IN THE TENNESSEE PUBLIC UTILITY COMMISSION AT NASHVILLE, TENNESSEE

IN RE:)	
)	
APPLICATION LIMESTONE WATER)	
UTILITY OPERAITNG COMPANY,)	DOCKET NO. 21-00053
LLC FOR AUTHORITY TO SELL OR)	
TRANSFER TITLE TO THE ASSETS,)	
PROPERTY AND REAL ESTATE OF A)	
PUBLIC UTILITY AND FOR A)	
CERTIFICATE OF CONVENIENCE)	
AND NECESSITY)	
)	

CONSUMER ADVOCATE'S FIRST DISCOVERY REQUEST TO CARTWRIGHT CREEK, LLC - PUBLIC

To: Cartwright Creek, LLC
C/O Henry Walker
Bradley Arant Boult Cummings, LLP
1600 Division Street, Suite 700
Nashville, TN 37203
hwalker@babc.com

This First Discovery Request is hereby served upon Cartwright Creek, LLC ("Cartwright Creek" or the "Company") pursuant to Rules 26, 33, 34 and 36 of the Tennessee Rules of Civil Procedure and Tenn. Comp. R. & Reg. 1220-1-2-.11. The Consumer Advocate Unit in the Financial Division of the Office of the Attorney General ("Consumer Advocate") requests that full and complete responses be provided pursuant to the Tennessee Rules of Civil Procedure. The responses are to be produced at the Office of the Tennessee Attorney General and Reporter, Financial Division, Consumer Advocate Unit, John Sevier Building, 500 Dr. Martin L. King Jr. Blvd., Nashville, Tennessee 37243, c/o Karen H. Stachowski, on or before 2:00 p.m. (CDT), July 14, 2021.

PRELIMINARY MATTERS AND DEFINITIONS

- 1. Continuing Request. These discovery requests are to be considered continuing in nature and are to be supplemented from time to time as information is received by the Company and any of its affiliates which would make a prior response inaccurate, incomplete, or incorrect.
- 2. Clear References. To the extent that the data or information requested is incorporated or contained in a document, identify the document including page/line number if applicable.
- 3. Format of Responses. Provide all responses in the format in which they were created or maintained, for example, Microsoft Word or Microsoft Excel format with all cells and formulas intact and in working order. If a document (including without limitation a financial or other spreadsheet or work paper) is not created or maintained in Microsoft Excel format, convert the document to Microsoft Excel format or provide the document in a format that enables or permits functionality like or similar to Microsoft Excel (including without limitation the functionality of working cells and formulas), or provide the software program(s) that will enable the Consumer Advocate to audit and analyze the data and information in the same manner as would be enabled or permitted if the document were provided in Microsoft Excel format.
- 4. **Objections.** If any objections to this discovery are raised on the basis of privilege or immunity, include in your response a complete explanation concerning the privilege or immunity asserted. If you claim a document is privileged, identify the document, and state the basis for the privilege or immunity asserted. If you contend that you are entitled to refuse to fully answer any of this discovery, state the exact legal basis for each such refusal.
- 5. **Singular/Plural.** The singular shall include the plural, and vice-versa, where appropriate.

6. **Definitions.** As used in this Request:

- (a) "You," "Your," "Company," or "Cartwright Creek," shall mean Cartwright Creek, LLC and all employees, agents, attorneys, representatives, or any other person acting or purporting to act on its behalf.
- (b) "Central States Water" shall mean Central States Water Resources, Inc. and all employees, agents, attorneys, representatives, or any other person acting or purporting to act on its behalf.
- (c) CSWR" shall mean Central States Water Resources, LLC and all employees, agents, attorneys, representatives or any other person acting or purporting to act on its behalf.
- (d) "Limestone," shall mean Limestone Water Utility Operating Company, LLC and all employees, agents, attorneys, representatives, or any other person acting or purporting to act on its behalf.
- (e) "Affiliate" shall mean any entity who, directly or indirectly, is in control of, is controlled by, or is under common control with the Company. For greater clarification, "control" is the ownership of 20% or more of the shares of stock entitled to vote for the election of directors in the case of a corporation, or 20% or more of the equity interest in the case of any other type of entity, or status as a director or officer of a corporation or limited liability company, or status as a partner of a partnership, or status as an owner of a sole proprietorship, or any other arrangement whereby a person has the power to choose, direct, or manage the board of directors or equivalent governing body, officers, managers, employees, proxies, or agents of another person. In addition, the term "Affiliate" shall mean any entity that directly or indirectly provides management or operational services to the Company or any affiliate (as defined in the preceding sentence) of the Company, or to which the Company provides management or operational services. Further, the payment of money to the Company or receipt by the Company of money from an entity with which the Company has any relationship, other than such payment or receipt, shall include the payor or recipient of such money as an "Affiliate."
- (f) "Communication" shall mean any transmission of information by oral, graphic, written, pictorial or otherwise perceptible means, including but not limited to personal conversations, telephone conversations, letters, memoranda, telegrams, electronic mail, newsletters, recorded or handwritten messages, meetings, and personal conversations, or otherwise.
- (g) "Document" shall have the broadest possible meaning under applicable law. "Document" shall mean any medium upon which intelligence or information can be recorded or retrieved, such as any written, printed, typed, drawn, filmed, taped, or recorded medium in any manner, however produced or reproduced, including but not limited to any writing, drawing, graph, chart, form, letter, note, report,

electronic mail, memorandum (including memoranda, electronic mail, report, or note of a meeting or communication), work paper, spreadsheet, photograph, videotape, audio tape, computer disk or record, or any other data compilation in any form without limitation, which is in your possession, custody or control. If any such document was, but no longer is, in your possession, custody or control, state what disposition was made of the document and when it was made.

- (h) "Person" shall mean any natural person, corporation, firm, company, proprietorship, partnership, business, unincorporated association, or other business or legal entity of any sort whatsoever.
- (i) "Identify" with respect to:
 - i. Any natural person, means to state the full name, telephone number, email address and the current or last known business address of the person (if no business address or email address is available provide any address known to you) and that person's relationship, whether business, commercial, professional, or personal with you;
 - ii. Any legal person, business entity or association, means to state the full name, the name of your contact person with the entity, all trade name(s), doing business as name(s), telephone number(s), email address(es), and current or last known business address of such person or entity (if no business address is available provide any address known to you);
 - iii. Any document, means to state the type of document (e.g., letter), the title, identify the author, the subject matter, the date the document bears and the date it was written; and
 - iv. Any oral communication, means to state the date when and the place where it was made, identify the person who made it, identify the person or persons who were present or who heard it, and the substance of it.
- (j) "And" and "or" shall be construed conjunctively or disjunctively as necessary to make the discovery request inclusive rather than exclusive.
- (k) "Including" shall be construed to mean including but not limited to.

FIRST DISCOVERY REQUESTS

1-1. Identify the monthly escrow balances established pursuant to Tennessee Public Utility

Commission (TPUC or the "Commission") orders by month since the date of inception
through May 2021.

RESPONSE:

1-2. Will the escrow funds balances established pursuant to Commission order be transferred to and maintained by Limestone, or are such balances proposed to be retained by the ownership of Cartwright Creek? If the former is true, provide a reference within the Agreement or Petition confirming the transfer of funds. If the latter is true, provide a comprehensive justification for the retention of these funds considering prior Commission orders.

RESPONSE:

1-3. Refer to *Order Approving Extension of Surcharge*, pp. 7-9, TPUC Docket No. 19-00097 (August 25, 2020). If the Parties' intention within the agreement is that the escrow funds will not be used to enhance the system to bring it into compliance with Tennessee environmental regulations, reconcile this position with the language contained in the Commission's Order in TPUC Docket No. 19-00097.

RESPONSE:

1-4. Provide the Cartwright Creek general ledger detail for the period January – May 2021.

RESPONSE:

1-5. Provide the Balance Sheet of Cartwright Creek for the month ended May 2021.

RESPONSE:

1-6. The tariff of Cartwright Creek contains separate rates for the areas of Grassland, Arrington, Hardeman, and Hideaway. Provide the monthly customer counts and revenue generated by customer category (residential, commercial, miscellaneous charges) for each for the period January 2020 through the most recent month available.

RESPONSE:

1-7. Provide a copy of all appraisals relied upon by Cartwright Creek to evaluate an appropriate Purchase/Sale price. To the extent such appraisals differ from the proposed purchase price of the system, provide all analysis reconciling the two amounts.

RESPONSE:

1-8. Identify the amount of capital injected by Cartwright Creek's owner(s) by year for the period January 2019 to date. For each capital injection, provide supporting documentation which confirms the capital injection.

RESPONSE:

- 1-9. Refer to the *Petition*, p. 6. Provide a specific list of the accounting, ratemaking, and regulatory approvals which are conditions precedent to closing the Transaction.

 RESPONSE:
- 1-10. Identify the number and amount of tap fee collections anticipated by CSWR, by year, and that were incorporated into its forecasted financial projects related to Cartwright Creek.

RESPONSE:

1-11. Refer to the *Petition*, Exhibit 7 (Confidential),

Tennessee Department of Environment and Conservation (TDEC) issued a Director's Order to Cartwright Creek identifying deadlines to comply with various compliance issues. A copy of the TDEC Director's Order is attached as Exhibit CA-1.

- a. Explain and provide support regarding Cartwright Creek's compliance with the requirements set out in the *Order and Assessment* section of TDEC Director's Order No. WPC18-0100 which are as follows:
 - i. Paragraph XIII, § 1. Submittal of Corrective Action Plan/Engineering Report (CAP/ER).
 - ii. Paragraph XIII, § 2. Completion of all scheduled activities within one year of date of approval by TDEC.
 - iii. Paragraph XIII, § 3. Submission of a Final Report to TDEC six months after completion of CAP/ER.
 - iv. Paragraph XIII, § 4.
- b. In light of the existing TDEC enforcement actions involving Cartwright Creek,
- c. Provide a comprehensive explanation identifying what portion, (if any) of the
- d. Provide a complete listing of

RESPONSE:

1-12. Does Cartwright Creek believe that civil penalties assessed by TDEC, like those assessed in the Director's Order attached as Exhibit CA-1, may be paid from the monies set aside in

the specifically identified escrow or surcharge accounts authorized by the Commission? ¹ Provide an explanation to your answer.

RESPONSE:

- 1-13. Refer to Petition of Cartwright Creek, LLC to Increase Tap Fees to Address Environmental Issues Raised by the Tennessee Department of Environment and Conservation, Exhibit A, TPUC Docket No. 19-00034 (March 13, 2019). A copy is attached as Exhibit CA-2. Provide the following:
 - a. The amount of escrow monies spent to date on the implementation of the CAP/ER submitted to TDEC in response to Director's Order No. WPC18-0100.
 - b. Based on the Engineering Report, Exhibit CA-2, provide the estimate of the costs for the recommendations set out on p. 14 of the report.

RESPONSE:

1-14. Refer to the *Petition*, Exhibit 7 (Confidential), Provide a

RESPONSE:

- 1-15. The 2020 Cartwright Creek financial statements provided to the Commission indicate a zero value for 2020 Depreciation Expense as well as Accumulated Depreciation. The 2018 Cartwright Creek financial statements also indicate a zero value for Depreciation Expense. With respect to this account, respond to the following questions:
 - a. Identify the last date Cartwright Creek recorded depreciation expense on its books.
 - b. Identify the annual depreciation expense charged in the year in which the expense was last recorded.

¹ Examples of specifically identified escrow or surcharge accounts can be found in a recent filing by Cartwright Creek. *Petition of Cartwright Creek, LLC Requesting Approval of Proposed Capital Improvements*, TPUC Docket No. 19-00049 (May 13, 2019). In this filing, Cartwright Creek identifies an escrow account created in TRA Docket No. 09-00056 and a utility Capital Improvements Surcharge account created in TRA Docket No. 16-00127, which were authorized for necessary system repairs, upgrades, and improvements. *Id.*

- c. Provide the justification for not recording depreciation expense.
- d. Provide the monthly accounting entries since January 2020 to record new capital expenditures associated with Plant in Service.

RESPONSE:

1-16. State the monthly service rates currently being assessed to customers within the Hardeman Springs Subdivision. Identify the existing tariff that specifies these charges.

RESPONSE:

1-17. Provide a complete copy of Cartwright Creek's current tariff.

RESPONSE:

1-18. Provide a copy of the Sewer and Wastewater Treatment System Service Agreement between Propst Hardeman Springs, LLC and Cartwright Creek, LLC dated October 24, 2018.

RESPONSE:

1-18. State whether Cartwright Creek holds a deed for the land, the treatment system and drip fields, and title to the wastewater treatment and collection system at the Hardeman Springs subdivision.

RESPONSE:

- 1-19. With respect to Customer Deposits, respond to the following:
 - a. Indicate whether it is the intent of Cartwright Creek to transfer customer deposits to the buyer at the date of the transaction along with sufficient details to identify the customer associated with their deposit.
 - b. Provide a comprehensive explanation for the change in customer deposits balance from \$214,000 at December 31, 2019 to \$38,000 at December 31, 2020. Provide the amount of customer deposits collected from customers and returned to customers within this response.

RESPONSE:

1-20. Refer to the *Petition*, Exhibit 16. Only one TDEC permit is provided in the *Petition*, and it is for the system at the Hardeman Springs Subdivision (SOP-17002). Provide copies of the permits for the other three systems at issue with this *Petition*.

RESPONSE:

RESPECTFULLY SUBMITTED,

KAREN H. STACHOWSKI (BPR No. 019607)

Assistant Attorney General

SARAH A. HIESTAND (BPR No. 014217)

Senior Assistant Attorney General

Office of the Tennessee Attorney General

Financial Division, Consumer Advocate Unit

P.O. Box 20207

Nashville, Tennessee 37202-0207

Phone: (615) 741-8733 Fax: (615) 741-1026

Email: karen.stachowski@ag.tn.gov Email: sarah.hiestand@ag.tn.gov

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was served via U.S. Mail or electronic mail upon:

Henry Walker Bradley Arant Boult Cummings, LLP 1600 Division Street, Suite 700 Nashville, TN 37203 Ph: 615-252-2363 hwalker@babc.com

Charles B. Welch, Jr., Esq. Tyler Cosby, Esq. Farris Bobango PLC 414 Union Street, Suite 1105 Nashville, TN 37219

Telephone: (614) 726-1200 Email: cwelch@farris-law.com Email: tcosby@farris-law.com

This the 29th day of June, 2021.

KAREN H. STACHOWSKI



STATE OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION **DIVISION OF WATER RESOURCES**

William R. Snodgrass - Tennessee Tower 312 Rosa L. Parks Avenue, 11th Floor Nashville, Tennessee 37243-1102

April 29, 2019

Mr. Bruce E. Mever Registered Agent Cartwright Creek, LLC 6545 Cox Road College Grove, TN 37046

CERTIFIED MAIL RETURN RECEIPT REQUESTED RECEIPT # 9414 7266 9904 2120 5184 08

Subject:

DIRECTOR'S ORDER NO.WPC18-0100

CARTWRIGHT CREEK, LLC

WILLIAMSON COUNTY, TENNESSEE

Dear Mr. Meyer:

Enclosed is a Director's Order and Assessment issued by the Tennessee Department of Environment and Conservation, Division of Water Resources for violations of the Water Quality Control Act, including failure to adhere to conditions of the permit.

The above violations have resulted in a full penalty assessment of \$37,950.00, with an upfront payment of \$7,590.00, due and payable on or before the 31st day after receipt of this Order and Assessment. The remaining assessment is due only if the order requirements are not timely met. Please read the Order carefully and pay special attention to the Notice of Rights section.

If you have questions concerning this correspondence, please contact Rebecca Rush at (615) 532-5984 or by email at Rebecca. Rush@tn.gov, or Jessica Murphy at (615) 532-0676 or by email at Jessica.Murphy@tn.gov.

Sincerely.

Jessica Murphy

Manager, Compliance and Enforcement Unit

JRRu:EJM

Cc:

DWR- Mr. Tim Jennette, Nashville EFO- Tim.Jennette@tn.gov

DWR- Ms. Virginia Lawrence, Nashville EFO- Virginia.Lawrence@tn.gov DWR- Ms. Stephanie Durman, TDEC OGC- Stephanie.Durman@tn.gov

DWR- Enforcement File WPC18-0100

STATE OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

IN THE MATTER OF:)	DIVISION OF WATER RESOURCES
CARTWRIGHT CREEK, LLC,)	
RESPONDENT.)	CASE NUMBER WPC18-0100

DIRECTOR'S ORDER AND ASSESSMENT

NOW COMES Jennifer Dodd, Director of the Tennessee Division of Water Resources, and states:

PARTIES

I.

Jennifer Dodd is the duly appointed Director of the Tennessee Division of Water Resources by the Commissioner of the Tennessee Department of Environment and Conservation (Division).

II.

Cartwright Creek, LLC (Respondent) is a wastewater utility in Williamson County, Tennessee, which operates Grasslands sewage treatment plant (STP) and the associated collection system. The Respondent is authorized to discharge treated domestic wastewater to the Harpeth River. Service of process may be made on the Respondent through its Registered Agent, Mr. Bruce E. Meyer at 6545 Cox Road, College Grove, Tennessee 37046.

JURISDICTION

III.

Whenever the Commissioner has reason to believe that a violation of the Water Quality Control Act, Tenn. Code Ann. §§ 69-3-101 to -148 (Act), has occurred, is occurring, or is about to occur, the Commissioner may issue a complaint to the violator and the Commissioner may order corrective action be taken. Tenn. Code Ann. § 69-3-109(a). Further, the Commissioner has authority to assess civil penalties against any violator of the Act, Tenn. Code Ann. § 69-3-115, and has authority to assess damages incurred by the state resulting from the violation, Tenn. Code Ann. § 69-3-116. The Board of Water Quality, Oil and Gas has promulgated rules governing general water quality criteria and use classifications for surface waters. Tenn. Comp. R. & Regs. Chapters 0400-40-03 and 0400-40-04. The Commissioner may delegate to the Director any of the powers, duties, and responsibilities of the Commissioner under the Act, Tenn. Code Ann. § 69-3-107(13), and has delegated such authorities to Jennifer Dodd.

IV.

The Respondent is a "person" as defined by the Act. Tenn. Code Ann. § 69-3-103.

V.

The Harpeth River, as described herein, constitutes "waters" of the state and a "stream." Tenn. Code Ann. § 69-3-103. All streams have been classified by the Tennessee Water Quality Control Board for suitable uses. Tenn. Comp. R. & Regs. Chapter 0400-40-04. The Harpeth River has been classified for the following uses: domestic water supply, industrial water supply, fish and aquatic life, recreation, irrigation, and livestock watering and wildlife. The Harpeth River in Williamson County is included on the 2018 303(d) list of impaired streams due to Dissolved Oxygen and Total Phosphorus.

VI.

A person must obtain coverage under a permit from the Department prior to discharging any substances to waters of the state, or to a location from which it is likely that the discharged substance will move into waters of the state. Tenn. Code Ann. § 69-3-108(b). Tennessee rules require that a set of effluent limitations will be required in each permit that will indicate adequate operation or performance of treatment units used, and that appropriately limit those harmful parameters present in the wastewater. Tenn. Comp. R. & Regs. 0400-40-05-.08. The permittee shall at all times properly operate and maintain all facilities and systems (and related appurtenances) for collection and treatment which are installed or used by the permittee to achieve compliance with the conditions of the permit. Tennessee Comp. R. & Regs. 0400-40-05-.07. Furthermore, it is unlawful for any person to increase the volume or strength of any wastes in excess of the permissive discharges specified under any existing permit. Tenn. Code Ann. § 69-3-108(b)(3). It is unlawful for any person to violate the conditions of a discharge permit issued by the Department. Tenn. Code Ann. § 69-3-108(b) and -114(b).

FACTS

VII.

On November 1, 2010, the Division issued National Pollutant Discharge Elimination System (NPDES) permit TN0027278 (Permit) to the Respondent. The Permit had an expiration date of November 30, 2011, and is currently administratively continued. The Permit authorizes the permittee to discharge treated municipal wastewater to the Harpeth River at mile 68.8 from Outfall 001. Part 1.1 of the Permit establishes a suite of numeric effluent limitations. Permit limits for ammonia, CBOD₅, and total nitrogen are derived from wasteload allocations established in the 2004 total maximum daily load document for dissolved oxygen.

VIII.

On August 21, 2014, the Division entered into Settlement Agreement and Consent Order WPC14-0021 with the Respondent to address violations of the Permit including effluent violations, overflows, and failing to timely submit Discharge Monitoring Reports (DMRs). The Respondent met all requirements set forth in the Order and the case was closed on December 31, 2015.

IX.

The Respondent appeared on the Environmental Protection Agency's Quarterly Noncompliance Report for Total Nitrogen and Carbonaceous Biochemical Oxygen Demand (CBOD) effluent violations between April and July 2018.

X.

During the monitoring period of September 2017 to February 2019, the Respondent selfreported the following effluent violations on its DMRs:

Parameter	Reported Effluent Violations 9/1/17 - 2/28/19			
Solids, total suspended	3			
Nitrogen, total (as N)	8			
Nitrogen, ammonia total (as N)	1			
CBOD, 5 day 20 C	39			
Suspended solids % removal	7			
Carbonaceous Oxygen Demand, % removal	10			
Total Violations	68			

XI.

On January 17, 2019, representatives of the Respondent participated in a show cause meeting with representatives of the Division. The Respondent explained that approximately one third of its total exceedances were the result of excessive inflow and infiltration (I/I), and

indicated that it had conducted a three-year I/I study, identified the primary source of I/I, and developed a plan to address this problem subject to funding availability.

VIOLATIONS

XII.

By violating the terms and conditions of the Permit, as described herein, the Respondent has violated sections 69-3-108(a) and 69-3-114(b) of the Act, which state in relevant part:

Tenn. Code Ann. § 69-3-108(b):

It is unlawful for any person, other than a person who discharges into a publicly owned treatment works or a person who is a domestic discharger into a privately owned treatment works, to carry out any of the following activities, except in accordance with the conditions of a valid permit:

- (3) The increase in volume or strength of any wastes in excess of the permissive discharges specified under any existing permit;
- (6) The discharge of sewage, industrial wastes or other wastes into waters, or a location from which it is likely that the discharged substance will move into waters;

Tenn. Code Ann. § 69-3-114(b):

In addition, it is unlawful for any person to act in a manner or degree that is violative of any provision of this part or of any rule, regulation, or standard of water quality promulgated by the board or of any permits or orders issued pursuant to this part; or to fail or refuse to file an application for a permit as required in § 69-3-108; or to refuse to furnish, or to falsify any records, information, plans, specifications, or other data required by the board or the commissioner under this part.

ORDER AND ASSESSMENT

XIII.

Pursuant to the authority vested by sections 69-3-109, 69-3-115 and 69-3-116 of the Act, I, Jennifer Dodd, hereby issue the following ORDER and ASSESSMENT:

1. Within 60 days of receipt of this Order and Assessment, the Respondent shall submit a Corrective Action Plan/Engineering Report ("CAP/ER") to the Division for review and approval. The CAP/ER shall include plans to address effluent violations, including plans to reduce I/I, and a project timeline for beginning and completing all activities relating to the plan. The CAP/ER shall evaluate alternative compliance options, including alternatives to direct discharge as a stand-alone facility. Once approved, these dates will become an enforceable part of the Order and subject to contingent penalties. If the Division requires changes to the submitted plans, the Respondent shall have 30 days from the date of notification to submit updated plans. This case number, WPC18-0100, should be written on all correspondence regarding this matter. The CAP/ER shall be submitted in duplicate to the following addresses:

Manager, Division of Water Resources Tim.Jennette@tn.gov Nashville Environmental Field Office 711 R.S. Gass Blvd. Nashville, TN 37216

AND

Manager, Compliance and Enforcement Unit Jessica.Murphy@tn.gov William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue, 11th Floor Nashville, TN 37243.

- 2. All scheduled activities in the approved CAP/ER shall be completed within one year of the date of approval by the Division and a notice of completion shall be submitted in duplicate to the Division at the addresses listed in Item One above.
- 3. The Respondent shall submit a Final Report to the Division six months after the completion of the CAP/ER. The Report shall detail the date of completion of each action

item in the CAP/ER and shall evaluate the effectiveness of all corrective actions taken in bringing the facility into compliance with the Permit. The Report shall also include an evaluation of additional corrective actions needed to bring the plant into compliance with the Permit, if necessary. The Report shall be submitted in duplicate to the Division at the addresses listed in Item One above.

- 4. The Respondent shall achieve substantial compliance with the Permit on or before December 31, 2021, at which time this Order shall be considered closed so long as the Respondent is in compliance with all Order requirements, all penalties owed have been paid to the Division, and the facility is in substantial compliance with requirements of the Permit.
- 5. The Respondent shall pay a civil penalty of \$37,950.00 to the Division, hereby ASSESSED to be paid as follows:
 - a. On or before the 31st day after receipt of this Order and Assessment, the Respondent shall pay a civil penalty in the amount of \$7,590.00.
 - b. If, and only if, the Respondent fails to comply with item 1 above, the Respondent shall pay a civil penalty in the amount of \$9,680, payable on or before the 31st day after default.
 - c. If, and only if, the Respondent fails to comply with item 2 above, the Respondent shall pay a civil penalty in the amount of \$9,680.00, payable on or before the 31st day after default.
 - d. If, and only if, the Respondent fails to comply with item 3 above, the Respondent shall pay a civil penalty in the amount of \$1,000.00, payable on or before the 31st day after default.

e. If, and only if, the Respondent fails to comply with item 4 by achieving substantial compliance with the Permit by December 31, 2021, the Respondent shall pay a CIVIL PENALTY in the amount of \$500.00, per effluent violation, up to a maximum of \$10,000.00, payable within 30 days of submission of the DMR reporting the effluent violation. Assessment of contingent penalties for effluent violations will begin on January 1, 2022, and will end on December 31, 2022.

The Respondent shall otherwise conduct business in accordance with the Act and rules promulgated pursuant to the Act.

The Director of the Division may, for good cause shown, extend the compliance dates contained within this Consent Order and Assessment. In order to be eligible for this time extension, the Respondent shall submit a written request to be received in advance of the compliance date. The written request must include sufficient detail to justify such an extension and include at a minimum the anticipated length of the delay, the precise cause or causes of the delay, and all preventive measures taken to minimize the delay. Any such extension by the Division will be in writing. Should the Respondent fail to meet the requirement by the extended date, any associated Civil Penalty shall become due 30 days thereafter.

Failure to comply with any of the requirements of this Consent Order and Assessment could lead to further enforcement actions, which may include additional civil penalties, assessment of damages, and/or recovery of costs. Payments of the civil penalty and/or damages shall be made payable to the "Treasurer, State of Tennessee" and sent to the Division of Fiscal Services - Consolidated Fees Section, Tennessee Department of Environment and Conservation, William R. Snodgrass Tennessee Tower, 312 Rosa Parks Avenue, 10th Floor, Nashville, Tennessee 37243.

RESERVATION OF RIGHTS

In issuing this Order and Assessment, the Department does not implicitly or expressly waive any provision of the Act or the regulations promulgated thereunder or the authority to assess costs, civil penalties, and/or damages incurred by the State against the Respondent(s). The Department expressly reserves all rights it has at law and in equity to order further corrective action, assess civil penalties and/or damages, and to pursue further enforcement action including, but not limited to, monetary and injunctive relief. Compliance with this order will be considered as a mitigating factor in determining the need for future enforcement action(s).

NOTICE OF RIGHTS

The Respondent(s) may appeal this Order and Assessment. Tenn. Code Ann. §§ 69-3-109, -115, and -116. To do so, a written petition setting forth the reasons for requesting a hearing must be received by the Commissioner within 30 days of the date the Respondent(s) received this Order and Assessment or this Order and Assessment will become final.

If an appeal is filed, an initial hearing of this matter will be conducted by an Administrative Law Judge (ALJ) as a contested case hearing. Tenn. Code Ann. § 69-3-110; Tenn. Code Ann. § 4-5-301 to -325 (the Uniform Administrative Procedures Act); Tenn. Comp. R. & Regs. 1360-04-01 (the Department of State's Uniform Rules of Procedure for Hearing Contested Cases Before State Administrative Agencies). Such hearings are legal proceedings in the nature of a trial. Individual Respondents may represent themselves or be represented by an attorney licensed to practice law in Tennessee. Artificial Respondents (corporations, limited partnerships, limited liability companies, etc.) cannot engage in the practice of law and therefore may only pursue an appeal through an attorney licensed to practice law in Tennessee. Low-

income individuals may be eligible for representation at reduced or no cost through a local bar association or legal aid organization.

At the conclusion of any initial hearing, the ALJ has the authority to affirm, modify, or deny the Order and Assessment. Furthermore, the ALJ on behalf of the Board has the authority to assess additional damages incurred by the Department including, but not limited to, all docketing expenses associated with the setting of the matter for a hearing and the hourly fees incurred due to the presence of the ALJ and a court reporter.

Any petition for review must be directed to the Commissioner of the Department of Environment and Conservation, c/o Jenny L. Howard, General Counsel, Department of Environment and Conservation, William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 2nd Floor, Nashville, Tennessee 37243. Payments of the civil penalty and/or damages shall be made payable to the "Treasurer, State of Tennessee" and sent to the Division of Fiscal Services - Consolidated Fees Section, Tennessee Department of Environment and Conservation, William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 10th Floor, Nashville, Tennessee 37243. Technical questions and other correspondence involving compliance issues should be sent to Jessica Murphy, State of Tennessee, Division of Water Resources, William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243. Attorneys should contact the undersigned counsel of record. The case number, WPC18-0100, should be written on all correspondence regarding this matter.

Issued by the Director of the Division of Water Resources of the Tennessee Department of Environment and Conservation on this 20th day of _______, 2019.

Exhibit CA-1

Jennifer Dodd, Director Division of Water Resources

Department of Environment and Conservation

Reviewed by:

Stephanie A. Durman

BPR #027783

Assistant General Counsel

Department of Environment & Conservation 312 Rosa L. Parks Avenue, 2nd Floor Nashville, Tennessee 37243

615-532-3020

stephanie.durman@tn.gov

Cartwright Creek

Collections System Review

JUNE, 2018

Prepared by:





Introduction

In May of 2018, Inflo Design Group, LLC (IDG) was requested by the Cartwright Creek, LLC, to provide an overview of the Cartwright Creek wastewater collection system facilities. The purpose of this review was to evaluate the existing flow monitoring and CCTV data and present information so that there might be a general understanding of the condition of the collection system and where allocating financial resources for system renewal might provide long-term benefit to the system. While not a formal "condition assessment" of the entire system, this report serves to summarize IDG's observations of the information available and recommendations for partial system renewal.

The process to develop this report is detailed in later sections, but in general, IDG performed four tasks in collecting information on the status of the system:

- Review of a flow monitoring report entitled "CARTWRIGHT CREEK TEMPORARY FLOW STUDY", from May through July of 2017, prepared by Utility Technologies (note, it is our understanding that George Kurz has conducted further analysis on this flow monitoring, and although his findings have not yet been reviewed by IDG, we highly recommend paying particular attention to calculated inflow / infiltration amounts.
- 2. Review of CCTV investigation of nearly 8,500LF of the collection system (slightly less than 20%).
- 3. Review of regulatory records available in the Tennessee Department of Environment and Conservation's permit dataviewer for permit #TN27278.
- On-site review of portions of the collection system, particularly near Grassland Middle School, Grassland Shopping Center, and near the wastewater treatment plant.

General observations made upon review of this information include:

- There is a large amount of infiltration entering the system, and much of it appears to be originating in a localized area of the system.
- The wastewater collection system as a whole is in average to below average condition based on analysis of similar collection systems in Middle Tennessee and will require broad-based rehabilitation in the future to restore capacity, but a complete reconstruction will not be necessary.
- Previous renewal efforts of CIPP lining appear to have been successful, although in some places laterals need to be sealed.
- Several manholes are in poor condition, and given the proximity of much of the system to creeks and drainageways, a more thorough field inspection of the critical portions of the system is warranted.



	SEWER COLLECTION S	SYSTEM SUMMARY
GENERAL CONDITION	The facilities are in average condition, but some locations, particularly near Grassland Middle School and the Grassland Shopping Center, are in poor condition.	10/13/2017 23.1 FTMS POWER 80 V Upstream manhole No:96 Cownstream manhole No:96A Cam Dir: Upstream
KEY OBSERVATIONS	 The area near Grassland Middle School is particularly prone to Infiltration. Several manholes are potential sources of Inflow & Infiltration into the system and warrant further inspection. 	MANHOLE 96A, NEAR THE CREEK IN FRONT OF GRASSLAND MIDDLE SCHOOL, HAS A HIGH DEGREE OF INFILTRATION. GIVEN THAT THIS CCTV WORK WAS PERFORMED DURING A RELATIVELY DRY MID-OCTOBER, IT IS LIKELY THAT THE INFILTRATION IS MUCH WORSE IN WETTER TIMES OF THE YEAR.
RECOMMENDED IMPROVEMENTS	1. Perform comprehensive rehabilitation on a portion of the system just to the west of Grassland Middle School. 2. Perform point repairs on a service line behind Pet Vet on Hillsboro road and at two manholes near Sonic in the Grassland commercial area.	

Other evaluation programs should be considered as the system ages including:

- Televising the remainder of the system.
- Investigating the source(s) of the heavy grease buildup evident in portions of the system.
- Maintaining permanent flow monitors in the collection system
- "Trunk walks" of lines, particularly those along creeks and drainageways.



2. Review of Available Information

IDG reviewed available information in the following order:

- 1. Regulatory records available on TDEC's dataviewer website;
- 2. CCTV logs provided by First Response performed in October of 2017;
- 3. Surface observations of areas noted in the CCTV logs as being prone to high rates of infiltration;
- 4. Flow monitoring report provided by Utility Technologies based on flow monitoring information collected May through July of 2017.

2.1 Regulatory Records Review

Overall, the goal of the system is to remain in compliance with NPDES permit #TN0027278, and this appears to be the case. According to an internal email at TDEC dated March 13, 2018, there is not a moratorium on connections in the Cartwright Creek basin and "any type of moratorium would be self-imposed". However, dating back to at least 2010, there are numerous references to excessive I/I in the collection system.

Also very importantly, there are no active regulatory orders for the Cartwright Creek system, with concurrence that the requirements of WPC14-0021 have been met. Interestingly, it does not appear that any compliance Evaluation Inspections have taken place since 2014, so it is likely that TDEC will make a visit to the system soon, so reviewing the commitments made in the Sewer Overflow Response Plan dated December 18, 2014, as well as the Corrective Action Plan dated February 17, 2015, would be helpful. Section 4.2.2 of the Corrective Action Plan specifically states that "repair of the collection system items will be required whether the treatment facility is upgraded or the wastewater is pumped to another facility.

The Nutrient Management Plan submitted to TDEC on March 4, 2015, cites infiltration as a hurdle for meeting the permitted effluent limits for the treatment facility. It also references three important numbers:

WWTP DESIGN FLOW (gallons per day)	WWTP ACTUAL FLOW (gallons per day)	WWTP AVERAGE FLOW BASED ON 300 Gal/Day PER HOUSEHOLD (gpd)
250,000	470,000	150,000

Based on these numbers, the wastewater is diluted on average by a factor of 3, which means that comprehensive system rehabilitation could likely have a high rate of return. It is very likely that the average daily household wastewater generation rate (during dry weather) is not 300 gpd and so the peaking factor's seen at the plant are potentially much higher than 3.



2.2 CCTV Review

Selected videos of portions of the collection system were reviewed in their entirety. Overall, the quality of the videos was very good, although there were a few items that could have been noted that were not. The information was not tabulated in PACP format, but for the purposes of a general investigation like this, that probably is not necessary. A summary table of the observations is below:

Upstream MH	Downstream MH	Material	Diameter	Length	Status	Services	Comments
17111			Ph 130	H. P.			CROSSING UNDER
96A	71C	DIP	15	75	GOOD	0	HILLSBORO
71C	71B	VCP	15	201	GOOD	0	
71B	71	VCP	15	199	MARGINAL	0	
71	70	VCP	15	172	BAD	0	
70	66	VCP	15	145	BAD	0	
66	65	VCP	15	133	BAD	0	
65	46B	VCP	15	256	BAD	0	
							MANHOLES NEED
96	96A	VCP	15	25	BAD	0	REPAIR
96X	96	VCP	12	198	BAD	0	
96F	96B	PVC	10	353	GOOD	0	HEAVY GREASE
75	74	VCP	8	366	GOOD	12	
74	73	VCP	8	120	GOOD	0	1-1-2-2-1
73	72	VCP	8	347	BAD	12	
72	71	VCP	8	380	MARGINAL	11	
71	71A	VCP	8	86	MARGINAL	1	
96D	96B	PVC	8	206	GOOD	0	
96B	96	PVC	10	281	GOOD	0	
3V	3	VCP	8	221	GOOD	0	
3Y	3V	PVC	8	386	GOOD	0	
3.							SERVICE LINE PROBABLY
4	3	PVC	8	255	GOOD	1	LEAKING
8	7	PVC	10	303	GOOD	1	
7	6	PVC	10	195	GOOD	2	
6	5	PVC	10	190	GOOD	1	
5	4	PVC	10	368	GOOD	2	
18A	18	PVC	8	109	GOOD	0	MANHOLE 18 – HEAVY INFIL.
18	17A	PVC	8	52	GOOD	0	17A SHOWS HVY INFIL.

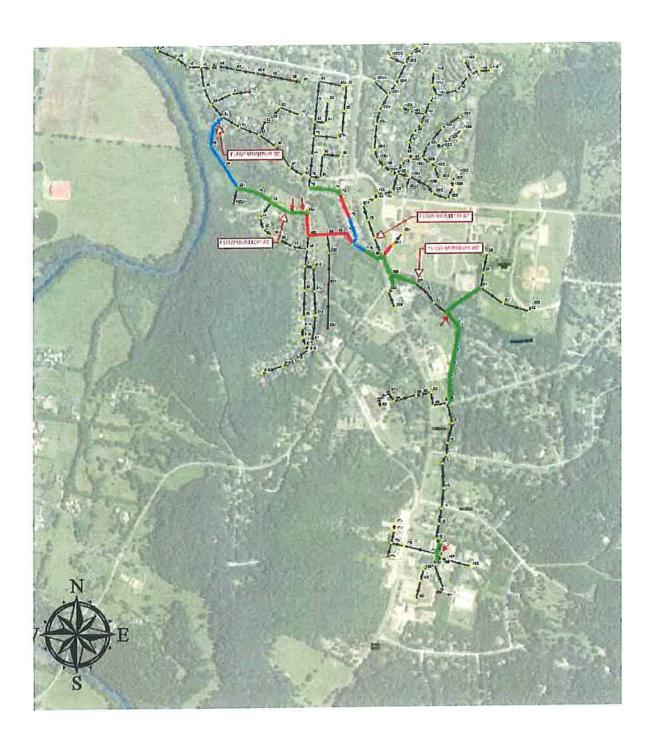


Upstream MH	Downstream MH	Material	Diameter	Length	Status	Services	Comments
17A	17	PVC	8	162	GOOD	0	
46B	46A	VCP	15	320	BAD	6	
46A	46	CIPP	15	261	GOOD	2	NEED LATERAL SEALS
46	43	CIPP	15	284	GOOD	0	
43	42	CIPP	15	220	GOOD	0	
42	1	CIPP	15	314	GOOD	0	
3A	3C	VCP	8	176	MARGINAL	3	GREASE
3C	3D	VCP	8	92	MARGINAL	0	GREASE
3D	3E	VCP	8	175	MARGINAL	0	GREASE
3E	3F	VCP	8	365	MARGINAL	0	GREASE
3F	1 1	VCP	8	308	MARGINAL	0	GREASE

For this initial review, the lines were simply characterized as "good", "bad" or "marginal". Generally, the PVC lines were in good shape and the larger clay lines were in fair to poor condition. It is helpful to note segments that were characterized as "marginal" because of their proximity to other issues might be the determining factor for whether to rehabilitate that segment. Groundwater can often "migrate" along a trench and find alternate ways into the pipe, so without a comprehensive approach to rehabilitation, a problem might not be solved — it might simply be moved.

Following the GREEN = GOOD, BLUE = MARGINAL, and RED = BAD convention in the table, a graphical representation of the CCTV review is shown on the following page. Here, is it evident that major issues are concentrated in a relatively specific area.







There were a few items of note that will have some bearing on the recommended approach to rehabilitation of portions of the system:

1. **Previous rehabilitation efforts appear to have been somewhat effective.** Segment 46A to 46 was previously lined and in much better condition than the adjacent segment 46B to 46A which had not been lined. However, the two services on segment 46A-46 were only reinstated and not sealed, and both of them were leaking as can be seen in the figure below.



IDG recommends that any services on lines that are rehabilitated receive at least a "cut and buff / lateral seal" treatment

2. **Grease is collecting in the system in specific locations.** A majority of the lines listed as "marginal" are 8" VCP segments coming from Boxwood Drive to the WWTP (manholes 3A to 3F). The true condition of these segments could not be determined because the lines were so full of grease, as shown below:



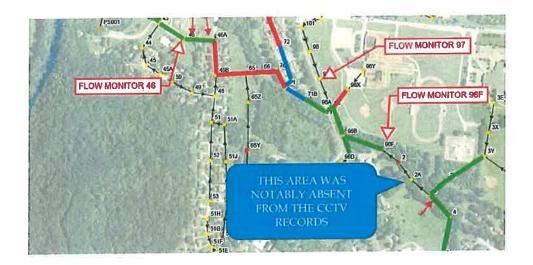


3. Manholes can be a major source of I/I, and in some cases may need to be replaced entirely. One or two manholes near Sonic in the Grassland Commercial Area are in need of repair or possible replacement, along with manholes in front of Grassland Middle School. Grouting and sealing with cementitious or epoxy coatings might work, but if the manholes are structurally deficient, replacing them altogether could be necessary.

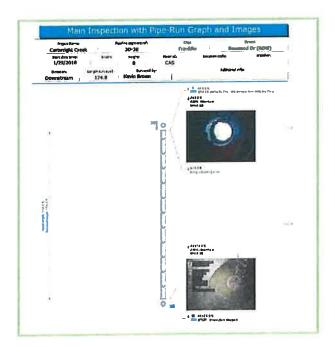


4. Some areas along the trunk line were not inspected but might be sources of I/I. For example, segments 2A-2 and 2-96F are along the creek and near some other problematic areas. These segments, particularly the manholes, should be considered in future investigative efforts.





For each video, First Response provided a pipeline summary sheet. Each of these reports were compared to notes taken during the CCTV review, and for the most part the data was in sync. A sample pipeline report is shown below (note, this segment should have been called out as having excessive grease buildup to the point that the camera had trouble passing):





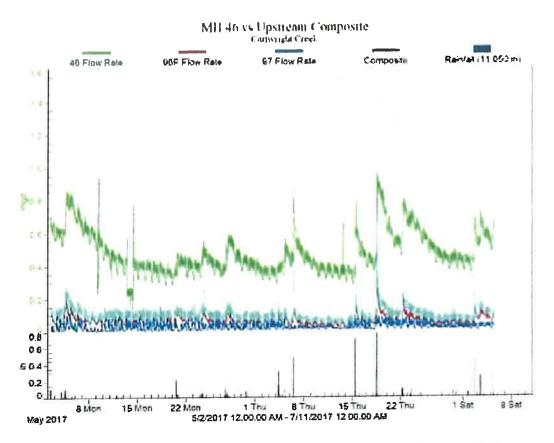
2.3 Surface Observations

Noting that the main problematic areas were near Hillsboro Road at Grassland Middle School and near Sonic at the Grassland Commercial area, a site visit was made to those locations. In both instances, the sewer lines and manholes were found to be located in or near drainage areas. Particularly near Grassland Middle School, there was evidence that the area flooded in recent weeks near at least three, possibly as many as five manholes. Some of these were not included in the CCTV study area, and we recommend this area be included in further investigative efforts. There did not appear to be locations where sinkholes had developed, which would possibly be indicative of collapsed sewer lines.

2.4 Flow Monitoring Review

The flow monitoring information performed by Utility Technologies corroborates the findings in the CCTV review that the majority of the infiltration is originating in a relatively limited portion of the collection system. The most important conclusion from UTI's report is the graph that shows flow monitor 46 on the same axes as flow monitor 97 and 96F. Although there is some infiltration evident upstream of flow monitor 97, and perhaps more from 96F (a large proportion of which originates at two manholes near Sonic), the largest contributory basin is the area just upstream of Manhole 46.





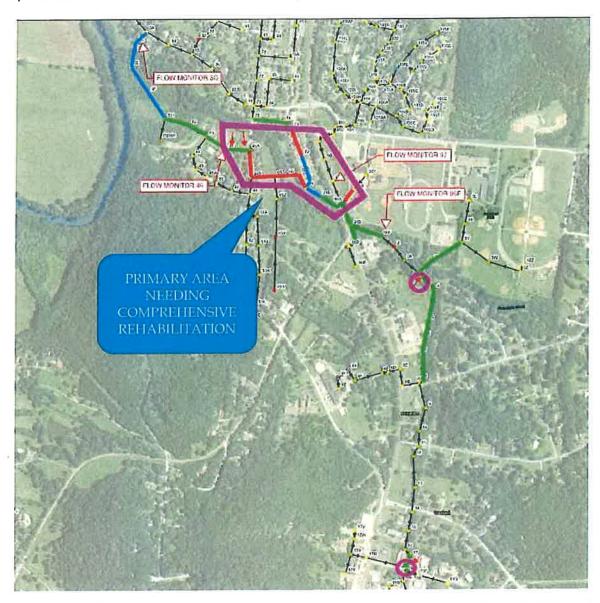
From this graph, several things may be inferred when looking at the flows from Basin 46 (the green line):

- 1. After rain events, it can take close to a week for the flow to return back to normal.
- 2. Even at "normal" flows, the lowest readings are approximately 300,000 gallons per day. In a basin this small that is nearly 100% residential, the flow should approach a flow rate near 0 in the early-morning hours.
- 3. The distinct peaks nearing 1,000,000 gallons per day are indicative of direct inflow into the system, as if water is flowing directly into a manhole somewhere.



3. Rehabilitation Strategies

As stated previously, typical "find and fix" strategies often meet with limited success. IDG recommends a "Basin Approach" to comprehensively renew the collection system in the most problematic areas. In this instance, Basin 46 is the primary area of concern:



Two other smaller areas, involving a service line repair and manhole repairs, also need repairs, and they are circled in pink above.



3.1 Gravity Line Rehabilitation Strategy

For repair of the main lines, we recommend cured-in-place lining (CIPP), not unlike what has been completed before in the system. There are several qualified contractors currently working in Brentwood, Metro Nashville, and Dickson, so obtaining good pricing should be relatively straightforward. A summary table of the proposed work is included below:

Upstream	Downstream						
MH	MH	Material	Diameter	Length	Status	Services	Comments
71C	71B	VCP	15	201	GOOD	0	
71B	71	VCP	15	199	MARGINAL	0	
71	70	VCP	15	172	BAD	0	
70	66	VCP	15	145	BAD	0	
66	65	VCP	15	133	BAD	0	
65	46B	VCP	15	256	BAD	0	
	2.55						MANHOLES NEED REPAIR
96	96A	VCP	15	25	BAD	0	/ REPLACEMENT
96X	96	VCP	12	198	BAD	0	A COLUMN TO A STATE OF THE STAT
73	72	VCP	8	347	BAD	12	
72	71	VCP	8	380	MARGINAL	11	
71	71A	VCP	8	86	MARGINAL	1	
4	3	PVC	8	255	GOOD	1	SERVICE PROB. LEAKING
18A	18	PVC	8	109	GOOD	0	MH 18 NEEDS REPAIR
							ONE OR BOTH MANHOLES
18	17A	PVC	8	52	GOOD	0	NEED REPAIR
46B	46A	VCP	15	320	BAD	6	
46A	46	CIPP	15	261	GOOD	2	NEED LATERAL SEALS

Please note that even though some lines are noted as "marginal" or even "good" in the case of 71C-71B, by virtue of being VCP lines and in the midst of other large leaks in the system, failing to line those segments might serve to simply concentrate the issue at those segments not rehabilitated.

3.2 Manhole Repair Strategy

Manholes appear to be a major contributor to the I/I problem in the system. Once a main is lined, there is an annular space between the liner and the main, and in some cases, between the main and the manhole itself, which allows infiltration to enter the system. We recommend that each manhole that is connected to a main that gets lined receive a cementitious coating to seal the manhole. There is some merit in considering a more robust (and more expensive) epoxy coating, but there does not appear to be a large amount of corrosion evident in the system, so a cementitious coating should suffice. As with the CIPP lining, there are qualified manhole rehabilitation contractors working nearby.



Further, we recommend additional inspection of manholes along the trunk line, particularly near Grassland Middle School. It is likely that some watertight lids and/or casting adjustments would be worthwhile investments.

3.3 Lateral Repair Strategy

If mains and manholes are rehabilitated, it is also necessary to seal the laterals. There are several different schools of thought for lateral rehabilitation, including:

- 1. Dig and replace the entire service line;
- 2. Trenchlessly line the entire service line;
- 3. Install a new cleanout at the easement / property line and dig & replace from there to the main;
- 4. Install a "lateral seal" trenchlessly as part of the rehabilitation efforts.

Based on our opinion, option #4 would be both an economical and effective lateral rehabilitation method for Cartwright Creek. A "full-wrap" lateral seal extending approximately 4-feet into the service line will effectively seal the majority of leaks in service lines. A leader in the industry, BLD Contracting, has installed several thousand of these lateral connection seals throughout Middle Tennessee, shown graphically below:





4. Recommendations

Effective sewer rehabilitation is a process that requires continual effort to properly reduce I/I because of the ever-deteriorating condition of underground infrastructure. Cartwright Creek's system, even with high rates of I/I, is in generally the same condition as most wastewater collection systems in Middle Tennessee, with the older larger clay lines being problematic and the newer PVC lines being in relatively good condition. To understand the range of options and high-level budgetary costs for varying degrees of rehabilitation, a table is provided below for the sake of comparison:

Rehabilitation Approach	Budgetary Cost
Comprehensively rehabilitate all non-PVC mains, manholes, and services in the system.	\$2,000,000
Comprehensively rehabilitate all defects noted on investigative work performed in 2017	\$750,000
Comprehensively rehabilitate selected areas noted on investigative work performed in 2017 (and tabulated in Part 3 of this report)	\$500,000
"Find and fix" selected mains for rehabilitation	\$275,000

IDG recommends the approach highlighted above: comprehensive rehabilitation in the areas noted in Section 3. It needs to be clear that this approach will not remove all of the I/I in the system. Most efforts set 50% removal as a viable goal for a basin, and this is possibly achievable in Basin 46 with a comprehensive rehabilitation strategy. Additional studies of the flow monitoring could better quantify the specific gallons to be removed from the system.

A more specific breakdown of the potential costs associated with this approach is as follows:



MAINS	Project Component	Quantity	Unit	Unit Cost	Total Cost
	15" CIPP	1451	LF	\$ 100.00	\$ 145,100.00
	12" CIPP	198	LF	\$ 80.00	\$ 15,840.00
	10" CIPP	0	LF	\$ 65.00	\$ -
	8" CIPP	813	LF	\$ 50.00	\$ 40,650.00
	INVESTIGATIVE CCTV	5000	LF	\$ 3.00	\$ 15,000.00
	HEAVY CLEANING	1500	LF	\$ 12.00	\$ 18,000.00
MANHOLES	0-6' DEPTH CEMENTITOUS COATING	20	EA	\$ 1,500.00	\$ 30,000.00
	PER VF ADDITIONAL	120	VF	\$ 150.00	\$ 18,000.00
	WATERTIGHT REPLACEMENT	3	EA	\$ 2,000.00	\$ 6,000.00
	CASTING ADJUSTMENT	5	EA	\$ 1,500.00	\$ 7,500.00
	MANHOLE REPLACEMENT - 10'- 14' DEPTH	2	EA	\$ 6,000.00	\$ 12,000.00
LATERALS	15" LATERAL SEAL - 4' LENGTH	7	EA	\$ 3,300.00	\$ 23,100.00
	10" LATERAL SEAL - 4' LENGTH	0	EA	\$ 2,800.00	\$ -
	8" LATERAL SEAL - 4' LENGTH	26	EA	\$ 2,500.00	\$ 65,000.00
	LATERAL POINT REPAIR - 6' LENGTH, 6-10' DEPTH	1	EA	\$ 3,000.00	\$ 3,000.00
	LATERAL POINT REPIAR - 6' LENGTH, 10'-14' DEPTH	1	EA	\$ 3,500.00	\$ 3,500.00
	CONSTRUCTION SUBTOTAL				\$ 403,000.00
	CONTINGENCY				\$ 40,300.00
	DESIGN SERVICES				\$ 32,300.00
	CONSTRUCTION PHASE SERVICES				\$ 30,200.00
	TOTAL PROJECT COST				\$ 505,800.00