



Environmental Services, Inc.

January 10, 2013

Mr. Vijay Gandhi
New York State Department of Environmental Conservation
Division of Water, Region 3
21 South Putt Corners Road
New Paltz, NY 12561-1620

RE: ANNUAL COLLECTION SYSTEM ASSET MANAGEMENT REPORT

Dear Mr. Gandhi:

I am pleased to report that significant progress has been made to the collection system this past year. As noted in the 2009 report the Village of Millbrook was successful in obtaining approximately \$ 400,000 in grant funds to be spent in the collection system to reduce the Inflow and Infiltration and make greatly needed repairs. This project is now completed. The last part of the project was completed in November of 2012. To date 5,930 feet of sewer main has been lined with a Cured in Place system. That accounts for approximately 23% of the entire collection system. During the past year we have performed the following:

- Rehabilitated 11 manholes
- Lined 765 feet of sewer main
- Internally sealed 14 manholes with Cementitious Coatings
- Televised 2,919 feet of sewer main.
- Assessed the video to determine future improvement plan.
- Repaired 6 catch basins in close proximity of the sanitary sewer system

As you can see, our focus this year was the lining of the sewer main and significant rehabilitation of manholes. Please see the attached spread sheets for explanations of the work performed at each manhole.

Scheduled improvements for 2013 include the lining of more sewer main, rehabilitation of additional manholes, and internally lining at least 10 manholes.

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As a reminder, The Village was able to perform the following repairs/replacements to the collection system from 2009 - 2011:

- Lined 5,165 feet of sewer main with Cured-In-Place lining
- Replaced 733 linear feet of sewer main
- Rehabilitated 42 manholes in the collection system
- Internally sealed and grouted 28 manholes
- Repaired 13 catch basins and 1 broken storm sewer
- While we were not able to remove any downspouts from the system, we were able to repair and cap two clean outs in the system. Downspout removal is going to necessitate significant re-routing and engineering to accomplish.
- Send out sump pump survey (January 2010)
- Televised 18,687 feet of sewer main.
- Video has been reviewed and findings have been utilized to set the repair/replacement plan for the future.
- Authorized Code Enforcement to perform Sump Pump inspections and issue citations to correct sump pump issues.

Accompanying this report are some of the worksheets that are being utilized to manage our collection system. They include the work performed as well as those areas to be targeted for future remediation. I have also included a graph showing the monthly average flows along with monthly precipitation from 2009 to the present. Over the past year the monthly average exceeded 200,000 GPD only once. As you can see on the graph the monthly flows have decreased significantly over the past year indicating a reduction of I&I.

As shown by the improvements made to the collection system over the past few years, the Village of Millbrook is committed to improving their system and will continue to do so in the years to come. We will continue to do everything possible to reduce the amount of I&I entering the system and maintain all aspects of the SPDES permit over time.

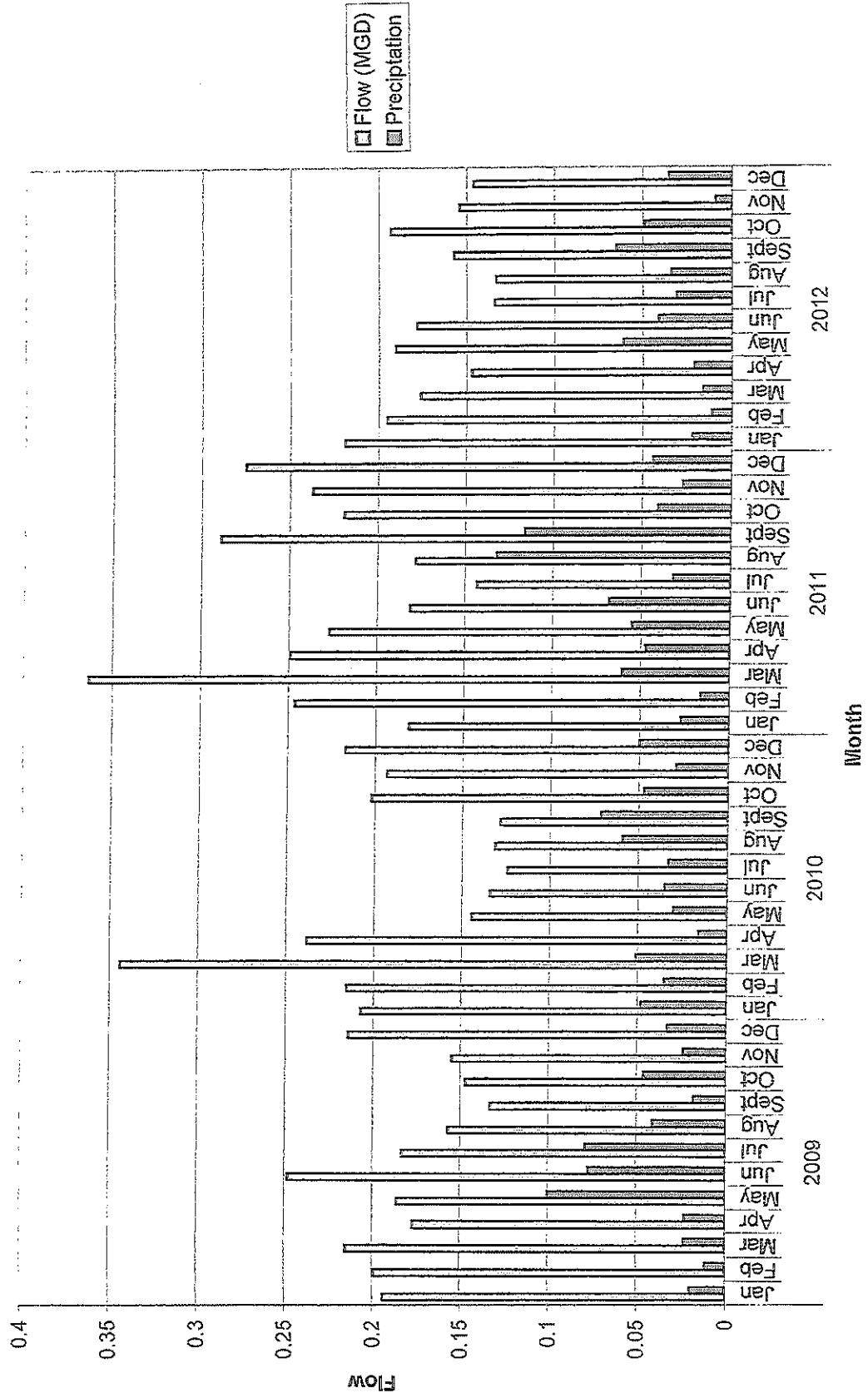
If you have any questions or concerns please feel free to call me any time.

Sincerely,



Scott E. Osborn
Area Coordinator
VRI Environmental Services

Millbrook WWTP Flow



Village of Millbrook Completed Manhole Work

Manhole Lining / Manhole Rehab / Both

Road	Manhole #	Depth below grade	Lid size (in)	Manhole Type	Work Done	Date Completed
Church St	21	flush	26	Brick	grouting	12/2/2009
Church St	27	1.5 inches	26	Brick	riser and lid, grouting	10/19/09 & 12/2/09
Church St	28	flush	26	Brick	grouting	12/2/2009
Church St	29	1 inch	26	Brick	grouting	12/2/2009
Elm School	44	4 inches	26	Brick	riser and lid	10/15/2009
Elm School	46	14 inches	26	Brick	precast risers and lid	9/30/2009
Haight Ave	64	7 inches	26	Brick	precast risers and lid	9/30/2009
Haight Ave	65	above grade	26	Brick	new lid	9/11/2009
Haight Ave	66	1" one side, flush other	26	Brick	grouting	12/2/2009
Hillside Ave	93	above grade	24	Concrete	grouting	12/2/2009
Hillside Ave	92	2.5 inches	24	Concrete	concrete rings and new riser	9/21/2009
Ciferri Dr	90	1.5 inches	24	Concrete	riser	9/21/2009
Ciferri Dr	90A	1 inch	24	Concrete	riser	9/21/2009
Ciferri Dr	91	0.5 inches	24	Concrete	riser	9/21/2009
Anson Ave	95	above grade	20	Brick	grouting	12/2/2009
Harts Village	52	1 inch	26	Brick	grouting	12/1/2009
North Ave	1	2 inches	26	Brick	riser and lid, grouting	10/19/09 & 12/1/09
North Ave	38	1 inch	26	Brick	removed steel ring, new riser and lid, grouting	12/3/2009
Dineen	100	0.5 inches	24	Concrete	riser	3/2/2010
Maple	49	2.5 inches	26	Brick	riser and lid	3/17/2010
Between Res & Alden	80	1 inch	26	Brick	riser and lid	3/12/2010
Between Res & Alden	81	at grade	26	Brick	riser and lid	3/12/2010
Between Res & Alden	82	1.5 inches	26	Concrete	grouting and riser	5/1/2010
Harts Village Rd	60A (104)	1 inch	24	Concrete	precast conc. risers	7/8/2010
Route 44	107	1.5 inches	24	Concrete	riser	7/22/2010
Anson	89	12 inches	24	Concrete	precast conc risers, frame and lid (26", was 24")	9/29/2010
Pilgrim	14	30 inches	26	Brick	precast conc risers, frame and lid	9/29/2010
Church	29A	1 inch	26	Brick	removed old steel riser and installed new riser	10/14/2010
Between Res & Frank	23	2 feet	26	Brick	precast conc risers (4) and new frame and lid	10/29/2010

Village of Millbrook Completed Manhole Work

Manhole Lining / Manhole Rehab / Both

Road	Manhole #	Depth below grade	Lid size (in)	Manhole Type	Work Done	Date Completed
Elm Dr	77	2 inches	26	Brick	removed damaged steel ring/installed new riser & lid	3/17/2011
Harts Village Rd	54	at grade	26	Brick	grouting/cement lining	6/9/2011
Harts Village Rd	58	0.5 inches	26	Brick	grouting/cement lining	6/9/2011
Harts Village Rd	58A	at grade	24	Brick	grouting/cement lining	6/9/2011
Harts Village Rd	59	buried	??		grouting/cement lining	6/9/2011
Haight Ave	86	0.5 inches	20	Brick	grouting/cement lining	6/9/2011
Haight Ave	87	1 inch	20	Brick	grouting/cement lining	6/10/2011
Fountain Place	61	above grade	26	Brick	grouting/cement lining	6/10/2011
Fountain Place	62	above grade	26	Brick	grouting/cement lining	6/9/2011
Fountain Place	63	flush	26	Brick	grouting/cement lining	6/9/2011
Reservoir Dr	79	1.5 inches	70	Brick	grouting/cement lining	6/9/2011
Reservoir Dr	67	.5 inches	26	Brick	grouting/cement lining	6/10/2011
Between Res & Alden	80	1 inch	26	Brick	grouting/cement lining	6/10/2011
Between Res & Alden	81	at grade	26	Brick	grouting/cement lining	6/10/2011
Elm Dr	35	1.5 inches on one side	26	Brick	grouting/cement lining	6/10/2011
Elm School Alley	44	4 inches	26	Brick	grouting/cement lining	6/13/2011
Elm School Alley	45	1 inch	26	Brick	grouting/cement lining	6/13/2011
North Ave	37	9 inches	26	Brick	precast concrete riser and new manhole frame and lid	6/16/2011
Between Res & Frank	24	3 inches	26	Brick	Installed new risers and lid	6/27/2011
Reservoir Dr	40/79A	8 inches		Brick	precast concrete riser and new manhole frame and lid	8/11/2011
Reservoir Dr	70	2 inches	26	Brick	Installed new risers and lid	11/2/2011
Rt 44	106	3.5 inches	24	Concrete	Installed 2 new cast iron risers	10/3/2011
Haight Ave	66	1" one side, flush other	26	Brick	Installed new risers and lid	11/2/2011
Dineen	103	at grade	24	Concrete	Installed new riser	11/2/2011
Elm Dr	76	2 inches	26	Brick	Removed damaged steel ring/installed new riser & lid	12/28/2011
Between Res & Frank	22	1.5 inches	26	Brick	Installed new riser and lid	12/29/2011

Village of Millbrook

Completed Manhole Work

Wanhe Ling / Manhole Rehab / Both

[illegible]

Village of Millbrook

Sewer Main Camera Work Completed

Year Completed	Street Name	Manhole Numbers (old numbers off old map)	Total Distance Covered	Pipe Size
2007	Ciferri Drive	90A-91	242 ft	8 in
2007	Reservoir Drive	69-68	276 ft	8 in
2007	Pilgrim Lane	15-16, 16-17	446 ft (223, 223)	8 in
2008	Ciferri Drive	90-90A, 90-89 (partial/camera blocked)	319 ft (305, 14)	8 in
2008	Harts Village	58A-89 (partial/camera blocked)	144 ft	8 in
2008	Maple Avenue	46-46, 46-47, 47-48 (partial), 48-49, 49-50, 50-51, 51-64	1134 ft (296, 573, 70, 179, 5, 228, 232, 5, 54, 5)	8 in
2008	Fountain Place	38-61, 61-62, 62-63	408 ft (125, 5, 112, 170, 5)	8 in
2008	Haight Ave	86-66, 66-65, 86-87	658, 5 ft (129, 5, 257, 5, 272)	8 in
2008	Elm School Alley	45-44 (partial/camera blocked)	96 ft	8 in
2009	Anson	97-73A	643 ft (177, 297, 169, 5)	8 in
2009	Maple	51-85	521 ft (126, 184, 211)	8 in
2009	Elm School Alley	36-45	540 ft (240, 300)	8 in
2009	Haight	64-65	164 ft	8 in
2009	Elm Drive	35-34	200 ft	8 in
2009	Elm Drive	35-78	1509 ft (300, 150, 125, 150, 150, 125, 275, 140, 94)	8 in
2009	Ciferri	90-89	95 ft	8 in
2009	Hillside	92-93	297 ft	8 in
2009	Harts Village	57A-52	975 ft (275, 175, 250, 100, 175)	8 in
2009	North Ave	52-1, 1-0	209 ft (125, 84)	8 in, 12 in
2010	Church St	18-29D	1535 ft	8 in, 10 in
2011	Alden Place	2930, 30-31, 31-32, 32-32A, 32A-32B, 32B-32C, 32C-32D	709 ft (175, 175, 250, 7, 69, 162, 288)	8 in
2011	Fountain Place	38-61, 61-62, 62-63	408 ft (125, 5, 112, 170, 5)	8 in
2011	North Ave	40-38A/39, 38A/39-38, 38-37, 37-0	848 ft (162, 341, 125, 220)	8 in, 10 in
2011	Reservoir	40/79A-67	145 ft	8 in
2011	Between Reservoir & Franklin	40/79A-23, 21-22, 22-23, 23-24, 24-25, 25-26, 26-26A	1288 ft (228, 109, 234, 231, 110, 110, 246)	8 in
2011	Washington Ave	8-10	388 ft (138, 250)	8 in
2011	Front St	8-7, 7-6, 6-5, 5-4, 4-3	1118 (336, 201, 188, 238, 155)	10 in
2011	Franklin	7-19, 19-18	453 ft (225, 228)	10 in
2012	Valley Farm	110-110I (10 manholes total)	1851 ft (228, 161, 173, 201, 200, 226, 75, 294, 303)	8 in
2012	Front St	2-1 (partial/camera blocked), 2-33, 2-3, 3-4, 4-5	934 ft (216, 239, 86, 155, 238)	10 in, 12 in
2012	Front & Merritt	5-79	134 ft	8 in

18,687.5 feet completed as of 2012

Millbrook Sewer Manhole Work Targeted

Road	Manhole #	Distance below grade	Depth (in)	Lid size (in)	Manhole Type	Work needed	Comments
Church St	29C				Brick	riser, grouting	Need to locate, manhole interior needs major repair
	29D	2-2.5 inches	69	24	Concrete	riser	
Maple Ave & Vellein Way	26	at grade	71	26	Brick	risers, lid, and grouting	Bricks wet, steel rings need to be replaced (10 inches below grnd)
	25	3 inches		26	Brick	risers, lid, and grouting	
Elm Drive	35	1.5 inches on one side	71	26		riser, grouting	near storm drains
	36	1.5 inches on one side		26	Brick	riser and lid	under pavement could not remove lid
	71	2 inches on one side		26	Brick	riser and lid	could not open
	73	under pavement	??	??		dig up and check	
	73A	under pavement	??			Frame and lid	Lid stuck, change to 24" frame and lid
	74		??		Brick	replace frame and lid	could not open
	78	under pavement	??	??		dig up and check	
Between Elm & Frit	33	2" above	54.5	26	Brick	grouting	Behind #17 Elm
Haight Ave	85	0.5 inches	108	20	Brick	riser and lid, grouting	ring and lid damaged, replace with 24 inch frame is 16" below grnd
	87	1 inch	62	20	Brick	riser and lid, grouting	Ring missing, need new frame and lid
Maple Ave	88	2 inches	??	20 or 24		riser and lid	under pavement could not remove lid
	84	1 inch	66	20		riser and lid	ring badly damaged, 6" grnd to frame
	85	above grade	??	20		replace frame and lid	could not open
North Ave	0	1 inch	63	26	Brick	riser and lid, grouting	ring broken, good condition but wet
	40	flush	75.5	26	Brick	grouting	bricks wet
Pilgrim Ln	13	1 inch	83.5	26	Brick	riser and lid	
Dineen	102	above grade	88.5	24	Concrete	new ring and regrade	Steel riser ring is corroding away and lid just sits on top
	101	at grade	76	26	Concrete	new ring and regrade	Steel riser ring is corroding away and lid just sits on top
Halcyon Rd	112	under pavement		24	Concrete	Locate and expose	

High Priority

Completed

Prepared By VRI Environmental Services 12/2012

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