## MILLBROOK, NY



# TASK IV APPENDIX B: IMPACT OF EXPANSIONS AND IMPROVEMENTS ON COST TO THE AVERAGE HOUSEHOLD

PREPARED BY:



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### **KEY ASSUMPTIONS**

Average Annual Household Consumption (Gallons)	127,750
Status Quo Invoiced Water System Consumption (Gallons)*	64,495,500
Status Quo Invoiced Sewer System Consumption (Gallons)**	57,232,000
Nine Partners Expansion Water Consumption (Gallons)***	3,960,250
Nine Partners Expansion Sewer Consumption (Gallons)***	3,321,500
Bennett Expansion Water Consumption (Gallons)	10,950,000
Bennett Expansion Sewer Consumption (Gallons)	10,950,000
Rodrigo Expansion Water Consumption (Gallons)***	3,066,000
Rodrigo Expansion Sewer Consumption (Gallons)***	2,299,500
Horseshoe Expansion Water Consumption (Gallons)***	14,162,000
Horseshoe Expansion Sewer Consumption (Gallons)***	7,281,750
Infirmary Expansion Water Consumption (Gallons)	292,000
Infirmary Expansion Sewer Consumption (Gallons)	292,000
Average Assessed Household Value: Systemwide	\$400,000
Future Capital Expense Cost of Financing with BANs	1.5%
Bond Financing Terms	4%, 20 Years
Capital Cost of Nine Partners Expansion Area: Water	\$1,215,000
Capital Cost of Nine Partners Expansion Area: Sewer	\$790,000
Capital Cost of Bennett College Expansion Area: Water	\$0 Paid by Developer
Capital Cost of Bennett College Expansion Area: Sewer	\$1,080,000 Paid by Developer
Capital Cost of Rodrigo Expansion Area: Water	\$648,000
Capital Cost of Rodrigo Expansion Area: Sewer	\$675,250
Capital Cost of Horseshoe Expansion Area: Water	\$2,706,000
Capital Cost of Horseshoe Expansion Area: Sewer	\$2,353,400
Capital Cost of Infirmary Expansion Area: Water	\$0 Paid by County
Capital Cost of Infirmary Expansion Area: Sewer	\$135,000 Paid by County
Operating Cost CPI	2%
CPI of Assessed Household Value	0.5%

<sup>\*</sup>Assumes that 95% of water processed at facility is Invoiced

<sup>\*\*</sup>Assumes that 80% of wastewater processed at facility is Invoiced

<sup>\*\*\*</sup>Assumes 80% of evaluated households would opt to hook-in to sewer/water system

VILLAGE OF MILLBROOK, NY
Impact of Expansions & Improvements on Cost to Avg. Household
Rate Study: Summary
Prepared By: R.S. Lynch & Company

	2011-2012 \$/1,000 Gallons: In-Village	20 Year AVG \$/1,000 Gallons: In-Village	2011-2012 \$/1,000 Gallons: Outside Village	20 Year AVG \$/1,000 Gallons: Outside Village	2011-2012 Average Household Bill: In-Village	20 Year AVG Average Household Bill: In-Village	2011-2012 Average Household Bill: Outside Village	20 Year AVG Average Household Bill: Outside Village
Status Quo: Water	\$3.02	\$4.60	\$6.04	\$9.20	\$386	\$589	\$773	\$1,177
Status Quo: Sewer	\$6.43	\$8.34	\$6.43	\$8.34	\$863	\$1,163	\$863	\$1,163
Status Quo with Nine Partners Expansion: Water	\$4.15	\$5.66	\$8.29	\$11.33	\$531	\$725	\$1,061	\$1,450
Status Quo with Nine Partners Expansion: Sewer	\$6.85	\$8.50	\$6.85	\$8.50	\$950	\$1,232	\$950	\$1,232
Status Quo with Bennett College Expansion: Water	\$2.88	\$4.30	\$5.75	\$8.60	\$368	\$551	\$737	\$1,101
Status Quo with Bennett College Expansion: Sewer	\$6.13	\$7.90	\$6.13	\$7.90	\$822	\$1,099	\$822	\$1,099
Status Quo with Rodrigo Knolls Expansion: Water	\$3.47	\$4.94	\$6.94	\$9.88	\$444	\$633	\$889	\$1,265
Status Quo with Rodrigo Knolls Expansion: Sewer	\$6.81	\$8.50	\$6.81	\$8.50	\$940	\$1,225	\$940	\$1,225
Status Quo with Horseshoe Expansion: Water	\$4.43	\$5.62	\$8.86	\$11.25	\$567	\$720	\$1,135	\$1,440
Status Quo with Horseshoe Expansion: Sewer	\$7.68	\$8.89	\$7.68	\$8.89	\$1,118	\$1,371	\$1,118	\$1,371
Status Quo with Infirmary Expansion: Water	\$3.00	\$4.57	\$6.00	\$9.14	\$384	\$585	\$769	\$1,170
Status Quo with Infirmary Expansion: Sewer	\$6.42	\$8.33	\$6.42	\$8.33	\$861	\$1,160	\$861	\$1,160

Village Fiscal Year: June 1st-May 31st

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VILLAGE OF MILLBROOK, NY Impact of Expansions & Improvements on Cost to Avg. Household Rate Study: Status Quo Water System Prepared By: R.S. Lynch & Company

		Past Revenues &			ture Revenues 8							
Village Fiscal Year: June 1st-May 31st	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Total Invoiced Water System Consumption (Gallons)	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500
Average Annual Household Consumption (Gallons)	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750
TOTAL CONSUMPTION:	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500
TOTAL CONSONIFTION.	04,493,300	04,453,300	04,493,300	04,493,300	04,493,300	04,493,300	04,493,300	04,493,300	04,493,300	04,493,300	04,493,300	04,453,300
Status Quo Capital Costs (Financed with BAN)	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Allocation of BAN Principal Amount to Annual Expenses	\$0	\$0	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Outstanding BAN Balance Subject to BAN Interest	\$80,000	\$80,000	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ending Balance of BAN	\$80,000	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Status Quo Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$0	\$1,200,000	\$0	\$0	\$0	\$0	\$0	\$0
BAN Balance Converted to Bond (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Status Quo Capital Costs Bond Principal Payments (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$40,298	\$41,910	\$43,586	\$45,330	\$47,143	\$49,029	\$50,990
BAN AND DEBT PRINCIPAL:	\$0	\$0	\$80,000	\$0	\$0	\$40,298	\$41,910	\$43,586	\$45,330	\$47,143	\$49,029	\$50,990
System Operating Costs				29/	Annual Escalation	2						
Routine Capital Improvements (Not Financed)	\$11,577	\$30,000	\$29,600	\$54,057	\$65,000	\$40,000	\$55,000	\$85,000	\$50,000	\$51,000	\$52,020	\$53,060
Liability Insurance	\$4,000	\$6,000	\$6,600	\$6,732	\$6,867	\$7,004	\$7,144	\$7,287	\$7,433	\$7,581	\$7,733	\$7,888
Personal Services: Water Clerk	\$5,200	\$5,400	\$3,900	\$6,000	\$6,120	\$6,242	\$6,367	\$6,495	\$6,624	\$6,757	\$6,892	\$7,080
Employee Benefits	\$3,200	\$415	\$3,500	\$398	\$406	\$414	\$422	\$431	\$439	\$448	\$457	\$466
Administration: System Operator	\$61,860	\$55,000	\$61,500	\$62,730	\$63,985	\$65,264	\$66,570	\$67,901	\$69,259	\$70,644	\$72,057	\$73,498
Chemicals/Testing	\$13,263	\$26,000	\$30,000	\$30,600	\$31,212	\$31,836	\$32,473	\$33,122	\$33,785	\$34,461	\$35,150	\$35,853
Utilities/Supplies	\$25,642	\$35,000	\$30,000	\$30,600	\$31,212	\$31,836	\$32,473	\$33,122	\$33,785	\$34,461	\$35,150	\$35,853
Contingency	\$0	\$50,185	\$44,300	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
BAN Interest (With BAN Interest of 1.5%)	\$0	\$0	\$1,800	\$25,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$23,000
Status Quo Bond Interest	\$0	\$0	\$0	\$0	\$0	\$48,000	\$46,388	\$44,712	\$42,968	\$41,155	\$39,269	\$37,308
TOTAL OPERATING AND INTEREST COSTS:	\$121,940	\$208,000	\$208,000	\$216,117	\$229,801	\$255,597	\$271,837	\$303,070	\$269,293	\$271,507	\$273,728	\$275,956
TOTAL ANNUAL EXPENSES:	\$121,940	\$208,000	\$288,000	\$216,117	\$229,801	\$295,895	\$313,747	\$346,656	\$314,623	\$318,650	\$322,757	\$326,946
Invoiced Water System Consumption: In Village (Gallons)*	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995
Invoiced Water System Consumption: Outside Village (Gallons)*	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505
Consumption Charge/1,000 Gallons: In Village**	\$2.99	\$2.99	\$2.99	\$3.02	\$3.21	\$4.13	\$4.38	\$4.84	\$4.39	\$4.45	\$4.51	\$4.57
Consumption Charge/1,000 Gallons: Outside Village**	\$5.98	\$5.98	\$5.98	\$6.04	\$6.42	\$8.27	\$8.77	\$9.68	\$8.79	\$8.90	\$9.02	\$9.13
Consumption Charge per Average Household: In Village	\$382.72	\$382.72	\$382.72	\$386.41	\$410.87	\$529.05	\$560.97	\$619.81	\$562.53	\$569.73	\$577.08	\$584.57
Consumption Charge per Average Household: Outside Village	\$765.44	\$765.44	\$765.44	\$772.82	\$821.75	\$1,058.10	\$1,121.93	\$1,239.61	\$1,125.07	\$1,139.47	\$1,154.15	\$1,169.13
Consumption Billing Revenues: In Village	\$171,629	\$171,629	\$171,629	\$173,283	\$184,255	\$237,249	\$251,563	\$277,949	\$252,265	\$255,494	\$258,787	\$262,146
Consumption Billing Revenues: Outside Village	\$42,425	\$42,425	\$42,425	\$42,834	\$45,546	\$58,646	\$62,184	\$68,707	\$62,358	\$63,156	\$63,970	\$64,800
Other Revenues	-\$92,114	-\$6,054	\$73,946	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL ANNUAL REVENUES:	\$121,940	\$208,000	\$288,000	\$216,117	\$229,801	\$295,895	\$313,747	\$346,656	\$314,623	\$318,650	\$322,757	\$326,946
*Assumes 11% of Consumed Gallons Billed to Town Residents												
**Assumes 100% of Expenses Paid Through Consumption												
Charges and Town Residents Pay Twice the Village Rate												
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VILLAGE OF MILLBROOK, NY
Impact of Expansions & Improvements on Cost to Avg. Household
Rate Study: Status Quo Water System
Prepared By: R.S. Lynch & Company

Village Fiscal Year: June 1st-May 31st	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	2029-2030	2030-2031	20 YR Average
Total Invoiced Water System Consumption (Gallons)	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	
Average Annual Household Consumption (Gallons)	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	
TOTAL CONSUMPTION:	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	
Status Quo Capital Costs (Financed with BAN)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Allocation of BAN Principal Amount to Annual Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Outstanding BAN Balance Subject to BAN Interest	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Ending Balance of BAN	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Status Quo Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
BAN Balance Converted to Bond (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Status Quo Capital Costs Bond Principal Payments (4%,20 Years)	\$53,030	\$55,151	\$57,357	\$59,651	\$62,037	\$64,519	\$67,099	\$69,783	\$72,575	\$75,478	\$78,497	
BAN AND DEBT PRINCIPAL:	\$53,030	\$55,151	\$57,357	\$59,651	\$62,037	\$64,519	\$67,099	\$69,783	\$72,575	\$75,478	\$78,497	
System Operating Costs												
Routine Capital Improvements (Not Financed)	\$54,122	\$55,204	\$56,308	\$57,434	\$58,583	\$59,755	\$60,950	\$62,169	\$63,412	\$64,680	\$65,974	
Liability Insurance	\$8,045	\$8,206	\$8,370	\$8,538	\$8,709	\$8,883	\$9,060	\$9,242	\$9,426	\$9,615	\$9,807	
Personal Services: Water Clerk	\$7,171	\$7,314	\$7,460	\$7,609	\$7,762	\$7,917	\$8,075	\$8,237	\$8,401	\$8,569	\$8,741	
Employee Benefits	\$475	\$485	\$495	\$505	\$515	\$525	\$535	\$546	\$557	\$568	\$580	
Administration: System Operator	\$74,968	\$76,468	\$77,997	\$79,557	\$81,148	\$82,771	\$84,426	\$86,115	\$87,837	\$89,594	\$91,386	
Chemicals/Testing	\$36,570	\$37,301	\$38,047	\$38,808	\$39,584	\$40,376	\$41,184	\$42,007	\$42,847	\$43,704	\$44,578	
Utilities/Supplies	\$36,570	\$37,301	\$38,047	\$38,808	\$39,584	\$40,376	\$41,184	\$42,007	\$42,847	\$43,704	\$44,578	
Contingency	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	
BAN Interest (With BAN Interest of 1.5%)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Status Quo Bond Interest	\$35,269	\$33,147	\$30,941	\$28,647	\$26,261	\$23,780	\$21,199	\$18,515	\$15,723	\$12,821	\$9,801	
TOTAL OPERATING AND INTEREST COSTS:	\$278,189	\$280,427	\$282,666	\$284,906	\$287,145	\$289,382	\$291,613	\$293,837	\$296,052	\$298,256	\$300,446	
TOTAL ANNUAL EXPENSES:	\$331,219	\$335,577	\$340,023	\$344,557	\$349,183	\$353,900	\$358,712	\$363,621	\$368,627	\$373,734	\$378,942	
Invoiced Water System Consumption: In Village (Gallons)*	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	
Invoiced Water System Consumption: Outside Village (Gallons)*	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	
Consumption Charge/1,000 Gallons: In Village**	\$4.63	\$4.69	\$4.75	\$4.81	\$4.88	\$4.94	\$5.01	\$5.08	\$5.15	\$5.22	\$5.29	\$4.60
Consumption Charge/1,000 Gallons: Outside Village**	\$9.25	\$9.37	\$9.50	\$9.63	\$9.76	\$9.89	\$10.02	\$10.16	\$10.30	\$10.44	\$10.59	\$9.20
Consumption Charge per Average Household: In Village	\$592.21	\$600.00	\$607.95	\$616.05	\$624.32	\$632.76	\$641.36	\$650.14	\$659.09	\$668.22	\$677.53	\$588.53
Consumption Charge per Average Household: Outside Village	\$1,184.41	\$1,200.00	\$1,215.89	\$1,232.11	\$1,248.65	\$1,265.52	\$1,282.73	\$1,300.28	\$1,318.18	\$1,336.44	\$1,355.07	\$1,177.06
Consumption Billing Revenues: In Village	\$265,572	\$269,066	\$272,631	\$276,267	\$279,975	\$283,758	\$287,616	\$291,552	\$295,566	\$299,660	\$303,837	
Consumption Billing Revenues: Outside Village	\$65,647	\$66,511	\$67,392	\$68,291	\$69,207	\$70,142	\$71,096	\$72,069	\$73,061	\$74,073	\$75,106	
Other Revenues	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
TOTAL ANNUAL REVENUES:	\$331,219	\$335,577	\$340,023	\$344,557	\$349,183	\$353,900	\$358,712	\$363,621	\$368,627	\$373,734	\$378,942	

<sup>\*</sup>Assumes 11% of Consumed Gallons Billed to Town Residents

Charges and Town Residents Pay Twice the Village Rate

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<sup>\*\*</sup>Assumes 100% of Expenses Paid Through Consumption

#### VILLAGE OF MILLBROOK, NY Impact of Expansions & Improvements on Cost to Avg. Household Rate Study: Status Quo Sewer System Prepared By: R.S. Lynch & Company

of All Properties Located in Village Which are Not Connected to System

		e Past Revenues		///	uture Revenues 8								
Village Fiscal Year: June 1st-May 31st	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Total Invoiced Sewer System Consumption (Gallons)	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000
Average Annual Household Consumption (Gallons)	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750
TOTAL CONSUMPTION:	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000
TOTAL CONSOMPTION:	57,232,000	37,232,000	57,232,000	57,232,000	57,232,000	57,232,000	37,232,000	57,232,000	57,232,000	57,232,000	57,232,000	37,232,000	57,232,000
Status Quo Capital Costs (Financed with BAN)	\$120,000	\$0	\$250,000	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Allocation of BAN Principal to Sewer Capital Assessment (SCA)	\$37,840	\$60,000	\$30,032	\$30,000	\$70,000	\$50,000	\$50,000	\$50,000	\$0	\$0	\$0	\$0	\$0
Outstanding BAN Balance Subject to BAN Interest	\$127,872	\$90,032	\$280,032	\$500,000	\$470,000	\$400,000	\$350,000	\$300,000	\$0	\$0	\$0	\$0	\$0
Ending Balance of BAN	\$90,032	\$30,032	\$250,000	\$470,000	\$400,000	\$350,000	\$300,000	\$250,000	\$0	\$0	\$0	\$0	\$0
Status Quo Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000,000	\$0	\$0	\$0	\$0	\$0
BAN Balance Converted to Bond (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$0		\$250,000	\$0	\$0	\$0		\$0
Status Quo Capital Costs Bond Principal Payments (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$0		\$41,977	\$43,656	\$45,403	\$47,219	\$49,107	\$51,072
Status quo capital costa Sona i i incipali i ayincina (170,20 i cais)	Ų.	Ų.	Ç	,	ΨŪ	Ų.	Ų.	Ų 1.1,3 · ·	Ų 13,030	ŷ 13, 103	V./,213	Ų 13,20 <i>7</i>	Ų31,07 <b>2</b>
ALLOCATION OF BAN AND DEBT PRINCIPAL TO SCA:	\$37,840	\$60,000	\$30,032	\$30,000	\$70,000	\$50,000	\$50,000	\$91,977	\$43,656	\$45,403	\$47,219	\$49,107	\$51,072
System Operating Costs				2%	Annual Escalatio	n							
Routine Capital Improvements (Not Financed)	\$22,533	\$33,000	\$35,000	\$35,700	\$36,414	\$37,412	\$37,885	\$37,885	\$38,643	\$39,416	\$40,204	\$41,008	\$41,828
Liability Insurance	\$0	\$6,000	\$6,600	\$6,732	\$6,867	\$7,004	\$7,144	\$7,287	\$7,433	\$7,581	\$7,733	\$7,888	\$8,045
Personal Services: Sewer Clerk	\$5,200	\$5,400	\$3,900	\$6,000	\$6,120	\$6,242	\$6,367	\$6,495	\$6,624	\$6,757	\$6,892	\$7,030	\$7,171
Employee Benefits	\$398	\$415	\$300	\$398	\$406	\$414	\$422	\$431	\$439	\$448	\$457	\$466	\$475
Administration: System Operator	\$108,350	\$106,000	\$108,350	\$110,517	\$112,727	\$114,982	\$117,282	\$119,627	\$122,020	\$124,460	\$126,949	\$129,488	\$132,078
Chemicals/Utilities	\$122,908	\$179,850	\$182,500	\$186,150	\$189,873	\$193,670	\$197,544	\$201,495	\$205,525	\$209,635	\$213,828	\$218,104	\$222,466
Contingency	\$0	\$11,335	\$13,370	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
BAN Interest (With BAN Interest of 1.5%)	\$0	\$1,500	\$900	\$7,500	\$7,050	\$6,000	\$5,250	\$4,500	\$0	\$0	\$0	\$0	\$0
Status Quo Bond Interest	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000	\$48,321	\$46,575	\$44,759	\$42,870	\$40,906
TOTAL OPERATING AND INTEREST COSTS:	\$259,389	\$343,500	\$350,920	\$367,997	\$374,457	\$380,725	\$386,894	\$442,719	\$444,004	\$449,872	\$455,822	\$461,854	\$467,969
TOTAL ANNUAL EXPENSES:	\$297,229	\$403,500	\$380,952	\$397,997	\$444,457	\$430,725	\$436,894	\$534,696	\$487,661	\$495,274	\$503,040	\$510,961	\$519,041
Invoiced Sewer System Consumption: In Village (Gallons)*	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400
Invoiced Sewer System Consumption: Outside Village (Gallons)*	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600
Consumption Channel (4 000 Calling on to Village	¢c.10	¢6.40	¢c.40	AC 43	¢6.54	¢c.c=	¢c.7c	67.74	ć7.7c	ć= oc	ć7.0c	ć0.07	ć0.40
Consumption Charge/1,000 Gallons: In Village	\$6.18	\$6.18	\$6.18	\$6.43	\$6.54	\$6.65	\$6.76	\$7.74	\$7.76	\$7.86	\$7.96	\$8.07	\$8.18
Consumption Charge/1,000 Gallons: Outside Village	\$6.18	\$6.18	\$6.18	\$6.43	\$6.54	\$6.65	\$6.76	\$7.74	\$7.76	\$7.86	\$7.96	\$8.07	\$8.18
Consumption Charge per Average Household: In Village	\$791.04	\$791.04	\$791.04	\$823.03	\$837.48	\$851.49	\$865.29	\$990.15	\$993.02	\$1,006.14	\$1,019.45	\$1,032.94	\$1,046.62
Consumption Charge per Average Household: Outside Village	\$791.04	\$791.04	\$791.04	\$823.03	\$837.48	\$851.49	\$865.29	\$990.15	\$993.02	\$1,006.14	\$1,019.45	\$1,032.94	\$1,046.62
Consumption Billing Revenues: In Village	\$336,009	\$336,009	\$336,009	\$349,597	\$355,734	\$361,688	\$367,549	\$420,583	\$421,804	\$427,378	\$433,030	\$438,761	\$444,571
Consumption Billing Revenues: Outside Village	\$17,685	\$17,685	\$17,685	\$18,400	\$18,723	\$19,036	\$19,345	\$22,136	\$22,200	\$22,494	\$22,791	\$23,093	\$23,398
Other Revenues	-\$94,305	-\$10,194	-\$2,774	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL NON-TAX REVENUES:	\$259,389	\$343,500	\$350,920	\$367,997	\$374,457 Annual Escalatio	\$380,725	\$386,894	\$442,719	\$444,004	\$449,872	\$455,822	\$461,854	\$467,969
Status Quo Assessed Property Value Allocated to SCA**	\$299,269,381	\$301,051,744	\$301 452 039	\$302,959,299			\$307,526,449	\$309.064.081	\$310 609 401	\$312,162,448	\$313,723,260	\$315,291,877	\$316,868,336
		\$0.000200000			\$0.000229905						\$0.000150510		
Average Assessed Household Value	\$400,000	\$400,000	\$400,000	\$402,000	\$404,010	\$406,030	\$408,060	\$410,101	\$412,151	\$414,212	\$416,283	\$418,364	\$420,456
Average Household Sewer Capital Assessment	\$50.80	\$400,000	\$400,000	\$402,000	\$404,010	\$406,030	\$408,060	\$122.05	\$412,151	\$60.25	\$62.65	\$65.16	\$420,456
Average nouseriou Sewer Capital Assessment	\$50.80	\$80.00	\$39.65	\$39.61	392.88	\$00.33	\$00.33	\$122.05	\$57.93	\$60.25	\$02.03	\$05.10	\$67.77
Sewer Capital Assessment Revenue	\$38,007	\$60,210	\$30,032	\$30,000	\$70,000	\$50,000	\$50,000	\$91,977	\$43,656	\$45,403	\$47,219	\$49,107	\$51,072
TOTAL ANNUAL REVENUES:	\$297,396	\$403,710	\$380,952	\$397,997	\$444,457	\$430,725	\$436,894	\$534,696	\$487,661	\$495,274	\$503,040	\$510,961	\$519,041
Average Charge/Household Including SCA : In Village:	\$841.84	\$871.04	\$830.89	\$862.84	\$930.36	\$917.84	\$931.64	\$1,112.19	\$1,050.95	\$1,066.39	\$1,082.10	\$1,098.10	\$1,114.39
Average Charge/Household Including SCA: Outside Village:	\$841.84	\$871.04	\$830.89	\$862.84	\$930.36	\$917.84	\$931.64	\$1,112.19	\$1,050.95	\$1,066.39	\$1,082.10	\$1,098.10	\$1,114.39
*Assumes 5% of Consumed Gallons Billed to Town Residents													
**Derived by Summing 100% of the Assessed Property Value of All													
Properties Connected to System Plus 33.33% of Assessed Property Value			I										
of All Properties Located in Village Which are Not Connected to System													

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VILLAGE OF MILLBROOK, NY Impact of Expansions & Improvements on Cost to Avg. Household Rate Study: Status Quo Sewer System Prepared By: R.S. Lynch & Company

Micration of BAN Principal to Sevent Cipital Assessment (SCA)   50   50   50   50   50   50   50   5	Village Fiscal Year: June 1st-May 31st	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	2029-2030	2030-2031	20 YR Average
Newroge Annual Honoshodis Consumption (Gallonian)  1771 CAL CONSUMPTION: 57220.00  1727 S7232.00	Total Invoiced Source System Consumption (Gallons)	E7 222 000										
TOTIAL CONSUMPTION: 57,232,000 57							, ,	, ,				
Sealus Quo Capital Costs (Financed with BANI) 50 50 50 50 50 50 50 50 50 50 50 50 50												
Micration of BAN Principal to Sevent Cipital Assessment (SCA)   50   50   50   50   50   50   50   5	TOTAL CONSOMITTION.	37,232,000	37,232,000	37,232,000	37,232,000	37,232,000	37,232,000	37,232,000	37,232,000	37,232,000	37,232,000	
December	Status Quo Capital Costs (Financed with BAN)	\$0			\$0			\$0				
Status Quo Capital Costs (Financed with Bond) Salta Subre Capital Cost (Financed with Bond) Salta Subre Capital Costs (	Allocation of BAN Principal to Sewer Capital Assessment (SCA)	-										
Satus Quo Capital Costs (Financed with Bond)		-										
SAR Ballance Converted to Bond (49;20 Years)	Ending Balance of BAN	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
ALLOCATION OF BAN AND DEBT PRINCIPAL TO SCI2. \$53,115 \$55,239 \$57,449 \$59,747 \$62,136 \$114,995 \$119,594 \$124,378 \$129,333 \$134,527 \$  ALLOCATION OF BAN AND DEBT PRINCIPAL TO SCI2. \$53,115 \$55,239 \$57,449 \$59,747 \$62,136 \$114,995 \$119,594 \$124,378 \$129,333 \$134,527 \$  Footine Capital Improvements (Not Financed) \$42,665 \$43,518 \$44,388 \$47,000 \$48,047 \$40,000 \$49,040 \$94,00	Status Quo Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$0	\$1,500,000	\$0	\$0	\$0	\$0	
ALLOCATION OF BAN AND DEBT PRINCIPAL TO SCA: \$53,115 \$55,239 \$57,449 \$597,47 \$62,136 \$114,995 \$119,594 \$124,378 \$122,378 \$124,378 \$134,527 \$  System Operating Costs  Value Capital Improvements (No Financed) \$42,665 \$43,518 \$44,388 \$45,276 \$46,182 \$47,105 \$48,847 \$49,008 \$49,988 \$59,988 \$59,988 \$10,008 \$49,988 \$59,987 \$10,000 \$40,000	BAN Balance Converted to Bond (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Spatem Operating Costs   Southine Capital Improvements (Not Financed)   S42,665   S43,518   S44,388   S44,388   S45,76   S46,182   S47,105   S48,047   S49,046   S9,615   S9,807   S9,808   S9,060   S9,242   S9,426   S9,615   S9,807   Serior Capital Improvements (Not Financed)   S48,665   S48,707   S8,708   S8,709   S8,838   S9,060   S9,242   S9,426   S9,615   S9,807   Serior Capital Improvements (Not Financed)   S48,667   S7,740   S7,760   S7,760   S7,761   S9,071   S8,075   S8,237   S8,401   S8,659   S8,741   Improvements (Not Financed)   S48,667   S48,667   S6,768   S8,741   S8,769   S8,771   S8,	Status Quo Capital Costs Bond Principal Payments (4%,20 Years)	\$53,115	\$55,239	\$57,449	\$59,747	\$62,136	\$114,995	\$119,594	\$124,378	\$129,353	\$134,527	
Southice Capital Improvements   S42,665   S43,518   S44,388   S45,276   S46,182   S47,100   S48,047   S49,000   S49,988   S50,988   S45,078   S45,078   S8,270   S8,270   S8,270   S8,270   S8,270   S8,270   S8,270   S8,271   S8,075   S8,277   S8,075   S8	ALLOCATION OF BAN AND DEBT PRINCIPAL TO SCA:	\$53,115	\$55,239	\$57,449	\$59,747	\$62,136	\$114,995	\$119,594	\$124,378	\$129,353	\$134,527	
Labelity insurance   \$8,206   \$8,370   \$8,378   \$8,709   \$8,888   \$9,060   \$9,242   \$9,426   \$9,615   \$9,807	System Operating Costs											
Personal Services: Sever Clerk 57,314 57,460 57,609 57,762 57,917 58,075 58,237 58,010 58,569 58,741 million/yee Benefits 5485 5495 5495 5595 5535 5536 5546 5557 5568 5580 4dministration: System Operator 5134,770 5327,414 5140,162 5142,966 5154,825 5148,711 515,716 5154,750 5157,845 5161,002 14,000 14,	Routine Capital Improvements (Not Financed)	\$42,665	\$43,518	\$44,388	\$45,276	\$46,182	\$47,105	\$48,047	\$49,008	\$49,988	\$50,988	
Semplone Benefits	Liability Insurance	\$8,206	\$8,370	\$8,538	\$8,709	\$8,883	\$9,060	\$9,242	\$9,426	\$9,615	\$9,807	
Administration: System Operator  \$134,720 \$137,44 \$143,720 \$143,741 \$143,720 \$143,742 \$143,740 \$143,740 \$143,740 \$143,740 \$143,740 \$143,000 \$15,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$1	Personal Services: Sewer Clerk	\$7,314	\$7,460	\$7,609	\$7,762	\$7,917	\$8,075	\$8,237	\$8,401	\$8,569	\$8,741	
Chemical Vulliues   \$22,6,16   \$23,145   \$23,083   \$240,805   \$245,621   \$250,333   \$225,544   \$226,055   \$255,688   \$271,185   \$200 total total contingency   \$15,000   \$15,0	Employee Benefits	\$485	\$495	\$505	\$515	\$525	\$535	\$546	\$557	\$568	\$580	
Contingency   \$15,000   \$1	Administration: System Operator	\$134,720	\$137,414	\$140,162	\$142,966	\$145,825	\$148,741	\$151,716	\$154,750	\$157,845	\$161,002	
AN Interest (With BAN Interest of 1.5%)	Chemicals/Utilities	\$226,916	\$231,454	\$236,083	\$240,805	\$245,621	\$250,533	\$255,544	\$260,655	\$265,868	\$271,185	
Salaus Quo Bond Interest (Sala, Sala, Sala	Contingency	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	
TOTAL OPERATING AND INTEREST COSTS: \$474,168 \$480,449 \$486,814 \$493,262 \$499,793 \$566,406 \$571,087 \$575,770 \$580,451 \$585,126  TOTAL ANNUAL EXPENSES: \$527,282 \$535,689 \$544,263 \$553,008 \$561,929 \$681,401 \$690,682 \$700,148 \$709,804 \$719,653 \$700,000 \$61,0	BAN Interest (With BAN Interest of 1.5%)											
TOTAL ANNUAL EXPENSES: \$527,282 \$535,689 \$544,263 \$553,008 \$561,929 \$681,401 \$690,682 \$700,148 \$709,804 \$719,653 \	Status Quo Bond Interest	\$38,863	\$36,738	\$34,529	\$32,231	\$29,841	\$87,355	\$82,755	\$77,972	\$72,997	\$67,822	
Invoiced Sewer System Consumption: In Village (Gallons)* 54,370,400 54,370,40	TOTAL OPERATING AND INTEREST COSTS:	\$474,168	\$480,449	\$486,814	\$493,262	\$499,793	\$566,406	\$571,087	\$575,770	\$580,451	\$585,126	
Noviced Sewer System Consumption: Outside Village (Gallons)* 2,861,600 2,861	TOTAL ANNUAL EXPENSES:	\$527,282	\$535,689	\$544,263	\$553,008	\$561,929	\$681,401	\$690,682	\$700,148	\$709,804	\$719,653	
Noviced Sewer System Consumption: Outside Village (Gallons)* 2,861,600 2,861	Invoiced Sewer System Consumption: In Village (Gallons)*	54.370.400	54.370.400	54.370.400	54.370.400	54.370.400	54.370.400	54.370.400	54.370.400	54.370.400	54.370.400	
Consumption Charge/1,000 Gallons: Outside Village \$8.29 \$8.39 \$8.51 \$8.62 \$8.73 \$9.90 \$9.98 \$10.06 \$10.14 \$10.22 \$8.35	Invoiced Sewer System Consumption: Outside Village (Gallons)*							, ,				
Consumption Charge/1,000 Gallons: Outside Village \$8.29 \$8.39 \$8.51 \$8.62 \$8.73 \$9.90 \$9.98 \$10.06 \$10.14 \$10.22 \$8.35	Consumption Charge/1.000 Gallons: In Village	\$8.29	\$8.39	\$8.51	\$8.62	\$8.73	\$9.90	\$9.98	\$10.06	\$10.14	\$10.22	\$8.34
Consumption Charge per Average Household: In Village \$1,060.48 \$1,074.53 \$1,088.77 \$1,103.19 \$1,117.79 \$1,266.77 \$1,277.24 \$1,287.72 \$1,298.19 \$1,308.64 \$1,067.45 \$1,060.48 \$1,060.48 \$1,060.48 \$1,067.45 \$1,088.77 \$1,103.19 \$1,117.79 \$1,266.77 \$1,277.24 \$1,287.72 \$1,298.19 \$1,308.64 \$1,067.45 \$1,067.45 \$1,060.48 \$1,067.45 \$1,060.48 \$1,067.45 \$1,060.48 \$1,067.45 \$1,060.48 \$1,067.45 \$1,060.48 \$1,067.45 \$1,060.48 \$1,												
Consumption Charge per Average Household: Outside Village \$1,060.48 \$1,074.53 \$1,088.77 \$1,103.19 \$1,117.79 \$1,266.77 \$1,277.24 \$1,287.72 \$1,298.19 \$1,308.64 \$1,067.45 \$1,067.4												\$1,067.45
Consumption Billing Revenues: Outside Village \$23,708 \$24,022 \$24,341 \$24,663 \$24,990 \$28,320 \$28,554 \$28,789 \$29,023 \$29,256 Other Revenues \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	Consumption Charge per Average Household: Outside Village											\$1,067.45
Consumption Billing Revenues: Outside Village \$23,708 \$24,022 \$24,341 \$24,663 \$24,990 \$28,320 \$28,554 \$28,789 \$29,023 \$29,256 Other Revenues \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	Consumption Billing Revenues: In Village	\$450,459	\$456,427	\$462,473	\$468,599	\$474,803	\$538,086	\$542,533	\$546,982	\$551,429	\$555,870	
Other Revenues											. ,	
TOTAL NON-TAX REVENUES: \$474,168 \$480,449 \$486,814 \$493,262 \$499,793 \$566,406 \$571,087 \$575,770 \$580,451 \$585,126 \$585,1	Other Revenues							. ,			. ,	
Sewer Capital Assessment \$0.000166789 \$0.000172598 \$0.000178609 \$0.000184829 \$0.000191266 \$0.000352210 \$0.000352210 \$0.00035476 \$0.000377170 \$0.000390305 \$0.000403898   Average Assessed Household Value \$422,558 \$424,671 \$426,794 \$428,928 \$431,073 \$433,228 \$435,395 \$437,572 \$439,759 \$441,958   Average Household Sewer Capital Assessment Revenue \$53,115 \$55,239 \$57,449 \$59,747 \$62,136 \$114,995 \$119,594 \$124,378 \$129,353 \$134,527   TOTAL ANNUAL REVENUES: \$527,282 \$535,689 \$544,263 \$553,008 \$561,929 \$681,401 \$690,682 \$700,148 \$709,804 \$719,653    Average Charge/Household Including SCA : In Village: \$1,130.96 \$1,147.83 \$1,164.99 \$1,182.46 \$1,20.24 \$1,40.95 \$1,40.95 \$1,40.95 \$1,452.76 \$1,469.83 \$1,487.15 \$1,162.55 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55	TOTAL NON-TAX REVENUES:											
Sewer Capital Assessment \$0.000166789 \$0.000172598 \$0.000178609 \$0.000184829 \$0.000191266 \$0.000352210 \$0.000352210 \$0.00035476 \$0.000377170 \$0.000390305 \$0.000403898   Average Assessed Household Value \$422,558 \$424,671 \$426,794 \$428,928 \$431,073 \$433,228 \$435,395 \$437,572 \$439,759 \$441,958   Average Household Sewer Capital Assessment Revenue \$53,115 \$55,239 \$57,449 \$59,747 \$62,136 \$114,995 \$119,594 \$124,378 \$129,353 \$134,527   TOTAL ANNUAL REVENUES: \$527,282 \$535,689 \$544,263 \$553,008 \$561,929 \$681,401 \$690,682 \$700,148 \$709,804 \$719,653    Average Charge/Household Including SCA : In Village: \$1,130.96 \$1,147.83 \$1,164.99 \$1,182.46 \$1,20.24 \$1,40.95 \$1,40.95 \$1,40.95 \$1,452.76 \$1,469.83 \$1,487.15 \$1,162.55 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55 \$1,487.15 \$1,462.55	Status Quo Assessed Property Value Allocated to SCA**	\$318,452.678	\$320,044.941	\$321,645.166	\$323,253.392	\$324,869.659	\$326,494.007	\$328,126.477	\$329,767.109	\$331,415.945	\$333,073.025	
Average Assessed Household Value \$422,558 \$424,671 \$426,794 \$428,928 \$431,073 \$433,228 \$435,395 \$437,572 \$439,759 \$441,958 Average Household Sewer Capital Assessment \$70.48 \$73.30 \$76.23 \$79.28 \$82.45 \$152.59 \$158.69 \$165.04 \$171.64 \$178.51 \$95.40 \$179.64 \$179.64 \$179.65 \$179.6	Sewer Capital Assessment											
Average Household Sewer Capital Assessment \$70.48 \$73.30 \$76.23 \$79.28 \$82.45 \$152.59 \$158.69 \$165.04 \$171.64 \$178.51 \$95.40 \$170.50 \$	Average Assessed Household Value	•	-	•	•	•	-		-	-	-	
TOTAL ANNUAL REVENUES: \$527,282 \$535,689 \$544,263 \$553,008 \$561,929 \$681,401 \$690,682 \$700,148 \$709,804 \$719,653  Average Charge/Household Including SCA : In Village: \$1,130.96 \$1,147.83 \$1,164.99 \$1,182.46 \$1,200.24 \$1,419.36 \$1,435.93 \$1,452.76 \$1,469.83 \$1,487.15 \$1,162.5	Average Household Sewer Capital Assessment	\$70.48	\$73.30	\$76.23	\$79.28	\$82.45	\$152.59	\$158.69	\$165.04	\$171.64	\$178.51	\$95.47
TOTAL ANNUAL REVENUES: \$527,282 \$535,689 \$544,263 \$553,008 \$561,929 \$681,401 \$690,682 \$700,148 \$709,804 \$719,653  Average Charge/Household Including SCA : In Village: \$1,130.96 \$1,147.83 \$1,164.99 \$1,182.46 \$1,200.24 \$1,419.36 \$1,435.93 \$1,452.76 \$1,469.83 \$1,487.15 \$1,162.5	Sewer Capital Assessment Revenue	\$53,115	\$55,239	\$57,449	\$59,747	\$62,136	\$114,995	\$119,594	\$124,378	\$129,353	\$134,527	
	· · · · · · · · · · · · · · · · · · ·			\$544,263	\$553,008	\$561,929	\$681,401		\$700,148	\$709,804	\$719,653	
	Average Charge/Household Including SCA : In Village:	\$1,130.96	\$1,147.83	\$1,164.99	\$1,182.46	\$1,200.24	\$1,419.36	\$1,435.93	\$1,452.76	\$1,469.83	\$1,487.15	\$1,162.92
	Average Charge/Household Including SCA: Outside Village:	\$1,130.96	\$1,147.83	\$1,164.99	\$1,182.46	\$1,200.24	\$1,419.36	\$1,435.93	\$1,452.76	\$1,469.83	\$1,487.15	\$1,162.92

<sup>\*</sup>Assumes 5% of Consumed Gallons Billed to Town Residents

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<sup>\*\*</sup>Derived by Summing 100% of the Assessed Property Value of All Properties Connected to System Plus 33.33% of Assessed Property Value of All Properties Located in Village Which are Not Connected to System

VILLAGE OF MILLBROOK, NY Impact of Expansions & Improvements on Cost to Avg. Household Rate Study: Water System with Nine Partners Expansion Prepared By: R.S. Lynch & Company

		Past Revenues 8			ıture Revenues 8							
Village Fiscal Year: June 1st-May 31st	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Total Invoiced Water System Consumption: Status Quo (Gallons)	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500
Total Expansion Area Water Consumption: Nine Partners (Gallons)	0	0	0	3,960,250	3,960,250	3,960,250	3,960,250	3,960,250	3,960,250	3,960,250	3,960,250	3,960,250
Average Annual Household Consumption (Gallons)	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750
TOTAL CONSUMPTION:	64,495,500	64,495,500	64,495,500	68,455,750	68,455,750	68,455,750	68,455,750	68,455,750	68,455,750	68,455,750	68,455,750	68,455,750
Status Quo Capital Costs (Financed with BAN)	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Allocation of BAN Principal Amount to Annual Expenses	\$0	\$0	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Outstanding BAN Balance Subject to BAN Interest	\$80,000	\$80,000	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ending Balance of BAN	\$80,000	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Status Quo Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$0	\$1,200,000	\$0	\$0	\$0	\$0	\$0	\$0
BAN Balance Converted to Bond (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Status Quo Capital Costs Bond Principal Payments (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$40,298	\$41,910	\$43,586	\$45,330	\$47,143	\$49,029	\$50,990
Expansion Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$1,215,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Expansion Capital Cost Bond Principal Payments (4%,20 Years)	\$0	\$0	\$0	\$40,802	\$42,434	\$44,131	\$45,897	\$47,732	\$49,642	\$51,627	\$53,692	\$55,840
BAN AND DEBT PRINCIPAL :	\$0	\$0	\$80,000	\$40,802	\$42,434	\$84,429	\$87,807	\$91,319	\$94,972	\$98,770	\$102,721	\$106,830
Status Quo System Operating Costs												
Routine Capital Improvements (Not Financed)	\$11,577	\$30,000	\$29,600	\$54,057	\$65,000	\$40,000	\$55,000	\$85,000	\$50,000	\$51,000	\$52,020	\$53,060
Liability Insurance	\$4,000	\$6,000	\$6,600	\$6,732	\$6,867	\$7,004	\$7,144	\$7,287	\$7,433	\$7,581	\$7,733	\$7,888
Personal Services: Water Clerk	\$5,200	\$5,400	\$3,900	\$6,000	\$6,120	\$6,242	\$6,367	\$6,495	\$6,624	\$6,757	\$6,892	\$7,030
Employee Benefits	\$398	\$415	\$300	\$398	\$406	\$414	\$422	\$431	\$439	\$448	\$457	\$466
Administration: System Operator	\$61,860	\$55,000	\$61,500	\$62,730	\$63,985	\$65,264	\$66,570	\$67,901	\$69,259	\$70,644	\$72,057	\$73,498
Chemicals/Testing	\$13,263	\$26,000	\$30,000	\$30,600	\$31,212	\$31,836	\$32,473	\$33,122	\$33,785	\$34,461	\$35,150	\$35,853
Utilities/Supplies	\$25,642	\$35,000	\$30,000	\$30,600	\$31,212	\$31,836	\$32,473	\$33,122	\$33,785	\$34,461	\$35,150	\$35,853
Contingency	\$0	\$50,185	\$44,300	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
BAN Interest (With BAN Interest of 1.5%)	\$0	\$0	\$1,800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Status Quo Bond Interest	\$0	\$0	\$0	\$0	\$0	\$48,000	\$46,388	\$44,712	\$42,968	\$41,155	\$39,269	\$37,308
Incremental Expansion Area Operating Costs (\$/1,000 Gallons)	\$0.00	\$0.00	\$0.00	\$1.95	\$1.99	\$2.03	\$2.07	\$2.11	\$2.15	\$2.20	\$2.24	\$2.28
Incremental Expansion Area Operating Costs	\$0	\$0	\$0	\$7,722	\$7,877	\$8,034	\$8,195	\$8,359	\$8,526	\$8,697	\$8,871	\$9,048
Incremental Expansion Area Bond Interest	\$0	\$0	\$0	\$48,600	\$46,968	\$45,271	\$43,505	\$41,669	\$39,760	\$37,774	\$35,709	\$33,562
TOTAL OPERATING AND INTEREST COSTS:	\$121,940	\$208,000	\$208,000	\$272,439	\$284,646	\$308,902	\$323,538	\$353,098	\$317,580	\$317,978	\$318,308	\$318,566
TOTAL ANNUAL EXPENSES:	\$121,940	\$208,000	\$288,000	\$313,241	\$327,080	\$393,331	\$411,344	\$444,417	\$412,551	\$416,748	\$421,029	\$425,396
Invoiced Water System Consumption: In Village (Gallons)*	57,400,995	57,400,995	57,400,995	61,361,245	61,361,245	61,361,245	61,361,245	61,361,245	61,361,245	61,361,245	61,361,245	61,361,245
Invoiced Water System Consumption: Outside Village (Gallons)*	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505
Consumption Charge/1,000 Gallons: In Village**	\$2.99	\$2.99	\$2.99	\$4.15	\$4.33	\$5.21	\$5.44	\$5.88	\$5.46	\$5.52	\$5.57	\$5.63
Consumption Charge/1,000 Gallons: Outside Village**	\$5.98	\$5.98	\$5.98	\$8.29	\$8.66	\$10.41	\$10.89	\$11.76	\$10.92	\$11.03	\$11.15	\$11.26
Consumption Charge per Average Household: In Village	\$382.72	\$382.72	\$382.72	\$530.70	\$554.15	\$666.40	\$696.91	\$752.95	\$698.96	\$706.07	\$713.32	\$720.72
Consumption Charge per Average Household: Outside Village	\$765.44	\$765.44	\$765.44	\$1,061.41	\$1,108.30	\$1,332.79	\$1,393.83	\$1,505.89	\$1,397.92	\$1,412.14	\$1,426.65	\$1,441.44
Consumption Billing Revenues: In Village	\$171,629	\$171,629	\$171,629	\$254,412	\$265,651	\$319,460	\$334,090	\$360,951	\$335,070	\$338,479	\$341,956	\$345,503
Consumption Billing Revenues: Outside Village	\$42,425	\$42,425	\$42,425	\$58,829	\$61,428	\$73,871	\$77,254	\$83,465	\$77,481	\$78,269	\$79,073	\$79,893
Other Revenues	-\$92,114	-\$6,054	\$73,946	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL ANNUAL REVENUES:	\$121,940	\$208,000	\$288,000	\$313,241	\$327,080	\$393,331	\$411,344	\$444,417	\$412,551	\$416,748	\$421,029	\$425,396
*Assumes 11% of Status Quo Consumed Gallons Billed to Town Residents and												
100% of Incremental Gallens Billed to Village Posidents				1								

<sup>100%</sup> of Incremental Gallons Billed to Village Residents

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<sup>\*\*</sup>Assumes 100% of Expenses Paid Through Consumption Charges and Town Residents Pay Twice the Village Rate

VILLAGE OF MILLBROOK, NY
Impact of Expansions & Improvements on Cost to Avg. Household
Rate Study: Water System with Nine Partners Expansion
Prepared By: R.S. Lynch & Company

Village Fiscal Year: June 1st-May 31st	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	2029-2030	2030-2031	20 YR Average
Total Invoiced Water System Consumption: Status Quo (Gallons)	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	_
Total Expansion Area Water Consumption: Nine Partners (Gallons)	3,960,250	3,960,250	3,960,250	3,960,250	3,960,250	3,960,250	3,960,250	3,960,250	3,960,250	3,960,250	3,960,250	
Average Annual Household Consumption (Gallons)	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	
TOTAL CONSUMPTION:	68,455,750	68,455,750	68,455,750	68,455,750	68,455,750	68,455,750	68,455,750	68,455,750	68,455,750	68,455,750	68,455,750	
Status Quo Capital Costs (Financed with BAN)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Allocation of BAN Principal Amount to Annual Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Outstanding BAN Balance Subject to BAN Interest	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Ending Balance of BAN	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Status Quo Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
BAN Balance Converted to Bond (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Status Quo Capital Costs Bond Principal Payments (4%,20 Years)	\$53,030	\$55,151	\$57,357	\$59,651	\$62,037	\$64,519	\$67,099	\$69,783	\$72,575	\$75,478	\$78,497	
Expansion Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Expansion Capital Cost Bond Principal Payments (4%,20 Years)	\$58,074	\$60,397	\$62,813	\$65,325	\$67,938	\$70,656	\$73,482	\$76,421	\$79,478	\$82,657	\$85,963	
BAN AND DEBT PRINCIPAL :	\$111,103	\$115,547	\$120,169	\$124,976	\$129,975	\$135,174	\$140,581	\$146,204	\$152,053	\$158,135	\$164,460	
Status Quo System Operating Costs												
Routine Capital Improvements (Not Financed)	\$54,122	\$55,204	\$56,308	\$57,434	\$58,583	\$59,755	\$60,950	\$62,169	\$63,412	\$64,680	\$65,974	
Liability Insurance	\$8,045	\$8,206	\$8,370	\$8,538	\$8,709	\$8,883	\$9,060	\$9,242	\$9,426	\$9,615	\$9,807	
Personal Services: Water Clerk	\$7,171	\$7,314	\$7,460	\$7,609	\$7,762	\$7,917	\$8,075	\$8,237	\$8,401	\$8,569	\$8,741	
Employee Benefits	\$475	\$485	\$495	\$505	\$515	\$525	\$535	\$546	\$557	\$568	\$580	
Administration: System Operator	\$74,968	\$76,468	\$77,997	\$79,557	\$81,148	\$82,771	\$84,426	\$86,115	\$87,837	\$89,594	\$91,386	
Chemicals/Testing	\$36,570	\$37,301	\$38,047	\$38,808	\$39,584	\$40,376	\$41,184	\$42,007	\$42,847	\$43,704	\$44,578	
Utilities/Supplies	\$36,570	\$37,301	\$38,047	\$38,808	\$39,584	\$40,376	\$41,184	\$42,007	\$42,847	\$43,704	\$44,578	
Contingency	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	
BAN Interest (With BAN Interest of 1.5%)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Status Quo Bond Interest	\$35,269	\$33,147	\$30,941	\$28,647	\$26,261	\$23,780	\$21,199	\$18,515	\$15,723	\$12,821	\$9,801	
Incremental Expansion Area Operating Costs (\$/1,000 Gallons)	\$2.33	\$2.38	\$2.42	\$2.47	\$2.52	\$2.57	\$2.62	\$2.68	\$2.73	\$2.79	\$2.84	
Incremental Expansion Area Operating Costs	\$9,229	\$9,414	\$9,602	\$9,794	\$9,990	\$10,190	\$10,393	\$10,601	\$10,813	\$11,030	\$11,250	
Incremental Expansion Area Bond Interest	\$31,328	\$29,005	\$26,589	\$24,077	\$21,464	\$18,746	\$15,920	\$12,981	\$9,924	\$6,745	\$3,439	
TOTAL OPERATING AND INTEREST COSTS:	\$318,746	\$318,845	\$318,857	\$318,777	\$318,599	\$318,318	\$317,926	\$317,419	\$316,790	\$316,030	\$315,134	
TOTAL ANNUAL EXPENSES:	\$429,850	\$434,393	\$439,027	\$443,753	\$448,574	\$453,492	\$458,508	\$463,624	\$468,842	\$474,165	\$479,594	
Invoiced Water System Consumption: In Village (Gallons)*	61,361,245	61,361,245	61,361,245	61,361,245	61,361,245	61,361,245	61,361,245	61,361,245	61,361,245	61,361,245	61,361,245	
Invoiced Water System Consumption: Outside Village (Gallons)*	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	
Consumption Charge/1,000 Gallons: In Village**	\$5.69	\$5.75	\$5.81	\$5.87	\$5.94	\$6.00	\$6.07	\$6.14	\$6.21	\$6.28	\$6.35	\$5.66
Consumption Charge/1,000 Gallons: Outside Village**	\$11.38	\$11.50	\$11.62	\$11.75	\$11.87	\$12.01	\$12.14	\$12.27	\$12.41	\$12.55	\$12.70	\$11.33
Consumption Charge per Average Household: In Village	\$728.27	\$735.96	\$743.81	\$751.82	\$759.99	\$768.32	\$776.82	\$785.49	\$794.33	\$803.35	\$812.55	\$725.05
Consumption Charge per Average Household: Outside Village	\$1,456.53	\$1,471.93	\$1,487.63	\$1,503.65	\$1,519.98	\$1,536.64	\$1,553.64	\$1,570.98	\$1,588.66	\$1,606.70	\$1,625.09	\$1,450.09
Consumption Billing Revenues: In Village	\$349,120	\$352,810	\$356,574	\$360,412	\$364,328	\$368,322	\$372,396	\$376,551	\$380,789	\$385,113	\$389,522	
Consumption Billing Revenues: Outside Village	\$80,730	\$81,583	\$82,453	\$83,341	\$84,246	\$85,170	\$86,112	\$87,073	\$88,053	\$89,052	\$90,072	
Other Revenues	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
TOTAL ANNUAL REVENUES:	\$429,850	\$434,393	\$439,027	\$443,753	\$448,574	\$453,492	\$458,508	\$463,624	\$468,842	\$474,165	\$479,594	

<sup>\*</sup>Assumes 11% of Status Quo Consumed Gallons Billed to Town Residents and 100% of Incremental Gallons Billed to Village Residents

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<sup>\*\*</sup>Assumes 100% of Expenses Paid Through Consumption Charges and Town Residents Pay Twice the Village Rate

#### VILLAGE OF MILLBROOK, NY Impact of Expansions & Improvements on Cost to Avg. Household Rate Study: Sewer System with Nine Partners Expansion Prepared By: R.S. Lynch & Company

Prepared by. N.S. Lynch & Company	Approximat	e Past Revenues	& Expenses	Projected F	uture Revenues	& Expenses								
Village Fiscal Year: June 1st-May 31st	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
Total Invoiced System Sewer Consumption: Status Quo (Gallons)	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000
Total Expansion Area Sewer Consumption: Nine Partners (Gallons)	0	0	0	3,321,500	3,321,500	3,321,500	3,321,500	3,321,500	3,321,500	3,321,500	3,321,500	3,321,500	3,321,500	3,321,500
Average Annual Household Consumption (Gallons)	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750
TOTAL CONSUMPTION:	57,232,000	57,232,000	57,232,000	60,553,500	60,553,500	60,553,500	60,553,500	60,553,500	60,553,500	60,553,500	60,553,500	60,553,500	60,553,500	60,553,500
Status Quo Capital Costs (Financed with BAN)	\$120,000	\$0	\$250,000	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Allocation of BAN Principal to Sewer Capital Assessment (SCA)	\$37,840	\$60,000	\$30,032	\$30,000	\$70,000	\$50,000	\$50,000	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0
Outstanding BAN Balance Subject to BAN Interest	\$127,872	\$90,032	\$280,032	\$500,000	\$470,000	\$400,000	\$350,000	\$300,000	\$0	\$0	\$0	\$0	\$0	\$0
Ending Balance of BAN	\$90,032	\$30,032	\$250,000	\$470,000	\$400,000	\$350,000	\$300,000	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0
Status Quo Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0
BAN Balance Converted to Bond (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0
Status Quo Capital Costs Bond Principal Payments (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$41,977	\$43,656	\$45,403	\$47,219	\$49,107	\$51,072	\$53,115
Expansion Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$790,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Expansion Capital Cost Bond Principal Payments (4%,20 Years)  ALLOCATION OF BAN AND DEBT PRINCIPAL TO SCA:	\$0 \$37,840	\$0 \$60,000	\$0 \$30,032	\$26,530 \$56,530	\$27,591 \$97,591	\$28,694 \$78,694	\$29,842 \$79,842	\$31,036 \$123,013	\$32,277 \$75,934	\$33,568 \$78,971	\$34,911 \$82,130	\$36,308 \$85,415	\$37,760 \$88,832	\$39,270 \$92,385
	\$37,840	\$60,000	\$30,032	\$50,550	\$97,591	\$78,694	\$79,842	\$123,013	\$75,934	\$78,971	\$82,130	\$85,415	\$66,632	\$92,385
Status Quo System Operating Costs	400 500	400.000	405.000	405 300	405 444	407.440	427.005	427.005	400 540	400 445	440.004	444.000	444.000	442.555
Routine Capital Improvements (Not Financed)	\$22,533 \$0	\$33,000	\$35,000	\$35,700	\$36,414	\$37,412 \$7.004	\$37,885	\$37,885	\$38,643	\$39,416	\$40,204	\$41,008	\$41,828	\$42,665
Liability Insurance Personal Services: Sewer Clerk	\$5,200	\$6,000 \$5,400	\$6,600 \$3,900	\$6,732 \$6,000	\$6,867 \$6,120	\$6,242	\$7,144 \$6,367	\$7,287 \$6,495	\$7,433 \$6,624	\$7,581 \$6,757	\$7,733 \$6,892	\$7,888 \$7,030	\$8,045 \$7,171	\$8,206 \$7,314
Employee Benefits	\$398	\$415	\$3,900	\$398	\$406	\$414	\$422	\$431	\$439	\$448	\$457	\$466	\$475	\$485
Administration: System Operator	\$108,350	\$106,000	\$108,350	\$110,517	\$112,727	\$114,982	\$117,282	\$119,627	\$122,020	\$124,460	\$126,949	\$129,488	\$132,078	\$134,720
Chemicals/Utilities	\$122,908	\$179,850	\$182,500	\$186,150	\$189,873	\$193,670	\$197,544	\$201,495	\$205,525	\$209,635	\$213,828	\$218,104	\$222,466	\$226,916
Contingency	\$0	\$11,335	\$13,370	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
BAN Interest (With BAN Interest of 1.5%)	\$0	\$1,500	\$900	\$7,500	\$7,050	\$6,000	\$5,250	\$4,500	\$0	\$0	\$0	\$0	\$0	\$0
Status Quo Bond Interest	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000	\$48,321	\$46,575	\$44,759	\$42,870	\$40,906	\$38,863
Incremental Expansion Area Operating Costs (\$/1,000 Gallons)	\$0.00	\$0.00	\$0.00	\$4.59	\$4.68	\$4.78	\$4.87	\$4.97	\$5.07	\$5.17	\$5.27	\$5.38	\$5.49	\$5.60
Incremental Expansion Area Operating Costs	\$0	\$0	\$0	\$15,246	\$15,551	\$15,862	\$16,179	\$16,502	\$16,832	\$17,169	\$17,512	\$17,863	\$18,220	\$18,584
Incremental Expansion Area Bond Interest	\$0	\$0	\$0	\$31,600	\$30,539	\$29,435	\$28,287	\$27,094	\$25,852	\$24,561	\$23,218	\$21,822	\$20,370	\$18,859
TOTAL OPERATING AND INTEREST COSTS:	\$259,389	\$343,500	\$350,920	\$414,842	\$420,546	\$426,021	\$431,360	\$486,315	\$486,689	\$491,602	\$496,553	\$501,539	\$506,559	\$511,612
TOTAL ANNUAL EXPENSES:	\$297,229	\$403,500	\$380,952	\$471,372	\$518,137	\$504,716	\$511,202	\$609,328	\$562,623	\$570,573	\$578,682	\$586,954	\$595,391	\$603,996
Invoiced Water System Consumption: In Village (Gallons)*	54,370,400	54,370,400	54,370,400	57,691,900	57,691,900	57,691,900	57,691,900	57,691,900	57,691,900	57,691,900	57,691,900	57,691,900	57,691,900	57,691,900
Invoiced Water System Consumption: Outside Village (Gallons)*	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600
Consumption Charge/1,000 Gallons: In Village	\$6.18	\$6.18	\$6.18	\$6.85	\$6.95	\$7.04	\$7.12	\$8.03	\$8.04	\$8.12	\$8.20	\$8.28	\$8.37	\$8.45
Consumption Charge/1,000 Gallons: Outside Village	\$6.18	\$6.18	\$6.18	\$6.85	\$6.95	\$7.04	\$7.12	\$8.03	\$8.04	\$8.12	\$8.20	\$8.28	\$8.37	\$8.45
Consumption Charge per Average Household: In Village	\$791.04	\$791.04	\$791.04	\$876.91	\$888.96	\$900.54	\$911.82	\$1,027.99	\$1,028.78	\$1,039.16	\$1,049.63	\$1,060.17	\$1,070.78	\$1,081.46
Consumption Charge per Average Household: Outside Village	\$791.04	\$791.04	\$791.04	\$876.91	\$888.96	\$900.54	\$911.82	\$1,027.99	\$1,028.78	\$1,039.16	\$1,049.63	\$1,060.17	\$1,070.78	\$1,081.46
Consumption Billing Revenues: In Village	\$336,009	\$336,009	\$336,009	\$395,238	\$400,672	\$405,889	\$410,975	\$463,333	\$463,689	\$468,370	\$473,087	\$477,837	\$482,621	\$487,434
Consumption Billing Revenues: Outside Village	\$17,685	\$17,685	\$17,685	\$19,604	\$19,874	\$20,133	\$20,385	\$22,982	\$23,000	\$23,232	\$23,466	\$23,701	\$23,939	\$24,177
Other Revenues	-\$94,305	-\$10,194	-\$2,774	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL NON-TAX REVENUES:	\$259,389	\$343,500	\$350,920	\$414,842 0.50%	\$420,546 Annual Escalation	\$426,021 on	\$431,360	\$486,315	\$486,689	\$491,602	\$496,553	\$501,539	\$506,559	\$511,612
Total Assessed Property Value of Current System**	\$299,269,381	\$301,051,744	\$301,452,039		\$304,474,096		\$307,526,449	\$309,064,081	\$310,609,401	\$312,162,448	\$313,723,260	\$315,291,877	\$316,868,336	\$318,452,678
Total Estimated Assessed Property Value of Expansion Area***	\$0	\$0	\$0	\$7,002,840	\$7,037,854	\$7,073,043	\$7,108,409	\$7,143,951	\$7,179,670	\$7,215,569	\$7,251,647	\$7,287,905	\$7,324,344	\$7,360,966
Total Estimated Assessed Property Value with Expansion Area	\$299,269,381	\$301,051,744	\$301,452,039	\$309,962,139	\$311,511,950	\$313,069,510	. , ,			\$319,378,017				
Sewer Capital Assessment		\$0.000200000	-					\$0.000389026						
Average Assessed Household Value	\$400,000	\$400,000	\$400,000	\$402,000	\$404,010	\$406,030	\$408,060	\$410,101	\$412,151	\$414,212	\$416,283	\$418,364	\$420,456	\$422,558
Average Household Sewer Capital Assessment	\$50.80	\$80.00	\$39.85	\$73.32	\$126.57	\$102.06	\$103.55	\$159.54	\$98.48	\$102.42	\$106.52	\$110.78	\$115.21	\$119.82
Sewer Capital Assessment Revenue	\$38,007	\$60,210	\$30,032	\$56,530	\$97,591	\$78,694	\$79,842	\$123,013	\$75,934	\$78,971	\$82,130	\$85,415	\$88,832	\$92,385
TOTAL REVENUES:	297,396	403,710	380,952	471,372	518,137	504,716	511,202	609,328	562,623	570,573	578,682	586,954	595,391	603,996
Average Charge/Household Including SCA: In Village:	\$841.84	\$871.04	\$830.89	\$950.22	\$1,015.53	\$1,002.60	\$1,015.37	\$1,187.53	\$1,127.26	\$1,141.58	\$1,156.15	\$1,170.95	\$1,185.99	\$1,201.28
Average Charge/Household Including SCA: Outside Village:	\$841.84	\$871.04	\$830.89	\$950.22	\$1,015.53	\$1,002.60	\$1,015.37	\$1,187.53	\$1,127.26	\$1,141.58	\$1,156.15	\$1,170.95	\$1,185.99	\$1,201.28
*Assumes 5% of Status Quo Consumed Gallons Billed to Town Residents														

<sup>\*</sup>Assumes 5% of Status Quo Consumed Gallons Billed to Town Resident and 100% of Incremental Gallons Billed to Village Residents

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<sup>\*\*</sup>Derived by Summing 100% of the Assessed Property Value of All Properties Connected to System Plus 33.33% of Assessed Property Value of All Properties Located in Village Which are Not Connected to System \*\*\*Assumes 26 Households Opt to Hook-In to System and that 1/3 of their Assessed Value was Already in the Total Assessed Property Value of Current System

VILLAGE OF MILLBROOK, NY Impact of Expansions & Improvements on Cost to Avg. Household Rate Study: Sewer System with Nine Partners Expansion Prepared By: R.S. Lynch & Company

Village Fiscal Year: June 1st-May 31st	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	2029-2030	2030-2031	20 YR Average
Total Invoiced System Sewer Consumption: Status Quo (Gallons)	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	
Total Expansion Area Sewer Consumption: Nine Partners (Gallons)	3,321,500	3,321,500	3,321,500	3,321,500	3,321,500	3,321,500	3,321,500	3,321,500	3,321,500	
Average Annual Household Consumption (Gallons)	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	
TOTAL CONSUMPTION:	60,553,500	60,553,500	60,553,500	60,553,500	60,553,500	60,553,500	60,553,500	60,553,500	60,553,500	
Status Quo Capital Costs (Financed with BAN)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Allocation of BAN Principal to Sewer Capital Assessment (SCA)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Outstanding BAN Balance Subject to BAN Interest	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Ending Balance of BAN	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Status Quo Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$1,500,000	\$0	\$0	\$0	\$0	
BAN Balance Converted to Bond (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Status Quo Capital Costs Bond Principal Payments (4%,20 Years) Expansion Capital Costs (Financed with Bond)	\$55,239 \$0	\$57,449 \$0	\$59,747 \$0	\$62,136 \$0	\$114,995 \$0	\$119,594 \$0	\$124,378 \$0	\$129,353 \$0	\$134,527 \$0	
Expansion Capital Costs (Financed with Bond) Expansion Capital Cost Bond Principal Payments (4%,20 Years)	\$40,841	\$42,475	\$44,174	\$45,941	\$47,778	\$49,689	\$51,677	\$53,744	\$55,894	
ALLOCATION OF BAN AND DEBT PRINCIPAL TO SCA:	\$96,080	\$99,923	\$103,920	\$108,077	\$162,773	\$169,284	\$176,055	\$183,097	\$190,421	
Status Quo System Operating Costs										
Routine Capital Improvements (Not Financed)	\$43,518	\$44,388	\$45,276	\$46,182	\$47,105	\$48,047	\$49,008	\$49,988	\$50,988	
Liability Insurance	\$8,370	\$8,538	\$8,709	\$8,883	\$9,060	\$9,242	\$9,426	\$9,615	\$9,807	
Personal Services: Sewer Clerk	\$7,460	\$7,609	\$7,762	\$7,917	\$8,075	\$8,237	\$8,401	\$8,569	\$8,741	
Employee Benefits	\$495	\$505	\$515	\$525	\$535	\$546	\$557	\$568	\$580	
Administration: System Operator	\$137,414	\$140,162	\$142,966	\$145,825	\$148,741	\$151,716	\$154,750	\$157,845	\$161,002	
Chemicals/Utilities	\$231,454	\$236,083	\$240,805	\$245,621	\$250,533	\$255,544	\$260,655	\$265,868	\$271,185	
Contingency	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	
BAN Interest (With BAN Interest of 1.5%)	\$0	\$0	\$0	\$0	\$07.355	\$0	\$0 \$77,972	\$0	\$0 \$67,822	
Status Quo Bond Interest	\$36,738	\$34,529	\$32,231	\$29,841	\$87,355	\$82,755		\$72,997		
Incremental Expansion Area Operating Costs (\$/1,000 Gallons)	\$5.71	\$5.82	\$5.94	\$6.06	\$6.18	\$6.30	\$6.43	\$6.56	\$6.69	
Incremental Expansion Area Operating Costs	\$18,956	\$19,335	\$19,722	\$20,116	\$20,519	\$20,929	\$21,348	\$21,775	\$22,210	
Incremental Expansion Area Bond Interest	\$17,289	\$15,655	\$13,956	\$12,189	\$10,351	\$8,440	\$6,453	\$4,386	\$2,236	
TOTAL OPERATING AND INTEREST COSTS:	\$516,694	\$521,804	\$526,940	\$532,098	\$597,276	\$600,457	\$603,571	\$606,611	\$609,572	
TOTAL ANNUAL EXPENSES:	\$612,774	\$621,728	\$630,860	\$640,175	\$760,049	\$769,740	\$779,626	\$789,709	\$799,993	
Invoiced Water System Consumption: In Village (Gallons)*	57,691,900	57,691,900	57,691,900	57,691,900	57,691,900	57,691,900	57,691,900	57,691,900	57,691,900	
Invoiced Water System Consumption: Outside Village (Gallons)*	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	
Consumption Charge/1,000 Gallons: In Village	\$8.53	\$8.62	\$8.70	\$8.79	\$9.86	\$9.92	\$9.97	\$10.02	\$10.07	\$8.50
Consumption Charge/1,000 Gallons: Outside Village	\$8.53	\$8.62	\$8.70	\$8.79	\$9.86	\$9.92	\$9.97	\$10.02	\$10.07	\$8.50
Consumption Charge per Average Household: In Village	\$1,092.20	\$1,103.01	\$1,113.86	\$1,124.77	\$1,262.54	\$1,269.27	\$1,275.85	\$1,282.27	\$1,288.53	\$1,087.43
Consumption Charge per Average Household: Outside Village	\$1,092.20	\$1,103.01	\$1,113.86	\$1,124.77	\$1,262.54	\$1,269.27	\$1,275.85	\$1,282.27	\$1,288.53	\$1,087.43
Consumption Billing Revenues: In Village	\$492,276	\$497,145	\$502,038	\$506,952	\$569,050	\$572,081	\$575,047	\$577,944	\$580,765	
Consumption Billing Revenues: Outside Village	\$24,418	\$24,659	\$24,902	\$25,146	\$28,226	\$28,376	\$28,523	\$28,667	\$28,807	
Other Revenues	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
TOTAL NON-TAX REVENUES:	\$516,694	\$521,804	\$526,940	\$532,098	\$597,276	\$600,457	\$603,571	\$606,611	\$609,572	
Total Assessed Property Value of Current System**	\$320,044,941	\$321,645,166	\$323,253,392	\$324,869,659	\$326,494,007	\$328,126,477	\$329,767,109	\$331,415,945	\$333,073,025	
Total Estimated Assessed Property Value of Expansion Area***	\$7,397,771	\$7,434,760	\$7,471,934	\$7,509,293	\$7,546,840	\$7,584,574	\$7,622,497	\$7,660,609	\$7,698,912	
Total Estimated Assessed Property Value with Expansion Area				\$332,378,952					\$340,771,937	
Sewer Capital Assessment				\$0.000325162			-			
Average Assessed Household Value	\$424,671	\$426,794	\$428,928	\$431,073	\$433,228	\$435,395	\$437,572	\$439,759	\$441,958	4
Average Household Sewer Capital Assessment	\$124.61	\$129.59	\$134.78	\$140.17	\$211.11	\$219.55	\$228.33	\$237.46	\$246.96	\$144.54
Sewer Capital Assessment Revenue	\$96,080	\$99,923	\$103,920	\$108,077	\$162,773	\$169,284	\$176,055	\$183,097	\$190,421	
TOTAL REVENUES:	612,774	621,728	630,860	640,175	760,049	769,740	779,626	789,709	799,993	
Average Charge/Household Including SCA : In Village:	\$1,216.81	\$1,232.60	\$1,248.64	\$1,264.93	\$1,473.65	\$1,488.81	\$1,504.18	\$1,519.74	\$1,535.50	\$1,231.97
Average Charge/Household Including SCA: Outside Village:	\$1,216.81	\$1,232.60	\$1,248.64	\$1,264.93	\$1,473.65	\$1,488.81	\$1,504.18	\$1,519.74	\$1,535.50	\$1,231.97

<sup>\*</sup>Assumes 5% of Status Quo Consumed Gallons Billed to Town Residents and 100% of Incremental Gallons Billed to Village Residents

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<sup>\*\*</sup>Derived by Summing 100% of the Assessed Property Value of All Properties Connected to System Plus 33.33% of Assessed Property Value of All Properties Located in Village Which are Not Connected to System \*\*\*Assumes 26 Households Opt to Hook-In to System and that 1/3 of their Assessed Value was Already in the Total Assessed Property Value of Current System

VILLAGE OF MILLBROOK, NY
Impact of Expansions & Improvements on Cost to Avg. Household
Rate Study: Water System with Bennett College Expansion
Prepared By: R.S. Lynch & Company

Prepared By: R.S. Lynch & Company	Annrovimata	Past Revenues &	2. Evnancas	Projected Fu	ıture Revenues &	Evnanças							
Village Fiscal Year: June 1st-May 31st	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Total Invoiced Water System Consumption: Status Quo (Gallons)	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500
Total Expansion Area Water Consumption: Bennett College (Gallons)	0	0	0	10,950,000	10,950,000	10,950,000	10,950,000	10,950,000	10,950,000	10,950,000	10,950,000	10,950,000	10,950,000
Average Annual Household Consumption (Gallons)	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750
TOTAL CONSUMPTION:	64,495,500	64,495,500	64,495,500	75,445,500	75,445,500	75,445,500	75,445,500	75,445,500	75,445,500	75,445,500	75,445,500	75,445,500	75,445,500
Status Quo Capital Costs (Financed with BAN)	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Allocation of BAN Principal Amount to Annual Expenses	\$0	\$0	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Outstanding BAN Balance Subject to BAN Interest	\$80,000	\$80,000	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ending Balance of BAN	\$80,000	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Status Quo Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$0	\$1,200,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
BAN Balance Converted to Bond (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Status Quo Capital Costs Bond Principal Payments (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$40,298	\$41,910	\$43,586	\$45,330	\$47,143	\$49,029	\$50,990	\$53,030
Expansion Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Expansion Capital Cost Bond Principal Payments (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
BAN AND DEBT PRINCIPAL :	\$0	\$0	\$80,000	\$0	\$0	\$40,298	\$41,910	\$43,586	\$45,330	\$47,143	\$49,029	\$50,990	\$53,030
Status Quo System Operating Costs													
Routine Capital Improvements (Not Financed)	\$11,577	\$30,000	\$29,600	\$54,057	\$65,000	\$40,000	\$55,000	\$85,000	\$50,000	\$51,000	\$52,020	\$53,060	\$54,122
Liability Insurance	\$4,000	\$6,000	\$6,600	\$6,732	\$6,867	\$7,004	\$7,144	\$7,287	\$7,433	\$7,581	\$7,733	\$7,888	\$8,045
Personal Services: Water Clerk	\$5,200	\$5,400	\$3,900	\$6,000	\$6,120	\$6,242	\$6,367	\$6,495	\$6,624	\$6,757	\$6,892	\$7,030	\$7,171
Employee Benefits	\$398	\$415	\$300	\$398	\$406	\$414	\$422	\$431	\$439	\$448	\$457	\$466	\$475
Administration: System Operator	\$61,860	\$55,000	\$61,500	\$62,730	\$63,985	\$65,264	\$66,570	\$67,901	\$69,259	\$70,644	\$72,057	\$73,498	\$74,968
Chemicals/Testing	\$13,263	\$26,000	\$30,000	\$30,600	\$31,212	\$31,836	\$32,473	\$33,122	\$33,785	\$34,461	\$35,150	\$35,853	\$36,570
Utilities/Supplies	\$25,642	\$35,000	\$30,000	\$30,600	\$31,212	\$31,836	\$32,473	\$33,122	\$33,785	\$34,461	\$35,150	\$35,853	\$36,570
Contingency	\$0	\$50,185	\$44,300	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
BAN Interest (With BAN Interest of 1.5%)	\$0 \$0	\$0	\$1,800	\$0 60	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Status Quo Bond Interest	\$0	\$0	\$0	\$0	\$0	\$48,000	\$46,388	\$44,712	\$42,968	\$41,155	\$39,269	\$37,308	\$35,269
Incremental Expansion Area Operating Costs (\$/1,000 Gallons)	\$0.00	\$0.00	\$0.00	\$1.95	\$1.99	\$2.03	\$2.07	\$2.11	\$2.15	\$2.20	\$2.24	\$2.28	\$2.33
Incremental Expansion Area Operating Costs	\$0	\$0	\$0	\$21,353	\$21,780	\$22,215	\$22,659	\$23,113	\$23,575	\$24,046	\$24,527	\$25,018	\$25,518
Incremental Expansion Area Bond Interest	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL OPERATING AND INTEREST COSTS:	\$121,940	\$208,000	\$208,000	\$237,469	\$251,581	\$277,812	\$294,496	\$326,182	\$292,868	\$295,553	\$298,255	\$300,974	\$303,708
TOTAL ANNUAL EXPENSES:	\$121,940	\$208,000	\$288,000	\$237,469	\$251,581	\$318,110	\$336,407	\$369,769	\$338,198	\$342,696	\$347,284	\$351,964	\$356,737
Invoiced Water System Consumption: In Village (Gallons)*	57,400,995	57,400,995	57,400,995	68,350,995	68,350,995	68,350,995	68,350,995	68,350,995	68,350,995	68,350,995	68,350,995	68,350,995	68,350,995
Invoiced Water System Consumption: Outside Village (Gallons)*	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505
Consumption Charge/1,000 Gallons: In Village**	\$2.99	\$2.99	\$2.99	\$2.88	\$3.05	\$3.85	\$4.08	\$4.48	\$4.10	\$4.15	\$4.21	\$4.26	\$4.32
Consumption Charge/1,000 Gallons: Outside Village**	\$5.98	\$5.98	\$5.98	\$5.75	\$6.10	\$7.71	\$8.15	\$8.96	\$8.19	\$8.30	\$8.41	\$8.53	\$8.64
Consumption Charge per Average Household: In Village	\$382.72	\$382.72	\$382.72	\$368.26	\$390.14	\$493.31	\$521.69	\$573.42	\$524.47	\$531.44	\$538.56	\$545.81	\$553.21
Consumption Charge per Average Household: Outside Village	\$765.44	\$765.44	\$765.44	\$736.52	\$780.28	\$986.63	\$1,043.37	\$1,146.85	\$1,048.93	\$1,062.88	\$1,077.11	\$1,091.62	\$1,106.43
Consumption Billing Revenues: In Village	\$171,629	\$171,629	\$171,629	\$196,647	\$208,333	\$263,426	\$278,577	\$306,204	\$280,060	\$283,785	\$287,584	\$291,460	\$295,412
Consumption Billing Revenues: Outside Village	\$42,425	\$42,425	\$42,425	\$40,822	\$43,248	\$54,685	\$57,830	\$63,565	\$58,138	\$58,911	\$59,700	\$60,504	\$61,325
Other Revenues	-\$92,114	-\$6,054	\$73,946	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL ANNUAL REVENUES:	\$121,940	\$208,000	\$288,000	\$237,469	\$251,581	\$318,110	\$336,407	\$369,769	\$338,198	\$342,696	\$347,284	\$351,964	\$356,737
*Assumes 11% of Status Quo Consumed Gallons Billed to Town Residents and 100% of Incremental Gallons Billed to Village Residents **Assumes 100% of Expenses Paid Through Consumption Charges and Town Residents Pay Twice the Village Rate													

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VILLAGE OF MILLBROOK, NY
Impact of Expansions & Improvements on Cost to Avg. Household
Rate Study: Water System with Bennett College Expansion
Prepared By: R.S. Lynch & Company

Village Fiscal Year: June 1st-May 31st	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	2029-2030	2030-2031	20 YR Average
Total Invoiced Water System Consumption: Status Quo (Gallons)	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	
Total Expansion Area Water Consumption: Bennett College (Gallons)	10,950,000	10,950,000	10,950,000	10,950,000	10,950,000	10,950,000	10,950,000	10,950,000	10,950,000	10,950,000	
Average Annual Household Consumption (Gallons)	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	
TOTAL CONSUMPTION:	75,445,500	75,445,500	75,445,500	75,445,500	75,445,500	75,445,500	75,445,500	75,445,500	75,445,500	75,445,500	
Status Quo Capital Costs (Financed with BAN)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Allocation of BAN Principal Amount to Annual Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Outstanding BAN Balance Subject to BAN Interest	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Ending Balance of BAN	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Status Quo Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
BAN Balance Converted to Bond (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Status Quo Capital Costs Bond Principal Payments (4%,20 Years)	\$55,151	\$57,357	\$59,651	\$62,037	\$64,519	\$67,099	\$69,783	\$72,575	\$75,478	\$78,497	
Expansion Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Expansion Capital Cost Bond Principal Payments (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
BAN AND DEBT PRINCIPAL :	\$55,151	\$57,357	\$59,651	\$62,037	\$64,519	\$67,099	\$69,783	\$72,575	\$75,478	\$78,497	
Status Quo System Operating Costs											
Routine Capital Improvements (Not Financed)	\$55,204	\$56,308	\$57,434	\$58,583	\$59,755	\$60,950	\$62,169	\$63,412	\$64,680	\$65,974	
Liability Insurance	\$8,206	\$8,370	\$8,538	\$8,709	\$8,883	\$9,060	\$9,242	\$9,426	\$9,615	\$9,807	
Personal Services: Water Clerk	\$7,314	\$7,460	\$7,609	\$7,762	\$7,917	\$8,075	\$8,237	\$8,401	\$8,569	\$8,741	
Employee Benefits	\$485	\$495	\$505	\$515	\$525	\$535	\$546	\$557	\$568	\$580	
Administration: System Operator	\$76,468	\$77,997	\$79,557	\$81,148	\$82,771	\$84,426	\$86,115	\$87,837	\$89,594	\$91,386	
Chemicals/Testing	\$37,301	\$38,047	\$38,808	\$39,584	\$40,376	\$41,184	\$42,007	\$42,847	\$43,704	\$44,578	
Utilities/Supplies	\$37,301	\$38,047	\$38,808	\$39,584	\$40,376	\$41,184	\$42,007	\$42,847	\$43,704	\$44,578	
Contingency	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	
BAN Interest (With BAN Interest of 1.5%)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Status Quo Bond Interest	\$33,147	\$30,941	\$28,647	\$26,261	\$23,780	\$21,199	\$18,515	\$15,723	\$12,821	\$9,801	
Incremental Expansion Area Operating Costs (\$/1,000 Gallons)	\$2.38	\$2.42	\$2.47	\$2.52	\$2.57	\$2.62	\$2.68	\$2.73	\$2.79	\$2.84	
Incremental Expansion Area Operating Costs	\$26,029	\$26,549	\$27,080	\$27,622	\$28,174	\$28,738	\$29,312	\$29,899	\$30,497	\$31,107	
Incremental Expansion Area Bond Interest	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
TOTAL OPERATING AND INTEREST COSTS:	\$306,455	\$309,215	\$311,986	\$314,767	\$317,556	\$320,351	\$323,150	\$325,951	\$328,753	\$331,552	
TOTAL ANNUAL EXPENSES:	\$361,606	\$366,572	\$371,637	\$376,804	\$382,074	\$387,450	\$392,933	\$398,526	\$404,230	\$410,049	
Invoiced Water System Consumption: In Village (Gallons)*	68,350,995	68,350,995	68,350,995	68,350,995	68,350,995	68,350,995	68,350,995	68,350,995	68,350,995	68,350,995	
Invoiced Water System Consumption: Outside Village (Gallons)*	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	7,094,505	
Consumption Charge/1,000 Gallons: In Village**	\$4.38	\$4.44	\$4.50	\$4.57	\$4.63	\$4.69	\$4.76	\$4.83	\$4.90	\$4.97	\$4.30
Consumption Charge/1,000 Gallons: Outside Village**	\$8.76	\$8.88	\$9.01	\$9.13	\$9.26	\$9.39	\$9.52	\$9.66	\$9.79	\$9.94	\$8.60
Consumption Charge per Average Household: In Village	\$560.77	\$568.47	\$576.32	\$584.33	\$592.51	\$600.84	\$609.35	\$618.02	\$626.87	\$635.89	\$550.68
Consumption Charge per Average Household: Outside Village	\$1,121.53	\$1,136.93	\$1,152.64	\$1,168.67	\$1,185.01	\$1,201.69	\$1,218.69	\$1,236.04	\$1,253.73	\$1,271.78	\$1,101.37
Consumption Billing Revenues: In Village	\$299,444	\$303,557	\$307,751	\$312,030	\$316,394	\$320,845	\$325,386	\$330,017	\$334,741	\$339,560	
Consumption Billing Revenues: Outside Village	\$62,162	\$63,015	\$63,886	\$64,774	\$65,680	\$66,604	\$67,547	\$68,508	\$69,489	\$70,489	
Other Revenues	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
TOTAL ANNUAL REVENUES:	\$361,606	\$366,572	\$371,637	\$376,804	\$382,074	\$387,450	\$392,933	\$398,526	\$404,230	\$410,049	

<sup>\*</sup>Assumes 11% of Status Quo Consumed Gallons Billed to Town Residents and 100% of Incremental Gallons Billed to Village Residents

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<sup>\*\*</sup>Assumes 100% of Expenses Paid Through Consumption Charges and Town Residents Pay Twice the Village Rate

#### VILLAGE OF MILLBROOK, NY Impact of Expansions & Improvements on Cost to Avg. Household Rate Study: Sewer System with Bennett College Expansion Prepared By: R.S. Lynch & Company

		e Past Revenues			uture Revenues									
Village Fiscal Year: June 1st-May 31st	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
Total Invoiced System Sewer Consumption: Status Quo (Gallons) Total Expansion Area Sewer Consumption: Bennett (Gallons)	57,232,000 0	57,232,000 0	57,232,000 0	57,232,000 10,950,000	57,232,000 10,950,000	57,232,000 10,950,000	57,232,000 10,950,000	57,232,000 10,950,000	57,232,000 10,950,000	57,232,000 10,950,000	57,232,000 10,950,000	57,232,000 10,950,000	57,232,000 10,950,000	57,232,000 10,950,000
Average Annual Household Consumption (Gallons)  TOTAL CONSUMPTION:	127,750 57,232,000	127,750 57,232,000	127,750 57,232,000	127,750 68,182,000	127,750 68,182,000	127,750 68,182,000	127,750 68,182,000	127,750 68,182,000	127,750 68,182,000	127,750 68,182,000	127,750 68,182,000	127,750 68,182,000	127,750 68,182,000	127,750 68,182,000
Status Quo Capital Costs (Financed with BAN)	\$120,000	\$0	\$250,000	\$250,000	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0
Allocation of BAN Principal to Sewer Capital Assessment (SCA)	\$37,840	\$60,000	\$30,032	\$30,000	\$70,000	\$50,000	\$50,000	\$50,000	\$0		\$0	\$0	\$0	\$0
Outstanding BAN Balance Subject to BAN Interest Ending Balance of BAN	\$127,872 \$90,032	\$90,032 \$30,032	\$280,032 \$250,000	\$500,000 \$470,000	\$470,000 \$400,000	\$400,000 \$350,000	\$350,000 \$300,000	\$300,000 \$250,000	\$0 \$0		\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Status Quo Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0
BAN Balance Converted to Bond (4%,20 Years)	\$0	\$0	\$0	\$0	\$0		\$0	\$250,000	\$0		\$0	\$0	\$0	\$0
Status Quo Capital Costs Bond Principal Payments (4%,20 Years)	\$0	\$0	\$0	\$0	\$0		\$0	\$41,977	\$43,656		\$47,219	\$49,107	\$51,072	\$53,115
Expansion Capital Costs (Financed with Bond) Expansion Capital Cost Bond Principal Payments (4%,20 Years)	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0		\$0 \$0	\$0 \$0	\$0 \$0		\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
ALLOCATION OF BAN AND DEBT PRINCIPAL TO SCA:	\$37,840	\$60,000	\$30,032	\$30,000	\$70,000	\$50,000	\$50,000	\$91,977	\$43,656	\$45,403	\$47,219	\$49,107	\$51,072	\$53,115
Status Quo System Operating Costs														
Routine Capital Improvements (Not Financed)	\$22,533	\$33,000	\$35,000	\$35,700	\$36,414	\$37,412	\$37,885	\$37,885	\$38,643	\$39,416	\$40,204	\$41,008	\$41,828	\$42,665
Liability Insurance	\$0	\$6,000	\$6,600	\$6,732	\$6,867	\$7,004	\$7,144	\$7,287	\$7,433	\$7,581	\$7,733	\$7,888	\$8,045	\$8,206
Personal Services: Sewer Clerk Employee Benefits	\$5,200 \$398	\$5,400 \$415	\$3,900 \$300	\$6,000 \$398	\$6,120 \$406	\$6,242 \$414	\$6,367 \$422	\$6,495 \$431	\$6,624 \$439	\$6,757 \$448	\$6,892 \$457	\$7,030 \$466	\$7,171 \$475	\$7,314 \$485
Administration: System Operator	\$108,350	\$106,000	\$108,350	\$110,517	\$112,727	\$114,982	\$117,282	\$119,627	\$122,020	\$124,460	\$126,949	\$129,488	\$132,078	\$134,720
Chemicals/Utilities	\$122,908	\$179,850	\$182,500	\$186,150	\$189,873		\$197,544	\$201,495	\$205,525	\$209,635	\$213,828	\$218,104	\$222,466	\$226,916
Contingency	\$0	\$11,335	\$13,370	\$15,000	\$15,000		\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
BAN Interest (With BAN Interest of 1.5%)	\$0	\$1,500	\$900	\$7,500	\$7,050		\$5,250	\$4,500	\$0		\$0	\$0	\$0	\$0
Status Quo Bond Interest	\$0	\$0	\$0	\$0	\$0		\$0	\$50,000	\$48,321		\$44,759	\$42,870	\$40,906	\$38,863
Incremental Expansion Area Operating Costs (\$/1,000 Gallons)	\$0.00	\$0.00	\$0.00	\$4.59	\$4.68		\$4.87	\$4.97	\$5.07	\$5.17	\$5.27	\$5.38	\$5.49	\$5.60
Incremental Expansion Area Operating Costs Incremental Expansion Area Bond Interest	\$0 \$0	\$0 \$0	\$0 \$0	\$50,261 \$0	\$51,266 \$0	\$52,291 \$0	\$53,337 \$0	\$54,404 \$0	\$55,492 \$0		\$57,734 \$0	\$58,888 \$0	\$60,066 \$0	\$61,267 \$0
TOTAL OPERATING AND INTEREST COSTS:	\$259,389	\$343,500	\$350,920	\$418,257	\$425,722		\$440,231	\$497,123	\$499,496		\$513,555	\$520,742	\$528,035	\$535,435
TOTAL ANNUAL EXPENSES:	\$297,229	\$403,500	\$380,952	\$448,257	\$495,722	\$483,016	\$490,231	\$589,100	\$543,152	\$551,876	\$560,774	\$569,850	\$579,107	\$588,550
Invoiced Water System Consumption: In Village (Gallons)*	54,370,400	54,370,400	54,370,400	65,320,400	65,320,400		65,320,400	65,320,400	65,320,400		65,320,400	65,320,400	65,320,400	65,320,400
Invoiced Water System Consumption: Outside Village (Gallons)*	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600
Consumption Charge/1,000 Gallons: In Village Consumption Charge/1,000 Gallons: Outside Village	\$6.18 \$6.18	\$6.18 \$6.18	\$6.18 \$6.18	\$6.13 \$6.13	\$6.24 \$6.24	\$6.35 \$6.35	\$6.46 \$6.46	\$7.29 \$7.29	\$7.33 \$7.33	\$7.43 \$7.43	\$7.53 \$7.53	\$7.64 \$7.64	\$7.74 \$7.74	\$7.85 \$7.85
Consumption Charge per Average Household: In Village	\$791.04	\$791.04	\$791.04	\$785.21	\$799.22	\$812.91	\$826.46	\$933.26	\$937.72	\$950.82	\$964.11	\$977.60	\$991.30	\$1,005.19
Consumption Charge per Average Household: Outside Village	\$791.04	\$791.04	\$791.04	\$785.21	\$799.22		\$826.46	\$933.26	\$937.72		\$964.11	\$977.60	\$991.30	\$1,005.19
Consumption Billing Revenues: In Village	\$336,009	\$336,009	\$336,009	\$400,703	\$407,855	\$414,842	\$421,754	\$476,258	\$478,532	\$485,217	\$492,001	\$498,887	\$505,874	\$512,963
Consumption Billing Revenues: Outside Village	\$17,685	\$17,685	\$17,685	\$17,554	\$17,868	\$18,174	\$18,476	\$20,864	\$20,964	\$21,257	\$21,554	\$21,856	\$22,162	\$22,472
Other Revenues  TOTAL NON-TAX REVENUES:	-\$94,305 \$259,389	-\$10,194 \$343,500	-\$2,774 \$350,920	\$0 \$418,257	\$0 \$425,722	\$0 \$433,016	\$0 \$440,231	\$0 \$497,123	\$0 \$499,496	\$0 \$506,473	\$0 \$513,555	\$0 \$520,742	\$0 \$528,035	\$0 \$535,435
	+===,===	¥= .=,===	7,		Annual Escalation		* ,	¥ .0.,0	7,	¥===,	,,	¥0-0,1 1-	7-2,	7000,100
Total Assessed Property Value of Current System**	\$299,269,381	\$301,051,744	\$301,452,039	\$302,959,299			. , ,	\$309,064,081	\$310,609,401		\$313,723,260			\$318,452,678
Total Estimated Assessed Property Value of Expansion Area***	\$0	\$0	\$0	\$23,750,000	\$23,868,750		\$24,108,034	\$24,228,574	\$24,349,717				\$24,840,376	\$24,964,578
Total Estimated Assessed Property Value with Expansion Area Sewer Capital Assessment	\$299,269,381 \$0.000127000	\$301,051,744 \$0.000200000	\$301,452,039 \$0.000099626	\$326,709,299 \$0.000091825	\$328,342,846						\$338,317,084 \$0.000139569		\$341,708,712 \$0.000149460	
Average Assessed Household Value	\$400,000	\$400,000	\$400,000	\$402,000	\$404,010		\$408,060	\$410,101	\$412,151	\$414,212	\$416,283	\$418,364	\$420,456	\$422,558
Average Household Sewer Capital Assessment	\$50.80	\$80.00	\$39.85	\$36.91	\$86.13	\$61.52	\$61.52	\$113.17	\$53.72	\$55.87	\$58.10	\$60.42	\$62.84	\$65.35
Sewer Capital Assessment Revenue	\$38,007	\$60,210	\$30,032	\$30,000	\$70,000	\$50,000	\$50,000	\$91,977	\$43,656	\$45,403	\$47,219	\$49,107	\$51,072	\$53,115
TOTAL REVENUES:	297,396	403,710	380,952	448,257	495,722	483,016	490,231	589,100	543,152	551,876	560,774	569,850	579,107	588,550
Average Charge/Household Including SCA : In Village: Average Charge/Household Including SCA: Outside Village:	\$841.84 \$841.84	\$871.04 \$871.04	\$830.89 \$830.89	\$822.12 \$822.12	\$885.35 \$885.35	\$874.44 \$874.44	\$887.98 \$887.98	\$1,046.44 \$1,046.44	\$991.43 \$991.43	\$1,006.68 \$1,006.68	\$1,022.21 \$1,022.21	\$1,038.03 \$1,038.03	\$1,054.14 \$1,054.14	\$1,070.54 \$1,070.54
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<sup>\*</sup>Assumes 5% of Status Quo Consumed Gallons Billed to Town Residents and 100% of Incremental Gallons Billed to Village Residents

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<sup>\*\*</sup>Derived by Summing 100% of the Assessed Property Value of All Properties Connected to System Plus 33.33% of Assessed Property Value of All Properties Located in Village Which are Not Connected to System

<sup>\*\*\*</sup>Assumes a \$250,000 Assessed Value per Unit (95 Units)

VILLAGE OF MILLBROOK, NY Impact of Expansions & Improvements on Cost to Avg. Household Rate Study: Sewer System with Bennett College Expansion Prepared By: R.S. Lynch & Company

Village Fiscal Year: June 1st-May 31st	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	2029-2030	2030-2031	20 YR Average
Total Invoiced System Sewer Consumption: Status Quo (Gallons)	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	
Total Expansion Area Sewer Consumption: Bennett (Gallons)	10,950,000	10,950,000	10,950,000	10,950,000	10,950,000	10,950,000	10,950,000	10,950,000	10,950,000	
Average Annual Household Consumption (Gallons)	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	
TOTAL CONSUMPTION:	68,182,000	68,182,000	68,182,000	68,182,000	68,182,000	68,182,000	68,182,000	68,182,000	68,182,000	
Status Quo Capital Costs (Financed with BAN)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Allocation of BAN Principal to Sewer Capital Assessment (SCA)	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0	
Outstanding BAN Balance Subject to BAN Interest	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0	
Ending Balance of BAN	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Status Quo Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$1,500,000	\$0	\$0	\$0	\$0	
BAN Balance Converted to Bond (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Status Quo Capital Costs Bond Principal Payments (4%,20 Years)	\$55,239	\$57,449	\$59,747	\$62,136	\$114,995	\$119,594	\$124,378	\$129,353	\$134,527	
Expansion Capital Costs (Financed with Bond)	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0	
Expansion Capital Cost Bond Principal Payments (4%,20 Years) ALLOCATION OF BAN AND DEBT PRINCIPAL TO SCA:	\$0 \$55,239	\$0 \$57,449	\$0 \$59,747	\$0 \$62,136	\$0 \$114,995	\$0 \$119,594	\$0 \$124,378	\$0 \$129,353	\$0 \$134,527	
	\$33,239	\$37,445	\$33,141	302,130	\$114,555	3115,354	\$124,576	\$125,555	3134,327	
Status Quo System Operating Costs Routine Capital Improvements (Not Financed)	\$43,518	\$44,388	\$45,276	\$46,182	\$47,105	\$48,047	\$49,008	\$49,988	\$50,988	
Liability Insurance	\$8,370	\$8,538	\$8,709	\$8,883	\$9,060	\$9,242	\$9,426	\$9,615	\$9,807	
Personal Services: Sewer Clerk	\$7,460	\$7,609	\$7,762	\$7,917	\$8,075	\$8,237	\$8,401	\$8,569	\$8,741	
Employee Benefits	\$495	\$505	\$515	\$525	\$535	\$546	\$557	\$568	\$580	
Administration: System Operator	\$137,414	\$140,162	\$142,966	\$145,825	\$148,741	\$151,716	\$154,750	\$157,845	\$161,002	
Chemicals/Utilities	\$231,454	\$236,083	\$240,805	\$245,621	\$250,533	\$255,544	\$260,655	\$265,868	\$271,185	
Contingency	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	
BAN Interest (With BAN Interest of 1.5%)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Status Quo Bond Interest	\$36,738	\$34,529	\$32,231	\$29,841	\$87,355	\$82,755	\$77,972	\$72,997	\$67,822	
Incremental Expansion Area Operating Costs (\$/1,000 Gallons)	\$5.71	\$5.82	\$5.94	\$6.06	\$6.18	\$6.30	\$6.43	\$6.56	\$6.69	
Incremental Expansion Area Operating Costs	\$62,493	\$63,742	\$65,017	\$66,318	\$67,644	\$68,997	\$70,377	\$71,784	\$73,220	
Incremental Expansion Area Bond Interest	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
TOTAL OPERATING AND INTEREST COSTS:	\$542,942	\$550,557	\$558,279	\$566,110	\$634,050	\$640,084	\$646,147	\$652,235	\$658,346	
TOTAL ANNUAL EXPENSES:	\$598,181	\$608,005	\$618,026	\$628,247	\$749,045	\$759,679	\$770,525	\$781,589	\$792,874	
Invoiced Water System Consumption: In Village (Gallons)*	65,320,400	65,320,400	65,320,400	65,320,400	65,320,400	65,320,400	65,320,400	65,320,400	65,320,400	
Invoiced Water System Consumption: Outside Village (Gallons)*	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	2,861,600	
Consumption Charge/1,000 Gallons: In Village	\$7.96	\$8.07	\$8.19	\$8.30	\$9.30	\$9.39	\$9.48	\$9.57	\$9.66	\$7.90
Consumption Charge/1,000 Gallons: Outside Village	\$7.96	\$8.07	\$8.19	\$8.30	\$9.30	\$9.39	\$9.48	\$9.57	\$9.66	\$7.90
Consumption Charge per Average Household: In Village Consumption Charge per Average Household: Outside Village	\$1,019.28 \$1,019.28	\$1,033.58 \$1,033.58	\$1,048.07 \$1,048.07	\$1,062.77 \$1,062.77	\$1,190.32 \$1,190.32	\$1,201.65 \$1,201.65	\$1,213.03 \$1,213.03	\$1,224.46 \$1,224.46	\$1,235.93 \$1,235.93	\$1,010.64 \$1,010.64
										\$1,010.04
Consumption Billing Revenues: In Village Consumption Billing Revenues: Outside Village	\$520,155 \$22,787	\$527,450 \$23,107	\$534,848 \$23,431	\$542,351 \$23,760	\$607,439 \$26,611	\$613,220 \$26,864	\$619,028 \$27,119	\$624,861 \$27,374	\$630,715 \$27,631	
Other Revenues	\$22,787	\$23,107	\$23,431		\$20,011	\$20,804	\$27,119	\$27,374 \$0	\$27,631	
TOTAL NON-TAX REVENUES:	\$542,942	\$550,557	\$558,279	\$566,110	\$634,050	\$640,084	\$646,147	\$652,235	\$658,346	
Total Assessed Property Value of Current System** Total Estimated Assessed Property Value of Expansion Area***	\$320,044,941 \$25,089,401	\$321,645,166 \$25,214,848	\$323,253,392	\$324,869,659 \$25,467,627	\$326,494,007 \$25,594,965	\$328,126,477 \$25,722,940	\$329,767,109 \$25,851,555	\$331,415,945 \$25,980,812	\$333,073,025 \$26,110,716	
Total Estimated Assessed Property Value with Expansion Area		. , ,		\$350,337,286		. , ,				
Sewer Capital Assessment		. , ,		\$0.000177362						
Average Assessed Household Value	\$424,671	\$426,794	\$428,928	\$431,073	\$433,228	\$435,395	\$437,572	\$439,759	\$441,958	
Average Household Sewer Capital Assessment	\$67.97	\$70.69	\$73.52	\$76.46	\$141.50	\$147.16	\$153.04	\$159.16	\$165.53	\$88.53
Sewer Capital Assessment Revenue	\$55,239	\$57,449	\$59,747	\$62,136	\$114,995	\$119,594	\$124,378	\$129,353	\$134,527	
TOTAL REVENUES:	598,181	608,005	618,026	628,247	749,045	759,679	770,525	781,589	792,874	
Average Charge/Household Including SCA : In Village:	\$1,087.25	\$1,104.26	\$1,121.59	\$1,139.23	\$1,331.82	\$1,348.80	\$1,366.07	\$1,383.62	\$1,401.46	\$1.099.17
Average Charge/Household Including SCA: Outside Village:	\$1,087.25	\$1,104.26	\$1,121.59	\$1,139.23	\$1,331.82	\$1,348.80	\$1,366.07	\$1,383.62	\$1,401.46	\$1,099.17
stage charge/ rousehold meldaning sort Outside village.	Q1,007.23	\$1,10 N.EU	V1,121.33	V1,100.20	V1,551.02	Ç1,5 .0.00	Ç1,500.07	Ç1,505.02	y1,.01.40	Q1,033.17

<sup>\*</sup>Assumes 5% of Status Quo Consumed Gallons Billed to Town Residents and 100% of Incremental Gallons Billed to Village Residents

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<sup>\*\*</sup>Derived by Summing 100% of the Assessed Property Value of All Properties Connected to System Plus 33.33% of Assessed Property Value of All Properties Located in Village Which are Not Connected to System

<sup>\*\*\*</sup>Assumes a \$250,000 Assessed Value per Unit (95 Units)

VILLAGE OF MILLBROOK, NY
Impact of Expansions & Improvements on Cost to Avg. Household
Rate Study: Water System with Rodrigo Knolls Expansion
Prepared By: R.S. Lynch & Company

William Flord Vanus 1 and 1 Advanced		Past Revenues 8			iture Revenues 8		2014 2017	2045 2046	2016 2017	2047 2040	2010 2010	2010 2020
Village Fiscal Year: June 1st-May 31st	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Total Invaiced Water System Consumptions Status Over (Callens)	64,495,500	64,495,500	64 405 500	64.405.500	64,495,500	64.405.500	64,495,500	64.405.500	64,495,500	64 405 500	64,495,500	64 405 500
Total Invoiced Water System Consumption: Status Quo (Gallons)  Total Expansion Area Water Consumption: Rodrigo Knolls (Gallons)	64,495,500	64,495,500	64,495,500	64,495,500 3,066,000	3,066,000	64,495,500 3,066,000	3,066,000	64,495,500 3,066,000	3,066,000	64,495,500 3,066,000	3,066,000	64,495,500 3,066,000
Average Annual Household Consumption (Gallons)	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750
TOTAL CONSUMPTION:	64,495,500	64,495,500	64,495,500	67,561,500	67,561,500	67,561,500	67,561,500	67,561,500	67,561,500	67,561,500	67,561,500	67,561,50
TOTAL CONSONIT HON.	04,455,500	04,455,500	04,433,300	07,301,300	07,301,300	07,301,300	07,301,300	07,501,500	07,301,300	07,301,300	07,301,300	07,301,300
Status Quo Capital Costs (Financed with BAN)	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Allocation of BAN Principal Amount to Annual Expenses	\$0	\$0	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Outstanding BAN Balance Subject to BAN Interest	\$80,000	\$80,000	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ending Balance of BAN	\$80,000	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Status Quo Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$0	\$1,200,000	\$0	\$0	\$0	\$0	\$0	\$
BAN Balance Converted to Bond (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1
Status Quo Capital Costs Bond Principal Payments (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$40,298	\$41,910	\$43,586	\$45,330	\$47,143	\$49,029	\$50,99
Expansion Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$648,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$(
Expansion Capital Cost Bond Principal Payments (4%,20 Years)	\$0	\$0	\$0	\$21,761	\$22,631	\$23,537	\$24,478	\$25,457	\$26,476	\$27,535	\$28,636	\$29,781
BAN AND DEBT PRINCIPAL :	\$0	\$0	\$80,000	\$21,761	\$22,631	\$63,835	\$66,388	\$69,044	\$71,805	\$74,678	\$77,665	\$80,77
Status Quo System Operating Costs												
Routine Capital Improvements (Not Financed)	\$11,577	\$30,000	\$29,600	\$54,057	\$65,000	\$40,000	\$55,000	\$85,000	\$50,000	\$51,000	\$52,020	\$53,060
Liability Insurance	\$4,000	\$6,000	\$6,600	\$6,732	\$6,867	\$7,004	\$7,144	\$7,287	\$7,433	\$7,581	\$7,733	\$7,888
Personal Services: Water Clerk	\$5,200	\$5,400	\$3,900	\$6,000	\$6,120	\$6,242	\$6,367	\$6,495	\$6,624	\$6,757	\$6,892	\$7,030
Employee Benefits	\$398	\$415	\$300	\$398	\$406	\$414	\$422	\$431	\$439	\$448	\$457	\$460
Administration: System Operator	\$61,860	\$55,000	\$61,500	\$62,730	\$63,985	\$65,264	\$66,570	\$67,901	\$69,259	\$70,644	\$72,057	\$73,49
Chemicals/Testing	\$13,263	\$26,000	\$30,000	\$30,600	\$31,212	\$31,836	\$32,473	\$33,122	\$33,785	\$34,461	\$35,150	\$35,85
Utilities/Supplies	\$25,642	\$35,000	\$30,000	\$30,600	\$31,212	\$31,836	\$32,473	\$33,122	\$33,785	\$34,461	\$35,150	\$35,853
Contingency	\$0	\$50,185	\$44,300	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
BAN Interest (With BAN Interest of 1.5%)	\$0	\$0	\$1,800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$(
Status Quo Bond Interest	\$0	\$0	\$0	\$0	\$0	\$48,000	\$46,388	\$44,712	\$42,968	\$41,155	\$39,269	\$37,308
Incremental Expansion Area Operating Costs (\$/1,000 Gallons)	\$0.00	\$0.00	\$0.00	\$1.95	\$1.99	\$2.03	\$2.07	\$2.11	\$2.15	\$2.20	\$2.24	\$2.28
Incremental Expansion Area Operating Costs	\$0	\$0	\$0	\$5,979	\$6,098	\$6,220	\$6,345	\$6,472	\$6,601	\$6,733	\$6,868	\$7,009
Incremental Expansion Area Bond Interest	\$0	\$0	\$0	\$25,920	\$25,050	\$24,144	\$23,203	\$22,224	\$21,205	\$20,146	\$19,045	\$17,900
TOTAL OPERATING AND INTEREST COSTS:	\$121,940	\$208,000	\$208,000	\$248,016	\$260,949	\$285,962	\$301,385	\$331,765	\$297,100	\$298,386	\$299,641	\$300,861
TOTAL ANNUAL EXPENSES:	\$121,940	\$208,000	\$288,000	\$269,776	\$283,580	\$349,796	\$367,773	\$400,809	\$368,905	\$373,064	\$377,305	\$381,632
Invoiced Water System Consumption: In Village (Gallons)*	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995
Invoiced Water System Consumption: Outside Village (Gallons)*	7,094,505	7,094,505	7,094,505	10,160,505	10,160,505	10,160,505	10,160,505	10,160,505	10,160,505	10,160,505	10,160,505	10,160,505
Consumption Charge/1,000 Gallons: In Village**	\$2.99	\$2.99	\$2.99	\$3.47	\$3.65	\$4.50	\$4.73	\$5.16	\$4.75	\$4.80	\$4.85	\$4.9
Consumption Charge/1,000 Gallons: Outside Village**	\$5.98	\$5.98	\$5.98	\$6.94	\$7.30	\$9.00	\$9.46	\$10.31	\$9.49	\$9.60	\$9.71	\$9.8
Consumption Charge per Average Household: In Village	\$382.72	\$382.72	\$382.72	\$444.29	\$467.03	\$576.08	\$605.68	\$660.09	\$607.55	\$614.40	\$621.38	\$628.53
Consumption Charge per Average Household: Outside Village	\$765.44	\$765.44	\$765.44	\$888.59	\$934.05	\$1,152.16	\$1,211.37	\$1,320.18	\$1,215.10	\$1,228.79	\$1,242.76	\$1,257.02
Consumption Billing Revenues: In Village	\$171,629	\$171,629	\$171,629	\$199,241	\$209,436	\$258,339	\$271,616	\$296,014	\$272,452	\$275,523	\$278,656	\$281,851
Consumption Billing Revenues: In Village Consumption Billing Revenues: Outside Village	\$171,629	\$171,629	\$171,629	\$199,241 \$70,535	\$209,436 \$74,144	\$258,339	\$271,616	\$104,794	\$272,452	\$275,523	\$278,656	\$281,85
Other Revenues	-\$92,114	-\$6,054	\$42,425 \$73,946	\$70,535	\$74,144 \$0	\$91,457 \$0	\$96,157	\$104,794	\$96,453 \$0	\$97,540 \$0	\$98,649	\$99,78 \$
TOTAL ANNUAL REVENUES:	-\$92,114 \$121,940	-\$6,054 \$208,000	\$73,946	\$269,776	\$283,580	\$349,796	\$0 \$367,773	\$400,809	\$368,905	\$373,064	\$0 \$377,305	بر \$381,63
TOTAL ANNUAL REVENUES:	ş121, <del>94</del> 0	92U0,UUU	⊋∠00,UUU	3203,17b	<i>9</i> 263,360	ş345,79b	7307,773 و	\$400,0U9	2006,505	ş3/3,U04	<i>3311,</i> 305	<i>φ</i> 361,032
*Assumes 11% of Status Quo Consumed Gallons Billed to Town Residents and												
100% of Incremental Gallons Billed to Town Residents												
**Assumes 100% of Expenses Paid Through Consumption Charges and Town				1								

<sup>\*\*</sup>Assumes 100% of Expenses Paid Through Consumption Charges and Town Residents Pay Twice the Village Rate

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VILLAGE OF MILLBROOK, NY Impact of Expansions & Improvements on Cost to Avg. Household Rate Study: Water System with Rodrigo Knolls Expansion Prepared By: R.S. Lynch & Company

Village Fiscal Year: June 1st-May 31st	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	2029-2030	2030-2031	20 YR Average
Total Invoiced Water System Consumption: Status Quo (Gallons)	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	
Total Expansion Area Water Consumption: Rodrigo Knolls (Gallons)	3,066,000	3,066,000	3,066,000	3,066,000	3,066,000	3,066,000	3,066,000	3,066,000	3,066,000	3,066,000	3,066,000	
Average Annual Household Consumption (Gallons)	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	
TOTAL CONSUMPTION:	67,561,500	67,561,500	67,561,500	67,561,500	67,561,500	67,561,500	67,561,500	67,561,500	67,561,500	67,561,500	67,561,500	
Status Quo Capital Costs (Financed with BAN)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Allocation of BAN Principal Amount to Annual Expenses	\$0	\$0 \$0	\$0 \$0	\$0	\$0	\$0	\$0 \$0	\$0	\$0	\$0	\$0	
·									-			
Outstanding BAN Balance Subject to BAN Interest	\$0 \$0	\$0	\$0 \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	
Ending Balance of BAN	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Status Quo Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
BAN Balance Converted to Bond (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Status Quo Capital Costs Bond Principal Payments (4%,20 Years)	\$53,030	\$55,151	\$57,357	\$59,651	\$62,037	\$64,519	\$67,099	\$69,783	\$72,575	\$75,478	\$78,497	
Expansion Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Expansion Capital Cost Bond Principal Payments (4%,20 Years)	\$30,973	\$32,212	\$33,500	\$34,840	\$36,234	\$37,683	\$39,190	\$40,758	\$42,388	\$44,084	\$45,847	
BAN AND DEBT PRINCIPAL :	\$84,002	\$87,362	\$90,857	\$94,491	\$98,271	\$102,202	\$106,290	\$110,541	\$114,963	\$119,561	\$124,344	
Status Quo System Operating Costs												
Routine Capital Improvements (Not Financed)	\$54,122	\$55,204	\$56,308	\$57,434	\$58,583	\$59,755	\$60,950	\$62,169	\$63,412	\$64,680	\$65,974	
Liability Insurance	\$8,045	\$8,206	\$8,370	\$8,538	\$8,709	\$8,883	\$9,060	\$9,242	\$9,426	\$9,615	\$9,807	
Personal Services: Water Clerk	\$7,171	\$7,314	\$7,460	\$7,609	\$7,762	\$7,917	\$8,075	\$8,237	\$8,401	\$8,569	\$8,741	
Employee Benefits	\$475	\$485	\$495	\$505	\$515	\$525	\$535	\$546	\$557	\$568	\$580	
Administration: System Operator	\$74,968	\$76,468	\$77,997	\$79,557	\$81,148	\$82,771	\$84,426	\$86,115	\$87,837	\$89,594	\$91,386	
Chemicals/Testing	\$36,570	\$37,301	\$38,047	\$38,808	\$39,584	\$40,376	\$41,184	\$42,007	\$42,847	\$43,704	\$44,578	
Utilities/Supplies	\$36,570	\$37,301	\$38,047	\$38,808	\$39,584	\$40,376	\$41,184	\$42,007	\$42,847	\$43,704	\$44,578	
Contingency	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	
BAN Interest (With BAN Interest of 1.5%)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Status Quo Bond Interest	\$35,269	\$33,147	\$30,941	\$28,647	\$26,261	\$23,780	\$21,199	\$18,515	\$15,723	\$12,821	\$9,801	
Incremental Expansion Area Operating Costs (\$/1,000 Gallons)	\$2.33	\$2.38	\$2.42	\$2.47	\$2.52	\$2.57	\$2.62	\$2.68	\$2.73	\$2.79	\$2.84	
Incremental Expansion Area Operating Costs	\$7,145	\$7,288	\$7,434	\$7,582	\$7,734	\$7,889	\$8,047	\$8,207	\$8,372	\$8,539	\$8,710	
Incremental Expansion Area Bond Interest	\$16,708	\$15,469	\$14,181	\$12,841	\$11,447	\$9,998	\$8,491	\$6,923	\$5,293	\$3,597	\$1,834	
TOTAL OPERATING AND INTEREST COSTS:	\$302,043	\$303,184	\$304,281	\$305,330	\$306,327	\$307,268	\$308,150	\$308,968	\$309,717	\$310,392	\$310,989	
TOTAL ANNUAL EXPENSES:	\$386,045	\$390,546	\$395,138	\$399,821	\$404,598	\$409,470	\$414,440	\$419,509	\$424,680	\$429,954	\$435,333	
Invoiced Water System Consumption: In Village (Gallons)*	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	
Invoiced Water System Consumption: Outside Village (Gallons)*	10,160,505	10,160,505	10,160,505	10,160,505	10,160,505	10,160,505	10,160,505	10,160,505	10,160,505	10,160,505	10,160,505	
invoiced water system consumption. Outside village (dalions)	10,100,303	10,100,303	10,100,303	10,100,303	10,100,303	10,100,303	10,100,303	10,100,303	10,100,303	10,100,303	10,100,303	
Consumption Charge/1,000 Gallons: In Village**	\$4.97	\$5.02	\$5.08	\$5.14	\$5.21	\$5.27	\$5.33	\$5.40	\$5.46	\$5.53	\$5.60	\$4.94
Consumption Charge/1,000 Gallons: Outside Village**	\$9.93	\$10.05	\$10.17	\$10.29	\$10.41	\$10.54	\$10.66	\$10.80	\$10.93	\$11.06	\$11.20	\$9.88
Consumption Charge per Average Household: In Village	\$635.78	\$643.19	\$650.75	\$658.46	\$666.33	\$674.35	\$682.54	\$690.89	\$699.40	\$708.09	\$716.95	\$632.59
Consumption Charge per Average Household: Outside Village	\$1,271.55	\$1,286.38	\$1,301.50	\$1,316.93	\$1,332.66	\$1,348.71	\$1,365.08	\$1,381.77	\$1,398.81	\$1,416.18	\$1,433.90	\$1,265.17
Consumption Billing Revenues: In Village	\$285,111	\$288,435	\$291,826	\$295,285	\$298,812	\$302,411	\$306,081	\$309,825	\$313,644	\$317,539	\$321,512	
Consumption Billing Revenues: Outside Village	\$100,934	\$102,111	\$103,312	\$104,536	\$105,785	\$107,059	\$108,358	\$109,684	\$111,036	\$112,415	\$113,821	
Other Revenues	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
TOTAL ANNUAL REVENUES:	\$386,045	\$390,546	\$395,138	\$399,821	\$404,598	\$409,470	\$414,440	\$419,509	\$424,680	\$429,954	\$435,333	

<sup>\*</sup>Assumes 11% of Status Quo Consumed Gallons Billed to Town Residents and 100% of Incremental Gallons Billed to Town Residents

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<sup>\*\*</sup>Assumes 100% of Expenses Paid Through Consumption Charges and Town Residents Pay Twice the Village Rate

#### VILLAGE OF MILLBROOK, NY Impact of Expansions & Improvements on Cost to Avg. Household Rate Study: Sewer System with Rodrigo Knolls Expansion Prepared By: R.S. Lynch & Company

	FF	e Past Revenues			uture Revenues									
Village Fiscal Year: June 1st-May 31st	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
Total Invoiced System Sewer Consumption: Status Quo (Gallons)	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000
Total Expansion Area Sewer Consumption: Rodrigo (Gallons)	0	0	0	2,299,500	2,299,500	2,299,500	2,299,500	2,299,500	2,299,500	2,299,500	2,299,500	2,299,500	2,299,500	2,299,500
Average Annual Household Consumption (Gallons)	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750
TOTAL CONSUMPTION:	57,232,000	57,232,000	57,232,000	59,531,500	59,531,500	59,531,500	59,531,500		59,531,500	59,531,500	59,531,500	59,531,500	59,531,500	59,531,500
Status Quo Capital Costs (Financed with BAN)	\$120,000	\$0	\$250,000	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Allocation of BAN Principal to Sewer Capital Assessment (SCA)	\$37,840	\$60,000	\$30,032	\$30,000	\$70,000	\$50,000	\$50,000	,	\$0		\$0	\$0	\$0	\$0
Outstanding BAN Balance Subject to BAN Interest	\$127,872	\$90,032	\$280,032	\$500,000	\$470,000	\$400,000	\$350,000	, ,	\$0		\$0	\$0	\$0	\$0
Ending Balance of BAN	\$90,032	\$30,032	\$250,000	\$470,000	\$400,000	\$350,000	\$300,000	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0
Status Quo Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0
BAN Balance Converted to Bond (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0
Status Quo Capital Costs Bond Principal Payments (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$43,656		\$47,219	\$49,107	\$51,072	\$53,115
Expansion Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$675,250	\$0	\$0	\$0		\$0		\$0	\$0	\$0	\$0
Expansion Capital Cost Bond Principal Payments (4%,20 Years)	\$0	\$0	\$0	\$22,676	\$23,583	\$24,526	\$25,508		\$27,589	\$28,692	\$29,840	\$31,034	\$32,275	\$33,566
ALLOCATION OF BAN AND DEBT PRINCIPAL TO SCA:	\$37,840	\$60,000	\$30,032	\$52,676	\$93,583	\$74,526	\$75,508	\$118,505	\$71,245	\$74,095	\$77,059	\$80,141	\$83,347	\$86,681
Status Quo System Operating Costs Routine Capital Improvements (Not Financed)	\$22,533	\$33,000	\$35,000	\$35,700	\$36,414	\$37,412	\$37,885	\$37,885	\$38,643	\$39,416	\$40,204	\$41,008	\$41,828	\$42,665
Liability Insurance	\$22,533	\$6,000	\$6,600	\$6,732	\$6,867	\$37,412	\$37,885 \$7,144		\$38,643	\$39,416	\$40,204	\$41,008	\$8,045	\$8,206
Personal Services: Sewer Clerk	\$5,200	\$5,400	\$3,900	\$6,000	\$6,120	\$6,242	\$6,367	\$6,495	\$6,624	\$6,757	\$6,892	\$7,000	\$7,171	\$7,314
Employee Benefits	\$398	\$415	\$300	\$398	\$406	\$414	\$422		\$439		\$457	\$466	\$475	\$485
Administration: System Operator	\$108,350	\$106,000	\$108,350	\$110,517	\$112,727	\$114,982	\$117,282	\$119,627	\$122,020	\$124,460	\$126,949	\$129,488	\$132,078	\$134,720
Chemicals/Utilities	\$122,908	\$179,850	\$182,500	\$186,150	\$189,873	\$193,670	\$197,544		\$205,525	\$209,635	\$213,828	\$218,104	\$222,466	\$226,916
Contingency	\$0	\$11,335	\$13,370	\$15,000	\$15,000	\$15,000	\$15,000		\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
BAN Interest (With BAN Interest of 1.5%)	\$0	\$1,500	\$900	\$7,500	\$7,050	\$6,000	\$5,250	\$4,500	\$0	\$0	\$0	\$0	\$0	\$0
Status Quo Bond Interest	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000	\$48,321	\$46,575	\$44,759	\$42,870	\$40,906	\$38,863
Incremental Expansion Area Operating Costs (\$/1,000 Gallons)	\$0.00	\$0.00	\$0.00	\$4.59	\$4.68	\$4.78	\$4.87	\$4.97	\$5.07	\$5.17	\$5.27	\$5.38	\$5.49	\$5.60
Incremental Expansion Area Operating Costs	\$0	\$0	\$0	\$10,555	\$10,766	\$10,981	\$11,201	\$11,425	\$11,653	\$11,886	\$12,124	\$12,367	\$12,614	\$12,866
Incremental Expansion Area Bond Interest	\$0	\$0	\$0	\$27,010	\$26,103	\$25,160	\$24,179		\$22,097	\$20,994	\$19,846	\$18,652	\$17,411	\$16,120
TOTAL OPERATING AND INTEREST COSTS:	\$259,389	\$343,500	\$350,920	\$405,562	\$411,325	\$416,865	\$422,273		\$477,755	\$482,752	\$487,792	\$492,873	\$497,994	\$503,154
TOTAL ANNUAL EXPENSES:	\$297,229	\$403,500	\$380,952	\$458,238	\$504,909	\$491,392	\$497,781	\$595,807	\$549,000	\$556,847	\$564,850	\$573,014	\$581,341	\$589,835
Invoiced Water System Consumption: In Village (Gallons)*	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400		54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400
Invoiced Water System Consumption: Outside Village (Gallons)*	2,861,600	2,861,600	2,861,600	5,161,100	5,161,100	5,161,100	5,161,100	5,161,100	5,161,100	5,161,100	5,161,100	5,161,100	5,161,100	5,161,100
Consumption Charge/1,000 Gallons: In Village	\$6.18	\$6.18	\$6.18	\$6.81	\$6.91	\$7.00	\$7.09	\$8.02	\$8.03	\$8.11	\$8.19	\$8.28	\$8.37	\$8.45
Consumption Charge/1,000 Gallons: Outside Village	\$6.18	\$6.18	\$6.18	\$6.81	\$6.91	\$7.00	\$7.09	\$8.02	\$8.03	\$8.11	\$8.19	\$8.28	\$8.37	\$8.45
Consumption Charge per Average Household: In Village	\$791.04	\$791.04	\$791.04	\$872.01	\$884.40	\$896.31	\$907.94		\$1,027.23	\$1,037.98	\$1,048.81	\$1,059.74	\$1,070.75	\$1,081.84
Consumption Charge per Average Household: Outside Village	\$791.04	\$791.04	\$791.04	\$872.01	\$884.40	\$896.31	\$907.94	\$1,026.26	\$1,027.23	\$1,037.98	\$1,048.81	\$1,059.74	\$1,070.75	\$1,081.84
Consumption Billing Revenues: In Village	\$336,009	\$336,009	\$336,009	\$370,401	\$375,666	\$380,725	\$385,664	\$435,922	\$436,336	\$440,899	\$445,502	\$450,143	\$454,821	\$459,533
Consumption Billing Revenues: Outside Village	\$17,685	\$17,685	\$17,685	\$35,160	\$35,660	\$36,140	\$36,609		\$41,419	\$41,852	\$42,289	\$42,730	\$43,174	\$43,621
Other Revenues	-\$94,305	-\$10,194	-\$2,774	\$0	\$0	\$0	\$0		\$0		\$0	\$0	\$0	\$0
TOTAL NON-TAX REVENUES:	\$259,389	\$343,500	\$350,920	\$405,562 0.50%	\$411,325 Annual Escalation	\$416,865	\$422,273	\$477,302	\$477,755	\$482,752	\$487,792	\$492,873	\$497,994	\$503,154
Total Assessed Property Value of Current System**	\$299,269,381	\$301,051,744	\$301,452,039	33	\$304,474,096		\$307,526,449	\$309,064,081	\$310,609,401	\$312,162,448	\$313,723,260	\$315,291,877	\$316,868,336	\$318,452,678
Total Estimated Assessed Property Value of Expansion Area***	\$0	\$0	\$0	\$7,236,000	\$7,272,180	\$7,308,541	\$7,345,084	\$7,381,809	\$7,418,718	\$7,455,812	\$7,493,091	\$7,530,556	\$7,568,209	\$7,606,050
Total Estimated Assessed Property Value with Expansion Area	\$299,269,381	\$301,051,744	\$301,452,039	\$310,195,299	\$311,746,276	\$313,305,007	\$314,871,532	\$316,445,890	\$318,028,119	\$319,618,260	\$321,216,351	\$322,822,433	\$324,436,545	\$326,058,728
Sewer Capital Assessment		\$0.000200000						\$0.000374487						
Average Assessed Household Value	\$400,000	\$400,000	\$400,000	\$402,000	\$404,010	\$406,030	\$408,060	\$410,101	\$412,151	\$414,212	\$416,283	\$418,364	\$420,456	\$422,558
Average Household Sewer Capital Assessment	\$50.80	\$80.00	\$39.85	\$68.27	\$121.28	\$96.58	\$97.85	\$153.58	\$92.33	\$96.02	\$99.86	\$103.86	\$108.01	\$112.33
Sewer Capital Assessment Revenue	\$38,007	\$60,210	\$30,032	\$52,676	\$93,583	\$74,526	\$75,508	\$118,505	\$71,245	\$74,095	\$77,059	\$80,141	\$83,347	\$86,681
TOTAL REVENUES:	297,396	403,710	380,952	458,238	504,909	491,392	497,781	595,807	549,000	556,847	564,850	573,014	581,341	589,835
Average Charge/Household Including SCA : In Village:	\$841.84	\$871.04	\$830.89	\$940.27	\$1,005.68	\$992.89	\$1,005.79	\$1,179.84	\$1,119.56	\$1,134.00	\$1,148.68	\$1,163.60	\$1,178.76	\$1,194.18
Average Charge/Household Including SCA: Outside Village:	\$841.84	\$871.04	\$830.89	\$940.27	\$1,005.68	\$992.89	\$1,005.79		\$1,119.56	\$1,134.00	\$1,148.68	\$1,163.60	\$1,178.76	\$1,194.18
Stage sharps, tradenoid melading sont outside village.	ÇG .1.04	Ç0, 1.04	\$656.65	Ç3 .3.E7	Q1,000.00	Ç33 <u>2.0</u> 3	Ç1,003.73	Q2,275.04	y1,113.30	ψ1,15 ×.00	Ç1,1 .0.00	ψ1,103.00	Q1,1.0.70	Ų1,1510
*Assumes 5% of Status Quo, Consumed Gallons Billed to Town Residents														

<sup>\*</sup>Assumes 5% of Status Quo Consumed Gallons Billed to Town Residents and 100% of Incremental Gallons Billed to Town Residents

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<sup>\*\*</sup>Derived by Summing 100% of the Assessed Property Value of All Properties Connected to System Plus 33.33% of Assessed Property Value of All Properties Located in Village Which are Not Connected to System

<sup>\*\*\*</sup>Assumes 18 Households Opt to Hook-In to System

VILLAGE OF MILLBROOK, NY Impact of Expansions & Improvements on Cost to Avg. Household Rate Study: Sewer System with Rodrigo Knolls Expansion Prepared By: R.S. Lynch & Company

Village Fiscal Year: June 1st-May 31st	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	2029-2030	2030-2031	20 YR Average
Total Invoiced System Sewer Consumption: Status Quo (Gallons)	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	
Total Expansion Area Sewer Consumption: Rodrigo (Gallons)	2,299,500	2,299,500	2,299,500	2,299,500	2,299,500	2,299,500	2,299,500	2,299,500	2,299,500	
Average Annual Household Consumption (Gallons)  TOTAL CONSUMPTION:	127,750 59,531,500									
Status Quo Capital Costs (Financed with BAN)	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0	
Allocation of BAN Principal to Sewer Capital Assessment (SCA)	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0	
Outstanding BAN Balance Subject to BAN Interest	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Ending Balance of BAN	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Status Quo Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$1,500,000	\$0	\$0	\$0	\$0	
BAN Balance Converted to Bond (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Status Quo Capital Costs Bond Principal Payments (4%,20 Years)	\$55,239	\$57,449	\$59,747	\$62,136	\$114,995	\$119,594	\$124,378	\$129,353	\$134,527	
Expansion Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Expansion Capital Cost Bond Principal Payments (4%,20 Years)	\$34,909	\$36,305	\$37,757	\$39,268	\$40,838	\$42,472	\$44,171	\$45,938	\$47,775	
ALLOCATION OF BAN AND DEBT PRINCIPAL TO SCA:	\$90,148	\$93,754	\$97,504	\$101,404	\$155,833	\$162,066	\$168,549	\$175,291	\$182,302	
Status Quo System Operating Costs										
Routine Capital Improvements (Not Financed)	\$43,518	\$44,388	\$45,276	\$46,182	\$47,105	\$48,047	\$49,008	\$49,988	\$50,988	
Liability Insurance	\$8,370	\$8,538	\$8,709	\$8,883	\$9,060	\$9,242	\$9,426	\$9,615	\$9,807	
Personal Services: Sewer Clerk	\$7,460	\$7,609	\$7,762	\$7,917	\$8,075	\$8,237	\$8,401	\$8,569	\$8,741	
Employee Benefits	\$495	\$505	\$515	\$525	\$535	\$546	\$557	\$568	\$580	
Administration: System Operator	\$137,414	\$140,162	\$142,966	\$145,825	\$148,741	\$151,716	\$154,750	\$157,845	\$161,002	
Chemicals/Utilities	\$231,454	\$236,083	\$240,805	\$245,621	\$250,533	\$255,544	\$260,655	\$265,868	\$271,185	
Contingency	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	
BAN Interest (With BAN Interest of 1.5%)	\$0	\$0	\$0	\$0	\$07.355	\$0	\$0	\$0	\$0	
Status Quo Bond Interest	\$36,738	\$34,529	\$32,231	\$29,841	\$87,355	\$82,755	\$77,972	\$72,997	\$67,822	
Incremental Expansion Area Operating Costs (\$/1,000 Gallons)	\$5.71	\$5.82	\$5.94	\$6.06	\$6.18	\$6.30	\$6.43	\$6.56	\$6.69	
Incremental Expansion Area Operating Costs	\$13,123	\$13,386	\$13,654	\$13,927	\$14,205	\$14,489	\$14,779	\$15,075	\$15,376	
Incremental Expansion Area Bond Interest	\$14,777	\$13,381	\$11,929	\$10,418	\$8,848	\$7,214	\$5,515	\$3,749	\$1,911	
TOTAL OPERATING AND INTEREST COSTS:	\$508,350	\$513,581	\$518,844	\$524,138	\$589,459	\$592,791	\$596,065	\$599,274	\$602,413	
TOTAL ANNUAL EXPENSES:	\$598,498	\$607,335	\$616,348	\$625,542	\$745,292	\$754,857	\$764,614	\$774,565	\$784,716	
Invoiced Water System Consumption: In Village (Gallons)*	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	
Invoiced Water System Consumption: Outside Village (Gallons)*	5,161,100	5,161,100	5,161,100	5,161,100	5,161,100	5,161,100	5,161,100	5,161,100	5,161,100	
Consumption Charge/1,000 Gallons: In Village	\$8.54	\$8.63	\$8.72	\$8.80	\$9.90	\$9.96	\$10.01	\$10.07	\$10.12	\$8.50
Consumption Charge/1,000 Gallons: Outside Village	\$8.54	\$8.63	\$8.72	\$8.80	\$9.90	\$9.96	\$10.01	\$10.07	\$10.12	\$8.50
Consumption Charge per Average Household: In Village	\$1,093.01	\$1,104.26	\$1,115.58	\$1,126.96	\$1,267.41	\$1,274.57	\$1,281.61	\$1,288.51	\$1,295.26	\$1,088.02
Consumption Charge per Average Household: Outside Village	\$1,093.01	\$1,104.26	\$1,115.58	\$1,126.96	\$1,267.41	\$1,274.57	\$1,281.61	\$1,288.51	\$1,295.26	\$1,088.02
Consumption Billing Revenues: In Village	\$464,279	\$469,056	\$473,863	\$478,697	\$538,356	\$541,399	\$544,389	\$547,320	\$550,187	
Consumption Billing Revenues: Outside Village	\$44,072	\$44,525	\$44,981	\$45,440	\$51,103	\$51,392	\$51,676	\$51,954	\$52,226	
Other Revenues	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
TOTAL NON-TAX REVENUES:	\$508,350	\$513,581	\$518,844	\$524,138	\$589,459	\$592,791	\$596,065	\$599,274	\$602,413	
Total Assessed Property Value of Current System**	\$320,044,941	\$321,645,166	\$323,253,392	\$324,869,659	\$326,494,007	\$328,126,477	\$329,767,109	\$331,415,945	\$333,073,025	
Total Estimated Assessed Property Value of Expansion Area***	\$7,644,080	\$7,682,301	\$7,720,712	\$7,759,316	\$7,798,112	\$7,837,103	\$7,876,288	\$7,915,670	\$7,955,248	
Total Estimated Assessed Property Value with Expansion Area				\$332,628,974						
Sewer Capital Assessment				\$0.000304857						
Average Assessed Household Value	\$424,671	\$426,794	\$428,928	\$431,073	\$433,228	\$435,395	\$437,572	\$439,759	\$441,958	
Average Household Sewer Capital Assessment	\$116.83	\$121.50	\$126.36	\$131.42	\$201.95	\$210.03	\$218.43	\$227.17	\$236.26	\$137.00
Sewer Capital Assessment Revenue	\$90,148	\$93,754	\$97,504	\$101,404	\$155,833	\$162,066	\$168,549	\$175,291	\$182,302	
TOTAL REVENUES:	590,148 598,498	607,335	616,348	625,542	745,292	754,857	764,614	774,565	784,716	
Average Charge/Household Including SCA : In Village:	\$1,209.84	\$1,225.76	\$1,241.94	\$1,258.38	\$1,469.36	\$1,484.60	\$1,500.04	\$1,515.68	\$1,531.52	\$1,225.02
Average Charge/Household Including SCA: Outside Village:	\$1,209.84	\$1,225.76	\$1,241.94	\$1,258.38	\$1,469.36	\$1,484.60	\$1,500.04	\$1,515.68	\$1,531.52	\$1,225.02

<sup>\*</sup>Assumes 5% of Status Quo Consumed Gallons Billed to Town Residents and 100% of Incremental Gallons Billed to Town Residents

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<sup>\*\*</sup>Derived by Summing 100% of the Assessed Property Value of All Properties Connected to System Plus 33.33% of Assessed Property Value of All Properties Located in Village Which are Not Connected to System

<sup>\*\*\*</sup>Assumes 18 Households Opt to Hook-In to System

VILLAGE OF MILLBROOK, NY
Impact of Expansions & Improvements on Cost to Avg. Household
Rate Study: Water System with Horseshoe Expansion
Prepared By: R.S. Lynch & Company

		Past Revenues &			ture Revenues 8	•						
Village Fiscal Year: June 1st-May 31st	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Total Invoiced Water System Consumption: Status Quo (Gallons)	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500
Total Expansion Area Water Consumption: Horseshoe (Gallons)	0	0	0	14,162,000	14,162,000	14,162,000	14,162,000	14,162,000	14,162,000	14,162,000	14,162,000	14,162,000
Average Annual Household Consumption (Gallons)	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750
TOTAL CONSUMPTION:	64,495,500	64,495,500	64,495,500	78,657,500	78,657,500	78,657,500	78,657,500	78,657,500	78,657,500	78,657,500	78,657,500	78,657,500
Status Quo Capital Costs (Financed with BAN)	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Allocation of BAN Principal Amount to Annual Expenses	\$0	\$0	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Outstanding BAN Balance Subject to BAN Interest	\$80,000	\$80,000	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ending Balance of BAN	\$80,000	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Status Quo Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$0	\$1,200,000	\$0	\$0	\$0	\$0	\$0	\$0
BAN Balance Converted to Bond (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Status Quo Capital Costs Bond Principal Payments (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$40,298	\$41,910	\$43,586	\$45,330	\$47,143	\$49,029	\$50,990
Expansion Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$2,706,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Expansion Capital Cost Bond Principal Payments (4%,20 Years)	\$0	\$0	\$0	\$90,872	\$94,507	\$98,287	\$102,219	\$106,308	\$110,560	\$114,982	\$119,582	\$124,365
BAN AND DEBT PRINCIPAL :	\$0	\$0	\$80,000	\$90,872	\$94,507	\$138,585	\$144,129	\$149,894	\$155,890	\$162,125	\$168,610	\$175,355
Status Quo System Operating Costs												
Routine Capital Improvements (Not Financed)	\$11,577	\$30,000	\$29,600	\$54,057	\$65,000	\$40,000	\$55,000	\$85,000	\$50,000	\$51,000	\$52,020	\$53,060
Liability Insurance	\$4,000	\$6,000	\$6,600	\$6,732	\$6,867	\$7,004	\$7,144	\$7,287	\$7,433	\$7,581	\$7,733	\$7,888
Personal Services: Water Clerk	\$5,200	\$5,400	\$3,900	\$6,000	\$6,120	\$6,242	\$6,367	\$6,495	\$6,624	\$6,757	\$6,892	\$7,030
Employee Benefits	\$398	\$415	\$300	\$398	\$406	\$414	\$422	\$431	\$439	\$448	\$457	\$466
Administration: System Operator	\$61,860	\$55,000	\$61,500	\$62,730	\$63,985	\$65,264	\$66,570	\$67,901	\$69,259	\$70,644	\$72,057	\$73,498
Chemicals/Testing	\$13,263	\$26,000	\$30,000	\$30,600	\$31,212	\$31,836	\$32,473	\$33,122	\$33,785	\$34,461	\$35,150	\$35,853
Utilities/Supplies	\$25,642	\$35,000	\$30,000	\$30,600	\$31,212	\$31,836	\$32,473	\$33,122	\$33,785	\$34,461	\$35,150	\$35,853
Contingency	\$0	\$50,185	\$44,300	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
BAN Interest (With BAN Interest of 1.5%)	\$0	\$0	\$1,800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Status Quo Bond Interest	\$0	\$0	\$0	\$0	\$0	\$48,000	\$46,388	\$44,712	\$42,968	\$41,155	\$39,269	\$37,308
Incremental Expansion Area Operating Costs (\$/1,000 Gallons)	\$0.00	\$0.00	\$0.00	\$1.95	\$1.99	\$2.03	\$2.07	\$2.11	\$2.15	\$2.20	\$2.24	\$2.28
Incremental Expansion Area Operating Costs	\$0	\$0	\$0	\$27,616	\$28,168	\$28,732	\$29,306	\$29,892	\$30,490	\$31,100	\$31,722	\$32,356
Incremental Expansion Area Bond Interest	\$0	\$0	\$0	\$108,240	\$104,605	\$100,825	\$96,893	\$92,805	\$88,552	\$84,130	\$79,531	\$74,747
TOTAL OPERATING AND INTEREST COSTS:	\$121,940	\$208,000	\$208,000	\$351,973	\$362,574	\$385,153	\$398,037	\$425,767	\$388,336	\$386,736	\$384,980	\$383,060
TOTAL ANNUAL EXPENSES:	\$121,940	\$208,000	\$288,000	\$442,845	\$457,081	\$523,739	\$542,165	\$575,661	\$544,226	\$548,862	\$553,591	\$558,415
Invoiced Water System Consumption: In Village (Gallons)*	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995
Invoiced Water System Consumption: Outside Village (Gallons)*	7,094,505	7,094,505	7,094,505	21,256,505	21,256,505	21,256,505	21,256,505	21,256,505	21,256,505	21,256,505	21,256,505	21,256,505
Consumption Charge/1,000 Gallons: In Village**	\$2.99	\$2.99	\$2.99	\$4.43	\$4.57	\$5.24	\$5.43	\$5.76	\$5.45	\$5.49	\$5.54	\$5.59
Consumption Charge/1,000 Gallons: Outside Village**	\$5.98	\$5.98	\$5.98	\$8.86	\$9.15	\$10.48	\$10.85	\$11.52	\$10.89	\$10.99	\$11.08	\$11.18
Consumption Charge per Average Household: In Village	\$382.72	\$382.72	\$382.72	\$567.33	\$585.57	\$670.96	\$694.57	\$737.48	\$697.21	\$703.15	\$709.21	\$715.39
Consumption Charge per Average Household: Outside Village	\$765.44	\$765.44	\$765.44	\$1,134.66	\$1,171.14	\$1,341.93	\$1,389.14	\$1,474.96	\$1,394.42	\$1,406.30	\$1,418.41	\$1,430.77
Consumption Billing Revenues: In Village	\$171,629	\$171,629	\$171,629	\$254,416	\$262,595	\$300,890	\$311,476	\$330,719	\$312,660	\$315,323	\$318,040	\$320,811
Consumption Billing Revenues: Outside Village	\$42,425	\$42,425	\$42,425	\$188,429	\$194,486	\$222,849	\$230,689	\$244,941	\$231,566	\$233,539	\$235,551	\$237,603
Other Revenues	-\$92,114	-\$6,054	\$73,946	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL ANNUAL REVENUES:	\$121,940	\$208,000	\$288,000	\$442,845	\$457,081	\$523,739	\$542,165	\$575,661	\$544,226	\$548,862	\$553,591	\$558,415
*Assumes 11% of Status Quo Consumed Gallons Billed to Town Residents and 100% of Incremental Gallons Billed to Town Residents												

<sup>\*\*</sup>Assumes 100% of Expenses Paid Through Consumption Charges and Town Residents Pay Twice the Village Rate

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VILLAGE OF MILLBROOK, NY
Impact of Expansions & Improvements on Cost to Avg. Household
Rate Study: Water System with Horseshoe Expansion
Prepared By: R.S. Lynch & Company

Village Fiscal Year: June 1st-May 31st	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	2029-2030	2030-2031	20 YR Average
Total Invoiced Water System Consumption: Status Quo (Gallons)	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	
Total Expansion Area Water Consumption: Horseshoe (Gallons)	14,162,000	14,162,000	14,162,000	14,162,000	14,162,000	14,162,000	14,162,000	14,162,000	14,162,000	14,162,000	14,162,000	
Average Annual Household Consumption (Gallons)	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	
TOTAL CONSUMPTION:	78,657,500	78,657,500	78,657,500	78,657,500	78,657,500	78,657,500	78,657,500	78,657,500	78,657,500	78,657,500	78,657,500	
Status Quo Capital Costs (Financed with BAN)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Allocation of BAN Principal Amount to Annual Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Outstanding BAN Balance Subject to BAN Interest	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Ending Balance of BAN	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Status Quo Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
BAN Balance Converted to Bond (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Status Quo Capital Costs Bond Principal Payments (4%,20 Years)	\$53,030	\$55,151	\$57,357	\$59,651	\$62,037	\$64,519	\$67,099	\$69,783	\$72,575	\$75,478	\$78,497	
Expansion Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Expansion Capital Cost Bond Principal Payments (4%,20 Years)	\$129,339	\$134,513	\$139,894	\$145,489	\$151,309	\$157,361	\$163,656	\$170,202	\$177,010	\$184,090	\$191,454	
BAN AND DEBT PRINCIPAL :	\$182,369	\$189,664	\$197,250	\$205,140	\$213,346	\$221,880	\$230,755	\$239,985	\$249,585	\$259,568	\$269,951	
Status Quo System Operating Costs												
Routine Capital Improvements (Not Financed)	\$54,122	\$55,204	\$56,308	\$57,434	\$58,583	\$59,755	\$60,950	\$62,169	\$63,412	\$64,680	\$65,974	
Liability Insurance	\$8,045	\$8,206	\$8,370	\$8,538	\$8,709	\$8,883	\$9,060	\$9,242	\$9,426	\$9,615	\$9,807	
Personal Services: Water Clerk	\$7,171	\$7,314	\$7,460	\$7,609	\$7,762	\$7,917	\$8,075	\$8,237	\$8,401	\$8,569	\$8,741	
Employee Benefits	\$475	\$485	\$495	\$505	\$515	\$525	\$535	\$546	\$557	\$568	\$580	
Administration: System Operator	\$74,968	\$76,468	\$77,997	\$79,557	\$81,148	\$82,771	\$84,426	\$86,115	\$87,837	\$89,594	\$91,386	
Chemicals/Testing	\$36,570	\$37,301	\$38,047	\$38,808	\$39,584	\$40,376	\$41,184	\$42,007	\$42,847	\$43,704	\$44,578	
Utilities/Supplies	\$36,570	\$37,301	\$38,047	\$38,808	\$39,584	\$40,376	\$41,184	\$42,007	\$42,847	\$43,704	\$44,578	
Contingency	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	
BAN Interest (With BAN Interest of 1.5%)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Status Quo Bond Interest	\$35,269	\$33,147	\$30,941	\$28,647	\$26,261	\$23,780	\$21,199	\$18,515	\$15,723	\$12,821	\$9,801	
Incremental Expansion Area Operating Costs (\$/1,000 Gallons)	\$2.33	\$2.38	\$2.42	\$2.47	\$2.52	\$2.57	\$2.62	\$2.68	\$2.73	\$2.79	\$2.84	
Incremental Expansion Area Operating Costs	\$33,004	\$33,664	\$34,337	\$35,024	\$35,724	\$36,439	\$37,167	\$37,911	\$38,669	\$39,442	\$40,231	
Incremental Expansion Area Bond Interest	\$69,773	\$64,599	\$59,219	\$53,623	\$47,803	\$41,751	\$35,456	\$28,910	\$22,102	\$15,022	\$7,658	
TOTAL OPERATING AND INTEREST COSTS:	\$380,966	\$378,689	\$376,222	\$373,553	\$370,673	\$367,571	\$364,237	\$360,658	\$356,824	\$352,720	\$348,335	
TOTAL ANNUAL EXPENSES:	\$563,335	\$568,353	\$573,472	\$578,693	\$584,019	\$589,451	\$594,992	\$600,643	\$606,408	\$612,288	\$618,286	
Invoiced Water System Consumption: In Village (Gallons)*	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	
Invoiced Water System Consumption: Outside Village (Gallons)*	21,256,505	21,256,505	21,256,505	21,256,505	21,256,505	21,256,505	21,256,505	21,256,505	21,256,505	21,256,505	21,256,505	
Consumption Charge/1,000 Gallons: In Village**	\$5.64	\$5.69	\$5.74	\$5.79	\$5.85	\$5.90	\$5.96	\$6.01	\$6.07	\$6.13	\$6.19	\$5.62
Consumption Charge/1,000 Gallons: Outside Village**	\$11.28	\$11.38	\$11.48	\$11.58	\$11.69	\$11.80	\$11.91	\$12.02	\$12.14	\$12.26	\$12.38	\$11.25
Consumption Charge per Average Household: In Village	\$721.69	\$728.12	\$734.68	\$741.36	\$748.19	\$755.15	\$762.25	\$769.49	\$776.87	\$784.40	\$792.09	\$719.76
Consumption Charge per Average Household: Outside Village	\$1,443.38	\$1,456.24	\$1,469.35	\$1,482.73	\$1,496.38	\$1,510.29	\$1,524.49	\$1,538.97	\$1,553.74	\$1,568.81	\$1,584.17	\$1,439.51
Consumption Billing Revenues: In Village	\$323,638	\$326,521	\$329,462	\$332,462	\$335,521	\$338,642	\$341,825	\$345,072	\$348,384	\$351,762	\$355,208	
Consumption Billing Revenues: Outside Village	\$239,697	\$241,832	\$244,010	\$246,232	\$248,498	\$250,809	\$253,167	\$255,571	\$258,024	\$260,526	\$263,078	
Other Revenues	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
TOTAL ANNUAL REVENUES:	\$563,335	\$568,353	\$573,472	\$578,693	\$584,019	\$589,451	\$594,992	\$600,643	\$606,408	\$612,288	\$618,286	

<sup>\*</sup>Assumes 11% of Status Quo Consumed Gallons Billed to Town Residents and 100% of Incremental Gallons Billed to Town Residents

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<sup>\*\*</sup>Assumes 100% of Expenses Paid Through Consumption Charges and Town Residents Pay Twice the Village Rate

#### VILLAGE OF MILLBROOK, NY Impact of Expansions & Improvements on Cost to Avg. Household Rate Study: Sewer System with Horseshoe Expansion Prepared By: R.S. Lynch & Company

riepared by. K.S. Lynch & Company	Approximat	e Past Revenues	& Expenses	Projected F	uture Revenues	& Expenses								
Village Fiscal Year: June 1st-May 31st	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
Total Invoiced System Sewer Consumption: Status Quo (Gallons)	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000
Total Expansion Area Sewer Consumption: Horseshoe (Gallons)	0	0	0	7,281,750	7,281,750	7,281,750	7,281,750	7,281,750	7,281,750	7,281,750	7,281,750	7,281,750	7,281,750	7,281,750
Average Annual Household Consumption (Gallons)	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750
TOTAL CONSUMPTION:	57,232,000	57,232,000	57,232,000	64,513,750	64,513,750	64,513,750	64,513,750	64,513,750	64,513,750	64,513,750	64,513,750	64,513,750	64,513,750	64,513,750
Status Quo Capital Costs (Financed with BAN)	\$120,000	\$0	\$250,000	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Allocation of BAN Principal to Sewer Capital Assessment (SCA)	\$37,840	\$60,000	\$30,032	\$30,000	\$70,000	\$50,000	\$50,000	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0
Outstanding BAN Balance Subject to BAN Interest	\$127,872	\$90,032	\$280,032	\$500,000	\$470,000	\$400,000	\$350,000	\$300,000	\$0	\$0	\$0	\$0	\$0	\$0
Ending Balance of BAN	\$90,032	\$30,032	\$250,000	\$470,000	\$400,000	\$350,000	\$300,000	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0
Status Quo Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0
BAN Balance Converted to Bond (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0
Status Quo Capital Costs Bond Principal Payments (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$41,977	\$43,656	\$45,403	\$47,219	\$49,107	\$51,072	\$53,115
Expansion Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$2,353,400	\$0	\$0	. \$0	. \$0	. \$0	\$0	. \$0	\$0	\$0	\$0
Expansion Capital Cost Bond Principal Payments (4%,20 Years)	\$0	\$0	\$0	\$79,031	\$82,193	\$85,480	\$88,899	\$92,455	\$96,154	\$100,000	\$104,000	\$108,160	\$112,486	\$116,986
ALLOCATION OF BAN AND DEBT PRINCIPAL TO SCA:	\$37,840	\$60,000	\$30,032	\$109,031	\$152,193	\$135,480	\$138,899	\$184,433	\$139,810	\$145,402	\$151,218	\$157,267	\$163,558	\$170,100
Status Quo System Operating Costs Routine Capital Improvements (Not Financed)	\$22,533	\$33,000	\$35,000	\$35,700	\$36,414	\$37.412	\$37.885	\$37.885	\$38.643	\$39,416	\$40,204	\$41.008	\$41.828	\$42,665
Liability Insurance	\$22,533 \$0	\$6,000	\$6,600	\$6,732	\$6,867	\$7,004	\$7,144	\$7,287	\$7,433	\$7,581	\$7,733	\$7,888	\$8,045	\$8,206
Personal Services: Sewer Clerk	\$5,200	\$5,400	\$3,900	\$6,000	\$6,120	\$6,242	\$6,367	\$6,495	\$6,624	\$6,757	\$6,892	\$7,030	\$7,171	\$7,314
Employee Benefits	\$398	\$415	\$300	\$398	\$406	\$414	\$422	\$431	\$439	\$448	\$457	\$466	\$475	\$485
Administration: System Operator	\$108,350	\$106,000	\$108,350	\$110,517	\$112,727	\$114,982	\$117,282	\$119,627	\$122,020	\$124,460	\$126,949	\$129,488	\$132,078	\$134,720
Chemicals/Utilities	\$122,908	\$179,850	\$182,500	\$186,150	\$189,873	\$193,670	\$197,544	\$201,495	\$205,525	\$209,635	\$213,828	\$218,104	\$222,466	\$226,916
Contingency	\$0	\$11,335	\$13,370	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
BAN Interest (With BAN Interest of 1.5%)	\$0	\$1,500	\$900	\$7,500	\$7,050	\$6,000	\$5,250	\$4,500	\$0	\$0	\$0	\$0	\$0	\$0
Status Quo Bond Interest	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000	\$48,321	\$46,575	\$44,759	\$42,870	\$40,906	\$38,863
Incremental Expansion Area Operating Costs (\$/1,000 Gallons)	\$0.00	\$0.00	\$0.00	\$4.59	\$4.68	\$4.78	\$4.87	\$4.97	\$5.07	\$5.17	\$5.27	\$5.38	\$5.49	\$5.60
Incremental Expansion Area Operating Costs	\$0	\$0	\$0	\$33,423	\$34,092	\$34,774	\$35,469	\$36,178	\$36,902	\$37,640	\$38,393	\$39,161	\$39,944	\$40,743
Incremental Expansion Area Bond Interest	\$0	\$0	\$0	\$94,136	\$90,975	\$87,687	\$84,268	\$80,712	\$77,014	\$73,167	\$69,168	\$65,008	\$60,681	\$56,182
TOTAL OPERATING AND INTEREST COSTS:	\$259,389	\$343,500	\$350,920	\$495,556	\$499,523	\$503,185	\$506,631	\$559,609	\$557,920	\$560,679	\$563,382	\$566,022	\$568,594	\$571,092
TOTAL ANNUAL EXPENSES:	\$297,229	\$403,500	\$380,952	\$604,587	\$651,716	\$638,665	\$645,530	\$744,042	\$697,730	\$706,082	\$714,600	\$723,289	\$732,152	\$741,192
Invoiced Water System Consumption: In Village (Gallons)*	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400
Invoiced Water System Consumption: Outside Village (Gallons)*	2,861,600	2,861,600	2,861,600	10,143,350	10,143,350	10,143,350	10,143,350	10,143,350	10,143,350	10,143,350	10,143,350	10,143,350	10,143,350	10,143,350
Consumption Charge/1,000 Gallons: In Village	\$6.18	\$6.18	\$6.18	\$7.68	\$7.74	\$7.80	\$7.85	\$8.67	\$8.65	\$8.69	\$8.73	\$8.77	\$8.81	\$8.85
Consumption Charge/1,000 Gallons: Outside Village	\$6.18	\$6.18	\$6.18	\$7.68	\$7.74	\$7.80	\$7.85	\$8.67	\$8.65	\$8.69	\$8.73	\$8.77	\$8.81	\$8.85
Consumption Charge per Average Household: In Village	\$791.04 \$791.04	\$791.04 \$791.04	\$791.04	\$983.22 \$983.22	\$991.09 \$991.09	\$998.36 \$998.36	\$1,005.19	\$1,110.31	\$1,106.95	\$1,112.43	\$1,117.79	\$1,123.03	\$1,128.13 \$1,128.13	\$1,133.09 \$1,133.09
Consumption Charge per Average Household: Outside Village	•	•	\$791.04		•	•	\$1,005.19	\$1,110.31	\$1,106.95	\$1,112.43	\$1,117.79	\$1,123.03		
Consumption Billing Revenues: In Village	\$336,009	\$336,009	\$336,009	\$417,641	\$420,984	\$424,071	\$426,974	\$471,623	\$470,199	\$472,525	\$474,803	\$477,028	\$479,196	\$481,301
Consumption Billing Revenues: Outside Village	\$17,685	\$17,685	\$17,685	\$77,915	\$78,539	\$79,115	\$79,656	\$87,986	\$87,720	\$88,154	\$88,579	\$88,994	\$89,399	\$89,792
Other Revenues  TOTAL NON-TAX REVENUES:	-\$94,305 \$259,389	-\$10,194 \$343,500	-\$2,774 \$350,920	\$0 \$495,556	\$0 \$499,523	\$0 \$503,185	\$0 \$506,631	\$0 \$559,609	\$0 \$557,920	\$0 \$560,679	\$0 \$563,382	\$0 \$566,022	\$0 \$568,594	\$0 \$571,092
TOTAL NON-TAX REVENUES:	\$259,389	\$343,500	\$350,920		Annual Escalatio		\$500,031	\$559,609	\$557,920	\$500,079	\$303,382	\$500,022	\$308,394	\$571,092
Total Assessed Property Value of Current System**	\$299,269,381	\$301,051,744	\$301,452,039	\$302,959,299	\$304,474,096		. , ,	\$309,064,081	\$310,609,401			\$315,291,877		\$318,452,678
Total Estimated Assessed Property Value of Expansion Area***	\$0	\$0	\$0	\$23,316,000	\$23,432,580	\$23,549,743	\$23,667,492	\$23,785,829	\$23,904,758	\$24,024,282		\$24,265,125	\$24,386,451	\$24,508,383
Total Estimated Assessed Property Value with Expansion Area	\$299,269,381	\$301,051,744	\$301,452,039	\$326,275,299	\$327,906,676						\$337,867,664			\$342,961,061
Sewer Capital Assessment			\$0.000099626	SSE *			\$0.000419390						\$0.000479284	
Average Assessed Household Value	\$400,000	\$400,000	\$400,000	\$402,000	\$404,010	\$406,030	\$408,060	\$410,101	\$412,151	\$414,212	\$416,283	\$418,364	\$420,456	\$422,558
Average Household Sewer Capital Assessment	\$50.80	\$80.00	\$39.85	\$134.34	\$187.51	\$166.92	\$171.14	\$227.24	\$172.26	\$179.15	\$186.31	\$193.77	\$201.52	\$209.58
Sewer Capital Assessment Revenue	\$38,007	\$60,210	\$30,032	\$109,031	\$152,193	\$135,480	\$138,899	\$184,433	\$139,810	\$145,402	\$151,218	\$157,267	\$163,558	\$170,100
TOTAL REVENUES:	297,396	403,710	380,952	604,587	651,716	638,665	645,530	744,042	697,730	706,082	714,600	723,289	732,152	741,192
Average Charge/Household Including SCA : In Village:	\$841.84	\$871.04	\$830.89	\$1,117.56	\$1,178.61	\$1,165.28	\$1,176.33	\$1,337.54	\$1,279.21	\$1,291.58	\$1,304.11	\$1,316.80	\$1,329.65	\$1,342.67
Average Charge/Household Including SCA: Outside Village:	\$841.84	\$871.04	\$830.89	\$1,117.56	\$1,178.61	\$1,165.28	\$1,176.33	\$1,337.54	\$1,279.21	\$1,291.58	\$1,304.11	\$1,316.80	\$1,329.65	\$1,342.67
*Assumes 5% of Status Quo, Consumed Gallons Billed to Town Pesidents														

<sup>\*</sup>Assumes 5% of Status Quo Consumed Gallons Billed to Town Residents and 100% of Incremental Gallons Billed to Town Residents

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<sup>\*\*</sup>Derived by Summing 100% of the Assessed Property Value of All Properties Connected to System Plus 33.33% of Assessed Property Value of All Properties Located in Village Which are Not Connected to System

<sup>\*\*\*</sup>Assumes 58 Households Opt to Hook-In to System

VILLAGE OF MILLBROOK, NY Impact of Expansions & Improvements on Cost to Avg. Household Rate Study: Sewer System with Horseshoe Expansion Prepared By: R.S. Lynch & Company

Village Fiscal Year: June 1st-May 31st	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	2029-2030	2030-2031	20 YR Average
Total Invoiced System Sewer Consumption: Status Quo (Gallons)	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	
Total Expansion Area Sewer Consumption: Horseshoe (Gallons)	7,281,750 127,750	7,281,750								
Average Annual Household Consumption (Gallons)  TOTAL CONSUMPTION:	64,513,750	64,513,750	64,513,750	64,513,750	64,513,750	64,513,750	64,513,750	64,513,750	127,750 64,513,750	
Status Quo Capital Costs (Financed with BAN)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Allocation of BAN Principal to Sewer Capital Assessment (SCA)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Outstanding BAN Balance Subject to BAN Interest	\$0	\$0	\$0	\$0	\$0 \$0	\$0 \$0	\$0	\$0	\$0	
Ending Balance of BAN	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Status Quo Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$1,500,000	\$0	\$0	\$0	\$0	
BAN Balance Converted to Bond (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Status Quo Capital Costs Bond Principal Payments (4%,20 Years)	\$55,239	\$57,449	\$59,747	\$62,136	\$114,995	\$119,594	\$124,378	\$129,353	\$134,527	
Expansion Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Expansion Capital Cost Bond Principal Payments (4%,20 Years)	\$121,665	\$126,532	\$131,593	\$136,857	\$142,331	\$148,024	\$153,945	\$160,103	\$166,507	
ALLOCATION OF BAN AND DEBT PRINCIPAL TO SCA:	\$176,904	\$183,980	\$191,340	\$198,993	\$257,325	\$267,618	\$278,323	\$289,456	\$301,034	
Status Quo System Operating Costs										
Routine Capital Improvements (Not Financed)	\$43,518	\$44,388	\$45,276	\$46,182	\$47,105	\$48,047	\$49,008	\$49,988	\$50,988	
Liability Insurance	\$8,370	\$8,538	\$8,709	\$8,883	\$9,060	\$9,242	\$9,426	\$9,615	\$9,807	
Personal Services: Sewer Clerk	\$7,460	\$7,609	\$7,762	\$7,917	\$8,075	\$8,237	\$8,401	\$8,569	\$8,741	
Employee Benefits	\$495	\$505	\$515	\$525	\$535	\$546	\$557	\$568	\$580	
Administration: System Operator	\$137,414	\$140,162	\$142,966	\$145,825	\$148,741	\$151,716	\$154,750	\$157,845	\$161,002	
Chemicals/Utilities	\$231,454	\$236,083	\$240,805	\$245,621	\$250,533	\$255,544	\$260,655	\$265,868	\$271,185	
Contingency BAN Interest (With BAN Interest of 1.5%)	\$15,000 \$0									
Status Quo Bond Interest	\$36,738	\$34,529	\$32,231	\$29,841	\$87,355	\$82,755	\$77,972	\$72,997	\$67,822	
Incremental Expansion Area Operating Costs (\$/1,000 Gallons)	\$5.71	\$5.82	\$5.94	\$6.06	\$6.18	\$6.30	\$6.43	\$6.56	\$6.69	
Incremental Expansion Area Operating Costs	\$41,558	\$42,389	\$43,237	\$44,101	\$44,983	\$45,883	\$46,801	\$47,737	\$48,691	
Incremental Expansion Area Bond Interest	\$51,502	\$46,636	\$41,574	\$36,311	\$30,836	\$25,143	\$19,222	\$13,064	\$6,660	
TOTAL OPERATING AND INTEREST COSTS:	\$573,509	\$575,838	\$578,073	\$580,205	\$642,226	\$642,114	\$641,793	\$641,252	\$640,478	
TOTAL ANNUAL EXPENSES:	\$750,413	\$759,819	\$769,412	\$779,198	\$899,551	\$909,732	\$920,116	\$930,708	\$941,512	
Invoiced Water System Consumption: In Village (Gallons)*	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	
Invoiced Water System Consumption: Outside Village (Gallons)*	10,143,350	10,143,350	10,143,350	10,143,350	10,143,350	10,143,350	10,143,350	10,143,350	10,143,350	
Consumption Charge/1,000 Gallons: In Village	\$8.89	\$8.93	\$8.96	\$8.99	\$9.95	\$9.95	\$9.95	\$9.94	\$9.93	\$8.89
Consumption Charge/1,000 Gallons: Outside Village	\$8.89	\$8.93	\$8.96	\$8.99	\$9.95	\$9.95	\$9.95	\$9.94	\$9.93	\$8.89
Consumption Charge per Average Household: In Village	\$1,137.88	\$1,142.51	\$1,146.94	\$1,151.17	\$1,274.22	\$1,274.00	\$1,273.36	\$1,272.29	\$1,270.75	\$1,137.64
Consumption Charge per Average Household: Outside Village	\$1,137.88	\$1,142.51	\$1,146.94	\$1,151.17	\$1,274.22	\$1,274.00	\$1,273.36	\$1,272.29	\$1,270.75	\$1,137.64
Consumption Billing Revenues: In Village	\$483,338	\$485,301	\$487,184	\$488,980	\$541,250	\$541,155	\$540,885	\$540,430	\$539,777	
Consumption Billing Revenues: Outside Village	\$90,172	\$90,538	\$90,889	\$91,224	\$100,976	\$100,958	\$100,908	\$100,823	\$100,701	
Other Revenues	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
TOTAL NON-TAX REVENUES:	\$573,509	\$575,838	\$578,073	\$580,205	\$642,226	\$642,114	\$641,793	\$641,252	\$640,478	
Total Assessed Property Value of Current System**	\$320.044.941	\$321,645,166	\$323,253,392	\$324.869.659	\$326,494,007	\$328,126,477	\$329.767.109	\$331,415,945	\$333.073.025	
Total Estimated Assessed Property Value of Expansion Area***	\$24,630,925	\$24,754,080	\$24,877,850	\$25,002,240	\$25,127,251	\$25,252,887	\$25,379,151	\$25,506,047	\$25,633,577	
Total Estimated Assessed Property Value with Expansion Area		\$346,399,246								
		\$0.000531122								
Average Assessed Household Value	\$424,671	\$426,794	\$428,928	\$431,073	\$433,228	\$435,395	\$437,572	\$439,759	\$441,958	
Average Household Sewer Capital Assessment	\$217.96	\$226.68	\$235.75	\$245.18	\$317.05	\$329.73	\$342.92	\$356.64	\$370.90	\$233.63
Sewer Capital Assessment Revenue	\$176,904	\$183,980	\$191,340	\$198,993	\$257,325	\$267,618	\$278,323	\$289,456	\$301,034	
TOTAL REVENUES:	750,413	759,819	769,412	779,198	899,551	909,732	920,116	930,708	941,512	
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Avorago Chargo/Household Including CCA - In Village	¢1 255 05	¢1 200 10	¢1 202 C0	¢1 206 25	¢1 F01 37	¢1 con 72	¢1 616 30	¢1 620 02	¢1 C41 CC	¢1 271 20
Average Charge/Household Including SCA: In Village: Average Charge/Household Including SCA: Outside Village:	\$1,355.85 \$1,355.85	\$1,369.19 \$1,369.19	\$1,382.69 \$1,382.69	\$1,396.35 \$1,396.35	\$1,591.27 \$1,591.27	\$1,603.73 \$1,603.73	\$1,616.28 \$1,616.28	\$1,628.93 \$1,628.93	\$1,641.66 \$1,641.66	\$1,371.26 \$1,371.26

<sup>\*</sup>Assumes 5% of Status Quo Consumed Gallons Billed to Town Residents and 100% of Incremental Gallons Billed to Town Residents

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<sup>\*\*</sup>Derived by Summing 100% of the Assessed Property Value of All Properties Connected to System Plus 33.33% of Assessed Property Value of All Properties Located in Village Which are Not Connected to System

<sup>\*\*\*</sup>Assumes 58 Households Opt to Hook-In to System

VILLAGE OF MILLBROOK, NY
Impact of Expansions & Improvements on Cost to Avg. Household
Rate Study: Water System with Infirmary Expansion
Prepared By: R.S. Lynch & Company

Residents Pay Twice the Village Rate

	Approximate	Past Revenues &	& Expenses	Projected Fu	ture Revenues &	Expenses						
Village Fiscal Year: June 1st-May 31st	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Total Invoiced Water System Consumption: Status Quo (Gallons)	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500
Total Expansion Area Water Consumption: Infirmary (Gallons)	0	0	0	292,000	292,000	292,000	292,000	292,000	292,000	292,000	292,000	292,000
Average Annual Household Consumption (Gallons)	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750
TOTAL CONSUMPTION:	64,495,500	64,495,500	64,495,500	64,787,500	64,787,500	64,787,500	64,787,500	64,787,500	64,787,500	64,787,500	64,787,500	64,787,500
Status Quo Capital Costs (Financed with BAN)	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Allocation of BAN Principal Amount to Annual Expenses	\$0	\$0	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Outstanding BAN Balance Subject to BAN Interest	\$80,000	\$80,000	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ending Balance of BAN	\$80,000	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Status Quo Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$0	\$1,200,000	\$0	\$0	\$0	\$0	\$0	\$0
BAN Balance Converted to Bond (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Status Quo Capital Costs Bond Principal Payments (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$40,298	\$41,910	\$43,586	\$45,330	\$47,143	\$49,029	\$50,990
Expansion Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$0	\$40,238	\$0	\$43,380	\$0	\$0	\$45,025	\$0,550
Expansion Capital Cost Bond Principal Payments (4%,20 Years)	\$0 \$0	\$0 \$0	\$0	\$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0
BAN AND DEBT PRINCIPAL:	\$0 \$0	\$0 \$0	\$80,000	\$0	\$0 \$0	\$40,298	\$41,910	\$43,586	\$45,330	\$47,143	\$49,029	\$50,990
5.17.11.5 5.25. 1.11.10.17.2.	Ţ.	Ŷő.	<b>400,000</b>		Ţ.	ŷ 10,230	Ų 12,510	ψ 13,300	ψ .5,550	Ų 17,12 IS	Ų 13,0 <u>2</u> 3	<b>430,330</b>
Status Quo System Operating Costs												
Routine Capital Improvements (Not Financed)	\$11,577	\$30,000	\$29,600	\$54,057	\$65,000	\$40,000	\$55,000	\$85,000	\$50,000	\$51,000	\$52,020	\$53,060
Liability Insurance	\$4,000	\$6,000	\$6,600	\$6,732	\$6,867	\$7,004	\$7,144	\$7,287	\$7,433	\$7,581	\$7,733	\$7,888
Personal Services: Water Clerk	\$5,200	\$5,400	\$3,900	\$6,000	\$6,120	\$6,242	\$6,367	\$6,495	\$6,624	\$6,757	\$6,892	\$7,030
Employee Benefits	\$398	\$415	\$300	\$398	\$406	\$414	\$422	\$431	\$439	\$448	\$457	\$466
Administration: System Operator	\$61,860	\$55,000	\$61,500	\$62,730	\$63,985	\$65,264	\$66,570	\$67,901	\$69,259	\$70,644	\$72,057	\$73,498
Chemicals/Testing	\$13,263	\$26,000	\$30,000	\$30,600	\$31,212	\$31,836	\$32,473	\$33,122	\$33,785	\$34,461	\$35,150	\$35,853
Utilities/Supplies	\$25,642	\$35,000	\$30,000	\$30,600	\$31,212	\$31,836	\$32,473	\$33,122	\$33,785	\$34,461	\$35,150	\$35,853
Contingency	\$0	\$50,185	\$44,300	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
BAN Interest (With BAN Interest of 1.5%)	\$0	\$0	\$1,800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Status Quo Bond Interest	\$0	\$0	\$0	\$0	\$0	\$48,000	\$46,388	\$44,712	\$42,968	\$41,155	\$39,269	\$37,308
Incremental Expansion Area Operating Costs (\$/1,000 Gallons)	\$0.00	\$0.00	\$0.00	\$1.95	\$1.99	\$2.03	\$2.07	\$2.11	\$2.15	\$2.20	\$2.24	\$2.28
Incremental Expansion Area Operating Costs	\$0	\$0	\$0	\$569	\$581	\$592	\$604	\$616	\$629	\$641	\$654	\$667
Incremental Expansion Area Bond Interest	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL OPERATING AND INTEREST COSTS:	\$121,940	\$208,000	\$208,000	\$216,686	\$230,382	\$256,189	\$272,441	\$303,686	\$269,922	\$272,148	\$274,382	\$276,623
TOTAL ANNUAL EXPENSES:	\$121,940	\$208,000	\$288,000	\$216,686	\$230,382	\$296,488	\$314,351	\$347,272	\$315,252	\$319,291	\$323,411	\$327,613
Invoiced Water System Consumption: In Village (Gallons)*	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	F7 400 00F	E7 400 00E	57,400,995	57,400,995	57,400,995	57,400,995
Invoiced Water System Consumption: In Village (Gallons)*	7,094,505	7,094,505	7,094,505	7,386,505	7,386,505	7,386,505	57,400,995 7,386,505	57,400,995 7,386,505	7,386,505	7,386,505	7,386,505	7,386,505
	, ,			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,	,,	,,	,,	,,		,,	,,
Consumption Charge/1,000 Gallons: In Village**	\$2.99	\$2.99	\$2.99	\$3.00	\$3.19	\$4.11	\$4.36	\$4.81	\$4.37	\$4.42	\$4.48	\$4.54
Consumption Charge/1,000 Gallons: Outside Village**	\$5.98	\$5.98	\$5.98	\$6.00	\$6.38	\$8.22	\$8.71	\$9.62	\$8.74	\$8.85	\$8.96	\$9.08
Consumption Charge per Average Household: In Village	\$382.72	\$382.72	\$382.72	\$384.29	\$408.58	\$525.82	\$557.50	\$615.88	\$559.10	\$566.26	\$573.57	\$581.02
Consumption Charge per Average Household: Outside Village	\$765.44	\$765.44	\$765.44	\$768.58	\$817.16	\$1,051.64	\$1,115.00	\$1,231.77	\$1,118.19	\$1,132.52	\$1,147.13	\$1,162.04
Consumption Billing Revenues: In Village	\$171,629	\$171,629	\$171,629	\$172,334	\$183,226	\$235,801	\$250,008	\$276,191	\$250,724	\$253,937	\$257,213	\$260,555
Consumption Billing Revenues: Outside Village	\$42,425	\$42,425	\$42,425	\$44,353	\$47,156	\$60,687	\$64,343	\$71,082	\$64,528	\$65,354	\$66,198	\$67,058
Other Revenues	-\$92,114	-\$6,054	\$73,946	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL ANNUAL REVENUES:	\$121,940	\$208,000	\$288,000	\$216,686	\$230,382	\$296,488	\$314,351	\$347,272	\$315,252	\$319,291	\$323,411	\$327,613
*Assumes 11% of Status Quo Consumed Gallons Billed to Town Residents and 100% of Incremental Gallons Billed to Town Residents												
**Assumes 100% of Expenses Paid Through Consumption Charges and Town												
Residents Pay Twice the Village Rate												

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VILLAGE OF MILLBROOK, NY Impact of Expansions & Improvements on Cost to Avg. Household Rate Study: Water System with Infirmary Expansion Prepared By: R.S. Lynch & Company

Village Fiscal Year: June 1st-May 31st	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	2029-2030	2030-2031	20 YR Average
Total Invoiced Water System Consumption: Status Quo (Gallons)	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	64,495,500	
Total Expansion Area Water Consumption: Infirmary (Gallons)	292,000	292,000	292,000	292,000	292,000	292,000	292,000	292,000	292,000	292,000	292,000	
Average Annual Household Consumption (Gallons)	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	
TOTAL CONSUMPTION:	64,787,500	64,787,500	64,787,500	64,787,500	64,787,500	64,787,500	64,787,500	64,787,500	64,787,500	64,787,500	64,787,500	
	4.0	4.0	4.0	40	4.0	40	4.0	4.0	4.0	**	4.0	
Status Quo Capital Costs (Financed with BAN)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Allocation of BAN Principal Amount to Annual Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Outstanding BAN Balance Subject to BAN Interest	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Ending Balance of BAN	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Status Quo Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
BAN Balance Converted to Bond (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Status Quo Capital Costs Bond Principal Payments (4%,20 Years)	\$53,030	\$55,151	\$57,357	\$59,651	\$62,037	\$64,519	\$67,099	\$69,783	\$72,575	\$75,478	\$78,497	
Expansion Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Expansion Capital Cost Bond Principal Payments (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
BAN AND DEBT PRINCIPAL :	\$53,030	\$55,151	\$57,357	\$59,651	\$62,037	\$64,519	\$67,099	\$69,783	\$72,575	\$75,478	\$78,497	
Status Quo System Operating Costs												
Routine Capital Improvements (Not Financed)	\$54,122	\$55,204	\$56,308	\$57,434	\$58,583	\$59,755	\$60,950	\$62,169	\$63,412	\$64,680	\$65,974	
Liability Insurance	\$8,045	\$8,206	\$8,370	\$8,538	\$8,709	\$8,883	\$9,060	\$9,242	\$9,426	\$9,615	\$9,807	
Personal Services: Water Clerk	\$7,171	\$7,314	\$7,460	\$7,609	\$7,762	\$7,917	\$8,075	\$8,237	\$8,401	\$8,569	\$8,741	
Employee Benefits	\$475	\$485	\$495	\$505	\$515	\$525	\$535	\$546	\$557	\$568	\$580	
Administration: System Operator	\$74,968	\$76,468	\$77,997	\$79,557	\$81,148	\$82,771	\$84,426	\$86,115	\$87,837	\$89,594	\$91,386	
Chemicals/Testing	\$36,570	\$37,301	\$38,047	\$38,808	\$39,584	\$40,376	\$41,184	\$42,007	\$42,847	\$43,704	\$44,578	
Utilities/Supplies	\$36,570	\$37,301	\$38,047	\$38,808	\$39,584	\$40,376	\$41,184	\$42,007	\$42,847	\$43,704	\$44,578	
Contingency	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	
BAN Interest (With BAN Interest of 1.5%)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Status Quo Bond Interest	\$35,269	\$33,147	\$30,941	\$28,647	\$26,261	\$23,780	\$21,199	\$18,515	\$15,723	\$12,821	\$9,801	
Incremental Expansion Area Operating Costs (\$/1,000 Gallons)	\$2.33	\$2.38	\$2.42	\$2.47	\$2.52	\$2.57	\$2.62	\$2.68	\$2.73	\$2.79	\$2.84	
Incremental Expansion Area Operating Costs	\$680	\$694	\$708	\$722	\$737	\$751	\$766	\$782	\$797	\$813	\$830	
Incremental Expansion Area Bond Interest	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
TOTAL OPERATING AND INTEREST COSTS:	\$278,870	\$281,121	\$283,374	\$285,628	\$287,882	\$290,133	\$292,379	\$294,619	\$296,850	\$299,069	\$301,275	
TOTAL ANNUAL EXPENSES:	\$331,899	\$336,271	\$340,731	\$345,279	\$349,919	\$354,652	\$359,479	\$364,402	\$369,424	\$374,547	\$379,772	
Invoiced Water System Consumption: In Village (Gallons)*	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	57,400,995	
Invoiced Water System Consumption: Outside Village (Gallons)*	7,386,505	7,386,505	7,386,505	7,386,505	7,386,505	7,386,505	7,386,505	7,386,505	7,386,505	7,386,505	7,386,505	
Consumption Charge/1,000 Gallons: In Village**	\$4.60	\$4.66	\$4.72	\$4.78	\$4.85	\$4.91	\$4.98	\$5.05	\$5.12	\$5.19	\$5.26	\$4.57
Consumption Charge/1,000 Gallons: Outside Village**	\$9.20	\$9.32	\$9.44	\$9.57	\$9.70	\$9.83	\$9.96	\$10.10	\$10.24	\$10.38	\$10.52	\$9.14
Consumption Charge per Average Household: In Village	\$588.62	\$596.37	\$604.28	\$612.35	\$620.58	\$628.97	\$637.53	\$646.26	\$655.17	\$664.26	\$673.52	\$585.00
Consumption Charge per Average Household: Outside Village	\$1,177.24	\$1,192.75	\$1,208.57	\$1,224.70	\$1,241.16	\$1,257.94	\$1,275.06	\$1,292.53	\$1,310.34	\$1,328.51	\$1,347.04	\$1,169.99
Consumption Charge per Average mousehold. Outside village	Ş1,111.24	<i>γ</i> 1,1 <i>7</i> 2./ <i>7</i>	31,200.37	31,224.70	Ş1,241.10	31,237.94	31,273.00	Ş1,474.33	ŷ1,31U.34	Ş1,320.31	эт,э <del>4</del> 7.04	Ş1,1UJ.99
Consumption Billing Revenues: In Village	\$263,964	\$267,441	\$270,988	\$274,606	\$278,296	\$282,059	\$285,898	\$289,814	\$293,808	\$297,882	\$302,038	
Consumption Billing Revenues: Outside Village	\$67,935	\$68,830	\$69,743	\$70,674	\$71,624	\$72,592	\$73,580	\$74,588	\$75,616	\$76,664	\$77,734	
Other Revenues	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
TOTAL ANNUAL REVENUES:	\$331,899	\$336,271	\$340,731	\$345,279	\$349,919	\$354,652	\$359,479	\$364,402	\$369,424	\$374,547	\$379,772	

<sup>\*</sup>Assumes 11% of Status Quo Consumed Gallons Billed to Town Residents and 100% of Incremental Gallons Billed to Town Residents

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<sup>\*\*</sup>Assumes 100% of Expenses Paid Through Consumption Charges and Town Residents Pay Twice the Village Rate

VILLAGE OF MILLBROOK, NY
Impact of Expansions & Improvements on Cost to Avg. Household
Rate Study: Sewer System with Infirmary Expansion
Prepared By: R.S. Lynch & Company

·	& Expenses	Projected Future Revenues & Expenses											
Village Fiscal Year: June 1st-May 31st	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Total Invoiced System Sewer Consumption: Status Quo (Gallons)	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000
Total Expansion Area Sewer Consumption: Infirmary (Gallons)	0	0	0	292,000	292,000	292,000	292,000	292,000	292,000	292,000	292,000	292,000	292,000
Average Annual Household Consumption (Gallons)	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750
TOTAL CONSUMPTION:	57,232,000	57,232,000	57,232,000	57,524,000	57,524,000	57,524,000	57,524,000	57,524,000	57,524,000	57,524,000	57,524,000	57,524,000	57,524,000
Status Quo Capital Costs (Financed with BAN)	\$120,000	\$0	\$250,000	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Allocation of BAN Principal to Sewer Capital Assessment (SCA)	\$37,840	\$60,000	\$30,032	\$30,000	\$70,000	\$50,000	\$50,000	\$50,000	\$0	\$0	\$0	\$0	\$0
Outstanding BAN Balance Subject to BAN Interest	\$127,872	\$90,032	\$280,032	\$500,000	\$470,000	\$400,000	\$350,000	\$300,000	\$0	\$0	\$0	\$0	\$0
Ending Balance of BAN	\$90,032	\$30,032	\$250,000	\$470,000	\$400,000	\$350,000	\$300,000	\$250,000	\$0	\$0	\$0	\$0	\$0
Status Quo Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000,000	\$0	\$0	\$0	\$0	\$0
BAN Balance Converted to Bond (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250,000	\$0	\$0	\$0	\$0	\$0
Status Quo Capital Costs Bond Principal Payments (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$41,977	\$43,656	\$45,403	\$47,219	\$49,107	\$51,072
Expansion Capital Costs (Financed with Bond)	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0	\$0 \$0	\$0	\$0 \$0	\$0 \$0
Expansion Capital Cost Bond Principal Payments (4%,20 Years)  ALLOCATION OF BAN AND DEBT PRINCIPAL TO SCA:	\$37,840	\$60,000	\$30,032	\$30,000	\$0 \$70,000	\$50,000	\$50,000	\$0 \$91,977	\$0 \$43,656	\$45,403	\$0 \$47,219	\$49,107	\$0 \$51,072
	\$37,640	300,000	\$30,032	\$30,000	\$70,000	\$30,000	\$30,000	351,577	\$43,030	343,403	347,219	343,107	331,072
Status Quo System Operating Costs	622 522	¢22.000	¢25.000	¢25.700	626 444	627.442	627.005	627.005	¢20.642	620.446	640.204	Ć44 000	Ć44 020
Routine Capital Improvements (Not Financed) Liability Insurance	\$22,533 \$0	\$33,000 \$6,000	\$35,000 \$6,600	\$35,700 \$6,732	\$36,414 \$6,867	\$37,412 \$7,004	\$37,885 \$7,144	\$37,885 \$7,287	\$38,643 \$7,433	\$39,416 \$7,581	\$40,204 \$7,733	\$41,008 \$7,888	\$41,828 \$8,045
Personal Services: Sewer Clerk	\$5,200	\$5,400	\$3,900	\$6,000	\$6,120	\$6,242	\$6,367	\$6,495	\$6,624	\$6,757	\$6,892	\$7,030	\$7,171
Employee Benefits	\$398	\$415	\$300	\$398	\$406	\$414	\$422	\$431	\$439	\$448	\$457	\$466	\$475
Administration: System Operator	\$108,350	\$106,000	\$108,350	\$110,517	\$112,727	\$114,982	\$117,282	\$119,627	\$122,020	\$124,460	\$126,949	\$129,488	\$132,078
Chemicals/Utilities	\$122,908	\$179,850	\$182,500	\$186,150	\$189,873	\$193,670	\$197,544	\$201,495	\$205,525	\$209,635	\$213,828	\$218,104	\$222,466
Contingency	\$0	\$11,335	\$13,370	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
BAN Interest (With BAN Interest of 1.5%)	\$0	\$1,500	\$900	\$7,500	\$7,050	\$6,000	\$5,250	\$4,500	\$0	\$0	\$0	\$0	\$0
Status Quo Bond Interest	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000	\$48,321	\$46,575	\$44,759	\$42,870	\$40,906
Incremental Expansion Area Operating Costs (\$/1,000 Gallons)	\$0.00	\$0.00	\$0.00	\$4.59	\$4.68	\$4.78	\$4.87	\$4.97	\$5.07	\$5.17	\$5.27	\$5.38	\$5.49
Incremental Expansion Area Operating Costs	\$0	\$0	\$0	\$1,340	\$1,367	\$1,394	\$1,422	\$1,451	\$1,480	\$1,509	\$1,540	\$1,570	\$1,602
Incremental Expansion Area Bond Interest	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL OPERATING AND INTEREST COSTS:	\$259,389	\$343,500	\$350,920	\$369,337	\$375,824	\$382,119	\$388,316	\$444,170	\$445,484	\$451,381	\$457,361	\$463,424	\$469,571
TOTAL ANNUAL EXPENSES:	\$297,229	\$403,500	\$380,952	\$399,337	\$445,824	\$432,119	\$438,316	\$536,147	\$489,140	\$496,784	\$504,580	\$512,532	\$520,643
Invoiced Water System Consumption: In Village (Gallons)*	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400
Invoiced Water System Consumption: Outside Village (Gallons)*	2,861,600	2,861,600	2,861,600	3,153,600	3,153,600	3,153,600	3,153,600	3,153,600	3,153,600	3,153,600	3,153,600	3,153,600	3,153,600
Consumption Charge/1,000 Gallons: In Village	\$6.18	\$6.18	\$6.18	\$6.42	\$6.53	\$6.64	\$6.75	\$7.72	\$7.74	\$7.85	\$7.95	\$8.06	\$8.16
Consumption Charge/1,000 Gallons: Outside Village	\$6.18	\$6.18	\$6.18	\$6.42	\$6.53	\$6.64	\$6.75	\$7.72	\$7.74	\$7.85	\$7.95	\$8.06	\$8.16
Consumption Charge per Average Household: In Village	\$791.04	\$791.04	\$791.04 \$791.04	\$821.83	\$836.27 \$836.27	\$850.28 \$850.28	\$864.06 \$864.06	\$988.35 \$988.35	\$991.27	\$1,004.39	\$1,017.70	\$1,031.19	\$1,044.87
Consumption Charge per Average Household: Outside Village	\$791.04	\$791.04		\$821.83	•				\$991.27	\$1,004.39	\$1,017.70	\$1,031.19	\$1,044.87
Consumption Billing Revenues: In Village	\$336,009	\$336,009	\$336,009	\$349,089	\$355,220	\$361,170	\$367,028	\$419,819	\$421,062	\$426,635	\$432,288	\$438,018	\$443,828
Consumption Billing Revenues: Outside Village Other Revenues	\$17,685 -\$94,305	\$17,685 -\$10,194	\$17,685 -\$2,774	\$20,248 \$0	\$20,604 \$0	\$20,949 \$0	\$21,288 \$0	\$24,350 \$0	\$24,422 \$0	\$24,746 \$0	\$25,074 \$0	\$25,406 \$0	\$25,743 \$0
TOTAL NON-TAX REVENUES:	\$259,389	\$343,500	\$350,920	\$369,337	\$375,824	\$382,119	\$388,316	\$444,170	\$445,484	\$451,381	\$457,361	\$463,424	\$469,571
				33	Annual Escalation								
Total Assessed Property Value of Current System**	\$299,269,381	\$301,051,744	\$301,452,039	\$302,959,299		\$305,996,466	\$307,526,449	\$309,064,081	\$310,609,401		\$313,723,260	\$315,291,877	\$316,868,336
Total Estimated Assessed Property Value with Expansion Area	\$0 \$299,269,381	\$0 \$301,051,744	\$0 \$301,452,039	\$2,000,000 \$304,959,299	\$2,010,000 \$306,484,096	\$2,020,050 \$308,016,516	\$2,030,150 \$309,556,599	\$2,040,301 \$311,104,382	\$2,050,503 \$312,659,904	\$2,060,755 \$314,223,203	\$2,071,059 \$315,794,319	\$2,081,414 \$317,373,291	\$2,091,821 \$318,960,157
Total Estimated Assessed Property Value with Expansion Area Sewer Capital Assessment			\$0.000099626	\$304,959,299		\$0.000162329		\$0.000295647	\$0.000139629		\$0.000149523	\$0.000154731	
Average Assessed Household Value	\$400,000	\$400,000	\$400,000	\$402,000	\$404,010	\$406,030	\$408,060	\$410,101	\$412,151	\$414,212	\$416,283	\$418,364	\$420,456
Average Household Sewer Capital Assessment	\$50.80	\$80.00	\$39.85	\$39.55	\$92.27	\$65.91	\$65.91	\$121.25	\$57.55	\$59.85	\$62.24	\$64.73	\$67.32
Sewer Capital Assessment Revenue	\$38,007	\$60,210	\$30,032	\$30,000	\$70,000	\$50,000	\$50,000	\$91,977	\$43,656	\$45,403	\$47,219	\$49,107	\$51,072
TOTAL REVENUES:	297,396	403,710	380,952	399,337	445,824	432,119	438,316	536,147	489,140	496,784	504,580	512,532	520,643
Average Charge/Household Including SCA : In Village:	\$841.84	\$871.04	\$830.89	\$861.38	\$928.54	\$916.19	\$929.98	\$1,109.59	\$1,048.82	\$1,064.24	\$1,079.94	\$1,095.93	\$1,112.19
Average Charge/Household Including SCA: Outside Village:	\$841.84	\$871.04	\$830.89	\$861.38	\$928.54	\$916.19	\$929.98	\$1,109.59	\$1,048.82	\$1,064.24	\$1,079.94	\$1,095.93	\$1,112.19
*Assumes 5% of Status Oug. Consumed Gallons Billed to Town Residents	•												

<sup>\*</sup>Assumes 5% of Status Quo Consumed Gallons Billed to Town Residents and 100% of Incremental Gallons Billed to Town Residents

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<sup>\*\*</sup>Derived by Summing 100% of the Assessed Property Value of All Properties Connected to System Plus 33.33% of Assessed Property Value of All Properties Located in Village Which are Not Connected to System

<sup>\*\*\*</sup>Assumes \$250/Square Foot (8,000 Square Feet)

VILLAGE OF MILLBROOK, NY
Impact of Expansions & Improvements on Cost to Avg. Household
Rate Study: Sewer System with Infirmary Expansion
Prepared By: R.S. Lynch & Company

Village Fiscal Year: June 1st-May 31st	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	2029-2030	2030-2031	20 YR Average
Total Invoiced System Sewer Consumption: Status Quo (Gallons)	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	57,232,000	
Total Expansion Area Sewer Consumption: Infirmary (Gallons)	292,000	292,000	292,000	292,000	292,000	292,000	292,000	292,000	292,000	292,000	
Average Annual Household Consumption (Gallons)	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	127,750	
TOTAL CONSUMPTION:	57,524,000	57,524,000	57,524,000	57,524,000	57,524,000	57,524,000	57,524,000	57,524,000	57,524,000	57,524,000	
Status Quo Capital Costs (Financed with BAN)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Allocation of BAN Principal to Sewer Capital Assessment (SCA)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Outstanding BAN Balance Subject to BAN Interest	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Ending Balance of BAN	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Status Quo Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$0	\$1,500,000	\$0	\$0	\$0	\$0	
BAN Balance Converted to Bond (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Status Quo Capital Costs Bond Principal Payments (4%,20 Years)	\$53,115	\$55,239	\$57,449	\$59,747	\$62,136	\$114,995	\$119,594	\$124,378	\$129,353	\$134,527	
Expansion Capital Costs (Financed with Bond)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Expansion Capital Cost Bond Principal Payments (4%,20 Years)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
ALLOCATION OF BAN AND DEBT PRINCIPAL TO SCA:	\$53,115	\$55,239	\$57,449	\$59,747	\$62,136	\$114,995	\$119,594	\$124,378	\$129,353	\$134,527	
Status Quo System Operating Costs											
Routine Capital Improvements (Not Financed)	\$42,665	\$43,518	\$44,388	\$45,276	\$46,182	\$47,105	\$48,047	\$49,008	\$49,988	\$50,988	
Liability Insurance	\$8,206	\$8,370	\$8,538	\$8,709	\$8,883	\$9,060	\$9,242	\$9,426	\$9,615	\$9,807	
Personal Services: Sewer Clerk	\$7,314	\$7,460	\$7,609	\$7,762	\$7,917	\$8,075	\$8,237	\$8,401	\$8,569	\$8,741	
Employee Benefits	\$485	\$495	\$505	\$515	\$525	\$535	\$546	\$557	\$568	\$580	
Administration: System Operator	\$134,720	\$137,414	\$140,162	\$142,966	\$145,825	\$148,741	\$151,716	\$154,750	\$157,845	\$161,002	
Chemicals/Utilities	\$226,916	\$231,454	\$236,083	\$240,805	\$245,621	\$250,533	\$255,544	\$260,655	\$265,868	\$271,185	
Contingency	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	
BAN Interest (With BAN Interest of 1.5%)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Status Quo Bond Interest	\$38,863	\$36,738	\$34,529	\$32,231	\$29,841	\$87,355	\$82,755	\$77,972	\$72,997	\$67,822	
Incremental Expansion Area Operating Costs (\$/1,000 Gallons)	\$5.60	\$5.71	\$5.82	\$5.94	\$6.06	\$6.18	\$6.30	\$6.43	\$6.56	\$6.69	
Incremental Expansion Area Operating Costs	\$1,634	\$1,666	\$1,700	\$1,734	\$1,768	\$1,804	\$1,840	\$1,877	\$1,914	\$1,953	
Incremental Expansion Area Bond Interest	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
TOTAL OPERATING AND INTEREST COSTS:	\$475,802	\$482,116	\$488,514	\$494,996	\$501,561	\$568,210	\$572,927	\$577,647	\$582,365	\$587,079	
TOTAL ANNUAL EXPENSES:	\$528,916	\$537,355	\$545,963	\$554,742	\$563,698	\$683,205	\$692,522	\$702,025	\$711,719	\$721,606	
Invoiced Water System Consumption: In Village (Gallons)*	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	54,370,400	
Invoiced Water System Consumption: Outside Village (Gallons)*	3,153,600	3,153,600	3,153,600	3,153,600	3,153,600	3,153,600	3,153,600	3,153,600	3,153,600	3,153,600	
Consumption Charge/1,000 Gallons: In Village	\$8.27	\$8.38	\$8.49	\$8.61	\$8.72	\$9.88	\$9.96	\$10.04	\$10.12	\$10.21	\$8.33
Consumption Charge/1,000 Gallons: Outside Village	\$8.27	\$8.38	\$8.49	\$8.61	\$8.72	\$9.88	\$9.96	\$10.04	\$10.12	\$10.21	\$8.33
Consumption Charge per Average Household: In Village	\$1,058.73	\$1,072.78	\$1,087.02	\$1,101.44	\$1,116.05	\$1,264.36	\$1,274.85	\$1,285.36	\$1,295.86	\$1,306.34	\$1,065.65
Consumption Charge per Average Household: Outside Village	\$1,058.73	\$1,072.78	\$1,087.02	\$1,101.44	\$1,116.05	\$1,264.36	\$1,274.85	\$1,285.36	\$1,295.86	\$1,306.34	\$1,065.65
Consumption Billing Revenues: In Village	\$449,717	\$455,685	\$461,732	\$467,859	\$474,064	\$537,059	\$541,518	\$545,979	\$550,439	\$554,894	
Consumption Billing Revenues: Outside Village	\$26,085	\$26,431	\$26,781	\$27,137	\$27,497	\$31,151	\$31,409	\$31,668	\$31,927	\$32,185	
Other Revenues	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
TOTAL NON-TAX REVENUES:	\$475,802	\$482,116	\$488,514	\$494,996	\$501,561	\$568,210	\$572,927	\$577,647	\$582,365	\$587,079	
	4040 450 670	4000 044 044	4004 645 466	4000 050 000	4224.050.550	4000 404 007	4000 40C 477	4000 767 400	4004 445 045	4000 070 005	
Total Assessed Property Value of Current System**	\$318,452,678 \$2,102,280	\$320,044,941 \$2,112,792	\$321,645,166 \$2,123,356	\$323,253,392 \$2,133,972	\$324,869,659	\$326,494,007 \$2,155,365	\$328,126,477 \$2,166,142	\$329,767,109	\$331,415,945	. , ,	
Total Estimated Assessed Property Value of Expansion Area***	. , ,				\$2,144,642			\$2,176,973	\$2,187,858	\$2,198,797	
Total Estimated Assessed Property Value with Expansion Area Sewer Capital Assessment	\$320,554,958 \$0.000165696	\$322,157,733 \$0.000171466		\$325,387,364	\$327,014,301	\$328,649,372	\$330,292,619	\$331,944,082	\$333,603,803 \$0.000387745		
•		•	•	•	•	•	•	•	-		
Average Assessed Household Value	\$422,558 \$70.02	\$424,671	\$426,794	\$428,928	\$431,073	\$433,228	\$435,395	\$437,572	\$439,759 \$170.51	\$441,958	\$94.84
Average Household Sewer Capital Assessment		\$72.82	\$75.73	\$78.76	\$81.91	\$151.59	\$157.65	\$163.96		\$177.34	\$94.84
Sewer Capital Assessment Revenue	\$53,115	\$55,239	\$57,449	\$59,747	\$62,136	\$114,995	\$119,594	\$124,378	\$129,353	\$134,527	
TOTAL REVENUES:	528,916	537,355	545,963	554,742	563,698	683,205	692,522	702,025	711,719	721,606	
Average Charge/Household Including SCA: In Village:	\$1,128.75	\$1,145.60	\$1,162.75	\$1,180.20	\$1,197.96	\$1,415.94	\$1,432.50	\$1,449.31	\$1,466.37	\$1,483.68	\$1,160.49
Average Charge/Household Including SCA: Outside Village:	\$1,128.75	\$1,145.60	\$1,162.75	\$1,180.20	\$1,197.96	\$1,415.94	\$1,432.50	\$1,449.31	\$1,466.37	\$1,483.68	\$1,160.49

<sup>\*</sup>Assumes 5% of Status Quo Consumed Gallons Billed to Town Residents and 100% of Incremental Gallons Billed to Town Residents

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<sup>\*\*</sup>Derived by Summing 100% of the Assessed Property Value of All Properties Connected to System Plus 33.33% of Assessed Property Value of All Properties Located in Village Which are Not Connected to System

<sup>\*\*\*</sup>Assumes \$250/Square Foot (8,000 Square Feet)

## VILLAGE OF MILLBROOK, NY Impact of Expansions & Improvements on Cost to Avg. Household Rate Study: Status Quo Capital Improvements

Prepared By: R.S. Lynch & Company

Water	2011-2012		2012-2013		2013-2014		2014-2015		015-2016
Valve Replacement Program	\$ 36,557.00	\$	35,000.00	\$	35,000.00	\$	35,000.00	\$	35,000.00
Hydrant Replacement Program	\$ 2,500.00			\$	5,000.00	\$	20,000.00		
Hand Held and Software upgrade	\$ 15,000.00								
Backup Generator		\$	30,000.00						
Water Meter Replacement				\$	275,000.00				
Water Tank Replacement				\$	725,000.00				
GUIDI Filtration System				\$	200,000.00				
Valve Replacement Program									
Turbine Pump and Motor								\$	50,000.00
Annual Totals	\$ 54,057.00	\$	65,000.00	\$	1,240,000.00	\$	55,000.00	\$	85,000.00

Sewer	2011-2012		2012-2013		2013-2014		2014-2015		015-2016
Inflow and Infiltration Abatement	\$ 31,000.00	\$	31,414.00	\$	32,412.00	\$	32,885.00	\$	31,000.00
Other	\$ 4,700.00							\$	6,885.00
Chlor/Dechlor Project	\$ 250,000.00								
Energy Effeciency Study		\$	5,000.00						
Preliminary Plant Improvement Study				\$	5,000.00	\$	5,000.00		
Overflow Retention Basin								\$ 1,	000,000.00
Annual Totals	\$ 285,700.00	\$	36,414.00	\$	37,412.00	\$	37,885.00	\$ 1	,037,885.00