding the County Sewer Act limits for inflow and infiltration that warrant attention by the municipality, WCDEF has, through the Planning Board, recommended the municipal lead agency require mitigation of such inflow and infiltration conditions as part of its SEQR findings. In some cases, the municipal lead agency has required the property developer to undertake or fund sewer rehabilitation work in the municipality to remove three gallons of inflow and infiltration for every new gallon of sanitary flow the proposed development project will generate. For Fair and Affordable Housing development this requirement may be reduced to removal of one gallon of inflow and infiltration for every new gallon of sanitary flow. WCDEF supports the adoption of this policy for new development in every municipality where excess inflow and infiltration conditions have been identified in sanitary sewers tributary to County sanitary sewage facilities.

1. Identify any proposed real property development projects that became subject to County Planning Board review during the report year.

No projects in the Village of Scarsdale appeared before the Westchester County Planning Board in 2020.

2. Describe the SEQR impact mitigation requirements requiring inflow and infiltration removal imposed by a municipal lead agency during the report year.

Most projects were new construction containing new sanitary connections. Village policy for residential house demolition and reconstruction is such that “**new houses built are not allowed to reuse old laterals**” as many are in fact clay pipes with cracking and non-watertight joints; conditions that may allow for infiltration.

3. Describe any inflow and infiltration reductions accomplished in the report year as the result of SEQR impact mitigation requirements imposed by municipal lead agencies.

As mentioned above, the Village expects that some of the replaced sanitary sewer laterals for the 30 dwellings demolished and rebuilt or significantly improved may have contributed to some inflow and infiltration reductions.