Town of Heath Springs, South Carolina Sewer Outfall Line Replacement Project

APPLICATION

South Carolina Rural Infrastructure Authority SC Infrastructure Investment Program (SCIIP)

September 12, 2022



Grant Application

Applicant Informa	tion	17.15		Hi			15	TIME IT
Applicant Name:	Town	of Heath S	Springs				-	
Mailing Address:	PO Bo	x 100	-					
City, State and Zip:	Heath	Springs, S	SC 29058	3		County:	Lanca	ster County
_	llation: 3,301 - 3,300 o			/sewer	if applicant is subm company or other eligi	itting on b		
NPDES Permit Num	ber: S(C004011	8	□ N/	A PWS ID Number	: SC2910	002	□ N/A
Regional Project Par	rticipant	s:						■ N/A
Project Description	n:				TITLE OF	28 31	160	
Project Title:	Sewer	Outfall Re	eplacem	ent P	roject			
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Grant Category:		Type of P	roject:		Project Benefit:			
Community Impact		Check all tha	t apply:		Number of customers	/taps directly	served l	ov project:
☐ Regional Solutions		□ Water	☐ Storm	water		,		
☐ Viability Planning		Sewer	☐ Plannii	ng	Residential: 425	Ві	usiness: _	26
Funding Request &	k Budge	t Summary	i isolič		A detailed es	timate of all	costs n	nust be attached.
Source		Construction	on Costs*	Non-	Construction Costs	Total		% of Total**
SCIIP Funds Request	ed:	\$ 2,598	3,260		\$ 376,740	\$ 2,975,	000	85%
RIA State Funds Requ Service pop ≤10K or Tie		\$ 500	,000			Total Loc Investment D		Total Local Investment Percentage:
Other:								
Other:						\$ 525,0	00	15%
Local Funds:		\$ 25,0	000					
Total Project Fundi	ng:	\$ 3,	123,260		\$ 376,740	\$ 3,50	0,000	
* Include a 25% cons ** SCIIP local investme Community Impact Large Systems (≥30,0 Small Systems (<30,0)	ent requi	rements (the e pop.): 25%	minimum p	osts	age of project costs tha		Regiona	y non-SCIIP funds): Il Solutions: 15% Planning: None





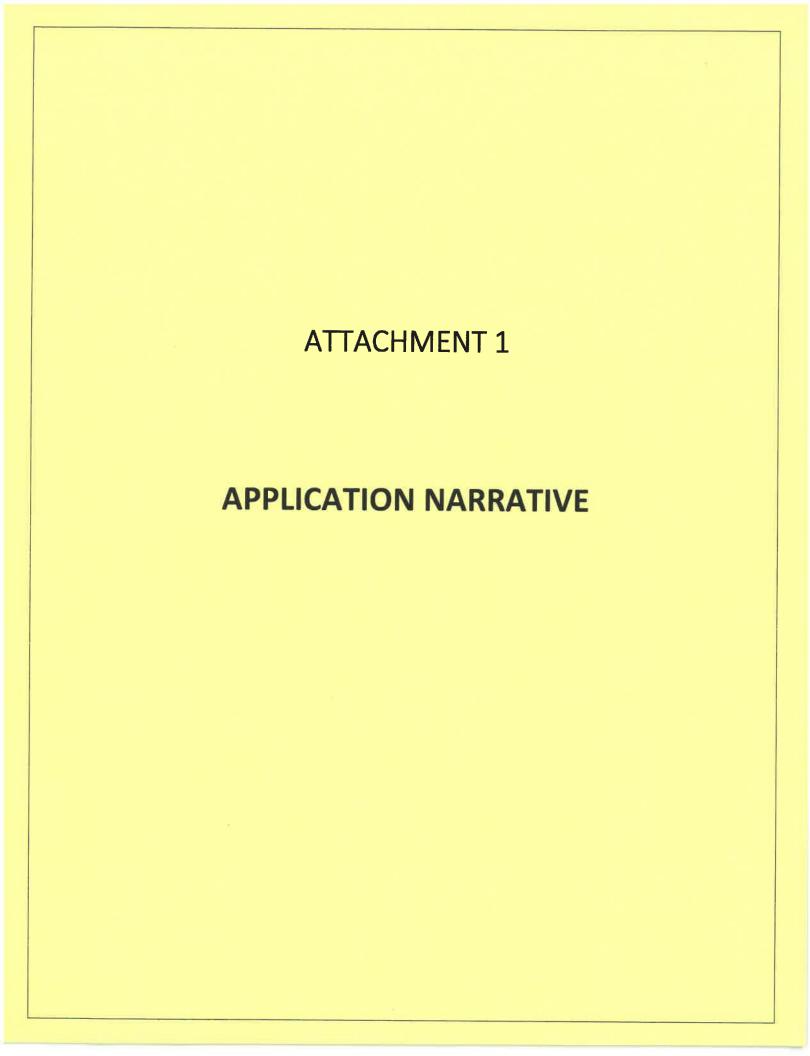
Project Schedule &	Re	adiness					THE STATE OF
Milestone	E	pected/Actual Compl	etion			len er	
Final Design	Da	ate: 07/31/2023] N/A				CODOTE
Permits Acquired	Da	ate: 10/31/2023] N/A	Permit	ts required (list t	ypes):	SCDOT Encroachment SCDHEC Construction
Acquisition	Da	ite:] N/A	# of easen	nents/parcels ne	eded:	0
Advertise for Bids	Da	te: 11/30/2023	l N/A		of contracts pla		
Start of Work	Da	te: 04/10/2024	N/A		28 15 15		TO THE PROPERTY.
Completion of Work	Da	te: <u>10/02/2025</u>	l N/A	Federal f	inal expenditure	deadli	ine is December 2026
Contact Information	1	Name	MIG.	Title	Phone		TE CONTRACTOR
Chief Elected or Administrative Officia	1:	Eddie Moore		Mayor	803.273.9938	eddi	Email Address eDheathsprings, us
Local Project Contact:		Katherine Edlein	Gran Assoc	ts & Planning	803.327.9041		dlein@catawbacog.org
Local Financial Contac	t:	Eddie Moore		Mayor	803.273.9938		
Engineer/Consultant:		Daniel Wallace	Ε	ngineer	803.768.5201	dwa	allace@keckwood.com
Certification				TIPE V		150	
Investment Program, wand authorized by the acknowledge that the I State and Local Fiscal applicable federal, state	ana thic Am nere Rec	that the applicant he h is funded through St erican Rescue Plan Ac ein described project w covery Funds program	as auti tate Fis t, to a vill mee quide	horized subm scal Recovery ssist in carry et an eligible lines, and th	nission of this re Funds allocated ing out the projections	quest f I to the ect desc Is as de	t and the attachments is for the SC Infrastructure State of South Carolina cribed herein. Further, I efined by U.S. Treasury's lect will comply with all
Eddie L. Moore			- 2-	Mayor			
Name of Chief Ex (Elected or Adi	mini W ure	istrative) *		9-1	Tit - ス <i>o</i> よこ Dat	te	
* Please save this com The printed form wit	plet h or	ed form for electronic sul iginal, pen-and-ink signa	bmissio ture mi	n prior to sign ust be mailed o	ing. Do NOT subm or delivered as dete	it a sca i ailed on	page 6.

Please see the following pages for required attachments and application submission instructions.

Applications must be <u>received</u> by 5:00 pm on September 12, 2022.

Town of Heath Springs Sewer Outfall Replacement Project RIA SCIIP Application Attachment List

- 1. APPLICATION NARRATIVE
- 2. PRELIMINARY ENGINEERING COST ESTIMATE
 - a. Detailed Cost Estimate
 - b. Project Budget & Funding Sources
- 3. PROJECT LOCATION AND SERVICE AREA MAPS
 - a. Aerial Location Map
 - b. Service Area Map
 - c. Existing Sewer System Map
 - d. Proposed Project Map (with Census Tracts)
- 4. FUNDING AND OTHER COMMITMENTS
 - a. Letter of Local Funding Commitment
 - b. Letter Requesting RIA State Funding
 - c. Letter of Ownership, Operation and Maintenance
- 5. VIABILITY SELF-ASSESSMENT
- 6. ADDITIONAL ATTACHMENTS
 - a. Letter from Town Utilities Director
 - b. DHEC Compliance Evaluation Inspection
 - c. Photographs of Outfall Line
 - d. Current Water and Sewer Rate Schedule
 - e. Current Operating Budget
 - f. DHEC Water System Details Town of Heath Springs



HEATH SPRINGS SEWER OUTFALL REPLACEMENT PROJECT

RURAL INFRASTRUCTURE AUTHORITY: SCIIP

SCIIP APPLICATION NARRATIVE

Town of Heath Springs, SC

SEPTEMBER 12, 2022

A. NEED

Explain the need for this project including:

- a summary of the current condition, capacity and deficiencies of existing facilities
- the frequency and severity of the problem

The Town of Heath Springs (Town) was incorporated in Lancaster County, SC, in 1890 as a Town that prides itself on maintaining the hospitality of a small, southern community while striving to improve the future for all its residents. Today, the Town of Heath Springs owns and operates its water and wastewater facilities, providing 399 residential and 26 commercial customers with these services. There are approximately 1,000 residents served. The system contains one master water meter and one 100,000-gallon elevated tank. The master meter is maintained by Lancaster County Water and Sewer District. The Town owns and operates a wastewater treatment plant, seven pump stations, and a distribution system that includes force main and gravity sewer lines. The Town handles all billing for water and wastewater services and has contractual agreements to oversee the maintenance and operation of these facilities. For a copy of the Town's water and sewer service rate schedule, see Attachment 6.

The Town of Heath Springs is requesting South Carolina Infrastructure Investment Program (SCIIP) funds for its Sewer Outfall Replacement Project. The proposed project consists of replacing a portion of the Town's gravity sewer outfall line as well as several manholes that are located along the line. This line was constructed in 1974 and conveys the entire Town's sewage to the Heath Springs Wastewater Treatment Plant, located at 712 Hart Street. This line goes from Salem Street to the intersection of Rowland Avenue and Hart Street and travels up Hart Street to the wastewater treatment plant. It connects the Town's entire sanitary sewer system to the wastewater treatment plant. This is an 8-inch line that is a mixture of PVC and ductile iron pipes with 4-foot diameter manholes, all of which have been severely degraded. The cause of the outfall line and associated manholes' corrosion is in large part due to the multiple force mains that tie into this section of the sewer system. The hydrogen sulfide gas released by these force mains works against the predominately ductile-iron pipe that is currently in place, corroding it to a point beyond reasonable repair. Most manholes observed for the system are at grade (level with ground) and have disintegrating rings and covers, which allow rainwater to easily enter the manholes and therefore the entire system. Many manhole joints and other connecting pipes also appear to be severely corroded, likely contributing to groundwater entering the system as well. Thus, the corroded outfall line infrastructure has led to increased levels of inflow and infiltration (I & I), an issue that has quality of service and financial repercussions for the Town. Oftentimes during periods of heavy rainfall, the infiltration caused by the outfall line's deteriorated state will push the Town's wastewater treatment plant to maximum capacity, bringing it from its standard 45,000 gallons a day to 150,000. The costs associated with treating this surplus of wastewater are substantial, especially for a town with fewer than 750 residents. The proposed project will provide a sustainable solution for the Town by replacing its antiquated and disintegrating critical infrastructure with sustainable, upgraded materials designed to withstand adverse conditions far into the future.

In recent years, there have been numerous issues and deficiencies justifying the need for the sewer line replacement and upgrade. The portion of the outfall line in question was constructed in 1974 and, at 47 years old, is approaching the end of its useful life due to aging, wear, and tear. It is undersized and corroded, with disintegrating 4-foot diameter manholes and 8-inch pipe, and no longer has the capacity to adequately serve the Town's system. Included in Attachment 6 is a letter describing the system's

deficiencies and needs written by the Town of Heath Springs' Utilities Director, Mr. Joey Oliver. Mr. Oliver stated that the outfall gravity line and manholes have corroded beyond repair and no longer meet the sewer needs of the community for capacity, resilience, or economic growth. There are photographs included in Attachment 6 that show the deteriorated condition of the manholes and sewer outfall line to the wastewater treatment plant. All of this underscores the need for the replacement project to improve service for the community and prevent further undue maintenance and operation expenses from being incurred by the Town and its citizens.

The existing gravity sewer outfall line targeted for replacement in this project has exceeded its useful life and no longer meets community needs in terms of service reliability, resiliency, and capacity for economic activity and growth. The proposed Sewer Outfall Replacement Project provides a solution to the system's current shortcomings. The new 10-inch outfall line and Epoxy-coated manholes will allow a larger volume of wastewater to flow from the Town to the treatment facility, and back without pushing the system to capacity when there is rainfall. This sewer outfall serves the business park as well as the entire Town. Upsizing the line is expected to nearly double the system capacity to account for any future growth that the Town experiences during the lifetime of the project. Replacing the outdated sewer line will improve the Town's quality of service, ensuring once more that all customers are provided with adequate and reliable wastewater services.

B. PROJECT DESCRIPTION

Provide a detailed description of the project, including all activities regardless of funding source

The Heath Springs Sewer Outfall Replacement Project consists of replacing and upgrading a portion of the Town's gravity sewer outfall line that extends from Salem Street to the intersection of Rowland Avenue and Hart Street before going northeast up to the wastewater treatment plant. The existing sewer outfall line is approximately 47 years old and at 8-inches is undersized for the current needs of the Town. For a map of the existing wastewater infrastructure, see Attachment 3. Predominately ductile iron pipe and a smaller amount of polyvinyl chloride (PVC) sewer pipe constitute the existing outfall line. The gravity sewer outfall line generally serves the entire Town and the outfall to the WWTP and has reached the end of its service life. The existing manholes and pipes have been severely degraded due to hydrogen sulfide gas resulting from the multiple force mains that tie to this section of the sewer system. The proposed project will consist of the replacement of the dated pipe along Hart Street with the installation of 5,400 linear feet of 10-inch PVC pipe and the replacement of 25 old and corroded manholes with new epoxycoated ones. A map of this proposed infrastructure is located in Attachment 3.

The Town serves approximately 399 residential and 26 commercial accounts, with approximately 750 people receiving wastewater services from the Town. The portion of the sewer trunk line being replaced serves all these accounts, as the entire system's wastewater runs through the sewer outfall line to reach the treatment facility. This means the improvements will benefit the entire Town's service area. A service area map depicting the Town's wastewater system can be found in Attachments 3.

Installation of the new gravity sewer outfall line will provide the Town of Heath Springs' residents with better wastewater service reliability by reducing infiltration levels, leaks and line breaks, and result in less associated repairs and maintenance man hours. With the new outfall line installed, and the greater capacity that will come with it, the Town will no longer need to spend excess finances to treat the

continual surplus of wastewater that seeps into its system after every rainfall and will be able to focus its efforts on other areas in need within Town limits. Construction activities will consist of the following:

Project Logistics

Project activities will include Construction, with Engineering and Administration as associated costs.

Construction

The Sewer Outfall Replacement Project will involve the installation of approximately 5,400 linear feet of 10" PVC gravity sewer main from Salem Street to the intersection of Rowland Avenue and Hart Street. Included will be 25 4' diameter manholes, reconnections of 45 existing sewer services, and appurtenances. Following is a list of the construction components for the project:

NO.	ITEM	UNIT	ESTIMATED QUANTITY
1	Mobilization	LS	1
2	Temporary Measures	LS	1
3	Erosion Control	LS	1
4	Clearing, Grubbing, Dispose Offsite (Easement Clearing)	AC	3.5
5	Grassing	AC	4.1
6	Traffic Control	LS	1
7	Sewer System Abandonment (Cross Country)	LF	1900
8	Sewer System Demolition (In Public R/W)	LF	3500
9	4' Diameter Manhole	EA	25
10	Manhole Epoxy Coating	EA	25
11	10" PVC Sewer Main	LF	5400
12	8" RJ DIP Carrier Pipe (3 crossings)	LF	120
13	18" Steel Casing (Jack & Bore- DOT Roadway)	LF	120
14	Connect to Existing Sewer Manhole	EA	1
15	Reconnect Forcemain to Manhole	EA	3
16	Cut & Patch Driveways	EA	15
17	Excavatable Flowable Fill - SCDOT Trench Backfill	LF	3,500
18	Reconnect Existing Sewer Services	EA	45
19	Remove & Replace Misc. (Mailboxes, culverts, etc.)	LS	1
20	Trench Rock Excavation (assumed)	CY	500
21	Import Suitable/ Export Unsuitable Material (assumed)	CY	500

A contractor will be competitively procured for construction. The project is relatively small in scope and as such, gives opportunity to smaller contractors to bid on the work. The Town of Heath Springs will take over the operation and maintenance of the gravity sewer outfall line following approval of SCDHEC to place the project in operation. (see attached Operation and Maintenance letter in Attachment 4).

No new easements will be needed for Heath Springs' Sewer Outfall Replacement Project, as all associated construction work will be located within the SCDOT right-of-way. For more details regarding project

construction and the activities and materials that it will entail, refer to the Detailed Cost Estimate found in Attachment 2.

Engineering

The Town of Heath Springs will procure an engineering firm through a competitive and fair bidding process. Once an engineer is selected and a contract is executed, the engineer will design and finalize plans for the replacement project concerning the Hart Street portion of gravity sewer outfall line. Upon completion, the engineer will submit all project plans to all regulatory agencies as needed. Both a SCDHEC construction permit and a SCDOT encroachment permit will need to be obtained, a detail that is accounted for in the proposed project schedule below. The engineer will assist with the contractor bidding process and oversee construction work once contracts are awarded as well. The engineer will also review and approve pay applications and change orders throughout the project, and provide as-built drawings once construction is complete.

Administration

Project administration will include managing and completing startup, bidding and procurement, financial management, pay requests, change orders, reporting, and closeout, among other grant requirements. Catawba Regional Council of Governments (CRCOG), which has administered a variety of projects in the area, including a recent one concerning the upgrade of the Town's wastewater treatment facility, will serve as the project administrator and ensure compliance with all SCIIP program requirements. CRCOG is familiar with the Town and its wastewater collection system, in addition to RIA grant processes and compliance procedures. CRCOG will utilize this familiarity to help ensure that the Town, the engineers, and the construction contractors are complying with RIA and SCIIP requirements for the duration of the project.

Due to the unknown administration requirements associated with the SCIIP program, final approved project scope, and necessary compliance regulations, CRCOG has put an administration cost place holder in the project budget of an estimated \$40,000. It is anticipated that this amount will be paid for with RIA's SCIIP COG administration allocation.

The total project costs are as follows:

TOWN OF HEATH SPRINGS, SC | SEWER OUTFALL REPLACEMENT PROJECT | 9.12.22

11/4	124	R Table		PRO	OJECT	BUDGET &	FUND	ING SOU	RCES			The same	
	Cc	onstruction	_Co	ntingency	En	gineering	Peri	mitting	_Adm	inistration		Total	%
SCIIP		\$1,973,608	\$	624,652		\$336,040	\$	700			\$	Total SC 2,935,000	83.86%
RIA State	\$	500,000	\$	-	\$	-	\$	-	\$	-	\$	Total Lo 500,000	cal
COG SCIIP A	\dmin								\$	40,000	\$	40,000	
Local	\$	25,000	_\$_		\$		<u>\$</u>		\$		\$	25,000	16.14%
Total	\$	2,498,608	\$	624,652	\$	336,040	\$	700	\$	40,000	Ś	3,500,000	100.00%

C. FEASIBILLITY

Identify how the project will cost-effectively solve the problem or improve conditions including consideration of two other alternatives.

The proposed project will address the need to upgrade the existing 8" force main to the Town's wastewater treatment plant and manholes along the subject force main. Both are aging and reaching the end of their useful lives. This project will address the capacity limitations and infiltration of water into the line and system. Before selecting this path forward, the Town also considered the two following alternatives:

Alternative 1: One alternative solution to the issues present in the Town's wastewater collection system is to leave the gravity sewer outfall line as is and avoid expending funds on replacing the deteriorating stretch of the line at this time. This would entail continuing to make costly repairs and expending resources on the treatment of a surplus of water caused by the inflow and infiltration into the system. Leaving the system as is would also prolong the time until the outfall line and manholes are upgraded, which would likely lead to an increase in required maintenance as the pipes and manholes continue to age and corrode, and the surrounding area and water demand continues to grow. Doing nothing would allow the system to continue to fail and endanger the public and environment due to the increased risk of sewer spills caused by the deteriorating pipeline and associated manholes.

Alternative 2: Another alternative solution is to consider using coated ductile iron pipe instead of PVC pipe for the replacement 10-inch pipe that will be installed as the new outfall line. After some consideration, this alternative was deemed to be not only illogical, but also not feasible for the Town due to significant cost increases and procurement lead times associated with using coated ductile iron pipe.

The Town of Heath Springs is proposing this project for SCIIP funding in part because it views the program as an opportunity to fix its system's issues before they become emergency problems that incite violations and are too expensive for the Town to repair on its own. By replacing and upsizing the gravity sewer outfall line sooner rather than later, the Town can be sure that its wastewater infrastructure is not limited in its capacity and hindering the community and surrounding area's economic development and growth. Furthermore, the replacement project will also prevent sewage spills, making the system safer for both the environment and current residential and commercial units.

Project Schedule

Explain how the project will be carried out to meet the December 2026 federal expenditure deadline, including any anticipated problems or delays

Several steps have been taken to ensure that the project will be carried out to meet the December 2026 federal expenditure deadline. First, the Town of Heath Springs has already taken steps to secure a partner in the proposed project. By contractually hiring Catawba Regional Council of Governments, the Town will be able to move quickly through its proposed schedule (below) once grants are awarded. Projected assigned duties and points of collaboration have already been established to ensure of an efficient partnership between the Town and CRCOG, in addition to the engineer and contractor who will join the project team once secured through procurement. Once an engineering firm has been officially contracted, the engineer will finalize project plans and specifications; submit plans and secure permits from regulatory

agencies as needed, assist with the contractor bidding process, and oversee construction once the contract is awarded. As the project administrator, CRCOG will oversee and assist with startup, the engineering and contractor bidding and procurement processes, financial management, processing pay requests and change orders, reporting, and project closeout.

The estimated time allotted for construction on the project schedule accounts for potential lead time delays for equipment, as the Town of Heath Springs is aware of the uncertainties of today's market. The small project scope should also ensure a quick completion time for the total project which will be well before the 2026 federal expenditure deadline.

No acquisition is anticipated, so time will not be expended on acquiring easements. There are no anticipated problems or delays at this time. Assuming that grants are awarded by January 2023, project completion is expected to take place in December 2025, which is 12 months before the December 2026 federal expenditure deadline. This will allow for extensions and modifications of the project schedule if needed while still meeting the deadline for federal expenditure.

The anticipated project schedule is as follows:

Project Task	Completion Date
Design Plans and Specifications	July 2023
Permitting (SCDOT, SCDHEC, etc.)	October 2023
Land Acquisition	N/A
Bidding	November 2023
Construction Start	April 2024
Construction Completion	October 2025
Project Close Out	December 2025

Budget & Funding Provide specific plans for preparing for and dealing with cost overruns

As with the project schedule, the Town of Heath Springs created its project budget and cost estimates with the possibility of cost overruns in mind. To account for the current uncertainty surrounding material supply and demand, the preliminary project cost estimate (Attachment 2) includes the 25 percent construction contingency as required by SCRIA. The Town's Utility Director and Catawba Regional COG developed a detailed cost estimate for an accurate estimate of what the project budget should be based on current prices and recently bid projects. The detailed cost estimate for the project includes materials and installation fees associated with the gravity sewer pipes and manholes themselves, sediment and erosion control, connections to existing infrastructure, and more to ensure that the project does not go over budget. The engineering fees included in the estimates are based on the current CDBG Engineering Fee tables and permitting fees were estimated from SCDHEC forms based on the anticipated project scope.

A condensed budget for the project is provided in the table below; for a full project budget, refer to Attachment 2.

		PRO	DJECT BU	DGET & FUNE	DING SOU	RCES		
	Cc	nstruction	En	gineering	Adm	inistration	4	Total
SCIIP	\$	2,598,260	\$	336,740			\$	otal SCIIP 2,935,000 otal Local
RIA State	\$	500,000	\$	-	\$	-	\$	500,000
COG SCIIP Admin					\$	40,000	\$	40,000
Local	\$	25,000	\$		\$	-	\$	25,000
Total	\$	3,123,260	\$	336,740	\$	40,000	\$	3,500,000

RIA State Grant

For systems serving up to 10,000 people or those in Tier III/IV counties that are requesting up to \$500,000 in RIA state grant funds to supplement local investment, provide rationale for the need and impact of requesting these funds

As a Town supplying a total of nearly 1,000 people with water and sewer services, the Town of Heath Springs is considered a small utility. For this reason, the Town is eligible to apply for RIA State Grant funds to supplement its local investment for the proposed project. For a complete project budget with RIA state grant funds, refer to Attachment 2. Though the Town of Heath Springs is willing to provide matching funds towards the project, it does not want the local match to financially burden its current customers and residents. Water and sewer services are costly, and the rising costs of goods and services have already negatively impacted the Town and its citizens.

The Town of Heath Springs requests that SC Rural Infrastructure Authority consider contributing \$500,000 in RIA state grant funds toward the Heath Springs Sewer Outfall Replacement Project to help offset local match requirements and bring its local investment amount up to the 15 percent of total project costs required by the SCIIP program. The project will have a transformational impact on the community for all the reasons described in this application and supporting documents. The Town requests the additional RIA state financial support for this project so it can help improve the Town's public and environmental safety as well as its economic capacity for future sustainability and growth.

Dig Once

Describe any interest in implementation of a "dig once" plan for incorporation of broadband conduit during project construction. Such projects will be referred to the Office of Regulatory Staff for possible coordination and funding.

The construction component of this project that would be applicable to the Dig Once Plan is the construction of the 10" gravity sewer. The Town of Heath Springs is open to discussing the project with the Office of Regulatory Staff for the possible installation of broadband conduit.

BENEFITS/IMPACT

Community Impact Grants

The existing sewer outfall line and manholes targeted for replacement in this project have exceeded their useful life through natural aging and corrosion from adverse conditions and no longer meets community needs in terms of public and environmental safety, as well as capacity for economic activity and growth. The proposed Heath Springs Sewer Outfall Replacement Project will make a transformative impact on the Town and surrounding area because it will provide a sustainable solution to the system's current shortcomings.

This project will address the following priorities for community impact grants:

Resilience & Rain/Floodwater Protection

The upgraded gravity outfall sewer line will be made of PVC pipe and the upgraded manholes will be coated with epoxy making them more resilient. This project will provide a stronger system that will not be prone to breaking which is more likely to happen with a corroded and deteriorated line. Currently, disintegrating rings and covers allow rainwater to enter existing manholes. Corroded manhole joints in the lines contribute to the groundwater entering the system. Both of these deficiencies have caused inflow and infiltration (I & I) into the system which results in a surplus of water to be treated at the wastewater treatment plant. This increases during storm events so the elimination of I & I will improve resilience during inevitable rain events.

Aging Infrastructure

The Town's outfall sewer line that connects the entire town to the WWTP is 47 years old and has reached the end of its useful service life. The existing line and 25 manholes have been severely degraded due to hydrogen sulfide gas resulting from the multiple force mains that tie to this section of sewer line. As stated in the Town's Utility Director's letter included in Attachment 6, the sewer outfall pipe is extremely corroded, and the manhole rings and covers are disintegrating which has led to increased wastewater treatment and maintenance cots for the Town. The proposed replacement and upgrade project will reduce the amount of inflow and infiltration in the system as well as the risks of sewage spills or line failures. The upgrades will bring greater safety and sustainability to the Town's wastewater system allowing the Town to continue to provide safe and reliable service to the existing residents, businesses, and industries, as well as future customers.

System Capacity

Upsizing the 8" line to a 10" line will nearly double the Town of Heath Springs' sewer capacity to prepare for any future growth. This will include residential growth as well as economic growth in the Town. The upgrades will also serve the Heath Spring Business Park, which is currently not fully developed, thus increasing the Town's ability to attract future industries to the area.

ATTACHMENT 2

PRELIMINARY ENGINEERING COST ESTIMATE

Heath Springs Sewer Outfall Replacement Project Detailed Cost Estimation 2022-09-05

P.O Box 450 215 Hampton Street

Catawba Regional Council of Governments

Rock Hill SC 29731

To Market Lake				Kock Hill SC 29731	
NO.	Wall	TIND	ESTIMATED	UNIT PRICE	TOTAL PRICE
1	Mobilization	2.1	1	\$50,000,00	
2	Temporary Measures	2	-	920,000,00	\$20,000.00
m	Brosion Control	3 ,	1	\$25,000.00	\$25,000.00
		LS	-	\$50,000.00	\$50,000.00
+ '	Clearing, Grubbing, Dispose Offsite (Easement Clearing)	AC	3.5	\$12,500.00	\$43.750.00
^	Grassing	AC	4.1	\$9.500.00	\$38.050.00
9	Traffic Control	LS	-	\$49,676,00	00000000
7	Sewer System Abandonment (Cross Country)	1.7	1900	625.00	942,070.00
00	Sewer System Demolition (In Public R/W)	12.	3500	\$45.00	347,300.00
6	4' Diameter Manhole		2000	945.00	\$157,500.00
10	Mental: H	EA	67	\$11,000.00	\$275,000.00
OI	iviannole Epoxy Coating	EA	25	\$7,000.00	\$175,000,00
11	10" PVC Sewer Main	LF	5400	\$134 58	\$77£ 727 00
12	8" RJ DIP Carrier Pipe (3 crossings)	11	001	000000000000000000000000000000000000000	\$120,132.00
13	18" Steel Costine (Incl. & Dans DOT D. 1	1	170	\$250.00	\$30,000.00
CT :	10 Succi Cashig (Jack & Bore- DOI Roadway)	LF	120	\$600.00	\$72,000.00
14	Connect to Existing Sewer Manhole	EA	-	\$10.000.00	\$10,000,00
15	Reconnect Forcemain to Manhole	EA	3	\$10,000,00	\$20,000,00
16	Cut & Patch Driveways	EA	15	&1 000 00	450,000,00
17	Excavatable Flowable Fill - SCDOT Trench Backfill	T I	2 500	41,000,00	315,000,00
18		į į	3,300	\$120.00	\$420,000.00
	TOTAL TAINING DOMEST DELIVICES	EA	45	\$2,500.00	\$112,500,00
19	Kemove & Replace Misc. (Mailboxes, culverts, etc.)	LS		\$65,000.00	\$65,000,00
20	Trench Rock Excavation (assumed)	Z.	500	\$150.00	675,000,00
21	Import Suitable/ Export Unsuitable Material (assumed)	<u>ا</u>	200	00.0019	973,000.00
		15	2005	\$00.00	\$30,000.00
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estimate
Cost

\$700.00 \$336,040.00 \$40,000.00

Engineering

Administration

TOTAL PROJECT COST

Permitting Fees

\$3,500,000.00

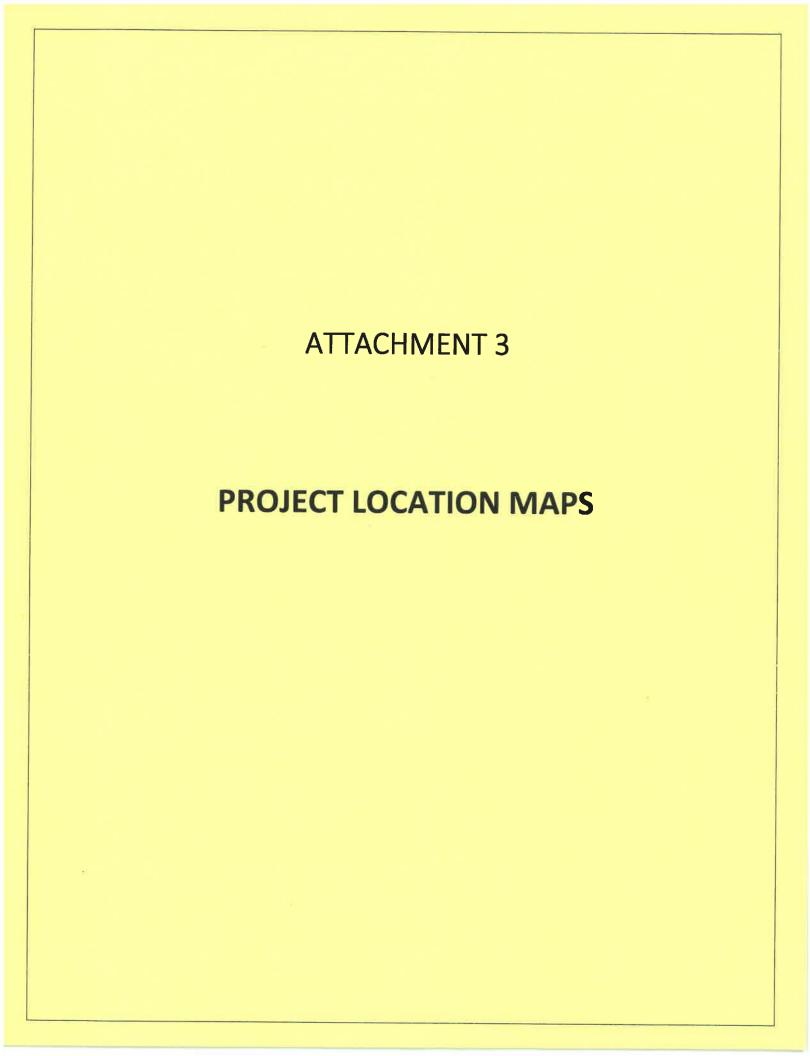
\$2,498,608.00 \$624,652.00 \$3,123,260.00

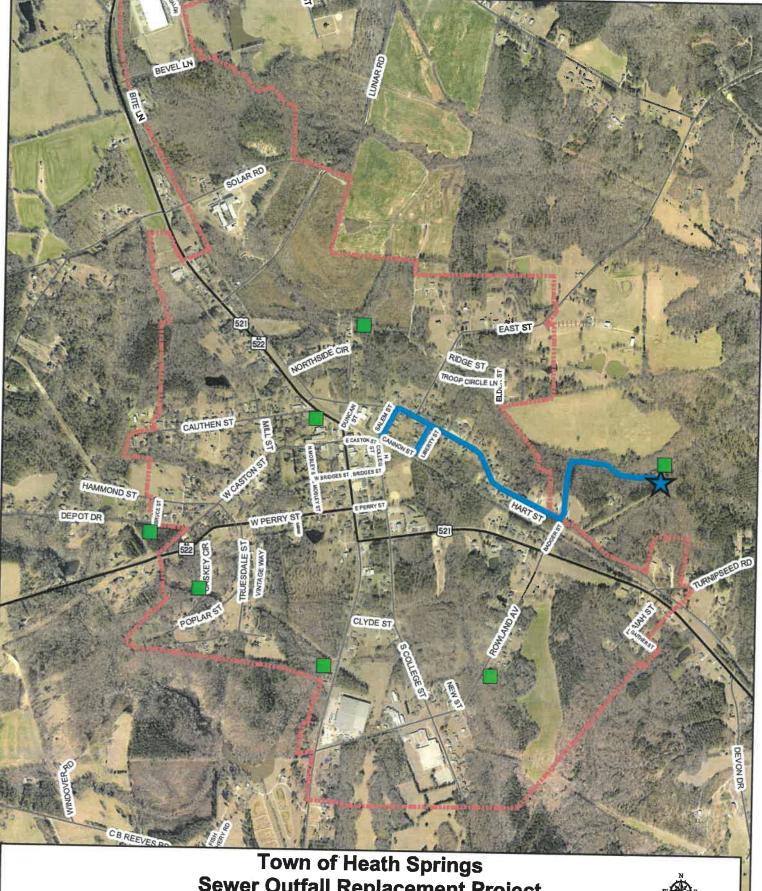
Subtotal

25% Contingency

Estimated Construction Total

	C	onstruction	En	gineering	Adm	inistration		Total
SCIIP	\$	2,598,260	\$	336,740				Total SCIIP
	•	2,550,200	Y	330,740			\$_	2,935,000
RIA State	\$	500,000	\$	-	\$		_	otal Local
COG Allocation	\$	-	\$	_	\$	40.000	\$	500,000
Local	\$	25,000	\$	-	\$	40,000	\$	40,000
							-	25,000
Total	\$	3,123,260	\$	336,740	\$	40,000	\$	3,500,000



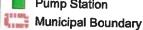


Sewer Outfall Replacement Project

General Location Aerial Map September 2022



Proposed 10" Sewer Outfall Line



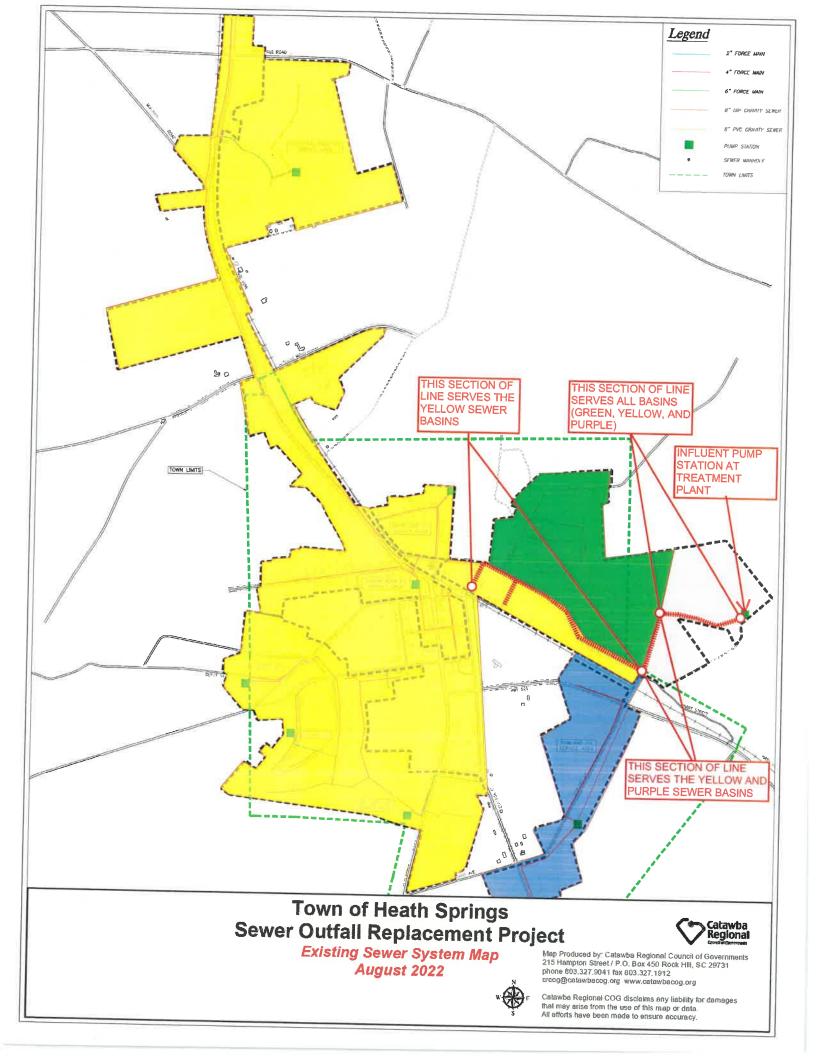
Wastewater Treatment Plant **Pump Station**

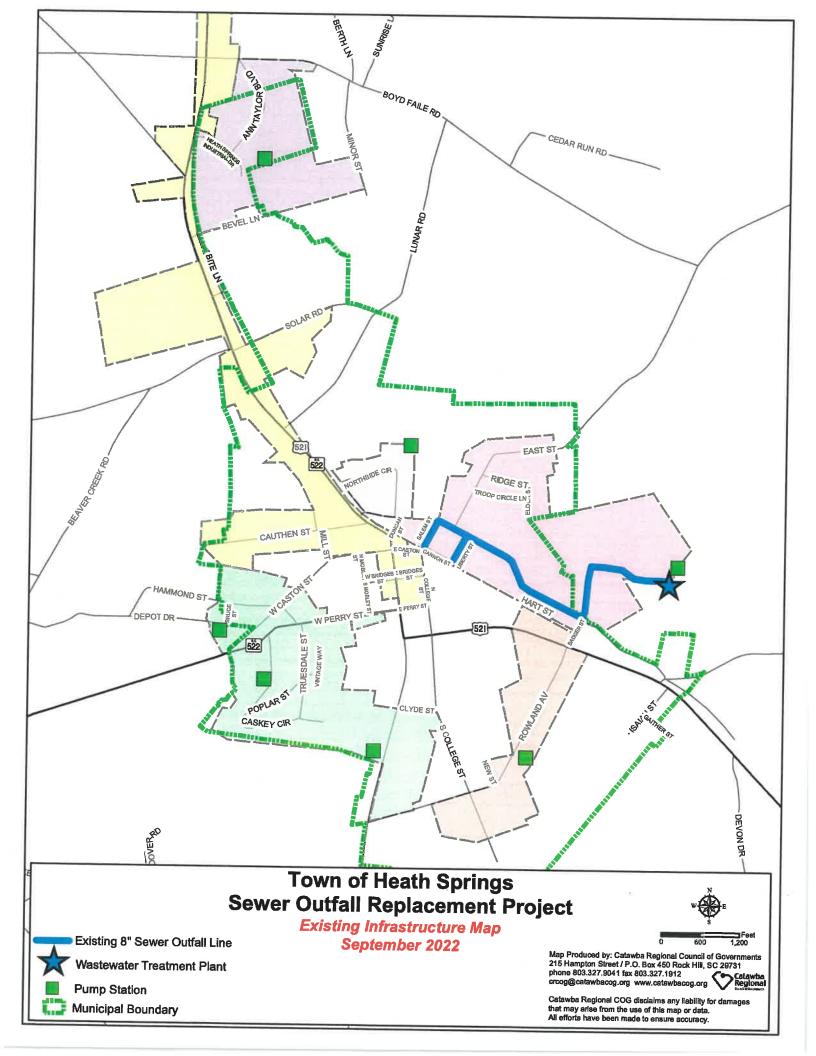


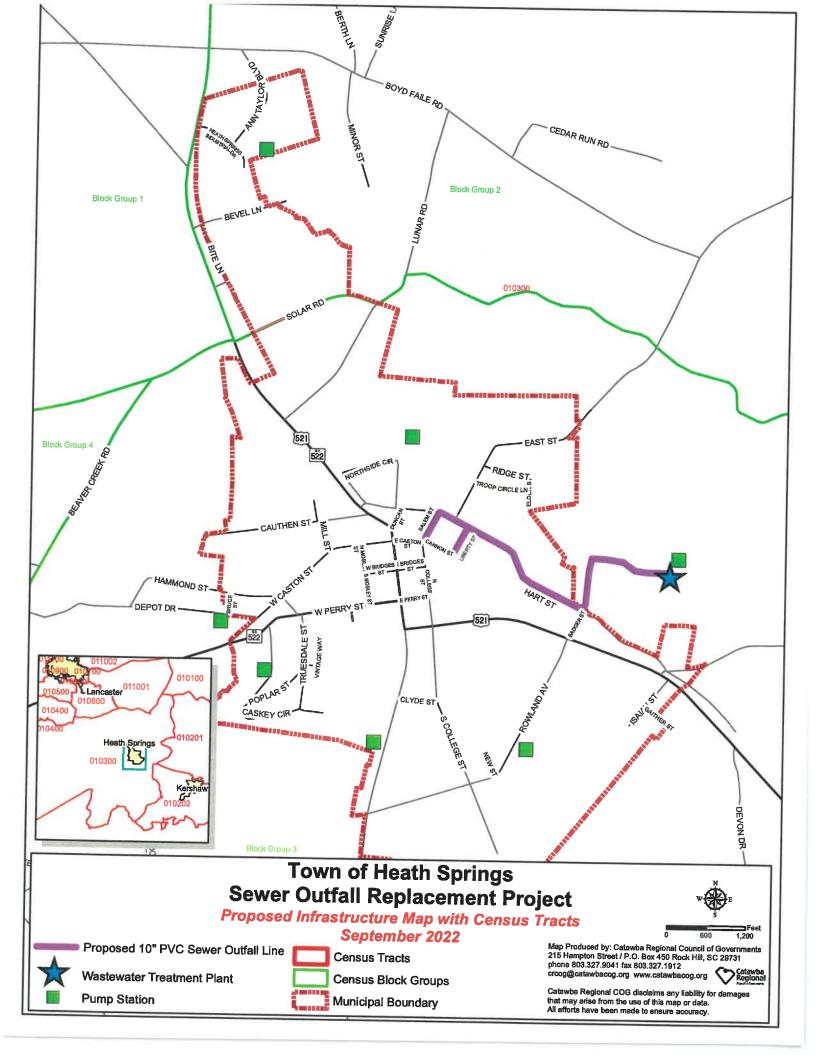
Map Produced by: Catawba Regional Council of Governments 215 Hampton Street / P.O. Box 450 Rock Hill, SC 29731 phone 803.327.9041 fax 803.327.1912 crcog@catawbacog.org www.catawbacog.org

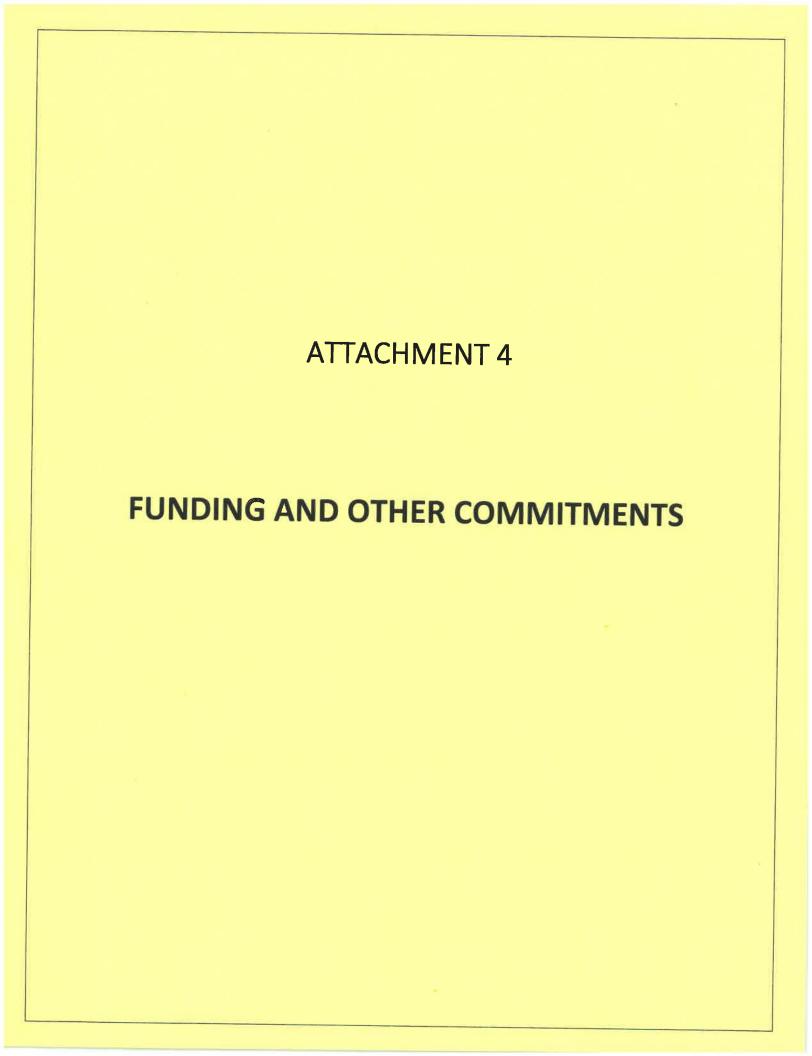
Catawba Regional COG disclaims any liability for damages that may arise from the use of this map or data.

All efforts have been made to ensure accuracy.











Post Office Box 100 • Heath Springs, SC 29058 803-273-2066 • Fax 803-273-3478

September 1, 2022

Bonnie Ammons, Executive Director SC Rural Infrastructure Authority 1201 Main Street, Suite 1600 Columbia, SC 29201

Re:

Heath Springs Sewer Outfall Replacement Project

Funding Commitment

Dear Mrs. Ammons:

The Town of Heath Springs is applying for a Community Impact Grant from the SC Rural Infrastructure Authority South Carolina Infrastructure Investment Program for its Sewer Outfall Replacement Project. The project will consist of replacing and upgrading a portion of the Town's gravity sewer outfall line that is currently in poor condition due to its age. Heath Springs' gravity sewer outfall line serves the entire town, as all sewer lines in the Town run through this main line which connects the system to Heath Springs Wastewater Treatment Plant. The replacement project will provide a sustainable, capacity building solution to a significant, town-wide wastewater infrastructure need.

Contingent upon RIA state grant acceptance, the Town of Heath Springs commits to providing funding for 15% of total project costs. Local investment funds will be provided from Town and SC RIA state grant funds, which will be available as soon as the project begins.

The total estimated project cost is \$3,500,000. The town is requesting \$2,975,000 from SCIIP Community Impact Grant funds and \$500,000 from RIA state grant funds. The Town of Heath Springs will commit up to \$25,000 for the project if awarded the RIA state grant of \$500,000, both of which it will put towards payment of construction costs associated with the project.

The Town of Heath Springs appreciates your consideration of its application for SCIIP funding.

Sincerely,

Eddie L. Moore

Mayor



Post Office Box 100 • Heath Springs, SC 29058 803-273-2066 • Fax 803-273-3478

September 1, 2022

Bonnie Ammons, Executive Director SC Rural Infrastructure Authority 1201 Main Street, Suite 1600 Columbia, SC 29201

Re:

Heath Springs Sewer Outfall Replacement Project

Request for SC RIA State Grant Funds

Dear Ms. Ammons:

The Town of Heath Springs is applying for a Community Impact Grant from the SC Rural Infrastructure Authority (RIA) South Carolina Infrastructure Investment Program (SCIIP) for its Sewer Outfall Replacement Project. Portions of the Town's wastewater infrastructure is aging and has experienced an increasing number of problems over the last several years. This project would benefit all citizens of the Town of Heath Springs, as its entire wastewater system relies on the proper functioning of the main sewer outfall line to transport sewage to the wastewater treatment plant. As evidenced by the utility director's letter and other supporting documentation in this application, Heath Springs' ability to maintain and operate the Town's wastewater system is hindered by its aging infrastructure and a solution is necessary to provide safe and cost-effective sewer service to the Town's residents and businesses.

We know the importance of the project to curresidents' wellbeing and the positive impact it could have for our local economy. We believe that this project will contribute to the area's economic viability and help us as we plan for future sustainability and growth. However, though the Town of Heath Springs is willing to provide matching funds of 15% towards the project, the Town does not have the resources to do so.

The Town of Heath Springs is requesting \$500,000 from the SCRIA State Grant funds for the Heath Springs Sewer Outfall Replacement Project. Wastewater services are costly and the recent rise in the price of goods and services have had a negative impact on the Town of Heath Springs and its residents. The Town will not be able to meet local investment requirements of the SCIIP grant award without additional financial assistance, making it ineligible to carry out the much-needed infrastructure improvements proposed in this application. A \$500,000 RIA state grant award would make the Heath Springs Sewer Outfall Replacement Project possible, giving the Town an opportunity to replace critical wastewater infrastructure for the benefit of all its citizens

Please let me know if you need any additional information to consider this request.

Sincerely,

Caduch Mobile Eddie L. Moore

Mayor



Post Office Box 100 • Heath Springs, SC 29058 803-273-2066 • Fax 803-273-3478

September 1, 2022

Bonnie Ammons, Executive Director SC Rural Infrastructure Authority 1201 Main Street, Suite 1600 Columbia, SC 29201

Re:

Heath Springs Sewer Outfall Replacement Project

Commitment to Own, Operate, and Maintain Sewer Outfall Line

Dear Mrs. Ammons:

The Town of Heath Springs is applying for a SC Infrastructure Investment Program Community Impact Grant from the SC Rural Infrastructure Authority to make much needed improvements to the Town's wastewater infrastructure. The proposed project will replace and upgrade a portion of the Town's gravity sewer outfall line.

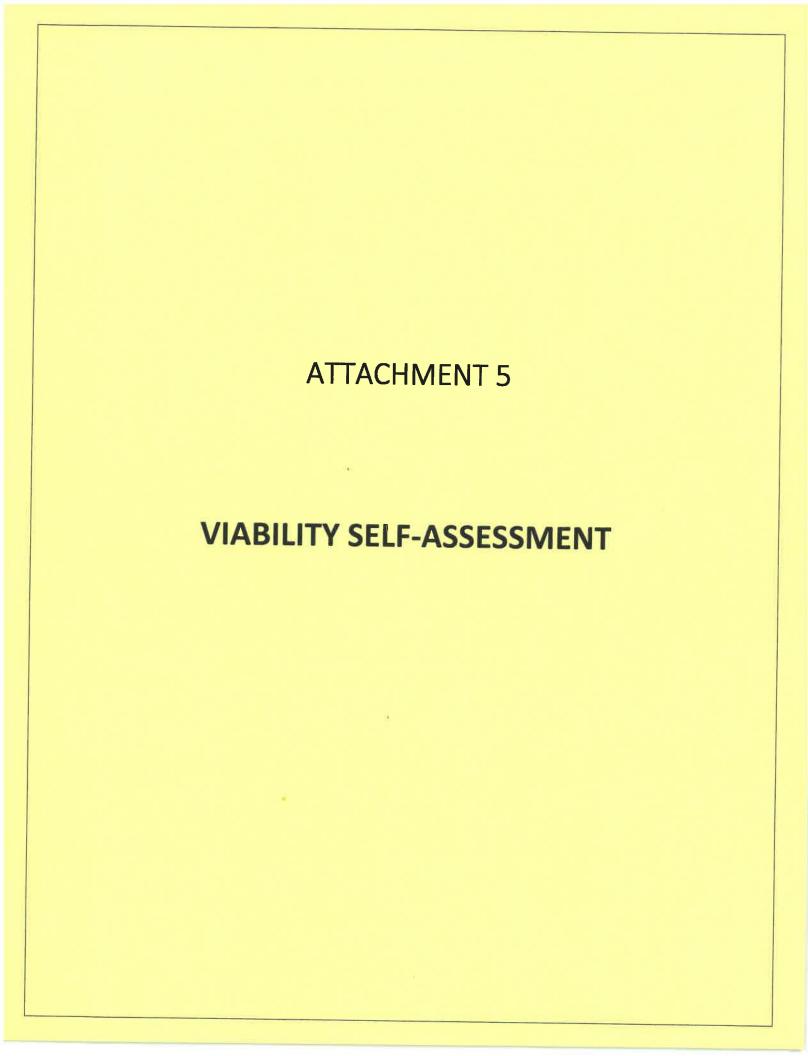
This system upgrade is needed for the Town to continue to provide safe and reliable wastewater services to the 425 residential and 26 commercial accounts that currently rely on the aging infrastructure to do so.

This letter serves as verification that the Town of Heath Springs will continue to own, operate, and maintain its gravity sewer outfall line once construction is completed. The Town has the technical and operational capacity to continue maintaining the sewer system. The cost for operation and maintenance will be covered through customer fees and will not cause any undue tax burden to the citizens of Heath Springs. A copy of the town's wastewater fee schedule is attached.

Sincerely,

Eddie L. Moore

Mayor



SC Water Utility Viability Tool Results

Date Completed 9/2/2023

Utility Name

Town of Heath Springs

Viability Score

42 of 100

~=~·	Benchmark	Response	Viability Points Earned	Maximum Poten Points
Step 1. Infrastructure			10	22
Primary System Service Population	> 10,000	< 3,300	0	6
Services Provided		Water & Sewer	1 .	
Water Service				W. W. W. W. W. W.
Age of the majority of the water distribution system:	50 years	45		
assets;	30 years	45	See Below	
Has your water utility had any sanitary survey inspections in the past 5 years?				
Unsatisfactory sanitary survey inspections?		0		2
Notices of Violation for major public health violations		0		
and/or water quality violations (not routine or M/R NOVs)	Zero	0	See Combined Below	
Consent or Administrative Orders?		0		
Monthly Residential Water Service Bill		\$36,48		
Sewer Service		430.40		
Age of the majority of the wastewater collection system:	50 years	45		
Age of the majority of the wastewater pumping and/or		1	See Below	
treatment assets:	30 years	45	Occ Dolling	
Has your wastewater utility had any compliance inspections in the past 5 years?				
Notices of Violation for major public health violations				
and/or major sewer overflows (not routine or M/R NOVs)	Zero	9	See Combined Below	
Consent or Administrative Orders?	2017	9	See Committee Below	
Monthly Residential Sewer Service Bill		\$36,48		
Water & Sewer Service		400.10		
Combined Non-Compliance Issues	See above	0	10	40
System Age (Distribution, Pumping, Collection, etc.)	See above	See above	0	10
Monthly Combined Service Bill	-	\$72.96		6
tep 2. Managerial/Operational		472.30		
Do you have a current capital improvement plan?	Yes	No	2	6
Do you have an Asset Management Program?	Yes	No	0	1
Are your system assets mapped in a GIS System?	Yes	No	0	1
How many key staff positions within the organization are		IAO	0	11
vacant and have been vacant for more than 3 months?	0	0	1 1	1
are vacant and have been vacant for more than three months?	0	0	1	1
Have the current members of your governing body (board or				1
council) received training related to operation and management of a utility in the last 2 years?	0	Some	0	į.
tep 3. Socio-Economics				
Primary Utility Service Area			.0	12
Population Change	*	Heath Springs town		
Median Household Income	1.31%	-17.12%	0	3
Poverty Rate	\$54,864.00	\$32,431.00	0	3
Unemployment Rate	14.7%	24.6%	0	3
and input itale	6.2%	6.9%	0	3

SC Water Utility Viability Tool Results

Date Completed 9/2/2022

Utility Name

Town of Heath Springs

Viability Score

42 of 100

	Benchmark	Response	Viability Points Earned	Maximum Potentia
Step 4. Financial			30	60
Step 4a Balance Sheet		I SHARE THE REAL PROPERTY.		80
Unrestricted Cash		\$156,346.00	_	
Total Outstanding Long Term Debt		\$0.00		<u> </u>
Net Plant Assets		\$4,956,162,00		
Step 4b Income Statement		**,555,152.55		
Operating Revenue	1	\$320,590.00		
Operating Expenses	· .	\$597,019.00		-
Annual Depreciation Expense		\$236,887,00	-	
Change in Net Assets	Greater than \$0	-\$276,103.00		-
Annual Interest Expense	Create Litality	\$0.00	0	5
Step 4c Statement of Cash Flows		30.00	Control of the last of the las	
Annual Debt Principal Payments		\$0.00		
Step 4d Fund Transfers		30.00		
Transfers to/from General	None	No		
Transfers from General	None	No	<u> </u>	-
Transfers between 5% and 10% of Gross Revenues)	None	No		_
Transfers Exceeding 10% of Gross Revenues	None	No	5	5
Step 4e Calculation	14016	INO		
Debt Service Coverage	Greater than 1,10x	0		10000
Days Cash on Hand (Unrestricted)	Greater than 90 days	158	0	10
Debt to Net Plant Assets	Less than 50%	150	10	10
Asset Conditions	Greater than 25 years	21	5	5
Free Cash Flow as % of Depreciation	Greater than 50%	-16.8	0	5
Annual Bill as % of MHI	Ordator main 50%	-10,6	0	5
Water	2.00%	4 900		
Sewer	2.00%	1 30%	10	10
Combined	4.00%	1 30%		
State Benchmark	4.00%	2 70%		
Water	\$51 08	Above 80th Percentile Benchmark		
Sewer	\$41 39	Above 80th Percentile Benchmark	0	5
Combined	\$92.47	Above 80th Percentile Benchmark		

ATTACHMENT 6 ADDITIONAL ATTACHMENTS



September 6, 2022

Post Office Box 100 • Heath Springs, SC 29058 803-273-2066 • Fax 803-273-3478

Ms. Bonnie Ammons SC Rural Infrastructure Authority 1201 Main Street, Suite 1600 Columbia. SC 29201

Re:

Heath Springs Sewer Outfall Replacement Project

Letter Regarding System Deficiencies

Dear Ms. Ammons:

The Town of Heath Springs is pleased to submit an application for the South Carolina Infrastructure Investment Program for its Sewer Outfall Replacement Project. The project consists of replacing a portion of the Town's gravity sewer outfall line that is located along Hart Street, stretching from its intersection with Salem Street to that of Rowland Avenue before extending northeast toward the Town's Wastewater Treatment Plant.

In recent years, there have been a number of issues and deficiencies identified that justify the need for the outfall line replacement. The aging and degrading portion of sewer line in question approaching the end of its useful life due to wear and tear on the infrastructure. The existing gravity outfall line and manholes are corroded beyond repair due to hydrogen sulfide gas coming from the multiple force mains that tie into this respective section of the sewer system. The Heath Springs Outfall Replacement Project scope will consist of replacing approximately 5,400 LF of 8-inch, ductile-iron pipe gravity sewer line and 25 degrading manholes. The gravity sewer outfall line generally serves the entire Town as the outfall line connecting the system to the Town's Wastewater Treatment Plant. The proposed improvements will involve the installation of new, 10-inch PVC sewer line and new Epoxy-coated manholes to improve the system, build capacity, and make it more resilient to adverse conditions.

The Town of Heath Springs understands that its sewer system must provide adequate service to its customers' needs for economic and public safety benefits. The existing sewer outfall line targeted for replacement in this project no longer meets community needs for capacity, resiliency, or economic activity and growth. The proposed Sewer Outfall Replacement Project provides a solution to the system's current sewer problems. The larger, 10-inch outfall line will improve the Company's quality of service, ensuring once more that all customers are provided adequate and reliable sewer services.

Thank you for your consideration and if you have any questions, you can contact me via telephone at 843.634.7093 or by email at joeyoliver20032003@yahoo.com.

Sincerely,

Milities Director



CERTIFIED MAIL—RETURN RECEIPT REQUESTED9214 8969 0099 9790 1417 0068 42

February 21, 2020

HEATH SPRINGS TOWN OF Attn: TONY STARNES PO BOX 100 HEATH SPRINGS, SC 29058

RE:

COMPLIANCE SAMPLING INSPECTION (ST)

PERMIT # SC0040118 v4.0 HEATH SPRINGS WWTF LANCASTER COUNTY

Dear Tony Starnes:

Attached are the results of the **Compliance Sampling Inspection (ST)** of your wastewater treatment facility performed by DHEC on June 27, 2018 to June 28, 2018.

A review of this data indicates that the wastewater was meeting applicable permit limits during the sampling period. However, this report noted deficiencies in the **Facility Site Review** section. This deficiency was minor and did not affect the overall rating of **Satisfactory** for the NPDES program.

It is requested that you respond in writing to this office within **fifteen (15) days** of receipt of this letter stating what actions have been taken to correct the deficiencies noted. Failure to adequately address these deficiencies may provide a basis for enforcement action.

If you have any questions regarding this inspection, please contact Chad Johnson at 803-285-7461 or johnsoce@dhec.sc.gov.

Sincerely,

Danny Nicholas

Environmental Health Manager Water Pollution Compliance Section

Bureau of Water

Permit Number:SC0040118

Facility Name: Town Of Heath Springs

Facility Physical Address: Hart Street, Heath Springs, SC

Facility Mailing Address: P.O.Box 100

Heath Springs Sc 29058-100

COMPLIANCE EVALUATION INSPECTION

N/A=Not Applicable, N/E= Not Evaluated, (Rec)=Recommended, (Req)=Required.

Permit

	General Requirements		METRI.
1	Responsible Official/Permittee Name is correct? If no, list correction in Deficiency, explanation section.	Minor (Req)	Yes
2	Mailing address is correct? If no, list correction in Deficiency, explanation section.	Minor (Req)	Yes
3	Location and number of discharge points are as described in the permit? If no, list correction in Deficiency, explanation section.	Minor (Req)	Yes
4	Name and location of receiving water is correct? If no, list correction in Deficiency, explanation section.	Minor (Req)	Yes
5	Permit application submitted 180 days prior to expiration. If no, list correction in Deficiency, explanation section.	Minor (Req)	Yes

Deficiency, explanation (3000 Characters) The facility is permitted to discharge under NPDES Permit SC0040118. The permit became effective on April 1, 2018 and expires on March 31, 2023. The facility has one outfall that discharges to Beckham Branch-Lynches Creek.

Compliance Schedule, Administrative Order, or Consent Order (R.61-9 Sec. 122.47)

Is the permittee meeting the permit compliance schedule, administrative order, or consent order?	Critical	N/A
Deficiency, explanation (2496 Characters)		

RECORDS AND REPORTS (R.61.9 Sec. 122.41j)

	General Requirements		
1	Is the operator of proper grade performing required inspections?	Critical	Yes
2	Plant and laboratory records and results maintained for required period and include all permitted parameters? (Bio-solids 5 years, all other records 3 years)	Major	Yes
3	Operator's log contains documentation of daily maintenance activities, name of operator performing tasks and time activities performed?	Major	Yes
4	Analytical results consistent with DMR?	Critical	Yes
5	If facility monitors more frequently than required results reported on DMR?	Critical	N/A
6	O&M manual available onsite? Last updated: mm/dd/yyyy(1/1/2018)	Major	Yes
7	SPCC completed and available? (if required) Last updated: mm/dd/yyy()	Major	N/A
8	BMP manual and available? (if required) Last updated:mm/dd/yyy()	Major	N/A
9	Odor abatement plan available? (if required) Last update: mm/dd/yyyy(1/1/2018)	Major	Yes
10	Ground water monitoring records maintained (if required)?	Minor (Reg)	N/A
11	Soil monitoring records available (if required)?	Minor (Reg)	N/A

Deficiency, explanation	(1200 Characters)	
DMR dates and parameters checked: (300 Characters)		
March, April and June 2018 DMRs; BOD, TSS, Total P, NH4, nut		

Sampling and Analysis Data (R.61.9 Sec. 122.41j)

Onsite Laboratory N	oratory Not Applicable Not Evaluated (Only if evaluated within the last 6 months			
CWA Certification #: (29552001)	Critical	Sat.	Expiration Date: mm/dd/yyyy(<u>11/24/2019</u>)	Date of last certification inspection: mm/dd/yyyy (12/9/2016)

	Onsite Lab	THE PROPERTY OF	
1	Date, times, location, and individual collecting sample listed?	Minor (Reg)	Yes
2	Date, time, analytical methods used, analyst, and analytical result listed?	Minor (Reg)	Yes
3	Sampler environment temp for composite samples is correct? (0.5-6°C, no ice in sample)	Major	Yes
4	Sample preservatives are correct? (H2SO4, ice, etc) Bacteria samples must indicate Sodium Thiosulfate for dechlorination.	Major	Yes
5	Program area, sample matrix, and analytical methods are listed and correct?	Major	Yes
6	Date, time, analyst, and analytical result listed?	Minor (Reg)	Yes

Deficiency, explanation (1500 Characters)			

Outside Laboratory (Records) Not Applicable (If facility lab analysis all parameters.)					
Lab Name: (J & G CWA Certification Parameters Contracted: (BOD, TSS, Total P, N					
Environmental)	Number: (<u>29101</u>)	nutrients, E. coli)			

IJ.	Outside Lab		
1	Are all outside labs certified for all parameters contracted under the CWA?	Critical	Satisfactory
2	Date, times, location, and signature of sampler listed?	Minor (Req)	Yes
3	Sample type (eg. grab), # of containers and type (eg. plastic) listed?	Major	Yes
4	Sampler environment temp for composite samples listed and correct? (0.5-6°C, no ice in sample)	Major	Yes
5	Preservatives listed? (H2SO4, ice, etc) Bacteria samples must indicate Sodium Thiosulfate for dechlorination.	Major	Yes
6	Program area, sample matrix, and analytical methods listed and correct?	Major	Yes
7	Date, time, analyst, and analytical result listed?	Minor (Reg)	Yes

Deficiency, explanation (1500 Characters)	

FLOW MEASUREMENT (R.61.9 Sec. 122.41j)

	Genera	al Requirements		di as	altaite
Facility design flow: (0.15) MG	D	Average facility flo	w: (0.03) MGD		
Flow meter calibration freque	ency: (12 Months)	Date of last calibra	tion: mm/dd/yyyy (7/14/	/2017)	
Routine calibration check fre					
Actual Flow: ()MGD	Recorded F	low: ()MGD	Error: () %	N/E(v	v/expl.)
Primary flow measurement equ	ipment located in	confined space?		NR	No

	Flow		No.
1	Proper flow tables used by facility?	Major	Yes
2	Sharp changes in flow rates are noted?	Minor (Reg)	Yes
3	Effluent flow measured after all return lines?	Major	Yes
4	Flow measurement equipment adequate to handle expected ranges of flow?	Major	Yes

Deficiency, explanation (1500 Characters)		
A flow comparison was not done as part of the inspection.		

	mes Not Applicable						
y	e and size of flume: ()						
The first of the f							
1	Flume appears to be properly installed and maintained?	Minor (Reg)	N/A				
2	Flow well distributed and free of turbulence across flume channel and cross- sectional velocities appear relatively uniform?	Minor (Reg)	N/A				
3	Flume clean and free of debris or deposits?	Minor (Reg)	N/A				
4	Flume walls and throat appear vertical and smooth with correct dimensions?	Minor (Reg)	N/A				
5	Flume head measured at proper location and zeroed to flume crest?	Minor (Reg)	N/A				
6	Operating under free-flow conditions?	Minor (Reg)	N/A				

Deficiency, explanation (1500 Characters)

We	irs Not Applicable					
Тур	e and size of weir: (45*)					
Weirs						
1	Weir properly installed and maintained?	Major	Yes			
2	Weir is level and weir plate is plumb, top edges sharp and clean?	Minor (Reg)	Yes			
3	Free access for air below the nappe of the weir?	Minor (Reg)	Yes			
4	Upstream channel straight for at least 4 times the depth of water level, and free of disturbing influences.	Minor (Reg)	Yes			
5	Stilling basin sufficient size and clear of debris?	Minor (Reg)	Yes			
6	Head measurements made at proper location?	Minor (Reg)	Yes			

Deficiency, explanation (1500 Characters)

SELF MONITORING PROGRAM (R.61.9 Sec. 122.41j)

General Requirements Composite sampler set to pull (150)mls for (895) every gallons of flow or ()minutes.

W.	Self Monitoring					
1	DO, pH, TRC analyses performed within 15 minutes of collection?	Major	Yes			
2	Sampling and analyses completed at required frequencies and on day specified in permit?	Minor (Reg)	Yes			
3	Composite sample method used as defined in permit? (Flow proportional unless the flow varies by 15% or they have Department approval.)	Minor (Reg)	Yes			
4	Composite sampler refrigerated or iced and sample environment temp recorded? (0.5-6°C, no ice in sample)	Major	Yes			
5	Proper sample preservation techniques used?	Major	Yes			
6	Sample collection time consistent with permit? (e.g. 8, 16, or 24 hrs)	Major	Yes			
7	Sample containers and holding times conform to 40 CFR 136.3?	Major	Yes			
8	Sampler tubing and container clean and intake header located in proper position to collect representative sample?	Minor (Rec)	Yes			
9	Fecal/E. Coll samples collected directly into sterilized container and sample incubation started no later than 8 hrs from collection?	Critical	Yes			

Deficiency, explanation (1500 Characters)

FACILITY SITE REVIEW (R.61-67.300)

Ge	neral Requirements		185 S
1	Standby power or equivalent available and able to power entire plant?	Minor (Reg)	No
2	Chlorine safety precautions (standing cylinders chained, leak detector with alarm, stored in ventilated area) in place?	Minor (Rec)	Yes
3	Facility marked with weather durable sign w/24 hr emergency phone #?	Minor (Reg)	Yes
4	Facility secured with a fenced/locked enclosure?	Minor (Reg)	Yes
5	Backflow prevention devices installed and inspected? Date: mm/dd/yyyy()	Minor (Rec)	N/A
6	Facility grounds and access road maintained?	Minor (Reg)	Yes
7	Sludge dewatering type: ()	Minor (Reg)	N/A

Deficiency, explanation (1500 Characters)	
indicate in totally	
	Deficiency, explanation (1500 Characters) ilable at this location

6	Monitoring Wells Not Applicable Not Evaluated	ATTEN SELVEN	1115
Co	mplete this section if evaluating monitoring wells required by the permit. R.61-71.H		THE PLANE
63	Well Condition	0. 0. W. P. M. S. M. F.	
1	Do all wells have secure locking caps?	Minor (Reg)	N/A
2	Do all wells have permanent ID plate?	Minor (Reg)	N/A
3	Concrete pad surface is not cracked or damaged?	Minor (Reg)	N/A
4	Wells were free of deficiencies or problems? (Explain and include well ID # below if answered "No".)	Minor (Req)	N/A

Deficiency, explanation (1500 Characters)	
 Deficiency, explanation (1500 Characters)	

Operation and Maintenance (R.61-9.122.41(a))

1	O&M	- FORTVENE - I	
	All treatment units in service or operational?	Critical	Ye
a	All backup units capable of being in service or operational?	Minor (Req)	Ye
2	Routine and preventive maintenance performed on equipment?	Major	Ye
3	Treatment Units:	Major	
a	Screening	Satisfactory	
b	Grinder / Comminutor	Satisfactory	
C	Grit Chamber	Satisfactory	
d	Primary Sedimentation	Satisfactory	
6	Trickling Filters	N/A	
f	Rotating Biological Contactor	N/A	
g	Aeration - Type:Diffused filters	Satisfactory	
h	Secondary Sedimentation	Satisfactory	
1	Digester: Aerobic Anaerobic	N/A	
j	Pond(s) - Type: ()	N/A	
k	Disinfection - Type: (HTH liquid chlorine)		
	If Chlorine: 150# Ton	Satisfactory	
1	Contact chamber	Satisfactory	
m	Dechlorination type: (liquid sodium sulfite)		
	If SO2: 150#Ton	Satisfactory	
n	Other process: ()	N/A	
4	Effluent appearance Critical	Satisfactory	
5	Facility receives other waste (e.g. Septic waste)?		
	If yes, list: ()	NR	No
	Deficiency, explanation (2460 Characters)		
	Sludge (Non-Land Application)	ar cousin	
1	Groundwater monitoring required? If yes:	NR	No
	Groundwater monitoring required? If yes: Lab Name: () Lab ID: ()	NR Minor (Reg.)	No N/A
2	Groundwater monitoring required? If yes: Lab Name: () Lab ID: () Groundwater monitoring records available?	Minor (Req)	N//
2	Groundwater monitoring required? If yes: Lab Name: () Lab ID: () Groundwater monitoring records available? Sludge dewatering type as permitted: Type: ()		N//
2 3 /ol	Groundwater monitoring required? If yes: Lab Name: () Lab ID: () Groundwater monitoring records available? Sludge dewatering type as permitted: Type: () lume of sludge generated on annual basis: (120000)Gal.	Minor (Req)	N//
2 3 /ol	Groundwater monitoring required? If yes: Lab Name: () Lab ID: () Groundwater monitoring records available? Sludge dewatering type as permitted: Type: () lume of sludge generated on annual basis: (120000)Gal. lume of sludge disposed of on an annual basis: (120000)Gal. Sludge disposal site(s): (pump and haul to Kershaw WWTP SC0025798)	Minor (Req) Minor (Req)	N// Sat
2 3 /ol /ol 4	Groundwater monitoring required? If yes: Lab Name: () Lab ID: () Groundwater monitoring records available? Sludge dewatering type as permitted: Type: () lume of sludge generated on annual basis: (120000)Gal. lume of sludge disposed of on an annual basis: (120000)Gal. Sludge disposal site(s): (pump and haul to Kershaw WWTP SC0025798) (check for approval letter or permit approval) Critical	Minor (Req) Minor (Req)	N// Sat
2 3 /ol /ol 4	Groundwater monitoring required? If yes: Lab Name: () Lab ID: () Groundwater monitoring records available? Sludge dewatering type as permitted: Type: () lume of sludge generated on annual basis: (120000)Gal. lume of sludge disposed of on an annual basis: (120000)Gal. Sludge disposal site(s): (pump and haul to Kershaw WWTP SC0025798)	Minor (Req) Minor (Req)	N// Sat
Vol 4 If n	Groundwater monitoring required? If yes: Lab Name: () Lab ID: () Groundwater monitoring records available? Sludge dewatering type as permitted: Type: () lume of sludge generated on annual basis: (120000)Gal. lume of sludge disposed of on an annual basis: (120000)Gal. Sludge disposal site(s): (pump and haul to Kershaw WWTP SC0025798) (check for approval letter or permit approval) Critical or disposal in past year, approximate date of next disposal: mm/yyyy()	Minor (Req) Minor (Req)	N/a Sat

Supplement 1 Not Applicable

SLUDGE HANDLING/DISPOSAL (Land application of sludge) R.61-9.503

	Sludge		NAMES OF THE RES	SELENO.
1	Groundwater monitoring required? If yes: Lab ID: () Lab Name: ()		NR	N/A
2	Groundwater monitoring records available?		Minor (Req)	N/A
3	Sludge dewatering type is as permitted?: Type: () Mi	nor (Reg		1
Vol	ume of sludge generated on annual basis: ()		, , , , , , , , , , , , , , , , , , , ,	-
	ume of sludge disposed of on an annual basis: ()			
4	Sludge disposal site(s): ()	T		
	(check for approval letter or permit approval)	Critica	al N/A	
If n	o disposal in past year, approximate date of next disposal: mm/yyyy (1 0110.00	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Cor	ntract service used for land application: ()			
5	Is cover crop present and actively growing?		Major	N/A
6	o de la constante de la consta		Major	N/A
7	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1		Major	N/A
8			Major	N/A
9	Permitted buffers suitable for site boundaries, water bodies, or drinking wat	er wells	7 Major	N/A
	,	C1 17CH3.	. Tiviajoi	IWA
	Deficiency, explanation (3000 Characters)			

	Monitoring Wells Not Evaluated		CONTRACT.
Con	nplete this section if evaluating land application monitoring wells, R.61-71.H		100.10
W.	Well Condition		EK 15
1	Do all wells have secure locking caps?	Minor (Reg)	N/A
2	Do all wells have permanent ID plate?	Minor (Reg)	N/A
3	Concrete surface pad cracked or damaged?	Minor (Reg)	N/A
4	Wells were free of deficiencies or problems? (Explain and include well ID # below if answered "No".)	Minor (Reg)	N/A

Deficiency, explanation (3000 Characters)	

Supplement 2 Not Applicable

Wastewater Effluent Land Application Site R.61-9.505 Part C

15%	Land Application	F 5 5 4 10 1	535 1
1	Groundwater monitoring required by permit?	NR	N/A
2	Groundwater monitoring records available?	Minor (Reg)	N/A
3	Agronomic plan required, available, and followed?	Major	N/A
4	Is water ponding on the application site?	Minor (Reg)	N/A
5	Surface runoff from the spray application area?	Critical	N/A
6	Cover crop displays even distribution of effluent? (e.g. no dead areas, even crop growth)	Minor (Req)	N/A
7	Spray heads maintained in good condition?	Major	N/A
8	Cover crop harvested and removed from site if required?	Major	N/A
9	No signs of stressed vegetation surrounding the site? No contamination migrating away from site? (e.g. dead trees down gradient)	Critical	N/A
10		Major	N/A

Deficiency, explanation	(3000 Characters)	

27	Monitoring Wells		Tualet.
Co	mplete this section if evaluating land application monitoring wells. R.61-71.H		
7	Weil Condition	Z THE SHOWN	
1	Do all wells have secure locking caps?	Minor (Reg)	N/A
2	Do all wells have permanent ID plate?	Minor (Reg)	N/A
3	Concrete surface pad cracked or damaged?	Minor (Reg)	N/A
4	Wells were free of deficiencies or problems? (Explain and include well ID # below if answered "No".)	Minor (Reg)	N/A

Supplement 3 Not Applicable

Field Parameters: Complete this section if conducting a Compliance Sampling Inspection or a detailed review of the field parameter equipment and procedures is warranted. **(40 CFR 136)**

pН	Instrument make and model: (Sension PH31)		
	PH P		
1	Analysis performed placing probe in effluent stream?	Major	Yes
2	If not performed in effluent stream, 15 minute holding time met?	Major	No
3	Meter calibrated each day of use?	Major	Yes
4	Records include: date, time, analyst, temp of buffers and slope (if appl.)?	Major	Yes
5	Fresh buffers used for each calibration?	Major	Yes
	Buffers used: (4, 7, 10)		
6	Buffers bracket the expected pH of samples?	Major	Yes
7	Buffers labeled with date received and opened?	Minor	Yes
		(Req)	
8	Buffers not expired (1 yr after opening if not specified)?	Minor	Yes
		(Req)	
9	Electrode in good repair (filling solution at proper level, no excess crystallization, bulb in proper solution, etc.)	Major	Yes
10	If equipped w/ATC, device checked against NIST or NIST traceable thermometer.	Major	Yes
11	Continuous pH monitoring required?	NR	N/A
12	If continuous required, facility is certified for EPA method 150.2?	Major	N/A
13	Continuous monitoring calibration method followed?	Major	N/A

Deficiency, explanation	(1500 Characters)	

DQ	Instrument make and model: (YSI 55) Not Applicable	3-2-3-3-3-3-3-3-3-3-3-3-3-3-3-3-3-3-3-3	
	Dissolved Oxygen		200
1	DO measurement performed placing probe in the effluent stream?	NR	Yes
2	If not performed in effluent stream, 15 minute holding time met and sample collected and transported in a zero headspace container?	Major	No
3	Meter calibrated each day of use?	Major	Yes
4	Records include date, time, air temp, initial DO, analyst, membrane and battery, zero altitude adjustment and adjusted DO (if applicable)?	Major	Yes
5	Temperature sensor checked against NIST or NIST traceable thermometer?	Major	Yes
6	Electrode tagged with: date of check, analyst, and adjustment.	Major	Yes
7	Lab corrected altitude or barometric pressure for height above sea level?	Major	Yes
8	Air calibrations conducted in closed chamber with 100% humidity?	Major	Yes
9	Membrane changed regularly (approximately monthly)?	Minor (Reg)	Yes
10	Probe membrane is free of air bubbles?	Major	Yes
11	Anode (A) is free of discoloration?	Major	Yes

LDC	O/ODO Instrument make and model: () Not Applicable		
	Dissolved Oxygen		
1	DO measurement performed placing probe in the effluent stream?	NR	N/A
2	If not performed in effluent stream, 15 minute holding time met and sample collected and transported in a zero headspace container?	Major	N/A
2a	Sample is stirred during analysis?	Major	N/A
3	All appropriate QA/QC has been performed each day of use? (Cleaning, IDOC with 4 replicates, Water/Air calibration, LCS and dup., CV/ORP check samples,)	Major	N/A
4			N/A
5	Temperature sensor checked against NIST or NIST traceable thermometer?	Major	N/A
6	Probe tagged with: date of check, analyst, and adjustment.	Major	N/A
7	Laboratory is documenting routine maintenance such as battery or sensor changes?	Major	N/A

Deficiency, explanation (1500 Characters)

Tem	perature N/A		
	Participation of the Control of the	SERVICE R	YZUP
1	Thermometer/sensors checked against NIST or NIST traceable thermometer?	Major	N//
2	Thermometer/sensors tagged: Date of check, analyst, adjustment?	Major	N//
	Deficiency, explanation (800 Characters)		

CIII	orine Instrument make and model: (CL2-HACH DR100)		
	Chlorine Children		7 JULY
1	Vials clean and free of cracks and scratches?	Major	Yes
2	Samples analyzed within 15 minute holding time?	Major	Yes
3	Primary stock solution protected from light, refrigerated and <6 months old?	Major	Yes
4	Volumetric glassware used to make secondary stock and working standards?	Major	Yes
5	Secondary standards refrigerated and made fresh each week?	Major	Yes
6	Working standards made daily?	Major	Yes
7	Instrument calibrated each day it is used?	Major	Yes
8	Records include date, time, true concentration, observed concentration, and analysts' initials?	Major	Yes
9	Standard calibration verification generated with each lot or annually. Standards used: (0.0, 0.05, 0.5, 1.0)	Major	Yes

Deficiency, explanation (1500 Characters)	

Standard Laboratory Practices

. 4.	Facilities and Equipment	Surgarul Salaka	SEE FOR
1	Lab glassware appears to be clean, with no noticeable sheen or build up?	Minor (Rec)	Yes
2	Laboratory is clean and orderly?	Minor (Rec)	Yes
3	Lab can control the facility temperature (between 60-80 degrees for stability of reagents)?	Major	Yes

Deficiency, explanation (800 Characters)	10 10 10



South Carolina Department of Health and Environmental Control Analytical & Radiological Environmental Services Division - Laboratory Report

Station Code: SC40118G

Location Description: 001 TOWN OF HEATH SPRINGS

Matrix: WATER

County: LANCASTER

Sample Type: GR

Additional Info:

Laboratory Sample Number: AE14277

Program Charge: WPC

Collected By: PHILLIPS K

Date of Collection: 06/26/2018

Time of Collection: 13:00

Weather: 00

Temp. Air: 33

Field pH: 6.10 Field DO: 7.15

Temp Water: 28.3

Chiorine Total Res.: <0.05

CI2: 1.77

Laboratory Sample Number: AE14277

Analyte

Result

Units

Method Reference

Quanti-tray E.Coli Analysis

Quanti-tray E.Coli Analysis

5.1

MPN/100mL

SM 9223B

Sample Comments:



South Carolina Department of Health and Environmental Control **Analytical & Radiological Environmental** Services Division - Laboratory Report

Station Code: SC40118G

Location Description: 001 TOWN OF HEATH SPRINGS

Matrix: WATER

County: LANCASTER

Sample Type: GR Additional info:

Laboratory Sample Number: AE14360

Program Charge: WPC

Collected By: PHILLIPS K

Date of Collection: 06/28/2018

Time of Collection: 10:28

Weather: 00

Temp. Air: 33 Field pH: 6.62

Field DO: 8.25

Temp Water: 26.1

Chlorine Total Res.: <0.05

Laboratory Sample Number. AE14360

Analyte

Result

Units

Method Reference

Quanti-tray E.Coll Analysis

Quanti-tray E.Coli Analysis

9.5

MPN/100mL

SM 9223B

Sample Comments:



South Carolina Department of Health and Environmental Control Analytical & Radiological Environmental Services Division - Laboratory Report

Station Code: SC40118C

Location Description: 001 TOWN OF HEATH SPRINGS

Matrix: WATER

County: LANCASTER

Sample Type: CP Additional Info:

Laboratory Sample Number: AE14361

Program Charge: WPC

Collected By: PHILLIPS K
Date of Collection: 06/28/2018

Time of Collection: 11:45

Temp Water: 6

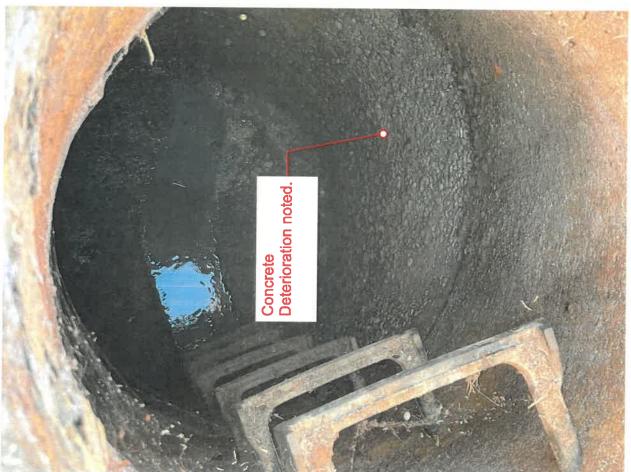
aboratory Sample Number: AE14361				
	Analyte	Result	Units	Method Reference
5 Day BOD Facility	5 Day BOD Facility	3.0	mg/l	SM 5210AB
Ammonia	Ammonia	0.13	-	*** *******
Nitrate/Nitrite	Nitrate/Nitrite	32	mg/L	LACHAT 101070610
Total Kjeldahl Nitrogen in Water			mg/L	LACHAT 10107041C
Total Phosphorus in Water	Total Kjeldahl Nitrogen in Water	1.4	mg/L	LACHAT 10107062E
	Total Phosphorus in Water	5.6	mg/L	LACHAT 10115011E
Total Suspended Solids	Total Suspended Solids	4.5	mg/L	SM2540 D

Sample Comments:

Town of Heath Springs Sewer Outfall Replacement Project

Photos









Town of Heath Springs

Water & Sewer Rates

		Current	Proposed	
In-Town Customers	3000 gallons	22.00	25.08	
Water & Sewer	Each additional	5.00	5.70	
Out-of Town Customers	3000 gallons	24.00	27.36	
	Each additional	6.00	6.84	
In-Town Commerical	3000 gallons	50.00	57.00	_
	Each additional	5.00	5.70	
Out of Town Commerical	3000 gallons	85.00	96.90	
	Each additional	6.00	6.84	
Farmers Water	1000 gallons	6.00	6.84	
Irrigation Meter	1000 gallon	22.00	25.08	
	Each additional 1k gallons	5.00	5.70	
Sanitation Service		12.00	13.68	
Example Billing		57.00	64.84	

Town Of Heath Springs Water and Sewer Operating Budget July 1, 2022 - June 30, 2023

	Revenues	
1	Water Charges	185,000.00
2	State Testing Fee	4,500.00
3	Water Penalties	3,800.00
4	Reconnections	400.00
5	Returned Check Fees	200.00
6	Water Tap	3,000.00
7	K-Ville Sewer Treatment	300.00
8	Sewer Charges	130,000.00
9	Adjustments	(800.00)
10	Sewer Penalties	2,000.00
11	Sewer Charges - Tap	1,200.00
12	ARP Funds	150,000.00
	Total Revenues	479,600.00
	Expenses	
1	Travel	3,000.00
2	Newspaper Ads	650.00
3	Repairs & Maintenance	8,000.00
4	Emergency Expansion	9
5	Lab Certification - Water	140.00
6	Contract - Distribution Operator	14,000.00
7	Salary-Meter Reader	5,196.00
8	Salaries	25,000.00
9	Contract Sevices - Labor	10,000.00
10	Billing Expense & Office Supplies	3,500.00
11	Pension Expense - SCRS	3,200.00
12	Water Purchases	49,000.00
13	Membership Fees	600.00
14	Utilities - Water	2,700.00
15	Audit	7,300.00
16	Water Meter Purchases	4,000.00
17	Grant Administration Fees	15,000.00
18	Water Sampling Contract	800.00
19	Safe Drinking Water-Ann. Fee	4,400.00
20	Supplies	1,000.00
21	Contract Services - Plant Operator	54,000.00
22	Contracted Lab Services	10,100.00
23	Utilties - Sewer	28,000.00
24	Sludge Removal	14,000.00
25	Supplies-Sewer	14,000.00
26	Insurance - WWTP	2,800.00
27	Ins. Lift Stations	1,000.00
28	Repairs & Maintenance - Sewer	10,000.00
29	Major Repairs	10,000.00
30	Landscaping - Joey Mowing	4,000.00
31	Sewer Permit	2,200.00
32	Bank Service Charges	3,500.00
33	Legal Fees	6,000.00
34	ARP Projects	150,000.00
35	Contingency	50,000.00
	Total Expense	517,086.00
1	Other Income Emergency Expansion Transfer	37,486.00
_	2	37,430.00
	m - 100 - 1	

(37,486.00)

Total Other Income

Links

Water System Facilities

Sample Schedules

Coliform/Microbial Sample Results

Coliform Sample Summary Results

Lead And Copper Sample Summary Results

Chem/Rad Samples/Results

Chem/Rad Samples/Results by <u>Analyte</u>

Violations/Enforcement Actions

Site Visits

Milestones

Return Links

Water Systems

Water System Search

County Map

<u>Glossary</u>

Drinking Water Branch

Water System Details

Water System No.

Federal Type C SC2910002

Water System

HEATH SPRINGS

State Type: C

Name: **Principal County** TOWN OF (SC2910002)

Primary SWP

Served: Status:

LANCASTER

Source: **Activity Date**

06-01-1977

Points of Contact

Name	Job Title	Туре	Phone	Address	Email
HEATH SPRINGS TOWN OF (SC2910002)		PL			
HEATH SPRINGS TOWN OF (SC2910002)		ow	803-273- 2066	103 DUNCAN ST HEATH SPRINGS, SC 29058	
OLIVER, JOEY	OWNER	ОТ			
OLIVER, JOEY	OWNER	OP			
PENNY, CHASITY		OP			
HEATH SPRINGS TOWN OF		AC	803-273- 2066	OLIVER PO BOX 100 HEATH SPRINGS, SC 29058	joeyoliver20032003@yahoo.com; wanda@heathsprings.us
KILPATRICK, WANDA	TOWN CLERK	ОТ			

Annual Operating Periods & Population Service Connections Served

Start Month		Population Type R	Population Served 1000	Туре	Count	Meter Type	Meter Size Measure
			1000	CM	26	ME	0
				RS	425	ME	0

Sources of Water

Service Areas



Name	Type Code	Status
2920001 LANCASTER CO WATER (P29102)	СС	A

Code	Name		
D	RESIDENTIAL		
K	AREA		

Water Purchases

Seller Water System No.	Water System Name	Seller Facility Type	Seller State Asgn ID No.	Buyer Facility Type	Buyer State Asgn ID No.
SC2920001	LANCASTER COUNTY W&SD (SC2920001)	TP	A29003	CC	P29102