

GARRARD COUNTY WATER ASSOCIATION

WATER SYSTEM IMPROVEMENTS

SUMMARY ADDENDUM

TO

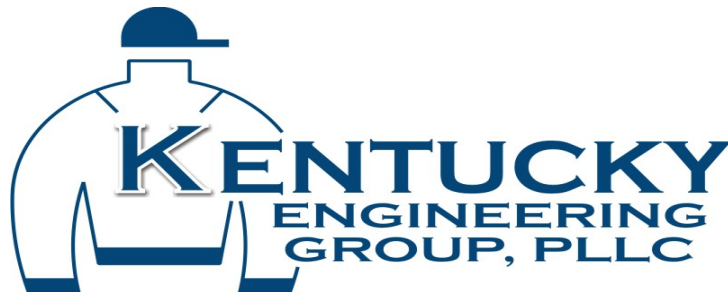
PRELIMINARY ENGINEERING REPORT

GARRARD COUNTY WATER ASSOCIATION

315 Lexington Road

Lancaster, KY 40444

August 2020



SUMMARY ADDENDUM
TO
PRELIMINARY ENGINEERING REPORT

DATED August 2020

FOR

Garrard County Water Association – 2020 Water System Improvements
(Name of Project)

APPLICANT CONTACT PERSON Sean Smith, General Manager

APPLICANT PHONE NUMBER (859) 792-4501

APPLICANT TAX IDENTIFICATION NUMBER (TIN) 61-0712154

ITEMS IN BOLD ITALIC PRINT ARE APPLICABLE TO SEWER SYSTEMS.

In order to avoid unnecessary delays in application processing, the applicant and its consulting engineer should prepare a summary of the preliminary report in accordance with this Guide.

Please complete the applicable sections of the Summary Addendum. ***Please note, if water and sewer revenue will both be taken as security for the loan, all user information and characteristics of both utility systems will be needed even though the project will benefit only one utility.***

Feasibility reviews and grant determinations may be processed more accurately and more rapidly if the Summary/Addendum is submitted simultaneously with the preliminary engineering report, or as soon thereafter as possible.

I. GENERAL

- A. Proposed Project: Provide a brief description of the proposed project. In addition to this summary, the applicant/engineer should submit a project map of the service area.

The proposed project is to upgrade the existing class 160 and/or AC water mains that serve the multiple portions of the GCWA system, replace the existing Gabbard water storage tank and extend water lines to serve new customers. The KY 152 (US 27 to Buena Vista Church) and KY 52 portions of the project will replace problematic class 160 PVC water line with class 200 or class 250 water line. The Eastland Acres portion of the project will replace AC water line with new class 200 water line. Research has shown the health risk of exposure to asbestos cement water line. The US 27 (Mt Hebron to Canoe Creek), Ky 1131 to Nina Ridge Road and Profit Road Extension portions of the project will help to loop the existing GCWA system and eliminate dead end sections of the water lines. The Profit Road Extension will also connect a section of the water system that has experienced periodic low pressure to a higher pressure zone, thus improving service to customers in this area. The Narrow Gap, Profit Road, Paper Mill Road, Sugar Creek Road, Bell Lane, Starnes Road, Boone Creek and Ham Hill portions of the project will extend water service to approximately 17 new customers. Lastly, the project will include the addition of a new Gabbard water storage tank that will replace the existing Gabbard tank. The increased tank capacity at a higher elevation will increase hydraulic pressure thus improving service to the customers in this area.

II. FACILITY CHARACTERISTICS OF EXISTING SEWER SYSTEM NA

A. Sewage Treatment:

1. Type _____

2. Method of Sludge Disposal _____

3. Cost per 1,000 gallons if sewage treatment is contracted:

\$ _____

4. Date Constructed _____

B. Treatment Capacity of Sewage Treatment Plant _____

C. Type of Sewage Collector System (Describe)

D. Number and Capacity of Sewage Lift Stations

E. Sewage Collection System:

*Lineal Feet of Collector Lines, by size 6" _____ 8" _____
10" _____ 12" _____, Larger _____
Date(s) Constructed _____*

F. Conditions of Existing System: Briefly describe the conditions and suitability for continued use of facility now owned by the applicant. Include any major renovation that will be needed within five to ten years.

III. FACILITY CHARACTERISTICS OF EXISTING WATER SYSTEM

A. Water Source: Describe adequacy of source (quality and quantity). Include an explanation of raw water source, raw water intake structure, treatment plant capacity, and current level of production (WTP). Also describe the adequacy of Water Purchase Contract if applicable.

The raw water source is the Kentucky River and provided by the City of Lancaster Water Treatment Plant. The quantity and quality are adequate. The levels of turbidity are high but are entirely treatable. The current WTP capacity is 2.1 MGD. The average production is approximately 1.8 MGD.

If the applicant purchases water:

Seller(s):

1. City of Lancaster, City of Danville, City of Berea

Price/1,000 gallons:

1. \$2.47, \$2.41, \$2.78

Present Estimated Market Value of Existing System: \$ 11,078,445

B. Water Storage:

Type: Ground Storage Tank _____ Elevated Tank 1
Standpipe 6 Other _____
Number of Storage Structures 7
Total Storage Volume Capacity 1,275,700 Gallons
Date Storage Tank(s) Constructed 1970s, 1980s, 1990s, 2017

C. Water Distribution System:

Pipe Material AC, PVC, DI
Lineal Feet of Pipe: 2" & 3" Diameter 714,000 4" 899,800
6" 25,400 8" 460,400
10" 50,160 14" _____

All pipe footage is an estimate only.

Date(s) Water Lines Constructed 1970 – present
Number and Capacity of Pump Station(s) 4; 1,000 gpm

D. Condition of Existing Water System:

Briefly describe the condition and suitability for continued use of facility now owned by the applicant. Include any major renovation that will be needed within five to ten years.

The Garrard County Water Association's system is currently in fair condition. Renovations/upgrades over the next five to ten years will continue to improve the older, undersized sections of the system and provide a safe, reliable source of drinking water to the customers.

E. Percentage of Water Loss Existing System 19%

IV. EXISTING LONG-TERM INDEBTEDNESS

A. List of Bonds and Notes:

<u>Date of Issue</u>	<u>Bond/Note Holder</u>	<u>Principal Balance</u>	<u>Payment Date</u>	<u>Bond Type Water/Sewer*</u>	<u>Amount on Deposit in Reserve Account</u>
20 <u>18</u> Issue	<u>RD</u>		<u>Jan 4th, annual</u>	<u>100 %</u> <u> </u> %	<u>\$</u>

* If a combined issue, show attributable portion to each system.

B. Principal and Interest Payments: (Begin with Next Fiscal Year Payment)

<u>Date of Issue</u>	<u>Bond/Note Holder</u>	<u>Payment Year 2019 Promissory Note</u>	<u>Payment Year 2020 Promissory Note</u>	<u>Payment Year 2021 Promissory Note</u>
20 <u>18</u> Issue	<u>RD</u>	<u>\$ 100,652</u>	<u>\$ 100,652</u>	<u>\$ 100,652</u>
Total		<u>\$ 100,652</u>	<u>\$ 100,652</u>	<u>\$ 100,652</u>

V. EXISTING SHORT-TERM INDEBTEDNESS

A. List of All Short Term Debts: (Do Not Show Any Debt Listed in Paragraph IV Above)

<u>Lender or Lessor</u>	<u>Date of Issue (Month & Year)</u>	<u>Principal Balance</u>	<u>Purpose (Water and/ or Sewer)</u>	<u>Payment Date</u>	<u>Principal & Interest Payment (P&I)</u>	<u>Date to Be Paid In Full</u>
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

VI. LAND AND RIGHTS - EXISTING SYSTEM(S)

Number of Treatment Plant Sites:	Water	_____	Sewer	_____
Number of Storage Tank Sites	Water	<u>7</u>	Sewer	_____
Number of Pump Stations:	Water	<u>4</u>	Sewer	_____
Total Acreage:	Water	<u>5 Acres</u>	Sewer	<u>Acres</u>
Purchase Price:	Water	\$ _____	Sewer	\$ _____

VII. NUMBER OF EXISTING USERS

	<u>Water</u>	<u>Sewer</u>
Residential (In Town) *	_____	_____.
Residential (Out of Town) *	<u>5,571</u>	_____.
Non-Residential (In Town)	_____	_____.
Non-Residential (Out of Town)	<u>174</u>	_____.
Total	<u>5,745</u>	_____.
Number to Total Potential Users Living in the Service Area	<u>6,000</u>	_____.

*Note: Residential Users: Classify by type of user regardless of quantity of water used. This classification should include those meters serving individual rural residence.

VIII. CURRENT WATER AND SEWER CONNECTION FEES FOR EACH SIZE WATER METER CONNECTION

<u>Meter Size</u>	<u>Water Connection Fee</u>	<u>Sewer Connection Fee</u>
5/8" x 3/4"	\$ 934.75	\$
1"	\$ 1,092.75	\$

IX. SEWER RATES - EXISTING SYSTEM N/A

Percentage of Water Bill _____ % *Minimum Charge \$* _____
Other: (If Charge Not Based on Water Bill) _____
Date This Rate Went Into Effect _____

X. WATER RATES - EXISTING SYSTEM

Existing Rate Schedule (2019 Rates):

<u>5/8 inch x 3/4"</u>		
first 1,000	11.78	minimum
next 1,000	6.39	per 1,000 gallons
next 1,000	5.18	per 1,000 gallons
next 2,000	4.96	per 1,000 gallons
over 5,000	4.63	per 1,000 gallons
<u>1 inch</u>		
first 5,000	33.27	minimum
over 5,000	4.63	per 1,000 gallons
<u>1.5 inch</u>		
first 10,000	56.42	minimum
over 10,000	4.63	per 1,000 gallons
<u>2 inch</u>		
first 25,000	125.87	minimum
over 25,000	4.63	per 1,000 gallons
<u>Bulk Sales</u>	5.85	per 1,000 gallons

Date This Rate Went Into Effect August 2018

XII. ANALYSIS OF ACTUAL SEWER USAGE - EXISTING SYSTEM - 12 MONTH PERIOD

For Period _____ to _____.

All Meter Sizes	Monthly Sewer Usage	Average	Residential		Non-Residential	
			No. of Users	Usage (1000)	No. of Users	Usage (1000)
0 - 2,000	Gallons	2,000	_____	_____	_____	_____
2,000 - 3,000	Gallons	2,500	_____	_____	_____	_____
3,000 - 4,000	Gallons	3,500	_____	_____	_____	_____
4,000 - 5,000	Gallons	4,500	_____	_____	_____	_____
5,000 - 6,000	Gallons	5,500	_____	_____	_____	_____
6,000 - 7,000	Gallons	6,500	_____	_____	_____	_____
7,000 - 8,000	Gallons	7,500	_____	_____	_____	_____
8,000 - 9,000	Gallons	8,500	_____	_____	_____	_____
9,000 - 10,000	Gallons	9,500	_____	_____	_____	_____
10,000 - 11,000	Gallons	10,500	_____	_____	_____	_____
11,000 - 12,000	Gallons	11,500	_____	_____	_____	_____
12,000 - 13,000	Gallons	12,500	_____	_____	_____	_____
13,000 - 14,000	Gallons	13,500	_____	_____	_____	_____
14,000 - 15,000	Gallons	14,500	_____	_____	_____	_____
15,000 - 16,000	Gallons	15,500	_____	_____	_____	_____
16,000 - 17,000	Gallons	16,500	_____	_____	_____	_____
17,000 - 18,000	Gallons	17,500	_____	_____	_____	_____
18,000 - 19,000	Gallons	18,500	_____	_____	_____	_____
19,000 - 20,000	Gallons	19,500	_____	_____	_____	_____
<u>20,000</u> - <u>22,000</u>	Gallons	<u>21,000</u>	_____	_____	_____	_____
<u>82,000</u> - <u>83,000</u>	Gallons	<u>82,500</u>	_____	_____	_____	_____
_____ - _____	Gallons	_____	_____	_____	_____	_____
		Total	(_____)	(_____)	(_____)	(_____)
		Average Usage		(_____)		(_____)

ANALYSIS OF ACTUAL WATER USAGE - EXISTING SYSTEM

<u>MONTHLY WATER USAGE</u>	<u>Average</u>	Residential		Commercial	
		No. of Users	Usage 1,000	No. of Users	Usage 1,000
<i>5/8 x 3/4 meter</i>					
0 - 1,000 Gal.	1,000	791	791	68	68
1,000 - 2,000 Gal.	1,500	723	1,085	20	30
2,000 - 3,000 Gal.	2,500	1001	2,503	9	23
3,000 - 4,000 Gal.	3,500	890	3,115	12	42
4,000 - 5,000 Gal.	4,500	625	2,813	8	36
5,000 - 6,000 Gal.	5,500	417	2,294	3	17
6,000 & Over Gal.	11950 11,900	1077	12,870	33	393
	<i>Subtotal</i>	<i>5524</i>	<i>25,469</i>	<i>153</i>	<i>608</i>
Average Monthly Usage			4,611		3,972
<i>1 inch meter</i>					
0 - 5,000 Gal.	3,000	12	36	8	24
5,000 & Over	34,000	31	1,054	6	204
	<i>Subtotal</i>	<i>43</i>	<i>1,090</i>	<i>14</i>	<i>228</i>
<i>1.5 inch meter</i>					
0 - 10,000 Gal.	750	2	2	3	2
10,000 & Over	41,500	1	42	1	42
	<i>Subtotal</i>	<i>3</i>	<i>43</i>	<i>4</i>	<i>43.75</i>
<i>2 inch meter</i>					
0 - 25,000 Gal.	1,200	1	1	1	1
25,000 & Over	63,400	0	0	2	127
	<i>Subtotal</i>	<i>1</i>	<i>1.2</i>	<i>3</i>	<i>128</i>
Totals		5571	26,603	174	1,007

XIII. FACILITY CHARACTERISTICS OF PROPOSED SEWER SYSTEM

N/A

A. Sewage Treatment:

1. Type _____

2. Method of Sludge Disposal _____

3. Cost per 1,000 gallons if sewage treatment is contracted:

\$ _____

B. Treatment Capacity of Sewage Treatment Plant _____

C. Type of Sewage Collector System (Describe) _____

D. Number and Capacity of Sewage Lift Stations _____

E. Sewage Collection System:

Lineal Feet of Collector Lines, by size 6" _____ 8" _____

10" _____ 12" _____, Larger _____

XIV. LAND AND RIGHTS - PROPOSED SEWER SYSTEM

N/A

Number of Treatment Plant Sites _____

Number of Pump Sites _____

Number of Other Sites _____

Total Acreage _____ *Acres*

Purchase Price \$ _____

XV. FACILITY CHARACTERISTICS OF PROPOSED WATER SYSTEM

A. Water Source: Describe adequacy of source (quality and quantity). Include an explanation of raw water source, raw water intake structure, treatment plant capacity, and current level of production (WTP). Also describe the adequacy of Water Purchase Contract if applicable.

Water Supply described in Section III-A.

B. Water Storage:

Type: Ground Storage Tank 1 Elevated Tank _____
Standpipe _____ Other _____

Number of Storage Structures 1

Total Storage Volume Capacity 50,000

C. Water Distribution System:

Pipe Material PVC

Lineal Feet of Pipe: 3" Diameter 13,900 4" 14,100

6" 28,300 8" 5,000

10" _____ 12" _____

Number and Capacity of Pump Station(s) _____

XVI. LAND AND RIGHTS - PROPOSED WATER SYSTEM

Number of Treatment Plant Sites 0

Number of Pump Sites 0

Number of Other Sites 1

Total Acreage 0.5 Acres

Purchase Price \$ 0

XVII. NUMBER OF NEW SEWER USERS

N/A

*Residential (In Town) **

*Residential (Out of Town) **

Non-Residential (In Town)

Non-Residential (Out of Town)

Total

Number to Total Potential Users Living in the Service Area

**Note: Residential Users: Classify by type of user regardless of quantity of water used. This classification should include those meters serving individual rural residences.*

XVIII. PROPOSED SEWER CONNECTION FEES FOR EACH SIZE WATER METER CONNECTION

N/A

Meter Size

Connection Fee

5/8" x 3/4"

\$ _____

1 - Inch

\$ _____

1-1/2 Inch

\$ _____

2 - Inch

\$ _____

3 - Inch

\$ _____

4 - Inch

\$ _____

5 - Inch

\$ _____

6 - Inch

\$ _____

XIX. NUMBER OF NEW WATER USERS

Residential (In Town) *	<u>0</u>
Residential (Out of Town) *	<u>17</u>
Non-Residential (In Town)	<u>0</u>
Non-Residential (Out of Town)	<u>0</u>
Total	<u>17</u>
Number to Total Potential Users Living in the Service Area	<u>17</u>

*Note: Residential Users: Classify by type of user regardless of quantity of water used. This classification should include those meters serving individual rural residences.

XX. PROPOSED WATER CONNECTION FEES FOR EACH SIZE WATER METER CONNECTION:

<u>Meter Size</u>	<u>Connection Fee</u>
<u>5/8" x 3/4"</u>	<u>\$ 934.75</u>
<u>1 - Inch</u>	<u>\$ 1,092.75</u>
<u>1-1/2 Inch</u>	<u>\$ Actual Cost</u>
<u>2 - Inch</u>	<u>\$ Actual Cost</u>
<u>3 - Inch</u>	<u>\$</u>
<u>4 - Inch</u>	<u>\$</u>
<u>5 - Inch</u>	<u>\$</u>
<u>6 - Inch</u>	<u>\$</u>

XXI. SEWER RATES – PROPOSED

N/A

A. Proposed Rate Schedule without RUS Grant:

Percentage of Water Bill _____ % Minimum Charge \$ _____

Other: (If Charge Not Based on Water Bill) _____

Proposed Rate Schedule: (Without RUS Grant)

<i>First</i>	_____	Gallons @ \$ _____	<i>Minimum.</i>
<i>Next</i>	_____	Gallons @ \$ _____	<i>per 1,000 Gallons.</i>
<i>Next</i>	_____	Gallons @ \$ _____	<i>per 1,000 Gallons.</i>
<i>Next</i>	_____	Gallons @ \$ _____	<i>per 1,000 Gallons.</i>
<i>Next</i>	_____	Gallons @ \$ _____	<i>per 1,000 Gallons.</i>
<i>Next</i>	_____	Gallons @ \$ _____	<i>per 1,000 Gallons.</i>
<i>All Over</i>	_____	Gallons @ \$ _____	<i>per 1,000 Gallons.</i>

The above proposed rate, without RUS grant, must be completed for each grant. If the applicant/engineer desires, there is no objection to recommending a proposed rate with an estimated RUS grant in the Table below. However, the preparer should remember that the Table (A) above must be completed prior to Table (B).

B. Recommended Rate Schedule with RUS Grant:

Percentage of Water Bill _____ % Minimum Charge \$ _____

Other: (If Charge Not Based on Water Bill) _____

Recommended Rate Schedule: (With RUS Grant)

<i>First</i>	_____	Gallons @ \$ _____	<i>Minimum.</i>
<i>Next</i>	_____	Gallons @ \$ _____	<i>per 1,000 Gallons.</i>
<i>Next</i>	_____	Gallons @ \$ _____	<i>per 1,000 Gallons.</i>
<i>Next</i>	_____	Gallons @ \$ _____	<i>per 1,000 Gallons.</i>
<i>Next</i>	_____	Gallons @ \$ _____	<i>per 1,000 Gallons.</i>
<i>Next</i>	_____	Gallons @ \$ _____	<i>per 1,000 Gallons.</i>
<i>All Over</i>	_____	Gallons @ \$ _____	<i>per 1,000 Gallons.</i>

If more than one rate, use additional sheets.

XXII. WATER RATES - PROPOSED

A. Proposed Rate Schedule without RUS Grant:

<u>5/8 inch x 3/4"</u>		
first 1,000	12.98	minimum
next 1,000	7.05	per 1,000 gallons
next 1,000	5.72	per 1,000 gallons
next 2,000	5.48	per 1,000 gallons
over 5,000	5.12	per 1,000 gallons
 <u>1 inch</u>		
first 5,000	36.71	minimum
over 5,000	5.12	per 1,000 gallons
 <u>1.5 inch</u>		
first 10,000	62.28	minimum
over 10,000	5.12	per 1,000 gallons
 <u>2 inch</u>		
first 25,000	139.01	minimum
over 25,000	5.12	per 1,000 gallons
 <u>Bulk Sales</u>	6.44	per 1,000 gallons

The above proposed rate, without RUS grant, must be completed for each grant. If the applicant/engineer desires, there is no objection to recommending a proposed rate with an estimated RUS grant in the Table below. However, the preparer should remember that the Table (A) above must be completed prior to Table (B).

B. Recommended Rate Schedule with RUS Grant:

<u>5/8 inch x 3/4"</u>		
first 1,000	12.86	minimum
next 1,000	6.99	per 1,000 gallons
next 1,000	5.67	per 1,000 gallons
next 2,000	5.43	per 1,000 gallons
over 5,000	5.07	per 1,000 gallons
 <u>1 inch</u>		
first 5,000	36.37	minimum
over 5,000	5.07	per 1,000 gallons
 <u>1.5 inch</u>		
first 10,000	61.72	minimum
over 10,000	5.07	per 1,000 gallons
 <u>2 inch</u>		
first 25,000	137.74	minimum
over 25,000	5.07	per 1,000 gallons
 <u>Bulk Sales</u>	6.38	per 1,000 gallons

Date This Rate Went Into Effect N/A

XXIII. FORECAST OF SEWER USAGE - INCOME - EXISTING SYSTEM – EXISTING USERS

<i>Meter Size*</i>	<i>Monthly Sewer Usage</i>	<i>Average Rate</i>	<i>Residential</i>		<i>Non-Residential</i>			
			<i>No. of Users**</i>	<i>Usage (1000)</i>	<i>Income</i>	<i>No. of Users</i>	<i>Usage (1000)</i>	<i>Income</i>
	<i>0 - 2,000 Gallons</i>	<i>1,000</i>						
	<i>2,000 - 3,000 Gallons</i>	<i>2,500</i>						
	<i>3,000 - 4,000 Gallons</i>	<i>3,500</i>						
	<i>4,000 - 5,000 Gallons</i>	<i>4,500</i>						
	<i>5,000 - 6,000 Gallons</i>	<i>5,500</i>						
	<i>6,000 - 7,000 Gallons</i>	<i>6,500</i>						
	<i>7,000 - 8,000 Gallons</i>	<i>7,500</i>						
	<i>8,000 - 9,000 Gallons</i>	<i>8,500</i>						
	<i>9,000 - 10,000 Gallons</i>	<i>9,500</i>						
<i>5/8</i>	<i>10,000 - 11,000 Gallons</i>	<i>10,500</i>						
<i>x</i>	<i>11,000 - 12,000 Gallons</i>	<i>11,500</i>						
<i>3/4</i>	<i>12,000 - 13,000 Gallons</i>	<i>12,500</i>						
<i>Inch</i>	<i>13,000 - 14,000 Gallons</i>	<i>13,500</i>						
	<i>14,000 - 15,000 Gallons</i>	<i>14,500</i>						
	<i>15,000 - 16,000 Gallons</i>	<i>15,500</i>						
	<i>16,000 - 17,000 Gallons</i>	<i>16,500</i>						
	<i>17,000 - 18,000 Gallons</i>	<i>17,500</i>						
	<i>18,000 - 19,000 Gallons</i>	<i>18,500</i>						
	<i>19,000 - 20,000 Gallons</i>	<i>19,500</i>						
	<i>- Gallons</i>							
	<i>- Gallons</i>							
	<i>- Gallons</i>							
	<i>Sub-Total</i>		<i>()</i>	<i>()</i>	<i>()</i>	<i>()</i>	<i>()</i>	<i>()</i>
	<i>Average Monthly Rate</i>	<i>()</i>						
	<i>Average Monthly Usage</i>		<i>()</i>		<i>()</i>		<i>()</i>	

* Breakdown of meter size usage is not required unless different sewer rates are charged based on size of water meter.

** Number of users should reflect the actual number of "meter settings".

	-	Gallons						
	-	Gallons						
1-	-	Gallons						
Inch	-	Gallons						
	-	Gallons						
	-	Gallons						
	-	Gallons						
		Sub-Total		()	()	()	()	()

	-	Gallons						
	-	Gallons						
1-1/2	-	Gallons						
Inch	-	Gallons						
	-	Gallons						
	-	Gallons						
	-	Gallons						
		Sub-Total		()	()	()	()	()

	-	Gallons						
	-	Gallons						
2-	-	Gallons						
Inch	-	Gallons						
	-	Gallons						
	-	Gallons						
	-	Gallons						
		Sub-Total		()	()	()	()	()

	-	Gallons						
	-	Gallons						
3-	-	Gallons						
Inch	-	Gallons						
	-	Gallons						
	-	Gallons						
	-	Gallons						
		Sub-Total		()	()	()	()	()

	-	Gallons						
	-	Gallons						
4-	-	Gallons						
Inch	-	Gallons						
	-	Gallons						
	-	Gallons						
	-	Gallons						
		Sub-Total		()	()	()	()	()

* Breakdown of meter size usage is not required unless different sewer rates are charged based on size of water meter.

** Number of users should reflect the actual number of "meter settings".

	-	Gallons						
	-	Gallons						
5-	-	Gallons						
Inch	-	Gallons						
	-	Gallons						
	-	Gallons						
		Sub-Total		()	()	()	()	()
	-	Gallons						
	-	Gallons						
6-	-	Gallons						
Inch	-	Gallons						
	-	Gallons						
	-	Gallons						
		Sub-Total		()	()	()	()	()
		TOTALS		()	()	()	()	()

MULTI-FAMILY AND APARTMENT USER ANALYSIS

If billed as a typical user, the information should be included in the residential information above. If not billed as a typical residential user, please explain below.

<u>Name of Unit</u>	<u>Number of Units</u>	<u>Number of Meters</u>	<u>Revenue Calculations</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

* Breakdown of meter size usage is not required unless different sewer rates are charged based on size of water meter.

** Number of users should reflect the actual number of "meter settings".

XXIV. FORECAST OF SEWER USAGE - INCOME - NEW USERS - EXTENSION ONLY

N/A

<u>Meter Size*</u>	<u>Monthly Sewer Usage</u>	<u>Average Rate</u>	<u>Residential</u>			<u>Non-Residential</u>		
			<u>No. of Users**</u>	<u>Usage (1000)</u>	<u>Income</u>	<u>No. of Users</u>	<u>Usage (1000)</u>	<u>Income</u>
	0 - 2,000 Gallons	1,000						
	2,000 - 3,000 Gallons	2,500						
	3,000 - 4,000 Gallons	3,500						
	4,000 - 5,000 Gallons	4,500						
	5,000 - 6,000 Gallons	5,500						
	6,000 - 7,000 Gallons	6,500						
	7,000 - 8,000 Gallons	7,500						
	8,000 - 9,000 Gallons	8,500						
	9,000 - 10,000 Gallons	9,500						
5/8	10,000 - 11,000 Gallons	10,500						
x	11,000 - 12,000 Gallons	11,500						
3/4	12,000 - 13,000 Gallons	12,500						
Inch	13,000 - 14,000 Gallons	13,500						
	14,000 - 15,000 Gallons	14,500						
	15,000 - 16,000 Gallons	15,500						
	16,000 - 17,000 Gallons	16,500						
	17,000 - 18,000 Gallons	17,500						
	18,000 - 19,000 Gallons	18,500						
	19,000 - 20,000 Gallons	19,500						
	- Gallons							
	- Gallons							
	- Gallons							
	Sub-Total		()	()	()	()	()	()
	Average Monthly Rate ()							
	Average Monthly Usage			()			()	

* Breakdown of meter size usage is not required unless different sewer rates are charged based on size of water meter.

** Number of users should reflect the actual number of "meter settings".

N/A

	-	Gallons							
	-	Gallons							
1-	-	Gallons							
Inch	-	Gallons							
	-	Gallons							
	-	Gallons							
	-	Gallons							
		Sub-Total		()	()	()	()	()	()

	-	Gallons							
	-	Gallons							
1-1/2	-	Gallons							
Inch	-	Gallons							
	-	Gallons							
	-	Gallons							
	-	Gallons							
		Sub-Total		()	()	()	()	()	()

	-	Gallons							
	-	Gallons							
2-	-	Gallons							
Inch	-	Gallons							
	-	Gallons							
	-	Gallons							
	-	Gallons							
		Sub-Total		()	()	()	()	()	()

	-	Gallons							
	-	Gallons							
3-	-	Gallons							
Inch	-	Gallons							
	-	Gallons							
	-	Gallons							
	-	Gallons							
		Sub-Total		()	()	()	()	()	()

	-	Gallons							
	-	Gallons							
4-	-	Gallons							
Inch	-	Gallons							
	-	Gallons							
	-	Gallons							
	-	Gallons							
		Sub-Total		()	()	()	()	()	()

* Breakdown of meter size usage is not required unless different sewer rates are charged based on size of water meter.

** Number of users should reflect the actual number of "meter settings".

N/A

	-	Gallons						
	-	Gallons						
5-	-	Gallons						
Inch	-	Gallons						
	-	Gallons						
	-	Gallons						
		Sub-Total		()	()	()	()	()
	-	Gallons						
	-	Gallons						
6-	-	Gallons						
Inch	-	Gallons						
	-	Gallons						
	-	Gallons						
		Sub-Total		()	()	()	()	()
		TOTALS		()	()	()	()	()

MULTI-FAMILY AND APARTMENT USER ANALYSIS

If billed as a typical user, the information should be included in the residential information above. If not billed as a typical residential user, please explain below.

<u>Name of Unit</u>	<u>Number of Units</u>	<u>Number of Meters</u>	<u>Revenue Calculations</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

* Breakdown of meter size usage is not required unless different sewer rates are charged based on size of water meter.

** Number of users should reflect the actual number of "meter settings".

WATER - INCOME - EXISTING SYSTEM

MONTHLY WATER USAGE	Average	Average Rate	Residential			Commercial		
			No. of Users	Usage 1,000	Income	No. of Users	Usage 1,000	Income
<i>5/8 x 3/4 meter</i>								
0 - 1,000 Gal.	1,000	\$ 11.78	791	791	9,318	68	68	801
1,000 - 2,000 Gal.	1,500	\$ 14.98	723	1,085	10,827	20	30	300
2,000 - 3,000 Gal.	2,500	\$ 20.76	1001	2,503	20,781	9	23	187
3,000 - 4,000 Gal.	3,500	\$ 25.83	890	3,115	22,989	12	42	310
4,000 - 5,000 Gal.	4,500	\$ 30.79	625	2,813	19,244	8	36	246
5,000 - 6,000 Gal.	5,500	\$ 35.59	417	2,294	14,839	3	17	107
6,000 & Over Gal.	11,493	\$ 63.33	1077	12,378	68,209	33	379	2,090
Sub-Total			5,524	24,977	\$166,206	153	594	\$4,040
Average Monthly Rate		\$ 27.89						
Average Monthly Usage				4,522			3,884	
<i>1 inch meter</i>								
0 - 5,000 Gal.	3,000	\$ 33.27	12	36	\$ 399.24	8	24	\$ 266.16
5,000 & Over	34,000	\$ 167.54	31	1,054	\$ 5,193.74	6	204	\$ 1,005.24
Subtotal			43	1090	5592.98	14	228	1271.4
<i>1.5 inch meter</i>								
0 - 10,000 Gal.	750	\$ 56.42	2	2	\$ 112.84	3	2	\$ 169.26
10,000 & Over	41,500	\$ 202.27	1	42	\$ 202.27	1	42	\$ 202.27
Subtotal			3	43	315.105	4	43.75	371.525
<i>2 inch meter</i>								
0 - 25,000 Gal.	1,200	\$ 125.87	1	0	\$ -	1	1	\$ 125.87
25,000 & Over Comm.	63,400	\$ 303.66	0	0	\$ -	2	127	\$ 607.32
Subtotal			1	0	0	3	128	733.194
Totals			5,571	26,110	\$ 172,114	174	994.02	\$ 6,417

FORECAST OF WATER - INCOME - EXISTING SYSTEM & NEW USERS

MONTHLY WATER USAGE	Average	Average Rate	Residential			Commercial		
			No. of Users	Usage 1,000	Income	No. of Users	Usage 1,000	Income
<i>5/8 x 3/4 meter</i>								
0 - 1,000 Gal.	1,000	\$ 12.86	791	791	10,172	68	68	874
1,000 - 2,000 Gal.	1,500	\$ 16.36	723	1,085	11,825	20	30	327
2,000 - 3,000 Gal.	2,500	\$ 22.69	1001	2,503	22,708	9	23	204
3,000 - 4,000 Gal.	3,500	\$ 28.24	890	3,115	25,129	12	42	339
4,000 - 5,000 Gal.	4,500	\$ 33.67	625	2,813	21,041	8	36	269
5,000 - 6,000 Gal.	5,500	\$ 38.92	417	2,294	16,228	3	17	117
6,000 & Over Gal.	11,493	\$ 69.30	1077	12,378	74,636	33	379	2,287
Sub-Total			5,524	24,977	\$181,738	153	594	\$4,418
Average Monthly Rate		\$ 30.49						
Average Monthly Usage				4,522			3,884	
<i>1 inch meter</i>								
0 - 5,000 Gal.	3,000	\$ 36.37	12	36	\$ 436.44	8	24	\$ 290.96
5,000 & Over	34,000	\$ 183.40	31	1,054	\$ 5,685.40	6	204	\$ 1,100.40
Subtotal			43	1090	6121.84	14	228	1391.36
<i>1.5 inch meter</i>								
0 - 10,000 Gal.	750	\$ 61.72	2	2	\$ 123.44	3	2	\$ 185.16
10,000 & Over	41,500	\$ 221.43	1	42	\$ 221.43	1	42	\$ 221.43
Subtotal			3	43	344.865	4	43.75	406.585
<i>2 inch meter</i>								
0 - 25,000 Gal.	1,200	\$ 137.74	1	0	\$ -	1	1	\$ 137.74
25,000 & Over	63,400	\$ 332.43	0	0	\$ -	2	127	\$ 664.86
Subtotal			1	0	0	3	128	802.596
Totals			5,571	26,110	\$ 188,204	174	994.02	\$ 7,018

FORECAST OF WATER - INCOME - NEW USERS - EXTENSION ONLY

MONTHLY WATER USAGE	Average	Average Rate	Residential			Commercial		
			No. of Users	Usage 1,000	Income	No. of Users	Usage 1,000	Income
<u>0</u>	<u>Average</u>							
<i>5/8 x 3/4 meter</i>								
0 - 1,000 Gal.	1,000	\$ 12.86	0	0	0	0	0	0
1,000 - 2,000 Gal.	1,500	\$ 16.36	0	0	0	0	0	0
2,000 - 3,000 Gal.	2,500	\$ 22.69	0	0	0	0	0	0
3,000 - 4,000 Gal.	3,500	\$ 28.24	0	0	0	0	0	0
4,000 - 5,000 Gal.	4,500	\$ 33.67	17	77	572	0	0	0
5,000 - 6,000 Gal.	5,500	\$ 38.92	0	0	0	0	0	0
6,000 & Over Gal.	11,493	\$ 69.30	0	0	0	0	0	0
	Sub-Total		17	77	\$572	0	0	\$0
Average Monthly Rate		\$ 30.49						
Average Monthly Usage				4,500			0	
 <i>1 inch meter</i>								
0 - 5,000 Gal.	3,000	\$ 36.37	0	0	\$ -	0	0	\$ -
5,000 & Over	34,000	\$ 183.40	0	0	\$ -	0	0	\$ -
	Subtotal		0	0	0	0	0	0
 <i>1.5 inch meter</i>								
0 - 10,000 Gal.	750	\$ 61.72	0	0	\$ -	0	0	\$ -
10,000 & Over	41,500	\$ 221.43	0	0	\$ -	0	0	\$ -
	Subtotal		0	0	0	0	0	0
 <i>2 inch meter</i>								
0 - 25,000 Gal.	1,200	\$ 137.74	0	0	\$ -	0	0	\$ -
25,000 & Over	Comm. 63,400	\$ 332.43	0	0	\$ -	0	0	\$ -
	Subtotal		0	0	0	0	0	0
	Totals		17	77	572	-	-	-

XXVII. CURRENT OPERATING BUDGET - (SEWER SYSTEM) NA

Based upon 12 months

A. Operating Income:

<i>Sewer Revenue</i>	\$ _____
<i>Late Charge Fees</i>	_____
<i>Other (Describe)</i>	_____
<i>Less Allowances and Deductions</i>	(_____)
Total Operating Income	\$ _____

B. Operation and Maintenance Expenses:

(Based on Uniform System of Accounts prescribed by National Association of Regulatory Utility Commissioners)

<i>Operation Expense</i>	\$ _____
<i>Maintenance Expense</i>	_____
<i>Customer Accounts Expense</i>	_____
<i>Administrative and General Expense</i>	_____
Total Operating and Maintenance Expenses	\$ _____
Net Operating Income	\$ _____

C. Non-Operating Income:

<i>Interest on Deposits</i>	\$ _____
<i>Other (Identify) Interest Income</i>	_____
<i>Grant</i>	_____
Total Non-Operating Income	\$ _____

D. Net Income \$ _____

E. Debt Repayment:

<i>RUS Interest</i>	\$ _____
<i>RUS Principal</i>	_____
<i>Non-RUS Interest</i>	_____
<i>Non-RUS Principal</i>	_____
Total Debt Repayment	\$ _____

F. Balance Available for Coverage \$ _____

XXVIII. PROPOSED OPERATING BUDGET - (SEWER SYSTEM) - EXISTING SYSTEM
AND NEW USERS (1st Full Year of Operation) Year Ending

A. Operating Income:

Sewer Revenue \$ _____
Late Charge Fees _____
Other (Describe) _____
Less Allowances and Deductions (_____)
Total Operating Income \$ _____

B. Operation and Maintenance Expenses:
*(Based on Uniform System of Accounts prescribed by National Association of
Regulatory Utility Commissioners)*

Operation Expense \$ _____
Maintenance Expense _____
Customer Accounts Expense _____
Administrative and General Expense _____
Total Operating and Maintenance Expenses \$ _____
Net Operating Income \$ _____

C. Non-Operating Income:

Interest on Deposits \$ _____
Other (Identify) _____
Total Non-Operating Income \$ _____

D. Net Income \$ _____

E. Debt Repayment:

RUS Interest \$ _____
RUS Principal _____
Non-RUS Interest _____
Non-RUS Principal _____
Total Debt Repayment \$ _____

F. Balance Available for Coverage \$ _____
Depreciation Fund _____
Short Lived Assets \$ _____
Balance Available \$ _____

**XXIX. PROPOSED OPERATING BUDGET - (SEWER SYSTEM) - NEW USERS -
EXTENSION ONLY (1st Full Year of Operation) Year Ending _____**

N/A

A. Operating Income:

Sewer Revenue \$ _____
Late Charge Fees _____
Other (Describe) _____
Less Allowances and Deductions (_____)
Total Operating Income \$ _____

B. Operation and Maintenance Expenses:

*(Based on Uniform System of Accounts prescribed by National Association of
Regulatory Utility Commissioners)*

Operation Expense \$ _____
Maintenance Expense _____
Customer Accounts Expense _____
Administrative and General Expense _____
Total Operating and Maintenance Expenses \$ _____
Net Operating Income \$ _____

C. Non-Operating Income:

Interest on Deposits \$ _____
Other (Identify) _____
Total Non-Operating Income \$ _____

D. Net Income \$ _____

E. Debt Repayment:

RUS Interest \$ _____
RUS Principal _____
Non-RUS Interest _____
Non-RUS Principal _____
Total Debt Repayment \$ _____

F. Balance Available for Coverage \$ _____

XXXVI. CURRENT OPERATING BUDGET - (WATER SYSTEM) -

Year Ending 2019

A.	Operating Income:	
	Water Sales	\$ 2,142,354
	Disconnect/Reconnect/Late Charge Fees	
	Other (Describe) water for resale	\$ 171,533
	Less Allowances and Deductions	
	Total Operating Income	<u>\$ 2,313,887</u>
B.	Operation and Maintenance Expenses: (Based on Uniform System of Accounts prescribed by National Association of Regulatory Utility Commissioners)	
	Source of Supply Expense	\$ 1,013,213
	Maintenance Expense	\$ 107,518
	Customer Accounts Expense	\$ 96,996
	Administrative and General Expense	\$ 543,334
	Total Operating Expenses	<u>\$ 1,761,061</u>
	Net Operating Income	<u>\$ 552,826</u>
C.	Non-Operating Income:	
	Interest on Deposits	\$ 50,000
	Other (Identify)	\$ 30,483
	Existing Debt Reserve	\$ (116,088)
	Total Non-Operating Income	\$ (35,605)
D.	Net Income	<u>\$ 517,221</u>
E.	Debt Repayment:	
	RD Note	\$ 100,652
	RD Principal	
	Non-RD Interest	
	Non-RD Principal	
	Total Debt Repayment	<u>\$ 100,652</u>
F.	Balance Available for Coverage	<u>\$ 416,569</u>

XXXVII. PROPOSED OPERATING BUDGET - (WATER SYSTEM)

(1st Full Year of Operation)

Year Ending 2022

A.	Operating Income:		
	Water Sales	\$	2,342,667
	Disconnect/Reconnect/Late Charge Fees		
	Other (Describe) water for resale	\$	172,000
	Less Allowances and Deductions		
	Total Operating Income	\$	<u>2,514,667</u>
B.	Operation and Maintenance Expenses: (Based on Uniform System of Accounts prescribed by National Association of Regulatory Utility Commissioners)		
	Source of Supply Expense	\$	1,139,727
	Pumping Expense	\$	120,943
	Customer Accounts Expense	\$	109,107
	Administrative and General Expense*	\$	801,176
	Total Operating Expenses	\$	<u>2,170,953</u>
	Net Operating Income	\$	<u>343,714</u>
C.	Non-Operating Income:		
	Interest on Deposits	\$	50,000
	Other (Short Lived Assets)	\$	136,000
	Existing Debt Reserve	\$	(116,088)
	Total Non-Operating Income	\$	69,912
D.	Net Income	\$	<u>413,626</u>
E.	Debt Repayment:		
	RD Note	\$	184,652
	RD Principal		
	Non-RD Interest		
	Non-RD Principal		
	Total Debt Repayment	\$	<u>184,652</u>
F.	Balance Available for Coverage	\$	<u>228,974</u>

*Includes salary/benefits increase for 2 new employees and
pandemic response fund

**XXXVIII. PROPOSED OPERATING BUDGET - (WATER SYSTEM) -
NEW USERS - EXTENSION ONLY**

A.	Operating Income:		
	Water Sales	\$	6,864
	Disconnect/Reconnect/Late Charge Fees		
	Other (Describe) Tap Fees & Misc		
	Less Allowances and Deductions		
	Total Operating Income	\$	<u>6,864</u>
B.	Operation and Maintenance Expenses: (Based on Uniform System of Accounts prescribed by National Association of Regulatory Utility Commissioners)		
	Source of Supply Expense	\$	1,200
	Pumping Expense	\$	1,200
	Customer Accounts Expense	\$	1,200
	Administrative and General Expense	\$	1,200
	Total Operating Expenses	\$	<u>4,800</u>
	Net Operating Income	\$	2,064
C.	Non-Operating Income:		
	Interest on Deposits	\$	36
	Other (Identify)		
	Total Non-Operating Income	\$	<u>36</u>
D.	Net Income	\$	2,100
E.	Debt Repayment:		
	RD Note	\$	563
	RD Principal		
	Non-RD Interest		
	Non-RD Principal		<u> </u>
	Total Debt Repayment	\$	<u>563</u>

**GCWA Water System Improvements
Summary Addendum
Funding Option 1 - 40 year Payback Schedule with Grant
First Year of Operation - Year Ending in 2022**

Total Project Cost	<i>\$2,500,000</i>
Proposed Funding	
GCWA	
RD Grant Funds	\$500,000
Proposed Bond Amount	\$2,000,000
Proposed Debt Service	
RD Loan Annual Debt Service	\$83,100
40 years @ 2.75%	
RD Loan Debt Service Coverage (10% of Annual Debt Service)	\$8,310
<i>Total New Project Debt Service</i>	
	<i>\$91,410</i>
Additional Expenses & Anticipated Debt Service	
Estimated Annual O & M Increase	\$409,893
Short-Lived Assets	\$106,000
	+
	\$0
<i>Total Additional Expenses & Anticipated Debt Service</i>	
	<i>\$515,893</i>
Total Annual Increase (Total New Project Debt Service + Total Additional Expenses)	\$607,303
Balance Available for Coverage	-
	\$416,569
<u>Total Additional Annual Revenue Required</u>	
	<u>\$190,734</u>
Additional Revenue Based on Existing Current Rates	\$6,532
Total Additional Annual Revenue Required	\$184,202
Total 2019 Billed Water Revenue	÷ \$2,142,354
Percentage Rate Increase	
	9.00%

<i>In Gallons</i>	2019 Existing Rates	Existing Current Rates	Proposed Rates
First 1,000	\$11.78	\$11.80	\$12.86
Next 1,000	\$6.39	\$6.41	\$6.99
Next 1,000	\$5.18	\$5.20	\$5.67
Next 2,000	\$4.96	\$4.98	\$5.43
Over 5,000	\$4.63	\$4.65	\$5.07

**GARRARD COUNTY WATER ASSOCIATION
WATER SYSTEM IMPROVEMENTS
SHORT LIVED ASSETS**

Replacement Reserves - Short Lived Assets				
Type of Reserve	User Description	Replacement Cost	Reserve on Hand	Annual Reserve
1-5 Years	computer equipment	\$40,000	\$0	\$8,000
1-5 Years	utility truck	60,000	0	12,000
1-5 Years	backhoe	90,000	0	18,000
1-5 Years	hydrants, valves, meters etc.	40,000	0	8,000
1-5 Years	SCADA equipment	50,000	0	10,000
Subtotal 1-5 Years				56,000
5-10 Years	bobcat	40,000	0	4,000
5-10 Years	utility truck	60,000	0	6,000
Subtotal 5-10 Years				10,000
10-15 Years	3 tank paintings @ \$100,000 ea	300,000	0	20,000
10-15 Years	12 pumps @ \$25,000 ea	300,000	0	20,000
Subtotal 10-15 Years				40,000

Total Annual Replacement Reserve - Short Lived Assets

\$106,000

XXXIII. ESTIMATED PROJECT COST – SEWER
(Round to nearest \$100)

N/A

	<u>Collection</u>	<u>Treatment</u>	<u>Total</u>
<i>Development</i>	_____	_____	_____
<i>Land and Rights</i>	_____	_____	_____
<i>Legal</i>	_____	_____	_____
<i>Engineering</i>	_____	_____	_____
<i>Interest</i>	_____	_____	_____
<i>Contingencies</i>	_____	_____	_____
<i>Initial Operating and Maintenance</i>	_____	_____	_____
<i>Other</i>	_____	_____	_____
TOTAL	_____	_____	_____

XXXIV. PROPOSED PROJECT FUNDING – SEWER

N/A

	<u>Collection</u>	<u>Treatment</u>	<u>Total</u>
<i>Applicant - User Contribution Fees</i>	_____	_____	_____
<i>Other - Applicant Contribution</i>	_____	_____	_____
<i>RUS Loan</i>	_____	_____	_____
<i>RUS Grant</i>	_____	_____	_____
<i>ARC Grant (If applicable)</i>	_____	_____	_____
<i>CDBG (If applicable)</i>	_____	_____	_____
<i>Other (Specify)</i>	_____	_____	_____
<i>Other (Specify)</i>	_____	_____	_____

XXV. ESTIMATED PROJECT COST – WATER

Development	<u>\$ 1,963,000</u>
Land and Rights	<u>10,000</u>
Legal	<u>10,000</u>
Engineering	<u>327,000</u>
Interest	<u>0</u>
Contingencies	<u>190,000</u>
Initial Operating and Maintenance	<u>0</u>
Other (Refinance existing loan)	<u>0</u>
TOTAL	<u>\$ 2,500,000</u>

XXXVI. PROPOSED PROJECT FUNDING

Applicant - User Connection Fees	\$ <u>0</u>
Other Applicant Contribution	<u>0</u>
RUS Loan	<u>2,000,000</u>
RUS Grant	<u>500,000</u>
ARC Grant (If applicable)	<u>0</u>
CDBG (If applicable)	<u>0</u>
Other (Specify)	<u>0</u>
Other (Specify)	<u>0</u>
TOTAL	<u>\$ 2,500,000</u>