

WATER RESOURCES BOARD

Tuesday, September 22, 2020
Operations & Maintenance Facility
1725 South Church Street
3:30 PM

A G E N D A

1. Consent Agenda:
 - A. Consider SRWTP TOC Instrument replacement 2
 - B. Consider JB&S Task Order 20-03, Supply & Install Two Gardner Denver 5hp Compressors..... 9
 - C. Consider JB&S Task Order 20-07, New Floor Drains in Pretreatment 12
 - D. Consider JB&S Task Order 20-06, WRRF #1 Clarifier Repairs..... 17
2. Consider minutes from the August 25, 2020 meeting 22
3. Consider a revision to CUD/MWRD boundary 27
4. Consider a proposal from Wisser Consultants for engineering design services for Salem Highway Widening Phase 2 30
5. Consider Greenhouse Ministries connection fees 33
6. Review Stormwater Controls Manual Update..... 37
7. Dashboard
8. Financials
9. Other business
10. Adjourn



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MEMORANDUM

DATE: September 2, 2020
TO: Water Resources Board
FROM: Alan Cranford
SUBJECT: TOC Instrument Replacement
Stones River Water Treatment Plant

Summary

Staff requests the Board approve the sole source purchase of a replacement Total Organic Carbon (TOC) instrument from Suez WTS Analytical Instruments, Inc. Suez is the manufacturer and they are providing a \$6,000 trade-in value for the existing instrument.

Background

The existing Total Organic Carbon (TOC) analyzer was purchased in August 2011. The typical lifespan of an instrument is approximately ten years with care and maintenance. Staff has worked hard to maintain this instrument in accordance with manufacturer's recommendations since its purchase. Staff was notified by the manufacturer in August 2019, that our model 5310C TOC instrument, serial number: 1201-5429 is nearing obsolescence. This means that parts are limited for repairs and at some point, the unit can no longer be repaired. In 2011, the instrument cost \$29,902.

Staff currently conducts 24 regulatory compliance samples annually. The cost to outsource these compliance samples is \$35 per sample for a total of \$840/year. In addition to compliance sampling the Department conducts an additional 1,100 analyses annually for compliance, blanks, standards, GAC monitoring, tank monitoring, duplicate, replicate, and certification samples used in process control and quality assurance. The cost for the Department to outsource these additional samples would be \$38,500/year with a total of \$39,340/year for all samples. The Department can analyze TOC samples with its own equipment for less than \$3/test for a cost less than \$3,372/year. Payback on the equipment is less than one year if based upon the additional samples the staff conducts for process control and quality assurance. The instrument is not only used for the regulatory compliance, it is also used to make adjustment to operations.

Fiscal Impact

The cost for replacing the TOC instrument is \$30,728 including the first year's annual service fees. Funding is in the FY21 capital budget in the amount of \$40,000.

Recommendation

Staff requests that the Board recommend to the City Council approving the purchase of the TOC instrument from Suez WTS Analytical Instruments, Inc. in accordance with their proposal.

Attachments

Suez TOC Instrument Replacement Quote
Suez Sole Source Letter



SUEZ WTS Analytical Instruments, Inc.
 6060 Spine Road
 Boulder, CO 80301, United States
 T 1 (303) 444-2009

Quotation

Murfreesboro Water Department	Date:	Wednesday, August 26, 2020
Kim Burritt	Quote Number :	UPW-00041730-20-6
Murfreesboro, TENNESSEE	Payment Terms:	Net 30, Subject to Credit Approval
UNITED STATES	Delivery Terms:	Ex Works, Boulder, CO USA
Phone : +1 (615) 848-3222	Expiration Date:	Tuesday, October 6, 2020
	Currency:	USD
	Shipment:	30 Days

Page 1 of 4

	Product Number	Unit Price	Qty	Ext. Price
Group 1				
M5310 C Lab TOC Analyzer, ICR	PRD 77120-01	24,700.00	1	24,700.00
M5310 C Laboratory TOC Analyzer with integrated ICR for monitoring TOC in municipal drinking waters, ranging from raw surface waters to finished drinking waters. INSTRUMENT NOT DESIGNED OR INTENDED FOR PHARMACEUTICAL APPLICATIONS. Included with analyzer: 300mL acid container, 150mL oxidizer container, Accessory Kit, Quick Start Guide, 12-Month Factory Warranty, and integrated ICR: Inorganic Carbon Remover (ICR). Used for removing high levels of Inorganic Carbon, improving instrument performance in applications where there is a high ratio of IC/TOC.				
Instrument Trade In	TRADE IN	(2,500.00)	1	(2,500.00)
Trade-in allowance - By accepting this trade-in offer the trade-in analyzer will become the property of Analytical Instruments 90 days after delivery of the new instrument. Buyer is responsible for packaging and shipping the trade-in analyzer to Analytical Instruments within 90 days of receipt of the new analyzer.				
Instrument Trade In	TRADE IN	(3,500.00)	1	(3,500.00)
Trade-in allowance - By accepting this trade-in offer the trade-in analyzer will become the property of Analytical Instruments 90 days after delivery of the new instrument. Buyer is responsible for packaging and shipping the trade-in analyzer to Analytical Instruments within 90 days of receipt of the new analyzer.				
M-Series USB Autosampler	PRD 77001-01	12,028.00	1	12,028.00
M-Series USB Autosampler using 40 mL vials. Accommodates 63 sample vials via three 21-position metal vial racks, 6-position standards rack to hold Certified Reference Standards. AS Accessory Kit is included with the following contents: needle, needle tubing, probe guide, DataPro2 software, USB cables, and power cord.				
Sub-Total USD :				30,728.00

Please refer to UPW-00041730-20 on your purchase order and email to Sievers.instruments.wts@suez.com
 Standard Terms and Conditions apply. Warranty valid in UNITED STATES only.

SUEZ WTS Analytical Instruments Inc.

Quotation

Murfreesboro Water Department	Date:	Wednesday, August 26, 2020
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UNITED STATES	Delivery Terms:	Ex Works, Boulder, CO USA
Phone : +1 (615) 848-3222	Expiration Date:	Tuesday, October 6, 2020
	Currency:	USD
	Shipment:	30 Days

Product Number	Unit Price	Qty	Ext. Price
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Important Information
Shipping Charges Total : \$250.00
Jeffery Witmer, Northeast Region Manager, (317) 273-3054

Please refer to UPW-00041730-20 on your purchase order and email to Sievers.instruments.wts@suez.com
Standard Terms and Conditions apply. Warranty valid in UNITED STATES only.

SUEZ WTS Analytical Instruments Inc.



STANDARD TERMS & CONDITIONS FOR SALE & SERVICE OF INSTRUMENTS

These Terms and Conditions are an integral part of each agreement between a SUEZ WTS Analytical Instruments company ("Seller") and its customer ("Purchaser") for the sale of instruments ("Instruments") and any related services ("Services"). Such agreement and these Terms and Conditions are collectively referred to as the "Agreement".

1. **Proposals & quotations.** For avoidance of doubt, Seller may refrain from accepting any purchase order until completion of Seller's due diligence process for a new customer. Moreover, if concerns are identified by Seller during this process, Seller reserves the right, in Seller's sole discretion, to refuse any associated purchase orders pending Seller's resolution of such concerns. Any proposals or price quotations may be modified or withdrawn by Seller at any time prior to acceptance by Purchaser. All prices quoted by Seller are F.O.B. point of origin unless otherwise indicated. Any Services performed by Seller beyond those set forth in its proposal will be charged at Seller's then standard rates, plus expenses.
2. **Warranties.** Seller warrants for a period of twelve months after shipment that Instruments manufactured by Seller will conform in all material respects to any descriptions or specifications included in the Agreement and will be free of defects in materials and workmanship. If the Instruments are installed by Seller, the warranty will be extended to twelve months after the installation date or thirteen months after shipment, whichever occurs earlier. Any performance warranties set forth elsewhere in the Agreement shall be limited to twelve months unless otherwise indicated. Components and materials of the type that need replacement periodically due to normal wear and tear such as valves, reaction chambers, catalysts, and parts whose contact with sample streams renders them unsuitable for further use are warranted against defects only as of the shipment date, unless expressly stated otherwise. Warranties do not apply to damage or wear resulting from accidents, negligence, abuse, or misuse by Purchaser or third parties; from failure to follow Seller's instructions for installation, operation or maintenance; or from alterations or repairs not performed in accordance with Seller's instructions. Seller warrants that any Services will be performed in a good and workmanlike manner. Purchaser shall promptly notify Seller of any warranty claim, and Purchaser's sole remedy shall be (at Seller's election) the repair or replacement of defective Instruments, the correction of deficient Services, or the refund of payments made for such Instruments or Services. If Seller, at its discretion, chooses to repair an Instrument subject to a warranty claim, seller may install or otherwise utilize parts or components that are either new, refurbished, remanufactured, or reconditioned in connection with that repair. Similarly, if Seller chooses to supply Purchaser with a replacement Instrument in response to a warranty claim, the replacement Instrument may contain either new, refurbished, remanufactured, or reconditioned parts or components. Purchaser shall not return Instruments to Seller without Seller's prior permission. THE FOREGOING WARRANTIES ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AND SELLER MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OTHER THAN AS EXPRESSLY STATED IN THIS AGREEMENT.
3. **Environmental Health and Safety.** Instruments must be installed to allow safe access and service by SUEZ employees per applicable regulatory requirements. Emergency egress, surrounding hazards and ergonomics should be considered, please contact the SUEZ Field Service Leader with questions prior to installation.
4. **Payment.** Seller's obligation to ship Instruments shall be subject to approval of all orders by Seller's credit department, and Seller may require full or partial payment in advance. All payment shall be made in full in lawful, free and unblocked U.S. Dollars. Payments not made within agreed upon terms will bear interest at the rate of 1.5 percent per month or, if lower, the maximum lawful rate. If Purchaser disputes any portion of an invoice, it shall notify Seller in writing with specificity and pay the undisputed portion within said 30-day period. Purchaser shall reimburse costs, including reasonable attorneys' fees, incurred by Seller to collect overdue amounts.
5. **Limitation of liability.** The aggregate liability of Seller and its affiliates and employees in connection with the Agreement and all Instruments and Services provided thereunder shall be limited to the amount actually paid by Purchaser to Seller for such Instruments or Services. Seller shall not be liable for any special, indirect, incidental, consequential, or punitive damages, including lost profits, loss of use, and claims by third parties.
6. **Export.** If Instruments are to be shipped to a point outside the U.S., Seller's obligation is subject to its ability to obtain, on acceptable terms, any applicable export licenses or permits.
7. **Inspection.** Purchaser or its designated representative shall be given a reasonable opportunity, upon request, to inspect Instruments, at Purchaser's cost, prior to their delivery to the carrier for shipment. Failure to make prompt inspection will be deemed a waiver of Purchaser's right of inspection.
8. **Taxes.** Purchaser shall pay all sales, use and excise taxes, customs duties, and similar taxes and governmental charges now or hereafter imposed on either party based on the sale, shipment or use of Instruments or the provision of Services.



WTS Analytical Instruments, Inc.
6060 Spine Road Boulder, CO 80301

9. **Shipping, title & risk of loss.** Purchaser is responsible for all shipping costs and insurance except as expressly agreed in writing. Purchaser shall give Seller complete shipping instructions, in the absence of which Seller shall be entitled to select the carrier. Title and risk of loss shall pass to Purchaser upon delivery of Instruments to the carrier for shipment, although Purchaser grants Seller a security interest in all Instruments until Seller is paid in full.
10. **Export Import Regulations.** Purchaser will not, directly or through an intermediary, export any Instruments (including related technology and information) to any country that is subject to embargo or similar restrictions under U.S. Export Regulations (including but not limited to Cuba, Iran, Iraq, Libya and North Korea), or transfer them to a national of any such country or to any other person or company restricted from receiving them, or put them to a prohibited end use, or transfer them with knowledge or reason to believe that they are intended for a prohibited destination, recipient or use. If Purchaser exports Instruments from the U.S., then Purchaser assumes the sole responsibility to confirm that the technical regulations and standards for the importation of such Instruments into the applicable country of import are met.
11. **Force majeure.** Seller will not be responsible for any delays, damages or failures to perform due to circumstances beyond its reasonable control, including those caused by Purchaser. Seller's time for performance shall be extended by a period of time commensurate with the amount of delay caused by such circumstances.
12. **Patents.** Seller shall hold Purchaser harmless against any claims by third parties that Instruments manufactured by Seller infringe U.S. patents, provided that Purchaser gives Seller prompt notice of such claim, full authority to defend against such claim, and whatever assistance Seller reasonably requests. The foregoing obligation does not apply to claims related to Instruments based on designs and/or specifications provided by Purchaser, Purchaser's alteration of Instruments, Purchaser's use of Instruments for a purpose not intended by Seller, or Purchaser's use of Instruments in combination with goods not manufactured by Seller, in which cases Purchaser shall hold Seller harmless against any claims of patent infringement made against Seller. If Purchaser's use of the Instruments is enjoined, Seller within a reasonable period of time shall (at Seller's election) obtain rights for Purchaser's continued use of the Instruments, modify the Instruments so they are non-infringing, replace the Instruments with non-infringing Instruments, or refund the then fair market value of the Instruments (before taking into account the alleged infringement) upon return of the Instruments to Seller. Seller shall have no liability with respect to patents outside the U.S.
13. **Documents.** All documents furnished by Seller in connection with Instruments shall remain the property of Seller, and Purchaser warrants that they will not be used or disclosed except to enable Purchaser's installation, operation and maintenance of Instruments.
14. **Complete agreement.** These Terms and Conditions, together with any other contract documents signed by both parties (other than any terms on Purchaser's order that are inconsistent with these Terms and Conditions), constitute the entire agreement between the parties. The Agreement may be modified or amended only by a writing signed by an authorized representative of the party against which enforcement is being sought.
15. **Miscellaneous.** The Agreement is governed by the laws of The State of Colorado, U.S.A.



Water Technologies & Solutions
Analytical Instruments

Subject: Sole Source Representative

SUEZ WTS Analytical Instruments Inc. is the sole manufacturer of Sievers products, purchase of new products, OEM repair/replacement parts, repairs, and maintenance.

No other representative is authorized to sell OEM products, provide SUEZ WTS certified repair, OEM replacement parts, SUEZ WTS certified maintenance or field services, and SUEZ WTS authorized technical support.

Use of a third-party maintenance provider may null and void warranty. If a third-party is unable to complete any repair, for SUEZ to provide technical support, warranty, or repair, your instrument must be returned to the original condition using Sievers standards, OEM replacement parts and consumables, and SUEZ WTS certified repair.

Sincerely,

A handwritten signature in blue ink, appearing to read "Erin England".

Erin England
Global Aftermarket Sales Director
720- 622-0193



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MEMORANDUM

DATE: September 1, 2020

TO: Water Resources Board

FROM: Alan Cranford

SUBJECT: Water/Wastewater Mechanical/Electrical Services Contract Task Order No. 20-03
Stones River Water Treatment Plant

Background

Task Order No. 20-03 for the Water/Wastewater Mechanical/Electrical Services Contract was approved by the Board and Council and was to demolish two existing air compressors, pour a new pad, furnish and install two new Gardner Denver air compressors, and test run. The work was completed; however, it required more time than estimated and there were some issues with one of the breakers that had to be resolved. This included additional labor. The additional cost to the project is \$3,252.91.

Fiscal Impact

The original estimate for the project was \$21,868.72. The total cost of the project, with the addition of the additional labor of \$3,252.91, is \$24,892.91.

Recommendations

The approval for this change is within the authority of the Director and is for informational purposes only.

Attachments

SRWTP – JBS Task Order 20-03 – Invoice

John Bouchard & Sons Company



1024 Harrison Street
 Nashville, TN 37203
 Office: (615) 256-0112
 Fax: (615) 256-2427

6315 Baum Drive
 Knoxville, TN 37919
 Office: (865) 523-9300
 Fax: (865) 544-1400

Visit our website at www.jbouchard.com

INVOICE DATE	9/1/2020	INVOICE NUMBER	20-C6581
PAGE NUMBER	1 of 1	CUSTOMER NUMBER	913930
SALESPERSON	Michael Jackson		
DIVISION	4 - Machine Shop		

Electrical Contracting Iron Construction Castings Mechanical Contracting Machine Services Industrial Supply
 Pumping Systems Sales & Service Compressor Sales & Service Bouchard Fire Protection

S
 O CITY OF MURFREESBORO
 L 2032 BLANTON DRIVE
 D MURFREESBORO, TN 37130

 T
 O

S
 H CITY OF MURFREESBORO
 I MURFREESBORO, TN 37130
 P

 T
 O

PURCHASE ORDER NUMBER	72002087-00	ORDERED BY	Steve Toler	SHIPPED VIA	CUSTOMER PICK UP
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Task Order 20-03 Supply and Install two Gardner Denver 5hp Compressors

Qty	Stock Number	Description	Unit Price	Extended Price
1		Task Order 20-03 Supply and Install two Gardner Denver 5hp Compressors See Attached Breakdown	24892.91	24892.91

FREIGHT	0.00	SALES TAX	0.00	TOTAL DUE	24,892.91
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TERMS: Net Cash 10th Prox. A service charge of one and one-half percent (1.5%) will be assessed on all past due accounts. In making shipments, our responsibility ceases with delivery in good order to the transportation company. A bill of lading or receipt for goods received in good order is proof of delivery. All claims or return of materials must be made within 10 days after receipt of materials. Prior permission is required for all returns and customer must supply date of purchase, invoice number, and reason for return. A fifteen percent (15%) restocking charge may be imposed on items returned.

REMIT TO:
 JOHN BOUCHARD & SONS CO.
 MSC 30305
 PO BOX 415000
 NASHVILLE, TN 37241-5000

INVOICE
Forging Our Second Century Together

Murfreesboro Service Contract Rate Sheet - 2020 - Job # 20-C6581
Supply and Install two Gardner Denver 5 HP Compressors Task Order 20-03

Description	Qty (hrs)	Rate	Extended
Project Mgr (RT)		\$75.00	\$0.00
Project Mgr (OT)		\$110.00	\$0.00
Superintendent (RT)		\$67.00	\$0.00
Superintendent (OT)		\$100.50	\$0.00
Pipefitter/Welder (RT)		\$52.00	\$0.00
Pipefitter/Welder (OT)		\$78.00	\$0.00
Sprinkler Fitter (RT)		\$44.00	\$0.00
Sprinkler Fitter (OT)		\$66.00	\$0.00
Electrician (RT)		\$52.00	\$0.00
Electrician (OT)		\$78.00	\$0.00
Apprentice/Helper (RT)		\$37.00	\$0.00
Apprentice/Helper (OT)		\$55.50	\$0.00
Expediter/Delivery (RT)		\$29.00	\$0.00
Expediter/Delivery (OT)		\$43.50	\$0.00
Machine Shop Millwright (RT)	34	\$60.00	\$2,040.00
Machine Shop Millwright (OT)		\$90.00	\$0.00
HVAC/Plb Service Tech (RT)		\$66.00	\$0.00
HVAC/Plb Service Tech (OT)		\$99.00	\$0.00
Air Compressor Tech (RT)	77	\$66.00	\$5,082.00
Air Compressor Tech (OT)		\$99.00	\$0.00
Laborer - Skilled (RT)	0.25	\$32.00	\$8.00
Laborer - Skilled (OT)		\$48.00	\$0.00
Laborer - Unskilled (RT)		\$23.00	\$0.00
Laborer - Unskilled (OT)		\$34.50	\$0.00

Equipment	Qty (hrs)	Rate/Hr	Extended
Welder		\$15.00	\$0.00
Power Threader		\$10.00	\$0.00
Mini/Midi Hammer		\$10.00	\$0.00
Variable Reach Forklift		\$27.00	\$0.00
Pickup Truck	93	\$15.00	\$1,395.00
Scissor Lift		\$19.00	\$0.00
Skid Steer		\$25.00	\$0.00
Boom Man Lift		\$29.00	\$0.00
Cat 420D Backhoe		\$34.00	\$0.00
Street Plate		\$7.00	\$0.00
185 CFM Compressor		\$15.00	\$0.00
ECM 350*		N/A	
Air Track Drill*		N/A	
Pipe Laser		\$21.00	\$0.00
Total Station EDM		N/A	
15 ton Boom Truck*		\$115.00	\$0.00
30-50 Ton RT Crane*		N/A	
80 Ton Crawler Crane*		N/A	
3" Submersible Pump		\$12.00	\$0.00
6" Hydraulic Pump		\$17.00	\$0.00

Materials & Subcontractors		
Compressors	Gardner Denver	\$12,810.90
Shipping	Gardner Denver	\$358.12
Blk Pipe & Fittings & Miscellaneous	JBS	\$128.43
Sealtight, Straps, & Miscellaneous	Williams	\$38.36
Vibration Pads	Grainger	\$386.00
Concrete Mix	Third Avenue	\$64.11
Sak 60 LB High Strenget, Lumber, & Miscellaneous	Lowes	\$185.10
Black Pipe, Wire, Fittings	Lowes	\$443.63
SS Clamps	HomeDepot	\$19.62
Modular 24 x 4	Lifting Gear	\$331.00
Fittings	Team Electric	\$2.18
Hose, Fittings, Clamps	Hose & Belting	\$112.47
Markup on Material & Subcontractors	10.00%	\$1,487.99

TOTAL ESTIMATE \$24,892.91



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MEMORANDUM

DATE: September 15, 2020

TO: Water Resources Board

FROM: Alan Cranford

SUBJECT: Water/Wastewater Mechanical/Electrical Services Contract Task Order No. 20-07
Stones River Water Treatment Plant

Background

Task Order No. 20-07 for the Water/Wastewater Mechanical/Electrical Services Contract is to install three new floor drains in the upstairs pretreatment building, in the room housing the Lime Silos. The estimate for the installation of three floor drains including core drilling three 3" drains, 3" cast iron no-hub piping, hangers, material to tie into the existing 3" drain riser, and painting by Commercial Painting Inc.

Fiscal Impact

The original estimate for the project was \$11,901.33. This project is in the FY21 capital projects in the amount of \$15,000.

Recommendations

Staff requests the Water Resources Board recommend to the City Council approving JBS Task Order 20-07 in accordance with the JBS estimate.

Attachments

SRWTP – JBS Task Order 20-07 New Floor Drains in Pretreatment Bldg



...

TASK ORDER NO. - 20-07

August 21, 2019

BETWEEN

**JOHN BOUCHARD & SONS COMPANY AND CITY OF MURFREESBORO
acting by and through the Murfreesboro Water and Sewer Department**

UNDER

Water/Wastewater System Mechanical/Electrical Services Contract

DATED

June 6, 2019 thru June 6, 2020

FOR

New Floor Drains in Pretreatment

Task Order - Unassigned
New Floor Drains in Pretreatment
Murfreesboro Water Plant

BACKGROUND

JBS has been asked to install three new floor drains in the upstairs Pretreatment room housing the Lime Silos. We have prepared an estimate for the installation of three (3) floor drains for your consideration. Budget pricing includes core drilling, three (3) 3" drains, 3" cast iron no-hub piping, hangers, material to tie into the existing 3" drain riser, and painting by Commercial Painting Inc.. In this budget price, we exclude the cost of floor scanning, which was priced separately to MWRD for a PO, and we exclude the cost of lift rental, as we were told to assume using the lift belonging to SRWTP. This work has been priced as straight time.

SCOPE OF WORK

Labor and materials by JBS to install three new floor drains as described above.

FISCAL IMPACT

Murfreesboro Service Contract Rate Sheet - 2019-2020			
Water Treatment Plant - Install Three (3) Floor Drains & Piping in Pretreatment			
Description	Qty (hrs)	Rate	Extended
Project Mgr (RT)	8	\$75.00	\$600.00
Project Mgr (OT)		\$110.00	\$0.00
Superintendent (RT)		\$67.00	\$0.00
Superintendent (OT)		\$100.50	\$0.00
Pipefitter/Welder (RT)	56	\$52.00	\$2,912.00
Pipefitter/Welder (OT)		\$78.00	\$0.00
Sprinkler Fitter (RT)		\$44.00	\$0.00
Sprinkler Fitter (OT)		\$66.00	\$0.00
Electrician (RT)		\$52.00	\$0.00
Electrician (OT)		\$78.00	\$0.00
Apprentice/Helper (RT)	56	\$37.00	\$2,072.00
Apprentice/Helper (OT)		\$55.50	\$0.00

Equipment	Qty (hrs)	Rate/Hr	Extended
Welder		\$15.00	\$0.00
Power Threader		\$10.00	\$0.00
Mini/Midi Hammer		\$10.00	\$0.00
Variable Reach Forklift		\$27.00	\$0.00
Pickup Truck	56	\$15.00	\$840.00
Scissor Lift		\$19.00	\$0.00
Skid Steer		\$25.00	\$0.00

Materials & Subcontractors		
Plumbing Materials	Ferguson	\$1,754.39
Painting Sub	CPI	\$2,250.00
Core Drilling Sub	Taylors	\$750.00
Mechanical Misc. Materials		\$225.00
Markup on Material & Subcontractors	10.00%	\$497.94

TOTAL ESTIMATE	\$11,901.33
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Contractor:

John Bouchard and Sons Company

City:

City of Murfreesboro Water and Sewer Dept.

By: David Proctor AV

By: _____

Name: David Proctor

Name: _____

Title: Project Manager

Title: _____

Date: 8/21/19

Date: _____

Approved as to Form: _____

Susan Emery McGannon, City Attorney

CONTRACTOR NOTICE CONTACT INFORMATION

CITY NOTICE CONTACT INFORMATION

John Bouchard and Sons Company

Murfreesboro Water and Sewer Dept.

Mailing address 1024 Harrison St.
Nashville, TN 37203

Mailing address 300 NW Broad St.
Murfreesboro, TN 37130

Phone number 615-256-0112

Phone number 615-890-0862

Fax number 615-256-2427

Fax number 615-896-4259

Company Contact David Proctor

Company Contact Darren Gore

E-mail David.Proctor@jbouchard.com

E-mail dgore@murfreesborotn.gov



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MEMORANDUM

DATE: September 14, 2020
TO: Water Resources Board
FROM: John Strickland
SUBJECT: TASK ORDER 20-06 #1 Clarifier Repair

SUMMARY

Request to task John Bouchard & Sons (JB&S) with the repair of one of the WRRF's clarifiers.

STAFF RECOMMENDATION

Recommend to City Council approving Task Order 20-06 for the repair of #1 Clarifier at the WRRF's by John Bouchard & Sons Co. at a cost of \$9,750.

BACKGROUND INFORMATION

In the course of Maintenance staff performing yearly Preventative Maintenance work on the WRRF's six Clarifiers, damage to the Auxiliary Scraper Arm Assembly on the #1 Clarifier was discovered. After draining the Clarifier for further inspection, it was found that some parts had failed and caused significant damage throughout the entire Scraper Arm Assembly.

The Task Order will be under the Department's standing Water-Wastewater Mechanical-Electrical services contract with JB&S.

FISCAL IMPACT

The repair of the WRRF's clarifier is requested to be funded from the Department's working capital reserves in the amount of \$9,750.

ATTACHMENTS

Task Order 20-06



...

TASK ORDER NO. 20-06

September 11, 2020

BETWEEN

**JOHN BOUCHARD & SONS COMPANY AND CITY OF MURFREESBORO
acting by and through the Murfreesboro Resources Department**

UNDER

Water/Wastewater System Mechanical/Electrical Services Contract

DATED

June 6, 2020 through June 6, 2021

FOR

WRRF #1 Clarifier Repairs

Task Order No. 20-06**WRRF #1 Clarifier Repairs****BACKGROUND**

In the course of Maintenance staff performing yearly Preventative Maintenance work on the WRRF's six Clarifiers, damage to the Auxiliary Scraper Arm Assembly on the #1 Clarifier was discovered. After draining the Clarifier for further inspection, it was found that some parts had failed and caused significant damage throughout the entire Scraper Arm Assembly.

SCOPE OF WORK

- Repair Scraper Arm and replace 30' attachment arm
- Replace the Upper Attachment configuration & reconnect the Arm Assembly to the Clarifier Bridge
- Repair bottom Scraper Assembly on each of the bottom corners
- Cut away the damaged metal, fabricate and galvanize new metal, and weld new back into the original structure.

Murfreesboro WRRF #1 Clarifier Repairs			
Description	Qty (hrs)	Rate	Extended
Project Mgr (RT)	5	\$75.00	\$375.00
Project Mgr (OT)		\$110.00	\$0.00
Superintendent (RT)		\$67.00	\$0.00
Superintendent (OT)		\$100.50	\$0.00
Pipefitter/Welder (RT)		\$52.00	\$0.00
Pipefitter/Welder (OT)		\$78.00	\$0.00
Sprinkler Fitter (RT)		\$44.00	\$0.00
Sprinkler Fitter (OT)		\$66.00	\$0.00
Electrician (RT)		\$52.00	\$0.00
Electrician (OT)		\$78.00	\$0.00
Apprentice/Helper (RT)		\$37.00	\$0.00
Apprentice/Helper (OT)		\$55.50	\$0.00
Expediter/Delivery (RT)		\$29.00	\$0.00
Expediter/Delivery (OT)		\$43.50	\$0.00
Machine Shop Millwright (RT)	90	\$60.00	\$5,400.00
Machine Shop Millwright (OT)		\$90.00	\$0.00
HVAC/Plb Service Tech (RT)		\$66.00	\$0.00
HVAC/Plb Service Tech (OT)		\$99.00	\$0.00
Air Compressor Tech (RT)		\$66.00	\$0.00
Air Compressor Tech (OT)		\$99.00	\$0.00
Laborer - Skilled (RT)		\$32.00	\$0.00
Laborer - Skilled (OT)		\$48.00	\$0.00
Laborer - Unskilled (RT)		\$23.00	\$0.00
Laborer - Unskilled (OT)		\$34.50	\$0.00

Equipment	Qty (hrs)	Rate/Hr	Extended
Welder	30	\$15.00	\$450.00
Power Threader		\$10.00	\$0.00
Mini/Midi Hammer		\$10.00	\$0.00
Variable Reach Forklift		\$27.00	\$0.00
Pickup Truck	15	\$15.00	\$225.00
Scissor Lift		\$19.00	\$0.00
Skid Steer		\$25.00	\$0.00
Boom Man Lift		\$29.00	\$0.00
Cat 420D Backhoe		\$34.00	\$0.00
Street Plate		\$7.00	\$0.00
185 CFM Compressor		\$15.00	\$0.00
ECM 350*		N/A	
Air Track Drill*		N/A	
Pipe Laser		\$21.00	\$0.00
Total Station EDM		N/A	
15 ton Boom Truck*		\$115.00	\$0.00
30-50 Ton RT Crane*		N/A	
80 Ton Crawler Crane*		N/A	
3" Submersible Pump		\$12.00	\$0.00
6" Hydraulic Pump		\$17.00	\$0.00
Materials & Subcontractors			
Materials			\$3,000.00
Markup on Material & Subcontractors		10.00%	\$300.00
TOTAL ESTIMATE			\$9,750.00

Contractor:
John Bouchard and Sons Company

City:
City of Murfreesboro

By: _____
Name: David Proctor
Title: Project Manager
Date: _____

By: _____
Name: Shane McFarland
Title: Mayor
Date: _____

Approved as to Form: _____
Adam Tucker, City Attorney

CONTRACTOR NOTICE CONTACT INFORMATION

CITY NOTICE CONTACT INFORMATION

John Bouchard and Sons Company
Mailing address 1024 Harrison St.
Nashville, TN 37203
Phone number 615-256-0112
Fax number 615-256-2427
Company Contact David Proctor
E-mail David.Proctor@jbouchard.com

Murfreesboro Water and Sewer Dept.
Mailing address 300 NW Broad St.
Murfreesboro, TN 37130
Phone number 615-890-0862
Fax number 615-896-4259
Company Contact Darren Gore
E-mail dgore@murfreesborotn.gov

MINUTES
MURFREESBORO WATER RESOURCES BOARD
August 25, 2020

The Murfreesboro Water Resources Board met on Tuesday, August 25, 2020 in the conference room at the Operations and Maintenance Building, 1725 S. Church Street. Consistent with the Governor's Executive Order, members of the Water Resources Board participated by electronic means as has been determined necessary to protect the public health, safety, and welfare in light of the COVID-19 pandemic. Present at the meeting were Board members: Mr. John Sant Amour, Dr. Al Carter, Mr. Brian Kidd, Mr. Ron Crabtree, Ms. Sandra Trail, Ms. Kathy Nobles, Mr. Kirt Wade, and Ms. Madelyn Scales-Harris. Also present were Darren Gore, Michele Pinkston, Valerie Smith, Doug Swann, Roman Hankins, Ryan Potts, Marshall Fall, Robert Haley, Steve Tate, Sharon Seibert, Jimmy Stacey, Matt Powers, Alan Cranford, Joe Russell, John Strickland, Randy McCullough, Brent Fowler, Jay Bradley, and Ronnie Martin along with other members of the public.

The Consent Agenda was presented for the following considerations:

A. Consider abandonment of sewer easement across Lot 1 Bilbro Addition –

This easement was recorded by plat and was intended for a proposed sewer main extension across Lot 1 to serve Lot 25. Another plat has been prepared to combine Lots 1 & 25 back into one lot of record therefore the sewer easement will no longer be necessary.

Staff recommended that the Board recommend to the Planning Commission and City Council approval of abandoning this existing sewer easement.

B. Consider uniform contract –

Since 2009, MWRD has contracted with Unifirst Corporation to provide uniform services. Staff has been very satisfied with the products and services provided by Unifirst to date. However, the current contract expired August 17, 2020. Staff is requesting to continue our relationship with Unifirst and enter into an agreement with Sourcewell. This contract expires May 22, 2024 and may be extended up to one additional year with written agreement from both parties. The contract will be utilized by MWRD (O&M, AMI, WTP, WRRF, ENGI) and other city-wide departments.

Staff recommended the Board recommend to City Council to approve the contract for uniform services with Unifirst Corporation.

MWRD's estimated annual costs will be approximately \$20,000. The total cost will be based on the actual amount of uniforms ordered by and serviced for the department. The costs associated with this agreement are included in MWRD's approved budget for FY21.

C. Consider Tiger Hill, Mill Street & Halls Hill Water Tanks Change Order #2 –

Currens Construction Services, LLC is the general contractor for the repair and recoating of the Tiger Hill, Mill Street and Halls Hill water storage tanks. They have completed all work at Mill Street and Halls Hill tanks other than landscaping repairs. They are currently working on the Tiger Hill tank and there are a couple of changes to the scope of work needed. Change Control Form #2 is to make the necessary changes.

Changes at the Tiger Hill water tank include:

- Build a sump pump pit - \$4,725
- Install Roof Static Rail - \$5,000

SSR and Staff have reviewed the cost associated with Change Control Form #2 and concur that all charges are fair.

The cost for Change Control Form #2 is \$9,725. The contract has a contingency available of \$165,015 for this project. The remaining contingency amount after Change Control Form #2 is \$155,290.

D. Consider Xage Security License and support renewal purchase –

Xage Security is a U.S.-based cybersecurity company that develops software to protect operational technology used in industrial operations. The cybersecurity software, Xage Security Fabric, is the only identity and access management software that protects interactions between devices, operators, and software regardless of vendor in an operational network. Xage sells the software in a number of different industries including utilities, wastewater, manufacturing, transportation, and defense in the U.S. and abroad.

During a Cybersecurity Penetration test conducted earlier this year by Waypoint Solutions, the only devices that were unable to be compromised were those that the Xage Security Fabric protected. This ensures our facilities are better protected from cyberattacks.

Staff recommended the Board approve the purchase of the referenced Xage Security License and Support Renewal for one year in the amount of \$20,520. Funding for the support would come from FY21 operating funds.

E. Consider John Bouchard & Sons T.O. 20-05, WRRF Traveling Irrigator Repairs –

The Department owns the Jordan farm off Leanna Road and the much larger Coleman Farm off Central Valley Road. They were purchased to play a significant role toward ensuring compliance with the City's U.S. EPA discharge permit via high volume land irrigation of treated water from the WRRF. Additionally, these large traveling irrigators will utilize the pipeline extension at the Coleman Farm.

The Task Order to repair one of the WRRF's irrigators will be under the Department's standing Water-Wastewater Mechanical-Electrical services contract with JB&S.

Staff recommended the Board recommend to City Council approving Task Order 20-05 for the repair of the irrigator at a cost of \$12,330. Funding is requested to come from the Department's working capital reserves.

F. Consider SRWTP HVAC replacement –

The Facilities Management Department conducted a citywide analysis on the current HVAC systems being operated by the City in 2019 and identified units needing replacement. The six units needing replacement use R-22 refrigerant and as of December 31, 2019, R-22 is no longer being produced. Over the next 5-years these units need to be replaced. There is \$73,100 budgeted for replacement at the water treatment plant for FY21. All units being replaced were placed into operation prior to 2007. One of the units went out in June 2020 and cannot be repaired.

Trane has been providing service for several years on new HVAC equipment at the water treatment plant. During this period, staff has been pleased with Trane's support. Staff requested that Trane look at the units needing replacement and provide a proposal based upon an existing Co-op contract.

The cost to replace the six units is \$61,794 and \$73,100 was budgeted. Funding is in the FY21 capital expenditures budget.

Staff recommended that the Board recommend to the City Council approving the purchase of the units from Trane in accordance with their proposal.

G. Consider Administration HVAC replacement –

Since late June the MWRD Administration building has had three HVAC units that have either failed or currently have a major issue. Two units have been shut down and one (computer server room) is running at low efficiency.

Rather than put money into all units (approximately 13 years old each) and risk other major issues in the near future, staff determined it best to replace all three units.

Replacement cost for all three units will be approximately \$23,000 and is within the Director's spending limit authority.

Staff solicited three quotes and selected the most competitive quote to replace the A/C units. Lee Company was the low quote vendor.

A motion was made by Kirt Wade to accept the Consent Agenda as presented and it was seconded by Dr. Carter. The Board voted unanimously to approve.

The July 28, 2020 Board Minutes were unanimously accepted as presented.

The Board considered proposed step system along Compton Road.

Staff has received a request for MWRD to approve and accept ownership of a step system as the means for sewage treatment. The property is already within the City and was annexed in 2006. The property is along Compton Road just north of Emery Road and is approximately 73.5 acres. The development anticipates 150 lots at approximately 10 – 12,000 sq. ft. lots.

This property was originally approved to be served with portions of gravity sewer (off-site & on-site), sewer pump station and forcemain at the time of annexation. The development of the property never occurred possibly due to the developer not being able to acquire the necessary off-site sewer easements.

Due to the amount and density of the developments since this time downstream of the property, all inquiries for the development of the property within the last two years have been given the option of developing the property with a step system or waiting until the construction of the North East Regional Pump Station (NERPS).

Staff recommended that the Board recommend to the Planning Commission and City Council approval of the step system contingent upon the Development being able to adhere to our Design Guidelines for step systems.

Brian Kidd made a motion to approve. Dr. Carter seconded. The motion unanimously passed.

The Board considered request to fund upgrade to stormwater treatment controls in Oakland Court.

The Murfreesboro Housing Authority is redeveloping Oakland Court, a 20-acre property next to Oaklands Mansion where 76 one to five-bedroom units have existed since the 1960s. In addition to replacing housing units, the project includes new water lines, sewer lines, streets and stormwater treatment and drainage infrastructure.

City staff encouraged the development team to include green stormwater infrastructure in the design. The team did so, planning for rain gardens within the North Academy Street right-of-way, and the Housing Authority is requesting the City to pay the extra cost of those features.

Staff advocated for green infrastructure for a couple of reasons. One, Oakland Court is in a priority drainage catchment – that is one with a relatively large area of imperviousness (hard surfaces) and a low amount of tree canopy and that drains to a quality-impaired stream (Sinking Creek in this case). Staff have targeted these catchments for stormwater retrofits. Two, staff would like to see a pilot installation of street-side rain gardens. Also referred to as planter boxes, there are not any of these in Murfreesboro, but we believe that they can serve as useful retrofits in priority catchments.

In the case of this project, the rain gardens will add benefit to the stormwater management system: 10-15% benefits to stormwater quality, quantity, and reduction to the long-term maintenance burden. In addition, green stormwater infrastructure presents a more pleasant physical environment for residents.

Staff recommended to the Board that the City reimburse the Housing Authority for the extra construction cost associated with installing street-side rain gardens on North Academy Street; up to \$150,000 from the City's stormwater fund.

The reimbursement amount will be based on the engineer's record of the extra costs, after completion of project. The Housing Authority is following competitive, Federal and State, bidding protocols on the Oaklands Court project.

Dr. Carter made a motion to approve. Kathy Nobles seconded. The motion unanimously passed.

The Board considered Waypoint Network Remediation services and equipment purchase.

As part of the EPA-required Risk & Resilience Certification, Waypoint Solutions conducted a Cybersecurity Penetration test on our SCADA network for both the Water and Wastewater plants earlier

this year. Upon completion of the tests, there were multiple findings that require remediation. One of the items, Cisco ASA (firewall), used in preventing cyber-attacks, is currently 8 years old and obsolete per the manufacturer. Also, during the conducted test, issues were noted with our network topology.

Replacing the current obsolete equipment and reconfiguring our SCADA network topology will lower our risk of infiltration from cyber-attackers.

Cybersecurity Remediation was budgeted at \$100,000 in our FY20 rate-funded capital expenditures budget.

Staff recommended the Board recommend to City Council approving the purchase of the equipment and services from Waypoint Solutions in the amount of \$28,000.

Funding for equipment and services will come from FY21 Reserves. This cost will be shared between the Water and Wastewater plants.

Brian Kidd made a motion to approve. Ron Crabtree seconded. The motion unanimously passed.

Staff presented and discussed the Water Resources Dashboard Performance for July 2020.

Staff presented the Financial Reports for the year ending June 30, 2020.

There being no further business, the meeting was adjourned.

John Sant Amour, Chairman



... creating a better quality of life

MEMORANDUM

DATE: September 15, 2020

TO: Water Resources Board

FROM: Valerie H. Smith

SUBJECT: CUD Boundary Revision No. 7
Along Veals Road
Proposed Step System Subdivision

Background

At the August & October 2017 meetings, the Board approved these properties, being annexed at the time, to be served with Septic Tank Effluent Pump (STEP) Systems and an onsite Sewage Treatment & Disposal System. The properties are to be developed into a 25.09-acre subdivision currently within MWRD's water service area.

Since the Board's approval of sewer service in 2017, the Developer has made several attempts to obtain off-site water easements from neighboring properties in order to extend water to the subdivision. The neighboring property owners have been unwilling to sell the necessary easements, so the Developer has been unable to move forward with design and construction. As a result, Huddleston-Steele Engineering, Inc., on behalf of the Developer, is requesting for the properties to be transferred to Consolidated Utility District (CUD) for water service. MWRD staff is satisfied that fair offers have been extended and the appropriate level of due diligence has been expended by the Developer.

At this time, all other Septic Tank Effluent Pump (STEP) Systems w/onsite Sewage Treatment & Disposal, that have been approved for MWRD to operate and maintain are within CUD's water service area.

Amendment document #7 will be prepared by our Legal Department and be executed by both parties upon approval of the Board.

Recommendation

Staff recommends that the Board recommend to City Council approving the revision to the CUD/MWRD boundary and the Mayor executing an amendment to the Water Service Boundary.

Fiscal Impact

Transferring this subdivision will CUD and MWRD continue to swap properties where necessary.

Attachments

GIS Exhibit of Boundary Revision

September 14, 2020

Ms. Valerie Smith, P.E.
Assistant Director of Engineering
Murfreesboro Water Resources Department
220 NW Broad Street
Murfreesboro, Tennessee 37130

Re: Proposed Traveller's Trace
Tax Map 112, Parcels 15.01, 15.04, 15.05 and 15.06

Dear Valerie:

On behalf of Freedom Construction, we are requesting that Murfreesboro Water Resources Department (MWRD) release the public potable water right to serve of above noted parcels containing approximately 25 acres to Consolidated Utility District (CUD).

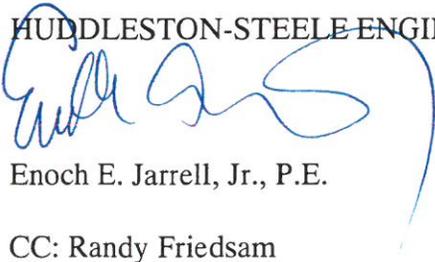
Sanitary Sewer will be a recirculating sand filter to be operated by MWRD. CUD has a water main along Veals Road and can serve these parcels with domestic and fire protection.

Randy Friedsam on behalf of Freedom Construction has made many attempts to obtain easements for public extension to connect to MWRD mains through the Hall Family tract and several residents of the Crestview subdivision to no avail.

Let us know if you have any questions.

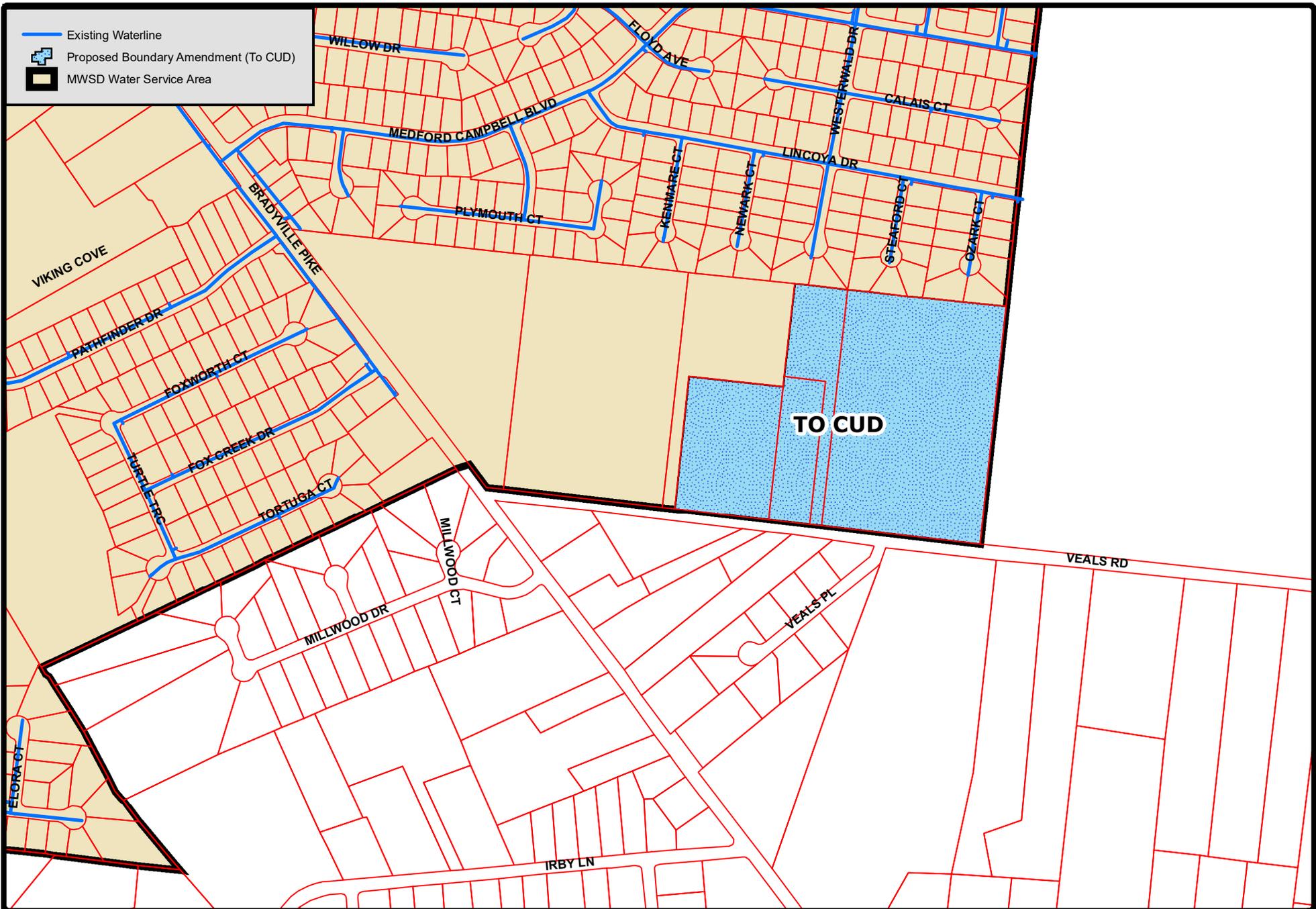
Sincerely,

HUDDLESTON-STEELE ENGINEERING, INC.



Enoch E. Jarrell, Jr., P.E.

CC: Randy Friedsam



MURFREESBORO WATER RESOURCES DEPARTMENT

Proposed MWRD Water Service Boundary Amendment #7 (Veals Rd)

SCALE : 1" = 500'

Sep 2020
TAB





... creating a better quality of life

MEMORANDUM

DATE: September 15, 2020

TO: Water Resources Board

FROM: Valerie H. Smith

SUBJECT: New Salem Hwy (SR-99) Widening Ph. II
Old Fort Parkway to I-24
Water/Sewer Relocation
Engineering Design Proposal

Background

At the January 2010 meeting, the Board approved Wiser Company to prepare water and sewer relocation plans in preparation of the Tennessee Department of Transportation (TDOT) construction project for widening New Salem Hwy (SR-99) from Old Fort Pkwy to Cason Lane. Since this time, TDOT phased the project into two phases. The first being from I-24 to Cason Lane and phase two being from Old Fort Parkway to I-24. Phase I is currently under construction.

Since the project was split into two phases, in 2017 Wiser used the remaining monies in their original proposal to separate the projects into two sets of plans, cost estimates and the required TDOT forms and resubmitted this information to TDOT.

Even though water main relocation plans were submitted to TDOT in 2017, with the water main located within the roadway for this upcoming Phase II, staff just recently learned that TDOT will not allow utilities within the roadway except where absolutely necessary. This requirement constitutes a significant change, and it not only required a redesign of the plans, but will also require the Department to purchase easements.

It is the Departments preference either be inside the road or outside the right of way in an easement with our mains. We would rather not have the water and sewer mains in between this area, because all of the other utilities such as storm drainage lines, gas, electric, cable, etc. are located here. Being in the area, between the roadway and right of way, with other utilities within close proximity, will make future maintenance difficult and sometimes dangerous.

Because of this redesign and the need for easements, staff requested a proposal for this Phase II of the project. The proposal is in an amount not to exceed \$30,450 and includes assistance with easement descriptions and exhibits necessary for water easements.

At this time, staff is of the understanding that engineering design does not qualify for reimbursement from TDOT, but that portions of MWSD's utility relocation construction cost may qualify for reimbursement.

Water Resources Department

300 NW Broad Street * P.O. Box 1477 * Murfreesboro, TN 37133-1477 * Office: 615 890 0862 * Fax: 615 896 4259
TTY 615 848 3214 * www.murfreesborotn.gov

A proposal from an appraisal company will follow to assist in appraising the properties so easement offers can be prepared for locations where the water line must be outside of the right of way.

Recommendation

It is recommended that City Council approve the Engineering proposal from Wisser Company.

Fiscal Impact

It is recommended this work, not to exceed \$30,450, be paid from Working Capital Reserves.

Attachments

Proposal



1620 Gateway Blvd. Ste. 201
Murfreesboro, TN 37129
W wiserconsultants.com
P 615-278-1500
F 615-217-8130

September 15, 2020

Valerie Smith, PE
Murfreesboro Water and Sewer Department
300 NW Broad Street
Murfreesboro, Tennessee 37130

RE: Proposal for Engineering Services – Water & Sewer Relocation Plans for TDOT Roadway Widening Project SR-99 (New Salem Hwy.), from I-24 to SR 96 (Old Fort Pkwy.) Murfreesboro, Tennessee

Dear Mrs. Smith,

Wiser Consultants is pleased to submit to you our scope of work and fee proposal for professional services related to the relocation of water and sewer lines in conjunction with the above referenced roadway widening project. Wiser will develop the required construction drawings to be incorporated into the roadway widening plans. Scope of Services shall include the development of preliminary plans, final construction plans, specifications, and cost estimates for approximately 4,650 LF of 16", 60 LF of 12", 230 LF of 8", 170 LF of 6" water lines and appurtenances, and approximately 140 LF of 8" sanitary sewer lines and appurtenances.

In addition, Wiser will also provide legal descriptions and legal sized exhibits for each of the properties where easements will be required.

We propose to provide the scope of work as outlined above on a Lump Sum Not to Exceed basis in the amount of **\$30,450**.

As always, Wiser Consultants looks forward to working with you and your staff on this project.

Sincerely,

WISER CONSULTANTS, LLC

Eric S. Brock, P.E.



... creating a better quality of life

MEMORANDUM

DATE: September 14, 2020
TO: Water Resources Board
FROM: Valerie Smith
SUBJECT: Greenhouse Ministries
315 South Academy
Water & Sewer Connection Fee Approval

Background

Per City Code, Chapter 33, Sections 50(A) (2) and (3) below, the Board is to recommend to City Council the sewer connection fees associated with Building applications that do not fit into one of the designated categories as listed on the connection fee spreadsheet.

Section 50

- (2) When the applicant for sewer services does not fit into one of the foregoing categories, the connection fee shall be based on \$2,550.00 for each two hundred sixty gallons per average daily demand (gpd).
- (3) The sewer connection fee for sewer service to any industrial use, or commercial space exceeding thirty-five thousand square feet, shall be fixed and established by the City Council upon recommendation of the Board after considering and taking into account the location, size, extent, nature and requirements of such customer, and the estimated cost of furnishing such sewer service to the customer, and further considering the estimated usage, occupancy and plumbing fixtures to be installed.

The fees for the proposed Greenhouse Ministries were calculated and provided to them based on the different uses within the building. The 1st floor is intended for all office space, with the 2nd floor as 17 temporary one bedroom housing units and one permanent apartment. At first, staff felt that the temporary housing units would be more like a hotel since each unit has one bedroom, a small kitchenet and did not have its own washer/dryer. However, during a recent meeting with Planning it was determined that the temporary housing units could have tenants stay up to 2 ½ years, which is more similar to the length of stay of an apartment. The combined water and sewer connection fee for a hotel room is \$1,150 whereas the combined water and sewer connection fee for an apartment is \$3,750, which could have one bedroom or multiple bedrooms.

With this new information staff feels that it would be most fair to charge initial fees using the “hotel” charge since it had already been provided, however, determine the actual usage and connection fee charge from an average of twelve to eighteen months of water usage once the new facility is open.

Water Resources Department

Staff has done this in the past with the Nissan Facility at Singer Road. We have also required facilities, where the difference in fees could be substantial, to sign an agreement and provide a LOC in the amount of the additional fees during this twelve to eighteen month period. The additional fees are \$44,200 (((\$3750 - \$1150)* 17). If the usage comes back less than charged, then a portion of the initial fees would be returned.

Recommendation

Staff recommends the Board recommend to City Council, approval of the initial Water and Sewer Connection Fees of \$19,550 and to re-evaluate the fees after twelve to eighteen months of usage.

Fiscal Impact

There is no fiscal impact other than the connection fees are deposited into Department's Working Capital Reserves Account.

Attachments

Sewer Connection Fee Spreadsheet

WATER & SEWER TAP WORKSHEET

TAP # _____ DATE 9/3/2020 SO NUMBER _____
 NAME Greenhouse Ministrys
 ADDRESS 1 _____
 ADDRESS 2 315 S Academy
 COMMENTS _____
17 hotel suites and 1 manager apt.

G/L Account	Transaction Code	Water(H)	Size	Units	Charge	Amount
3104.252101	TPW2	SF RES Water Connection (2 of 2)	Size	-	300.00	-
3104.252101	TPWA	Water Service Line Stub	Size	-	325.00	-
3104.252101	TPWB	Complete 1" Tap & Meter	Size 5/8"	1.00	1,000.00	1,000.00
3104.252101	TPWC	Complete 2" Tap & Meter	Size 2"	1.00	3,750.00	3,750.00
WATER CONNECTION FEE (H)						
3104.252102	TPW1	SF RES Water (1 of 2)		-	1,200.00	-
3104.252102	TPWD	Retail Shop/Service Water Establishment		-	1,200.00	-
MULTI-FAMILY (H)						
3104.252102	TPWE	Apartments/Condos Water Connection		1.00	1,200.00	1,200.00
3104.252102	TPWF	Restaurant Water Connection (per seat)		-	65.00	-
3104.252102	TPWG	Hotel/Motel Water Connection (per room)		17.00	350.00	5,950.00
3104.252102	TPWH	Hospitals/Nursing Homes Water Connection (per bed)		-	540.00	-
3104.252102	TPWI	School Water Connection (per student)		-	16.00	-
3104.252102	TPWJ	Office Space Water Connection > 5K sq ft	SFU equal	3.40	1,200.00	4,080.00
3104.252102	TPWK	Commercial Space Water Connection > 35K sq ft	SFU equal	-	-	-
3104.252102	TPWL	Industrial Manufacturing Water Connection	SFU equal	-	1,200.00	-
3104.252103	TPWM	Water Outside City Charge		-	250.00	-
3104.252401	TPWN	Fire Hydrant Water Connection		-	-	-
3104.252401	TPWO	Main Line Water Tap 6" X 6"	Size	1.00	2,670.00	2,670.00
Other						
3104.252102	TPWQ	Water Irrigation Connection Fee Only	5/8"	1.00	300.00	300.00
3104.252102	TPWR	Laundry Water Connection Fee Only	SFU equal	-	1,200.00	-
3104.252102	TPWS	Car Wash Water Connection Fee Only	per bay	-	10,800.00	-
Repurified Water						
3104.252301	TPWT	Complete Taps	Size	-	-	-
3104.252301	TPWU	Repurified Water Service Line Stubs				-
3104.252301	TPWV	Repurified Meter Connection				-
TOTAL WATER						18,950.00

Note: This amount is only guaranteed for 30 days from date of worksheet or July 1, which ever comes first. Additional charges may apply.

TAP # _____ DATE _____ SO NUMBER _____
 NAME _____
 ADDRESS 1 _____
 ADDRESS 2 _____
 COMMENTS _____

G/L Account	Transaction Code	Sewer Connection Fees	Size	Units	Charge	Amount
3104.252201	TPS2	SF RES Sewer Connection (2 of 2) \$300				
3104.252202	TPS1	SF RES Sewer (1 of 2) \$2250		-	2,550.00	-
3104.252201	TPS6	Apartment/Condo Sewer Connection (2 of 2) \$300				
3104.252202	TPS5	Apartment/Condo Sewer (1 of 2) \$2250		1.00	2,550.00	2,550.00
3104.252201	TPS4	Retail Shop/Service Sewer Connection (2 of 2) \$300				
3104.252202	TPS3	Retail Shop/Service Est Sewer (1 of 2) \$2250		-	2,550.00	-
3104.252202	TPSA	Restaurant Sewer (15 sf per seat)		-	110.00	-
3104.252202	TPSC	Hotel/Motel Sewer Connection (per room)		17.00	800.00	13,600.00
3104.252202	TPSD	Hospital/Nursing Home Sewer Connection (per bed)		-	800.00	-
3104.252202	TPSE	School Sewer Connection (30 sf per student)		-	24.00	-
3104.252202	TPSF	Office Space Sewer Connection > 5K sq ft	SFU equal	3.40	2,550.00	8,670.00
3104.252202	TPSG	Commercial Space Sewer Connection > 35K sq ft	SFU equal	-	2,550.00	-
3104.252202	TPSH	Industrial Manufacturing Sewer Connection	SFU equal	-	2,550.00	-
3104.252202	TPSR	Laundry Sewer Connection Fee (only)	SFU equal	-	2,550.00	-
3104.252202	TPSS	Car Wash Sewer Connection Fee (only)	per bay	-	16,800.00	-
3104.252202	TPSM	Misc. Sewer Connection Fee Only	SFU equal	-	2,550.00	-
HOUSE SERVICE CHARGE (H)						
3104.252204	TPSI	Existing sewer service HSC		-	1,000.00	-
3104.252204	TPSJ	New Sewer Tap and Service by O&M	labor and mat.	-	-	-
3104.252226	TPOT	Outside City Sewer		-	450.00	-
3104.252226	TPOI	Outside City Plumbing Inspection		-	50.00	-
3104.252203	TPCO	Sewer Clean Out		1.00	100.00	100.00
ASSESSMENT DISTRICT FEES						
3104.252224	TPTR	Three Rivers	DUAL W/ S/B	-	900.00 ea	-
3104.252228	TPSV	South Church St		-	10,600.00 ea	-
3104.252214	TPOC	Overall Creek Sewer District (O/C)		-	1,000.00 ea	-
3104.252227	TPBD	Basin "D"	DUAL W/ S/B	-	925.00 ea	-
3104.252217	TPSB	Salem / Barfield Sewer District (S/B)		-	750.00 ea	-
3104.252218	TPSQ	US 41/Florence Rd Sewer District	DUAL W/ O/C	-	5,800.00 ac	-
3104.252220	TPOL	Osborne Lane Sewer District	VARIES	-		-
3104.252219	TPBE	Buchanan / Elam Road Sewer District		-	1,000.00 ea	-
3104.252222	TPST	Rockvale Sewer District	DUAL W/ O/C	-	1,550.00 ea	-
3104.252221	TPSU	Medical Center Pkwy Sewer District	DUAL W/ O/C	-	10,900.00 ac	-
3104.252223	TPPL	Pitts Lane Sewer District		-	2,350.00 ea	-
					TOTAL SEWER	24,920.00
					TOTAL WATER & SEWER CHARGES	43,870.00

Note: This amount is only guaranteed for 30 days from date of worksheet or July 1, which ever comes first. Additional charges may apply.



... creating a better quality of life

Memorandum

Date: September 15, 2020
To: Water Resources Board
From: Robert Haley, III
Subject: Stormwater program
Need to update stormwater design standards

BACKGROUND

The City's stormwater controls manual is 12 years old. City staff have made a few revisions to the manual over those years, but it is time for newer design criteria and standards. We need to revise the manual and associated technical guidance:

- To update design criteria and procedures, incorporating lessons learned industry-wide, State-wide and in Murfreesboro
- To prepare for an upcoming State rule and permit that will address stormwater control measures; and
- To prepare standard and/or preferred designs and detail drawings.

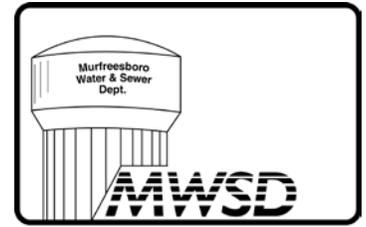
Historically, 80 percent of subdivision developments and 44 percent of site developments require installation of stormwater control measures (SCMs). Over the past 12 years, 425 new land development projects – subdivision developments and sites –have included one or more stormwater controls, such as detention ponds, bioretention cells, pervious concrete and paver bricks, and manufactured devices. Being added to those 425 are 88 projects now permitted for or under construction, and another 108 projects in pre-construction planning.

These stormwater controls are necessary for flood control, for storm water runoff quality and the quality of the receiving streams. And the costs to design, construct and to maintain SCMs are significant to the development community, to the City and to property owners.

Staff plan to contract for stormwater-related engineering assistance to accomplish the above updates and hope to bring to the board in the next month or two a recommendation to that end.

RECOMMENDATION

This memo is for information purposes only. No action is necessary.



WATER RESOURCES

DASHBOARD PERFORMANCE

August 2020



MWRD FY2020-2024 CIP

NO.	PROJECT	2019-2020 2019	2020-2021 2020 Issue	2021-2022 2021 Issue	2022-2023 2022 Issue	2023-2024 2023 Issue	TOTAL
	Construction- Northeast Regional PS & Force Main						\$0
	Overall Creek PS & Force Main Upgrade						\$0
	Construction- Biosolids Processing Equipment						\$0
	TOTAL Capital Improvements funded from Debt Service	\$0	\$0	\$0	\$0	\$0	\$0

NO.	PROJECT	2019-2020 2020 FY	2020-2021 2021 FY	2021-2022 2022 FY	2022-2023 2023 FY	2023-2024 2024 FY	TOTAL
	Sewer rehab- Account 335	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$5,000,000
	Meters, Water/Sewer Taps, Hydrants - 280, 290, 300, 310	\$435,000	\$435,000	\$435,000	\$435,000	\$435,000	\$2,175,000
	Water lines- Account 320	\$350,000	\$350,000	\$350,000	\$350,000	\$350,000	\$1,750,000
	Sewer Lines - Account 330	\$350,000	\$350,000	\$350,000	\$350,000	\$350,000	\$1,750,000
	Biolsolids Processing Equip & Storage Sinking Fund	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$2,500,000
	Walter Hill Dam Repair/Remediation Sinking Fund	\$125,000	\$125,000	\$125,000	\$125,000	\$125,000	\$625,000
	Lift Station Replacement Sinking Fund	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000
	NE Regional PS & FM Sinking Fund	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$2,500,000
	GAC Replacement	\$125,000	\$125,000	\$125,000	\$125,000	\$125,000	\$625,000
	High Service Pumps & Membrane Pump Improv.		\$1,000,000				\$1,000,000
	Vehicle and Equipment Replacement	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000	\$7,500,000
	TOTAL Capital Improvements funded from Rates	\$5,135,000	\$6,135,000	\$5,135,000	\$5,135,000	\$5,135,000	\$26,675,000

NO.	PROJECT	2019-2020 2020 FY	2020-2021 2021 FY	2021-2022 2022 FY	2022-2023 2023 FY	2023-2024 2024 FY	TOTAL
	W&S CAPITAL IMPROVEMENT PROJECTS						
	Misc FY20 Working Reserve Commitments	\$1,850,000					\$1,850,000
	Biosolids Processing Equipment & Storage Addition	\$1,000,000	\$9,500,000	\$5,500,000			\$16,000,000
	Replace Biosolids Polymer System	\$100,000	\$1,350,000				\$1,450,000
	Overall Creek Pump Station & Force Main Upgrade	\$500,000	\$7,500,000	\$4,300,000			\$12,300,000
	NE Regional Engineering Design	\$500,000	\$1,500,000	\$250,000	\$250,000		\$2,500,000
	NE Regional P.S. & Force Main		\$3,000,000	\$10,000,000	\$7,500,000		\$20,500,000
	Cherry Lane / Sazerac Sanitary Sewer		\$1,000,000	\$1,500,000			\$2,500,000
	SR840 Interchange Area Sanitary Sewer	\$200,000	\$1,100,000	\$1,100,000			\$2,400,000
	Joe B. Jackson Sanitary Sewer	\$50,000	\$750,000				\$800,000
	MWRRF Wet Weather Treatment Train Impr	\$50,000	\$150,000	\$500,000	\$2,500,000	\$2,500,000	\$5,700,000
	Mill Street Painting, Halls Hill and Tiger Hill Tank Repairs	\$1,000,000	\$1,800,000				\$2,800,000
	Replace Pall Membranes					\$650,000	\$650,000
	High Service PS & Membrane Feed Pump Improv.		\$2,500,000				\$2,500,000
	Direct Potable Reuse Demonstration			\$350,000	\$350,000		\$700,000
	Stones River Water Qual Sampling / NPDES Permitting	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$750,000
	Subtotal CAPITAL PROJECTS	\$5,400,000	\$30,300,000	\$23,650,000	\$10,750,000	\$3,300,000	\$73,400,000
	TRANSPORTATION (Water/Sewer Imp.)						
	Bradyville Pike			\$1,500,000	\$1,500,000	\$500,000	\$3,500,000
	Jones Blvd Widening		\$500,000	\$500,000			\$1,000,000
	Cherry Lane Repurified Main Extension (14,600 LF)		\$2,000,000	\$1,000,000			\$3,000,000
	Cherry Lane Sanitary Sewer Construction	\$150,000	\$1,000,000	\$1,500,000			\$2,650,000
	SR 99 Widening- Old Fort to Cason Lane		\$500,000	\$1,000,000			\$1,500,000
	St. Clair St.		\$500,000				\$500,000
	John Rice Blvd & Rucker Lane		\$200,000				\$200,000
	Maney Avenue Reconstruction - Phase 2		\$250,000	\$250,000			\$500,000
	Wilkinson Pike Reconstruction (MCP to TL)		\$650,000	\$650,000			\$1,300,000
	Subtotal TRANSPORTATION PROJECTS	\$150,000	\$5,600,000	\$6,400,000	\$1,500,000	\$500,000	\$14,150,000
	REHABILITATION						
	Sewer Rehabilitation - Maintenance Contract	\$2,770,000	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000	\$8,770,000
	INFORMATION TECHNOLOGY PROJECTS						
	IT/Computer Systems Hardware Upgrades	\$350,000	\$100,000	\$100,000	\$100,000	\$100,000	\$750,000
	Electronic Content Management (Scanning/Imaging)		\$250,000	\$250,000			\$500,000
	IT Design Services & Consulting	\$100,000	\$100,000	\$100,000			\$300,000
	Comp Maintenance Management System (CMMS)		\$400,000	\$600,000			\$1,000,000
	Subtotal INFORMATION TECHNOLOGY PROJECTS	\$450,000	\$850,000	\$1,050,000	\$100,000	\$100,000	\$2,550,000
	TOTAL Projects from Working Capital Reserves	\$8,770,000	\$38,250,000	\$32,600,000	\$13,850,000	\$5,400,000	\$98,870,000

PROJECTED RESERVE FUND BALANCE REVENUE (TAPS)	\$8,000,000	\$7,500,000	\$7,500,000	\$7,500,000	\$7,500,000
SINKING FUND DEPOSITS TO RESERVES FROM RATES	\$2,375,000	\$3,375,000	\$2,375,000	\$2,375,000	\$2,375,000
SECURED MIN. BALANCE FOR WORKING CAPITAL RESERVES	\$24,331,276	\$24,817,902	\$25,314,260	\$25,820,545	\$26,336,956
PROJECTED WORKING CAPITAL RESERVE BALANCE	\$83,220,668	\$55,845,668	\$33,120,668	\$29,145,668	\$33,620,668
FUNDS ABOVE SECURED MINIMUM BALANCE	\$58,889,392	\$31,027,766	\$7,806,408	\$3,325,123	\$7,283,712

Preliminary *Draft* 5-YR CAPITAL IMPROVEMENTS PLAN (CIP)
STORMWATER UTILITY FUND, FY20.-24

NO.	PROJECT	Originator	2019-2020 2020 FY	2020-2021 2021 FY	2021-2022 2022 FY	2022-2023 2023 FY	2023-2024 2024 FY	TOTAL
			<i>Projected</i>	<i>Budget</i>	<i>Pro Forma</i>	<i>Pro Forma</i>	<i>Pro Forma</i>	
	Neighborhood Projects (NP)							
NP-1	Memorial Blvd / Haynes Dr. Drainage Improvements	City Eng	\$125,000	\$50,000				\$175,000
NP-2	Mitchell-Nielson Drainage Project	City Eng	\$50,000					\$100,000
NP-3	Huntwood/Leaf Ave Neighborhood Drainage Imp.	City Eng	\$100,000	\$100,000				\$200,000
NP-4	Southern Meadows / Kimbro Woods Drainage Imp.	City Eng	\$500,000	\$500,000				\$1,025,000
NP-5	Liberty Dr. / Thatcher Trace Spring Box	City Eng	\$50,000	\$75,000				\$125,000
NP-6	Pennington Drive Drainage Repair/Upgrade (Added)	City Eng						\$0
NP-7	Gateway Pond Repair	Eng/MRSD						\$0
NP-8	Hardwood Drive Drainage Upgrade (Added)	City Eng	\$250,000					\$250,000
NP-9	Pacific Place/Riverrock Blvd Drainage Imp.	City Eng	\$0	\$0				\$0
	Subtotal		\$1,075,000	\$725,000				\$1,875,000
	Water Quality Improvement (Compliance) Projects (WQ)							\$0
WQ-1	Town Creek Bioretention BMP's @ Cannonsburgh	MWRD						\$0
WQ-2	Molloy Lane Water Quality Pond	MWRD	\$25,000	\$125,000	\$75,000			\$225,000
WQ-3	Rosebank Springs Constructed Wetlands	City Eng	\$35,000	\$165,000	\$115,000			\$350,000
WQ-4	Lee's Branch Stream Restoration	City Eng	\$25,000					\$25,000
WQ-5	West Fork Stones River at Cason Trail; bank repair	MWRD	\$140,000					\$180,000
WQ-6	Bear Branch Water Quality Mitigation	City Eng						\$0
WQ-7	Sinking Creek Headwater protection BMP	MWRD/Eng	\$30,000	\$50,000	\$150,000	\$150,000	\$150,000	\$530,000
WQ-8	Todd's Lake Regional Wetlands Improvements	City Eng						\$0
WQ-9	Hooper's Bottom Regional Water Quality Project	City Eng	\$25,000	\$150,000		\$175,000	\$175,000	\$550,000
WQ-10	Lytle Creek/Ridgley Road Bacteriological Reduction (Added)	MWRD	\$15,000	\$75,000	\$25,000			\$125,000
WQ-11	Memorial Blvd/VA Pond Trash Rack (Added)	MWRD						\$0
WQ-12	Spence Creek Restoration	MWRD/Eng	\$25,000	\$25,000	\$25,000			\$100,000
WQ-13	E. Lokey Ave Trash Rack at Sinking Creek	MWRD	\$30,000	\$75,000				\$105,000
WQ-14	Sinking Creek/ Northfield Blvd Commercial Retrofit Study/Project	MWRD	\$25,000	\$50,000	\$100,000			\$185,000
WQ-15	Overall Street retrofit/ bioretention - streetscape	MWRD	\$35,000	\$100,000				\$135,000
WQ-16	Downtown planter box retrofits study/project	MWRD	\$50,000	\$50,000				\$110,000
	Subtotal		\$460,000	\$865,000	\$490,000	\$325,000	\$325,000	\$2,620,000
	Public Drainage/Streets Participation Projects (PD)							\$0
PD-1	Maney Avenue Phase 2	City Eng						\$50,000
PD-2	Town Creek Conveyance (Murfree Springs to Cannonsburgh)	City Eng	\$500,000	\$250,000	\$100,000			\$900,000
PD-3	Maple St. Alley Permeable Paver Project	City Eng						\$0
	Subtotal		\$500,000	\$250,000	\$100,000			\$950,000
	Totals		\$2,035,000	\$ 1,840,000	\$ 590,000	\$ 325,000	\$ 325,000	\$ 5,445,000

EFFECTIVE UTILITY MANAGEMENT
Financial Viability
MWRD WORKING CAPITAL ACCOUNT SUMMARY

ESTIMATED Working Capital at 8/31/20

Board Designated (System Dev, Assessments, etc) as of 6/30/19	\$ 34,445,773	
Undesignated Excess Funds as of 6/30/19	48,028,398	
Estimated Reserve Revenue thru 8/31/20	8,635,133	
Estimated Reserve Expenditures thru 8/31/20	(8,478,123)	
		82,631,181

COMMITTED Reserves at 8/25/20

Admin Building A/C Unit Replacement (3 units)	23,000	
Sewer Rehabilitation Project 2020/2021	4,250,092	
NE Regional Pump Station Engineering Amend#1	30,640	
SSR Amend No. 7 - Bioassess Sampling & Stratification	108,800	
Overall Creek P.S. Upgrades Additions (SSR, MR, JBS)	173,681	
Warrior Dr. Westpoint S/D Watermain Participation	109,477	
Sewer Inspection Software - WinCan	53,138	
Hazen Sawyer Regulatory Assistance	164,365	
SSR - Biosolids Polymer System Replacement	95,407	
Rucker Lane Widening Sewer Extensions	74,095	
S&ME - 2020 Sewer Rehab Design	320,500	
Tank Painting (Mill, Tiger, Halls Hill)	422,958	
ELI - Thompson Lane Utility Relocation TDOT	90,900	
SSR Task Order - High Service & Membrane Pumps	71,715	
Sewer Rehab Change Order #1	150,812	
ADS Temporary Flow Monitoring	69,000	
SSR Task Order Overall Creek PS Upgrade	431,371	
CIA - Cherry Lane Ph2 Utility Design	36,000	
ELI - Joe B. Jackson West P.S. and Sewer Design	7,782	
Sanitary Sewer 2019/20 Rehabilitation Contract	1,020,606	
CIS Software Upgrade V4	343,000	
SSR Task Order - Mill, Tiger, Halls Hill Tank Painting	86,284	
SSR Task Order 201 Facilities Plan	177,603	
Biosolids Thermal Dryer Install (JBS & MR)	107,137	
Overall Creek P.S. Upgrades (VFD's)	275,428	
S&ME - 2019 Sewer Rehab Design	113,051	
Biosolids Small-scale Thermal Dryer	216,250	
H-S Blackman Park Sewer Design	180,000	
SEC Jones Blvd Utility Design Proposal	14,225	
Northeast Regional PS & Conv - SSR	1,765,973	
Bradyville Pike Utility Design - Neil-Schaffer	22,710	11,006,000

APPROVAL Requests at 9/23/20

Wiser Hwy99 Ph2 Eng Supplement	30,450	
JBS Task Order 20-06 Clarifier Repair #1	9,750	40,200

BALANCE of Working Capital at 9/23/20 after COMMITMENTS **\$ 71,584,981**

DESIGNATED Projects Pending

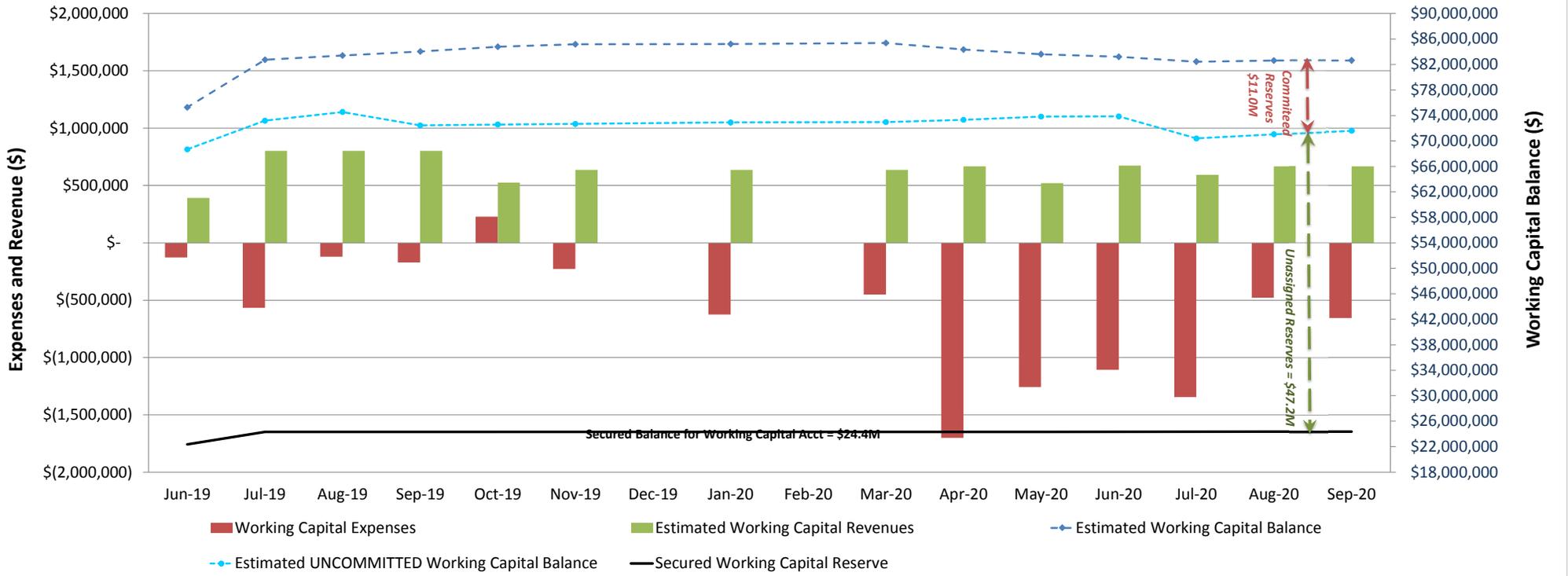
N/A		-

ESTIMATED UNCOMMITTED Working Capital Reserves as of September 23, 2020 **\$ 71,584,981**

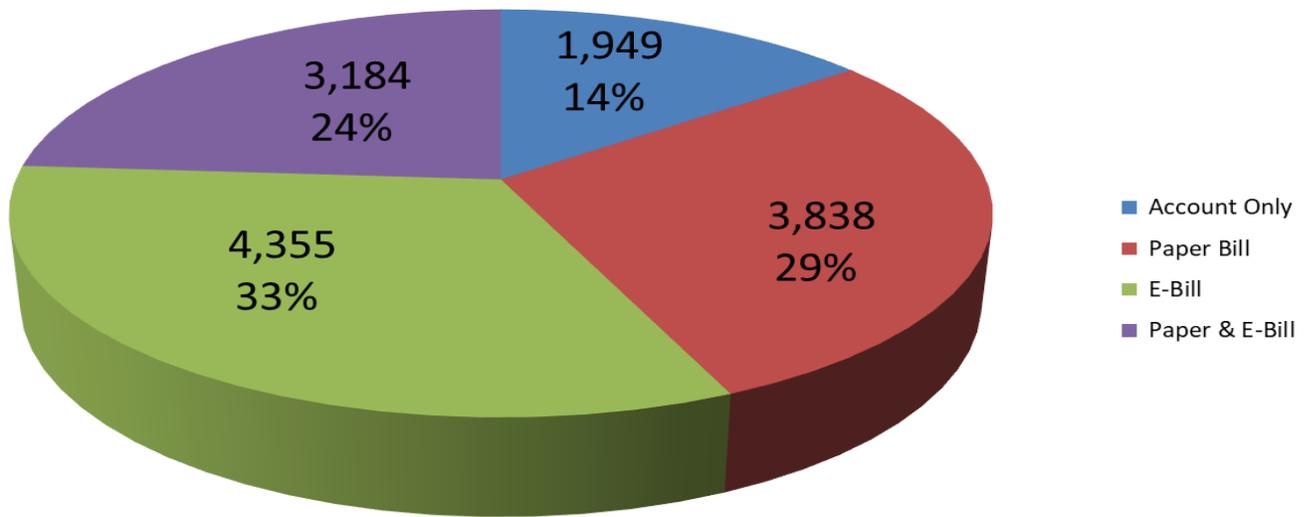
SECURED FY20-21 Operating and Maintenance Expenses **\$ 24,363,800**

UNASSIGNED Working Capital Funds (Est. Uncommitted - Secured) **\$ 47,221,181**

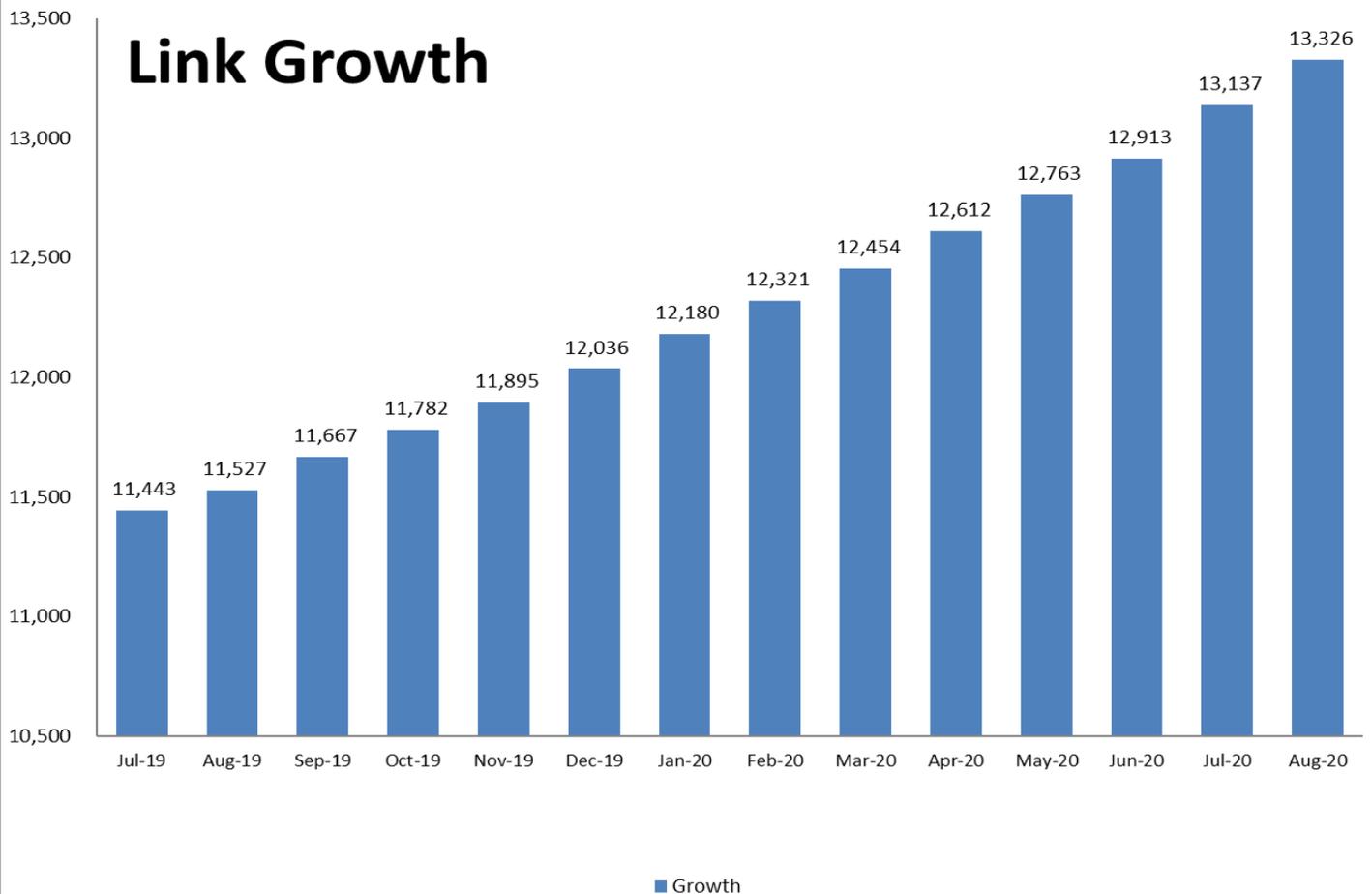
MWRD Working Capital Reserves Dashboard



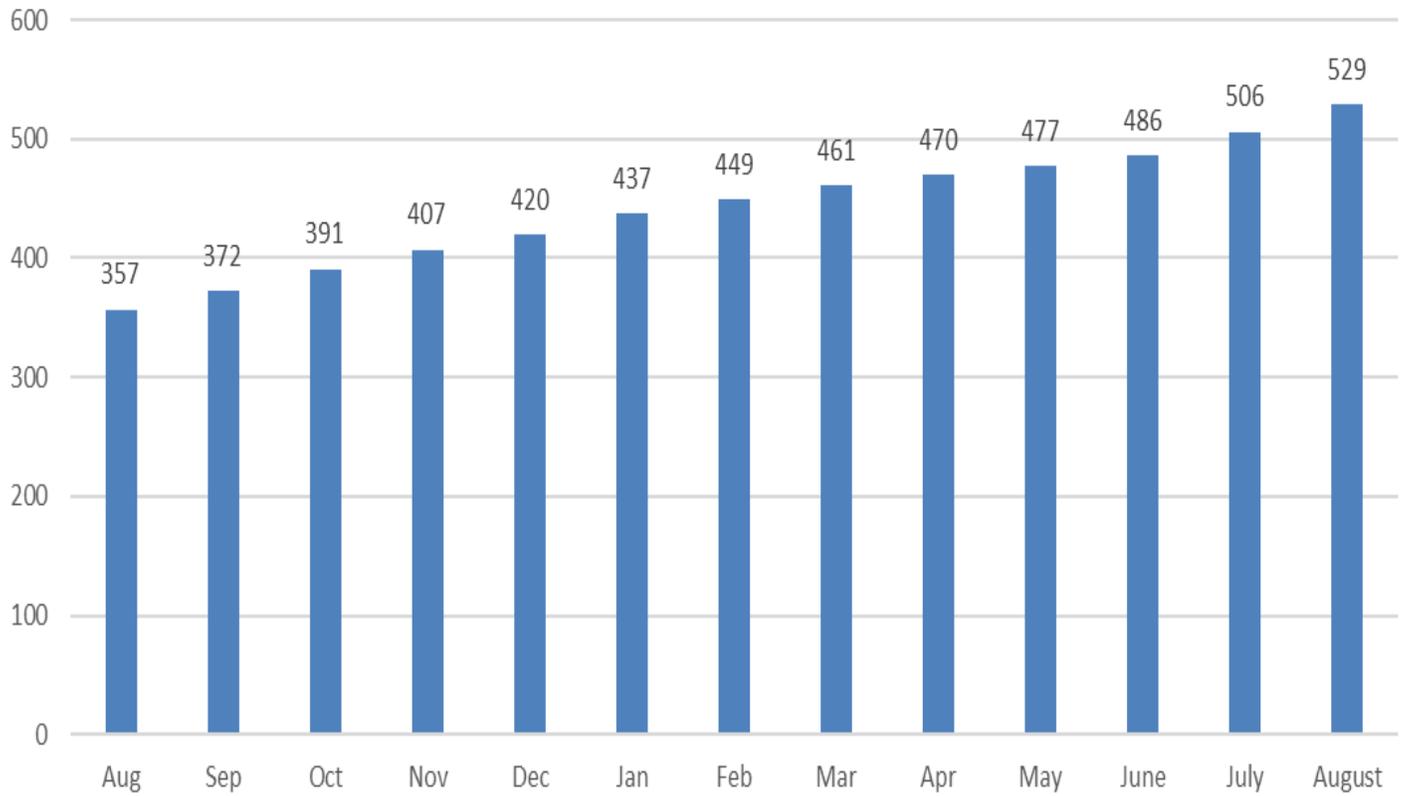
Infinity.Link Customers as of August 2020 = 13,326



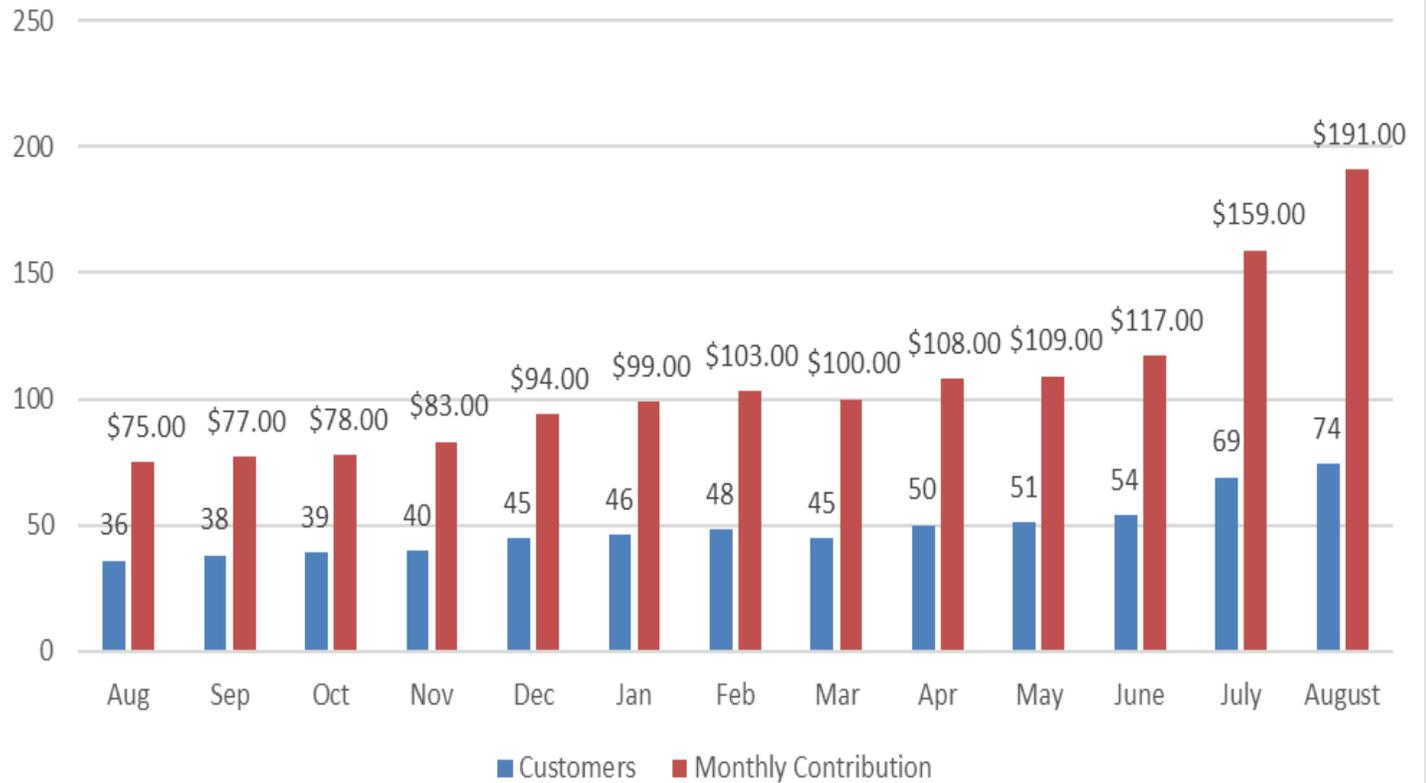
Link Growth



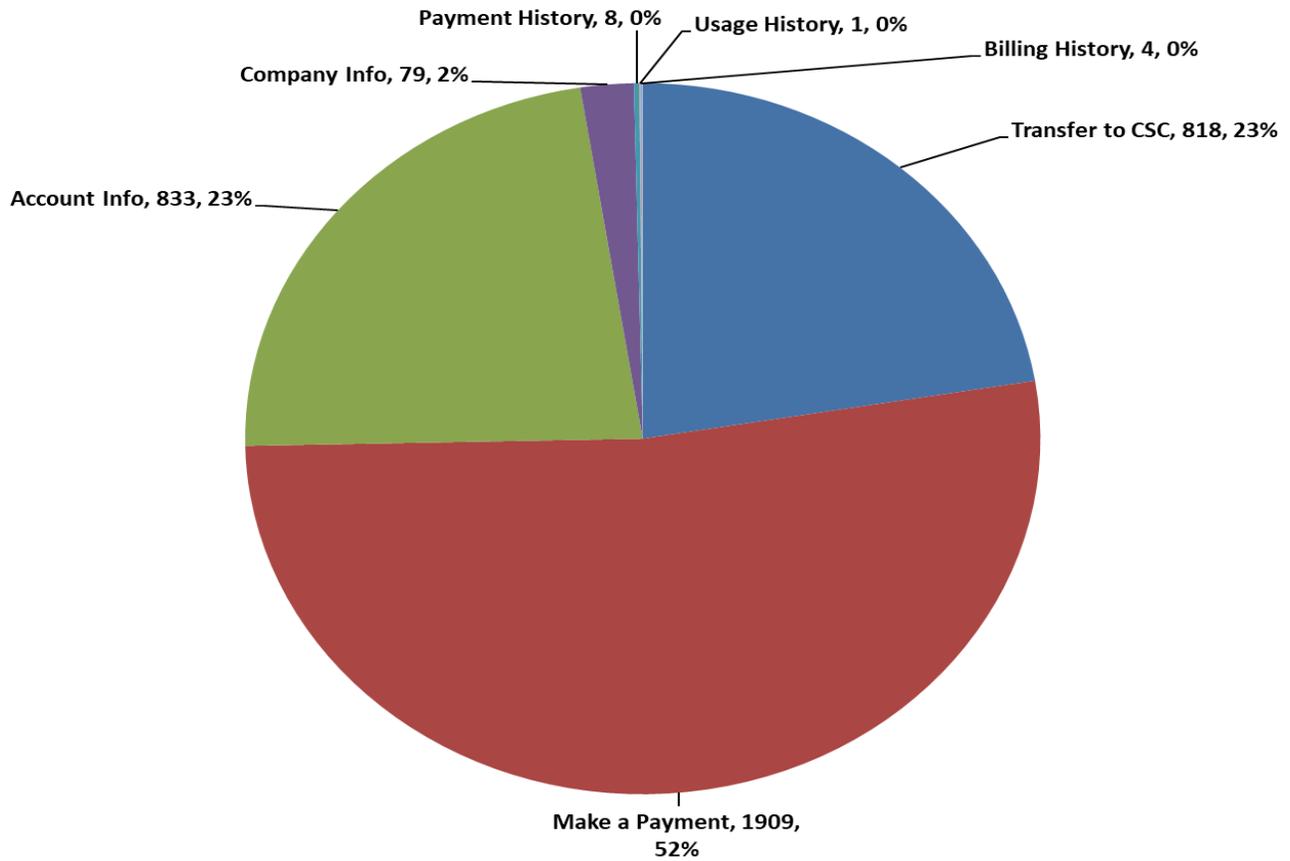
AMI Customer Portal Users



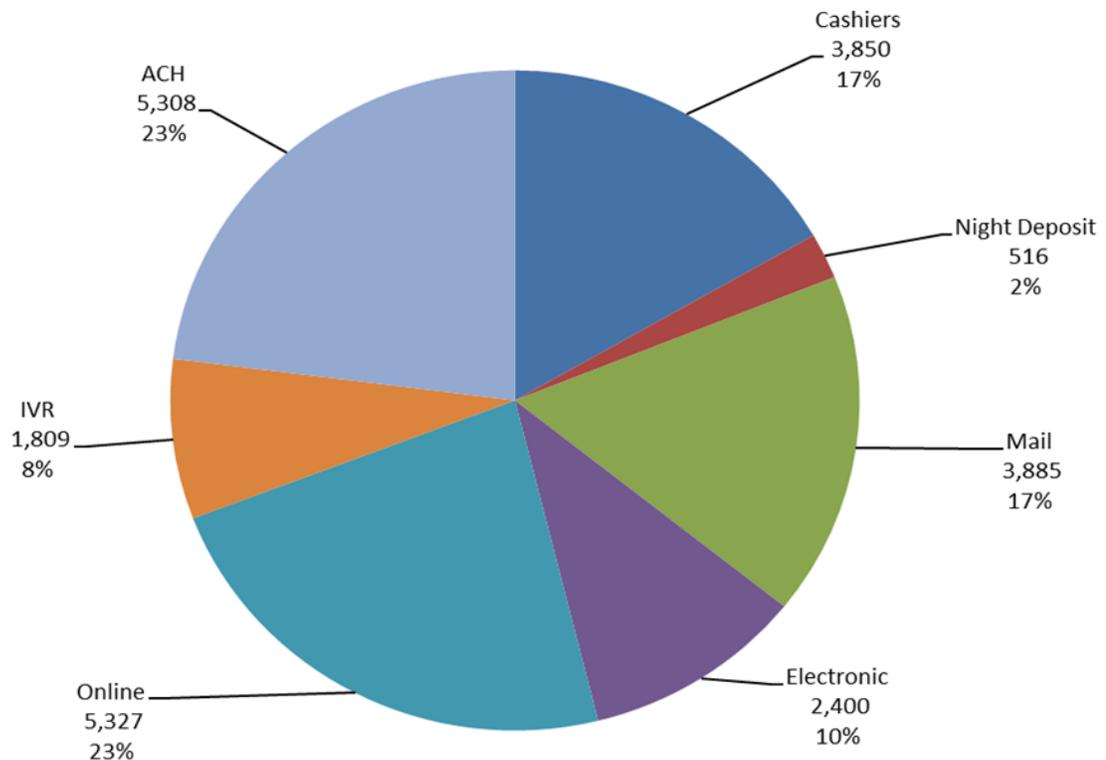
H₂O Users & Monthly Contributions



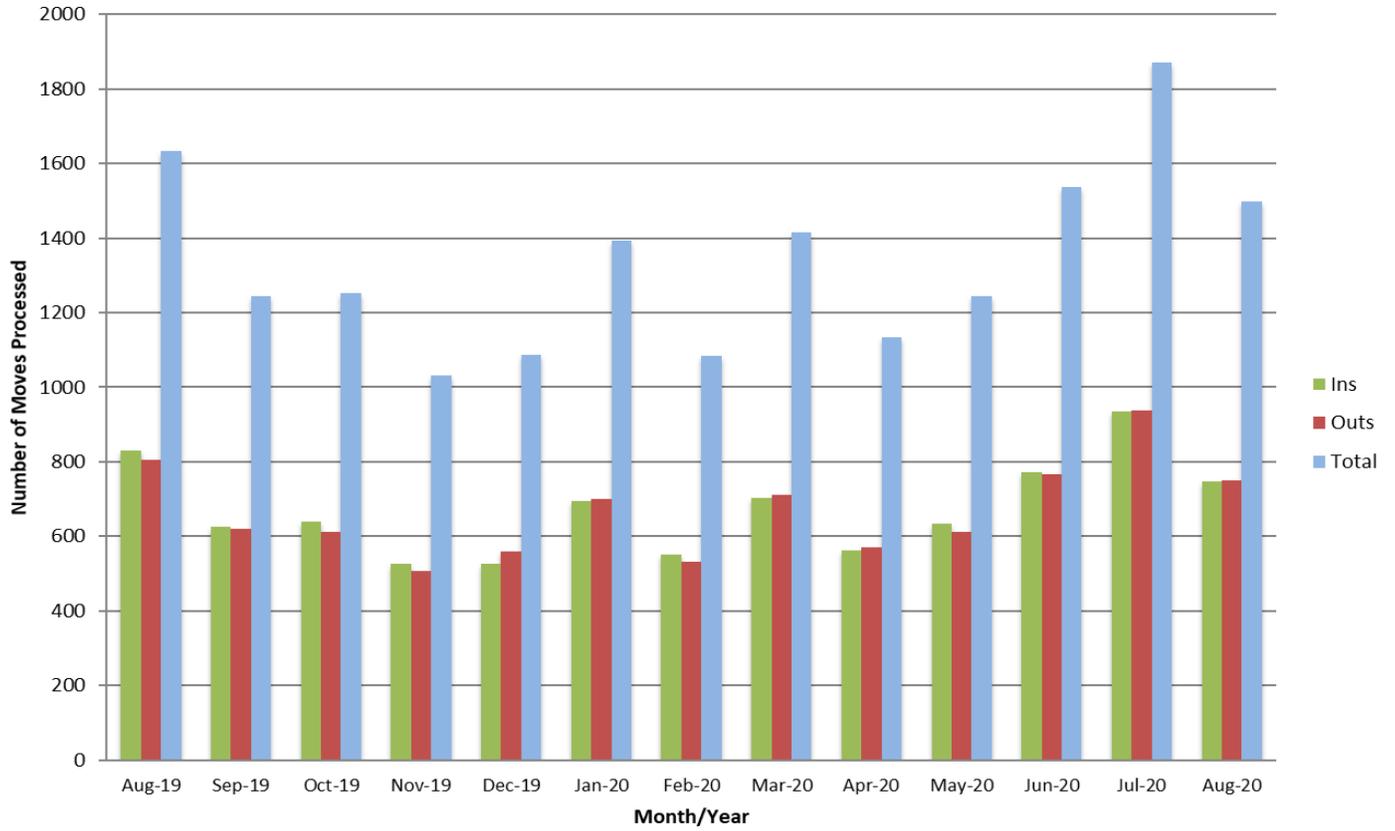
IVR Calls From 08/01-08/31/20 = 3,652



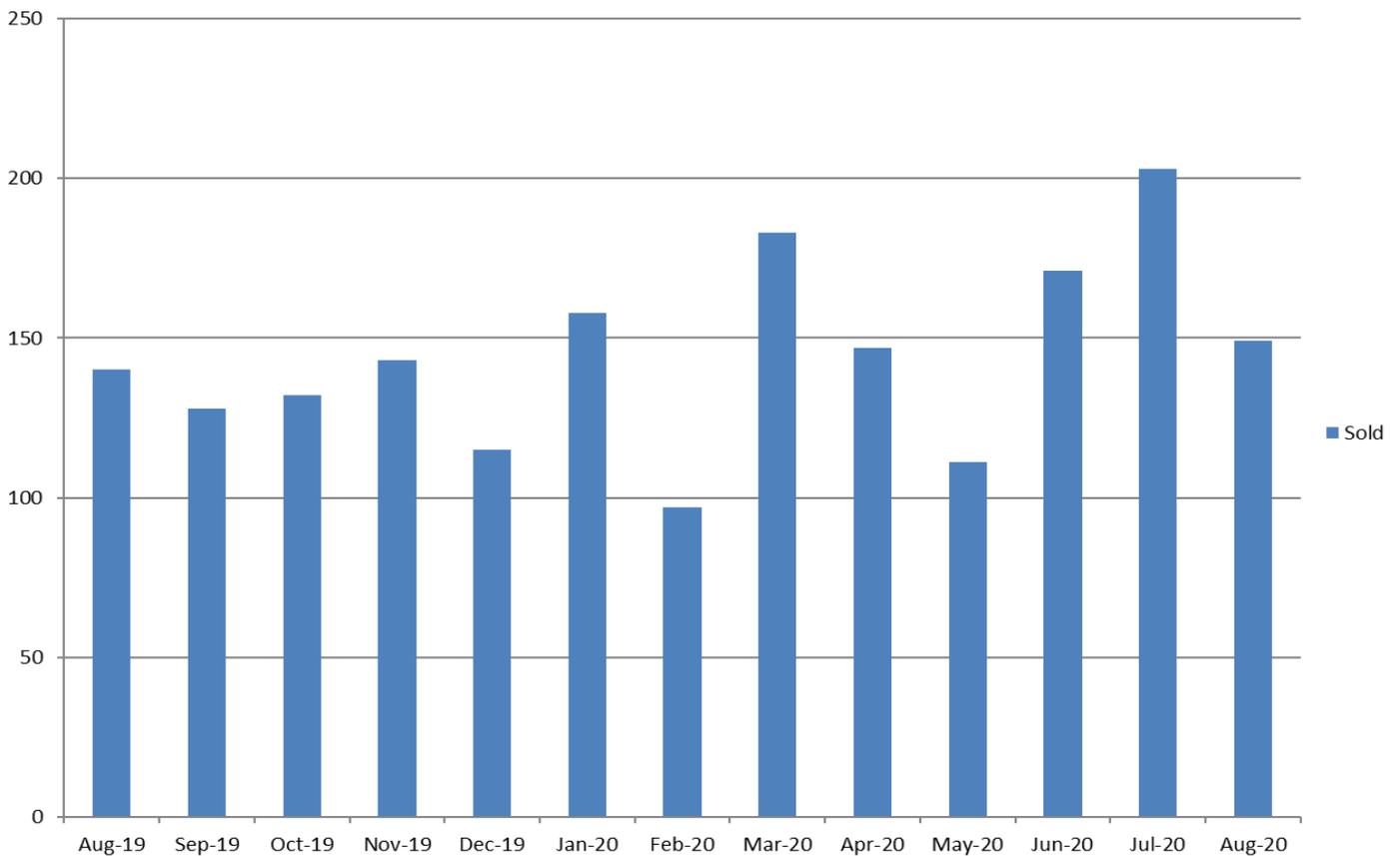
August 2020 Payments by Type



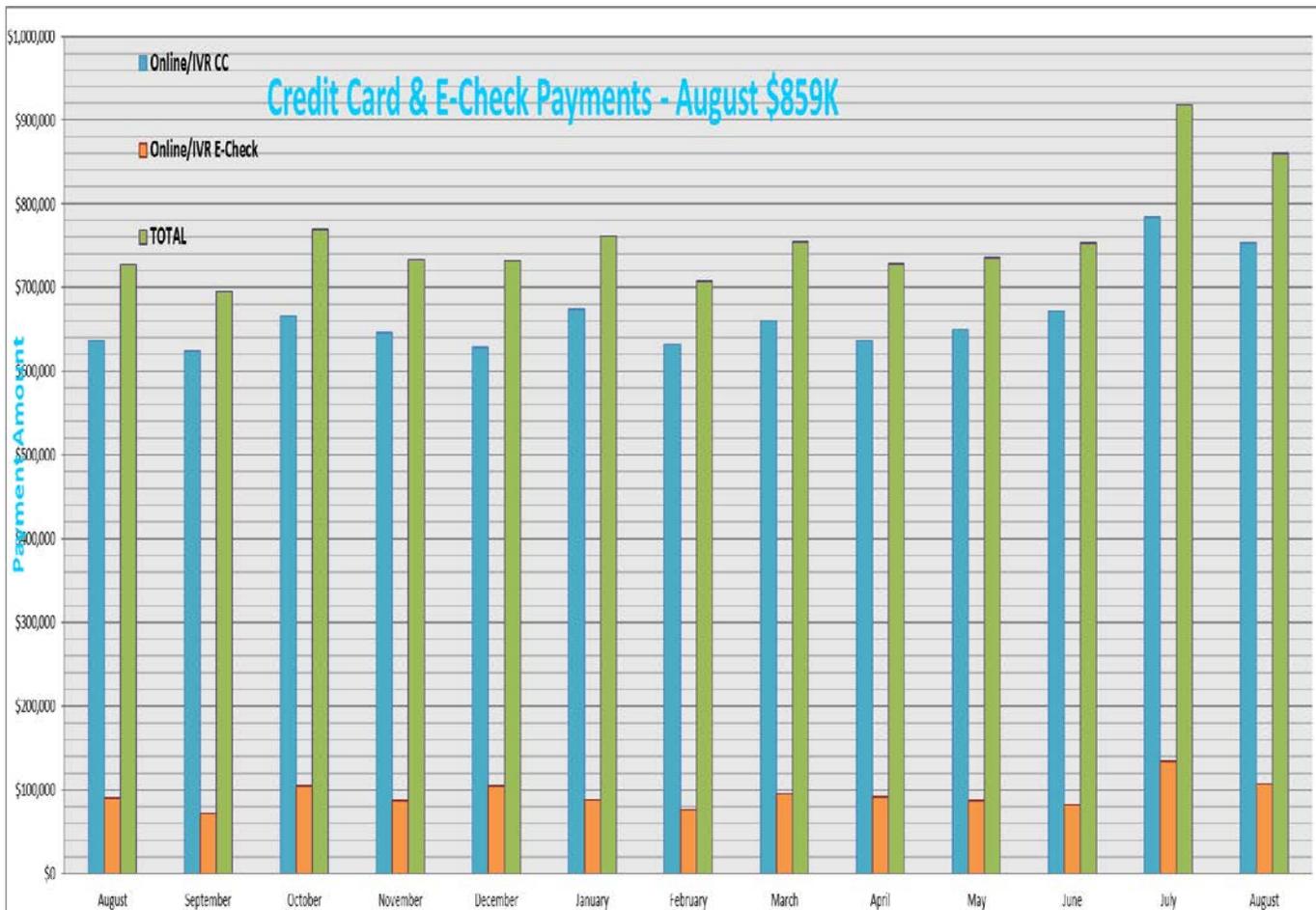
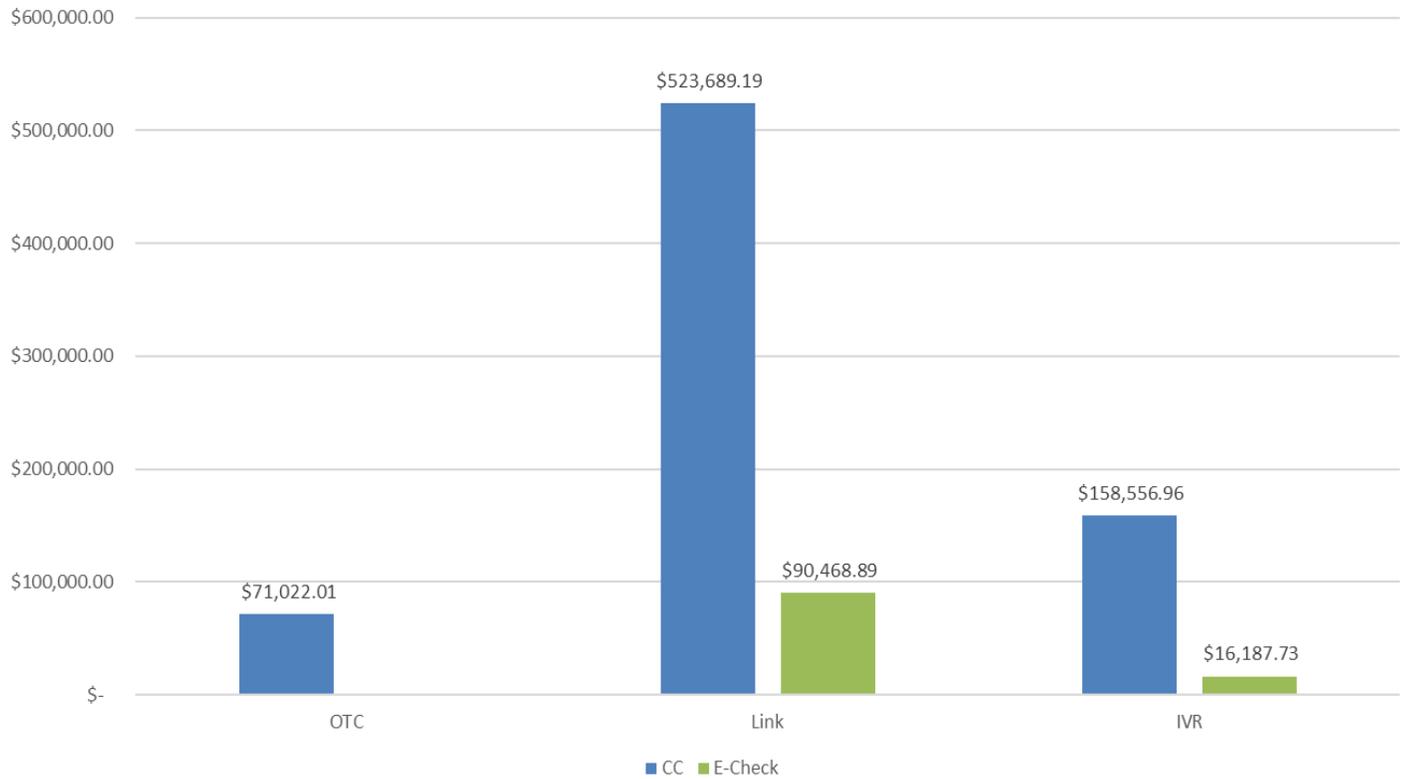
August Moves Processed = 1,497



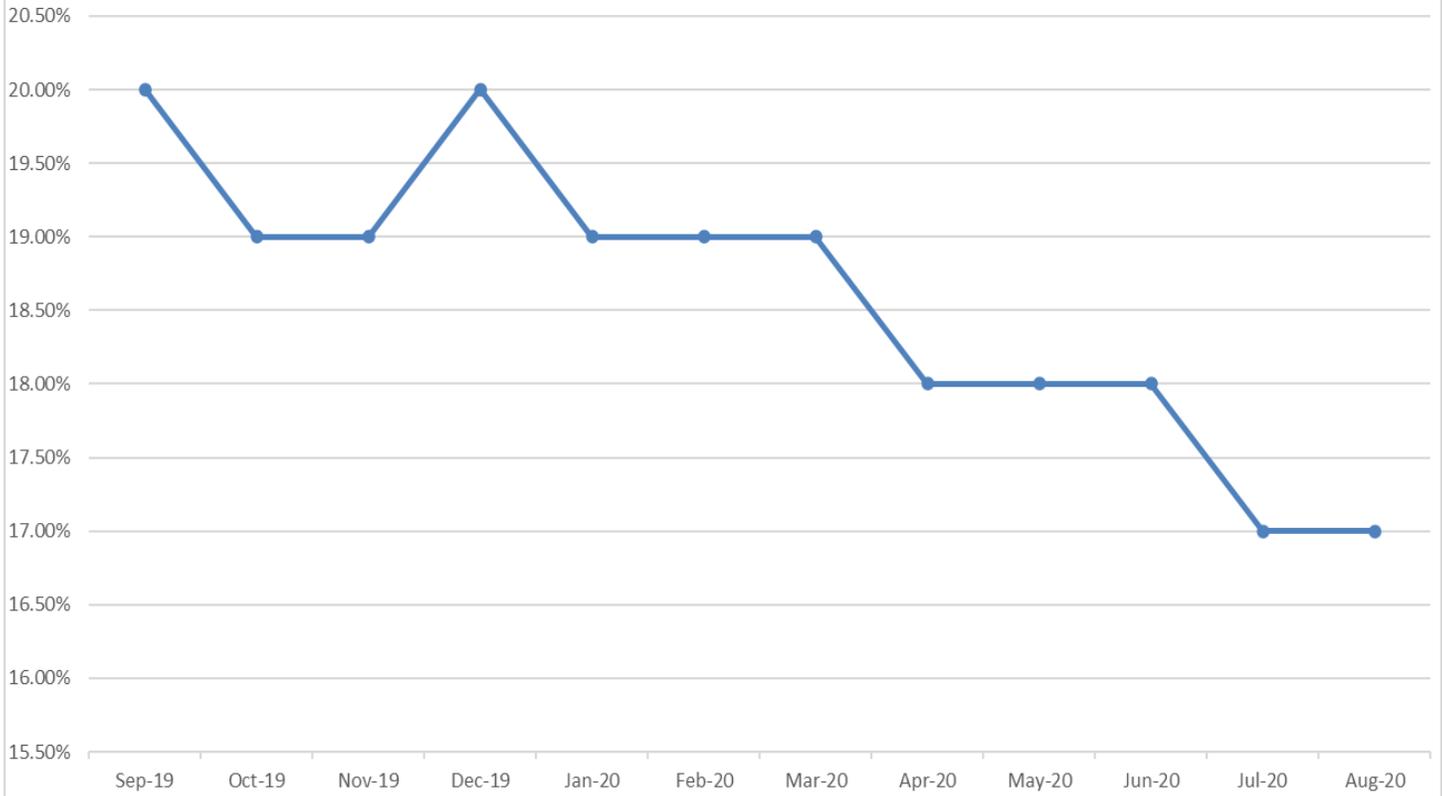
August Taps Sold = 149



Electronic Payment Method August 2020



Water Loss - 12-month rolling average

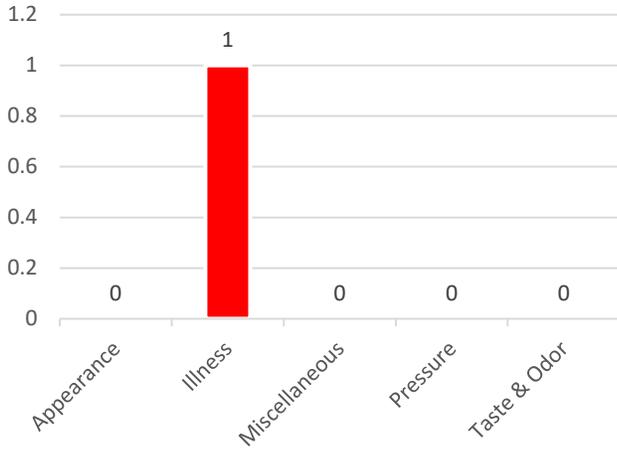


STONES RIVER WATER TREATMENT PLANT

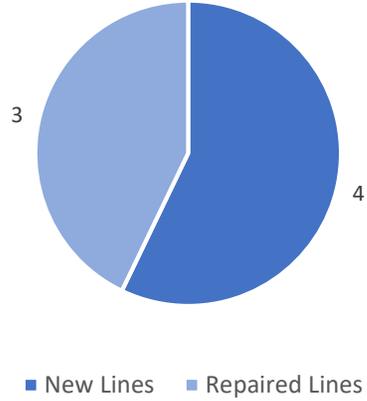
Dashboard Report

August 2020

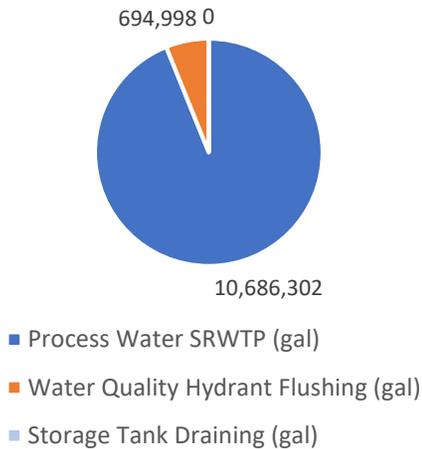
Drinking Water Laboratory Section Water Quality Complaints



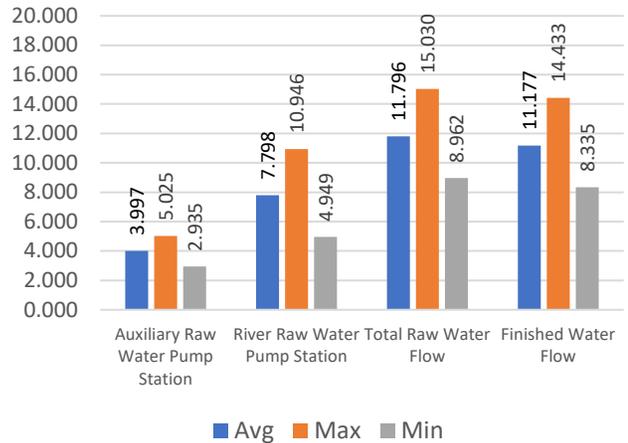
Drinking Water Laboratory Section New & Repaired Lines Tested



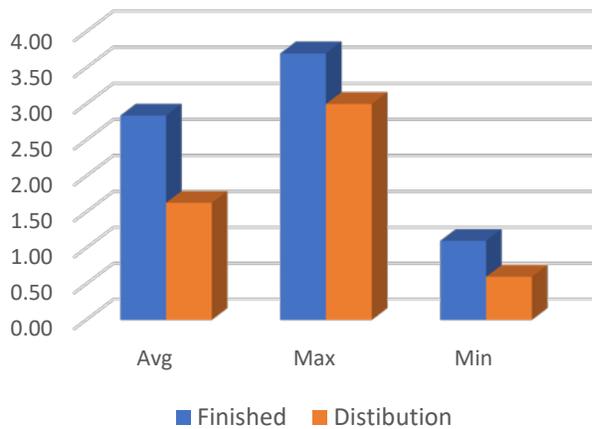
Water Quality Water Used Not Sold



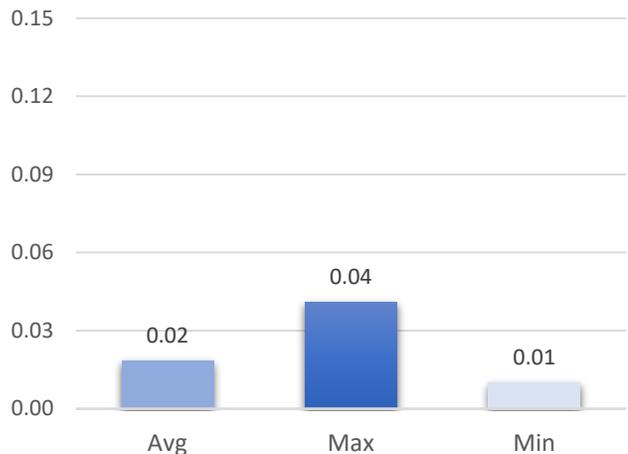
Plant Operations Section Flow (MGD)



Plant Operations Section Chlorine (mg/L)



Plant Operations Section Finished Turbidity (NTU)

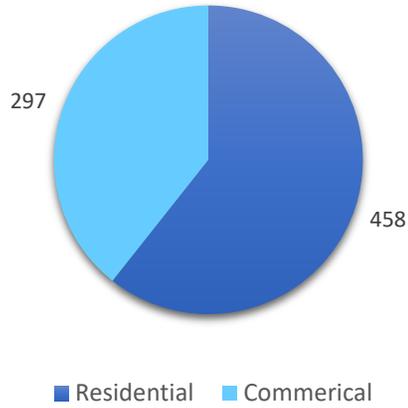


STONES RIVER WATER TREATMENT PLANT

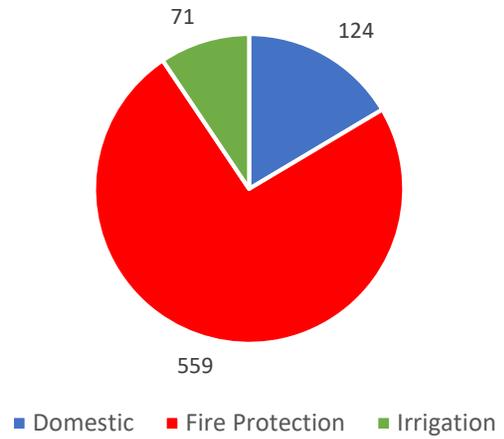
Dashboard Report

August 2020

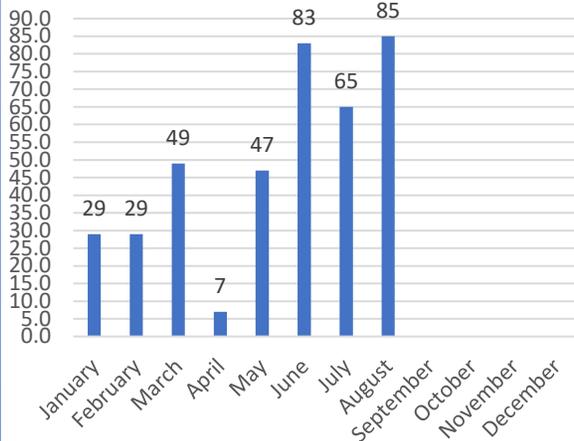
Cross-Connection Control Section Number of Devices Tested By Category



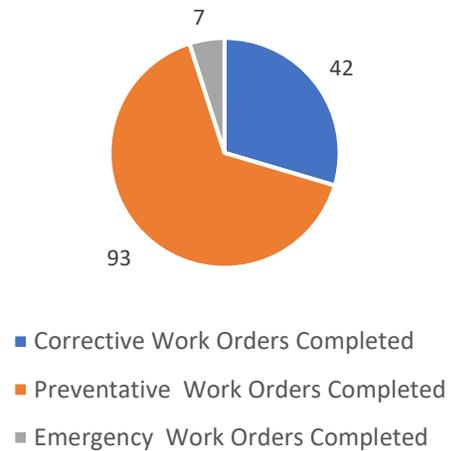
Cross-Connection Control Section Number of Devices Tested



Drinking Water Operations Section Pall Membrane Module Pin Count



Drinking Water Maintenance Section Work Order Status

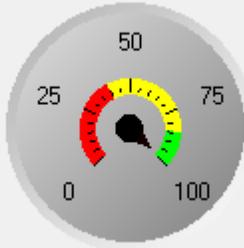


MURFREESBORO WATER RESOURCE RECOVERY FACILITY

DASHBOARD REPORT

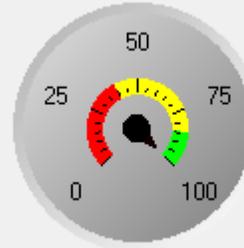
August, 2020

**BOD PERCENT
REMOVAL**



99.1

**AMMONIA PERCENT
REMOVAL**

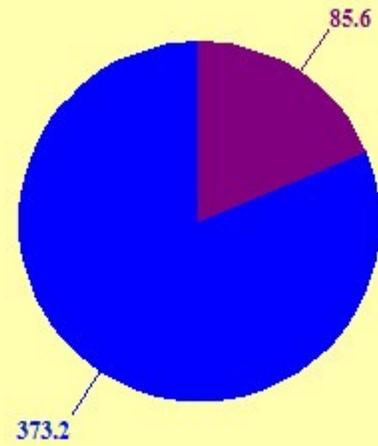


99.6

439.016
**MILLION GALLONS
TREATED**

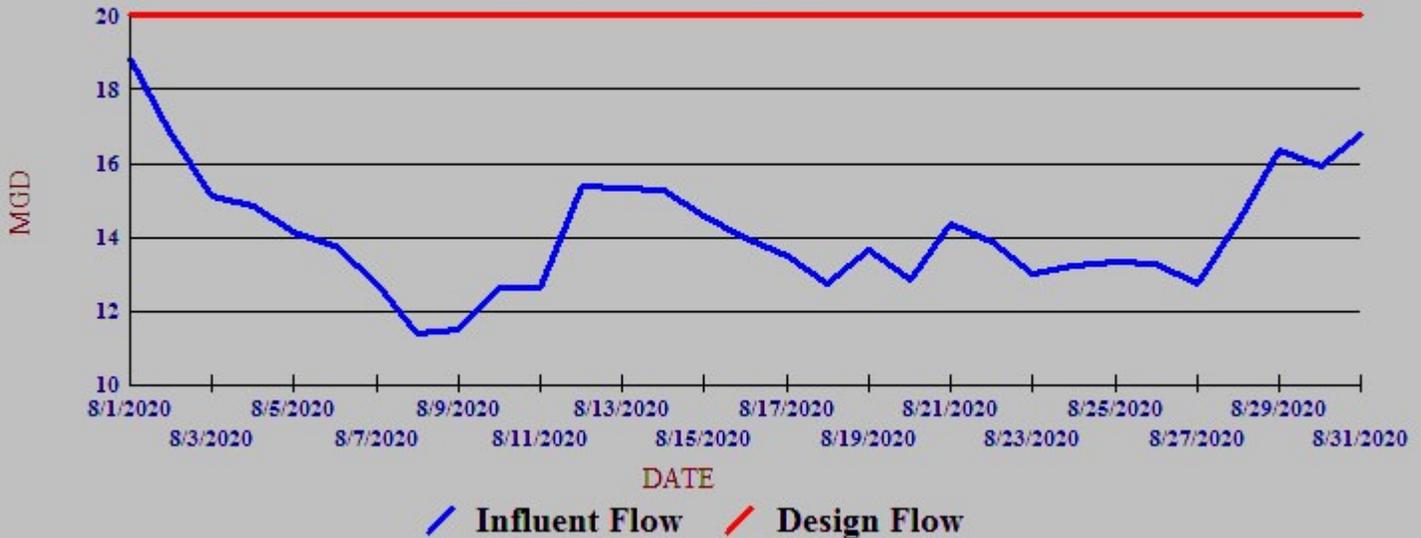
2,349.66
**TONS
BIOSOLIDS
REMOVED**

EFFLUENTS



MGD
■ DISCHARGE ■ REUSE

AVERAGE INFLUENT FLOW



**MWRD - OPERATIONS & MAINTENANCE
DASHBOARD REPORT - FY'21**

DISTRIBUTION SYSTEMS													
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
WATER PIPE (FT)													
1" Copper	0	0											0
2" Copper	0	0											0
1" PEX	131	131											262
2" PEX	0	0											0
SERVICES													
Fire Hydrants <i>(New)</i>	0	10											10
Fire Hydrants <i>(Blow off)</i>	0	3											3
Leaks Repaired	10	9											19
Taps <i>(New)</i>	3	4											7
Stubs <i>(New)</i>	2	0											2
Tap <i>(Replacements)</i>	17	0											17
Meter Connections	3	20											23
AMI													
Leaks Detected	15	18											33
Leaks (being monitored)	1	3											4
Leaks (awaiting repair)	6	0											6
Small Leaks (AMI/Serv Trucks-repaired)	8	14											22
Large Leaks (O&M Repair)	1	8											9
Large Meters Tested	0	0											0
Small Meters Tested	0	0											0
Mlog Changed	65	0											65
Meters Pulled	0	0											0
Meters Inspected	1,200	1,331											2,531

**MWRD - OPERATIONS & MAINTENANCE
DASHBOARD REPORT - FY'21**

COLLECTION SYSTEMS													
	<i>JUL</i>	<i>AUG</i>	<i>SEP</i>	<i>OCT</i>	<i>NOV</i>	<i>DEC</i>	<i>JAN</i>	<i>FEB</i>	<i>MAR</i>	<i>APR</i>	<i>MAY</i>	<i>JUN</i>	<i>TOTAL</i>
SEWER													
TV Lines	34,812	11,180											45,992
TV Lines (<i>Warranty</i>)	2,683.40	0.00											2,683.40
TV Laterals	204.00	0.00											204.00
Line Cleaning	10,090.20	45,825.00											55,915.20
SEWER REHAB													
Maintenance Projects	8	18											26
Lateral Replacement Pipe (<i>ft</i>)	30	28											58
Restoration	3	1											4
STORMWATER													
Line Cleaning	11,009.00	860.00											11,869.00
SERVICES													
Sewer Cleanouts (<i>New</i>)	160	125											285
Sewer Cleanouts (<i>GIS Located</i>)	0	0											0

COLLECTION & DISTRIBUTION SYSTEMS													
	<i>JUL</i>	<i>AUG</i>	<i>SEP</i>	<i>OCT</i>	<i>NOV</i>	<i>DEC</i>	<i>JAN</i>	<i>FEB</i>	<i>MAR</i>	<i>APR</i>	<i>MAY</i>	<i>JUN</i>	<i>TOTAL</i>
SERVICES													
Service Calls	165	157											322
TN One Call Locates	2,259	2,084											4,343
Residential Insp	112	103											215
Residential Final Inspections	103	119											222
Commercial Final Inspections	16	11											27
Total	2,655	2,474	0	5,129									

**MWRD - OPERATIONS & MAINTENANCE
DASHBOARD REPORT - FY'21**

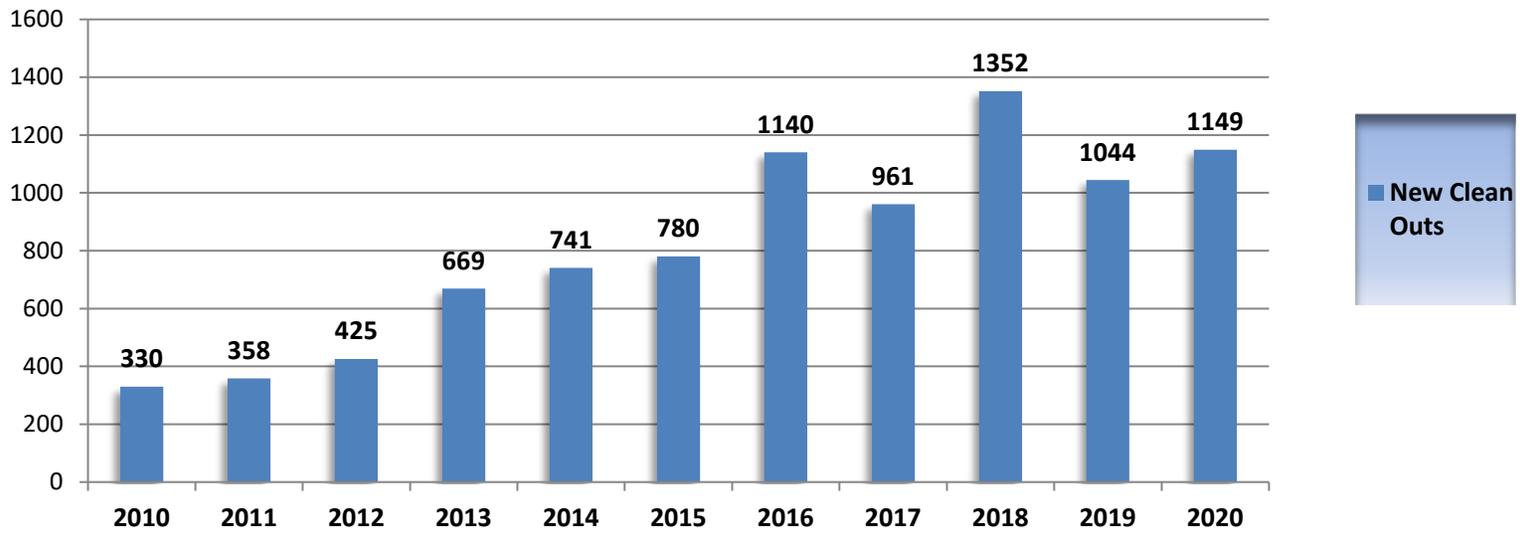
NEW CONSTRUCTION													
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
WATER PIPE (FT)													
6" C-900	0	0											0
8" C-900	0	32											32
6" Ductile Iron	0	0											0
8" Ductile Iron	0	0											0
1" Copper	0	0											0
2" Copper	0	0											0
1" PEX	655	191											846
2" PEX	0	0											0
Total	655	223	0	878									
SEWER PIPE (FT)													
6" SDR-35 (PVC)	0	0											0
8" SDR-35 (PVC)	0	0											0
6" Ductile Iron	0	0											0
8" Ductile Iron	0	0											0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
MAINTENANCE													
Tap (<i>Replacements</i>)	22	0											22
Stone	398	903											1,301

**MWRD - OPERATIONS & MAINTENANCE
NON-BILLED FLUSHING REPORT - FY '20**

	<i>JUL</i>	<i>AUG</i>	<i>SEP</i>	<i>OCT</i>	<i>NOV</i>	<i>DEC</i>	<i>JAN</i>	<i>FEB</i>	<i>MAR</i>	<i>APR</i>	<i>MAY</i>	<i>JUN</i>	<i>TOTAL</i>
O&M DEPT.													
Meters (Events)	0	0											0
Fire Hydrants	0	0											0
Jet\Wash Trucks	17,000	6,000											23,000
Sweepers & Saw	850	450											1,300
Stub & Meter Connection	800	2,000											2,800
New Construction	5,600	7,500											13,100
Main Line Leaks	89,450	232,450											321,900
Subtotal O&M	113,700	248,400	0	362,100									
ENGINEERING DEPT.	3,434,583	1,533,987											4,968,570
FIRE DEPT.	0	112,500											112,500
STREET DEPT.	23,200	23,950											47,150
Subtotal Other Depts	3,457,783	1,670,437	0	5,128,220									
Total	3,571,483	1,918,837	0	5,490,320									

Displayed in gallons

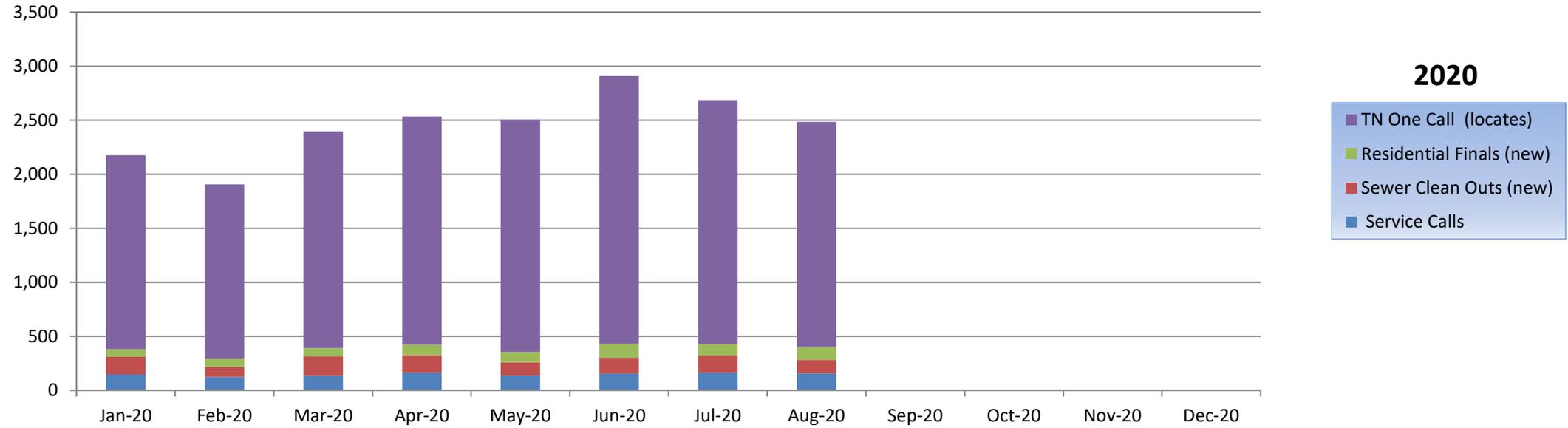
NEW SEWER CLEAN OUTS



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
New Clean Outs	330	358	425	669	741	780	1140	961	1352	1044	1149

** For the calendar year Jan-Dec*

OPERATIONS & MAINTENANCE MONTHLY TOTALS



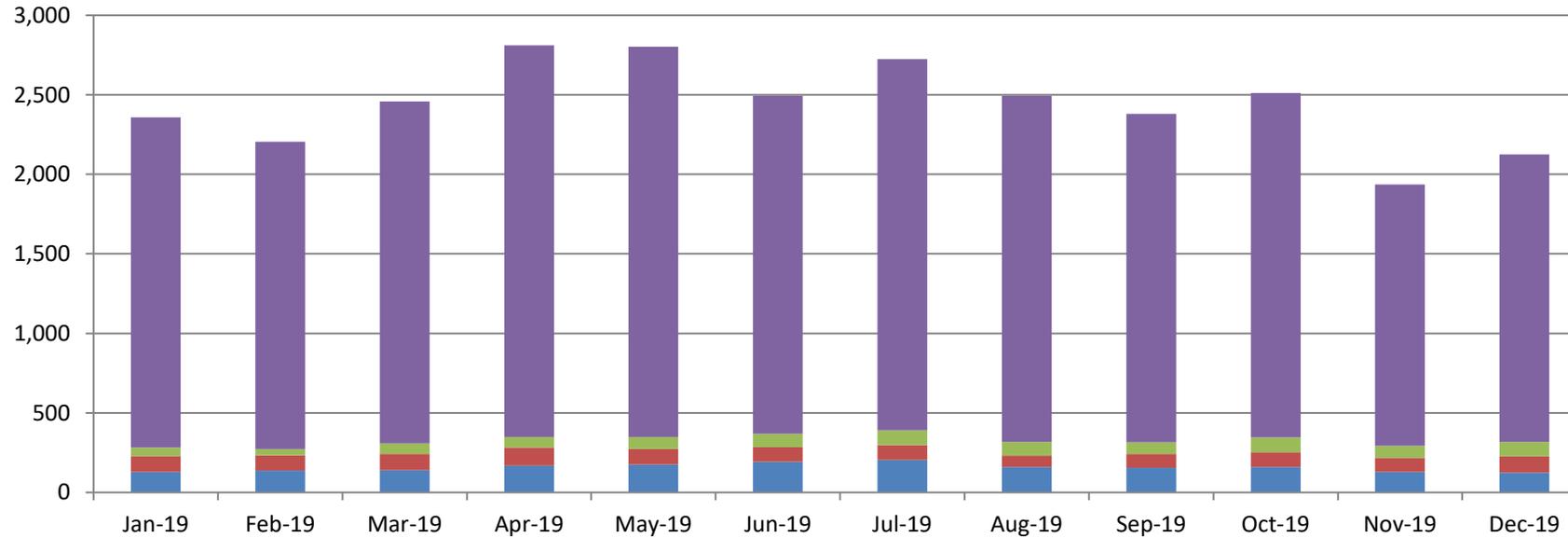
	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Total
Service Calls	148	123	138	166	139	156	165	157					1,192
Sewer Clean Outs (new)	166	94	177	161	119	147	160	125					1,149
Residential Finals (new)	68	79	77	96	97	126	103	119					765
TN One Call (locates)	1,794	1,611	2,004	2,110	2,149	2,481	2,259	2,084					16,492
TOTAL	2,176	1,907	2,396	2,533	2,504	2,910	2,687	2,485					19,598

MWRD - OPERATIONS & MAINTENANCE

Asphalt Quotes FY 2021

	Blue Water		Hawkins		Vulcan		Notes
	Binder	Topping	Binder	Topping	Binder	Topping	
Jul	\$65.00	\$75.00	\$54.50	\$62.50	\$55.22	\$63.13	
Aug	\$65.00	\$75.00	\$53.50	\$61.50	\$54.17	\$62.06	
Sep	\$65.00	\$75.00	\$53.50	\$61.50	\$54.03	\$61.97	
Oct							
Nov							
Dec							
Jan							
Feb							
Mar							
Apr							
May							
Jun							

OPERATIONS & MAINTENANCE MONTHLY TOTALS



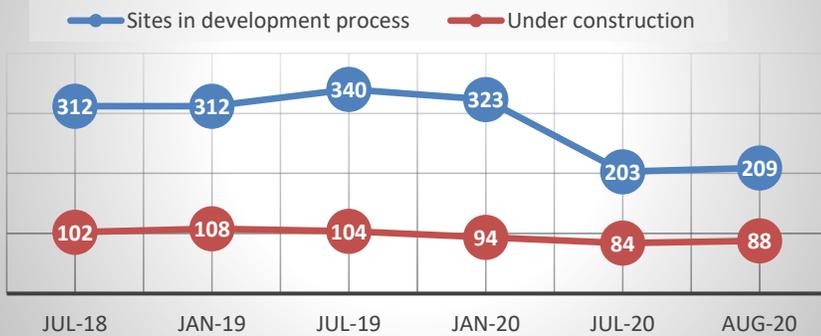
2019

- TN One Call (locates)
- Residential Finals (new)
- Sewer Clean Outs (new)
- Service Calls

	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Total
Service Calls	129	138	139	168	176	193	205	159	156	159	128	124	1,874
Sewer Clean Outs (new)	100	95	104	115	97	91	93	72	85	94	89	102	1,137
Residential Finals (new)	52	41	65	65	76	84	93	86	75	94	75	91	897
TN One Call (locates)	2,076	1,931	2,150	2,463	2,452	2,125	2,334	2,177	2,064	2,165	1,645	1,807	25,389
TOTAL	2,357	2,205	2,458	2,811	2,801	2,493	2,725	2,494	2,380	2,512	1,937	2,124	29,297

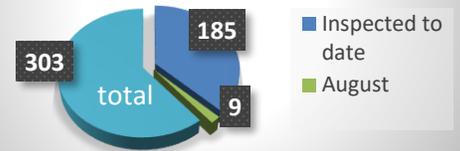
Stormwater Dashboard - August 2020

Construction Phase Inspections of Stormwater Control Measures (SCMs)



Inspection Program

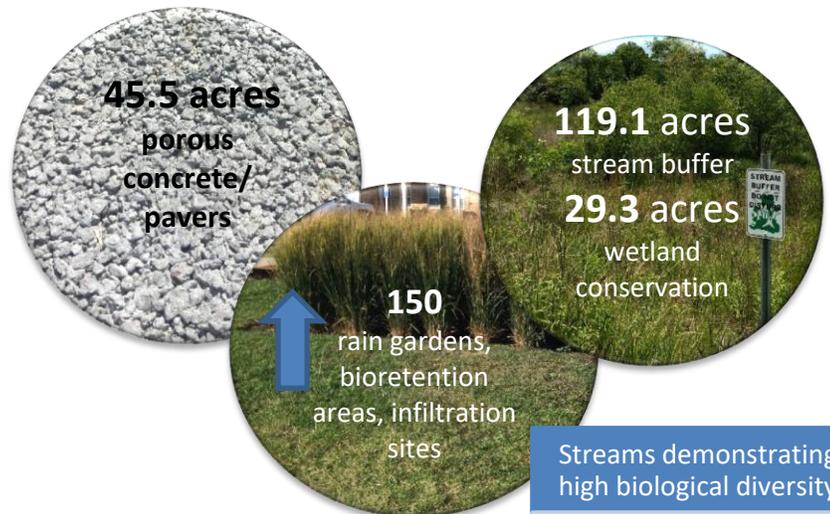
Stormwater Post Construction Inspections



Education and Outreach



LID/ Green Infrastructure

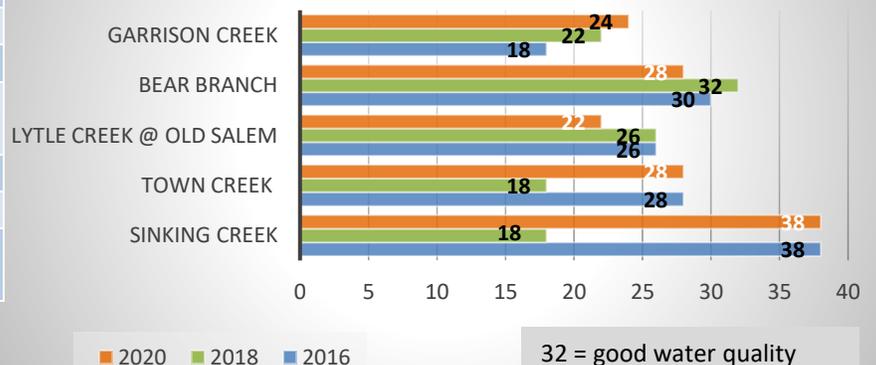


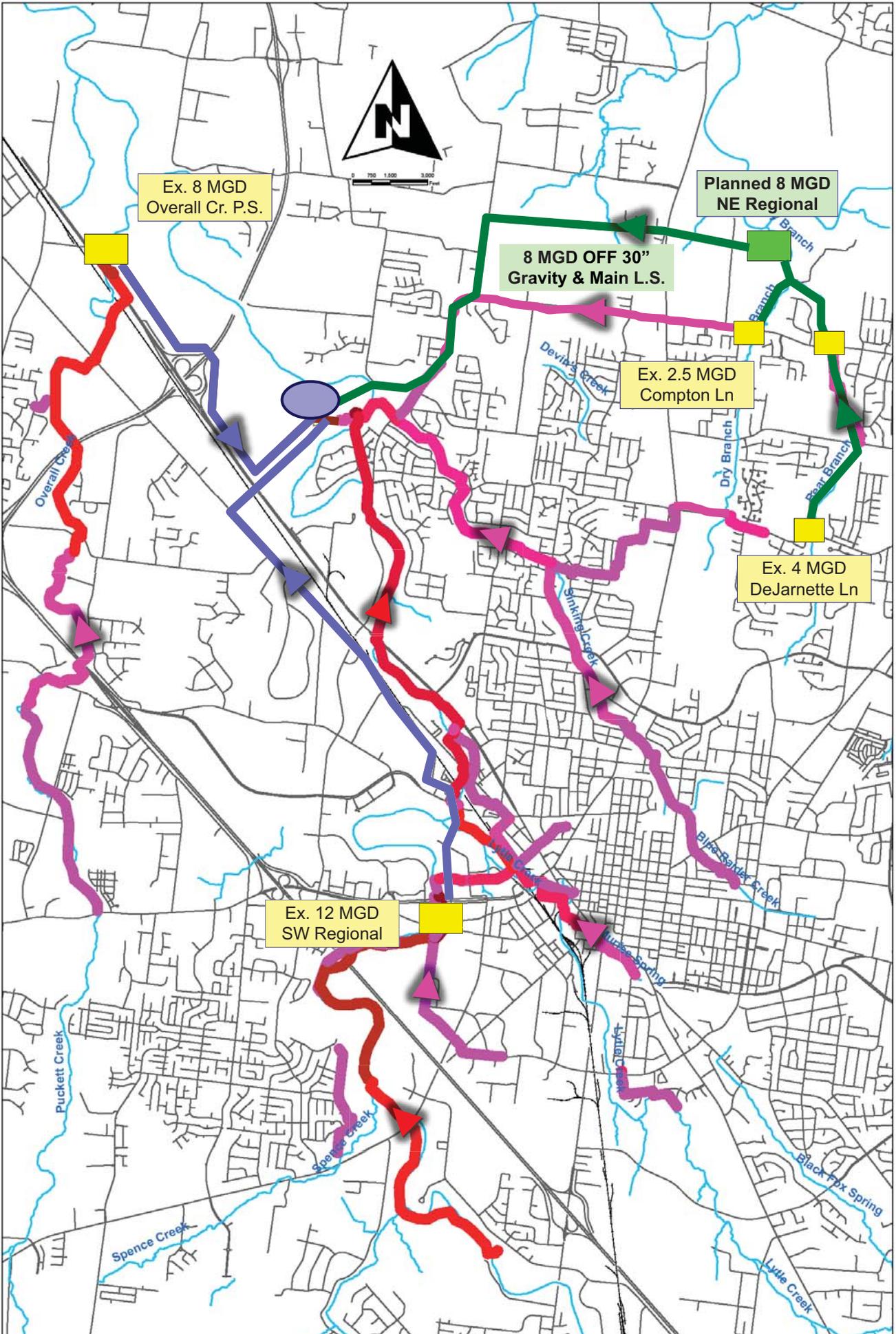
Stormwater Infrastructure

	Aug	YTD	Total
Junction Boxes	100	446	17,022
Headwalls	27	182	7,036
Ponds	2	26	543
Gravity Mains	15,496.41 ft	61,381.41 ft	711.12 miles
Weirs	2	18	331
WQ Units	0	4	116
Underground Storage	0	0	30

Stream scorecard

Required biological sampling in streams impaired because of nutrients or sediment/siltation





**MURFREESBORO WATER RESOURCES DEPARTMENT
OPERATING REVENUES AND EXPENDITURES
TWO MONTHS ENDED AUGUST 31, 2020**

	YTD ACTUAL	ANNUAL BUDGET	% TO BUDGET
Operating Revenues			
Water Revenue	\$ 2,993,874	\$ 16,510,000	18.1%
Repurified Revenue	\$ 8,388	\$ 29,000	28.9%
Wastewater Revenue	\$ 4,872,800	\$ 30,928,000	15.8%
Other Income	\$ 66,147	\$ 349,000	19.0%
Total Operating Revenues	\$ 7,941,209	\$ 47,816,000	16.6%
Water Operating Expenses	\$ 1,731,200	\$ 11,437,160	15.1%
Wastewater Operating Expenses	\$ 1,916,805	\$ 12,921,140	14.8%
Total Operating Expenses	\$ 3,648,005	\$ 24,358,300	15.0%
Net Earnings from Operations	\$ 4,293,205	\$ 23,457,700	18.3%

	YTD ACTUAL	ANNUAL BUDGET	% TO BUDGET
WATER REVENUES			
Metered Water	\$ 2,699,667	\$ 15,100,000	17.9%
Water Adjustments	\$ (1,757)	\$ (26,000)	6.8%
Private Fire Protection	\$ 18,977	\$ 112,000	16.9%
Service Initiation Fees	\$ 53,335	\$ 230,000	23.2%
Late Fees	\$ 154,983	\$ 675,000	23.0%
Non-Payment Fees	\$ 17,385	\$ 175,000	9.9%
Returned Payment Fees	\$ 660	\$ 8,000	8.3%
Cross Connection	\$ 50,625	\$ 200,000	25.3%
Enernoc	\$ -	\$ 36,000	0.0%
Miscellaneous	\$ -	\$ -	
TOTAL WATER REVENUES	\$ 2,993,874	\$ 16,510,000	18.1%

REPURIFIED REVENUES			
Repurified Revenue	\$ 8,388	\$ 29,000	28.9%
TOTAL REPURIFIED REVENUES	\$ 8,388	\$ 29,000	28.9%

WASTEWATER REVENUES			
Enernoc	\$ -	\$ 10,000	0.0%
Sewer Charges	\$ 4,840,329	\$ 30,500,000	15.9%
Sewer Adjustments	\$ (25,454)	\$ (100,000)	25.5%
Surveillance	\$ 6,384	\$ 38,000	16.8%
Sampler	\$ 3,000	\$ 18,000	16.7%
BOD	\$ 22,997	\$ 275,000	8.4%
Amonia	\$ 1,299	\$ 90,000	1.4%
Septage Charges	\$ 21,350	\$ 90,000	23.7%
STEP Revenue	\$ 2,895	\$ 7,000	41.4%
TOTAL SEWER REVENUES	\$ 4,872,800	\$ 30,928,000	15.8%

OTHER INCOME			
Interest Earnings	\$ 26,804	\$ 150,000	17.9%
Inspections	\$ 36,971	\$ 145,000	25.5%
Miscellaneous	\$ 2,373	\$ 54,000	4.4%
TOTAL OTHER INCOME	\$ 66,147	\$ 349,000	19.0%

**MURFREESBORO WATER RESOURCES DEPARTMENT
 OPERATING REVENUES AND EXPENDITURES
 TWO MONTHS ENDED AUGUST 31, 2020**

	YTD ACTUAL	ANNUAL BUDGET	% TO BUDGET
Water Operating Expenses			
Water Source	\$ 21,208	\$ 227,500	9.3%
Water Treatment	\$ 639,953	\$ 4,157,600	15.4%
Water Storage	\$ 3,373	\$ 47,300	7.1%
Water Distribution	\$ 245,355	\$ 1,782,300	13.8%
Cross Connection	\$ 53,140	\$ 340,800	15.6%
Water Plant Administration	\$ 172,176	\$ 1,003,400	17.2%
AMI Field Services	\$ 129,476	\$ 931,900	13.9%
O&M Admin Allocation (40%)	\$ 41,526	\$ 235,600	17.6%
Customer Service Allocation (50%)	\$ 109,498	\$ 676,100	16.2%
Engineering Allocation (40%)	\$ 70,752	\$ 466,880	15.2%
Field Inspection Allocation (25%)	\$ 21,500	\$ 127,900	16.8%
Admin Allocation (40%)	\$ 223,243	\$ 1,439,880	15.5%
Total Water Operating Expenses	\$ 1,731,200	\$ 11,437,160	15.1%
Wastewater Operating Expenses			
Wastewater Collections	\$ 323,514	\$ 2,203,400	14.7%
Wastewater Rehab	\$ 20,564	\$ 162,000	12.7%
Wastewater Pump Stations	\$ 144,076	\$ 916,500	15.7%
Wastewater Industrial Surveillance	\$ 49,951	\$ 327,300	15.3%
Wastewater House Services	\$ 2,876	\$ -	
Wastewater Treatment	\$ 442,241	\$ 2,924,000	15.1%
Wastewater Disposal	\$ 94,336	\$ 685,100	13.8%
WRRF Administration	\$ 126,961	\$ 931,500	13.6%
STEP System	\$ 453	\$ 24,000	1.9%
Repurified Treatment	\$ -	\$ 121,000	0.0%
Repurified Distribution	\$ 1,024	\$ 30,500	3.4%
Repurified Disposal	\$ 33,530	\$ 322,500	10.4%
O&M Admin Allocation (60%)	\$ 62,289	\$ 353,400	17.6%
Customer Service Allocation (50%)	\$ 109,498	\$ 676,100	16.2%
Engineering Allocation (60%)	\$ 106,128	\$ 700,320	15.2%
Field Inspection Allocation (75%)	\$ 64,499	\$ 383,700	16.8%
Admin Allocation (60%)	\$ 334,865	\$ 2,159,820	15.5%
Total Sewer Operating Expenses	\$ 1,916,805	\$ 12,921,140	14.8%

**MURFREESBORO WATER RESOURCES DEPARTMENT
 OPERATING REVENUES AND EXPENDITURES
 TWO MONTHS ENDED AUGUST 31, 2020**

SUMMARY OF NET TAP FEES	YTD ACTUAL	ANNUAL BUDGET	% TO BUDGET
Water Taps/Reserves	\$ 181,988	\$ 450,000	40%
Sewer Taps/Reserves	\$ 984,729	\$ 5,300,000	19%
Special Assessment Districts	\$ 266,575	\$ 2,000,000	13%
	<u>\$ 1,433,292</u>	<u>\$ 7,750,000</u>	<u>18%</u>

DEBT SERVICE	YTD ACTUAL	ANNUAL BUDGET	% TO BUDGET
Principal	\$ 444,152	\$ 11,860,200	4%
Interest	\$ 96,472	\$ 1,736,700	6%
	<u>\$ 540,624</u>	<u>\$ 13,596,900</u>	<u>4%</u>

Debt Coverage Ratio	YTD ACTUAL	ANNUAL BUDGET	% TO BUDGET
Operating Net Earnings	\$ 4,293,205	\$ 23,457,700	18%
Debt Service	\$ 540,624	\$ 13,596,900	4%
	7.94	1.73	