

MAP, PLAN & REPORT

SOUTH CAIRO WATER DISTRICT FORMATION

Prepared For:

TOWN OF CAIRO

512 Main Street, P.O. Box 728 Cairo, NY 12413

28 Madison Avenue Extension Albany, NY 12203 518.452.1290





TABLE OF CONTENTS

1.0 Introduction
2.0 PROPOSED DISTRICT & BENEFITTED PROPERTIES3
3.0 GENERAL PLAN OF IMPROVEMENTS5
4.0 DESCRIPTION OF FACILITIES & PROJECTED DEMAND5
5.0 Proposed District Operations7
6.0 REGULATORY REVIEW & APPROVAL PRIOR TO CONSTRUCTION7
7.0 MAXIMUM AMOUNT TO BE EXPENDED7
8.0 Cost of Hook Up Fees – If Any10
9.0 DETAILED EXPLANATION OF COSTS11
10. Cost to the Typical Property11
11.0 METHOD OF FINANCE
12.0 STATEMENT AS TO THE BENEFIT ASSESSMENT13
13.0 DISTRICT FORMATION PROCESS
14.0 SUMMARY14

Figures

Figure 1 – Water District Map

Attachments

Attachment A – Village of Catskill Water Rules and Regulations

Attachment B – Village of Catskill Water Rate Charges

1.0 Introduction & Back Ground

The American Thermostat Superfund Site in located in Greene County, NY in the Town of Catskill at 2037 Route 23B. In 1981, the New York State Department of Environmental Conservation discovered that American Thermostat employees were improperly disposing of chemicals at the facility. Workers had been pouring waste organic solvents down drains attached to an abandoned septic system for several years and dumping solvents and sludges on the parking lot. State health personnel tested drinking water wells in the vicinity of the facility and found them to be contaminated with trichloroethylene (TCE) and other volatile organic compounds (VOCs), including tetrachloroethylene (PCE).

In 1990, a source control remedy was selected for the American Thermostat site. The remedy included decontamination of the building, excavation of the on-property contaminated soil above the water table, treatment using low temperature thermal desorption, and redeposition, and extraction, treatment, and reinjection of the contaminated on- and off-property groundwater. The remedies were implemented from 1992 to 1998. Since 1998, the groundwater extraction and treatment system has been addressing the contaminated groundwater located on the site property and downgradient. The EPA previously extended the existing Catskill water district pipeline to affected properties up to the Town of Catskill and Town of Cairo border in 1992.

In 1998, VOC contamination was detected in the two wells at Country Estates and in three residential wells along Scotch Rock Road, located in the Town of Cairo; all five wells were located beyond the previous limits of the contaminated groundwater plume. Granular activated carbon (GAC) treatment systems were installed on these wells. Until 2022, the finished water sample results for PCE in the Country Estates wells were consistently below the drinking water standards; the finished water sample collected at this time showed PCE levels above the drinking water standard. This exceedance was attributed to breakthrough of the carbon in the GAC treatment system due to lack of maintenance. The carbon was subsequently changed for both the primary supply well and the emergency supply well.

NYSDOH and NYSDEC worked with the Town of Cairo to offer private well sampling to those residences using potentially-affected private wells. Approximately 20 wells were sampled; PCE breakdown product cis-1,2-dichloroethene was detected above its drinking water standard in one well and low levels of VOCs (1,2-dichloropropane in two wells and bromodichloromethane, bromoform, and dibromochloromethane in one well) were detected in three other wells. EPA and the various state and local entities agreed that the

existing waterline should be extended to Country Estates and all the affected and potentially affected private wells in the area that were targeted for sampling.

Based upon these findings, in combination with only limited private well sampling results and uncertainties related to the hydrogeology, the extent of the contaminant plume, and the impact that taking the Country Estates supply well offline will have on the groundwater plume, EPA, NYSDEC, and the New York State Department of Health have concluded that the existing waterline should be extended to encompass Country Estates and all the affected and potentially affected private wells in the area. Specifically, the existing waterline would be extended from its current terminus, approximately 400 feet from Country Estates, to Country Estates, to and around Scotch Rock Road, to and around Route 23B to R McLaren Road, and back to the junction with Country Estates, which is 32 tax parcels.

The Village's water system has a New York State Department of Environmental Conservation (NYSDEC) permit allowing a withdrawal of 2.5 million gallons per day (MGD). The water treatment plant is rated for 2 million gallons per day. As per the intermunicipal agreement (IMA) between the Village and Town of Catskill, the Town of Catskill is permitted to purchase up to 330,000 gallons per day (GPD) of potable water from the Village. The water treatment plant average daily demand is 1.2 million gallons per day, with the highest demand days reaching 1.6 million gallons. There is adequate treatment and supply capacity at the water treatment plant and distribution system to supply the South Cairo Water District.

Table 1. Catskill Water Capacity

Source	Peak	Peak Withdrawal	Remaining
Capacity	Production	reak wiilialawai	Capacity
2.5 MGD	2.0 MGD	1.6 MGD	0.4 MGD

This project will be designed and permitted in phases. Phase 1 includes the water main extension and connection to the Country Estates Mobile Home Park. The costs associated with the design and permitting for phase 1 have been paid for by Greene County. Construction for phase 1 is planned to begin in the spring of 2025. 90% of the construction cost for phase 1 will be paid for by the Environmental Protection Agency. The remaining 10% will be contributed by the Village of Catskill through in-kind services and the New York State Department of Environmental Conservation.

Phase 2 of this project will include a new water main to and around Scotch Rock Road, to and around Route 23B to R McLaren Road, and back to the junction with Country Estates. Funding for the design of phase 2 would be provided in the second quarter of 2025 by the EPA, and construction of phase 2 would begin in spring of 2026.

The proposed Water District described herein is defined by the lands contained in the tax parcels listed and described in Table 2 below and as shown in Figure 1. This Map, Plan and Report presents the information necessary for the Town of Cairo to create this Water District in accordance with Town Law, Article 12 of the New York State Consolidated Laws.

2.0 Proposed District & Benefitted Properties

The area in question includes properties around County Route 23B, Scotch Rock Road, and R McLaren Road. The proposed water district described herein is defined by the lands contained in the tax parcels listed and described in Table 2 and as shown in Figure 1.

Table 2. District Formation Parcel Description

Tax ID	Owner	Address	Zoning	Use
119.00-4-2	Duncan, Edward	148 Scotch Rock Rd	RR	1 Family Res
119.00-4-3	Conklin, LIFE ESTATE, Evelyn M	151 & 159 Scotch Rock Rd	RR	2 Family Res
119.00-4-4	Klinke Living Trust, Jane M	123 Scotch Rock Rd	RR	1 Family Res
119.00-4-5	Conklin, Evelyn M	140 Scotch Rock Rd	RR	Seasonal res
119.00-4-6	Duncan, Edward	Scotch Rock Rd	RR	Rural vac
119.00-4-14	Kubler, Robert	83 Scotch Rock Rd	RR	1 Family Res
119.00-4-17	VanKleeck, Clifford M.	2382 Route 23B	C-MU	2 Family Res
119.00-4-18	Davis, Willie	2386 Route 23B	C-MU	1 Family Res
119.00-4-19	Berg, Alan G	221 Scotch Rock Rd	RR	2 Family Res
119.00-4-20	Liuzza, Camille	2392 Route 23B	C-MU	Motel
119.00-4-21.1	Molloy, Patrick	263 Scotch Rock Rd	C-MU	1 Family Res
119.00-4-21.2	Lennon, Kylie	2394 Route 23B	C-MU	Mfg housing
119.00-4-24	Villela, Michael	93 Scotch Rock Rd	C-MU	1 Family Res
119.00-4-25	Flammer, Estate of, Bernhard	2376 Route 23B	C-MU	1 use sm bld
119.00-4-26	Priputen, Jean	70 Scotch Rock Rd	RR	1 Family Res
119.00-4-27	Lennon, Ryan Michael	2258 Route 23B	C-MU	1 Family Res
119.00-4-28	Davis, Willie B	2380 Route 23B	C-MU	Mtor veh srv
119.00-4-29	Villela, Michael	2378 Route 23B	C-MU	Apartment
119.00-4-30	Villela, Michael	Route 23B	C-MU	Rural vac
119.00-5-2	Community Dev Inst Head Start,	2395 Route 23B	C-MU	Spec. school
119.00-5-3.1	McKeown, Michael	2393 Route 23B	C-MU	2 Family Res
119.00-5-4	Abitabile, Jamie	2389 & 2391 Route 23B	C-MU	Res Multiple
119.00-5-7	Hart, Nathanael	2387 Route 23B	C-MU	1 Family Res
119.00-5-9	Ricci, Maureen	Route 23B	C-MU	Rural vac
119.00-5-10	Ricci, Maureen	Route 23B	C-MU	Rural vac
119.00-5-11	Jontammy LLC,	2327 Route 23B	C-MU	Mfg hsing pk
119.00-5-12	Abea, Frances R	46 R McLaren Rd	C-MU	Mfg housing
119.00-5-13	Sherman, Ellen	45 R McLaren Rd	C-MU	Mfg housing
119.00-5-14	Wahmann, Bridget	14 R McLaren Rd	C-MU	Rural res
119.01-2-9	Jaycox, Aleathe	2417 Route 23B	C-MU	1 Family Res
119.01-2-10	Argueta, Carlos	2411 Route 23B	C-MU	Mfg housing
119.01-2-11	Dorval, Ruth	Route 23B	C-MU	Vac w/imprv

3.0 GENERAL PLAN OF IMPROVEMENTS

The improvements associated with the proposed district includes water lines, water services, hydrants, and valves, as applicable, anticipated to be installed. Hydrants and valves will be installed to meet the regulatory requirements. Currently, the Village of Catskill has excess capacity within its water system and a portion of the excess capacity can be assigned to the users in the South Cairo Water District, provided adequate infrastructure is in place.

4.0 DESCRIPTION OF FACILITIES & PROJECTED DEMAND

The Village of Catskill owns, operates, and maintains a water system consisting of a water filtration plant, storage, transmission main and distribution system. The improvements associated with the proposed District include water lines, water services, hydrants, and valves anticipated to be installed. Given the information available at this time, it is expected that the project will include installation of approximately 6,000 linear feet water line, water services, hydrant(s) and other ancillary items. Hydrants and valves will be installed to meet the regulatory requirements.

Table 3A. Water Demand - Phase 1 - Country Estates

Description	Number of Buildings	Hydraulic Loading	Average Daily Flow	Average Minute Flow	Peak Minute Flow (factor of 4)
Double Wide	25	330	8,250	5.7	22.8
Mobile Homes		GPD	GPD	GPM	GPM
Single Wide	34	220	7,480	5.2	20.8
Mobile Homes		GPD	GPD	GPM	GPM
Sales Office/	1	300	300	0.2	0.8
Club House		GPD	GPD	GPM	GPM
Caretaker Home	1	440 GPD	440 GPD	0.3 GPM	1.2 GPM
Total	61	-	16,470 GPD	11.4 GPM	45.6 GPM

Water Design Flow based on New York State Design Standards for Intermediate Sized Wastewater Systems – Hydraulic loading rates based on a new facility with water saving plumbing fixtures.

Table 3B. Water Demand - Phase 2 - Scotch Rock Rd, R McLaren Rd & route 23B

Tax ID	Description	# of Bedrooms	Hydraulic Loa	Aveage Minute flow	Peak Flow Per Minute (Factor of 4)
119.00-4-2	1 Family Res	4	440	0.3	1.2
119.00-4-3	2 Family Res	5	550	0.4	1.6
119.00-4-4	1 Family Res	3	330	0.2	0.8
119.00-4-5	Seasonal res	4*	440	0.3	1.2
119.00-4-6	Rural vac	NA	0	0	0
119.00-4-14	1 Family Res	3	330	0.2	0.8
119.00-4-17	2 Family Res	4	440	0.3	1.2
119.00-4-18	1 Family Res	3	330	0.2	0.8
119.00-4-19	2 Family Res	5	550	0.4	1.6
119.00-4-20	Motel	12	1320	0.9	3.6
119.00-4-21.1	1 Family Res	3	330	0.2	0.8
119.00-4-21.2	Mfg housing	3	330	0.2	0.8
119.00-4-24	1 Family Res	3	330	0.2	0.8
119.00-4-25	Pork Store	NA**	250	0.2	0.8
119.00-4-26	1 Family Res	3	330	0.2	0.8
119.00-4-27	1 Family Res	2	220	0.2	0.8
119.00-4-28	Mtor veh srv	NA***	1000	0.7	2.8
119.00-4-29	Apartment	4	440	0.3	1.2
119.00-4-30	Rural vac	NA	0	0	0
119.00-5-2	Post Office	NA****	375	0.3	1.2
119.00-5-3.1	2 Family Res	3	330	0.2	0.8
119.00-5-4	Res Multiple	4	440	0.3	1.2
119.00-5-7	1 Family Res	3	330	0.2	0.8
119.00-5-9	Rural vac	NA	0	0	0
119.00-5-10	Rural vac	NA	0	0	0
119.00-5-12	Mfg housing	4*	440	0.3	1.2
119.00-5-13	Mfg housing	4*	440	0.3	1.2
119.00-5-14	Rural res	2	220	0.2	0.8
119.01-2-9	1 Family Res	2	220	0.2	0.8
119.01-2-10	Mfg housing	4*	440	0.3	1.2
119.01-2-11	Vac w/imprv	NA	0	0	0
	Total		11195	7.7	30.8

^{*}Dwellings with an unlisted number of bedrooms are assumed to be 4

Water Design Flow based on New York State Design Standards for Intermediate Sized Wastewater Systems – Hydraulic loading rates based on a new facility with water saving plumbing fixtures.

The average daily flow for phase 1 is 16,470 GPD and for phase 2 its 11,195 GPD. The Total daily average flow is estimated to be 27,665 GPD. The peak flow demand is estimated at 76.4 GPM. It is proposed that the Village supply up to 150,000 GPD to the South Cairo Water District to account for potential growth and peak demand.

^{**}The store totals 2,186 SQFT. The hydraulic demand for a grocery store is 0.1 GPD/SQFT. Plus 2 Employees 15 GPD/Employee.

^{***}Owners Estimate for peak daily demand use 1,000 GPD.

^{****}Whole Budling is 7,678 SQFT, and could serve up to 25 employees 15 GPD/Employee.

The improvements associated with the proposed district includes water lines, water services, hydrants, and valves, as applicable, anticipated to be installed. Hydrants and valves will be installed to meet the regulatory requirements. Currently, the Village of Catskill has excess capacity within its water system and a portion of the excess capacity can be assigned to the users in the water district provided adequate infrastructure is in place.

5.0 Proposed District Operations

The Village of Catskill shall own all infrastructure located within the South Cairo Water District. The Town cannot utilize the water infrastructure that is owned by the Village, and cannot develop cross-connections into other water districts. The Village of Catskill will be responsible for the operation and maintenance of the South Cairo Water District. Water meters will be installed at each user site in accordance with The Village of Catskill's standards (except for the Country Estates sub-meters). The Village of Catskill will be responsible for maintaining the Country Estates master meter, and the owner of Country Estates will be responsible for the maintaining the sub-meters. The Village will perform all the water meter readings, excluding the Country Estates sub-meters. The Village will bill each user within the Water District on a quarterly basis. The quarterly water bill will be charged to the owner of Country Estates and then divided amongst the tenants based on their individual water usage. The water services will be privately owned from the corporation stop all the way to the point of service.

6.0 REGULATORY REVIEW & APPROVAL REQUIRED

Design and construction of the proposed water system will be performed in conformance with Recommended Standards for Water Works, Latest Edition – Policies for the Review, and Approval of Plans and Specifications for Public Water Supplies and applicable NYSDOH Design Standards. Additional site-specific standards such as those specified and recommended by agencies such as the Greene County Highway Department, Environmental Protection Agency, New York State Department of Environmental Conservation and New York State Department of Health a will be utilized as applicable. Regulatory review and approval will be obtained prior to the initiation of construction.

7.0 COST ESTIMATE

Preliminary construction costs including all material, labor, engineering, legal and administration costs estimated to be approximately \$4,044,135.67. Engineering and Construction period services are expected to cost \$475,500, totaling \$4,519,635.67.

Construction will be done in two phases. A more detailed cost estimate is provided in Table 4. Given that the entire project is being funded through the Environmental Protection Agency, and New York State. The Village of Catskill's contribution will be through in-kind services. The maximum amount to be expended by the Town of Cairo and the Village of Catskill is \$0.00

Table 4A. Construction Cost Estimate

	Opinion of Probable Cost	Am	er	ica	an Ther	mc	ostat Reme	dia	ation
		Initial Date:	9/20	/202	24		Project Number:	XXX	
	American Thermostat Remediation		Preli	imin	ary		Calculated By:	MD	
		Revision Date:	10/9	/202	24		Checked By:		
Item No.	ltem	Quantity	Unit		\$/Unit	cos	TS Total		Subtotals
	Country Estates Connection								
1	Mobilization 5%	1	LS	\$	17,830.00	\$	17,830.00		
2	Ten Inch HDPE Water Main - Open Cut	330		\$	150.00	\$	49,500.00		
3	Eight Inch HDPE Water Main - Boring	40	LF	\$	240.00	\$	9,600.00		
4	Hydrant Valve and Lead Assembly	1	EΑ	\$	12,500.00	\$	12,500.00		
5	Two Inch Copper or HDPE	40	LF	\$	75.00	\$	3,000.00		
6	Country Estates Wet Well Valve Vault Conversion		ΕA	\$	150,000.00	\$	150,000.00		
7	Bollards		EA	\$	1,000.00	\$	2,000.00		
8	Ten Inch Gate Valve		EA	\$	8,000.00	\$	8,000.00		
9			EA	\$	6,500.00	\$	6,500.00		
	Eight Inch Gate Valve			-	•	_			
10	Aggregates and Fill	400		\$	60.00	\$	24,000.00		
11	Water Meter Submetering		EA	\$	1,500.00	\$	91,500.00		
12	Traffic Control 3%		LS	\$	5,400.75		5,400.75		
13	General Site Restoration Work and Erosion Control 4%	1	LS	\$	7,201.00	\$	7,201.00		
	Construction Subtotal in 2024 Dollars							\$	387,031.75
	Construction Subtotal in 2025 Dollars (Inflation=5%)							\$	406,383.34
	Project Contingency 20%							\$	487,660.01
	Village Legal and Admin (2%)							\$	9,753.20
	TOTAL							\$	497,413.21
	The Loop (Main St, Scotch Rock Rd, and R McLaren Rd)								
14	Mobilization	1	LS	\$	101,575.00	\$	101,575.00		
15	Ten Inch HDPE Water Main - Open Cut	1950		\$	150.00	\$	292,500.00		
16	Eight Inch HDPE Water Main - Open Cut	3650		\$	125.00	\$	456,250.00		
17	Two Inch Copper or HDPE on R McLaren Rd - Open Cut	650		\$	75.00	\$	48,750.00		
18	Hydrant Valve and Lead Assembly		EA	\$	12,500.00	\$	200,000.00		
						_	· · · · · · · · · · · · · · · · · · ·		
19	Rock Excavation (estimate to be revised after geotechnical review)	800		\$	350.00	\$	280,000.00		
20	Water Meter and Installation (not including meter pit)		EA	\$	1,500.00	\$	30,000.00		
21	Water Service Fittings		EA	\$	600.00	\$	12,000.00		
22	Service Piping Direct Bury	2000		\$	65.00	\$	130,000.00		
23	Sercie Piping Pushed Casing	300	LF	\$	110.00	\$	33,000.00		
24	Ten Inch Gate Valve	2	EΑ	\$	8,000.00	\$	16,000.00		
25	Eight Inch Gate Vale		EΑ	\$	6,500.00	\$	13,000.00		
26	Aggregates and Fill	6500	CY	\$	60.00	\$	390,000.00		
27	Air Relief Vault		ΕA		65,000.00	\$	130,000.00		
28	Traffic Control 3%	1	LS	\$	60,945.00		60,945.00		
29	General Site Restoration and Erosion Control 4%		LS	\$	81,260.00		81,260.00		
30	Pavement Restoration 3%		LS	\$	60,945.00	\$	60,945.00		
	Construction Subtotal in 2024 Dollars			Ė	,	Ť	2-1,2-12-00	\$	2,336,225.00
	Construction Subtotals in 2026 Dollars (inflation 5%)							\$	2,575,688.06
	Project Contingency 35%							\$	3,477,178.88
	Village Legal and Admin (2%)							\$	69,543.58
	TOTAL	 		\vdash				\$	3,546,722.46
	IVIAL	 	<u> </u>	\vdash		_		Ψ	3,340,122.40
	TOTAL PROJECT CONSTRUCTION COSTS							¢	3 064 030 00
	TOTAL PROJECT CONSTRUCTION COSTS TOTAL VILLAGE ADMIN COSTS							\$	3,964,838.89 79,296.78

Table 4B. Engineering Cost Estimate

Opinion of Probable Cost		А	me	ric	an Ther	mo	stat Reme	diat	tion
		Initial Date:					Project Number:	XXX	
	Water Main Extension Desgin	Design Stage:					Calculated By:		
		Revision Date:		_			Checked By:		
Item No.	Item	Quantity	Unit		\$/Unit	COST	Total	l	Subtotals
	Country Estates Connection Design	1		┢	ψ/OΠIL		Total	\vdash	
	Survey Engineering Report Design,Plans,Bid Documents,Specifications, Easements, SEQR Bidding and Construction Period Services	LS LS LS	1 1	\$ \$ \$	2,000.00 10,000.00 36,000.00 22,000.00	\$	2,000.00 10,000.00 36,000.00 22,000.00		
								\$	70,000.00
	The Loop (Main St, Scotch Rock Rd, and R McLaren Rd)								
	Survey Geotechnical Engineering Report Map Plan and Report Design,Plans,Bid Documents,Specifications, Easements, SEQR Bell Brook Stream Disturbance Permit Bidding and Construction Period Services	LS LS LS LS	1 1 1 1	\$ \$ \$ \$ \$ \$ \$	29,000.00 18,500.00 15,000.00 15,000.00 8,000.00 155,000.00	\$ \$ \$ \$	29,000.00 18,500.00 15,000.00 165,000.00 8,000.00 155,000.00	\$	405,500.00
	 TOTAL	+		┡				\$	475,500.00
	TOTAL			⊢				•	470,000.00

8.0 Cost of Hook Up Fees - If Any

The cost of plumbing connections to the water main shall be borne by Environmental Protection Agency and New York State when connected. If a user chooses not to connect at the time of construction, and later decides to connect, the cost will be borne on the property owner, including the Village's connection fee. No hook up fees will be imposed on the users during phase 1 or phase 2 of this project. Future hookups must be approved by the Catskill Water Department using only approved materials.

9.0 DETAILED EXPLANATION OF COSTS

9.1 DEBT SERVICE

Debt service is typically paid by the owners of all existing properties in the district, including those which are currently vacant, unoccupied, or undeveloped. The total project cost is estimated to be \$4,519,635.67. Because the total cost of the infrastructure extension will be funded by EPA and NYS, there are no costs or fees for water users within the Water District associated with capital costs or debt service.

9.2 OPERATION AND MAINTENANCE COST

In accordance with existing Village of Catskill policies, the operation and maintenance of service lines installed to the distribution line will be the responsibility of the property owner, from the corporation stop to the structure. Therefore, in the future any costs incurred by the property owner relative to the service lines will be separate from the overall user cost for district users.

The South Cairo Water District will be subject to the Village of Catskill's out of district water user rates, which scale based on the quantity of water used.

10. Cost to the Typical Property

Pursuant to Village Law, the debt service costs for the districts are charged only against the benefitted properties within the district. As required by Article 12 of New York State Town Law, these costs will be charged on a benefit basis.

Benefit assessments can be made through several types of formulas. The formula to be applied is set by the Town Board. The formula should fit the individual case and the equities of a given project.

The estimated costs to the typical property are as follows in Table 5. The District Formation will not result in increased costs for existing users in other districts. Out of district user rates can be found on Table 5A. 1 unit is 750 gallons or 100 cubic feet. Although the New York State Design Standards for Intermediate Sized Wastewater Systems identifies the hydraulic loading rate of a 3-bedroom house as 330 GPD, it is typical for this area that an equivalent dwelling unit (EDU) uses 150 GPD, or 13,725 gallons per quarter, which is equal to 18.3 Units.

The first 10 units would be billed at a rate of \$8.09. The next 8.3 units would be billed at a rate of \$9.56. The estimated total quarterly cost for water usage for an EDU is \$160.25.

Table 5A. Water Service Rates

Units per Quarter	Village Rate	Town District Rate
Up to 10	\$4.01/Unit	\$8.09/Unit
11-20	\$4.78/Unit	\$9.56/Unit
21-40	\$5.15/Unit	\$10.28/Unit
41+	\$5.31/Unit	\$10.66/Unit

^{*1} Unit = 750 Gallons or 100 Cubic Feet

Table 5B. Projected Quarterly Service Charges – Typical Residential

Debt Service Costs	\$0.00
O&M Fee	\$5.00
Quarterly User Cost	\$160.25
Total Quarterly Cost	\$165.25
Total Annual Cost	\$661.00

Each year, the New York State Office of the State Comptroller issues a listing of the average estimated cost thresholds for special districts. The proposed Water District typical user costs, as shown in Table 5 above, is \$661.00, which is below the 2024 Comptroller's cost. As such, approval is not required.

The Country Estates Mobile Home Park will have a master meter maintained by the Village. The individual structures will be sub-metered as a part of the construction contract and the owner will assume responsibility for maintenance of the sub-meters thereafter. The quarterly water bill will be charged to the owner of Country Estates and then divided amongst the tenants based on their individual water usage. The same user rates shown on Table 5A will be used to calculate the water bill for the owner of Country Estates. Mobile homes use less water than a typical residential home. The quarterly cost per mobile home is estimated to be \$130 quarterly or \$520 annually.

11.0 METHOD OF FINANCE

The total project cost is \$4,519,635.67. The Town of Cairo, and the Village of Catskill will not be expending any monies to extend water service. The total cost of the project will be funded

^{**}Minimum Quarterly Charge = 10 Units

^{***}Plus OMW \$5.00

by EPA, and NYS. There will be no debt service associated with the project. The period of probable usefulness of the water improvements in the district is at least 50 years.

12.0 STATEMENT AS TO THE BENEFIT ASSESSMENT

General Municipal Law requires that all costs associated with a water district are to be borne by users in the district. The proposed costs to the typical user are typically based on a shared debt service by the property owners and the operation and maintenance costs. Service charges for provision of water by the Village of Catskill are based on water use or equivalent.

13.0 DISTRICT FORMATION PROCESS

In accordance with New York State Town Law, Article 12, the following are the procedural requirements for the district formation of a special district for the Town of Cairo:

- The submission of this report, representing a Map, Plan and Report to the Town Board, which encompasses the proposed District Extension.
- The Town Board accepts and files the Map, Plan and Report.
- The Town Board schedules and holds a public hearing in accordance with NYS Town Law and Town of Cairo public notice requirements.
- Assuming the action will not have an adverse impact on the environment, a SEQR negative declaration shall be made.
- The Town Board will consider acting on the proposed District Extension by resolution.

The Town Board, in its review of the district formation shall confirm that the following criteria has been satisfied:

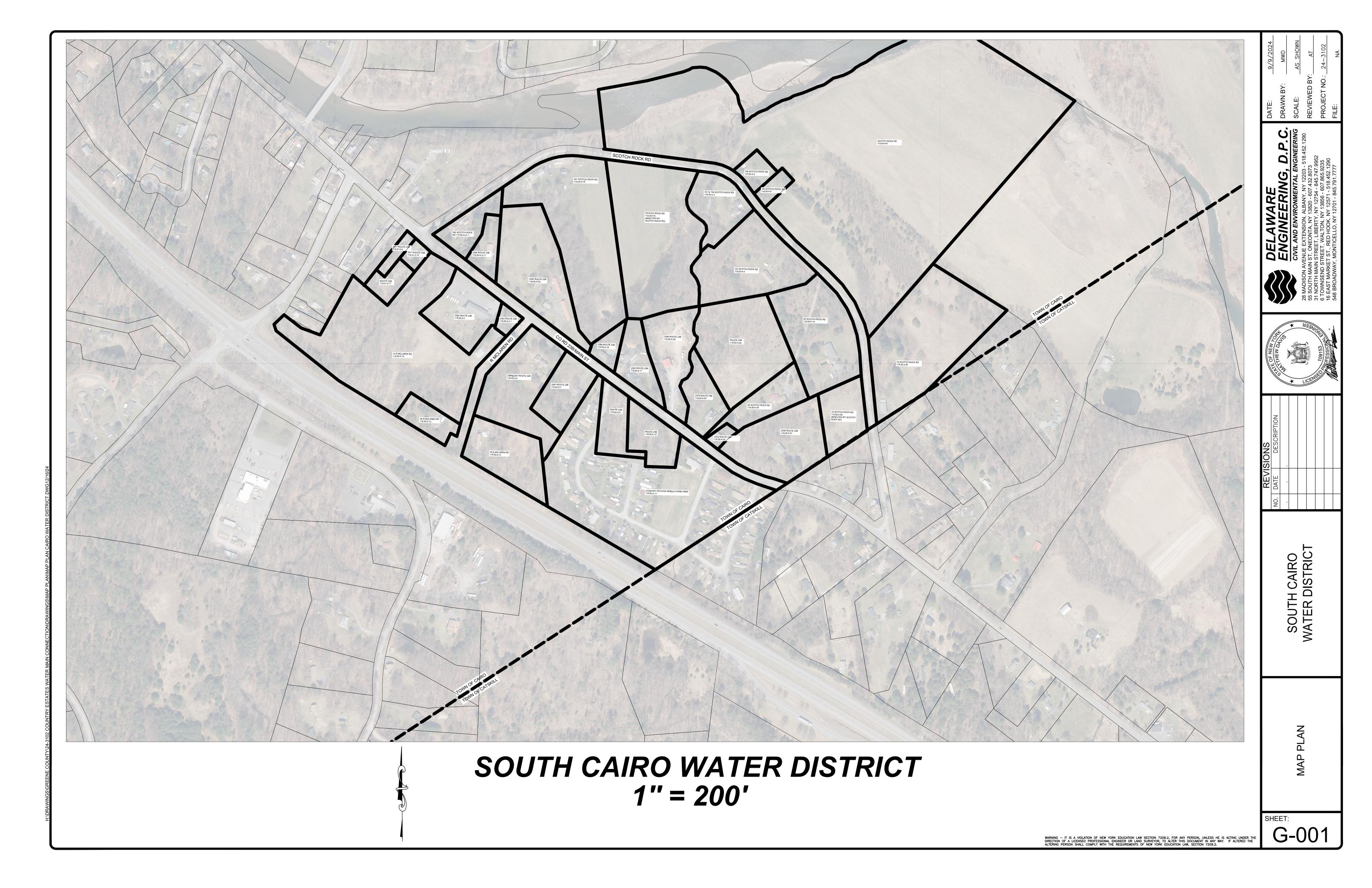
- All the property and property owners within the proposed District Extension are benefited.
- All the property and property owners benefited are included within the limits of the proposed District Extension.
- The cost of the proposed improvements (if any proposed) is to be assessed against the
 benefited area and all real property to be assessed will be benefited by the proposed
 improvements and no benefited property will be excluded. In this case, there are no costs to
 the Town of Cairo.
- It is in the public interest to form the district and will not constitute an undue burden on the property that will bear the cost.
- The Town of Cairo must enter into a municipal agreement with the Village of Catskill.

14.0 SUMMARY

The project includes the formation of a new water district, called the South Cairo Water District, and the extension of water main from the existing infrastructure on Route 23B and the connection of properties in the Town of Cairo. The project will benefit property owners in the Town of Cairo through the provision of public water.

Following acceptance of this Map, Plan, and Report, the Town of Cairo will conduct of a public hearing, and review and approval of such, the Town of Cairo intends to create a Water district as described in this report.

Figure 1 District Map



Attachment A Village of Catskill Water Regulations

VILLAGE OF CATSKILL WATER RULES AND REGULATIONS

Revised and adopted – May 12, 2021

Table of Contents

Water Rules & Regulations

		<u>Page</u>
Ordnances		3-4
Section 1 -	Trenches	5
Section 2 –	Tapping of Mains & Tapping Fee Schedule	5-7
Section 3 –	Service Pipes and Fixtures	7-8
Section 4 –	Private Water Lines	8
Section 5 –	Branch Service and Curb Cocks	8
Sections 6 -	Cross Connections	9
Section 7 -	Repairs and Maintenance	9
Section 8 -	Meters	9-10
Section 9 -	Illegal Use of Water	10
Section 10 -	Emergency Water Restrictions	10-11
Section 11 -	Waste of Water	11
Section 12 -	Vacancy	11
Section 13 -	Shutting off Water Service	11
Section 14 -	Payments of Water Rents	12
	Third Party Notifications	
Section 15 –	Property Transfers	13
Section 16 -	Main Extensions	13

WATER RULES AND REGULATIONS

ORDINANCES

NO. 1

It shall not be lawful for any person to throw into the supply reservoir at Potic or Catskill Water Works, or upon the bank thereof, or upon the ice formed in the said reservoirs when the same is frozen over, any stick, stone, refuse, or other substances or material of any description whatsoever, either solid or liquid. Nor is it lawful to skate, run, slide, walk, stand, go or be upon any ice that may form upon such reservoir. Any violation of this ordinance shall result in a fine of \$250.00.

It shall be lawful to fish at the Potic Reservoir with a permit. Said permit may be obtained at the Village Clerks office either on a yearly basis or a lifetime permit. Fees for said permits to be determined by the Board of Trustees. There will be no charge for a reservoir permit for senior citizens aged 70 and over. Failure to comply with the rules and regulations printed on the permit will result in a revocation of said permit and a fine of \$100.00.

NO. 2

No person except the Superintendent of Public Works or persons acting under his direction or permission, shall open any fire hydrants or draw water therefrom. That the chief engineer of the fire department of the Village of Catskill and his assistants and members of the fire department are authorized to use said hydrants for the purpose of extinguishing fires or testing engines, hose, and apparatus. All such uses shall be under the direction and supervision of the chief of the fire department and his assistants and in no case shall inexperienced or incompetent persons be allowed to manipulate or interfere with any such hydrant or any gate valve or other fixture of said water works. Any violation of this ordinance shall result in a fine of \$250.00.

NO. 3

It shall not be lawful for any person not specially authorized by the Water Department to tap any main of the Catskill Water Works or make any connection therewith or to in any manner interfere with said mains. Any violation of this ordinance shall result in a fine of \$2,500.00.

NO.4

Capital Cost: Any new water system connections, either commercial or residential must be approved by the Superintendent of Public Works or persons acting under his direction.

Any new water systems connections outside the Village of Catskill shall pay the required tapping fee plus a capital cost reimbursement of \$2,000.00.

NO.5

The following rules and regulations shall for a part of the contract with all persons using the Village water and the fact of using said water shall be considered an assent on the part of the owner or user to be found thereby. The Village Board of Trustees reserves the right to make changes, by resolution, in the rules and regulations and the water rates, as they deem necessary.

NO.6

Installation of water mains outside the limits of the Village of Catskill shall be allowed after approval is given by the Village Board of Trustees and the Superintendent of Public Works or his duly appointed agent and all necessary agreements and permits have been executed. All construction, attorney, engineering and/or inspection fees incurred for main extensions, outside the Village of Catskill limits, shall be borne in their entirety by the water consumers of the new installation.

The water main extensions are to be made in accordance with plans and specifications approved by Village Board of Trustees and the Superintendent of Public Works and shall be under the supervision and inspections of the extensions. HDPE or another approved pipe must be used for all main extensions. The Superintendent of Public Works will inspect and accept all water mains before connection to the water system.

NO.7

On and after the effective date of these regulations, no toilet, unless it shall meet the water saving performance standards as provided for in this section, shall be installed in any building using the Village of Catskill water and sewer systems.

The water performance standards for toilets and associated flush-valve, if any, will be a maximum flow not to exceed an average of one and six-tenths (1 6/10) gallons of water per flush.

The provisions of this section shall not apply to fixtures installed prior to the effective date of this section, which are removed and relocated to another room or area in the same building after the effective date of this section, not shall they apply to the installation of fixtures for which a building permit was issued prior to the effective date of these regulations.

Any violations of this section shall cause a fine of \$50.00 per day of violations to be levied upon the property owner.

RULES AND REGULATIONS

TRENCHES

SECTION 1. All trenches dug for service connections must be properly guarded and not left open longer than is necessary and the roadbed and sidewalk must be restored to its former condition to the satisfaction of the Superintendent of Public Works. Flooding trenches to settle the ground will not be allowed.

All clay removed from the street opening must be removed and the same back filled with the approved fill of item 4, as approved by the Superintendent of Public Works.

TAPPING OF MAINS

SECTION 2. APPLICATIONS: All persons or corporations wishing to use the water of the Village of Catskill for any purpose must first make an application to the Water Department, in writing, in the form prescribed, upon blanks which will be furnished free of charge. Said blanks must be signed by the owner of the property where the water is to be used or by his/her duly authorized agent, stating without reserve the various use to which the water is to be applied. Should the water be required for other purposes, after work is commenced or finished, notice in writing must be given before the desired change in made, and an addition is granted. When a tap is made and a service line is run to the building location, a water meter must be installed by a member of the water department. If the service line is only run to the curb box, then it is not necessary to install the water meter immediately. Any individual or corporation using Village water without making prior application, shall be guilty of illegal use of water under Section 9.

TAPPING: All tapping of mains for 1" taps will be done by the Water Department. For all tapping's of water mains above 1", the applicant must hire a contractor approved by the Superintendent of Public Works.

Fee Schedule:

Water O&M line

\$5.00/QTR residential

\$15.00/QTR commercial

A service fee of \$50 will be charged each time the water service is requested to be turned on or off.

A service fee of \$50 will be charged when a water user requests their water meter be pulled out and an additional fee of \$50 will be charged when the meter is put back in.

Startup fee for new residential accounts \$100.00

Tapping Fee Schedule

5/8" and 3/4" are residential meter sizes.

1" and above are commercial meter sizes

The village Water Department will make the tap and supply all materials for 1" tap.

1"
$$tap = $1,000$$

For taps above 1". The owner pays a permit fee. Through the tap fee, the meter is paid for by the user and will be supplied by the Village of Catskill.

 $1 \frac{1}{2}$ " tap = \$5,000 (includes the meter)

2" tap = \$6,000 (includes the meter)

3" tap = \$8,000 (includes the meter)

4" tap = \$10,000 (includes the meter)

6" tap = \$15,000 (includes the meter)

8" tap = \$20,000 (includes the meter)

Buildings provided with separate fire service lines are charged a fee capacity surcharge that is added to the tap and permit fee.

$$1 \frac{1}{2}$$
" tap = \$1,000

$$2$$
" tap = \$1,500

$$3" tap = $2,000$$

4" tap =
$$$2,500$$

$$6$$
" tap = \$3,000

8"
$$tap = $4,000$$

Tapping of a hydrant:

\$250.00

Sewer tap fees:

Residential = \$500 Commercial = \$1,500

All sewer taps shall be performed by the applicant.

SERVICE PIPES AND FIXTURES

SECTION 3. All persons taking water will do so at their expense and all owners shall furnish their own service pipe which must be plastic rated at 250psi or above with stainless steel tracer wire or other approved pipe by the Superintendent of Public Works. All service pipes must be at least three- and one-half feet (3 ½') below the surface of the ground and the curb box must be located just behind the property line. The Village will supply the curb box and stainless-steel rod. The meter will be installed inside the building (or meter pit) in an approved location by the water department. A ball valve must be installed before and after the water meter. Upon installation of the above, the Superintendent of Public Works or agent shall inspect all work.

Service pipes and drain or sewer pipes for any new construction must be laid in two (2) separate trenches to feet (10ft) apart. When repair or replacements need to be done on already existing connections, the service pipe will not be allowed in the same trench with a drain or sewer pipe unless there is an intervening space of at least three feet (3ft) between said sewer pipes and service pipe. Under no circumstances will the drain or sewer pipe be allowed to be above the water service pipe.

<u>SERVICE LEAKS:</u> The cost or repairs must be borne by the property owner, and he/she is responsible for the service line from the connection at the main to the premises it services. If the leak is found by the Water Department employees, the Water Department shall be reimbursed by the property owner. (see section 7 – Repairs and Maintenance)

All fixtures including the water meter shall be at the owner's expense, protected from frost and kept in repair to prevent waste of water. Should any user wish to discontinue the use of the Village water, they must contact the Water Department and set up an appointment for the Water Department to come and remove the water meter and shut off the water at the curb box.

If a property is torn down and no rebuilding is planned for the site within one (1) year, the water line must be excavated at the main, disconnected and pulled away from the main. If no building is done within the one-year period, an outside contractor will be called in to disconnect the water line and the expense will be charged to the property owner. (See sewer regs. For disconnecting sewer line Art 4, sec. 3)

When hot water boilers are used, suitable vacuum and air valves must be applied to prevent collapsing, as the Village of Catskill will in no event be responsible for any damage that may occur from failure to observe this important rule.

PRIVATE WATER LINES

SECTION 4. Upon request for a private line, the applicant shall present all pertinent information to the Water Department concerning the new line. Where necessary, building and/or site plans must be submitted at the time of application. All private lines shall be installed subject to the supervision and inspection of the Superintendent of Public Works and trenches shall not be backfilled until the private line is inspected and approved. Water will not be turned on to the private line until work has been approved.

OWNERSHIP: Ownership of a private line shall remain with the owner of the property serviced by this line. The right to connect to the private line for extensions of or services connected is retained by the Water Department. However, such service installations normally will not be made until written consent of the owner of said private line has been received by the Water Department.

REPAIRS: Repairs to private lines will be made as set forth in Section 7 – Repairs and Maintenance.

USE: The use of said private line must be in accordance as stated in the application. Any other use, unless granted in writing by the Superintendent of Public Works, could result in the permanent discontinuation of service.

BRANCH SERVICE AND CURB COCKS

SECTION 5. No service pipe will be allowed to run from lot to another. However, consumer may make application to the Water Department for a permit to unite and if such permit is granted, may use one service pipe by placing a curb branched service, independent curb cocks and boxes, whereby the supply to each consumer may be controlled. The application for water shall accompany the application to units.

Same will not be allowed except in the event the parties involved agree to have attached, to the deeds, that the parties involved shall share and share alike the maintenance of the main line between and/or curb boxes to the Village main.

CROSS CONNECTIONS

SECTION 6. In conformity with the New York State Sanitary Code, cross connections between potable public water and non-potable supplies are prohibited.

Discharge lines from sprinkler systems must have a six (6") air gap between discharge and drain unless approved trap check is provided.

REPAIRS AND MAINTENANCE

SECTION 7. All services, including all piping and fixtures for the delivering and supplying of water from the main to the building serviced, shall be maintained and/or repaired by the property owner. If, for any reason, a leak develops on the service of the fixtures, the owner shall take immediate steps to repair same. In the event of unreasonable delay in the prosecution of the repair work, due notice will be given by the Superintendent of Public Works to the owner or the tenant of the premises to start the necessary repairs within twenty-four hours (24hrs.)

Upon the failure of the owner to start repairs within this period, the Department of Public Works and Water Department may repair the break and the cost of the repairs shall be levied against the owner. Customers who fail to repair service leaks within the twenty-four (24) hour period may have their water service shut off until repairs are affected. The determination of the responsibility involved, whether the Village of Catskill or the property owner, shall rest with the Village Board of Trustees and the Superintendent of Public Works and their decision shall be final.

Where an emergency shall exist upon occasion of a break on a service line, the Superintendent may man the necessary repairs with the Water Department forces without notice to the property owner. However, the cost involved in the prosecution of the work will be assessed against the property owner.

Charges for work undertaken by the Department of Public Works and the Water Department will be from the fee schedule set up by said departments.

METERS

SECTION 8. Any newly constructed residential or commercial building tapping into the Village of Catskill water supply must have a water meter installed for the purpose of determining usage. The billing for the account will begin the date the water meter is installed by the Water Department.

The meter readings will be taken quarterly (March, June, September, December.) If the meter is not read by the owner/representative of the property or by the Water Departments radio read system, the Village will not be responsible if any discrepancies occur in the billing when the actual reading is taken.

Any outside the Village water customer who still have an outstanding balance on their account, will have said balance re-levied to their taxes.

Any water meters installed in new construction or replaced in an existing structure must be supplied and installed by the Water Department.

If corrections are not made within ten (10) days of notification by the Village of Catskill Water Department, water service to the location will be terminated without further notice until said corrections are completed.

The Water Department reserves the right to remove and test meters and to substitute another meter in its place.

If a meter gets out of order or fails to register, the consumer will be charged the minimum usage of 0-10 units per quarter until the Water Department changes the meter out for a new one.

ILLEGAL USE OF WATER

SECTION 9. No person taking water shall supply other parties or families not entitled to its use, nor take Village water from a hydrant, except by special permission from the Superintendent of Public Works. If permission is not obtained the person(s) using same will be held for the whole amount of water illegally used.

Any person illegally using Village water by any means, with no meter or an open hydrant, shall be charged a fine of \$1,000.00 and may face charges of theft of services.

EMERGENCY WATER USE RESTRICTIONS

SECTION 10. The Village Board of Trustees may take conservation measures in the form of a ban or prohibition on the outdoor use of Village water, which prohibited use shall include, but not be limited to, the filling of swimming pools and other recreational uses, washing of automobiles or other vehicles or inanimate objects, and the watering of plants, bushes, tree, lawns, or other subjects grown for primarily aesthetic or decorative reasons.

Such ban or prohibition, once declared by the Village Board of Trustees, shall be printed in a designated newspaper or general circulation in the Village for at least two consecutive days and shall remain in full force and effect until the Board of Trustees shall determine that such ban

or prohibition on the water usage in no longer necessary for the continued health, safety, and/or welfare of the Village residents or users.

Any violation of the ban duly authorized by the Board of Trustees shall be a violation and punishable by a fine of not more than fifty dollars (\$50.00) for each violation, and/or water service so improperly used while prohibited or banned may be suspended buy the Village of Catskill Department of Public Works.

Each separate day of prohibited use shall constitute a separate violation of the section.

WASTE OF WATER

SECTION 11. All property supplied with Village water must be open and accessible to proper representatives of the Water Department at all reasonable times and whenever it is found that water is permitted to run to waste or is being waster through defective faucet or other fixtures or is being taken from the premises by those not entitled to its use, the owner of said property shall be responsible for all excess water usage.

VACANCY

SECTION 12. Water meters must be disconnected, and water shut off at the curb by the Water Department.

If water is not shut off nor meter disconnected, any damage caused by freezing of pipes and meter shall be at the expense of the property owner. If the water meter is damaged due to freezing or any other negligence on the part of the property owner, the property owner will be responsible for payment of a new meter at the current market cost.

SHUTTING OFF WATER SERVICE

SECTION 13. The water may be shut off from the mains of the entire Village or of any street thereof, when repairs, connections or changes are to be made or necessary for any purpose. When practicable, notice will be given in advance when the water is to be shut off, by publication in the Village newspaper and/or local radio stations; however, the Village of Catskill and the Water Department shall not be responsible for failure to do so in any case, nor be liable for any damages that may result from such shutting off said water, whether such notice be given or not.

PAYMENTS OF WATER RENTS

SECTION 14. Water and sewer rents are payable quarterly on the first day of January, April, June, and October in each year at the office of the Village Clerk-Treasurer – Collector and if not paid within thirty (30) days of when they become payable, a penalty will be assessed. The percentage of said penalty shall be set by the Board of Trustees.

All water and sewer rents are due during the collection's months (January, April, June, and October.) If received by mail and not postmarked by the last day of the collection month, a penalty will be assessed.

Village of Catskill water system customers will be subject to the discontinuance of their water service for failure to pay their water rents. If a customer's account shows two (2) unpaid quarters, a notice will be generated stating that their water will be shut off in thirty (30) days if payment is not made in full. A second notice will be sent fifteen (15) days after the first notice advising the customer that their water will now be shut off in fifteen (15) days. Copies of shut off notices will be sent to property locations and addresses, serving notices on tenants, when the owners mailing address if different from the property locations address.

In the event that payment in full is not made at the end of this thirty (30) day period, the Superintendent of Public Works will be advised that water service to the account it to be shut off. Water Department employees will then shut the water off at the curb box. Water service will not be restored until payment of the outstanding bill and a \$100.00 surcharge for the shutting off and restoring of water service is made in full.

If the customers outside shut off valve inoperable, the Water Department will excavate the service at the main and disconnect the service. When payment is made in full, the main will again be excavated and the service reconnected. All costs for excavation will be billed to the customer and must be paid prior to the restoring of the water service, as it is the customers responsibility to keep the shut off valve in working condition.

<u>THIRD PARTY NOTIFICATION:</u> If a customer is 65 years of age or older or disabled, they may designate a consenting adult third party to receive duplicate copies of the water shut off notices. Application for third party notification must be made through the Village Clerks office. Neither Board of Trustees nor the Water Department has any liability if for any reason the duplicate shut-off notice is not mailed to or received by the designated third party.

Water and sewer rents are a lien on the property at which they are used. Therefore, the owner of property will be responsible for the unpaid water and sewer rents of their tenants.

PROPERTY TRANSFERS

SECTION 15. When a property transfer occurs and neither the new owner nor his agent asked for a final reading or checked for any outstanding balance on an account, the new owner will be responsible for payment of said unpaid balance or large billing resulting from no final reading.

MAIN EXTENSIONS

SECTION 16. No water main extension shall be made on any street that has not been accepted as such by the Board of Trustees, without prior approval.

In the case of a developer changing undeveloped areas into streets and building lots, within the limits of the Village of Catskill, and seeking water main extensions, same may be granted under the following conditions:

- (A) The developer must pay for all excavation and back fill, same being done under the supervision on the Superintendent of Public Works or his agent. The mains, and installation of same, shall be paid for by the developer.
- (B) The developer must file with the Village Board of Trustees a copy of the map of the proposed development, drawn to scale and indicate thereon all proposed streets and building lots.

In the case of a developer of undeveloped property outside the limits of the Village of Catskill wishing to develop said property into streets and building lots and seeking water main extensions on the same, permission may be granted under the following conditions:

- (A) The development must be in a currently established water district or establish a water district or become annexed to the Village.
- (B) The street in which is to be installed must first be accepted as such by the Catskill Town Board.
- (C) The entire cost of installation must be paid by the developer and the installation must be under the supervision of the Superintendent of Public Works or his duly authorized agent.

Attachment B Village of Catskill Water Rates

EFFECTIVE JULY 1, 2024

IN VILLAGE WATER/SEWER RATES

UNITS	WATER	SEWER
0-10	\$4.01/unit	\$3.84/unit
11-20	\$4.78/unit	\$4. 71 /unit
21-40	\$5.15/unit	\$5.24/unit
41+	\$5.31/unit	\$5.57/unit

OUT VILLAGE WATER/SEWER RATES

0-10	\$8.09/unit	\$4.60/unit
11-20	\$9.56/unit	\$5.66/unit
21-40	\$10.28/unit	\$6.29/unit
41+	\$10.66/unit	\$6.67/unit

PLUS OMW \$5.00 OMS \$5.00