

**BOARD OF THE METROPOLITAN SEWERAGE DISTRICT**  
**October 19, 2022**

**1. Call to Order and Roll Call:**

The regular monthly meeting of the Metropolitan Sewerage District Board was held in the Boardroom of MSD's Administration Building at 2:00 pm, Wednesday, October 19, 2022. Chairman Vebaun presided with the following members present: Bryson, Dearth, Kelly, Lapsley, Manheimer, Pelly, Pennington, Pressley, Watts, Whitesides and Wisler. Ashley and Franklin were absent.

Others present were William Clarke, General Counsel; Forrest Westall, McGill Associates; Tom Hartye, Hunter Carson, Scott Powell, Mike Stamey, Ken Stines, Spencer Nay and Pam Nolan, MSD.

**2. Inquiry as to Conflict of Interest:**

Mr. VeHaun asked if there were any conflicts of interest with the agenda items. No conflicts were reported.

**3. Approval of Minutes of the September 21, 2022 Board Meeting:**

Mr. VeHaun asked if there were any changes to the Minutes of the September 21, 2022 Board Meeting. Mr. Watts moved for approval of the minutes as presented. Mr. Whitesides seconded the motion. Voice vote in favor of the motion was unanimous.

**4. Discussion and Adjustment of Agenda: None.**

**5. Introduction of Guests: None.**

**6. Informal Discussion and Public Comment: None.**

**7. Report of General Manager:**

Mr. Hartye reported that on the Agenda is an item for engineering services to perform a conditional assessment on MSD's Hydroelectric Facility and also an item for replacing the heat exchanger which is adjunct to the incinerator. Mr. Hartye then turned the meeting over to MSD's Engineering Director, Hunter Carson, to give a presentation on these items.

Mr. Carson reported that he would show some slides and give a little bit of history about the Hydroelectric Plant here at MSD. It was originally constructed in 1904 by the W.T. Weaver Power Company. The W.T. Weaver Power Company operated the facility for approximately 18 years before they turned ownership over to Carolina Power & Light Company, who ran it for roughly forty years. MSD purchased the dam, flume, and powerhouse in the late 1960's but did not operate it until the late 1980's. He presented a slide from 1982, prior to MSD's rehabilitation project in 1984. In 1984, MSD rehabilitated the facility with new intake structure, new concrete flume, reconstructed powerhouse and installed three new hydraulic turbines. He presented slides of the existing powerhouse being dismantled, and the rebuilding of the flume wall, which is about 2,800 LF in length, 18 feet tall and about 18 feet thick at the base. The new intake facility was also shown. On the upstream side of the intake are the gates where the river water enters the flume, and the gates

allow us to isolate the flume to dewater it if need be. He presented slides of the new hydraulic turbines which are about 18-20 feet in length. Each one of those is capable of generating 850kW of power. MSD can generate up to 2.5MW of clean renewable energy with the hydro which offsets the electricity that we purchase from Duke Energy by \$300,000-\$600,000 per year. That range is based on river flow and how many turbines are operating throughout the year. One of the turbines is “variable pitch” so we have the ability to change the pitch, or angle, of the impeller which enables it to be operated at low flow conditions. MSD has to maintain a minimum level over the dam for downstream flow conditions to maintain aquatic habitat, which is part of our Federal Energy Regulatory Commission (FERC) Permit in addition to US Fish and Wildlife. He presented slides of the existing powerhouse, flume and “tail race” which is the downstream. Some of the original stone masonry work was left from the early 1900’s construction. Mr. Carson pointed out a photo where it appeared the facility was generating power due to water leaving the tail race. He stated that they are having trouble with some of the isolating gates. For about four or five years there has been trouble closing one of the gates. He stated that is one of the issues with the facility and the reason for the condition assessment. He presented a slide showing the inside of the facility showing two of the three turbines. The turbines are enclosed in blue “turtle shells” and then there is a gear box and the generator. The slide also shows a turbine with the turtle shell removed and he described how they work. He presented slides of the existing 13’ dam and intake gates. The dam is considered a “low head” dam due to its height. He presented a recent aerial video that shows the entire process. Mr. Hartye pointed out that the wall was major construction, it is 18’ and taller than the dam and runs 2,800 feet all the way down. It holds the water up so that you have that energy once you get to the powerhouse. He also pointed out the plant and the fact that there is not a lot of room between the treatment plant, Riverside Drive, the flume, and the river. Mr. Lapsley stated that you would probably never get a permit from the Corps of Engineers today to build that wall.

Mr. Carson stated that another item on the agenda is the purchase of a new Heat Exchanger for the Incinerator. He presented slides and stated MSD went through this process in 2015. MSD has a fluidizing bed incinerator that has gasses that leave it upwards of 1800°F. Those gasses enter through the top of the heat exchanger and go through tubes that are incorporated inside of the heat exchanger. At the same time, we are pumping in ambient air. As those two gases and air cross each other we recover approximately 1200°F of waste heat. We are able to pump that 1200°F pre-heated air back into the incinerator and save money on natural gas. The units have a useful life of about 5-8 years, and we are right at that threshold. The units are about 55,000 pounds so it does require a sizeable crane. There is an access hatch in the roof of the building to remove and replace the units.

Mr. Kelly asked what there was to keep fish and other wildlife from being drawn into the turbines. Mr. Carson stated that the original construction included a fish ladder which allowed the fish to swim away from the turbines and up and over the dam, but it is no longer in service. The bar screens in front of the intake gates have approximately 2-inches or more spacing. He stated that he didn’t think there was anything that physically keeps fish out. Mr. Stines stated that there is not. Ms. Manheimer referred to the American Rivers Study and that MSD was being asked

to consider removing this infrastructure. She asked if that would be looked into and would the pros and cons and costs be considered. She stated that is something that is happening around the country and is it becoming a trend to remove these dams. Mr. Hartye stated that the American Rivers folks did approach MSD, and it was brought to this Board. They want to perform a feasibility study. They will pay for the study. Mr. Hartye stated that Mr. Westall, Mr. Carson, Mr. Clarke, and he met with them. MSD will monitor their study and provide them with the information to perform their study. They will bring it back to MSD and this Board and we can review the pros and cons. The number one thing they are weighing is the environmental aspect because right now we are eliminating greenhouse gases and our carbon footprint by half at the treatment plant which is significant. There is the environmental aspect of that vs. the fish migration. Then you have the customers saving between \$300,000-\$600,000 a year on the power costs. They will have to look at all of that and come back with a case showing that this is in the best interest of everyone. MSD will have a memorandum of understanding with American Rivers which will be shared with this Board once it is complete and executed. That will just state that they are going to conduct the study and MSD will provide them with information. That will probably take six months to a year. This is predicated on funding that they are going to get from the State for the study. The overall picture is that there was \$800 Million in the last Infrastructure Bill for these types of things across the Country. Ms. Manheimer asked if that was just the study or to perform the work. Mr. Hartye stated yes, to do the work also. This Hydroelectric Power project presented today was on our docket before American Rivers came to us, which was about 6 months ago. We have been operating the hydro facility for a long time and wanted to give the Board this background regardless of what happens with the American Rivers study. Mr. Westall added that, in relation to Ms. Manheimer's question regarding how many of these are being removed, the vast majority are old, abandoned mill dams. They have taken a huge number out. There are a few active dams that are still generating electricity, but they are all case and site specific depending upon revenue, etc. It is green energy as opposed to having to purchase it through some other route. There are a lot of questions that have to be evaluated and those are all in the feasibility study scope of work. Ms. Wisler asked if MSD was thinking about re-instating the fish ladder. Mr. Westall stated that he anticipates that they will come back with recommendations that could include that. The fish ladder didn't prevent the fish from getting in. This is a facility that has been permitted for a long period of time. The Federal Energy Regulatory Commission (FERC) license didn't require any kind of screening or anything, but that issue will be evaluated, how much impingement is there on the wildlife and how much effect that has on the overall river. You have to look upstream and downstream relative to the ecology of the river. Mr. Hartye stated to keep in mind that there are two dams in Marshall too. Mr. Clarke added that there are a lot of things to consider.

Mr. Hartye reported that MSD received a call from Christine Belz at 158 Waightstill Drive yesterday. Thanks to Billy Cantrell, Grayson Hensley, and all the crew. Thanks as well to McKinley Hensley, Josh Mathews, Ronnie Buckner, Dakota Weaver, Jimmy Brooks.

Mr. Hartye reported that the next Regular Board Meeting will be held on November 16<sup>th</sup> at 2 pm. The October Right of Way Committee has been cancelled. There will be a combined Right of Way/Planning Committee on November 2<sup>nd</sup> at 9

am. This combined committee meeting will discuss current MSD policies regarding sewer system expansion.

**8. Consolidated Motion Agenda:**

**a. Consideration of Bids – Bent Tree Road Rehabilitation**

Mr. Hartye reported that this project is located outside of downtown Asheville, just east of the Grove Park Inn and consists of approximately 1,644 LF of 8-inch PVC. The existing 6-inch and 4-inch clay and ductile iron lines are undersized and in poor condition. The contract was advertised and four bids were received on September 22, 2022 in the following amounts: Hyatt Pipeline, LLC in the amount of \$1,147,734.00 (This bid was rejected due to not submitting the proposal form); Moore & Son Site Contractors in the amount of \$1,110,305.00; T.P. Howard's Plumbing Co., Inc. in the amount of \$1,050,000.00 and Terry Brothers Construction Company in the amount of \$980,781.00. The apparent low bidder is Terry Brothers Construction Company in the amount of \$980,781.00. Terry Brothers has extensive experience with District rehabilitation projects and continues to provide excellent workmanship. The original Construction Budget for this project was \$800,000.00. The bids exceeded the construction budget due to a late design change in the pipe material. The pipe material change to PVC is due to DIP shortages and long lead times (~year). The PVC pipe requires three feet of cover which increased the trench depth and anticipated rock removal by an additional two feet. Sufficient funds are available in contingency. Staff recommends award of this contract to Terry Brothers Construction Company in the amount of \$980,781.00, subject to review and approval by District Counsel.

**b. Consideration of Bids for Equipment Procurement: Incinerator Heat Exchanger Replacement:**

Mr. Hartye reported that the Incinerator Heat Exchanger is located at the Water Reclamation Facility. The unit was replaced in 2015 as part of the incinerator emissions upgrade project and needs to be replaced now. The District is pre-purchasing the heat exchanger due to long lead times of approximately one year for fabrication. The purchase was advertised and equipment proposals were solicited from three manufacturers. Only one proposal was received from Wabtec Components, LLC in the amount of \$1,175,370.00. The bid price includes stainless steel inlet and outlet plenums to prevent against corrosion. There will be a partial payment made this year. Also attached is a Capital Project Ordinance for the entire project since it is a multi-year project. The total budget for this project is \$1,875,000.00. Staff recommends that the District procure the specified heat exchanger with stainless steel plenums as manufactured by Wabtec Components (formerly Thermal Transfer Corp., the manufacturer of the existing heat exchanger) in the amount of \$1,175,370.00.

**c. Consideration of Contract Engineering Services – Hydroelectric Power Plant Rehabilitation – Conditional Assessment:**

Mr. Hartye reported that in accordance with general statutes, MSD advertised a Request for Qualifications for a Hydroelectric Facility Conditional Assessment. The study will include the evaluation of all structural and generating components, and a cost/benefit analysis of recommended improvements. These will be included in MSD's 10-year Capital Improvement Program. In July 2022, MSD received responses from four firms as follows: Geosyntec Consultants, Inc., Hatch, Turbine Pros, and Clifton Science and Engineering LLC. Staff's selection committee interviewed a shortlist of firms and carefully considered the various strengths that each offered. Ultimately, Geosyntec was chosen as the most qualified firm for this project. Geosyntec has a history of performing dam inspections of all sizes throughout the country. They will team with American Hydro, a global firm specializing in hydropower solutions and turbine services to inspect the powerhouse generating components. Geosyntec's initial bid was \$196,000.00 and included an underwater structural survey. Staff determined that portions of this work can be completed without the use of underwater technology by draining the facilities during low flow periods when it's not being used. Removing this task reduced Geosyntec's fee to \$128,000.00. The FY 22-23 budget for this project is \$200,000.00. Staff recommends the District enter into an engineering services contract with Geosyntec in the amount of \$128,000.00, subject to review and approval by District Counsel.

**d. Consideration of Developer Constructed Sewer Systems – Fairview Meadows; Laurelwood Village; The Ramble Block "M"; Hamrick Farms Phase 2:**

Mr. Hartye reported that the Fairview Meadows project is located off Reeds Creek Road in Buncombe County and included extending approximately 1,450 linear feet of 8-inch public gravity sewer to serve 42 homes in this residential development.

Mr. Hartye reported that the Laurelwood Village project is located off Ledbetter Road in Buncombe County and included extending approximately 920 linear feet of 8-inch public gravity sewer to serve the 31 homes in this residential development.

Mr. Hartye reported that the Ramble Block "M" project is located off Emerald Necklace Drive in Buncombe County and included extending approximately 2,880 linear feet of 8-inch public gravity sewer to serve 16 homes in this phase of this residential development.

Mr. Hartye reported that the Hamrick Farms Phase 2 project is located off of Lower Edgewood Road in the City of Asheville and included extending approximately 1,244 linear feet of 8-inch public gravity sewer to serve 48 townhomes in this residential development.

Staff recommends acceptance of the aforementioned developer constructed sewer systems. All MSD requirements have been met.

**e. Consideration of Budget Amendment of Fleet Replacement:**

Mr. Powell reported that in FY 2022, the Board approved the purchase of four vehicles during the budget process. Due to the impact of COVID-19 on supply chains, the chassis has been delayed until October/November of 2022. As such, Staff recommends amending the Fleet and Heavy Equipment Fund in the amount of \$200,000.00. This amount will cover expenditures which were appropriated last year.

**f. Cash Commitment Investment Report – Month ended August, 2022:**

Mr. Powell reported that Page 56 presents the makeup of the District's Investment Portfolio. There has not been a significant change in the makeup of the portfolio from the prior month. Page 57 presents the MSD Investment Manager's report as of the month of August. The weighted average maturity of the investment portfolio is 99 days and the yield to maturity is 2.27%. Page 58 presents the analysis of the District's Cash Receipts. Monthly domestic sewer revenue is considered reasonable based on historical trends. Monthly and YTD Industrial Sewer Revenue as well as Facility and Tap Fees are considered reasonable based on historical trends. Page 59 presents the analysis of the District's Expenditures. Monthly and YTD expenditures are considered reasonable based on historical trends. Page 60 presents the District's Variable Debt Service Report. The 2008A Series Bond is performing at budgeted expectations. As of the end of September, both issues have saved the District rate payers approximately \$7.2 million in debt service since April of 2008. Mr. Kelly stated that he asked several times over the years but would like to know at this time what it would cost to terminate if the costs keep going down. Mr. Powell stated that it is in comparison to where interest rates are and what the swap is performing at. Currently the swap is at 3.291% and we have a 10-year horizon on the remaining portion of that debt. As we live in inflationary times, a current 10-year T bill is at roughly 4%. We could terminate the swap but we would be paying a little more than 4% for the remaining portion of those years. If the swap were at zero we could terminate and then go variable rate for the remaining portion of those years. Currently the reset rate on those bonds are roughly 2.4%. This would be an item we could ask our Investment Advisors to take a look at. If we go all in on a variable rate, we would pay roughly 2.8% but you are variable. We can mitigate the exposure with the investment portfolio. As this gets closer to zero and depending upon how our interest rates are, Staff might be back to this Board to consider termination of the swap. The only negative is sending the wrong signal to our credit rating agencies. Staff would want to have that dialog with them to make certain that it doesn't send the wrong signal to the market. When we went into the interest rate swaps and variable debt there were a lot of organizations that did not manage those structures well and put their rate payers in harms way. We are always looking at this on a monthly basis and looking at opportunities when they are presented. The good thing is that we are going to debt market as it is stated right now in 2025. We might look at it before that time period. There might be an opportunity that we can wrap it up into a new deal. Right now the variable portion of our total debt portfolio is 28% so doing anything with the swap right now might send the wrong signal to the rating agencies.

Minutes  
October 19, 2022  
Page Seven

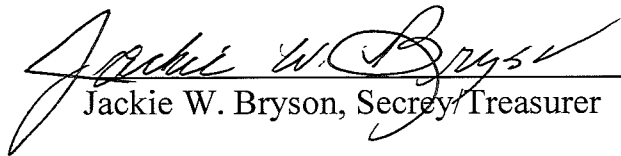
With no further discussion, Mr. VeHaun called for a motion to approve the Consolidated Motion Agenda. Mr. Dearth moved, Ms. Wisler seconded the motion. Roll call vote was as follows: 12 ayes; 0 Nays.

9. **Old Business:** None.

10. **New Business:** None.

11. **Adjournment:**

With no further business, Mr. VeHaun called for adjournment at 2:36 pm.

  
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Jackie W. Bryson, Secretary/Treasurer



# Metropolitan Sewerage District

Regular Board Meeting

October 19, 2022, 2 pm

	Agenda Item	Presenter
	Call to Order and Roll Call	VeHaun
	01. Inquiry as to Conflict of Interest	VeHaun
	02. <a href="#">Approval of Minutes of the September 21, 2022 Board Meeting</a>	VeHaun
	03. Discussion and Adjustment of Agenda	VeHaun
	04. Introduction of Guests	VeHaun
	05. Informal Discussion and Public Comment	VeHaun
	06. <a href="#">Report of General Manager</a>	Hartye
	07. Consolidated Motion Agenda	Hartye
	a. Consideration of Bids – <a href="#">Bent Tree Road GSR</a>	
	b. Consideration of Bids for Equipment Procurement – <a href="#">Incinerator Heat Exchanger Replacement</a>	
	c. Consideration of Contract for Engineering Services – <a href="#">Hydroelectric Power Plant Rehabilitation-Conditional Assessment</a>	
	d. Consideration of Developer Constructed Sewer Systems – <a href="#">Fairview Meadows; Laurelwood Village; The Ramble Block “M”; Hamrick Farms Ph. 2</a>	
	e. <a href="#">Consideration of Budget Amendment of Fleet Replacement</a>	Powell
	f. <a href="#">Cash Commitment/Investment Report-Month ended August, 2022</a>	Powell
	08. Old Business	VeHaun
	09. New Business:	VeHaun
	10. Adjournment: (Next Meeting 11/16/22)	VeHaun
	<a href="#">STATUS REPORTS</a>	



**BOARD OF THE METROPOLITAN SEWERAGE DISTRICT**  
**September 21, 2022**

**1. Call to Order and Roll Call:**

The regular monthly meeting of the Metropolitan Sewerage District Board was held in the Boardroom of MSD's Administration Building at 2:00 pm, Wednesday, September 21, 2022. Chairman Vebaun presided with the following members present: Bryson, Dearth, Lapsley, Pennington, Pressley, Watts, Whitesides and Wisler. Ashley, Franklin, Kelly, Manheimer and Pelly were absent.

Others present were William Clarke, General Counsel; Joe Martin, Woodfin Sanitary Water & Sewer District; Alan Wheeler, Builder; Kevin Hackett, Builder, Barry Bialik, Builder and Tom Hartye, Hunter Carson, Scott Powell, Angel Banks, Kevin Johnson, Mike Stamey, Ken Stines, Pam Thomas, Spencer Nay and Pam Nolan, MSD.

**2. Inquiry as to Conflict of Interest:**

Mr. VeHaun asked if there were any conflicts of interest with the agenda items. No conflicts were reported.

**3. Approval of Minutes of the July 20, 2022 Board Meeting:**

Mr. VeHaun asked if there were any changes to the Minutes of the July 20, 2022 Board Meeting. Mr. Whitesides moved for approval of the minutes as presented. Mr. Watts seconded the motion. Voice vote in favor of the motion was unanimous.

**4. Discussion and Adjustment of Agenda: None.**

**5. Introduction of Guests:** Mr. VeHaun welcomed Barry Bialik, Kevin Hackett and Alan Wheeler.

**6. Informal Discussion and Public Comment:**

Barry Bialik stated that he is a local contractor who builds compact cottages and affordable housing, is Chair of Asheville Affordable Housing Advisory Committee and owns the Thirsty Monk. He first wanted to discuss rate changes that happened in July. He read the minutes of past meetings, and it was discussed, not as a rate change, but there were some wording adjustments that make it a very significant rate change. As a volume home builder with twenty-five active permits with the City of Asheville, in the past there was a standard fee called a road cut fee of approximately \$2,300. When contractors budget for a tap they know what the facility fees, tap fees, and road cut fees will be. What happened in July is that the wording changed to say that if there is a tap that needs to be put in the street or could be complicated, instead of having a standard road cut fee, an engineer's estimate is created. He stated that he is on the Government of Affairs Committee for the Homebuilders Association, an active builder, and Chair the Affordable Housing Committee, and didn't hear anything about this change. The most recent sewer availability application he submitted was standard, a house on Charlotte Street, with the tap going in the street. For this one single house the tap fee came in at \$15,000. The breakdown came in as the standard facility fee of \$2,836. Instead of what's expected as the road cut fee, accompanying it was an estimate of what everything

would be which totaled \$12,000 plus the facility fee. One single house is \$15,000 for sewer which is not anything they would've known to budget. Another recent one he would have expected to be a standard \$6,000 in the past with the road cut fee, came in at \$7,800. Mr. Bialik stated that he would call this a significant fee hike, but when he read the minutes, he didn't see it discussed as a fee hike. He saw it discussed as a minor wording change that instead of a road cut fee, MSD now reserves the right to say these taps need to be done by a contractor or they will prepare an engineer's estimate. He stated that he wanted to bring this to the Board's attention and see what can be done to open up this discussion because this is a significant change, approximately 10% of his construction budget. He added that anyone he had mentioned this to, from the Home Builder's Association to large and small contractors, no one seems aware so he stated he didn't think it was publicly noted in a way that such a change should have been.

Mr. Bialik stated that for his second discussion he would put on his Affordable Housing Advisory hat. They have a sub task force called "build" and at each meeting they invite a different discipline to attend. Kevin Johnson has attended one of these meetings. This task force identifies all of the things that make housing construction more expensive. One of the big things that came up in their conversations is that MSD, by Charter, is not allowed to extend their own sewer lines. He stated that they were shocked to hear that and asked around and clarified that it is not a State Law. Hendersonville can extend their own lines. MSD's Charter disallows itself from extending its own lines. This means that everything is on private developers to prepare, perform engineering, and take on expenses. He stated that he understands there is some cost sharing that can happen but in places that he has lived, from the Seattle area, zoning and sewer districts worked hand in hand. They would prepare zoning studies to determine what is the smallest amount they could run sewer lines to match with the zoning. He used the Emma area as an example. There is an affordable housing crisis. Emma has land available but the biggest reason it is not developed is because there are no sewer lines there. He stated that he would propose looking to the Charter because he believes it is outdated. He also proposed looking to see what others are doing and see how MSD could look at changing what they are doing. He stated that through the Affordable Housing Budget they would continue on the path with pushing for this Charter change. The City is contracting a new missing middle housing study and he knows that is one of the biggest things that they have identified to be reviewed. He stated that he knows they will continue to push for the Board to consider that Charter and to look at this major rate hike as he doesn't know if it was properly noted as a rate hike.

Mr. Hartye responded to Mr. Bialik's first item of discussion. There is a Planning & Development Status Report included in each month's Board package. This report shows activity going on in Planning & Development. There are approximately 4,500 services and units being installed by developers in active projects throughout the District, both residential and commercial and a little industrial. Then there are a small amount of scattered service connections, which is what he believes Mr. Bialik is talking about. These connections are primarily in Asheville that are in or adjacent to existing neighborhoods, existing mains for empty lots, failed services, or adding new units to existing lots that already have houses due to increased zoning density. There are 2 types of these services. There are the "same side service" which are in the back easement or front yard that are shorter and just involve digging dirt to install and are

fairly easy. The fee for MSD crews to make the typical “same side” connection has not changed at all. It is a flat \$1,300 fee. We can still do all of these since it does not involve pulling off a whole full-fledged crew or involving a subcontractor. On the other side, there are the more complicated and involved ones that involve pavement cuts or boring underneath pavement and would involve pulling crews off of our main focus which is to rehabilitate and replace the system. This was in the previous policy and is still the same. MSD has always reserved the right to require any new services to be completed by the developer or contractor. MSD would get involved in these connections based upon our labor and time availability. In the last few years, both supply chain issues and labor issues have diminished MSD’s involvement in complex service connections for new development. MSD does not want to pull crews off of rehabilitation jobs, which is our main focus, to do work for a new development. We still do so to some extent and will notify the developer up front of how much and roughly how long it will be if developer is not in a hurry. MSD has an engineering inspector that goes out to review each connection to both advise how it is to be constructed and give an estimate of how much it might cost, and this is done free of charge. In reviewing these more complex connections with staff it became obvious that the costs to MSD for a long side service requiring pavement disturbance or boring were much higher than what was being charged (\$3,600 vs. current avg. \$6,525). These costs are also highly variable dependent on particular field conditions, anywhere from \$3,300 to \$15,774. With the rising costs, it became evident that our existing customers were subsidizing these more complex new development services. We changed the wording so that these more involved services were all at cost and we would do the up-front work of providing an estimate. MSD has always held that you can take it to a contractor. Now the service we are providing is an engineering estimate that tells you what it will cost, and you can wait for MSD provide the connection if we have the availability of crews or you can take the estimate to a contractor to see if you can negotiate a price. This was part of the fee/rate schedule and budget that was public noticed in mid-May on the website just like the increase to everyone’s sewer service charge. MSD honored any service requests that were made prior to July 1. After that point, when developers call in to inquire about sewer service to a property our Planning and Development Personnel let them know that we have to send an inspector out to investigate to determine how to connect and how much it would cost. They are then provided an estimate.

Mr. Hartye then responded to Mr. Bialik’s second item of discussion. As far as the Charter is concerned, he stated that approximately 20 years ago, Billy Clarke, himself and the then Chair of the Planning Committee, Steve Aceto, met with Martin Nesbitt and other Legislatures to discuss the ability to “special assess”. Special Assessment means that when you extend out into a new area, you put in whatever the infrastructure is, and you can assess those people (new customers) a proportionate share based on acreage, units, etc., of that cost. Then you don’t put that on the shoulders of the existing customers. MSD’s goal was to try to eliminate package plants, failing septic systems and that sort of thing to clean up streams. Although Mr. Nesbitt kind of agreed with what we were saying, he was concerned about MSD running sewer lines up “into the hollars” and trying to condemn land for development that wasn’t wanted. In about 2005, the death knell of this was the “Kelo vs. New London” case. The Supreme Court sided with the town to condemn one private owner for another private owner. This sent a backlash across the United

States, including here. We were actually trying to give up our tax status at that time if they would give us special assessment ability. MSD wanted this ability. In the next 10 years, he, Staff and Mr. Clarke and the Planning Committee went through a whole series of new contributions and partnerships with developers. There are new policies like 10- year up front revenues for failing septic systems, Affordable Housing Fee rebates of over 75%, Affordable Housing participation in their lines going to their developments up to \$50,000, and Revenue Sharing for any developer at 50% for 10 years. Another program is Developer to Developer reimbursement. If a Developer runs a line going to his development and another developer takes advantage of that line within the first 10 years, MSD will reimburse the original developer a proportionate share of what the new developer is going to use that line for. The MSD Master Plan is a big program that was just discussed in the last Right of Way Committee Meeting. Master Plan lines are laid out through our District in areas that are not yet served, in a logical way so that we ascertain and use gravity wherever we can. When a developer comes in and they want to develop a property, use to be a long time ago they would push and push and get a small pump station to get to MSD's system any way possible. That created a lot of problems. Now we are trying to apply some logic to the expansion of the system so when a developer comes in and they are in a basin and all they need for their development is an 8-inch gravity line and our Master Plan shows that to serve that particular basin they will ultimately need a 12-inch, we will require them to install the 12-inch and we will reimburse them for that 12-inch increased cost. In addition, right now our policy states that we will obtain rights of way and perform the engineering. There is a lot of participation in that type of thing. All of this is born out of the fact that we could not get a special assessment. At the last Right of Way Committee meeting there was discussion regarding the MSD Reimbursement Program and he stated that Ms. Banks could speak further on this issue. Mr. Hartye also suggested that if Mr. Bialik wanted to continue with that conversation, he should attend the next Right of Way Committee Meeting.

**7. Report of General Manager:**

Mr. Hartye reported that MSD received a letter from the Town of Mars Hill regarding the aid that MSD provided in their time of need. Thanks to Ken Stines and his Staff.

Mr. Hartye reported that MSD received the GFOA's Certificate of Achievement for Excellence in Financial Reporting for the FY 2021 CAFR. Thanks to Jody Germaine and Scott Powell.

Mr. Hartye reported that the next regular Board Meeting will be held on October 19<sup>th</sup> at 2 pm. The September Right of Way Committee Meeting has been cancelled. The next Right of Way Committee meeting will be held on October 26<sup>th</sup> at 9 am. He suggested that Mr. Bialik note the date for the Right of Way Committee Meeting.

**8. Report of Committees:**

**a. Right of Way Committee – August 24, 2022**

Ms. Banks reported that at the Right of Way Committee she and Hunter Carson presented for information purposes only, a very thorough and interesting discussion on current developer driven extension projects and the District's Policy for the extension of public sewers. There were discussions regarding the nature of timing impacts, staffing impacts, cost impacts and the possibility of litigation involved through condemnation action. This was brought to the Right of Way Committee first specifically because that Committee of this Board looks at, reviews, and advises on issues related to real estate, condemnations, and property acquisitions. Staff wanted to go over this conversation with them first and Staff is here today to answer any questions, come back to you with any information you may wish to see in light of the fact that this body, the full Board, may wish to look at the current extension policy and discuss it further, review it, keep it the same, or tweak it. The Minutes from that meeting are included in this Board package and she and Mr. Carson are here to answer any questions. She also stated if the Board would like to put some things together for Staff to review, they could then plan future discussions. Mr. Hartye added this issue may well involve the Planning Committee too. They just want this Board to be aware that these programs are available, and a lot of these programs are not taken advantage of. We don't have that many take advantage of the Revenue Sharing Program. The one that we do get a lot of participation in is the Affordable Housing. This may be a Planning Committee conversation as well. Mr. Pennington wasn't available for the previous conversation, but he feels there should be a Planning Committee conversation with Mr. Pennington included. Candler is a good example, when he mentioned before, the reason MSD was trying to get the special assessment early on was to do the same type of project that Candler presents right now. Eliminating three package plants and all of these failing septic tanks out there and cleaning up Hominy Creek, this would be a perfect situation for that. We will be looking to Mr. Pennington for guidance as far as Buncombe County Planning and how they relate. Mr. Pennington added that he thought that was a great point and it speaks a lot to some of the concerns Mr. Bialik brought up. The County will definitely be looking at infrastructure from wastewater but also from the potable water side as well. If we don't address it now, we are going to run out of options for land which is our scarcest resource. He stated that he also thinks it has an environmental benefit, Hominy Creek is impaired, and it flows into the French Broad River, so it has a multi-factor effect of doing a couple of different things. There will be more to come, they are in the Goals, Policies and Objectives phase and he will have a lot more to share. Mr. Dearth stated that whichever way you go in terms of prospective construction, there is no point in doing anything without it being on track, whatever the track is, with the various water systems. Mr. Hartye stated that, in general terms, water is a lot easier and cheaper to run because you can run it three feet under the ground, pretty much anywhere. Sewer has to be run on a grade so that we are always the limiting factor. A lot of times you will already have water. As is the case with Weaverville, you may not have or project enough water. Mr. Dearth stated that it is not only do you not have enough, but the policy states that we don't do prospective construction. That's not to say that's not the absolute right answer in all cases but whatever we're doing with water has to be in track with what you're doing with sewer. Mr. Hartye stated that MSD tries to coordinate

with the various member agencies and update our plan according to what you all are doing. Mr. Clarke stated that, from a policy perspective, when MSD took over all of the sewer lines in the 1990's, they were in a state of disrepair, so MSD has focused for a long time on fixing the existing system. That takes a long time and probably will take another 50-100 years. MSD's charter does not prohibit it from extending sewer lines. MSD has made a policy decision to fix the existing system and by fixing the existing system, has enabled a lot of development to occur with developers extending the sewer system. He stated that he realizes there are areas within the City of Asheville that, for whatever reason, do not have public sewer but that is another issue. Mr. VeHaun asked if there was any further discussion. There was none.

**9. Consolidated Motion Agenda:**

**a. Consideration of Bids – Toxaway Street Rehabilitation**

Mr. Hartye reported that this project is located in the Kenilworth area and consists of approximately 2,480 LF of 8-inch HDPE primarily installed via pipe bursting. The existing clay lines are undersized and in poor condition with multiple structural defects and heavy root intrusion which has resulted in major infiltration and inflow. The project was advertised and two bids were received on August 25<sup>th</sup>. The project was therefore readvertised, according to statutes, and two bids were again received on September 2, 2022 in the following amounts: Portland Utilities Construction Company in the amount of \$1,112,136.40; and Terry Brothers Construction Company in the amount of \$620,627.00. The apparent low bidder is Terry Brothers Construction Company in the amount of \$620,627.00. Terry Brothers has extensive experience with District rehabilitation projects and continue to provide excellent workmanship. The FY22-23 Construction Budget for this project is \$985,000.00.00. The bid amount is significantly lower than budgeted due to a design change from dig and replace to pipe bursting which reduced the need for asphalt restoration. Staff recommends award of this contract to Terry Brothers Construction Company in the amount of \$620,687.00, subject to review and approval by District Counsel.

**b. Consideration of Sole Source Procurement: Influent Pump Impeller Purchase:**

Mr. Hartye reported that the plant has three large influent pumps (each rated at 35 mgd) that lift wastewater received at the plant to the head of the treatment process. These pumps are very critical. Staff recently observed a significant reduction in pumping capacity of Influent Pump No. 2 and upon inspection discovered a hole in the impeller. The impeller was temporarily repaired but is in need of replacement. Given the criticality of these pumps, the purchase of two impellers is recommended; one to replace the failed impeller in Pump No. 2 and a second as a spare, particularly due to the long lead times faced. Given the unique nature of these pumps, a primary overriding concern is that each pump must be standardized with identical performance. Morris Pump is the original pump manufacturer and only manufacturer of the replacement impellers. Accordingly, a sole source purchase is required. The cost for the two pump impellers is

\$154,720.00, with a production and delivery time of 22 weeks. MSD personnel will be utilized for pump impeller replacement after delivery of the units. The FY22-23 budget for this project is \$160,000.00. Staff recommends that the District sole source procure two (2) Morris Pump Model 125MF-2AB impellers in the amount of \$154,720.00 and recommends this sole source due to the fact that standardization, performance, and compatibility with the existing pump is a primary overriding concern.

**c. Consideration to Construct without Easement or Condemnation – Elk Mountain Place:**

Mr. Hartye reported that the Right of Way Committee recommended authority to proceed with construction without an easement or condemnation at this time.

**d. Consideration of Developer Constructed Sewer Systems – Brown Avenue; Padgettown Phase 2; Reserve at Gashes Creek; 20 Winding Road; Amarn-Clayton Road; Fields Jaguar; Olivette Phase 1B; Sycamore Cove Subdivision:**

Mr. Hartye reported that the Brown Avenue project is located in the Town of Woodfin and included extending approximately 58 linear feet of 8-inch public gravity sewer to serve 3 homes in this residential development.

Mr. Hartye reported that the Padgettown Phase 2 project is located off Avena Road in the Town of Black Mountain and included extending approximately 1,189 linear feet of 8-inch public gravity sewer to serve the 36 homes in this phase of this residential development.

Mr. Hartye reported that the Reserve at Gashes Creek project is located along Charlotte Highway in Buncombe County and included relocating 525 linear feet of 12-inch public gravity sewer, abandoning approximately 485 linear feet of 8-inch public gravity sewer and extending approximately 1,495 linear feet of 8-inch public gravity sewer to serve 190 apartments and amenities for this residential apartment complex.

Mr. Hartye reported that the 20 Winding Road project is located between East Street and Winding Road in the City of Asheville and included extending approximately 222 linear feet of 8-inch public gravity sewer to serve 5 homes in this residential development.

Mr. Hartye reported that the Amarn-Clayton Road project is located off of Clayton Road in Buncombe County and included extending approximately 1,360 linear feet of 8-inch public gravity sewer to serve 20 homes in this residential development.

Mr. Hartye reported that the Fields Jaguar project is located off Long Shoals Road in Buncombe County and included relocating approximately 316 linear feet of 8-

inch public gravity sewer along with abandoning approximately 300 linear feet of public sewer to accommodate this commercial development.

Mr. Hartye reported that the Olivette Phase 1B project is located off River Run along the French Broad River in Buncombe County and included extending approximately 940 linear feet of 8-inch public gravity sewer to serve 11 homes in this residential development.

Mr. Hartye reported that the Sycamore Cove US 74A in Buncombe County and included extending approximately 1,080 linear feet of 8-inch public gravity sewer to serve 26 homes in this residential development.

Staff recommends acceptance of the aforementioned developer constructed sewer systems. All MSD requirements have been met.

**e. Cash Commitment Investment Report – Month ended July, 2022:**

Mr. Powell reported that Page 46 presents the makeup of the District's Investment Portfolio. Page 47 presents the MSD Investment Manager's report as of the month of July. The weighted average maturity of the investment portfolio is 70 days and the yield to maturity is 1.76%. Page 50 presents the District's Variable Debt Service Report. The 2008A Series Bond is performing at budgeted expectations. As of the end of August, the issues have saved the District rate payers approximately \$7.2 million in debt service.

**f. Fourth Quarter Budget to Actual Review – FY2022:**

Mr. Powell reported that Page 53 presents how the District has performed in relation to the Budget. Domestic and Industrial Revenue are above budgeted expectations. Staff believes Domestic User Fee variance will end up around 104% when June accounts receivable data is received from its Member Agencies in September. Facility and Tap Fees are above budgeted expectations. This is due to the District receiving an additional \$3.2 Million from various developments. Interest and miscellaneous income are above budgeted expectations. O&M expenditures are at 90.6% of budget. This amount may vary slightly from audited numbers due to final accruals. Bond principal and interest and other long-term obligations are at budgeted expectations. Capital Project Expenditures are at approximately 82% of budget. This reflects delays in three projects, Christian Creek being one of those due to Norfolk Southern right of way issues. All unexpended funds relocated to capital projects have been re-budgeted in the FY2023 Budget.

**g. Reimbursement Resolution for Bond Projects:**

Mr. Powell reported that to be in compliance with IRS Regulations concerning tax exempt financing, all expenditures made with non-MSD bond funds and to be reimbursed from MSD bond funds must be properly identified and authorized. The proposed reimbursement resolution identifies major projects intended to be solely or substantially financed by bonds anticipated to be issued in FY2025. Board approval is required to obtain the tax exemption of interest paid on MSD



bonds by authorizing reimbursement from bond proceeds of the expenditures for the attached project listing.

With no further discussion, Mr. VeHaun called for a motion to approve the Consolidated Motion Agenda. Ms. Wisler moved, Mr. Watts seconded the motion. Roll call vote was as follows: 9 ayes; 0 Nays.

**10. Old Business:**

Mr. VeHaun called for a motion to go into closed session to discuss the pending litigation of Nowak vs. MSD. Ms. Wisler moved, Mr. Pelly seconded the motion. Roll call vote was as follows: 9 ayes; 0 Nays.

**11. New Business:** None.

**12. Adjournment:**

With no further business, Mr. VeHaun called for adjournment at 3:10 pm.

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Jackie W. Bryson, Secrey/Treasurer



## MEMORANDUM

TO: MSD Board  
FROM: Thomas E. Hartye, P.E., General Manager  
DATE: October 14, 2022  
SUBJECT: Report from the General Manager

- MSD Hydroelectric Facility

MSD's Hydroelectric Facility and the Craggy Dam Reservoir were constructed in 1904 for electric generation by the W.T. Weaver Power Company. Since 1984 MSD has been operating this 2880 KW hydroelectric facility which basically saves our customers \$300,000 to 600,000 annually and reduces our carbon footprint for the Treatment plant by roughly half. On the agenda today is an item for Engineering services to perform a condition assessment of the facilities and to make recommendations for capital improvements. This study has been on our planning horizon for several years. Staff will show some slides of the facilities to familiarize the Board.

- Kudos

MSD received a call from Christene Belz with Keller Williams commending the crew that worked at 158 Waightstill Drive yesterday. She said the crew responded to sewer flooding a new home that Keller Williams had recently sold. She said they had amazing personalities, were very professional and found the problem right away that plumbers had been searching for several days. She, as well as the new homeowner, were very impressed. She wanted to give a shout out to Billy Cantrell, Grayson Hensley, and all the crew. She said they explained the problem and resolved the issue very quickly. The cleanout had been buried under the new driveway and rocks and gravel had stopped up the service line. Thanks as well to McKinley Hensley, Josh Mathews, Ronnie Buckner, Dakota Weaver, Jimmy Brooks.

- Board/Committee Meetings/Events

The next Regular Board Meeting will be held on November 16<sup>th</sup> at 2 pm. The October ROW Committee has been cancelled. There will be a combined ROW and Planning Committee on November 2<sup>nd</sup> at 9 am. The combined committee meeting will discuss current MSD policies regarding sewer system expansion.

# Metropolitan Sewerage District of Buncombe County

## BOARD ACTION ITEM

**BOARD MEETING DATE:** October 19, 2022

**SUBMITTED BY:** Tom Hartye, P.E. – General Manager

**PREPARED BY:** Hunter Carson, P.E. – Director of Engineering  
Darin Prosser, P.E. – Project Manager

**SUBJECT:** Consideration of Bids: Bent Tree Rd. Sanitary Sewer Rehabilitation Project, MSD Project No. 2016102

**BACKGROUND:** The Bent Tree Road project is located outside of downtown Asheville, just east of the Grove Park Inn. The project starts on Old Toll Road and turns northeast through residential properties on Bent Tree Road before ending on Crestwood Road. The project is approximately 1,654 LF of 8-inch PVC installed by dig and replace.

The existing lines are 6-inch and 4-inch clay and ductile iron that are undersized and in poor condition with multiple structure defects. These issues have resulted in major infiltration and inflow. This project will remove a ductile iron pipe that has been installed on top of the ground that is exposed to the environment. This project has a pipe rating of 60.

The contract was advertised, and four sealed bids were received on September 22, 2022, at 2:00pm in the following amounts:

<u>Contractor</u>	<u>Bid</u>
1) Hyatt Pipeline, LLC	\$1,147,734.00*
2) Moore & Son Site Contractors	\$1,110,305.00
3) T.P. Howard's Plumbing Co, Inc.	\$1,050,000.00
<b>4) Terry Brother Construction Co.</b>	<b>\$980,781.00</b>

\*Hyatt Pipeline's bid was rejected due to not submitting the proposal form.

The apparent low bidder is Terry Brothers Construction Company with a bid amount of \$980,781.00. Terry Brothers Construction Company has extensive experience with District rehabilitation projects and continues to provide excellent workmanship.

**FISCAL IMPACT:** The FY 22-23 construction budget for this project is \$800,000.00. The bids exceeded the construction budget due to a late design change in pipe material. The pipe material change to PVC is due to DIP shortages and long lead times (~1 yr). The PVC pipe requires three feet of cover which increased the trench depth and anticipated rock removal by an additional two feet. Sufficient funds are available in contingency.

**STAFF RECOMMENDATION:** Staff recommends award of this contract to Terry Brothers Construction Company, contingent upon review and approval by District Counsel.

**METROPOLITAN SEWERAGE DISTRICT OF BUNCOMBE COUNTY, NORTH CAROLINA**

**Bent Tree Road Sanitary Sewer Rehabilitation**

**Project No. 2016102**

**BID TABULATION**

**September 22, 2022**

<b>BIDDER</b>	<b>Bid Bond</b>	<b>MBE Form</b>	<b>Bid Forms (Proposal)</b>	<b>TOTAL BID AMOUNT</b>
Hyatt Pipeline, LLC Canton, NC	5%	2	No*	\$1,147,734.00
Moore & Son Site Contractors Mills River, NC	5%	1	Yes	\$1,110,305.00
T.P. Howard's Plumbing Company Fairview, NC	5%	1	Yes	\$1,050,000.00
<b>Terry Brothers Construction Company Leicester, NC</b>	5%	1	Yes	<b>\$980,781.00</b>

**APPARENT LOW BIDDER**

\* Hyatt Pipeline's bid is rejected because they did not submit the proposal form.

Darin Prosser, P.E.  
Project Engineer  
Metropolitan Sewerage District of  
Buncombe County, North Carolina



This is to certify that the bids tabulated herein were publicly opened and read aloud at 2:00 p.m. on the 22nd day of September, 2022, in the W.H. Mull Building at the Metropolitan Sewerage District of Buncombe County, Asheville, North Carolina, and that said bids were accompanied by acceptable bidders bonds in the amount of 5% of the bid.

**Metropolitan Sewerage District of Buncombe County, North Carolina  
CAPITAL IMPROVEMENT PROGRAM**

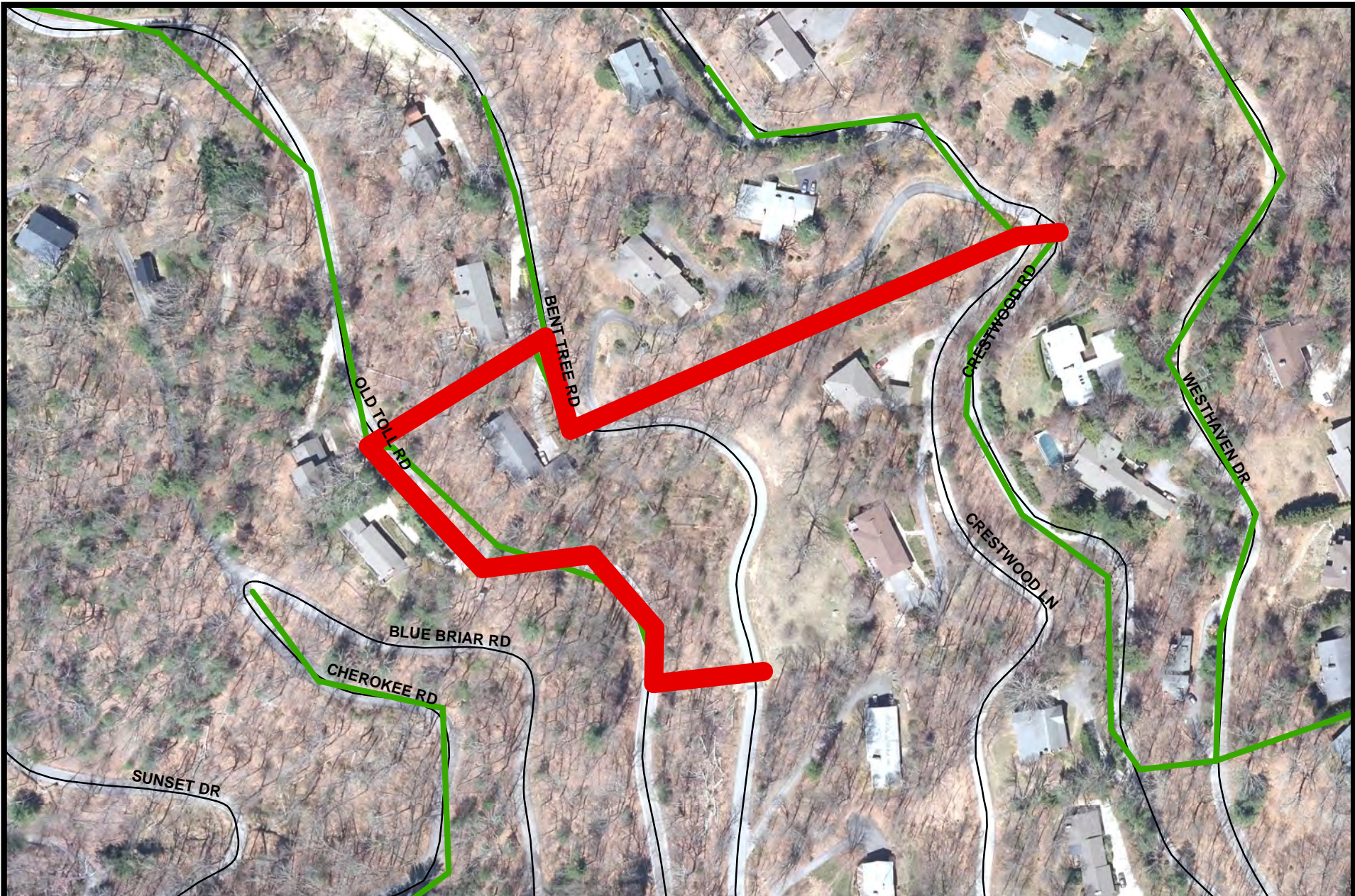
**BUDGET DATA SHEET - FY 2022 - 2023**

<b>PROJECT:</b> Bent Tree Road	<b>LOCATION:</b> Asheville
<b>TYPE:</b> General Sewer Rehab	<b>PIPE RATING:</b> 60
<b>PROJECT NO.:</b> 2016102	<b>TOTAL LF:</b> 1,654
<b>PROJECT BUDGET:</b> \$864,615.00	<b>PROJECT ORIGIN:</b> SSO's, Work Orders, Line Condition

DESCRIPTION	ESTIMATED PROJECT COST	TOTAL EXPENDS THRU 12/31/21	EST. COST JAN - JUNE 2022	BUDGET FY 22-23
55310 - PRELIM. ENGINEERING				
55320 - SURVEY - DESIGN	\$9,300.00	\$9,300.00		
55330 - DESIGN				
55340 - PERMITS				
55350 - SPECIAL STUDIES				
55360 - EASEMENT PLATS	\$4,500.00	\$4,500.00		
55370 - LEGAL FEES	\$2,850.00	\$2,850.00		
55380 - ACQUISITION SERVICES				
55390 - COMPENSATION	\$39,465.00	\$39,465.00		
55400 - APPRAISAL				
55410 - CONDEMNATION				
55420 - CONSTRUCTION	\$800,000.00			\$800,000.00
55430 - CONST. CONTRACT ADM.				
55440 - TESTING	\$2,500.00			\$2,500.00
55450 - SURVEY - ASBUILT	\$6,000.00			\$6,000.00
<b>TOTAL AMOUNT</b>	<b>\$864,615.00</b>	<b>\$56,115.00</b>	<b>\$0.00</b>	<b>\$808,500.00</b>

<b>ENGINEER:</b> MSD	<b>DP</b>	<b>ESTIMATED BUDGETS - FY 24 - 32</b>	
<b>R.O.W. ACQUISITION:</b> MSD	<b># PLATS:</b> [ 5 ]	<b>FY 23-24</b>	\$0.00
<b>CONTRACTOR:</b>		<b>FY 24-25</b>	\$0.00
<b>CONSTRUCTION ADM:</b> MSD		<b>FY 25-26</b>	\$0.00
<b>INSPECTION:</b> MSD		<b>FY 26-27</b>	\$0.00
		<b>FY 27-28</b>	\$0.00
		<b>FY 28-29</b>	\$0.00
<b>PROJECT DESCRIPTION:</b> This project runs adjacent to Bent Tree Rd. in Asheville. It begins on Old Toll Rd., crosses Bent Tree Rd., and ends at Crestwood Rd. There are numerous structural problems and bends within the lines which contribute to I/I issues.		<b>FY 29-30</b>	\$0.00
		<b>FY 30-31</b>	\$0.00
		<b>FY 31-32</b>	\$0.00

**SPECIAL PROJECT NOTES:**



**Bent Tree Road  
Project No. 2016102**

NOT TO SCALE



**METROPOLITAN SEWERAGE DISTRICT**  
of  
BUNCOMBE COUNTY, NORTH CAROLINA

**Budget Map**

# Metropolitan Sewerage District of Buncombe County

## BOARD ACTION ITEM

**BOARD MEETING DATE:** October 19, 2022

**SUBMITTED BY:** Tom Hartye, P.E. – General Manager

**PREPARED BY:** Hunter Carson, P.E. – Director of Engineering  
Darin Prosser, P.E. – Project Manager

**SUBJECT:** Consideration of Bids for Equipment Procurement: Incinerator Heat Exchanger Replacement, MSD Project No. 2022057

**BACKGROUND:** The Incinerator Heat Exchanger is located at the Water Reclamation Facility. The incinerator plays a crucial role in the District's management of biosolids, which are a residual of all wastewater treatment plants. The heat exchanger is an essential piece of equipment in the operation of the incinerator.

The heat exchanger increases the efficiency of the process by recovering residual heat from the incinerator. The exhaust gas is approximately 1,500°F - the heat exchanger recovers a significant portion of this heat, and raises the incoming combustion air by over 1000°F. This recovered heat then helps to reduce the amount of fuel that is required to operate the incinerator.

This unit was replaced in 2015 as part of the incinerator emissions upgrade and has operated almost continuously since its installation and has performed well. Due to the exhaust gas, corrosion and pitting is forming in the shell of the heat exchanger. This is normal wear and tear with heat exchangers and will require replacement approximately every 5-8 years.

### Procurement of the New Heat Exchanger

The District is pre-purchasing the heat exchanger due to lead-times of approximately one year for fabrication. Fabrication will last through two fiscal years, FY 22-23 and FY 23-24, so a Capital Project Ordinance will be required. Installation of this unit will be completed through a competitively bid construction contract. Advertisement of the construction contract is scheduled for FY 23-24.

This purchase was advertised, and equipment proposals were solicited from three manufacturers for this equipment. Only one proposal was received on September 22, 2022 as follows:

<u>Manufacturer</u>	<u>Equipment Price</u>
1) Wabtec Components, LLC	\$1,175,370.00*

\*The bid price includes an add alternate bid item for stainless steel inlet and outlet plenums in lieu of carbon steel, in the amount of \$33,420.00. The District is asking for Board approval of the total bid amount of \$1,175,370.00.

**FISCAL IMPACT:** The FY 22-23 budget for this project is \$250,000.00 and includes partial payment of the heat exchanger per contractual payment terms (25% payment following approved shop drawings). Payments required in FY 22-23 (\$293,842.50) exceed the budgeted amount; however, sufficient funds are available in contingency.

The total multi-year CIP budget for the project is \$1,875,000.00 and includes the remaining balance of heat exchanger (\$881,527.50) as well as costs to refurbish the existing heat exchanger unit in FY 23-24.

**STAFF RECOMMENDATION:** Staff recommends that the District procure the specified heat exchanger with add alternate for stainless steel plenums as manufactured by Wabtec Components (formerly Thermal Transfer Corp., the manufacturer of the existing heat exchanger) in the amount of \$1,175,370.00.



**INCINERATOR HEAT EXCHANGER REPLACEMENT  
EQUIPMENT PROCUREMENT CONTRACT  
CAPITAL PROJECT ORDINANCE**

**BE IT ORDAINED** by the Board of the Metropolitan Sewerage District of Buncombe County, North Carolina, that pursuant to Section 13.2 of Chapter 159 of the General Statutes of North Carolina, the following Incinerator Heat Exchanger Replacement – Equipment Procurement Contract Capital Project Ordinance is hereby adopted:

Section 1. The project authorized is the Incinerator Heat Exchanger Replacement – Equipment Procurement Contract to be financed in whole or in part by appropriated net position.

Section 2. The following amounts are appropriated for the project:

**Capital Expenditures**                                **\$ 1,175,370.00**

Section 3. The following revenues are anticipated to be available to provide for these expenditures:

**Transfer from General Fund**                      **\$ 1,175,370.00**

Section 4. The Finance Officer is hereby directed to maintain within the Construction Fund sufficient specified detailed accounting records to satisfy all financial reporting requirements.

Section 5. Funds may be advanced from the Operations and Maintenance fund if necessary for the purpose of making payments as due.

Section 6. The Finance Officer is directed to include a detailed analysis of past and future costs and revenues on this capital project in every budget submission made to this Board.

Section 7. Copies of this Incinerator Heat Exchanger Replacement – Equipment Procurement Contract Project Ordinance shall be furnished to the Secretary of the Governing Board, and to the Finance Officer for direction carrying out this project.

**ADOPTED** this Nineteenth day of October, 2022.

**ATTEST: BOARD OF THE METROPOLITAN SEWERAGE DISTRICT OF BUNCOMBE COUNTY, NORTH CAROLINA**

\_\_\_\_\_  
M. Jerry VeHaun, Chairman

\_\_\_\_\_  
Jackie W. Bryson Secretary/Treasurer

**APPROVED AS TO FORM:**

\_\_\_\_\_  
William Clarke, Legal Counsel  
Metropolitan Sewerage District  
of Buncombe County, NC

*METROPOLITAN SEWERAGE DISTRICT OF BUNCOMBE COUNTY, NORTH CAROLINA*

**Incinerator Heat Exchanger Replacement  
Project No. 2022057**

**BID TABULATION  
September 22, 2022**

<b>BIDDER</b>	<b>Bid Bond</b>	<b>Bid Forms</b>	<b>Total Bid Amount</b>
Wabtec Components, LLC 50 North Linden Street, Duquesne, PA 15110	Yes	Yes	\$1,175,370.00

**APPARENT LOW BIDDER**

Darin Prosser, P.E.  
Project Engineer  
Metropolitan Sewerage District of  
Buncombe County, North Carolina



This is to certify that the bids tabulated herein were publicly opened and read aloud at 2:30 p.m. on the 22nd day of September, 2022, in the W.H. Mull Building at the Metropolitan Sewerage District of Buncombe County, Asheville, North Carolina, and that said bids were accompanied by acceptable bidders bonds in the amount of 5% of the bid.

**Metropolitan Sewerage District of Buncombe County, North Carolina  
CAPITAL IMPROVEMENT PROGRAM**

**BUDGET DATA SHEET - FY 2022 - 2023**

<b>PROJECT:</b>	Incinerator Heat Exchanger Replaceme	<b>LOCATION:</b>	MSD-Treatment Plant
<b>TYPE:</b>	Treatment Plant	<b>PIPE RATING:</b>	N/A
<b>PROJECT NO.</b>	2022057	<b>TOTAL LF:</b>	0
<b>PROJECT BUDGET:</b>	\$1,875,000.00	<b>PROJECT ORIGIN:</b>	Aging Equipment

DESCRIPTION	ESTIMATED PROJECT COST	TOTAL EXPENDS THRU 12/31/21	EST. COST JAN - JUNE 2022	BUDGET FY 22-23
55310 - PRELIM. ENGINEERING				
55320 - SURVEY - DESIGN				
55330 - DESIGN				
55340 - PERMITS				
55350 - SPECIAL STUDIES				
55360 - EASEMENT PLATS				
55370 - LEGAL FEES				
55380 - ACQUISITION SERVICES				
55390 - COMPENSATION				
55400 - APPRAISAL				
55410 - CONDEMNATION				
55420 - CONSTRUCTION	\$1,875,000.00			\$250,000.00
55430 - CONST. CONTRACT ADM.				
55440 - TESTING				
55450 - SURVEY - ASBUILT				
<b>TOTAL AMOUNT</b>	<b>\$1,875,000.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$250,000.00</b>

<b>ENGINEER:</b>	MSD	HC	<b>ESTIMATED BUDGETS - FY 24 - 32</b>	
<b>R.O.W. ACQUISITION:</b>		# PLATS: [ 0 ]	FY 23-24	\$1,625,000.00
<b>CONTRACTOR:</b>	MSD		FY 24-25	\$0.00
<b>CONSTRUCTION ADM.:</b>	MSD		FY 25-26	\$0.00
<b>INSPECTION:</b>	MSD		FY 26-27	\$0.00
			FY 27-28	\$0.00
			FY 28-29	\$0.00
			FY 29-30	\$0.00
			FY 30-31	\$0.00
			FY 31-32	\$0.00

**PROJECT DESCRIPTION:** This project includes the rehabilitation of the existing heat exchanger and fabrication of a new heat exchanger inside of the incinerator building. Having two heat exchangers will allow MSD to switch out the heat exchangers when one requires rebuilding. This will result in minimal downtime and operating efficiency of the incinerator. The existing heat exchanger is approximately six years old and is showing major corrosion issues due to gases that are present in the incinerating process.

**SPECIAL PROJECT NOTES:**



**Incinerator Heat Exchanger Replacement  
Project No. 2022057**

NOT TO SCALE



**METROPOLITAN SEWERAGE DISTRICT**  
of  
BUNCOMBE COUNTY, NORTH CAROLINA

**Budget Map**

# Metropolitan Sewerage District of Buncombe County

## INFORMATION ONLY ITEM

**BOARD MEETING DATE:** October 19, 2022

**SUBMITTED BY:** Tom Hartye, P.E. - General Manager

**PREPARED BY:** Hunter Carson, P.E. - Director of Engineering  
Tim Hensley, P.E. - Project Manager

**SUBJECT:** Consideration of Contract for Engineering Services: Hydroelectric Power Plant Rehabilitation, MSD Project No. 2021016

**BACKGROUND:** MSD's Hydroelectric Facility and the Craggy Dam Reservoir were constructed in 1904 for electric generation by the W.T. Weaver Power Company. Between 1926 and 1963, Carolina Power and Light Company owned and operated the facility prior to selling to MSD soon thereafter.

In 1984, MSD rehabilitated the Hydroelectric Facility and began generating power to offset a significant amount of the treatment plant's annual electrical demand. Rehabilitation included a new intake structure, new concrete flume, installation of three new hydraulic turbines, and improvements to the dam. Since then, the Hydroelectric Facility has offset the cost of energy at the treatment plant by \$300,000-\$600,000 annually.

Over the past 38 years, normal wear has occurred to the system's components and structures, and equipment has become obsolete. Operational issues include troublesome intake gates, frequent turbine bearing failures, and generally outdated generating equipment inside the power plant. Due to the facility's age and condition, upgrades and/or rehabilitation is necessary to continue generating power safely, reliably, and efficiently.

In accordance with *NCGS 143-64.31*, MSD advertised a Request for Qualifications for a Hydroelectric Facility Conditional Assessment. The study will include the evaluation of all structural and generating components, and a cost/benefit analysis of recommended improvements. Estimated costs of said improvements will be provided as part of the study and will be incorporated into MSD's 10-year Capital Improvement Program.

In July 2022, MSD received responses from four firms (Geosyntec Consultants Inc, Hatch, Turbine Pros, and Clifton Science and Engineering LLC) and created a shortlist of the three most qualified candidates. The staff selection committee interviewed the shortlisted firms and carefully considered the various strengths that each offered (e.g. experience at similar facilities, qualifications of their proposed team, team's location, quality of presentation, and availability). Ultimately, Geosyntec was chosen as the most qualified firm for this project.

Geosyntec has a history of performing dam inspections of all sizes throughout the country. They will team with American Hydro, a global firm specializing in hydropower solutions and turbine services to inspect the powerhouse generating components. Geosyntec has worked with MSD in

the past, recently completing “inundation mapping” that was required for MSD’s Emergency Action Plan at the treatment plant ash lagoon dam. Given staff’s positive experience with that project, along with their team’s qualifications, it is recommended that the District contract with Geosyntec for the Hydroelectric Facility Conditional Assessment.

Geosyntec’s initial lump sum fee was \$196,000.00 and included \$73,000.00 for underwater structural inspection/surveying of the upstream side of the dam and interior walls of the flume. Staff determined that portions of this work can be completed without the use of underwater technology by performing a visual inspection while the flume is drained. Removing this task reduced Geosyntec’s fee to \$128,000.00. If underwater inspection/survey is deemed necessary to supplement the visual inspection, the work will be included at a later date.

Please refer to the attached documents for more detailed information.

**FISCAL IMPACT:** The FY 22-23 Special Studies budget for this project is \$200,000.00.

**STAFF RECOMMENDATION:** Staff recommends the District enter into an engineering services contract with Geosyntec in the amount of \$128,000.00, subject to review and approval by District Counsel.

# Scope of Work

Hydroelectric Facility Condition Assessment  
Craggy Dam Hydroelectric Project (FERC P-7497)  
Municipal Sewerage District of Buncombe County



Submitted to:



MSD

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## Table of Contents

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SECTION 1: Scope of Work.....	2
1.1 Introduction.....	2
1.2 Task 1 – Condition Assessment.....	2
1.3 Task 2 – Hydrologic Assessment.....	5
1.4 Task 3 – Capital Planning Recommendations.....	6
1.5 Task 4 – Capital Improvement Recommendations Report .....	7
SECTION 2: Estimated Cost and Schedule .....	8
Attachment A – Notice to Proceed and Professional Services Agreement.....	10

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October 9, 2022

Mr. Tim Hensley  
Engineer  
Metropolitan Sewerage District of Buncombe County, NC  
Via Electronic Mail to: [thensley@msdbc.org](mailto:thensley@msdbc.org)

**Subject: Revised Scope of Work  
Hydroelectric Facility Condition Assessment  
Craggy Dam Hydroelectric Project, FERC No. 7497**

Dear Mr. Hensley:

Geosyntec Consultants (Geosyntec) and our partner companies are pleased to submit this revised Scope of Work (SOW) for the Condition Assessment for the Craggy Dam Hydroelectric Project (Project) to MSD of Buncombe County. This SOW provides the estimated costs and schedule durations for the planned condition assessment of the Project as described in our Statement of Qualifications dated July 29, 2022. The SOW has been revised to remove Task 1C – Surveying, which will be procured under a separate proposal, and to increase the level of effort in Task 1A to include visual inspection of the flume in a dewatered condition. Revisions to the SOW are indicated by red text.

We greatly appreciate being selected for this project on the basis of the qualifications of our project team and look forward to working with MSD to finalize our SOW and successful execution of the work. If you have any questions, please do not hesitate to contact either of the undersigned.

Sincerely,



Conrad Ginther, PE (AL, CO, GA, KY, NC, SC, TN)  
Principal

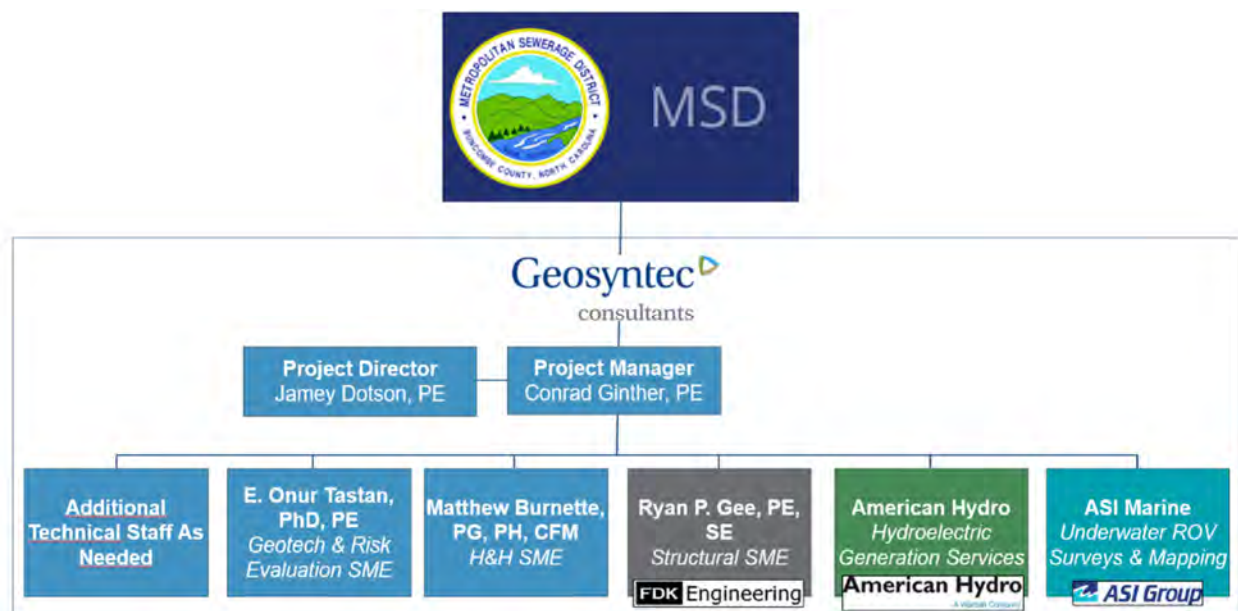


E. Onur Tastan, Ph.D., PE (MI, NC, SC, TN)  
Principal

## SECTION 1: SCOPE OF WORK

### 1.1 Introduction

Geosyntec has assembled a capable project team with the wide range of expertise required to perform a condition assessment and develop capital improvement planning recommendations for the Craggy Dam Hydroelectric Project. The project Organizational Chart below presents our team structure including our proposed Subject Matter Experts and Partner Companies. The organizational design is intended to give MSD a broad base of expertise to develop a detailed understanding of the existing condition of the hydroelectric facility and recommendations for rehabilitation and appropriate upgrades.



### 1.2 Task 1 – Condition Assessment

Task 1 will include a comprehensive review of existing project records, including drawings, performance data, and available operations and maintenance records, and performance of visual inspections and surveys to determine the current condition of critical elements of the project.

#### 1.2.1 Task 1A – Civil Structures (Geosyntec & FDK)

The focus of Task 1A is to document the current configuration and condition of the Project's civil structures including the gravity dam, debris screens, gates at the canal headworks and powerhouse, canal walls, and others. Prior to the site inspection, available project records will be reviewed, organized, and compiled to ensure the project team has a good understanding of the current configuration, performance history, and current deficiencies or operations challenges

that exist. A detailed visual inspection of all accessible project civil structures will be performed to document the current condition of the structures, pertinent dimensions, and the location and condition of any significant defects such as localized structural failures, spalls, exposed reinforcement, etc.

**This SOW has been revised to include a thorough visual inspection and documentation of observations of the interior of the flume in a dewatered condition.**

**Assumptions:** The following assumptions have been made to develop the level of effort for this subtask:

- The estimated cost of this subtask includes engineering hours to review existing documentation, perform the inspection, and edit and compile inspection notes and photographs for the Condition Assessment Report.
- The inspection of these structures is expected to require 4 days in the field. An allowance of \$3,000 has been assumed for direct travel expenses incurred in the performance of this subtask.
- **We assume that the headgates will be able to eliminate flow into the flume other than minor to moderate leakage with the gates closed, that safe access to the flume will be provided by MSD, and that the bottom of the flume can be safely traversed by personnel on foot during the inspection.**
- **We anticipate this task being performed in conjunction with dewatering of the canal for the performance of the Task 1B scope.**

**Deliverable:** The deliverable for this task will be compiled notes and a photo log. The notes and photo log will be included as attachments to the Visual Inspection Report.

### **1.2.2 Task 1B – Generating Equipment (Geosyntec & American Hydro)**

The focus of Task 1B is to document the current configuration and condition of the Project's generating equipment. Prior to the site inspection, available project records will be reviewed, organized, and compiled to ensure the project team has a good understanding of the current configuration, performance history, and current deficiencies or operations challenges that exist. A component list will be compiled and provided to MSD to confirm its completeness.

Major items we expect to inspect in this subtask include:

- **Powerhouse Intake Gates:** The intake gates are especially critical to plant performance because there are no wicket gates in the current configuration so they are the only means to regulate flow and protect the equipment from emergency scenarios such as load rejection or breach of unit integrity. The inspection of these gates will include full travel demonstration, seal effectiveness, and consideration of options to create redundancy in the event of gate damage or failure. Suggestions for supplemental or auxiliary power and spare parts to be kept in inventory will be provided.
- **Turbine Area Items**
  - **Runners:** The project has 2 fixed blade units (Units 1 and 3) and 1 Kaplan unit (Unit 2). The inspection of the runners will include clearance checks, visual

- inspection of the condition of blades, discharge rings, inspections for evidence of cavitation, and the blade seals in Unit 2's runner.
- Turbine Shaft: Visual inspection of the turbine shafts will be performed to look for damage to the shaft or couplings, evidence of axial movement, and evidence of seals leaking.
- Bearings: Bearings will be inspected visually to assess their overall condition and to look for evidence of oil leakage. It is suggested that the oil from all three units be sampled for testing.
- Unit 2 Oil Head: We suggest that the Oil Head be sent out for rehabilitation during an outage or that a replacement Oil Head be ordered. Final machining of the oil head should occur after the shaft inspection.
- Gearbox/Speed increaser: Borescope inspections of these elements to assess their condition is recommended. We recommend that the thrust bearings be removed and inspected/rehabbed off site during an outage.
- Electrical Systems
  - Electrical systems testing will be performed by a qualified subcontractor under supervision of MSD or American Hydro personnel.
  - Generator/Excitation: Generators and exciters will be inspected in a shut down condition for as-found testing including: Megger with Polarization index, visual inspection with a borescope, and possible pole drop testing. Additional recommended inspection to be performed during operation includes infrared temperature monitoring, and vibration monitoring for the generator, exciter, and switchgear.
  - Transformer: Electrical testing in a shutdown and operating condition, oil sampling and testing (if applicable), and infrared temperature monitoring while running.

**Assumptions:** The following assumptions have been made to develop the level of effort for this subtask:

- The field inspection of the generating equipment is expected to require up to 5 days in the field. We will coordinate with MSD to perform the inspection during planned outages or other convenient times to minimize disruption of normal operations.
- With the exception of the electrical testing portion of this scope, American Hydro will perform inspections of the generating equipment free of charge. This is a typical business practice which allows much more accurate and reliable estimates for repair, upgrades, and/or replacements of hydro components later performed by American Hydro to be developed.
  - The estimated cost of this subtask includes engineering hours to coordinate inspections and to edit and compile inspection notes and photographs for the Condition Assessment Report.
  - An allowance of \$12,500 using a local vendor to be determined has been assumed for the electrical testing.
- An allowance of \$1,500 has been assumed for direct travel expenses incurred in the performance of this subtask.

Deliverable: The deliverable for this task will be compiled notes, a photo log, and a summary of recommendations from American Hydro based on the results of the field inspection. These will be included as attachments to the Condition Assessment Report.

### 1.2.3 Task 1C – Site Survey

Task 1C has been removed from this SOW and will be rebid to subcontractors and proposed in a separate document for review and approval by MSD.

### 1.2.3 Task 1D – Condition Assessment Report

In Task 1D a data report will be compiled to convey the observations and measurements made during the performance of the Task 1 scope. A draft version of this Report will be provided to MSD for review and comment. Response to MSD's comments will be incorporated into the final version of the Condition Assessment Report.

Assumptions: The following assumptions have been made to develop the level of effort for this subtask:

- We have assumed one review and response cycle in the estimated cost for this subtask.
- The final Condition Assessment Report will be included as an attachment to the Capital Improvement Recommendations Report.

## 1.3 Task 2 – Hydrologic Assessment

Geosyntec will review available information related to the Craggy Dam reservoir and MSD's hydroelectric facility including design discharge of the three existing units, minimum instream flow requirements as required by the facility's FERC license, and any available stage or flow data collected by MSD. Geosyntec will also review recent relevant hydrological studies in the region, specifically those on the French Broad River, to document any observed changes or trends in low-flow conditions.

Following data review and synthesis, Geosyntec will review USGS stream gage records for gaging stations located along the French Broad River and perform flow duration analysis to determine the percentage of time various flows are expected to occur in a typical year. Flow duration analysis will present minimum flow requirements, percentage of time full-power generation is possible, and percentage of time partial power generation is possible for the facility's existing units, i.e., operating one or two of the existing units only. Finally, a monthly analysis will be performed to discern the range of flows expected throughout the hydrologic year and identify any sustained critical periods where generation may not be possible.

Assumptions: The following assumptions have been made to develop the level of effort for this subtask:

- MSD will provide design discharge for the existing units, documentation of minimum flow requirements contained within the facility's FERC license, and any monitoring data (stage(s) and/or discharge) in electronic format.

- Geosyntec will review only readily available peer-reviewed hydrological studies within the region and along the French Broad River. Focus will be placed on recent USGS studies, primarily “Low-Flow Characteristics and Flow-Duration Statistics for Selected USGS Continuous-Record Streamgaging Stations in North Carolina Through 2012” and included references.
- The Hydrologic Assessment Technical Memorandum will be included as an attachment to the Capital Improvement Recommendations Report.

Deliverable: The deliverable for this task will be a Hydrologic Assessment Technical Memorandum including a discussion of and results from the hydrologic assessment. The Technical Memorandum will be included as an attachment to the Capital Improvement Recommendations Report.

## 1.4 Task 3 – Capital Planning Recommendations

Task 3 includes the development of a matrix of critical Project components (including civil structures and generating equipment) and order of magnitude cost estimates for potential repairs, replacement, or upgrades of components; ranking each component according to their overall project risk; and providing risk-informed recommendations for capital planning efforts.

### 1.4.1 Task 3A – Develop Risk Matrix and Recommendations

The information collected during Tasks 1 and 2 will be used to populate the Risk Matrix. In addition we will quantify the financial, regulatory, and operational risks related to failure of each component and develop order of magnitude costs for repairs or upgrades to components. An internal workshop will be conducted to assign scoring criteria for the risk matrix. Following the development of the scoring criteria, each item in the component list will be evaluated based on the findings during the inspection, and risk scores will be assigned.

Assumptions: The following assumptions have been made to develop the level of effort for this subtask:

- MSD will assist in development of the list of critical Project components to be considered in the Risk Matrix.

Deliverable: The first deliverable for this subtask will be the initial version of the Risk Matrix database to be used in Task 3B. The second deliverable for this subtask will be draft capital improvement recommendations to be used in Task 3C.

### 1.4.2 Task 3B – Risk Matrix Workshop

After initial development of the Risk Matrix we will hold a workshop with MSD to review the status, risk score, and anticipated costs related to each component. MSD’s input as the owner and operator of the Project will be invaluable to developing recommendations and cost vs benefit recommendations for capital improvements.

Assumptions: The following assumptions have been made to develop the level of effort for this subtask:

- An allowance of \$1,500 has been assumed for direct travel expenses incurred in the performance of this subtask.

Deliverable: The deliverable for this subtask will be workshop notes and updates to the Risk Matrix database.

### **1.4.3 Task 3C – Capital Improvement Recommendations Workshop**

Following the conclusion of Task 3B we will develop capital planning recommendations based on cost vs. benefit analyses and the understanding of risks for critical components of the Project. Draft recommendations will be presented to MSD in a collaborative workshop to ensure that recommendations are fully vetted and that MSD has a clear understanding of the context of each recommendation.

Assumptions: The following assumptions have been made to develop the level of effort for this subtask:

- An allowance of \$1,500 has been assumed for direct travel expenses incurred in the performance of this subtask.
- The estimated cost for this subtask does not include performance of design calculations or detailed development of repair or upgrade alternatives past the conceptual level required to develop order of magnitude cost estimates for cost vs. benefit analyses.

Deliverable: The deliverable for this subtask will be workshop notes and updates to the Recommendations based on MSD feedback.

## **1.5 Task 4 – Capital Improvement Recommendations Report**

Task 4 consists of development of a report detailing the results of the condition assessment, risk analysis, and recommendations for capital planning and presentation of the final recommendations to MSD senior management.

### **1.5.1 Task 4A – Draft Report**

The draft Capital Improvement Plan Recommendations Report will include the deliverables generated during Tasks 1 through 3, a narrative description of the development of the recommendations and their pertinent details. This subtask will begin following completion of the Risk Matrix Workshop. The draft Report will be submitted to MSD for review and comment. Response to MSD's comments will be incorporated into the final version of the Report.

Assumptions: The following assumptions have been made to develop the level of effort for this subtask:

- We have assumed one review and response cycle in the estimated cost for this subtask.

### **1.5.2 Task 4B – Presentation to Executives**

After submittal of the draft Report, we will present the results of the condition assessment and capital planning recommendations to MSD's executives.

Assumptions: The following assumptions have been made to develop the level of effort for this subtask:

- An allowance of \$1,500 has been assumed for direct travel expenses incurred in the performance of this subtask.

Deliverable: The deliverable for this subtask will be a presentation to MSD senior management.

### 1.5.3 Task 4C – Final Report

The final Capital Improvement Recommendations Report will include the contents of the draft version of the report and will incorporate MSD’s comments on the draft as appropriate.

## SECTION 2: ESTIMATED COST AND SCHEDULE

Table 2-1 summarizes the estimated costs to complete the SOW for the condition assessment and recommendations for improvements to the Craggy Dam Hydroelectric Project. We propose to complete the proposed SOW on a lump sum basis with monthly progress payments according to the terms and conditions included in Attachment B. Any additional services will be conducted on a time and materials basis upon approval by MSD.

**Table 2-1: Summary of Estimated Costs**

Task	Total Lump Sum Cost	Subcontractor Cost	Travel Expense Allowance
Task 1 Total	\$52,000	Task 1B – \$12,500 Task 1C removed	\$4,500
Task 2 Total	\$12,500	\$0	\$0
Task 3 Total	\$31,000	\$0	\$3,000
Task 4 Total	\$32,500	\$0	\$1,500
<b>Project Total</b>	<b>\$128,000</b>	<b>\$12,500</b>	<b>\$9,000</b>

Table 2-2 shows the preliminary proposed milestone schedule for this SOW. We understand that the actual schedule for physical inspections of the facility and workshops will be dictated by the operating status of the Project and will coordinate directly with MSD to ensure that inspections and workshops occur at times that will minimize disruptions to operations.

**Adjustments to this milestone schedule are anticipated upon procurement of the Task 1C surveying but the total project schedule is not expected to be affected.**



**Table 2-2: Proposed Milestone Schedule**

<b>Project Milestone</b>	<b>Start Date</b>	<b>End Date</b>
Total Project	October 24, 2022	June 30, 2023
<b>Task 1 Condition Assessment</b>	October 24, 2022	December 21, 2022
Task 1A Civil Structures	October 24, 2022	November 28, 2022
Task 1B Generating Equipment	October 24, 2022	November 28, 2022
<b>Task 1C Site Survey</b>	<b>TBD</b>	<b>TBD</b>
Task 1D Condition Assessment Report	November 28, 2022	December 21, 2022
<b>Task 2 Hydrologic Assessment</b>	October 24, 2022	December 2, 2022
<b>Task 3 Capital Planning Recommendations</b>	December 21, 2022	April 28, 2023
Task 3A Develop Risk Matrix and Recommendations	December 21, 2022	April 28, 2023
Task 3B Risk Matrix Workshop	February 28, 2023	February 28, 2023
Task 3C Capital Improvement Recommendations Workshop	April 18, 2023	April 18, 2023
<b>Task 4 CIP Recommendations Report</b>	April 28, 2023	June 30, 2023
Task 4A Draft Report	April 28, 2023	May 26, 2023
Task 4B Presentation to Executives	June 13, 2023	June 13, 2023
Task 4C Final Report	June 14, 2023	June 30, 2023

## ATTACHMENT A – NOTICE TO PROCEED AND PROFESSIONAL SERVICES AGREEMENT

**By its signature below and/or authorizing Geosyntec Consultants of NC, P.C. to proceed in accordance with this Proposal, Metropolitan Sewerage District of Buncombe County, NC accepts and agrees to the Services, Schedule and Compensation described above and the attached terms and conditions.**

**Agreed and Accepted By:**

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Signature

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Typed or Printed Name

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Title

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Date of Signature

## PROFESSIONAL SERVICES AGREEMENT

This Professional Services Agreement (“Agreement”) is attached to and made a part of the proposal submitted to **Metropolitan Sewerage District of Buncombe County, NC** (“Client”) by Geosyntec Consultants, Inc., and its subsidiaries and affiliates<sup>1</sup> (collectively “Geosyntec”), dated \_\_\_\_\_ (“Proposal”). Geosyntec shall perform the scope of services described in the Proposal, subject to the following terms and condition upon acceptance of the Proposal or Client’s authorization to proceed. The Client and Geosyntec are referred to herein individually as “Party” and collectively as “Parties”.

**1. ACCEPTANCE OF TERMS:** The terms and conditions set forth below and the contents of the Proposal shall constitute the full Agreement between the Client and Geosyntec and shall be deemed mutually accepted and effective upon Client’s signing the Proposal, issuing an authorization to proceed with the Proposal or by payment of an invoice submitted by Geosyntec. Any changes or amendment to these terms and conditions, or conflicting terms introduced by the Client in a purchase order or other document, are expressly rejected unless both Parties agree to the changes in writing and they are incorporated into this Agreement. Any amendment must be in writing signed by Client and Geosyntec.

**2. SCOPE OF SERVICES:** The services to be provided by Geosyntec pursuant to this Agreement (“Services”) are described in the Proposal, and any amendments thereto, which shall set forth the schedule and estimated charges for the Services. If the Services are to be rendered in connection with a specific location, the Proposal shall also describe the site (“Project Site”).

**3. CLIENT RESPONSIBILITY:** Client shall provide Geosyntec, in writing, all information relating to Client’s requirements for the Project in a timely manner, give Geosyntec prompt written notice of any suspected deficiency in the Services and with reasonable promptness to avoid impacts to the progress of the Project, provide Geosyntec with approvals and decisions. When the Services include on-site activities, Client shall also correctly identify the location of subsurface structures, such as pipes, tanks, cables, and utilities and notify Geosyntec of any potential hazardous substances or other health and safety hazards or conditions known to Client existing on or near the Project Site. Client shall be responsible for obtaining all necessary permits required to execute the Services and Project work. If included in the Services, Geosyntec will assist Client with permit applications, however all impacts and obligations will be the responsibility of the Client, and Geosyntec shall not be liable for any delays related to obtaining permits, whether caused by the Client, regulatory bodies, or other third parties. In addition, Client agrees to hold Geosyntec harmless from any claim related to or arising from circumstances, acts or omissions in connection with the Project Site which occurred prior to Geosyntec providing any Services under this Agreement.

**4. COMPENSATION, INVOICING AND PAYMENT:** The method of compensation shall be identified in the Service Order. When the method of compensation is on a time and materials basis, Geosyntec shall submit invoices to Client reflecting the number of hours worked multiplied by the hourly rate reflected in Geosyntec’s rate schedule attached to the Service Order, along with any pre-approved expenses for reimbursement. The rates and rate schedule for projects lasting more than one year may be adjusted annually. The rates are inclusive of all taxes except such value added, sales, service or withholding taxes that are imposed by some jurisdictions, and which shall be explicitly identified. Any such applicable taxes will be added to the invoice and shall be paid by the Client. Geosyntec shall not be liable for taxes imposed outside the U.S., Canada, Australia, Ireland, and the United Kingdom. Where compensation is subject to a “not to exceed” budget such limit shall only apply to the total approved budget. Any amount allocated to a task or milestone may be exceeded without Client authorization as long as the total budget limit is not exceeded. Rates for days of actual testimony at depositions, trials, or hearings will be two times the rate shown on the rate schedule. All costs incurred and time spent by Geosyntec responding to subpoenas related to litigation which Geosyntec is not a named party shall be reimbursable in accordance with Geosyntec’s then current rate schedule.

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<sup>1</sup> The defined term “Geosyntec” refers to Geosyntec Consultants, Inc., except where Services are rendered in Michigan it refers to Geosyntec Consultants of Michigan, Inc.; in New York it refers to B&B Engineers and Geologists of New York, P.C.; in Puerto Rico it refers to Geosyntec Consultants of Puerto Rico, P.C.; in North Carolina it refers to Geosyntec Consultants of NC, P.C.; in Canada it refers to Geosyntec Consultants International, Inc.; in the United Kingdom it refers to Geosyntec Consultants, Ltd.; and in Australia it refers to Geosyntec Consultants Pty. Ltd. The applicable entity shall be identified on the Service Order. Client may be billed by Geosyntec Consultants, Inc. on behalf of the affiliate.

Geosyntec shall periodically submit invoices to Client and Client shall pay each invoice within thirty (30) days of the date of the invoice. Payment shall not be conditioned upon Client's receipt of payment from any other parties. No deductions shall be made from Geosyntec's compensation on account of penalty, liquidated damages or other sums withheld from payments to Client or others, or on account of the cost of changes in the Services. If Client objects to all or any portion of any invoice, Client shall notify Geosyntec in writing of the objection within fifteen (15) calendar days from the date of the invoice, give reasons for the objection, and pay that portion of the invoice not in dispute.

Geosyntec may invoice Client for any expense authorized by the Client exceeding \$5,000 before the expense has been incurred by Geosyntec. Client shall pay the greater of an additional charge of one percent (1%) of the amount of the invoice per month or the maximum percentage allowed by law for any payment received by Geosyntec more than thirty (30) days from the date of the invoice. Payment thereafter shall first be applied to accrued interest and then to the unpaid principal. The additional charge shall not apply to any disputed portion of any invoice resolved in favor of Client. In the event of a legal action brought by Geosyntec against Client for invoice amounts not paid, attorneys' fees, court costs, and other related expenses shall be paid to the prevailing party by the other Party. No deductions shall be made from Geosyntec's compensation on account of penalty, liquidated damages or other sums withheld from payments to Client or others, or on account of the cost of changes in the Services.

In addition to the above, if payment of Geosyntec invoices is not maintained on a thirty (30) day current basis, Geosyntec may, by ten (10) days' written notice to Client, suspend further performance and withhold any and all deliverables and data from Client until such invoice payments are restored to a current basis. If the Project Site is located in a jurisdiction which requires Geosyntec to pay any subcontractors within a stated period of time, the Client shall make payment to Geosyntec within five (5) days prior to the lapse of such time period.

5. **CHANGES:** In the event services beyond those specified in the Scope of Services are provided by Geosyntec or requested by the Client, the Parties shall negotiate an adjustment to the scope, schedule or fee, and the Service Order shall be equitably adjusted to represent such changes.

6. **RECOGNITION OF RISK:** Client recognizes that services and opinions relating to environmental, geologic, and geotechnical conditions are based on limited data and that actual conditions may vary from those encountered at the times and locations where data are obtained, and that the limited data results in uncertainty with respect to the interpretation of these conditions, despite the use of due professional care. In addition, any estimate of costs prepared by Geosyntec represents judgment as a design professional and is supplied for the general guidance of the Client. Since Geosyntec has no control over the cost of labor and material, or over competitive bidding or market conditions, Geosyntec does not guarantee the accuracy of such estimates as compared to Contractor bids or actual cost to the Client. Accordingly, any estimates, forecasts and predictions provided as part of the Services are presented solely on the basis of the assumptions accompanying the estimates, forecasts and predictions.

7. **STANDARD OF CARE:** Geosyntec shall render its Services in a manner consistent with the level of care and skill ordinarily exercised by other firms rendering the same services under similar circumstances at the time the Services are performed. The representations provided herein are provided expressly in lieu of all other warranties or conditions, express or implied. All statutory or implied warranties and conditions including but not limited to those of merchantability and fitness for a purpose are hereby expressly negated and excluded. Should an error or omission become apparent in the Services during the term of the Agreement or within ninety (90) days following the completion of the Services, Geosyntec's liability shall be limited to the correction of the error or omission shall be contingent upon Geosyntec being notified promptly of the defect.

8. **INDEMNIFICATION:** To the fullest extent permitted by law, the Parties shall indemnify and hold harmless each other (and each of their respective officers, directors, shareholders, partners, employees, and representatives) from and against all claims, demands, causes of actions, suits, based upon or arising from allegations of illness, injuries to persons, destruction of or damage to property, costs, expenses and all reasonable expenses, legal or otherwise, to the extent arising out of the indemnifying Party's negligent acts or omissions. In addition, the Parties shall indemnify, defend, and hold harmless the other party against all loss, cost, expense, royalties, claims for damages or liability in law or in equity, including without limitation, attorney fees, court costs, and other litigation expenses that may at any time arise or be set up for any infringement (or alleged infringement) of any patent, copyright, trade secret, or other proprietary right of any person or entity in consequence of the use by indemnifying Party of any documents or materials.

9. **LIMITATION OF LIABILITY:** To the fullest extent permitted by law, the liability of Geosyntec, its employees, agents, and subcontractors for claims of loss, injury, death, damage, or expense incurred by the Client, including, without limitation, third party claims for contribution and indemnification, arising out of or relating to Services rendered or obligations imposed under this Agreement or any Service Order issued hereunder, shall not exceed, in the aggregate, the greater of \$100,000 or the amount paid to Geosyntec under the applicable Service Order. The Client shall indemnify and defend Geosyntec against any third-party claims against Geosyntec exceeding the limitation of liability. In addition, neither Party shall be entitled to recover consequential damages, including, without limitation, loss of use or loss of profits, from the other Party, their employees, representatives, agents, subsidiaries, affiliates, successors or assigns. The foregoing limitations of liability shall apply regardless of whether the allegation is based on a theory of breach of contract, negligence or other wrongful act, but shall not apply if caused by gross negligence or willful misconduct.

10. **INSURANCE:** Geosyntec shall maintain during the term of this Agreement the following minimum insurance coverage:

(i)	Workers' Compensation Employer's Liability	Statutory - \$1,000,000 per occurrence
(ii)	Commercial General Liability or Public Liability Insurance	- \$1,000,000 per occurrence
(iii)	Comprehensive Automobile Liability	- \$1,000,000 combined single limit
(iv)	Professional Liability	- \$1,000,000 per claim

Geosyntec shall provide Client with an insurance certificate upon Client's request.

11. **DISPUTES:** The Parties agree to promptly resolve their differences through good faith negotiations as a condition precedent to filing a formal claim. In the event disputes remain following such good faith negotiations between the Parties, the remaining dispute shall be submitted to a senior representative of each Party who shall have the authority to enter into an agreement to resolve the dispute ("Representative"). The Representatives shall not have been directly involved in the performance of the Subcontracted Services and shall negotiate in good faith. If the Representatives are unable to resolve the dispute within three weeks or within such longer time period as the Representatives may agree, the dispute shall be mediated by an independent third-party agreed to by both parties. Any disputes or portions thereof remaining following mediation shall be determined by remedies at law or equity, as they may be available, subject to the limitations in this Agreement. Any applicable statute of limitations on any claim in any way related to Agreement shall commence to run and alleged cause of action shall be deemed to have accrued no later than the date of either Geosyntec's final invoice or termination of this Agreement by either Party. Both Parties agree that the applicable statute of limitations for any claims in any way related to this Agreement shall be shortened to a period not longer than two years, unless a shorter statute of limitations would otherwise apply.

12. **RIGHT OF ENTRY:** Client grants to Geosyntec, and, if the Project Site is not owned by Client, will provide that permission for a right of entry from time to time for Geosyntec, its employees, agents, and subcontractors for the purpose of providing the Services. If Geosyntec is required to enter into agreements with third parties to obtain access to property to perform the Services, such agreements must be consistent with the obligations imposed on Geosyntec under this Agreement and the Compensation, Schedule and terms and conditions of this Agreement shall be subject to an equitable adjustment to reflect additional obligations imposed thereunder. If the provisions of any written access agreement between Client and the property owner require the Client's agents, such as Geosyntec, to name the property owner as an additional insured, those provisions shall be incorporated into this Agreement. Client shall indemnify and defend Geosyntec for any liabilities or claims that may result from a right of entry agreement with legal obligations imposed upon Geosyntec greater than those in this Agreement.

13. **PROJECT SITE RESPONSIBILITIES:** If included in the Services, Geosyntec shall visit the Project Site as needed to complete the Services. Construction Observation responsibilities will occur at appropriate intervals to allow Geosyntec to become generally familiar with the progress, quality of work (contractors' work), to determine if the work is proceeding in general accordance with the contract documents. Visits to the Project Site and observations made by Geosyntec shall not make Geosyntec responsible for, nor relieve the construction contractor(s) of the full responsibility for all construction means, methods, techniques, sequences, and procedures necessary for coordinating and completing all portions of the work under the construction contract(s) and for all

safety precautions incidental thereto. Geosyntec shall incur no liability for unforeseen costs and/or claims relating to the Services that arise from Project Site conditions that differ from anticipated conditions, including without limitation for any subsurface conditions or systems and/or utility configurations.

**14. HAZARDOUS SUBSTANCES:** “Hazardous Substances” shall refer to any hazardous, toxic, or dangerous substance that cannot be introduced back into the environment under existing law without additional treatment. In the event that Geosyntec encounters unanticipated Hazardous Substances, it may suspend work for safety reasons until mutually agreeable arrangements are made, including but not limited to amendments to this Agreement. Solely upon Client’s request, Geosyntec may assist Client in identifying options for off-site treatment, storage or disposal of the Hazardous Substances. Geosyntec will not make any independent determination relating to the selection of a treatment, storage, or disposal facility nor subcontract such activities through transporters or others. Client shall sign all necessary manifests for the disposal of Hazardous Substances. In the event Parties mutually agree that Geosyntec will sign manifests, Geosyntec will only sign as agent on behalf of Client, and Geosyntec will not be a generator, transporter, or disposer of the Hazardous Substances. Client shall indemnify, defend, and hold harmless Geosyntec against any claim or loss resulting from such signing and from Geosyntec’s handling of Hazardous Substances.

**15. CONFIDENTIALITY:** Geosyntec will maintain as confidential the provisions of this Agreement and any business information that is not generally known to, and cannot be readily ascertained by others, and which a reasonable person under the circumstances would consider confidential and will not release, distribute, or publish same or Geosyntec’s test results to any third party without prior permission from Client, unless required by law, order of a court or regulatory body of competent jurisdiction. Such release will occur only after prior notice to Client.

**16. INTELLECTUAL PROPERTY AND USE OF DOCUMENTS:** Provided that Geosyntec has been fully paid for the Services, Client shall have a perpetual, non-transferable license and right to use the documents, maps, photographs, drawings, and specifications resulting from Geosyntec’s efforts on the Project. Except where necessary to give effect to the foregoing limited license, Geosyntec is not granting Client any license for Geosyntec’s patents, patent applications, patent disclosures, inventions and improvements (whether patentable or not), copyrights, copyrightable works (including computer programs), trade secrets, trademarks, service marks, know-how, database rights, or any other form of intellectual property created, developed, or conceived outside the performance of Services. Geosyntec shall have the right to retain copies of all such materials. Work products delivered in electronic form are subject to anomalies, errors, misinterpretation, deterioration, and unauthorized modification, or may be draft or incomplete work products, electronic documents provided by Geosyntec are furnished solely for convenience and only those professional work products in hard-copy format bearing Geosyntec’s signature or professional stamp may be relied upon by Client or other recipients approved in writing. Geosyntec may rely upon data provided by Client or other third parties without independent verification unless otherwise provided in the Service Order. If the Services include the use of a GIS database Client acknowledges that any changes to the information contained in the database will result in different results. The Client will be solely responsible for any modifications to the database made by Client.

Geosyntec is performing the Services under this Agreement solely for Client and solely with respect to the Project, and not for any other party or purpose. No party other than Client shall be entitled to rely on any reports or recommendations provided by Geosyntec as part of the Services (“Reports”) without Geosyntec’s separate written consent, and Geosyntec shall have no liability for the use of any Reports by any party for any purpose other than the Project. Client will indemnify, defend and hold Geosyntec harmless from any claims by third parties arising from the use of any Reports.

**17. DELAYS AND FORCE MAJEURE:** Geosyntec shall not be responsible for any delays resulting from actions or inactions of the Client or third parties. In the event that Geosyntec field or technical work is interrupted due to causes reasonably outside of its control, Geosyntec’s schedule for performance and compensation shall be equitably adjusted (in accordance with Geosyntec’s current Rate Schedule) for the additional labor, equipment, time, and other charges associated with maintaining its work force and equipment available during the interruption, and for such similar charges that are incurred by Geosyntec for demobilization and subsequent remobilization.

Except for the foregoing provision, neither Party shall hold the other responsible for damages or delays in performance caused by force majeure, acts of God, or other events beyond the reasonable control of the other Party. Delays within the scope of this Section which cumulatively exceed forty-five (45) days shall, at the option of either Party, make the

applicable Service Order subject to termination for convenience or to renegotiation.

**18. SUSPENSION/TERMINATION:** If a Service Order or Geosyntec's Services are suspended by the Client for more than thirty (30) days, upon resumption of Services the Client shall compensate Geosyntec for expenses incurred as a result of the suspension and resumption of Services and Geosyntec's schedule and fees for the remainder of the Services shall be equitably adjusted. If the Services are suspended for more than ninety days, consecutive or in the aggregate, Geosyntec may terminate the Service Order upon giving not less than five (5) days written notice to the Client.

Either Party can terminate this Agreement for cause if the other commits a material and uncured breach of this Agreement, including untimely payment, or becomes insolvent, has a receiver appointed, or makes a general assignment for the benefit of creditors. Termination for cause shall be effective five (5) calendar days after receipt of a written notice of termination, unless a later date is specified in the notice of termination. The notice of termination for cause shall contain specific reasons for termination, and both Parties shall cooperate in good faith to cure the causes for termination stated in the notice of termination. Termination for cause shall not be effective if reasonable action to cure the breach has been taken before the effective date of the termination. Client shall pay Geosyntec upon invoice for services performed and charges incurred prior to suspension or termination, plus suspension and termination charges. Termination charges shall include, without limitation, the putting of Project documents and analyses in order and all other related charges incurred which are directly attributable to termination. In the event of termination for cause, the Parties shall have their remedies at law as to other rights and obligations between them, subject to the other terms and conditions of this Agreement.

**19. ASSIGNMENT AND THIRD PARTY RIGHTS:** Neither Party to this Agreement shall assign its duties and obligations hereunder without the prior written consent of the other Party. This Agreement shall not create any rights or benefits to Parties other than Client and Geosyntec.

**20. VALIDITY, SEVERABILITY AND GOVERNING LAW:** The provisions of this Agreement shall be enforced to the fullest extent permitted by law. If any provision of this Agreement is found to be invalid or unenforceable, the provision shall be construed and applied in a way that comes as close as possible to expressing the intention of the Parties with regard to the provisions and that saves the validity and enforceability of the provision. This Agreement shall be governed by the laws of the place of the Project Site unless expressly provided otherwise in the Service Order. In the event that any provision or portion of this Agreement is held to be unenforceable or invalid the remaining provisions or portions shall remain in full force and effect.

**21. INTEGRATED WRITING:** This Agreement constitutes a final and complete repository of the agreements between Client and Geosyntec. It supersedes all prior or contemporaneous communications, representations, or agreements, whether oral or written, relating to the subject matter of this Agreement. Modifications to the terms and conditions of this Agreement shall not be binding unless made in writing and agreed to by both Parties. Any written authorization or notice to proceed given by the Client to Geosyntec regarding Services shall be incorporated into the relevant Service Order and shall have the effect of attaching this Agreement to the authorized Services.

**22. NOTICES, SIGNATURES AND AUTHORIZED REPRESENTATIVES:** The following signatories of this Agreement are the authorized representatives of Client and Geosyntec for the execution of this Agreement. Each Service Order shall set forth the name and address of the respective authorized representatives of the Parties for the administration of that Service Order. Any information or notices required or permitted under this Agreement or any Service Order shall be deemed to have been sufficiently given if in writing and delivered to the authorized representative identified in the applicable Service Order. Notice given by mail may also be transmitted electronically at the time of mailing.



**Metropolitan Sewerage District of Buncombe County, North Carolina  
CAPITAL IMPROVEMENT PROGRAM**

**BUDGET DATA SHEET - FY 2022 - 2023**

<b>PROJECT:</b>	<b>Hydroelectric Power Plant Rehab</b>	<b>LOCATION:</b>	<b>MSD-Treatment Plant</b>
<b>TYPE:</b>	<b>Treatment Plant</b>	<b>PIPE RATING:</b>	<b>N/A</b>
<b>PROJECT NO.</b>	<b>2021016</b>	<b>TOTAL LF:</b>	<b>0</b>
<b>PROJECT BUDGET:</b>	<b>\$1,340,000.00</b>	<b>PROJECT ORIGIN:</b>	<b>Agging Equipment, Condition</b>

DESCRIPTION	ESTIMATED PROJECT COST	TOTAL EXPENDS THRU 12/31/21	EST. COST JAN - JUNE 2022	BUDGET FY 22-23
55310 - PRELIM. ENGINEERING				
55320 - SURVEY - DESIGN				
55330 - DESIGN	\$100,000.00			
55340 - PERMITS				
55350 - SPECIAL STUDIES	\$200,000.00			\$200,000.00
55360 - EASEMENT PLATS				
55370 - LEGAL FEES				
55380 - ACQUISITION SERVICES				
55390 - COMPENSATION				
55400 - APPRAISAL				
55410 - CONDEMNATION				
55420 - CONSTRUCTION	\$1,000,000.00			
55430 - CONST. CONTRACT ADM.	\$40,000.00			
55440 - TESTING				
55450 - SURVEY - ASBUILT				
<b>TOTAL AMOUNT</b>	<b>\$1,340,000.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$200,000.00</b>

<b>ENGINEER:</b>	MSD	HC	<b>ESTIMATED BUDGETS - FY 24 - 32</b>	
<b>R.O.W. ACQUISITION:</b>	MSD	# PLATS: [ 0 ]	<b>FY 23-24</b>	\$100,000.00
<b>CONTRACTOR:</b>			<b>FY 24-25</b>	\$1,040,000.00
<b>CONSTRUCTION ADM.:</b>	MSD		<b>FY 25-26</b>	\$0.00
<b>INSPECTION:</b>	MSD		<b>FY 26-27</b>	\$0.00
			<b>FY 27-28</b>	\$0.00
			<b>FY 28-29</b>	\$0.00
<b>PROJECT DESCRIPTION:</b> This project includes an evaluation of the existing hydroelectric plant and its aging infrastructure. The study will consider the cost benefit of replacing various components with more efficient technology. The project also includes rehabilitation of the influent bar screen structure.			<b>FY 29-30</b>	\$0.00
			<b>FY 30-31</b>	\$0.00
			<b>FY 31-32</b>	\$0.00

**SPECIAL PROJECT NOTES:**



# Hydroelectric Power Plant Rehabilitation Project No. 2021016

NOT TO SCALE



METROPOLITAN SEWERAGE DISTRICT  
of  
BUNCOMBE COUNTY, NORTH CAROLINA

Budget Map

# Metropolitan Sewerage District of Buncombe County

## Board Action Item

**BOARD MEETING DATE:** October 19, 2022

**SUBMITTED BY:** Tom Hartye, P.E. - General Manager

**REVIEWED BY:** Hunter Carson, P.E. - Engineering Director

**PREPARED BY:** Kevin Johnson, P.E. - Planning and Development Manager

**SUBJECT:** Acceptance of Developer Constructed Sewer System for the Fairview Meadows Sewer Extension, MSD Project No. 2019142

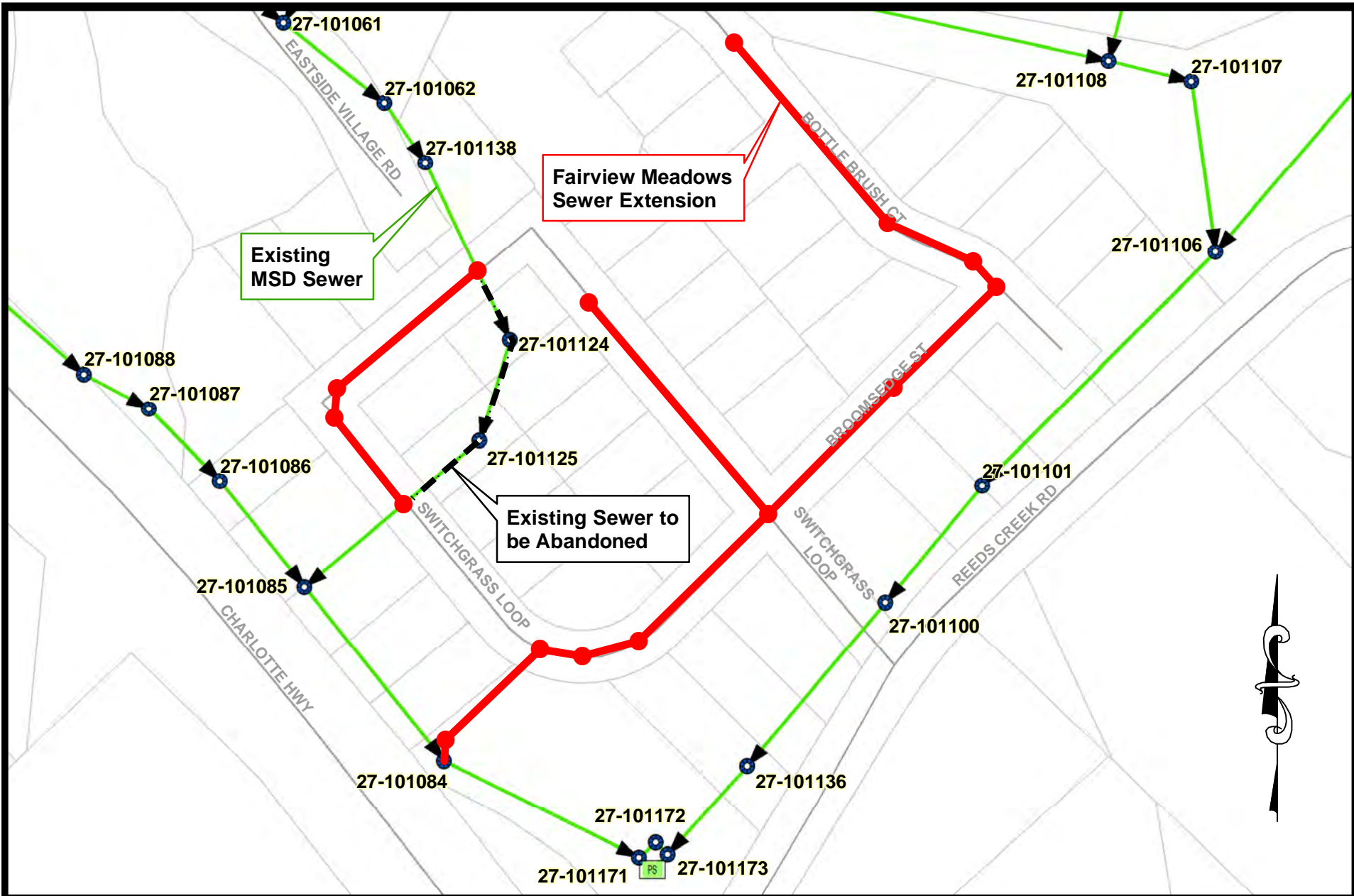
**BACKGROUND:** This project is located inside the District boundary off Reeds Creek Road in Buncombe County. The developer of the project is Billy Taylor of Fairview Holdings, LLC.

The project included extending approximately 1,450 linear feet of 8-inch public gravity sewer to serve the Single-Family Residential Development.

A wastewater allocation was issued in the amount of 12,600 GPD for the forty-two (42) homes in the residential development. The estimated cost of the sewer construction is \$172,000.00.

All MSD requirements have been met.

**STAFF RECOMMENDATION:** Staff recommends acceptance of this developer constructed sewer system.



**MSD**  
Engineering Division

**Fairview Meadows Sewer Extension  
MSD Project # 2019142**

Metropolitan Sewerage District of Buncombe County

10/05/2022

# Metropolitan Sewerage District of Buncombe County

## Board Action Item

**BOARD MEETING DATE:** October 19, 2022

**SUBMITTED BY:** Tom Hartye, P.E. - General Manager

**REVIEWED BY:** Hunter Carson, P.E. - Engineering Director

**PREPARED BY:** Kevin Johnson, P.E. - Planning and Development Manager

**SUBJECT:** Acceptance of Developer Constructed Sewer System for the Laurelwood Village Sewer Extension, MSD Project No. 2019216

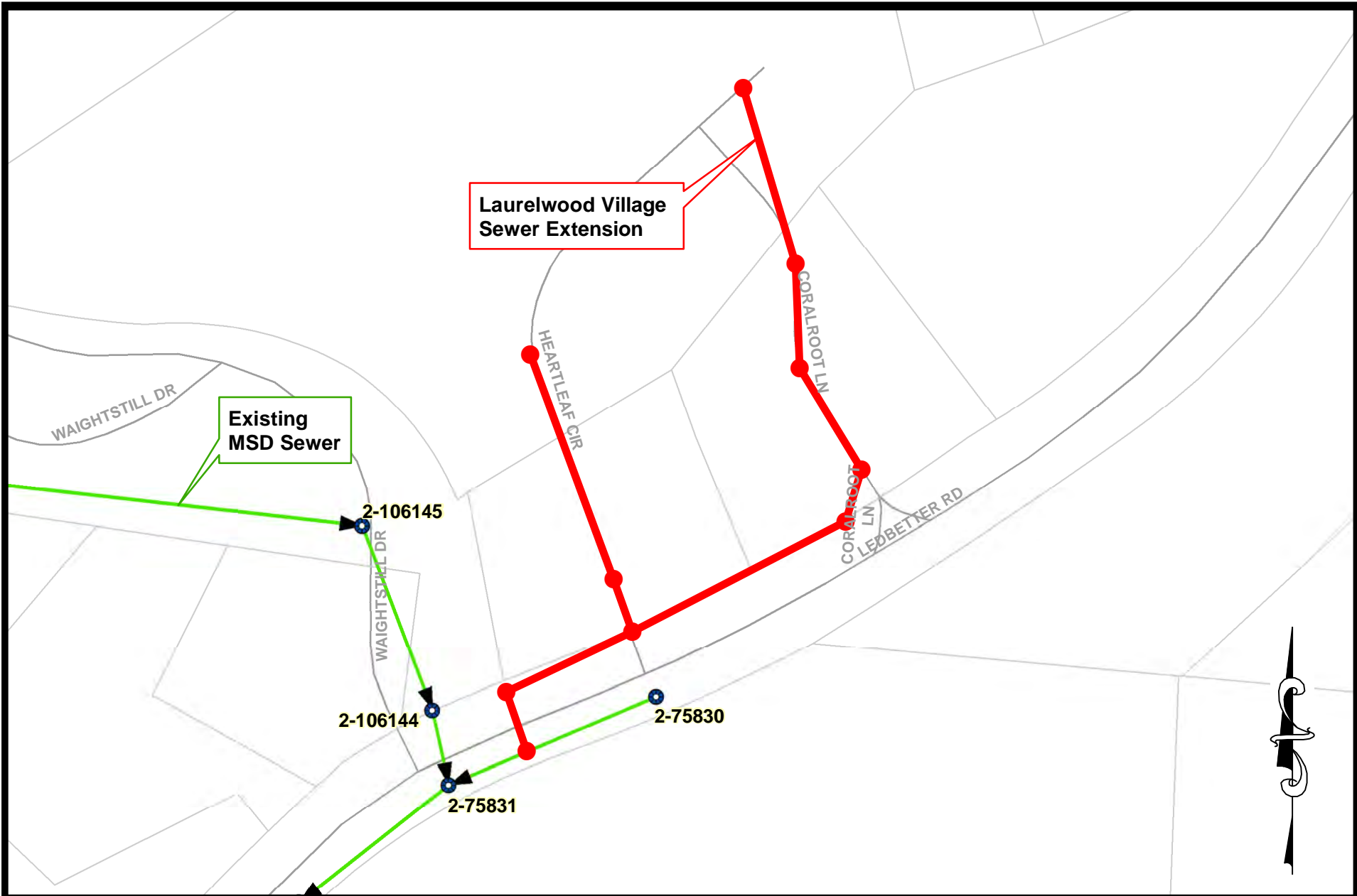
**BACKGROUND:** This project is located inside the District boundary off Ledbetter Road in Buncombe County. The developer of the project is Tim Fleishour of WEI Investments, LP.

The project included extending approximately 920 linear feet of 8-inch public gravity sewer to serve the Multi-Family Residential Development.

A wastewater allocation was issued in the amount of 12,600 GPD for the thirty-one (31) residential units in the development. The estimated cost of the sewer construction is \$99,871.00.

All MSD requirements have been met.

**STAFF RECOMMENDATION:** Staff recommends acceptance of this developer constructed sewer system.



**MSD**  
Engineering Division

**Laurelwood Village Sewer Extension  
MSD Project # 2019216**

Metropolitan Sewerage District of Buncombe County

10/05/2022

# Metropolitan Sewerage District of Buncombe County

## Board Action Item

**BOARD MEETING DATE:** October 19, 2022

**SUBMITTED BY:** Tom Hartye, P.E. - General Manager

**REVIEWED BY:** Hunter Carson, P.E. - Engineering Director

**PREPARED BY:** Kevin Johnson, P.E. - Planning and Development Manager

**SUBJECT:** Acceptance of Developer Constructed Sewer System for The Ramble Block "M" Sewer Extension, MSD Project No. 2021133

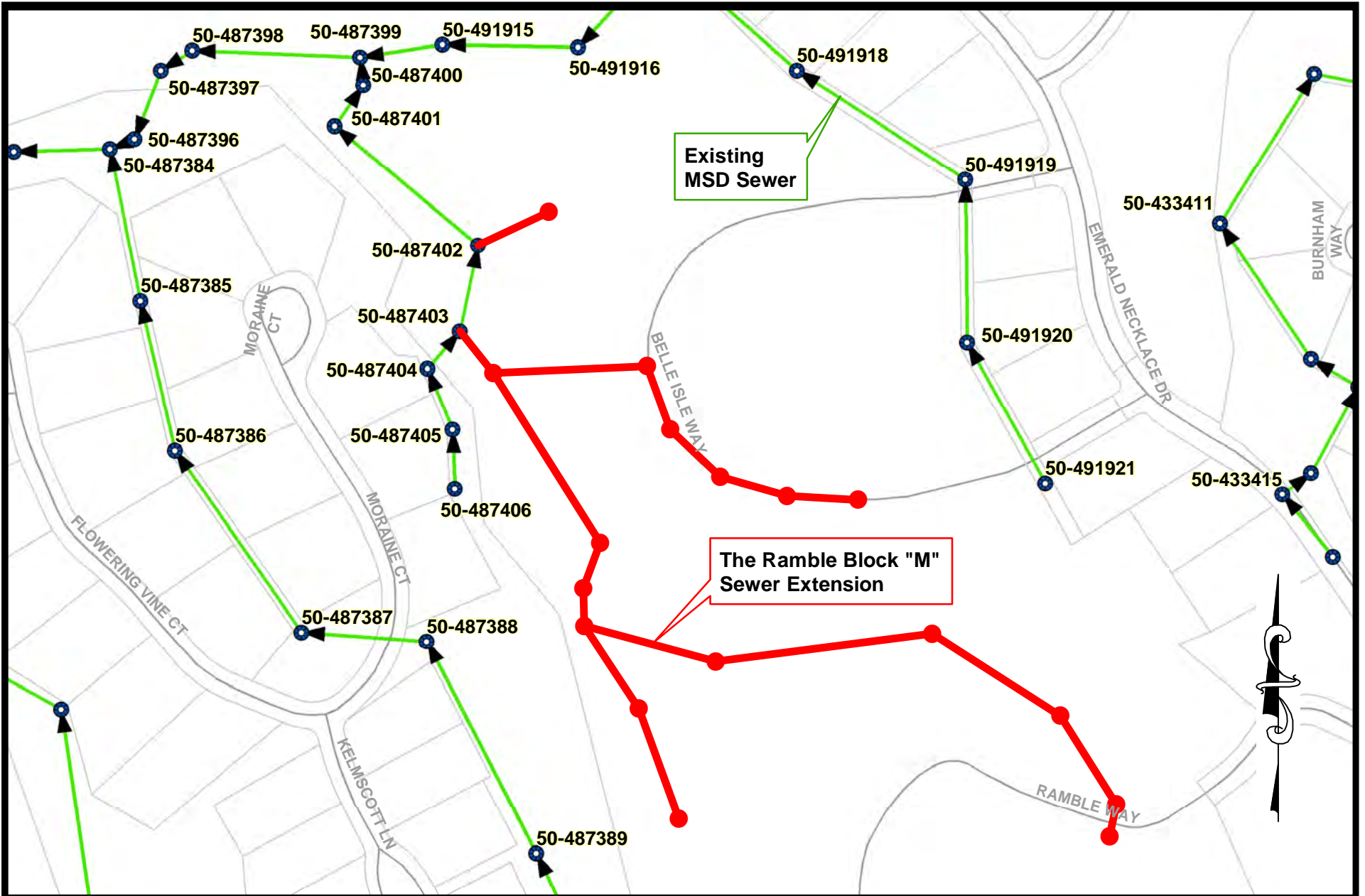
**BACKGROUND:** This project is located inside the District boundary off Emerald Necklace Drive in Buncombe County. The developer of the project is Lee Thomason of Ramble Biltmore Forest, LLC.

The project included extending approximately 2,880 linear feet of 8-inch public gravity sewer to serve the Single-Family Residential Development.

A wastewater allocation was issued in the amount of 4,800 GPD for the sixteen (16) homes in this phase of the residential development. The estimated cost of the sewer construction is \$255,000.00.

All MSD requirements have been met.

**STAFF RECOMMENDATION:** Staff recommends acceptance of this developer constructed sewer system.



Existing  
MSD Sewer

The Ramble Block "M"  
Sewer Extension



**MSD**  
Engineering Division

**The Ramble Block "M" Sewer Extension**  
**MSD Project # 2021133**  
Metropolitan Sewerage District of Buncombe County

10/05/2022



# Metropolitan Sewerage District of Buncombe County

## Board Action Item

**BOARD MEETING DATE:** October 19, 2022

**SUBMITTED BY:** Tom Hartye, P.E. - General Manager

**REVIEWED BY:** Hunter Carson, P.E. - Engineering Director

**PREPARED BY:** Kevin Johnson, P.E. - Planning and Development Manager

**SUBJECT:** Acceptance of Developer Constructed Sewer System for the Hamrick Farms Phase 2 Sewer Extension, MSD Project No. 2021160

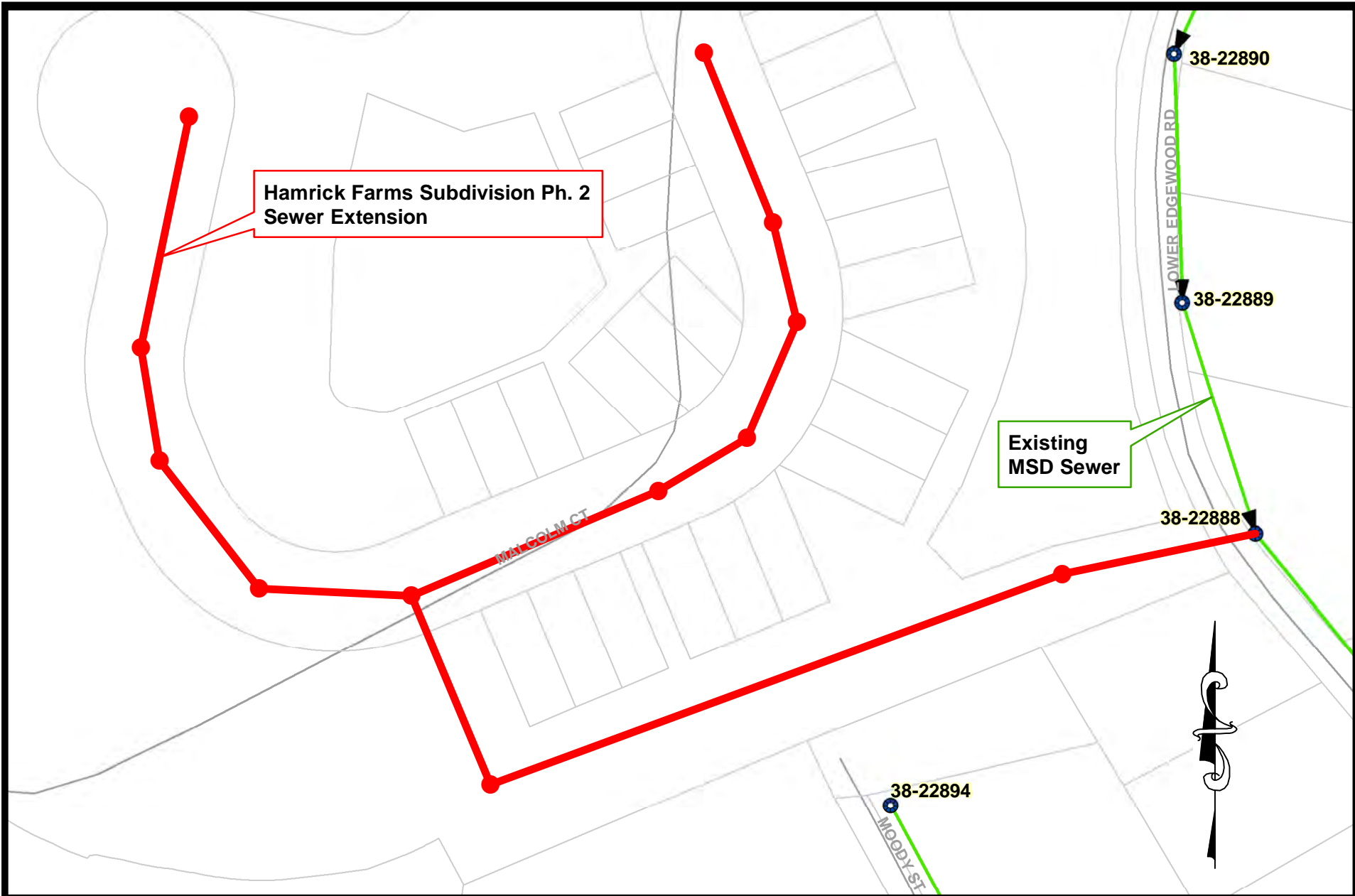
**BACKGROUND:** This project is located inside the District boundary off Lower Edgewood Road in the City of Asheville. The developer of the project is David Luck of Lower Edgewood, LLC.

The project included extending approximately 1,244 linear feet of 8-inch public gravity sewer to serve the Single-Family Residential Development.

A wastewater allocation was issued in the amount of 14,400 GPD for the forty-eight (48) townhomes in this residential development. The estimated cost of the sewer construction is \$185,000.00.

All MSD requirements have been met.

**STAFF RECOMMENDATION:** Staff recommends acceptance of this developer constructed sewer system.



Hamrick Farms Subdivision Ph. 2  
Sewer Extension

Existing  
MSD Sewer



**MSD**  
Engineering Division

## Hamrick Farms Subdivision Ph. 2 Sewer Extension MSD Project # 2021160

Metropolitan Sewerage District of Buncombe County

10/05/2022

# Metropolitan Sewerage District of Buncombe County BOARD ACTION ITEM

**Meeting Date:** October 19, 2022  
**Submitted By:** Thomas E. Hartye, PE., General Manager  
**Prepared By:** W. Scott Powell, CLGFO, Director of Finance  
**Subject:** Consideration of Budget Amendment for Fleet Replacement

## **Background**

To be in compliance with North Carolina General Statutes, all expenditures must be included in the governing body's adopted annual balanced budget ordinance. In the event unforeseen expenditures occur which exceed the adopted amount, a budget amendment resolution must be approved by the governing body. The proposed budget amendment resolution identifies the nature of the expenditure as well as the source of funding.

## **Discussion**

In FY2022, the board approved the purchase of 4 vehicles during the budget process. Due to impact of COVID-19 on supply chains, the chassis has been delayed until October/November 2022. As such, staff recommends amending the Fleet and Heavy Equipment Fund in the amount of \$200,000. This amount will cover expenditures which were appropriated last year.

## **Staff Recommendation**

Staff recommends the approval of the attached Budget Amendment Resolution.

### **Action Taken**

Motion by:	to	Approve	Disapprove
Second by:		Table	Send to Committee
Other:			
Follow-up required:			
Person responsible:		Deadline:	

**BUDGET AMENDMENT RESOLUTION  
FOR THE  
METROPOLITAN SEWERAGE DISTRICT  
OF BUNCOMBE COUNTY, NORTH CAROLINA**

**WHEREAS**, the Metropolitan Sewerage District of Buncombe County, North Carolina (the "Issuer") is a body politic and corporate organized and existing under the laws of the State of North Carolina; and

**WHEREAS**, the General Manager and Finance Director recommend and the District Board now desires to amend the FY2021-FY2022 Construction and Debt Service fund outlined below.

**NOW, THEREFORE, BE IT RESOLVED BY THE BOARD AS FOLLOWS:**

Section 1. The Board hereby adopts the amendment to the Construction Fund listed below.

Equipment Expenditures	<u>\$200,000</u>
------------------------	------------------

It is estimated that the following revenues will be available to the Construction Fund:

Appropriated from Net Position	<u>\$200,000</u>
--------------------------------	------------------

Section 3. That this resolution shall be entered in the minutes of the District within five (5) days after its adoption, copies thereof are ordered to be filed with the Finance and Budget Officer and Secretary of the Board as required by G. S. 159-13(d).

**PASSED AND ADOPTED this 19<sup>th</sup> day of October, 2021**

\_\_\_\_\_  
M. Jerry VeHaun  
Chairman of the Board

Attested to:

\_\_\_\_\_  
Jackie W. Bryson, Secretary/Treasurer

# Metropolitan Sewerage District of Buncombe County

## BOARD INFORMATIONAL ITEM

Meeting Date: October 19, 2022  
 Submitted By: Thomas E. Hartye, PE., General Manager  
 Prepared By: W. Scott Powell, CLGFO, Director of Finance  
 Cheryl Rice, Accounting Manager  
 Subject: Cash Commitment/Investment Report-Month Ended August 31, 2022

### Background

Each month, staff presents to the Board an investment report for all monies in bank accounts and specific investment instruments. The total investments as of August 31, 2022 were \$76,573,933. The detailed listing of accounts is available upon request. The average rate of return for all investments is 0.467%. These investments comply with North Carolina General Statutes, Board written investment policies, and the District's Bond Order.

The attached investment report represents cash and cash equivalents as of August 31, 2022 do not reflect contractual commitments or encumbrances against said funds. Shown below are the total investments as of August 31, 2022 reduced by contractual commitments, bond funds, and District reserve funds. The balance available for future capital outlay is \$15,366,801.

Total Cash & Investments as of 07/31/2022		76,573,933
Less:		
Budgeted Commitments (Required to pay remaining FY23 budgeted expenditures from unrestricted cash)		
Construction Funds	(27,028,765)	
Operations & Maintenance Fund	<u>(17,833,125)</u>	
		(44,861,890)
Bond Restricted Funds		
Bond Service (Funds held by trustee):		
Funds in Principal & Interest Accounts	(52,326)	
FY23 Principal & Interest Due	<u>(8,783,690)</u>	
		(8,836,016)
District Reserve Funds		
Fleet Replacement	(1,111,831)	
Pump Replacement	(193,267)	
WWTP Replacement	(257,122)	
Maintenance Reserve	<u>(1,031,574)</u>	
		(2,593,794)
District Insurance Funds		
General Liability	(107,086)	
Worker's Compensation	(447,563)	
Post-Retirement Benefit	(2,434,482)	
Self-Funded Employee Medical	<u>(1,926,301)</u>	
		<u>(4,915,432)</u>
Designated for Capital Outlay		<u>15,366,801</u>

Meeting Date: October 19, 2022

Subject: Cash Commitment/Investment Report-Month Ended August 31, 2022

Page 2

Staff Recommendation

None - Information Only.

Action Taken

Motion by:

to

Approve

Disapprove

Second by:

Table

Send to Committee

Other:

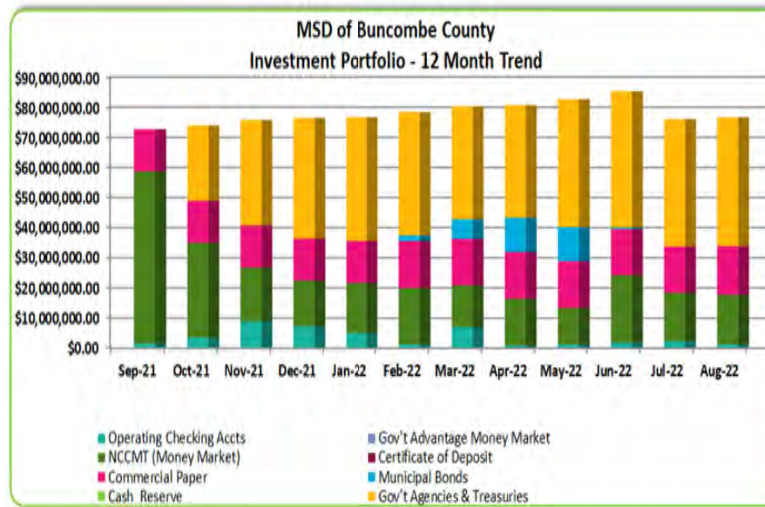
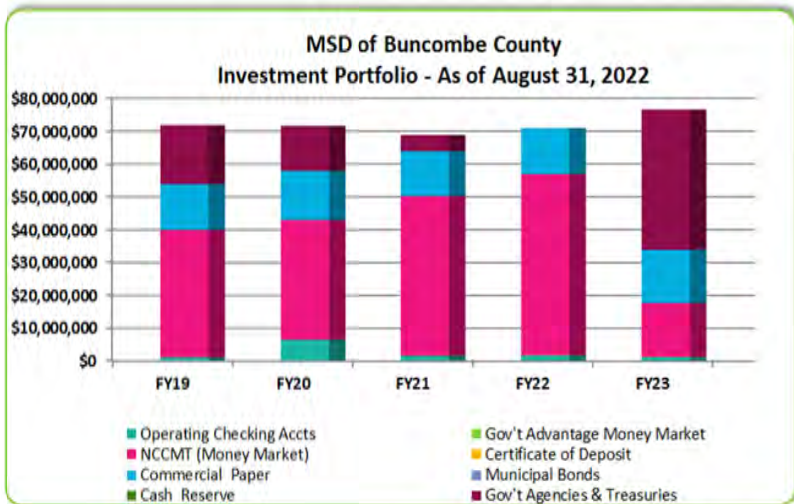
Follow-up required:

Person responsible:

Deadline:

	Operating Checking Accounts	Gov't Advantage Money Market	NCCMT (Money Market)	Certificate of Deposit	Commercial Paper	Municipal Bonds	Cash Reserve	Gov't Agencies & Treasuries	Total
Held with Bond Trustee	\$ -		\$ 52,326			\$ -	\$ -		\$ 52,326
Held by MSD	1,221,092	46,697	16,377,854	-	16,201,010	-		42,674,954	76,521,607
	\$ 1,221,092	\$ 46,697	\$ 16,430,180	\$ -	\$ 16,201,010	\$ -	\$ -	\$ 42,674,954	\$ 76,573,933

Investment Policy Asset Allocation	Maximum Percent	Actual Percent	
U.S. Government Treasuries, Agencies and Instrumentalities	100%	56.22%	No significant changes in the investment portfolio as to makeup or total amount.
Bankers' Acceptances	20%	0.00%	
Certificates of Deposit	100%	0.00%	The District's YTM of 2.269 % is exceeding the YTM benchmark of the NCCMT Government Portfolio.
Commercial Paper	20%	19.67%	
Municipal Bonds	100%	0.00%	
North Carolina Capital Management Trust	100%	22.46%	
Checking Accounts:	100%		All funds invested in CD's, operating checking accounts, Gov't Advantage money market are fully collateralized with the State Treasurer.
Operating Checking Accounts		1.59%	
Gov't Advantage Money Market		0.06%	



## Metropolitan Sewerage District Investment Managers' Report On August 31, 2022

### Summary of Asset Transactions

	Original Cost	Market	Interest Receivable
Beginning Balance	\$ 68,412,128	\$ 68,440,611	\$ 36,000
Capital Contributed (Withdrawn)	1,378,647	1,378,647	
Realized Income	20,354	20,354	
Unrealized/Accrued Income		68,545	17,323
Ending Balance	<u>\$ 69,811,129</u>	<u>\$ 69,908,157</u>	<u>\$ 53,323</u>

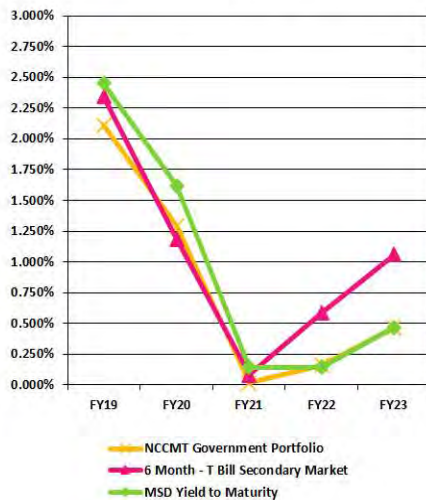
### Value and Income by Maturity

	Original Cost	Income
Cash Equivalents <91 Days	\$ 46,660,614	\$ 70,997
Securities/CD's 91 to 365 Days	19,766,900	30,077
Securities/CD's > 1 Year	3,383,615	5,148
	<u>\$ 69,811,129</u>	<u>\$ 106,222</u>

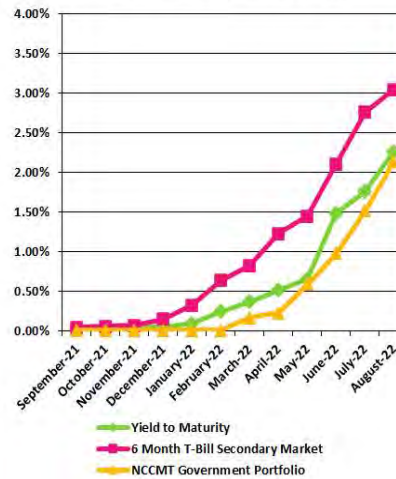
### Month End Portfolio Information

Weighted Average Maturity	99
Yield to Maturity	2.27%
6 Month T-Bill Secondary Market	3.05%
NCCMT Government Portfolio	2.14%

Metropolitan Sewerage District  
Annual Yield Comparison



Metropolitan Sewerage District  
Yield Comparison - August 31, 2022



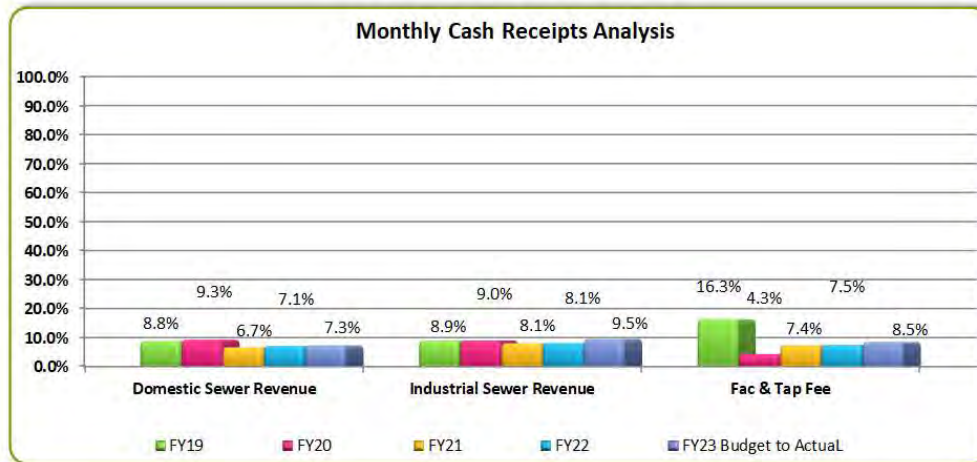


Meeting Date: October 19, 2022

Subject: Cash Commitment/Investment Report-Month Ended August 31, 2022

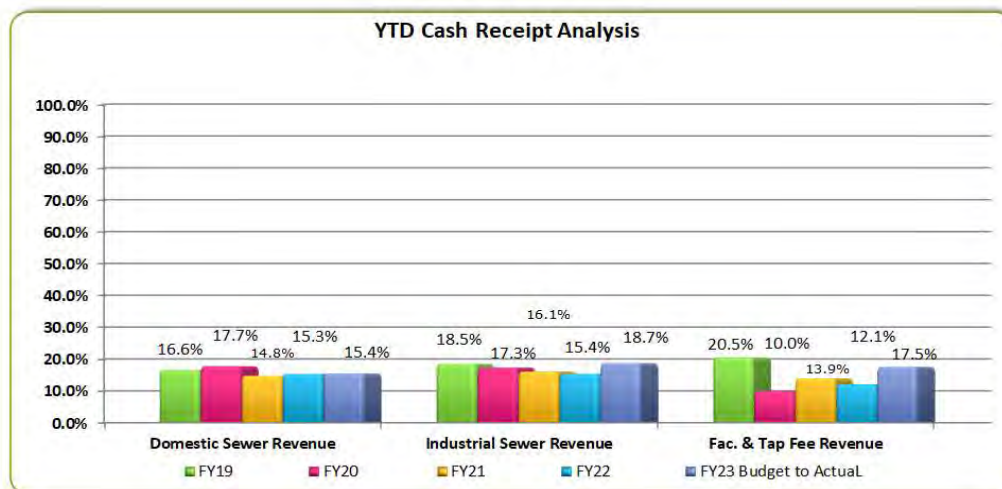
Page 5

## Metropolitan Sewerage District Analysis of Cash Receipts As of August 31, 2022



### Monthly Cash Receipts Analysis:

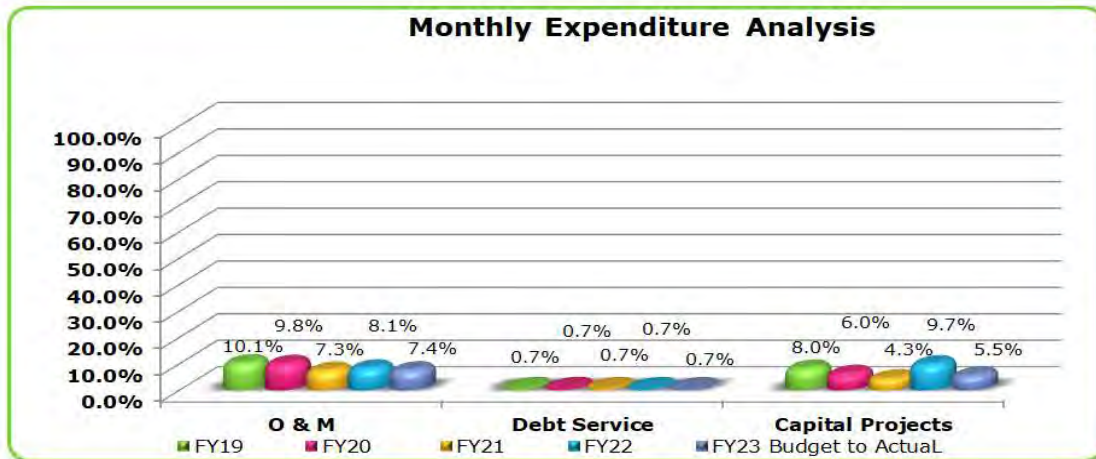
- \* Monthly domestic sewer revenue is considered reasonable based on timing of cash receipts in their respective fiscal periods.
- \* Monthly industrial sewer revenue is reasonable based on historical trends.
- \* Due to the unpredictable nature of facility and tap fee revenue, staff considers facility and tap fee revenue reasonable.



### YTD Actual Revenue Analysis:

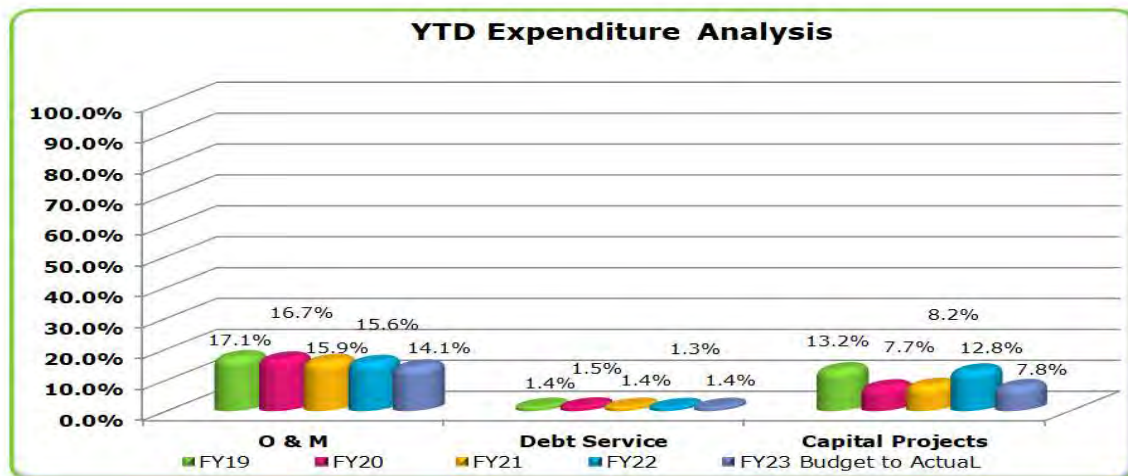
- \* YTD domestic sewer revenue is considered reasonable based on historical trends.
- \* YTD industrial sewer revenue is reasonable based on historical trends.
- \* Due to the unpredictable nature of facility and tap fee revenue, staff considers facility and tap fee revenue reasonable.

### Metropolitan Sewerage District Analysis of Expenditures As of August 31, 2022



Monthly Expenditure Analysis:

- \* Monthly O&M expenditures are considered reasonable based on historical trends and timing of expenditures in the current year.
- \* Due to the nature of the variable rate bond market, monthly expenditures can vary year to year. Based on current variable interest rates, monthly debt service expenditures are considered reasonable.
- \* Due to nature and timing of capital projects, monthly expenditures can vary from year to year. Based on the current outstanding capital projects, monthly capital project expenditures are considered reasonable.



YTD Expenditure Analysis:

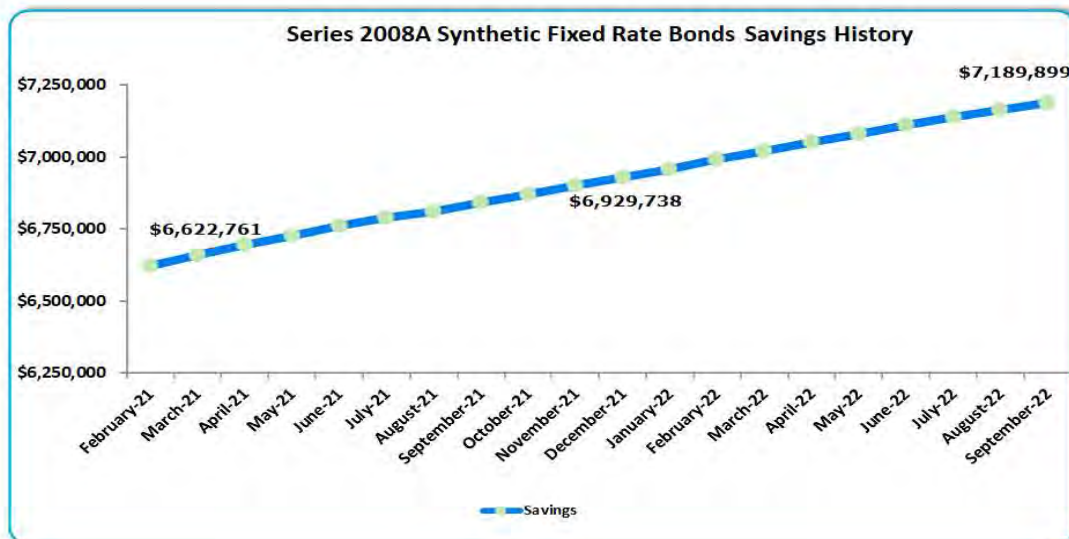
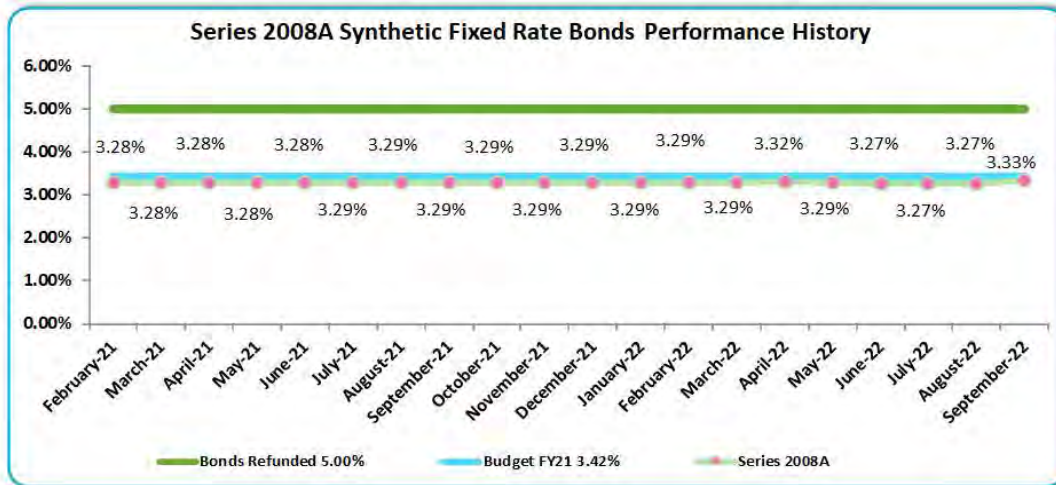
- \* YTD O&M expenditures are considered reasonable based on historical trends.
- \* Due to the nature of the variable rate bond market, YTD expenditures can vary year to year. Based on current variable interest rates, YTD debt service expenditures are considered reasonable.
- \* Due to nature and timing of capital projects, YTD expenditures can vary from year to year. Based on the current outstanding capital projects, YTD capital project expenditures are considered reasonable.

Meeting Date: October 19, 2022

Subject: Cash Commitment/Investment Report-Month Ended August 31, 2022

Page 7

### Metropolitan Sewerage District Variable Debt Service Report As of September 30, 2022



**Series 2008A:**

- \* Savings to date on the Series 2008A Synthetic Fixed Rate Bonds is \$7,189,899 as compared to 4/1 fixed rate of 4.85%.
- \* Assuming the rate on the Series 2008A Bonds continues at the current all-in rate of 3.7210%, MSD will achieve cash savings of \$4,670,000 over the life of the bonds.
- \* MSD would pay \$208,305 to terminate the existing Bank of America Swap Agreement.

# **STATUS REPORTS**

**MSD System Services In-House Construction  
FY 2022-2023**

PROJECT NAME	LOCATION	ZIP CODE	ESTIMATED FOOTAGE	ESTIMATED PROJECT DATES	WO#	CREW	COMPLETION DATE	ACTUAL FOOTAGE	NOTES
21 Mulberry Street Construction Rehabilitation	Woodfin	28804	465	7/8/22 - 7/22/22	289365	M. Hensley	7/22/2022	465	Construction Complete
Charlotte Street @ N Ridgeway Avenue	Blk Mountain	28711	1073	6/15/22 - 8/29/22	232699	Dockery	7/26/2022	1233	Construction Complete
122 Riverside Replacement	Asheville	28801	50	8/6/22 - 8/7/22	290174	Dockery	8/7/2022	50	Construction Complete
Owenby Lane @ US Highway 70 Sewer Rehabilitation	Black Mountain	28711	900	FY 21-22	268180	Dockery	8/29/2022	990	Construction Complete
Cherry Street Sewer Rehabilitation	Weaverville	28787	420	9/6/22 - 10/1/22	278196	Dockery	9/23/2022	435	Construction Complete
S Main St @ Reems Creek Rd Sewer Rehabilitation	Weaverville	28787	592	10/3/22 - 11/15/22	275831	Dockery			Construction just underway
Albermarle Commons PS Elimination	Asheville	28805	625	11/16/22 - 12/20/22	284482	Dockery			Ready for construction
Briarcliff Dr at Oakwide Dr Construction Rehab Ph. 2	Asheville	28803	257	FY 21-22	285342	McDevitt			Ready for construction
Naples PS Elimination and Gravity Conversion Ph. 2	Cane Creek	28760	422	FY 21-22	285603	McDevitt			Ready for construction
Norwood Ave Sewer Rehabilitation	Asheville	28804	1022	FY 21-22	275810	TBA			Ready for construction
44 Galax Sewer Rehab	Asheville	28806	294	FY 21-22	280827	TBA			Ready for Construction
Old Asheland Ave to Phifer Street Sewer Rehabilitation	Asheville	28801	462	FY 21-22	258560	TBA			Ready for construction
Vandalia Ave Sewer Rehabilitation	Asheville	28806	1325	FY 22-23	248041	TBA			Ready for construction
Northwest Avenue @ W Charleston Avenue	Swannanoa	28778	1031	FY 21-22	275849	TBA			Ready for construction
Highland Farms Road Sewer Rehabilitation	Black Mountain	28711	850	FY 21-22	275837	TBA			Ready for construction
Virginia Ave @ Lufty Ave	Asheville	28806	513	FY 22-23	441499	TBA			Ready for construction
Wynn St. @ Mountain St. Sewer Rehabilitation	Asheville	28801	437	FY 21-22	263129	TBA			In ROW
Mountain View Rd at Maxwell Rd Sewer Rehabilitation	Asheville	28805	521	FY 22-23	265289	TBA			In ROW
Bell Rd at New Haw Creek Rd Sewer Rehabilitation	Asheville	28805	1002	FY 22-23	248044	TBA			In ROW
Grindstaff Dr @ McDowell St	Asheville	28803	603	FY 22-23	284606	TBA			In Design
5 Golf Street	Asheville	28801	240	FY 22-23	284586	TBA			In Design
Sheppard Drive @ NO. 15 Sewer Rehabilitation	Asheville	28806	231	FY 22-23	284601	TBA			Preliminary Engineering
11 Shenandoah Rd Sewer Rehabilitation	Asheville	28805	1600	FY 22-23	275804	TBA			Preliminary Engineering
Wellington Street	Asheville	28806	865	FY 22-23	280245	TBA			Preliminary Engineering
Rhodes Street at Union Street	Woodfin	28804	230	FY 22-23	284578	TBA			Preliminary Engineering
10 Balsam Rd Sewer Rehabilitation	Ridgecrest	28770	410	FY 22-23	275803	TBA			Preliminary Engineering
Dayton Road @ No. 35 Sewer Rehabilitation	Asheville	28804	376	FY 22-23	275887	TBA			Preliminary Engineering
449 Midland Dr	Asheville	28804	318	FY 22-23	279672	TBA			Preliminary Engineering
Old Fairview Rd @ Willington Road	Asheville	28803	732	FY 22-23	276005	TBA			Preliminary Engineering



## CONSTRUCTION TOTALS BY DATE COMPLETED - Monthly

From 7/1/2022 to 8/31/2022

	Dig Ups	Emergency Dig Ups	Dig Up ML Ftg	Dig Up SL Ftg	Manhole Repairs	Taps Installed	ROW Ftg	IRS Rehab Ftg *	Const Rehab Ftg *	D-R Rehab Ftg *	Manhole Installs	Bursting Rehab Ftg *	Total Rehab Ftg *
<b>July 2022</b>	28	6	63	433	17	10	25,839	0	435	1233	7	30	1698
<b>August 2022</b>	29	6	70	904	14	27	14,647	0	0	1040	6	0	1040
<b>Grand Totals</b>	<b>57</b>	<b>12</b>	<b>133</b>	<b>1,337</b>	<b>31</b>	<b>37</b>	<b>40,486</b>	<b>0</b>	<b>435</b>	<b>2273</b>	<b>13</b>	<b>30</b>	<b>2738</b>

\* Used to calculate Total Rehab Footage



## CUSTOMER SERVICE REQUESTS

### Monthly - All Crews

CREW	MONTH	JOBS	AVERAGE RESPONSE TIME	AVERAGE TIME SPENT
<b>DAY 1ST RESPONDER</b>				
	July, 2022	115	28	34
	August, 2022	83	30	37
		<b>198</b>	<b>29</b>	<b>35</b>
<b>NIGHT 1ST RESPONDER</b>				
	July, 2022	41	25	19
	August, 2022	41	26	24
		<b>82</b>	<b>26</b>	<b>21</b>
<b>ON-CALL CREW *</b>				
	July, 2022	29	40	39
	August, 2022	29	29	60
		<b>58</b>	<b>34</b>	<b>50</b>
<b>Grand Totals:</b>		<b>338</b>	<b>29</b>	<b>34</b>

\* On-Call Crew Hours: 8:00pm-7:30am (Jul. - Oct.) 11:30pm-7:30am (from Nov. onward) Monday-Friday, Weekends, and Holidays



## PIPELINE MAINTENANCE TOTALS BY DATE COMPLETED - Monthly

July 01, 2022 to August 31, 2022

	Main Line Wash Footage	Service Line Wash Footage	Rod Line Footage	Cleaned Footage	CCTV Footage	Smoke Footage	SL-RAT Footage
<b>2022</b>							
<b>July</b>	100,862	4,736	1,390	102,252	14,226	50	1,886
<b>August</b>	95,363	1,583	0	95,363	29,426	0	6,165
<b>Grand Total:</b>	<b>196,225</b>	<b>6,319</b>	<b>1,390</b>	<b>197,615</b>	<b>43,652</b>	<b>50</b>	<b>8,051</b>
<b>Avg Per Month:</b>	<b>98,113</b>	<b>3,160</b>	<b>695</b>	<b>98,808</b>	<b>21,826</b>	<b>25</b>	<b>4,026</b>



***Right of Way Section  
1st Quarter Summary  
Open Projects***

<b><i>Project</i></b>	<b><i>Total ROW Budget</i></b>	<b><i>Total Expends to Date</i></b>	<b><i>Comment</i></b>
Albemarle Commons Pump Station Elimination	\$22,298	\$12,849	Project 100% complete with 58% of Total Budget expended and no condemnations.
Caledonia Road GSR	\$99,460	\$89,624	Project 100% complete with 90% of Total Budget expended and no condemnations.
Cherokee Road GSR	\$142,404	\$39,806	Access 71% complete with 28% of Total Budget expended to date. Community-wide opposition to the project. Four condemnations anticipated.
Christian Creek Interceptor	\$100,477	\$85,427	Access 100% complete with 85% of Total Budget expended to date. Two condemnations filed. One case closed by Default Judgment. One case pending with Regal Hospitality.
Elk Mountain Place GSR	\$153,253	\$75,144	Access 62% complete with 45% of Total Budget expended to date.
Wynne Street @ Mountain Street GSR	\$23,632	\$14,616	Project 100% complete with 62% of Total Budget expended and no condemnations.

**CAPITAL IMPROVEMENT PROGRAM**

**STATUS REPORT SUMMARY**

**October 12, 2022**

PROJECT	LOCATION OF PROJECT	CONTRACTOR	AWARD DATE	NOTICE TO PROCEED	ESTIMATED COMPLETION DATE	*CONTRACT AMOUNT	*COMPLETION STATUS (WORK)	COMMENTS
AURORA DRIVE	Asheville 28805	Terry Brothers Construction Co.	9/21/2022	9/29/2022	12/28/2022	\$620,627.00	0%	Preconstruction meeting was held on September 30th. Work is underway on-site.
BENT TREE ROAD	Asheville 28804	TBA	TBA	TBA	TBA	TBA	0%	Project was bid on September 22nd. Project to be presented at the October Board meeting.
CHRISTIAN CREEK INTERCEPTOR	Buncombe County	Buckeye Bridge LLC	12/15/2021	3/14/2022	7/7/2023	\$5,938,455.00	30%	Two crews are laying mainline; boring contractor is on site.
SPRINGSIDE ROAD @ OVERLOOK ROAD	Asheville 28803	Huntley Construction Company	5/19/2021	9/23/2021	10/1/2022	\$836,550.16	95%	All mainline pipe is installed. Restoration and paving to be done.
TOXAWAY STREET	Asheville 28806	Terry Brothers Construction Co.	7/20/2022	8/16/2022	11/14/2022	\$318,890.00	90%	Working on paving and restoration.
WRF - EQUIPMENT STORAGE FACILITY	Woodfin	Cooper Construction Company	10/20/2021	3/28/2022	3/28/2023	\$3,044,144.18	75%	Working on electrical work.
WRF- PLANT HIGH RATE PRIMARY TREATMENT	Woodfin	Shook Construction Company	10/17/2018	1/7/2019	1/2/2023	\$15,257,858.94	99%	Contractor's subs continue working on punch list.
WRF - RBC SLIDE GATE REPLACEMENT PHASE 1	Woodfin	IPC Structures	10/20/2021	3/24/2022	11/30/2022	\$303,849.99	0%	Waiting on IPC to re-mobilize.

**\*Updated to reflect approved Change Orders and Time Extensions**

## Planning & Development Project Status Report

Active Construction Projects Sorted by Work Location and Project Number

October 6, 2022

No.	Project Name	Project Number	Work Location	Zip Code	Units	LF	Pre-Construction Conference Date	Comments
1	First Baptist Relocation	2015032	Asheville	28801	Comm.	333	7/21/2015	Final Inspection complete, awaiting close-out docs
2	Hounds Ear (Mears Ave Cottages)	2016123	Asheville	28806	18	402	8/18/2017	Pre-con held, construction not yet started
3	Ashecroft Ph. 2	2016229	Asheville	28806	40	2,450	2/20/2018	On hold
4	RADTIP	2017052	Asheville	28801	0	919	2/13/2018	Final Inspection complete, awaiting close-out docs
5	Whitney Drive Subdivision	2018057	Asheville	28806	15	425	3/12/2021	Final Inspection complete, awaiting close-out docs
6	Sterling Property	2018231	Asheville	28801	4	260	6/18/2021	Final Inspection complete, awaiting close-out docs
7	Timber Hollow Subdivision	2019049	Asheville	28805	18	525	7/28/2020	On hold
8	Millbrook Cottages	2019066	Asheville	28806	7	322	2/15/2022	Pre-con held, construction not yet started
9	UNC-A Edgewood Road Parking Lot	2019078	Asheville	28801	Comm.	373	7/19/2019	Final Inspection complete, awaiting close-out docs
10	Julian Woods Retirement Relocation	2019112	Asheville	28704	Comm.	1,083	3/17/2022	Installing
11	Ironwood Sewer Relocation	2019123	Asheville	28801	554	227	4/23/2021	Installing
12	Hawthorne at Haywood Phase 2	2019130	Asheville	28806	92	668	12/15/2020	Final Inspection complete, awaiting close-out docs
13	Overlook Circle Subdivision	2019256	Asheville	28803	7	180	8/11/2020	Final Inspection complete, awaiting close-out docs
14	Crossroads at West Asheville Ph. 1	2020111	Asheville	28806	0	1,758	1/25/2022	Final Inspection complete, awaiting close-out docs
15	Amarx - Baker Drive	2021046	Asheville	28804	24	760	10/22/2021	Final Inspection complete, awaiting close-out docs
16	Burton Street	2021048	Asheville	28806	4	64	10/29/2021	Pre-con held, construction not yet started
17	Beloved Asheville	2021070	Asheville	28805	12	272	4/29/2022	Installing
18	328 Emma Road	2021131	Asheville	28806	17	665	11/5/2021	Final Inspection complete, awaiting close-out docs
19	Busbee Ph. 1	2021245	Asheville	28803	210	4,245	4/26/2022	Installing
20	MAHEC Parking Deck	2021083	Asheville	28803	Comm.	550	6/1/2022	Waiting on final inspection
21	Old Home Road Subdivision	2021094	Asheville	28804	21	1,790	5/4/2022	Pre-con held, construction not yet started
22	Randolph Avenue Commercial	2021149	Asheville	28806	Comm.	650	6/30/2022	Pre-con held, construction not yet started
23	Woodfield (RAD Lofts)	2021063	Asheville	28801	235	403	6/8/2022	Installing
24	Crossroads Community Ph1 Apartments	2022068	Asheville	28806	660	595	8/25/2022	Pre-con held, construction not yet started
25	Selwyn Townhomes	2021209	Asheville	28806	45	993	8/19/2022	Installing
26	Waynesville Avenue Cottages	2021211	Asheville	28806	7	128	8/25/2022	Pre-con held, construction not yet started
27	Reddick Road	2021108	Asheville	28805	5	507	9/2/2022	Pre-con held, construction not yet started
28	808 Montreat Road	2015126	Black Mountain	28711	4	371	4/18/2017	Final Inspection complete, awaiting close-out docs
29	Givens Highland Farms-Cottage Development	2018272	Black Mountain	28711	16	1,355	9/13/2019	Final Inspection complete, awaiting close-out docs
30	Sweet Birch Lane Phase 3	2020151	Black Mountain	28711	20	800	6/30/2021	Waiting on final inspection
31	Old Toll Road Subdivision	2020182	Black Mountain	28711	14	637	8/17/2021	Waiting on final inspection
32	Craven Hill Circle	2020195	Black Mountain	28711	3	380	11/5/2021	Waiting on final inspection
33	Tudor Croft - Phase 2D	2018004	Black Mountain	28711	5	224	6/8/2022	Waiting on Testing
34	NC DOT 1-5504 NC 191/I-26 Interchange	2016132	Buncombe Co.	28806	0	355	10/23/2017	Installing
35	Liberty Oaks Ph. 1B	2018063	Buncombe Co.	28715	24	615	11/5/2021	Final Inspection complete, awaiting close-out docs
36	Upper Grassy Branch Road	2018087	Buncombe Co.	28805	6	250	8/31/2018	On Hold
37	Victoria Hills (Lance Road) Ph. 1	2018094	Buncombe Co.	28704	38	1,176	3/6/2020	Final Inspection complete, awaiting close-out docs
38	Victoria Hills (Lance Road) Ph. 2 & 3	2018094	Buncombe Co.	28704	54	2,180	3/6/2020	Final Inspection complete, awaiting close-out docs
39	Rockdale Subdivision	2018145	Buncombe Co.	28778	9	630	3/17/2020	Final Inspection complete, awaiting close-out docs
40	Porter Road Subdivision	2019022	Buncombe Co.	28803	9	210	6/30/2021	Waiting on Testing
41	Roberson Relocation	2019037	Buncombe Co.	28715	Comm.	200	4/24/2020	Pre-con held, construction not yet started
42	Jasper Apartments	2019086	Buncombe Co.	28778	100	760	12/8/2020	Final Inspection complete, awaiting close-out docs
43	Aiken Road Multi-Family	2019128	Buncombe Co.	28804	407	4,620	10/2/2020	Waiting on final inspection
44	The Ramble - Tea House Ridge	2019159	Buncombe Co.	28803	22	8,050	9/21/2021	Installing
45	841 Charlotte Hwy	2019222	Buncombe Co.	28730	Comm.	110	4/20/2021	Pre-con held, construction not yet started
46	Creekside Cottages	2019255	Buncombe Co.	28704	6	400	3/12/2015	Phase 2 Construction Not started
47	The Farm at Pond Road	2020009	Buncombe Co.	28806	687	3,550	6/4/2021	Waiting on final inspection
48	Fisher Mill Road	2020015	Buncombe Co.	28704	3	380	10/20/2020	Final Inspection complete, awaiting close-out docs
49	Fountain Park Subdivision - Ph. 2	2020026	Buncombe Co.	28806	120	4,611	7/12/2019	Final Inspection complete, awaiting close-out docs
50	Virginia Commons	2020072	Buncombe Co.	28704	47	750	6/4/2021	Final Inspection complete, awaiting close-out docs
51	CMH Avery Creek	2020080	Buncombe Co.	28704	10	580	2/8/2022	Waiting of final inspection
52	Kirkwood MHP (aka Rice MHP on-site)	2020166	Buncombe Co.	28715	75	2,610	12/21/2021	Waiting of final inspection
53	Habitat- Glenn Bridge Road	2020178	Buncombe Co.	28704	30	908	12/14/2021	Waiting of final inspection
54	Springs of North Asheville Ph. 2	2020190	Buncombe Co.	28804	120	855	10/29/2021	Waiting of final inspection
55	Project Ranger (aka Pratt & Whitney)	2020194	Buncombe Co.	28803	Comm.	256	12/7/2021	Final Inspection complete, awaiting close-out docs
56	Town Mountain Preserve Ph. 2	2020197	Buncombe Co.	28804	6	1,210	5/28/2021	Waiting of final inspection
57	Village at Bradley Branch Ph. 4B	2021120	Buncombe Co.	28704	16	393	11/2/2021	Waiting of final inspection
58	Enka Oak Street	2021224	Buncombe Co.	28715	3	114	6/3/2022	Waiting on Testing
59	Collett Industrial (Banner Farm)	2020108	Cane Creek	28759	Comm.	255	11/20/2020	Final Inspection complete, awaiting close-out docs
60	Pardee Partners	2021058	Cane Creek	28759	Comm.	1,105	11/2/2021	Waiting on final inspection
61	Tap Root Ph. 1	2020024	Fletcher	28732	198	8,397	4/29/2022	Installing
62	Fernleaf Charter School	2020177	Fletcher	28732	Comm.	780	3/25/2022	Waiting on final inspection
63	Rutledge Road Subdivision Ph. 1	2021032	Fletcher	28732	31	1,594	3/1/2022	Final Inspection complete, awaiting close-out docs
64	Suncap Warehouse	2021059	Fletcher	28732	Comm.	803	12/3/2021	Final Inspection complete, awaiting close-out docs
65	Heritage Park	2021275	Fletcher	28732	63	2,653	9/6/2022	Installing
66	Palisades at Reems Creek	2020066	Weaverville	28787	132	1,020	3/24/2022	Installing
67	Greenwood Park Ph. 2	2020245	Weaverville	28787	25	1,560	5/25/2021	Final Inspection complete, awaiting close-out docs
68	Union Chapel (Views at Reems Creek)	2021030	Weaverville	28787	11	650	8/2/2022	Pre-con held, construction not yet started
69	18 Wildwood Park Sewer Relocation	2021129	Weaverville	28787	1	147	2/22/2022	Pre-con held, construction not yet started
70	Crest Mountain Phase 3B	2013041	Woodfin	28806	69	1,329	10/15/2013	Final Inspection complete, awaiting close-out docs
71	Reese & Jan Lasher (High Hopes)	2015152	Woodfin	28806	14	320	4/26/2016	Final Inspection complete, awaiting close-out docs
72	Brown Avenue aka Wolf Tract	2017029	Woodfin	28806	6	219	6/4/2021	Installing
73	Skyfin-Terraces at Reynolds Mtn - Phase 4	2020167	Woodfin	28804	5	100	8/8/2017	Final Inspection complete, awaiting close-out docs
74	Serenity Townhomes	2020037	Woodfin	28804	8	480	7/14/2020	Waiting on final inspection
75	Weaverville Road Subdivision	2020123	Woodfin	28804	4	600	4/6/2021	Pre-con held, construction not yet started
76	West City View	2020155	Woodfin	28804	21	845	7/23/2021	Waiting on testing
			<b>TOTAL</b>			4,437	83,944	