BOARD OF THE METROPOLITAN SEWERAGE DISTRICT March 15, 2023

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, March 15, 2023. Chairman Vehaun presided with the following members present: Ashley, Bryson, Dearth, Franklin, Kelly, Lapsley, Manheimer, Pelly, Pennington, Watts and Whitesides. Moore and Wisler were absent.

Others present were Billy Clarke, General Counsel; Brian Goldstein with Woodfin Sanitary Water and Sewer District; Jim Struve with Hazen & Sawyer; Tom Hartye, Hunter Carson, Bart Farmer, Scott Powell, Mike Stamey, Darin Prosser, Angel Banks, 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 January 18, 2023 Board Meeting:

Mr. VeHaun asked if there were any changes to the Minutes of the January 18, 2023 Board Meeting. Mr. Watts moved for approval of the minutes as presented. Mr. Ashley seconded the motion. Voice vote in favor of the motion was unanimous.

4. Discussion and Adjustment of Agenda:

Mr. Hartye stated that Item 08. C. Reimbursement Agreement – English Drive Subdivision will be pulled from the Consolidated Motion Agenda. There were no comments or objections.

5. Introduction of Guests:

Mr. VeHaun welcomed Brian Goldstein with Woodfin Sanitary Water and Sewer District and Jim Struve with Hazen & Sawyer.

6. Informal Discussion and Public Comment: None.

7. Report of General Manager:

Mr. Hartye reported that there are 2 big Engineering Studies coming before the Board. The one today is for the Solids Handling Facility, and one will be in a couple of months for a Biological Process Upgrade. These studies typically go from an alternatives analysis to about a 30% design level where a more refined capital budget estimate can be made. Our current place holder estimate of \$90 million for the Biological Process Upgrade is derived from the 2015 Facilities Plan which estimated at \$55-60 Million which we have inflated with time. Our goal was the upcoming regulations of 2030, but in replacing this entire process with Biological Nutrient Removal (BNR) which

Minutes March 15, 2023 Page Two

will meet any potential future regulations 20 years out, the cost may be over double that. This will challenge our engineers to phase the project for the near term 2030 regulations first. Today's item will be the Preliminary Engineering Report (PER) for the Solids Handling Facility. Mr. Hartye stated that he would go into further detail under that item. Mr. Hartye presented slides of the plant to familiarize everyone with what will be discussed. Mr. Pennington asked if the floor was an epoxy type surface and were the tuyeres firebrick? Mr. Hartye stated that it was all refractory brick. There was some further discussions regarding materials, sands and their functions.

Mr. Hartye reported that Joe Blair of Wildwood Park in Weaverville called to express his appreciation for James Norton and Chase Jones assistance. They did a great job of helping him get through the ice to open his line.

Mr. Hartye reported that attached is an email regarding a call from Gail Muirhead of Garden Circle. Thanks to Linda Phillips, Grayson Hensley and McKinley Hensley.

Mr. Hartye reported that attached is an email regarding a call from Ina Par of Mayfair Drive and her appreciation for Wayne Rice.

Mr. Hartye reported that attached is an email regarding a call from Pam with Bayshore Company regarding Gregg Patton and Grey Clough.

Mr. Hartye reported that the next Right of Way Committee Meeting will be held on March 22nd at 9 am. The next Regular Board Meeting will be held on April 19th at 2 pm.

8. Report of Committees:

a. Right of Way Committee - January 25, 2023

Mr. Pelly reported that the Right of Way Committee met on January 25, 2023 and actions are noted in the Consolidated Motion Agenda.

9. Consolidated Motion Agenda:

a. Consideration of Bids – Intermediate Clarifier Trough Rehabilitation Ph. 1:

Mr. Hartye reported that the intermediate clarifier was placed into service in 1990. This project includes surface preparation and coating application to make the existing troughs watertight and resistant to further corrosion. The project has been divided into two phases: Phase 1, scheduled for completion in Spring 2023 will have the chosen contractor rehabilitating the effluent troughs in the southern half of the intermediate clarifier. Following a short evaluation period, Phase 2 will be undertaken, rehabbing the effluent troughs on the north side of the clarifier. Phase 1 was

Minutes March 15, 2023 Page Three

advertised informally, and one bid was received on January 26, 2023, as follows: Carolina Management Team, LLC in the amount of \$255,651.89. The FY 22-23 Construction Budget for this project is \$257,000.00. This is an information only item since it is a smaller project.

b. Consideration of Engineering Services Contract – Solids Handling PER:

Mr. Hartye reported that the purpose of this project is to evaluate and recommend improvements to MSD's solids handling processes at the Water Reclamation Facility (WRF) which will include a phased plan for WRF upgrades necessary for managing solids production over a 30-year planning horizon. The fluidizing bed incinerator (FBI) is the primary means of solids disposal at the WRF. The existing FBI was originally placed into service in 1992 and has undergone several rebuilds of various components over the years with the most major rebuild was in 2004. Unlike most other process equipment, we do not have a second incinerator that can be used for backup. During these rebuild periods and maintenance periods MSD has an agreement to haul to the County Landfill. In turn, MSD takes leachate from the County Landfill on a daily basis. This preliminary engineering report will both determine the sizing of the replacement FBI equipment along with identifying back-up options that may either reduce or eliminate the need for hauling during downtimes. Some thoughts are to try to use the existing FBI as a back-up or go to a dryer which makes small pellets that we can either market or haul and those would be a lot less to haul. With the new liquid treatment upgrades to meet the 2030 regulations, an increase in solids is anticipated and will be incorporated into the study. Other solids handling equipment appears to be fine but each system will be looked at for its condition, capacity and useful life to see if any changes are required. Pursuant to NCGS 143-64.31 the District has to advertise a Request for Qualifications for the project and received responses from CDM Smith and Hazen & Sawyer. Both firms were invited to interview in front of MSD's Selection Committee. Mr. Hartye reported that the Selection Committee is comprised of himself, MSD's Lead Engineers, Lead Operations folks from the plant and Forest Westall. The Selection Committee chose Hazen & Sawyer as the most qualified engineering consultant to complete the project. Hazen & Sawyer has extensive experience with similar solids handling studies and has performed work on all four sewage sludge incinerators in the State of North Carolina. Additionally, Hazen & Sawyer will team with Chavond-Barry Engineering, a highly reputable engineering firm specializing in the design and improvement of thermal processes and air pollution control systems. Hazen & Sawyer has performed well on previous projects for the District. Attached is the Scope of Work and the fee involved. Sufficient funds are available in the CIP Contingency Fund to cover anticipated FY22-23 expenses. Since this project spans two fiscal years, there is also a Capital Project Ordinance attached. Staff recommends the District enter into an engineering contract with Hazen & Sawyer in the amount of \$453,300.00, subject to review and approval by District Counsel. Mr.

Minutes March 15, 2023 Page Four

Kelly asked if the equipment that is coming out has any salvage value or does it go to the landfill? Mr. Hartye stated that one option is to try to keep it going as a back-up for when the new one goes down. But it definitely has salvage value if it is not used.

c. Consideration of Reimbursement Agreement – English Drive Subdivision:

Mr. Hartye reported that this item has been pulled from the Agenda.

d. Consideration of Condemnation – Elk Mountain Place GSR:

Mr. Hartye reported that after four contacts with this owner, negotiations have stalled. Right of Way Committee recommends authority to obtain appraisal and proceed with condemnation, if necessary.

e. Consideration of Compensation Budgets – 6 Cottage Street SSR; Buchanan Avenue GSR:

Mr. Hartye reported that the Right of Way Committee recommends approval of these Compensation Budgets.

f. Consideration of Developer Constructed Sewer Systems – 328 Emma Road; The Farm @ Pond Road Ph. 1; Jasper Apartments; Overlook Circle; Project Ranger; The Springs of North Asheville Ph. 2; Sterling Property; Victoria Hills Subdivision; Whitney Drive Subdivision:

Mr. Hartye reported that the 328 Emma Road project is located in the City of Asheville and included extending approximately 665 linear feet of 8-inch public gravity sewer to serve 17 homes in this residential development.

Mr. Hartye reported that the Farm @ Pond Road Ph. 1 project is located in Buncombe County and included extending approximately 3,540 linear feet of 8-inch public gravity sewer to serve 168 apartments in this phase of this residential development.

Mr. Hartye reported that the Jasper Apartments project is located along US Highway 70 in Buncombe County and included extending approximately 765 8'inch public gravity sewer to serve 100 affordable apartments in this residential development.

Mr. Hartye reported that the Overlook Circle project is located at Overlook Circle and Overlook Place in the City of Asheville and included extending approximately 180 linear feet of 8-inch public gravity sewer to serve 7 homes in this residential development.

Mr. Hartye reported that the Project Ranger project is located off of Brevard Road in Buncombe County and included extending approximately

Minutes March 15, 2023 Page Five

250 linear feet of 12-inch and approximately 3,060 linear feet of 10-inch public gravity sewer to serve the Commercial development. This project also qualified for MSD's Economic Development Fee Waiver.

Mr. Hartye reported that the Springs of North Asheville Phase 2 project is located off Old Marshal Highway in Buncombe County and included extending approximately 855 linear feet of 8-inch public gravity sewer to serve 120 townhomes in this residential development.

Mr. Hartye reported that the Sterling Property project is located at Burton Street in the City of Asheville and included extending approximately 262 linear feet of 8-inch public gravity sewer to serve 4 homes in this residential development.

Mr. Hartye reported that the Victoria Hills Subdivision project is located off Lance Road in Buncombe County and included extending approximately 4,180 linear feet of 8-inch public gravity sewer to serve 95 homes in this residential development.

Mr. Hartye reported that the Whitney Drive project is located off Hi Alta Avenue in the City of Asheville and included extending approximately 425 linear feet of 8-inch public gravity sewer to serve 15 homes in this residential development.

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

g. Cash Commitment Investment Report - Month ended January, 2023:

Mr. Powell reported that Page 77 presents the makeup of the District's Investment Portfolio. There has been no significant change in the makeup of the portfolio from the prior month. Page 78 presents the MSD Investment Manager's report as of the month of January. The weighted average maturity of the investment portfolio is 119 days and the yield to maturity is 4.23%. Page 79 presents the District's Analysis of Cash Receipts. Domestic User Fees are considered reasonable based on timing of cash receipts and historical trends. Industrial User Fees are considered reasonable based on timing of cash receipts and historical trends. Facility and Tap Fees are above budgeted expectations due to receiving revenue from various developers. Page 80 presents the Districts analysis of expenditures. O&M, Debt Service and Capital Project expenditures are considered reasonable based on historical trends and timing of cash expenditures. Page 81 presents the District's Variable Debt Service Report. The 2008A Series Bonds are performing at budgeted expectations. As of the end of February, the issue has saved the District rate payers over \$7.3 million in debt service since April of 2008.

Mr. Kelly stated he had asked several times, that years ago if we were to terminate this existing swap agreement it would cost the District \$2

Minutes March 15, 2023 Page Six

Million. Now, if we were to terminate it, someone would pay us \$55,000. Mr. Powell stated that is correct, but he does not recommend terminating it due to the uncertain nature of interest rates at this time. Mr. Kelly asked if it is likely, if the interest rates continue to increase, that MSD would proceed with an increase also? Mr. Powell stated that is correct and if you exercise the termination then you would be exposed to the interest rates at that time. Typically, a positive value means that interest rates are more than what you're actually receiving.

h. Second Quarter Budget to Actual Review:

Mr. Powell reported that page 84 presents the District's second quarter Budget to Actual Revenue and Expenditure Report. Domestic User Fees and Industrial User Fees are at budgeted expectations. Facility and Tap Fees are above budgeted expectations due to unanticipated revenue from various developers. Interest and miscellaneous income are above budgeted expectations. Actual short-term interest rates are higher than anticipated for the fiscal year. O&M expenditures are at 50.38% of budget. They include encumbered amounts which has elevated the budget to actual above 50%. Bond principal and interest expenditures are reflected at 50%. This will aid the user to properly assess debt service commitments on a budgetary perspective. Actual amount spent as of the end of the first quarter is 16.43%. This is due to timing of the District's debt service payments. Amounts budgeted for capital equipment and capital projects are rarely expended proportionately throughout the year.

With no further discussion, Mr. VeHaun called for a motion to approve the Consolidated Motion Agenda with the exception of 08.c., which was removed. Mr. Pelly moved, Mr. Whitesides seconded the motion. Roll call vote was as follows: 12 ayes; 0 Nays.

10. Old Business: None.

11. New Business:

Mr. Vehaun stated that 3-4 years ago there was some discussion from the Town of Canton regarding treating their wastewater. He stated that their conditions have drastically changed due to the Canton Paper Mill closing and asked Mr. Hartye if he had any comments. Mr. Hartye stated that Mr. Carson had anticipated the question might be asked so he created a map to show how far away they are. Staff is waiting for the dust to settle before there is a full conversation. Mr. Hartye stated that this map basically shows what it would take to get to MSD from the paper mill. The pump station is at their plant and they would have to pump up the ridge about 3,000 feet, then it's gravity all the way back to MSD. That would be over 45,000 feet. It would be a massive project. They would probably identify many other options such as having the Town maintain the plant and get some money to upgrade it. Clyde or Waynesville may also be an option as well. Mr. Pelly asked if the plant was

Minutes March 15, 2023 Page Seven

currently serving the Town in that capacity? Mr. Hartye stated yes, the Town's wastewater goes to the Mill and the Mill treats both together. It will take some time, they have to close, decommission, etc. so the plant will be around for some time. They have a few options but if they were to come this way, this map shows what it would look like. Mr. Pennington stated that is essentially nine miles and his understanding is that the plant was the largest user of potable water from the Town as well as the largest employer so it is like a triple whammy. Mr. Watts asked if there were any numbers on the quantity of discharge they may have to have treated. Mr. Clarke stated that it is an average of about a half million gpd in dry weather and about a million gpd in wet weather. Mr. Hartye stated that is not very much. Ms. Manheimer commented that if this project were to be pursued maybe the State would step in and help. Mr. Clarke stated that Haywood County has some wastewater issues of it's own, they send theirs to the Town of Waynesville. This might be an opportunity for the Town of Waynesville and Haywood County to get together and resolve their wastewater issues. Mr. Watts asked if it came this way, it would go through the pump station planned for Carrier Bridge? Mr. Hartye stated yes, eventually it would. Mr. Watts asked if that capacity was sufficient? Mr. Hartye stated yes, but if you're talking about the rest of Haywood County and their growth, MSD would have to take a look at that. These numbers that Mr. Clarke quoted are not a lot. We expect that from the Southern end of town in a couple of years. There was some discussion regarding other failed facilities in the State.

12. Adjournment:

With no further business, Mr. VeHaun called for adjournment at 2:38 pm.

Jackie W. Bryson, Secretary/Treasurer



Metropolitan Sewerage District

Regular Board Meeting

March 15, 2023 @ 2 pm

Agenda Item	Presenter
Call to Order and Roll Call	VeHaun
01. Inquiry as to Conflict of Interest	VeHaun
02. Approval of Minutes of the January 18, 2023 Board Meeting	VeHaun
03. Discussion and Adjustment of Agenda	VeHaun
04. Introduction of Guests	VeHaun
05. Informal Discussion and Public Comment	VeHaun
06. Report of General Manager	Hartye
07. Report of Committees	
a. Right of Way Committee – January 25, 2023	Pelly
08. Consolidated Motion Agenda	Hartye
 a. Consideration of Bids – Intermediate Clarifier Trough Rehabilitation Phase 1 	
 b. Consideration of Engineering Contract – Solids Handling PER 	
c. Reimbursement Agreement – English Drive Subdivision	
d. Consideration of Condemnation – Elk Mountain Place GSR	
e. Consideration of Compensation Budgets – 6 Cottage Street SSR; Buchanan Avenue GSR	
 f. Consideration of Developer Constructed Sewer Systems 328 Emma Road; The Farm at Pond Road Ph. 1; Jasper Apartments; Overlook Circle Subdivision; Project Ranger; Springs of North Asheville Ph. 2; Sterling Property; Victoria Hills Subdivision; Whitney Drive 	
g. Cash Commitment/Investment Report-Month ended January, 2023	Powell
h. Second Quarter Budget to Actual Review	Powell
09. Old Business	VeHaun
10. New Business:	VeHaun
11. Adjournment: (Next Meeting 4/19/23)	VeHaun
STATUS REPORTS	

BOARD OF THE METROPOLITAN SEWERAGE DISTRICT January 18, 2023

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, January 18, 2023. Chairman Vehaun presided with the following members present: Bryson, Dearth, Franklin, Kelly, Manheimer, Moore, Pelly, Pennington, Watts and Whitesides. Ashley, Lapsley and Wisler were absent.

Others present were Susan Russo-Klein for William Clarke, General Counsel; Stephanie Isham with Cherry Bekaert; Patty Beaver with CIBO; Brian Goldstein with Woodfin Sanitary Water and Sewer District; Tom Hartye, Hunter Carson, Bart Farmer, 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 November 16, 2022 Board Meeting:

Mr. VeHaun asked if there were any changes to the Minutes of the November 16, 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:

Mr. VeHaun welcomed Stephanie Isham with Cherry Bekaert; Patty Beaver with CIBO; and Brian Goldstein who is the new Executive Director at Woodfin Sanitary Water and Sewer District.

Mr. VeHaun welcomed Martin Moore, new Board Member representing Buncombe County and presented him with a red manhole hook.

6. Informal Discussion and Public Comment: None.

7. Report of General Manager:

Mr. Hartye reported that Stephanie Isham from Cherry Bekaert, MSD's Auditor, is present to give a report on the Fiscal Year 2022 Audit.

Ms. Isham reported that she is filling in for Dan Gougherty. Mr. Gougherty had a conflict with meeting dates but is the one issuing the report. Ms. Isham stated that there has been a new reporting change for auditors. Many times in the financial statement world, clients are having to implement new standards but this year, audit firms had to implement a new standard. If you wanted to compare your audit deliverables to each other year after year, you will see that three deliverables look a little bit different. Standards have required auditors to add additional language and disclosures. One of the noted changes among all clients is that it identifies significant

Minutes January 18, 2023 Page Two

> risks. As an auditor, we take a risk based approach to your audit. We look at things that have changed year to year, things that are material, things that have significant estimates and then we plan out your audit. There are always inherent risks in an audit and in organizations. For MSD, you will see that we identified management override and controls. Not because we have found management override and controls or that we have any concerns about management override and controls. The structure of the Independent Auditor's Report has also changed from two pages to three pages. She stated that she was happy to report a clean audit for this past fiscal year which is the best you can get. That is a testimony to MSD's financial team to prepare great books and records. There were no corrected or uncorrected misstatements. Everything that was given to the auditors was exactly how it was presented back to MSD. Auditors are required to communicate certain things at the end of the audit. One of those things is that you can go to the financial statements and read them. There has been no new guidance that has to be implemented and all notes are very consistent year to year. She stated that as part of an audit they are always looking at relationships and making sure that they have been identified by management, making sure everything is appropriate, transactions are disclosed. They have found no issues or concerns there. Additionally, they look for significant or unusual transactions and there were none. There was nothing as far as timing, size, or nature of a transaction that was unusual. There are always significant estimates in any type of financial statement report that you will receive. Management has prepared these estimates they, as an audit firm, review them and review inputs just to make sure they are appropriate. The two most significant estimates on those statements have been identified. They are Management's estimate of depreciation expense which is associated with your fixed assets and capital assets. Management has estimated depreciation for the life of these assets. The Net Pension Liability is another estimate that has been made along with other post retirement benefits. They have reviewed the financial statements that MSD's team has prepared and believe that they are neutral, consistent and fair. There were no difficulties encountered, no disagreements with management and no auditor consultations within Cherry Bekaert. MSD Management has given them a representation letter. There was no outside management consultation. There were no other findings or issues, no fraud or legal acts. Upcoming financial reporting changes are some standards that are coming down the pipeline that MSD will have to evaluate and implement in future years and Management is aware of those. There are performance indicators that MSD has to meet and for the last two years have met them all. Ms. Isham presented graphs showing financial highlights. The District's Capital Assets continue to increase every year. The second graph shows the Long-Term Bond payable which the District has been paying down as it invests in Capital Assets and the District has not gone out for new debts since FY2018, so you see a steady decline due to normal payment of debt. The third graph is the Net Position. This shows assets and deferred inflows over liabilities and deferred outflows. The fourth graph shows Operating Results which include an increase in operating revenues, expenses, and income. She thanked the MSD team for having them hear and being so great to work with. There were no questions.

> Mr. Hartye reported that attached is an e-mail from Mary Carol Koester of Asheville regarding Wayne Rice, MSD's First Responder.

Minutes January 18, 2023 Page Three

Mr. Hartye reported that attached is an e-mail regarding an MSD service call by Rick Bradley and Grey Clough.

Mr. Hartye reported that MSD has once again received the Distinguished Budget Presentation Award by the NCGFOA. Thanks to Scott Powell and Jody Germaine.

Mr. Hartye reported that he would like to thank MSD's Tech Services Staff, Mechanical Staff and Building Trades Staff for teaming up to repair the fluidized bed incinerator which should be finishing up in the next week or so. Not many utilities have the multi-talented Staff that MSD has. We are repairing the refractory dome, replacing tuyeres and steel cladding in the upper portion of the heat exchanger. MSD has a more comprehensive rebuild of the main unit and heat exchanger scheduled for the next fiscal year. MSD has an agreement with the Buncombe County Landfill for us to take their daily leachate and they take our sludge when we take the incinerator down for maintenance and repairs which happens once every year or two. Also, Staff will bring to the Board an item next month regarding preparing a preliminary engineering report for solids disposal with a 30-year planning horizon which will basically involve a replacement incinerator along with possible back up options.

Mr. Hartye reported that Board Members and the public often ask who our biggest users are. Attached is a list of our Principal Commercial Users which can be found in the Statistical Section of the CAFR. This section also has a lot of other financial and operational statistics that may be of interest.

Mr. Hartye reported that the next Right of Way Committee Meeting will be held on January 25th at 9 am. The next Regular Board Meeting will be held on February 15th at 2 pm.

8. Consolidated Motion Agenda:

a. Consideration of Annual Meeting Dates FY 2023:

Mr. Hartye reported that attached is a list of annual meeting dates for Board Meetings and a description of when Committee Meetings will be held.

b. Consideration of Budget Calendar FY 2023-2024:

Mr. Hartye reported that attached is the Budget Calendar showing when all meetings will be held that lead up to the Preliminary and Final Budget. These include CIP Committee, Personnel Committee and Finance Committee followed by Preliminary Budget and Final Budget Meetings.

c. Consideration of Bids - Le An Hurst Road GSR:

Mr. Hartye reported that this project includes 847 LF of dig and replace and pipe bursting. The contract was advertised and three sealed bids were received on December 1, 2022 as follows: Buckeye Bridge, LLC in the amount of \$340,585.50; Huntley Construction Company in the amount of \$386,962.00; and

Minutes January 18, 2023 Page Four

Terry Brothers Construction Company in the amount of \$259,040.00. The apparent low bidder is Terry Brothers Construction Company with a bid amount of \$259,040.00. Terry Brothers Construction Company has extensive experience with District rehabilitation projects. The FY 22-23 construction budget for this project is \$275,000.00. Staff recommends award of this contract to Terry Brothers Construction Company in the amount of \$259,040.00, subject to review and approval by District Counsel.

d. Consideration of Bids – CIPP Lining Contract #9:

Mr. Hartye reported that this project consists of numerous line segments across the District which have been identified as having significant problems with root intrusion and structural defects. This project was moved up to this fiscal year to replace an interceptor project at Amboy Road which will be constructed next year as a part of the Carrier Bridge Pump Station upgrade. This contract consists of the rehabilitation of existing collector and interceptor sewers using "Cured-in-Place" (CIPP) lining which is a trenchless technology method. The total project is approximately 22,439 LF. In addition, the manholes and service lines associated with these pipe segments will also be rehabilitated. The contract was advertised and three sealed bids were received on December 1, 2022 as follows: Morgan Contracting Inc. in the amount of \$3,766,937.00; Buckeye Bridge, LLC in the amount of \$2,456,332.60; and Terry Brothers Construction Company in the amount of \$2,130,890.00. The apparent low bidder is Terry Brothers Construction Company with a bid amount of \$2,130,890.00. The Engineer's estimate was \$1.8 Million. The apparent low bid appears to be competitive and reflecting market conditions. The budget for the project this replaces is \$3.05 Million. Construction will span two fiscal years (FY 22-23 and FY 23-24), so a Capital Project Ordinance is required. Staff recommends award of this contract to Terry Brothers Construction Company in the amount of \$2,130,890.00, subject to review and approval by District Counsel.

e. Consideration of Developer Constructed Sewer Systems – Amarx-Baker Drive; Craven Hill Circle; Crossroads at West Asheville:

Mr. Hartye reported that the Amarx-Baker Drive project is located in the City of Asheville and included extending approximately 760 linear feet of 8-inch public gravity sewer to serve 24 homes in this residential development.

Mr. Hartye reported that the Craven Hill Circle project is located in Buncombe County and included extending approximately 307 linear feet of 8-inch public gravity sewer to serve 3 homes in this residential development.

Mr. Hartye reported that the Crossroads at West Asheville project is located off South Bear Creek Road in Buncombe County and included extending approximately 2,161 linear feet of new public gravity sewer to serve 660 units in this residential development.

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

f. Consideration of Audit and Annual Report – FY Ended June 30, 2022:

Mr. Powell reported that the link to the Annual Comprehensive Financial Report may be found here:

http://www.msdbc.org/documents/annualreports/PreFY2022.pdf

He reported that there is a lot of great information there. There is also attached a Schedule of Revenue and Expenditures Budget to Actual. He reported that Domestic User Fees and Industrial User Fees are above budgeted expectations. This is primarily due to Staff taking a conservative approach as it pertains to the rebound from COVID in addition to a 2.75% rate increase for Fiscal Year 2022. Facility and Tap fees are above budgeted expectations due to receiving revenue from various developers. O&M expenditures are at roughly 90% of budget. This is due to energy cost deference from the Hydro Facility as well as the HRTP not going online as budgeted. Capital Expenditures were less than budgeted due to a couple of project delays. There were no questions.

g. Cash Commitment Investment Report - Month ended November, 2022:

Mr. Powell reported that Page 34 presents the makeup of the District's Investment Portfolio. There has been no significant change in the makeup of the portfolio from the prior month. Page 35 presents the MSD Investment Manager's report as of the month of November. The weighted average maturity of the investment portfolio is 67 days and the yield to maturity is 3.01%. Page 36 presents the District's Analysis of Cash Receipts. Domestic User Fees are considered reasonable based on timing of cash receipts and historical trends. Industrial User Fees are considered reasonable based on timing of cash receipts and historical trends. Facility and Tap Fees are above budgeted expectations due to receiving revenue from various developers. Page 37 presents the Districts analysis of expenditures. O&M, Debt Service and Capital Project expenditures are considered reasonable based on historical trends and timing of cash expenditures. Page 38 presents the District's Variable Debt Service Report. The 2008A Series Bonds are performing at budgeted expectations. As of the end of November, the issue has saved the District rate payers over \$7.3 million in debt service since April of 2008.

With no further discussion, Mr. VeHaun called for a motion to approve the Consolidated Motion Agenda. Mr. Pelly moved, Mr. Watts seconded the motion. Roll call vote was as follows: 11 ayes; 0 Nays.

9. Old Business: None.

10. New Business: None.

11. Adjournment:

With no further business, Mr. VeHaun called for adjournment at 2:34 pm.

Minutes	
January 18, 2023	
Page Six	

Jackie W. Bryson, Secretary/Treasurer



MEMORANDUM

TO: MSD Board

FROM: Thomas E. Hartye, P.E., General Manager

DATE: March 9, 2023

SUBJECT: Report from the General Manager

Major Plant Projects and Engineering Studies

On the agenda for this meeting is an item regarding a Preliminary Engineering Report (PER) for Solids Handling facilities at the Treatment Plant. Although there are many improvement projects at the plant for the next 10 years this is one of two <u>major</u> projects. In a few months we will also be bringing another PER for the upgrade/replacement of the main biological treatment process at the plant. These projects are currently estimated to cost approximately \$60 million and \$90 million, respectively.

Kudos

- Joe Blair of Wildwood Park in Weaverville called to express his appreciation for James Norton and Chase Jones assistance. They did a great job of helping him get through the ice to open his line.
- See attached email regarding a call from Gail Muirhead of Garden Circle. Thanks to Linda Phillips, Grayson Hensley and McKinley Hensley.
- See attached email regarding a call from Ina Par of Mayfair Dr. and her appreciation for Wayne Rice.
- See attached email regarding a call from Pam with Bayshore Company regarding Gregg Patton and Grey Clough.

• Board/Committee Meetings/Events

The next Right of Way Committee meeting will be held on March 22nd at 9am. The next Regular Board Meeting will be held on April 19th at 2 pm.

Subject: Appreciation

Date: Friday, January 13, 2023 at 1:27:04 PM Eastern Standard Time

From: Tolley, Lisa <LisaT@msdbc.org>

To: Hartye, Tom <THartye@msdbc.org>

CC: Stamey, Mike <mikes@msdbc.org>, Hensley, McKinley <mhensley@msdbc.org>, Troughton,

Meredith < MTroughton@msdbc.org>, Phillips, Linda < lindap@msdbc.org>

Attachments: image001.png

Gail Muirhead at 42 Garden Circle called express her appreciation for our dispatcher Linda Phillips. She said Linda was wonderful, her people skills were great, her communication was great, and she said Linda just really needs a raise. She appreciated her communication and keeping her updated.

Ms. Muirhead also wanted to say that Grayson's crew came out and they were fantastic as well. They did a wonderful job. She said she asked questions and they answered everything. McKinley was there also, and they were so nice to explain things. She just wanted to tell us that she just can't commend the team at MSD enough.

W:292862

Thanks,

Lisa Tolley

Office Administrator
System Services Division
Metropolitan Sewerage District
2028 Riverside Drive
Asheville, NC 28804

Phone: 828-225-8240 Fax: 828-251-9040



From: Ward, Shannon <SWard@msdbc.org>
Sent: Wednesday, January 25, 2023 12:57 PM

To: Tolley, Lisa < lisat@msdbc.org>

Subject: WAY TO GO!!!

RE: Wayne Rice

FROM: Ina Parr

ADDRESS: 33 Mayfair Drive

Asheville, NC 28803

Ms. Parr called into dispatch on Wednesday, January 25, 2023 concerned that she may have a blockage. Wayne responded to the call and she was very pleased with the quick response time, how knowledgeable Wayne was and how helpful he was. She said that he represents MSD well and she just wanted to call back and let us know.

Shannon S Ward

Office Assistant //
System Services Division
Metropolitan Sewerage District
2028 Riverside Drive
Asheville, NC 28804
(828)225-8239

Subject: FW: #773 CARIBOU RD. CALL SR124729

Date: Wednesday, January 25, 2023 at 1:04:16 PM Eastern Standard Time

From: Tolley, Lisa < lisat@msdbc.org>

To: Hartye, Tom <THartye@msdbc.org>

CC: Stines, Ken <kens@msdbc.org>, Capizzi, Jason <jasonc@msdbc.org>, Gosnell, John

<JohnG@msdbc.org>, Troughton, Meredith <MTroughton@msdbc.org>

See below. W:293504

Thanks, Lisa

From: Phillips, Linda <LindaP@msdbc.org> **Sent:** Tuesday, January 24, 2023 2:15 PM

To: Tolley, Lisa < lisat@msdbc.org>

Subject: #773 CARIBOU RD. CALL SR124729

GREG WENT ON THIS CALL TODAY. HE ENDED UP NEEDING THE BIG FLUSHER., SO GREY WAS ALSO ON SITE. PAM WITH BAYSHORE CO. JUST CALLED AND JUST WANTED TO SHOW HER APPRECIATION FOR MSD AND HOW THEY HELPED THIS HOMEOWNER, SAVED HIM LOTS OF MONEY, SHE SAID, THOUSANDS. SHE PRAISED MSD AS ALWAYS COMING THROUGH FOR THEIR CLIENTS TO GO BEYOND EVERYTHING TO HELP THEM. I TOLD HER I WOULD PASS THIS ON TO APPROPRIATE SUPERVISOR FOR THESE GUYS. LINDA

RIGHT OF WAY COMMITTEE RECOMMENDATIONS AND MINUTES January 25, 2023

I. Call To Order

The regular monthly meeting of the Right of Way Committee was held in the Boardroom of the William H. Mull Building and called to order at 9:00 a.m. on Wednesday, January 25, 2023. The following Right of Way Committee members were present: Matt Ashley, Jackie Bryson, Esther Manheimer, Chris Pelly, Nathan Pennington and Al Whitesides. Kelly was absent.

Others present: Jerry VeHaun, Board Chairman; Bob Watts, Board Member; William Clarke, MSD Counsel; Angel Banks, Tom Hartye, Hunter Carson, Wesley Banner, Mike Stamey and Pam Nolan, MSD.

Mr. Pelly chaired the meeting in Mr. Kelly's absence.

II. Inquiry as to Conflict of Interest

Mr. Pelly inquired if anyone had a conflict of interest with Agenda items. There were none.

III. Consideration of Condemnation – Elk Mountain Place GSR:

Property Owner: Billy R. & Peggy H. Clement, Pin 9730-44-1125

Subject parcel is currently unimproved. The existing sewer line is located on an adjacent property due east and cannot be replaced in the same trench due to close proximity to an existing mobile home dwelling. The proposed sewer line was shifted to run along the eastern portion of subject property. Negotiations with the owner began on August 1, 2022 and have progressed very slowly. A response was received after two months, and the owner stated that she will not allow MSD to perform any work on her property. Standard compensation amount is \$2152, and the owner refused to provide a compensation counteroffer when asked. Negotiations have stalled with the owner.

Contacts: 4

STAFF RECOMMENDATION: Authority to obtain appraisal and proceed with condemnation, if necessary.

Ms. Banks stated that Mr. Banner will be reviewing this condemnation. Mr. Banner explained the above situation. Ms. Banks added that this parcel is the last holdout of 37 parcels on this project. Mr. Ashley asked if the easement would eliminate use of this property. Mr. Banner stated that per the Town of Woodfin Zoning Ordinances, the minimum lot size for R-7 Zoning is 7,000 square feet and the subject parcel is only 4,791 square feet. Due to the non-conforming lot size and building setbacks, building on this lot would be difficult. There was discussion regarding lot size and easement location. There was some further discussion regarding another parcel this owner has across the road.

Mr. Ashley made the motion to accept Staff's recommendation. Mr. Pennington seconded the motion. Voice vote was unanimous.

COMMITTEE RECOMMENDATION: Authority to obtain appraisal and proceed with condemnation, if necessary.

IV. Consideration of Compensation Budgets-

6 Cottage Street SSR, Project No. 2022090 Buchanan Avenue GSR, Project No. 2014023

The attached Compensation Budgets are based on current ad valorem tax values and follow the MSD approved formula.

STAFF RECOMMENDATION: Approval of Compensation Budgets.

Ms. Banks reviewed the above compensation budgets. The 6 Cottage Street project is located in Woodfin across from the Elementary School and consists of replacing 525 linear feet of 4" and 6" Orangeburg with 8" DIP. The existing lines are in dire condition. There have been numerous overflows and sections of the line have collapsed. The Buchanan Avenue project is located off of Biltmore Avenue and White Fawn Drive and consists of replacing 2,400 linear feet of 4", 6" and 8" VCP with 8" DIP. The existing lines have multiple fractures and heavy root intrusion. There was no discussion.

Mr. Ashley made the motion to accept Staff's recommendation. Mr. Pennington seconded the motion. Voice vote was unanimous.

COMMITTEE RECOMMENDATION: Approval of Compensation Budgets.

V. Quarterly Report – Second Quarter:

Attached you will find a Project Status Summary for all active acquisition projects. This report provides information on percentage of easements complete, percentage of compensation expended and comments on condemnations. This information is provided for your review. There was no discussion.

STAFF RECOMMENDATION: For information only. No action required.

VI. Other Business:

Included in this package is a copy of the 2023 Right of Way Committee Meeting Schedule:

There being no further business, the meeting adjourned at 9:09 am.

Metropolitan Sewerage District of Buncombe County INFORMATION ONLY ITEM

BOARD MEETING DATE: March 15, 2023

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

PREPARED BY: Hunter Carson, P.E. – Director of Engineering

Shaun Armistead, P.E. - Project Manager

SUBJECT: Consideration of Bids: Intermediate Clarifier Trough Rehabilitation Ph 1.

MSD Project No. 2021026

BACKGROUND: The intermediate clarifier was placed into service in 1990. Clarified water

flows upward through one of four clarifier basins and overflows into a series of aluminum effluent troughs. These troughs are in poor condition and are leaking. This project includes surface preparation and coating application to make the existing troughs watertight and resistant to further corrosion.

The intermediate clarifier rehabilitation project has been divided into two phases: Phase I, scheduled for completion in Spring 2023 will have the chosen contractor rehabilitating the effluent troughs in the southern half of the intermediate clarifier. Following a short evaluation period, Phase 2 will be undertaken, rehabbing the effluent troughs on the north side of the clarifier will be.

Phase 1 was advertised informally, and one bid was received on January 26, 2023, in the following amount:

<u>Contractor</u> <u>Bid</u>

1) Carolina Management Team, LLC \$255,651.89

The apparent low bidder is Carolina Management Team, LLC with a bid amount of \$255,651.89. Carolina Management Team, LLC is a qualified contractor for this project, with National Association of Corrosion Engineers (NACE) Certified Coating Inspectors and Society for Protective Coatings (SSPC) Certified Concrete Coating Inspectors on staff.

FISCAL IMPACT: The FY 22-23 construction budget for this project is \$257.000.00.

STAFF RECOMMENDATION: Information only item.

WRF - Intermediate Clarifier Effluent Trough Rehab, Phase 1 Project No. 2022024

BID TABULATION January 26, 2023

BIDDER	Bid Forms (Proposal)	TOTAL BID AMOUNT
Carolina Management Team, LLC		
Asheville, NC	Yes	\$255,651.89

Shaun Armistead, P.E. Project Engineer Metropolitan Sewerage District of Buncombe County, North Carolina

This is to certify that the bids tabulated herein were opened at 2:00 p.m. on the 26th day of January, 2023, in the W.H. Mull Building at the Metropolitan Sewerage District of Buncombe County, Asheville, North Carolina. This was an informal bid and no bid bonds were required.

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

BUDGET DATA SHEET - FY 2022 - 2023

PROJECT:	Int. Clarifier Eff. Trough Rehab	LOCATION:	MSD - Treatment Plant	
	· · · · · · · · · · · · · · · · · · ·			
TYPE:	Treatment Plant	PIPE RATING:	N/A	
PROJECT NO.	2022024	TOTAL LF:	0	
PROJECT BUDGET:	\$516,000.00	PROJECT ORIGIN:	Aging Infrastructure, Poor	r condition
		ii		
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	\$514,000.00			\$257,000.00
55430 - CONST. CONTRACT ADM.				
55440 - TESTING	\$2,000.00			
55450 - SURVEY - ASBUILT				
TOTAL AMOUNT	\$516,000.00	\$0.00	\$0.00	\$257,000.00
ENGINEER	MOD	110	FORWATER BURGE	
ENGINEER: R.O.W. ACQUISITION:	MSD MSD	HC # DI ATS: [0 1	ESTIMATED BUDGE	
CONTRACTOR:	MGD	# PLATS: [0]	FY 24-25	\$259,000.00
CONSTRUCTION ADM.:	MSD		FY 25-26	\$0.00
INSPECTION:	MSD		FY 26-27	\$0.00 \$0.00
			FY 27-28	\$0.00
			FY 28-29	\$0.00
PROJECT DESCRIPTION: The interr	nediate clarifier was placed into service in 19 er basins and overflows into a series of alo	990. Clarified water flows	s 	\$0.00
These troughs are in poor condition	FY 30-31	\$0.00		
coating application to make the exis-	r corrosion.	FY 31-32	\$0.00	





Intermediate Clarifier Effluent Trough Rehab Project No. 2022024



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: 3/15/23

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 Engineering Services Contract – Solids Handling PER,

MSD Project Number 2023048

BACKGROUND: The term "solids handling" refers to unit processes used to stabilize and

reduce the volume of solids generated during wastewater treatment. The purpose of this project is to evaluate and recommend improvements to MSD's solids handling processes at the Water Reclamation Facility (WRF). A Preliminary Engineering Report (PER) will be generated and will include a phased plan for WRF upgrades necessary for managing solids production over a 30-year planning horizon. The PER will focus on sludge thickening, thickener pumping system, sludge dewatering, and solids

disposal.

The fluidizing bed incinerator (FBI) is MSD's primary means of solids disposal at the WRF. The existing FBI was originally placed into service in 1992 and has undergone several rebuilds of various components over the years with the most major rebuild in 2004. Unlike most other process equipment, the FBI does not have a redundant unit that can be used for back-up. During these rebuild periods and annual maintenance periods MSD has an agreement to haul to the County Landfill.

This preliminary engineering report will both determine the sizing of the replacement FBI equipment along with identifying back-up options that may either reduce or eliminate the need for hauling during downtimes. The original permitted capacity of this system was 40 dry tons per day. Pursuant to Title V regulations, field stack tests are required to rate allowable output. Prior stack tests yielded 32 dry tons/day and MSD plans on running new stack tests at higher rates as necessary prior to the replacement being online.

With the new liquid treatment upgrades to meet the 2030 regulations, an increase in solids is anticipated and will be incorporated into the study.

Other solids handling processes including gravity thickeners, thickener pumping system, belt filter press dewatering, and ash thickener system are aged but believed to be in fair condition due to routine maintenance. The two gravity thickeners were placed in service in 1984, ash thickener system in 1992, and belt filter presses in 2004. Each system will be evaluated for condition, remaining service life, and ability to meet future sludge production rates.

Solids handling processes are critical to the WRF and are equally as important as liquid treatment processes. These processes and associated systems will be evaluated for age and condition, capacity, efficiency, and redundancy. The PER will focus heavily on a new sewage sludge incinerator capable of meeting future growth while also reducing emission concentrations.

The PER will provide prioritized project recommendations and cost estimates that will assist MSD in creating its 10-yr CIP budget for the plant, with a planning horizon of thirty years.

Selection of Consultant

In accordance with NCGS 143-64.31 the District advertised a Request for Qualifications for the project and received responses from CDM Smith and Hazen & Sawyer. Both firms were invited to interview in front of MSD's selection committee and discussed their qualifications and methodology for approaching this project. Both firms possessed competent staff and gave excellent presentations.

After careful review and consideration of both firm's capabilities, experience, and staffing, the selection committee chose Hazen & Sawyer as the most qualified engineering consultant to complete the project. Hazen & Sawyer has extensive experience with similar solids handling studies and has performed work on all four sewage sludge incinerators in the state of North Carolina. Additionally, Hazen & Sawyer will team with Chavond-Barry Engineering, a highly reputable engineering firm specializing in the design and improvement of thermal processes and air pollution control systems.

Hazen & Sawyer has performed well on previous projects for the District. In 2013, they completed a Capital Improvements Plan for MSD's FBI to meet new emission limits, referred to as "Maximum Available Control Technology" (MACT). In 2011, the Weaverville Pumping System Study was completed, a comprehensive evaluation of the pumping system with recommended capital improvements.

Following the firm selection, Hazen & Sawyer prepared a Scope of Work which includes the following services:

- Age and condition evaluation of existing solids handling processes.
- Current and future capacity evaluation of existing solids handling processes.
- Sludge production projections for 30-year planning period.
- Technology assessment for future solids handling processes.
- Alternatives analysis for (backup) solids disposal.
- Preliminary permitting for new sewage sludge incinerator.
- Preparation of a PER. The PER will include recommended infrastructure improvements, cost estimates, address constructability concerns and permitting requirements, and a schedule for implementation.

Engineering Fee

Hazen & Sawyer's initial fee was reduced to \$453,300.00. Hazen & Sawyer's Scope of Services includes an optional task in the amount of \$23,200.00 for assistance during incinerator stack testing.

The inclusion of this optional task is recommended by staff but will be initiated only if deemed necessary prior to the annual stack test.

Please refer to the attached Scope of Services and Fee Schedule for further details.

FISCAL IMPACT:

Sufficient funds are available in the CIP Contingency Fund to cover anticipated FY 22-23 expenses. Remaining expenses will be budgeted in FY 23-24.

This project will span two fiscal years, FY 22-23 and FY 23-24 so a Capital Project Ordinance is required.

STAFF RECOMMENDATION:

Staff recommends the District enter into an engineering contract with Hazen & Sawyer in the amount of \$453,300.00, subject to final review and approval by District Counsel.

SOLIDS HANDLING PRELIMINARY ENGINEERING REPORT 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 Solids Handling Preliminary Engineering Report (PER) Capital Project Ordinance is hereby adopted:

Section 1. The project authorized is the Solids Handling PER to be financed in whole or in part by appropriated net position.

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

Capital Expenditures

\$ 453,300.00

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

Transfer from General Fund \$\\$453,300.00

- Section 4. The Finance Officer is hereby directed to maintain within the Capital Improvements Program 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 Solids Handling PER 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 Fifteenth Day of March, 2023.

ATTEST: BUNCOMBE COUNTY,	BOARD OF THE METROPOLITAN SEWERAGE DISTRICT OF 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	



March 3, 2023

Hunter Carson, PE MSD of Buncombe County, NC Mull Building 2028 Riverside Drive Asheville, NC 28804

Re: Scope and Fee Proposal for the Solids Handling PER

Dear Mr. Carson:

Hazen and Sawyer is pleased to submit the enclosed scope and fee proposal for your consideration to provide preliminary engineering services to complete the Solids Handling PER at the French Broad River WRF.

Enclosed you will find the following documents:

- Scope of Services including a description of the services to be provided.
- One Optional Task for MSD's consideration
- Our proposed fee value broken out by the baseline lump sum fee and not to exceed with categorical rates for the Optional Task
- A Project Schedule
- A table with the projected manhours and associated fee, correlating with the Scope of Services Tasks

Should you have any questions regarding this proposal, please feel free to reach out.

Very truly yours,

Aaron D. Babson, PE Associate Vice President

cc: Jim Struve, PE



Scope of Services

Metropolitan Sewerage District of Buncombe County French Broad River Water Reclamation Facility Solids Handling PER

The purpose of this agreement is for Hazen and Sawyer (Hazen) to provide Professional Engineering services to complete a Solids Handling Preliminary Engineering Report (PER) at Metropolitan Sewerage District of Buncombe County's French Broad River WRF (MSD) as described in the Request for Qualifications. The PER will include a condition assessment on the existing equipment, incinerator alternatives analysis, siting the new facilities on the existing French Broad River WRF plant site to seamlessly be integrated into the forthcoming liquid train project, and for beginning regulatory discussions.

MSD indicated the following drivers for the Solids Handling PER Project. These items have been considered in the development of the scope of services proposal:

- Age and Condition of the existing FBI
- Capacity of existing FBI and Sludge Production of Future Process
- Lack of Redundancy (No sustainable alternative disposal option)
- Permitting of new sewage sludge incineration unit
- Process redundancy vs. running two incineration units
- Limited footprint for new infrastructure

Technical memoranda (TM) will be developed as part of this assignment. Once reviewed and discussed with District staff, pertinent information from the TMs will be incorporated into an Executive Summary to compile a final Preliminary Engineering Report. The evaluation is to generally include:

- Task 1 Bimonthly Project and Kickoff Meetings
- Task 2 Sludge Production Development, Condition & Capacity Assessment
- Task 3 Technology Assessment (Thickening Technology, Dewatering Technology, Incinerator and Air Pollution Control Technology, Redundancy Assessment)
- Task 4 Permitting Assistance
- Task 5 New Solids Handling Facility Concept Development
- Task 6 CIP Development and Final Report
- Task 7 Stack Testing Assistance (Optional)

The following task items will be completed by Hazen and Sawyer (Hazen) and their sub-consultants for this project. The scope of tasks outlined below shall include all incidentals required to provide the



complete task described, including but not limited to overall management of the evaluation work, project planning, budget and schedule oversight, administration of the MSD agreement, arrangement / management of all meetings and communication as needed with various project stakeholders.

1. Bimonthly Project and Kickoff Meetings

1.1 Project Administration

Hazen will manage the efforts of its project team members and sub-consultants by assigning manpower, delegate responsibilities, review work progress, monitor budget and schedule, and direct the progress of the work. As part of project administration, Hazen will provide monthly invoicing with status reports and schedule updates pertaining to the Work. Costs for this task are integrated in the overall costs for the individual tasks.

1.2 Bimonthly Progress Meetings

Hazen will host progress meetings via Teams with MSD, as necessary. At a maximum, Hazen will conduct bi-monthly progress meetings in addition to the workshops listed below. These meetings will be conducted in between workshops to provide a project update to MSD, if desired.

1.3 Kickoff Meeting and Project Workshops

Hazen will lead a project kickoff workshop with MSD. The purpose of the workshop is to re-introduce the key Hazen team members, review the scope of services as delineated herein, discuss MSD's priorities and drivers, understand current biosolids management and operations, and to obtain critical process and operating data. Hazen has gathered quite a bit of information regarding these topics though the scoping meetings and may use the time to confirm understandings more efficiently to confirm understandings gained through these meetings and move to project related tasks.

In addition to the kickoff meeting, project workshops, as detailed in other sections of this scope of services, will also be held throughout the project. A presentation will be prepared for each workshop to visually present the information and to facilitate discussion. Minutes from all meetings will be recorded and distributed to all participants to document key decisions and cost implications. Each workshop cost is included in the individual tasks.

1.4 Quality Assurance / Quality Control

Hazen will conduct an internal technical review for each proposed TM and the Executive Summary in accordance with Hazen's Quality Control Policy Manual prior to submission to MSD. Costs for QA/QC related activities are integrated into each task described herein.



2. Sludge Production Development, Condition & Capacity Assessment

2.1 Sludge Production Development

2.1.1 Historical Data Review

Hazen will evaluate historical plant operating data to estimate sludge production rates and associated peaking factors. Operating data from the facility shall be provided in electronic format (e.g., Microsoft Excel spreadsheet, raw database files) for the previous three (3) years for the following criteria:

- Influent Average Daily Flow Rate (million gallons/day)
- Influent BOD or CBOD (mg/L)
- Influent TSS (mg/L)
- Effluent BOD or CBOD (mg/L)
- Effluent TSS (mg/L)
- Primary treatment BOD (or CBOD) and TSS, as available
- Secondary or activated sludge treatment MLSS and MLVSS
- Flow and %TSS (or mg/L) to gravity thickening
- Flow, %TSS (or mg/L) and VSS/TSS sent to dewatering
- Dewatered cake production information (e.g., dewatered cake solids, wet cake mass, dry solids mass, etc.)
- Dewatered cake characteristics including available TCLP (Toxicity Characteristic Leaching Procedure) results, other sampling to include Volatile Solids (VS) %, Total Solids (TS) %, BTU content, etc.
- FBI sludge processing rates, water use by flow and time on roof sprays, auxiliary fuel consumption rates, operating times and total daily processing rates by dry ton, operating temperatures through the system, differential pressures through the incinerator and air pollution control equipment, etc.

Hazen will utilize information provided to estimate sludge production rates (lb/MG flow treated) (SPR) for the WRF using plant influent and Hazen's sludge production estimator tool and compare estimates from the sludge production estimator tool to other plant operating data to develop a preliminary mass balance around the WRF for the existing secondary treatment process with and without high-rate primary treatment (HRPT) in service.

In addition, Hazen will develop up to three (3) future sludge production rate projections to represent the future secondary liquid treatment process to capture future changes to solids production at the WRF. We will work with the consultant firm selected for the Biological Treatment Analysis to estimate the solids production rates of the potential options developed. If the options are not available by this firm when needed to move forward, Hazen will work with MSD to develop the three alternatives most likely to be considered in this project and produce the estimated SPRs for our study.



In addition to SPR development, dewatered cake solids concentration and anticipated VS/TS fraction from each process will be developed to inform incinerator design.

2.1.2 Coordination with Liquid Train PER

Hazen will conduct two (2) virtual coordination meetings with the selected firm for the Liquid Train Improvements PER to coordinate on future secondary liquid treatment processes considered, sludge production rate calculations and impact of selected process on solids handling process.

Once a Biowin model is developed for the Liquid Train PER and the selected secondary process is modeled, Hazen will confirm the solids production rates with the model. Significant changes in solids production rates that result in re-work of the proposed concepts and technical memorandums previously produced may require an amendment.

Should Hazen be selected for the Liquid Train PER, the cost associated with this task will not be billed to MSD.

2.1.3 Mass-Peaking Factor Development

Hazen will estimate mass-based peaking factors for the maximum month (MAX30), maximum two-week (MAX14), and maximum week (MAX07) operating conditions at the WRF from the furnished plant data. Absent sufficient operating data, Hazen will estimate mass-based peaking factors using statistical tools combined with experience working with similar municipal wastewater treatment plants of similar size and scale.

2.1.4 Influent Flow and Load Projections

Hazen will estimate future influent flow and loading for a 30-year planning period for the WRF based on historical data analysis as well as anticipated domestic and industrial growth rates. Hazen will work with MSD to develop the projected growth rates and distribution of industrial vs. domestic flows, in addition we will utilize information provided by Buncombe County and City of Asheville Economic Development teams, Hazen's 2017 City of Asheville Water System Master Plan Report, information from the French Broad River Metropolitan Planning Organization, US Census, and other information provided by MSD regarding known future development areas to develop the projections over that planning horizon.

2.1.5 Future Residuals Production Rate Estimate

Hazen will estimate future residuals production rates for a 30-year planning period (e.g., 2023 to 2052) for the WRF based on the influent flow and load projections developed in Task 2.1.4. Future residuals production rates and rate of growth will be utilized for planning ultimate facility capacity and to identify potential pathways for facility infrastructure phasing.

Future residuals production rate development will account for the timeline of planned liquid train improvements and transition of secondary process.



2.2 Condition Assessment

A visual mechanical condition assessment of the existing solids handling processes (equipment) will be performed by Hazen and its subconsultant, CBE, to identify visible mechanical defects and deficiencies. In addition to the visual condition assessment, staff interviews will be conducted and maintenance records reviewed. The assessment will cover the following equipment downstream of the blend tank pumps:

- Gravity Thickeners
- Thickener Pump Station
- Dewatering Polymer System
- Belt Filter Presses
- Ash Slurry Pumps MSD would like to evaluate removing Ash Thickener and Thickened Ash Pumps from operation. Ash slurry pumps will be evaluated for ability to pump directly to lagoons.
- Electrical Equipment for all process equipment included here-in. Assessment will include remaining service time estimates and available capacity.

Defects, deficiencies, and non-compliance items will be documented. The existing fluidized bed incinerator and equipment was previously evaluated by IFCO in 2020 and MSD has plans in place to complete repairs and upgrades as required to maintain operation until a new unit can be installed.

2.3 Capacity Assessment

Solids production rates developed in Task 2.1 will be utilized to assess the existing solids processing equipment capacity and ability to handle AVG365 MAX07, MAX14, and MAX30 conditions for the current permitted plant capacity. The capacity assessment will be completed for both the current liquid treatment process as well as for the future secondary treatment process. Capacity shortfalls and system bottlenecks in the solids processing train will be identified. Incinerator and associated ancillary equipment capacity will not be evaluated; a capacity of 40 dtpd or as indicated by MSD will be assumed. Ways to optimize the existing system to increase capacity, reliability and longevity will be evaluated.

2.4 Technical Memorandum and Workshop

Hazen will prepare a TM summarizing the findings and recommendations of the sludge production rate development and condition / capacity assessment. A draft TM (#1) will be submitted to the District for review prior to the Workshop. Following sufficient review time, a half-day workshop will be conducted to present the draft TM and to receive review comments. Review comments will be incorporated into final TM #1 following the workshop.

3. Technology Assessment

The following technology evaluations will be completed to confirm thickening, dewatering, incineration, and air pollution control technology for the new incinerator. In addition, alternate solids handling



processes will be evaluated to determine best solids handling operational strategy during incinerator downtime.

3.1 Thickening Assessment

Hazen will evaluate two different thickening technologies – continuing with gravity thickening or transitioning to a mechanical thickening process (i.e. GBT, RDT, TCEN). Each thickening technology will be evaluated based upon the following criteria:

- Solids Feed Rate (lb/hr)
- Thickened Solids Content (% total solids)
- Electrical consumption (kW-hr)
- Polymer consumption (lb(active)/dT solids)
- Footprint
- Capital Cost (\$)
- Operation and Maintenance Cost (\$)
- Operational complexity
- Thickened sludge storage requirements
- Impact on dewatering operation and FBI

Hazen will complete a cost-benefit analysis for the two thickening technologies and consider impact of technology on entire thickening operation (feed pumps, polymer requirements, thickened solids storage requirements) and evaluate the impact on dewaterability and FBI operation. Hazen will provide a recommendation of whether MSD shall continue to utilize the existing gravity thickeners or transition to mechanical thickening when the new incinerator is constructed.

3.2 Dewatering Technology

Hazen will evaluate two (2) dewatering technologies - a belt filter press and a centrifuge. Each dewatering technology will be evaluated based upon the following criteria:

- Solids Feed Rate (lb/hr)
- Cake Dryness (% total solids)
- Electrical consumption (kW-hr)
- Polymer consumption (lb(active)/dT solids)
- Footprint
- Capital Cost (\$) (including structural implications of centrifuges)
- Operation and Maintenance Cost (\$)
- Historical Operating Performance (Owner References)
- Impact on Cake Pumps and FBI operation (and energy expended at FBI)

Hazen will complete a cost-benefit analysis for the two dewatering technologies and consider impact of technology on entire dewatering support system (feed pumps, polymer system, cake pumps) and evaluate the impact on FBI operation and utilization of supplemental fuel. Hazen will provide a recommendation



of whether the District shall continue to dewater with belt filter presses or transition to centrifuges when the new incinerator is constructed.

3.3 Incinerator and Air Pollution Control Assessment

Hazen and its subconsultant, CBE, will evaluate different options to meet new LLLL limits. For the incinerator and air pollution control technology assessment, CBE will perform a comprehensive review of technologies available with consideration of current need and mindful to be as flexible as possible for potential future regulatory changes especially with regards to PFAS/PFOS. For each technology, the capital and operating cost will also be evaluated.

For the incinerator, given MSD's familiarity with refractory dome fluidized bed incinerator, this will be the base design for comparison. Various technologies and designs will be reviewed and evaluated. Some technologies to be considered would be Multiple Hearth Pyrolizer, Sludge Dryer/Incineration/Thermal Recovery combination process, and different air distribution system for the fluidized bed incinerator, such as metal plate or pipe tuyere.

For Air Pollution control (APC), two technologies have shown potential to meet the LLLL new incinerator emission standard, Fixed Carbon Bed and Sorbent Polymer Composite. Both technologies will be reviewed extensively to evaluate their advantages and disadvantages. Other potential technologies such as bag filters with carbon injection will also be considered.

Each incinerator and APC technology will be assessed for following criteria:

- Capacity/Feed Rate
- Utility and consumable consumption
- Footprint and layout
- Capital Cost
- Operation and Maintenance Cost
- Operational Complexity
- Impact to upstream and downstream equipment
- Potential permitting complication

Hazen/CBE will provide recommendations on the Incinerator and Air Pollution Control System that is most appropriate for MSD. The technology assessment will provide MSD with high confidence level that the technology selected for incineration and air pollution control will be one that can meet the emission regulations while being most economical in both capital and operational cost.

PFOS/PFOA may also be a future concern in the biosolids treatment train. MSD requests for Hazen to include a minor task to consider potential technologies available to remove these contaminants and include the flexibility in the proposed design to install treatment in the future.



3.4 Redundancy Assessment

Under this task Hazen will develop preliminary design concepts for a redundant biosolids management strategy that could be implemented to provide redundancy to the new FBI or be implemented during incinerator downtime. Potential alternatives for evaluation include the following:

- Composting
- Drying
- Rehabilitation of the existing incinerator, resulting in two functioning incinerators under different regulations
- Sustainable Landfill options
- Third-party vendor (i.e. McGill Composting, Synagro, Denali, others)

A maximum of three (3) alternatives will be evaluated. Hazen will meet with MSD to select the three alternatives for evaluation.

3.5 Technical Memorandum and Workshop

Hazen and CBE will prepare a TM summarizing the technology assessments of thickening technology, dewatering technology, incinerator and air pollution control technology and the redundant solids management strategy for incinerator downtime. A draft TM (#2) will be submitted to MSD for review. Following sufficient review time, a half-day workshop will be conducted to present the draft TM and to receive review comments. Review comments will be incorporated into final TM #2.

4. Permitting Assistance

Hazen and its subconsultant, CBE, will have preliminary discussions with Asheville-Buncombe Air Quality Agency (ABAQA) to discuss the concept for construction of a new incinerator to be permitted to meet the new LLLL limits. Hazen and CBE will meet with ABAQA a maximum of three (3) meetings (2 virtual, 1 in-person) to discuss the project and probability for success. Hazen and CBE will complete the following tasks:

- Identify needed stakeholder engagement based on prior public perception and acceptance of new FBIs. Reach out to similar size facilities working through the LLLL permitting process to understand prior lessons learned.
- Develop a checklist and flowchart indicating the required permitting steps to successful operation of a new FBI
- Meet with ABAQA to discuss proposed project
- Develop regulatory and implementation schedule

Hazen will prepare a TM summarizing the permitting strategy, potential issues and required stakeholder engagement for permitting success and document discussions with ABAQA. A draft TM (#3) will be submitted to the District for review. Review comments will be incorporated into final TM #3.



5. New Solids Handling Facility Concept Development

Hazen will develop preliminary design concepts (max 30% design) for the new Solids Handling Facility or modifications required to the existing facility based around the results of the Technology Assessments detailed in Task 3. For the preliminary design, Hazen and CBE will develop the following:

- Process Flow Diagram
- Process Mass Balance
- Major Unit Process Sizing
- Major Process Equipment Sizing
- Class 5 Level Capital Cost Estimate

In addition, Hazen will develop two (2) conceptual Solids Handling Facility layouts including a site plan and 30% drawing preparation of the proposed improvements. Hazen will consider the impacts on the existing infrastructure when proposing to repurpose with the new design.

Hazen will prepare a TM summarizing the recommended concepts with preliminary layouts and site layout. A draft TM (#4) will be submitted to MSD for review. Following sufficient review time, a half-day workshop will be conducted to present the draft TM and to receive review comments. Review comments will be incorporated into final TM #4.

6. CIP Development and Final Report

Hazen will summarize the final recommendation and cost for CIP budgeting purposes.

Hazen will prepare an Executive Summary detailing the findings, conclusions, and recommendations for subsequent actions of the four (4) TMs. In addition, Hazen will summarize the final recommendation and associated cost and present for CIP budgeting purposes by February 2024.

A draft of the Executive Summary will be submitted to MSD for review and comment prior to inclusion in the Final Report. Following sufficient review time, a half-day workshop will be conducted to present the draft Final Report and to receive review comments. A final report will be prepared after the finalized Executive Summary and will include the Executive Summary and the four TMs. The final report will include four (4) bound copies and one (1) electronic version in bookmarked PDF format and delivered by May 2024.

7. Stack Testing Assistance (Optional Task)

Hazen and its subconsultant, CBE, will provide onsite support during stack testing of the existing incinerator to rerate the incinerator to the original 40 dry ton per day processing capacity.

Prior to conducting a stack test a stack test protocol must be drafted and submitted for approval by the air regulatory agency. CBE will compose this document and incorporate MSD's comments prior to submittal to the agency.



During the testing, Hazen and/or CBE will be on-site coordinating testing and operational needs. MSD will be setting operating limits based upon the incinerator and air pollution control operation during testing. CBE will work with MSD to understand the incinerator system limitations and abilities so that the most advantageous operating parameters are set to avoid unnecessary deviations.

In addition, Hazen and CBE will provide support to MSD during follow-up reporting of the test results. CBE will review the operating data and calculate the operating averages and feed rates for inclusion in the stack test report. We will perform a detailed review of the stack test report to help ensure emissions are correctly calculated and reported.

Task 7 is categorical rate, not to exceed, and is an optional task that shall be specifically authorized and directed by MSD in writing before providing this service.

List of Deliverables

- TM #1 Solids Production Estimates, Condition & Capacity Assessment
- TM #2 Technology Assessment (Thickening, Dewatering, Incinerator & Air Pollution Control, and Redundancy Assessment)
- TM #3 Permitting Assessment
- TM #4 New Solids Handling Facility Concept
- Executive Summary
- Final Report (Executive Summary + TM Nos. 1, 2, 3, and 4)

Basis of Compensation

The work to be performed for providing professional engineering services associated with preparation of the Solids Handling PER as previously delineated in Scope of Services above, will be billed on a lump sum basis and is a total of \$453,300. Task 7 is an optional task that shall only be invoiced by Hazen as authorized and directed by MSD and will be billed as categorical rate, not to exceed should it be needed.

A breakdown of the fee is shown in the table below. Direct project expenses for travel, reprographics, etc. will be billed at straight costs.



Task	Subtask Description	Total
1	Monthly Project and Kickoff Meetings	\$16,600
2	Sludge Production Development, Condition & Capacity Assessment	\$90,300
3	Technology Assessment	\$175,800
4	Permitting Assistance	\$35,300
5	New Incinerator Concept Development	\$101,300
6	Final Report	\$34,000
	Reimbursable Expenses (Included in Lump Sum)	\$ -
	Base Total for Preliminary Engineering Report Tasks	\$453,300
7	Stack Testing Assistance (Optional)	\$23,200

Our categorical billing rates are provided below. These rates will be used if the optional, not to exceed task is authorized by MSD.

Employee Classification	Billing Rates
Vice President	\$280.00
Associate Vice President	\$260.00
Senior Associate	\$245.00
Associate	\$195.00
Senior Principal Engineer	\$180.00
Principal Engineer	\$160.00
Engineer	\$130.00
Assistant Engineer	\$120.00
Senior Principal Designer	\$160.00
Principal Designer	\$135.00
Designer	\$105.00
Administrative	\$80.00



Schedule

The schedule below summarizes the tentative major milestones for completion of the Solids Handling PER

Milestone Description	Tentative Date
NTP / Kick-Off Workshop	March 2023
Workshop #1 – SPR Development and Condition / Capacity Assessment	Jun 2023
Workshop #2 – Technology Assessments	Aug 2023
TM #3 – Permitting Discussion	Sept 2023
Workshop #4 – New Incinerator Design Concept	Nov 2023
Workshop #5 – Draft Report Discussion	Jan 2024
Final Report	May 2024

Metropolitan Sewerage District of Buncombe County French Broad River Water Reclamation Facility Solids Handling Preliminary Engineering Report Preliminary Engineering Services Projected Manhours and Associated Fee Revision 3 - March 2023

ask No	. Description	VP (Hrs) \$280.00 Prj Dir Struve	VP (Hrs) \$280.00 Tech Advisor Bullard	AVP (Hrs) \$260.00 PFAS Khunjar	AVP (Hrs) \$260.00 Incineration Bickerstaff	AVP (Hrs) \$260.00 Incineration Babson	Sr Assoc (Hrs) \$245.00 Condition Assessment Moretz	Sr Assoc (Hrs) \$245.00 Structural Assessment Whiteley	Assoc (Hrs) \$195.00 Prj Mgr Borgmann	Sr Prin Eng (Hrs) \$175.00 Electrical Eval Siebach	Prin Eng (Hrs) \$160.00 Prj Eng Yeh / Young	Asst Eng (Hrs) \$120.00 Prj Eng Ananth	Sr Pri CAD (Hrs) \$160.00 Designer Karmanocky / Rogers	CBE (Hrs) \$260.00 CBE John Yu	CBE (Hrs) \$210.00 CBE Albert Hamfeldt	CBE (Hrs) \$185.00 CBE Keith Croly	Total Labor Hrs	Total Labor Fee
1 1.2	Monthly Project and Kickoff Meetings Monthly Progress Meetings (Virtual)					7			14			14					35	\$6,230
1.3	Kickoff Meeting		4			4			4			4					16	\$3,420
	Subtotal	0	4	0	0	11	0	0	18	0	0	18	0				51	\$9,650
	Task No. 1 Expenses																	
	Subtotal								Travel	Expenses								\$893
	Task No. 1 Subconsultants CBE - Kickoff Meeting including onsite walkthrough and staff interviews													4	16		20	\$4,400
	CBE Expenses						Flight, Re	ental Car, Hotel,	Meals for Kick	off meeting and f	acility visit (2 day	s onsite)						\$1,600
	CBE Subtotal													4	16	0	20	\$6,000
	Task 1 Hazen Subtotal Task 1 CBE Subtotal																	\$10,600 \$6,000
	Task 1 Subtotal																	\$16,600
2	Sludge Production Development, Condition & Capacity Ass	sessment																
2.1	Review Historical Data: Influent Loadings and Sludge Production Rates		8						8		16	8					40	\$7,320
2.1	Confirm/Update Flow Projections		4			4			24		24						56	\$10,680
2.1	Establish Solids Loading Rates		4			4			24		16	8					56	\$10,360
2.1	Coordination with Liquid Train PER		4			8			16		16						44	\$8,880
2.2	Perform Visual Mechanical Condition Assessment				4		8		8								20	\$4,560
2.2	Perform Electrical Condition Assessment				_	_				16							16	\$2,800
2.2	Incinerator & Ancillaries Condition Assessment				4	8											12	\$3,120
2.3	Existing Facility Capacity Assessment		6						12		32						50	\$9,140
2.4	Prepare Tech Memo #1	_			8		12		24	4	24						72	\$14,240
2.4	Provide Tech Memo #1 Review	2	4														6	\$1,680
2.4	Conduct Sludge Production Rate, Condition & Capacity Assessment Workshop	2	8			8			16		8	8					50	\$10,240
	Subtotal	4	38	0	16	32	20	0	132	20	136	24	0				422	\$83,020
	Task No. 2 Expenses																	
	Subtotal								Travel	Expenses								\$2,679
	Task No. 2 Subconsultants																	
	CBE historical data analysis, operational review, preliminary planning for the New Incinerator													8	12		20	\$4,600
	CBE Expenses																	\$0
	Subtotal													8	12	0	20	\$4,600
	Task 2 Hazen Subtotal Task 2 CBE Subtotal																	\$85,700 \$4,600
	Task 2 CBE Subtotal Task 2 Subtotal																	_

Task N	o. Description	VP (Hrs) \$280.00 Prj Dir Struve	VP (Hrs) \$280.00 Tech Advisor Bullard	AVP (Hrs) \$260.00 PFAS Khunjar	AVP (Hrs) \$260.00 Incineration	AVP (Hrs) \$260.00 Incineration Babson	Sr Assoc (Hrs) \$245.00 Condition Assessment Moretz	Sr Assoc (Hrs) \$245.00 Structural Assessment Whiteley	Assoc (Hrs) \$195.00 Prj Mgr Borgmann	Sr Prin Eng (Hrs) \$175.00 Electrical Eval Siebach	Prin Eng (Hrs) \$160.00 Prj Eng Yeh / Young	Asst Eng (Hrs) \$120.00 Prj Eng Ananth	Sr Pri CAD (Hrs) \$160.00 Designer Karmanocky /	CBE (Hrs) \$260.00 CBE John Yu	CBE (Hrs) \$210.00 CBE Albert Hamfeldt	CBE (Hrs) \$185.00 CBE Keith Croly	Total Labor Hrs	Total Labor Fee
3 3.1 3.2 3.3	Technology Assessment Thickening Assessment Dewatering Assessment Incinerator and Air Pollution		4 4		8	16		32	24 24 8		24 24		Rogers		Hamieidi		52 84 32	\$9,640 \$17,480 \$7,800
3.3 3.4 3.5	Future PFAS Planning Redundancy Assessment Prepare Tech Memo #2		4	16		8		16	2 16 24		16 24	32					26 68 64	\$6,630 \$10,640 \$12,440
3.5 3.5	Provide Tech Memo #2 Review Conduct Thickening & Dewatering Technology Assessment Workshop	4	8 4		4	8 8			16		4	12					20 52	\$5,440 \$10,560
	Subtotal	8	24	16	12	40	0	48	114	0	92	44	0				398	\$80,630
	Task No. 3 Expenses Subtotal								Travel	Expenses								\$893
	Task No. 3 Subconsultants CBE - Incinerator and Air Pollution Assessment								riaro	Ехропос				20	60	60	140	\$28,900
	CBE - Prepare Incinerator Options TM, APC Options TM CBE - Conduct Technology Assessment Workshop (1 in													20 21	20 21	20 10	60 52	\$13,100 \$11,720
	person, 1 virtual). Hazen/Client Virtual Meetings (6)																	
	CBE - Produce Process Calculation and PFD CBE - Preliminary System Design (1 design) and Cost Estimating													50 20	30 20	30 20	110 60	\$24,850 \$13,100
	CBE Expenses							Flight, Renta	al Car, Hotel, N	leals for one onsi	te workshops			404	454	110	400	\$2,500
	Subtotal													131	151	140	422	\$94,170
	Task 3 Hazen Subtotal Task 3 CBE Subtotal Task 3 Subtotal																	\$81,600 \$94,200 \$175,800
4	Permitting Assistance																	\$110,000
4.1 4.1 4.1	Meetings with ABAQA (including material preparation) Develop Checklist of Permitting Steps Prepare Tech Memo #3					16 12 16			8 8 8			8 8 16					32 28 40	\$6,680 \$5,640 \$7,640
1.4	Provide Tech Memo #3 Review		4		4	10			4			10					12	\$2,940
	Subtotal	0	4	0	4	44	0	0	28	0	0	32	0				112	\$22,900
	Task No. 4 Expenses Subtotal								Travel	Expenses								\$729
	Task No. 4 Subconsultants									,								**
	CBE - Meetings with ABAQA (Virtual) CBE - Meetings with Hazen to support Permitting strategy /														10	10	20	\$3,950
	Proposed APC equipment to meet LLLL limits CBE - Prepare TM#3: Review of Permit Process														10	10 20	20 20	\$3,950 \$3,700
	Subtotal													0	20	40	60	\$11,600
														J	20	10	30	Ψ11,000
	Task 4 Hazen Subtotal Task 4 CBE Subtotal																	\$23,700 \$11,600
	Task 4 Subtotal																	\$35,300

Task N	o. Description	VP (Hrs) \$280.00 Prj Dir Struve	VP (Hrs) \$280.00 Tech Advisor Bullard	AVP (Hrs) \$260.00 PFAS Khunjar	AVP (Hrs) \$260.00 Incineration	AVP (Hrs) \$260.00 Incineration	Sr Assoc (Hrs) \$245.00 Condition Assessment Moretz	Sr Assoc (Hrs) \$245.00 Structural Assessment Whiteley	Assoc (Hrs) \$195.00 Prj Mgr Borgmann	Sr Prin Eng (Hrs) \$175.00 Electrical Eval Siebach	Prin Eng (Hrs) \$160.00 Prj Eng Yeh / Young	Asst Eng (Hrs) \$120.00 Prj Eng Ananth	Sr Pri CAD (Hrs) \$160.00 Designer Karmanocky /	CBE (Hrs) \$260.00 CBE John Yu	CBE (Hrs) \$210.00 CBE Albert	CBE (Hrs) \$185.00 CBE Keith Croly	Total Labor Hrs	Total Labor Fee
5 5.1	New Solids Handling Facility Concept Development New SH Facility 30% Drawing Preparation			10	8	24		•	32	32			Rogers 80		Hamfeldt	,	186	\$35,560
5.1 5.2	New SH Facility 30% Site Layout Prepare Tech Memo #4					24 16			32 8	8			80				136 32	\$25,280 \$7,120
5.2	Provide Tech Memo #4 Review	4	4														8	\$2,240
5.2	Conduct SH Facility Concept Workshop	8	8		8	8			16		16						64	\$14,320
	Subtotal	12	12	10	16	72	0	0	88	40	16	0	160				426	\$84,520
	Task No. 5 Expenses																	
	Subtotal								Travel I	Expenses								\$893
	Task No. 5 Subconsultants CBE - New SH Facility Layouts (CBE supports																	
	Incinerator/APC area)													20	20	20	60	\$13,100
	CBE - Conduct SH Facility Concept Workshop													4	4	4	12	\$2,620
	Subtotal													24	24	24	72	\$15,720
	Task 5 Hazen Subtotal Task 5 CBE Subtotal																	\$85,500 \$15,800
	Task 5 Subtotal																	\$101,300
6	CIP Development and Final Report																	
	Summarize Final Recommendations and Cost for CIP Budgeting					4			16		24						44	\$8,000
	Prepare Executive Summary	•			4				16		16						36	\$6,720
	Provide Executive Summary Review Conduct Final Report Review Workshop	2 2	4 2			4 4			12		4						10 24	\$2,720 \$5,140
	Subtotal	4	6	0	4		0	0	28	0	20	0	0				70	\$22,580
		7	0	O	7	O	O	O	20	O	20	O	O				70	Ψ22,000
	Task No. 6 Expenses Subtotal								Travel I	Expenses								\$893
	Task No. 6 Subconsultants									·								
	Summarize Final Recommendations and Cost for CIP													12	12	12	36	\$7,860
	Budgeting Conduct Final Report Review Workshop													4	4	4		
	Conduct Final Report Review Workshop													•			12	\$2,620
	Subtotal													16	16	16	48	\$10,480
	Task 6 Hazen Subtotal Task 6 CBE Subtotal																	\$23,500 \$10,500
	Task 6 Subtotal																	\$34,000
	Hazen Base Lump Sum Fee CBE Base Lump Sum Fee Total Base Lump Sum Fee																	\$310,600 \$142,700 \$453,300

Task No. Description	VP (Hrs) \$280.00 Prj Dir Struve	VP (Hrs) \$280.00 Tech Advisor Bullard	AVP (Hrs) \$260.00 PFAS Khunjar	AVP (Hrs) \$260.00 Incineration	AVP (Hrs) \$260.00 Incineration Babson	Sr Assoc (Hrs) \$245.00 Condition Assessment Moretz	Sr Assoc (Hrs) \$245.00 Structural Assessment Whiteley	Assoc (Hrs) \$195.00 Prj Mgr Borgmann	Sr Prin Eng (Hrs) \$175.00 Electrical Eval Siebach	Prin Eng (Hrs) \$160.00 Prj Eng Yeh / Young	Asst Eng (Hrs) \$120.00 Prj Eng Ananth	Sr Pri CAD (Hrs) \$160.00 Designer Karmanocky / Rogers	CBE (Hrs) \$260.00 CBE John Yu	CBE (Hrs) \$210.00 CBE Albert Hamfeldt	CBE (Hrs) \$185.00 CBE Keith Croly	Total Labor Hrs	Total Labor Fee
Optional Tasks 7 Stack Testing Assistance (Optional) 7.1 Onsite Stack Testing Support 7.1 Stack Testing Reporting Assistance					24 4							rogers		Hamileide		24 4	\$6,240 \$1,040
Subtotal	0	0	0	0	28	0	0	0	0	0	0	0				28	\$7,280
Task No. 7 Expenses Subtotal								Travel	Expenses								\$729
Task No. 7 Subconsultants CBE - Old stack Test Review and Protocol prep CBE - Travel and Onsite for 2 days of stack test. CBE - Calculation and report review CBE Expenses							Flight, Rer	ıtal Car, Hotel,	Meals for Onsite	Inspection			2	8 40 8	4 8	14 40 18	\$2,940 \$8,400 \$3,680 \$1,600
Subtotal													4	56	12	72	15,020
Task 7 Hazen Subtotal Task 7 CBE Subtotal Task 7 Subtotal																	\$8,100 \$15,100 \$23,200

Board Action Item

BOARD MEETING DATE: March 15, 2023

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: English Drive Master Plan Sewer Extension – Consideration of

Reimbursement Agreement, MSD Project No. 2021216

BACKGROUND: This project is for the installation of a new sanitary sewer interceptor along

Ragsdale Creek. Chris Kaselak of Terra Dominus I LLC (Terra) proposes to install this new 12-inch line in accordance with the District's Collection

System Master Plan.

The interceptor will begin at an existing MSD line on private property along Ragsdale Creek. It will extend approximately 1,150 linear feet upstream to serve three tracts owned by Terra totaling seven acres. Terra plans to develop this property for residential use. The construction cost estimate for the 12-inch line is approximately \$462,000.00, which Terra will fund.

An 8-inch line would serve Terra's needs; however, a 12-inch line will be installed in accordance with the Master Plan. This line therefore qualifies for *Additional Capacity Reimbursement*.

Under Additional Capacity Reimbursement, a developer who is required to construct a larger line than is necessary for their own development, in order to serve additional areas, is eligible for reimbursement of the increased construction cost. In this case, the increase is \$63,250.00, or differential between 8-inch pipe price (\$170/LF) and 12-inch pipe price (\$225/LF).

In addition, for new lines 12 inches and larger which will serve upstream properties in the future, the District will design the line and acquire necessary rights-of-way. MSD has contracted with High Country Engineering for the design. MSD will have to acquire three easements to accommodate this master plan extension.

Please refer to the attached documentation for further details.

FISCAL IMPACT:

The proposed FY23-24 budget includes \$108,000.00 for ROW acquisition (in FY23-24) and \$63,250.00 for construction reimbursement (in FY24-25). Design was budgeted in FY22-23 with fees totaling \$39,350.00.

The reimbursement to Terra will not be issued until the sewer construction project is fully closed out and the line has been accepted by the District Board. Performance and payment bonds will be provided by Terra to the District in the amount of 100% of the construction contract.

STAFF RECOMMENDATION:

Staff recommends that the District enter into a reimbursement agreement with Terra Dominus I LLC, in the amount of \$63,250.00, subject to review and approval by District Counsel.

STATE OF NORTH CAROLINA)	AGREEMENT REGARDING
AND COUNTY OF)	CONSTRUCTION OF AND
BUNCOMBE)	REIMBURSEMENT FOR INCREASED
)	CAPACITY FOR GRAVITY MASTER
)	PLAN LINE TO SERVE RAGSDALE
)	CREEK BASIN – MSD PROJECT #
)	2021216 (ENGLISH DRIVE)
THIS AGREEMENT, made this _	day of	, 2023, by and between the
METROPOLITAN SEWERAGE DISTI	RICT OF B	SUNCOMBE COUNTY (hereinafter
sometimes called "MSD" or the "District"	') . a North (Carolina public body and body politic and

METROPOLITAN SEWERAGE DISTRICT OF BUNCOMBE COUNTY (hereinafter sometimes called "MSD" or the "District"), a North Carolina public body and body politic and corporate created and established under the provisions of the North Carolina Metropolitan Sewerage Districts Act, Chapter 153, Article 25, Sections 153-295 to 153-324, inclusive (succeeded by Chapter 162A, Article 5, Sections 162A-64 to 162A-81, inclusive) of the General Statutes of North Carolina; and Terra Dominus I LLC (hereinafter sometimes called "Terra"), a limited liability corporation organized under the laws of the State of North Carolina with its principal office and place of business in Greensboro, N.C.

WHEREAS, MSD maintains and operates a system of interceptor and collector sewer lines and a wastewater treatment facility which treats wastewater generated within and without the boundaries of the Metropolitan Sewerage District which system of interceptor and collector sewers and wastewater treatment facility, together with additional facilities which may be acquired by MSD is sometimes herein referred to as the "District Sewerage System"; and

WHEREAS, MSD has had prepared a master plan for its system of interceptor and collector sewers (the "Master Plan"), and the Master Plan calls for the construction of a new interceptor sewer with pipe size diameter ranging as large as 12 inches to serve the Ragsdale Creek Drainage Basin; and

WHEREAS, Terra owns three tracts (PINS 9618513589, 9618511613, 9618417677) totaling approximately 7.08 acres in the Ragsdale Creek Drainage Basin (the "Property"); and

WHEREAS, **Terra** desires to connect the Property to the District Sewerage System so that the Property may be developed for commercial and residential purposes: and

WHEREAS, the Property is not currently served by sewer, and

WHEREAS, Terra is willing to pay the cost of constructing an eight-inch gravity collection system in accordance with MSD Standards and of sufficient length and capacity to provide sewer service to the Property, but not to the remainder of the Ragsdale Creek Basin envisioned to be served in the Master Plan; and

WHEREAS, MSD, in order to facilitate the orderly growth of the District Sewerage System in the Ragsdale Creek Basin, to preserve and promote the health and welfare of the District and to ensure the development of the Sewerage System in accordance with its Master Plan, is willing to pay the estimated difference in cost between an eight-inch line sufficient to serve the Property and the twelve-inch interceptor line necessary to serve the Property and the remainder of the Ragsdale Creek Basin as described in the Master Plan; and

WHEREAS, the **MSD** Board has approved the expenditure of up to \$63,250.00 to pay the cost of upgrading the Ragsdale Creek Master Plan Interceptor Sewer Extension from an eight-inch line to a twelve-inch line; and

WHEREAS, MSD has reviewed plans and specifications prepared by High Country Engineering for the construction of a twelve-inch sewer line to serve the Property and the remainder of the Ragsdale Creek Basin (the "English Drive/Ragsdale Creek Gravity Master Plan Line"); and

WHEREAS, Terra is willing to construct that portion of the Ragsdale Creek Master Plan Sewer Extension from the MSD Sewer System to the Property, provided that MSD will reimburse Terra for the difference in cost between a twelve inch line and an eight inch line for that portion; and

WHEREAS, all necessary permits for the construction of the English Drive / Ragsdale Creek Master Plan Sewer Line will be obtained by Terra; and

WHEREAS, the approximate cost of constructing the 12 inch sewer line from the District Sewerage System to the Property is \$462,000; and

WHEREAS, MSD is willing to acquire the temporary construction easements and permanent easements necessary to construct the 12 inch sewer line.

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and the covenants and conditions set forth herein, **MSD** and **Terra** agree as follows:

- 1. Terra will contract with a well-qualified, experienced, financially sound utility contractor currently licensed in North Carolina and satisfactory to MSD, to build the English Drive / Ragsdale Creek Gravity Master Plan Line Phase 1, MSD Project No. 2021216. For the purposes of this Agreement, the portion to be constructed shall be referred to herein as the "English Drive / Ragsdale Creek Master Plan Sewer Line." The Contractor shall be required to provide and maintain in force (until the project is complete) a payment bond and a performance bond in the amount of 100 % of the English Drive / Ragsdale Creek Master Plan Sewer Line construction contract amount. Terra and MSD shall be named beneficiaries under said bond. The bonds shall meet the requirements of Chapter 44A of the North Carolina General Statutes.
- Terra will also provide performance and payment bonds in the amount of 100% of the English Drive / Ragsdale Creek Master Plan Sewer Line construction cost estimate.
 MSD shall be named beneficiary under the bonds, and the bonds shall be in accord with the requirements of Chapter 44A of the North Carolina General Statutes.
- 3. The Ragsdale Creek Master Plan Sewer Line will be constructed in a good and workmanlike manner, in accordance with the plans and specifications prepared by High Country Engineering and approved by **MSD** and in accordance with all permit requirements. A copy of all permits will be provided to MSD prior to scheduling of

pre-construction meeting. **MSD** will issue an approved copy of plans and specifications to High Country Engineering, **Terra**, and its contractor prior to the pre-construction meeting. The plans, specifications and permits are incorporated into and made a part of this Agreement by reference.

- 4. MSD will acquire the temporary construction easements and permanent easements necessary to construct the 12 inch sewer line.
- 5. Terra and MSD acknowledge and agree that the estimated cost of upsizing (from eight-inch to 12-inch) that portion of the English Ragsdale Creek Master Plan Sewer Line up to and across the Terra Property is \$63,250.00. MSD and Terra agree that MSD shall make no additional reimbursement or payments to Terra except as set forth in this Agreement.
- 6. **MSD** agrees to reimburse **Terra** the amount set forth in paragraph 3 upon full project completion. Full project completion for the English Drive / Ragsdale Creek Master Plan Sewer Line shall be defined as:
 - 1) All construction and testing are 100% complete and passing and final inspection approval has been issued by **MSD**.
 - 2) All applicable permitting requirements are satisfied.
 - 3) Final closeout documents including:
 - Easement Plat to include on-site easements across the limits of the
 property to be conveyed to MSD. The on-site easements shall
 include a properly sized and sited easement near and generally
 following Ragsdale Creek for the future extension of the Master
 Plan Sewer Line completely through Terra's properties.
 - Engineer's Certification
 - Engineering As-Built Drawings
 - Contractor's Certification to include one-year warranty
 - Conveyance of Sewer System and Easement Documents

4) Conveyance of the English Drive / Ragsdale Creek Master Plan Sewer Line and easements therefor to **MSD** and acceptance of same by the Board of Directors of MSD.

Completion shall be determined by the MSD Planning and Development Section. Upon full project completion, MSD shall notify Terra in writing of such satisfactory completion of the work and MSD shall thereafter immediately reimburse Terra as provided in paragraphs 3 and 4.

- 7. MSD will employ construction inspectors, at its expense, to inspect the construction of the English Drive / Ragsdale Creek Master Plan Sewer Line.
 Terra and its contractor further agree to coordinate all sewer construction activities with MSD to facilitate timely completion of the work and restoration of affected areas.
- 8. Changes to the project made in the field must be reviewed and approved by MSD prior to implementation. It shall be the responsibility of Terra and its contractor to make MSD's Construction Division aware of any proposed change(s) and to obtain approval for the change(s) from MSD. Upon receipt of a request for a change or changes in the project design and/or construction, MSD will promptly review such change(s) and indicate approval or denial of such change(s) within reasonable time from receipt. Any proposed change affecting the quality of the design, the integrity of the sewer system, resulting in additional costs to MSD, or any matter involving right of way revisions shall be submitted in writing by Terra and shall be approved/disapproved in writing by MSD within a reasonable amount of time not to exceed five (5) business days. To the extent an approved change increases the cost of the Ragsdale Creek Master Plan Sewer Line construction, MSD and Terra shall mutually agree upon any additional reimbursement to Terra for such increase in cost.

- 9. Upon completion of construction, **Terra** will convey the English Drive / Ragsdale Creek Master Plan Sewer Line and associated Easements to **MSD**. Such conveyance will be by instrument in form and content similar to Exhibit A attached hereto. Upon finding the conveyance is in accord with relevant provisions of its bond order and applicable law, **MSD** will issue approval to record the conveyance and accept such conveyance.
- 10. This Agreement shall be governed by and under the laws of the State of North Carolina and any litigation hereunder shall be in the General Court of Justice for the 28th Judicial District of North Carolina.
- 11. This Agreement represents the entire agreement between **MSD** and **Terra** with respect to the subject matter hereof. Any amendment to this agreement shall be in writing and signed by the parties hereto.

Member

IN WITNESS WHEREOF, the parties have executed this agreement by and through their respective, duly authorized representatives as the day and year first above written.

	BUNCOMBE OLINA	COUNTY,	NORTE
Ву: _	Thomas E. Harty	e, P.E. General	Manager
Terra	Dominus I LLC		
By:			

Christopher Kaselak for Developer, Managing

METROPOLITAN SEWERAGE DISTRICT

PERFORMANCE BOND

(Form)

of this Bond:	
Name and Address of Principal (Contractor):	Terra Dominus 1, LLC, Greensboro, N.C.
Name and Address of Surety:	
Name and Address of Contracting Body:	The Metropolitan Sewerage District of Buncombe County, North Carolina 2028 Riverside Drive

Amount of Bond: \$462,000.00

Contract: Estimated Cost of constructing the English Drive Ragsdale Creek Master

Plan Sewer Line as described in the AGREEMENT REGARDING CONSTRUCTION OF AND REIMBURSEMENT FOR INCREASED CAPACITY FOR GRAVITY MASTER PLAN LINE TO SERVE RAGSDALE CREEK BASIN MSD PROJECT # 2021216 between Terra Dominus I and the Metropolitan Sewerage District of Buncombe County

dated March , 2023.

KNOW ALL MEN BY THESE PRESENTS, That we, the PRINCIPAL and SURETY above named, are held and firmly bound unto the above named Contracting Body, hereinafter called the Contracting Body, in the penal sum of the amount stated above for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal entered into a certain contract with the Contracting Body, as identified and shown above and hereto attached:

NOW, THEREFORE, if the Principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term of said contract and any extensions thereof that may be granted by the Contracting Body, with or without notice to the Surety, and during the life of any guaranty required under the contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modification of the contract that may hereafter be made, notice of which modifications to the Surety being hereby waived, then, this obligation to be void; otherwise to remain in full force and virtue.

THIS PERFORMANCE BOND is made and given pursuant to the requirements and provisions of Section 129 of Chapter 143 of the General Statutes of North Carolina and pursuant to Article 3 of Chapter 44-A of the General Statutes of North Carolina, and each and every provision set forth and contained in Article 3 of Chapter 44-A of the General Statutes of North Carolina is incorporated herein, made a part R&S 3073613_1

Section XIV - Bonds

hereof, and deemed to be conclusively written into this Bond.

IN WITNESS WHEREOF, the principal and surety parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

	Terra Dominus I, LLC
WITNESS:	
(Proprietorship or Partnership)	BY: (SEAL)
	TITLE: (owner, partner, office held in corporation, joint venture)
ATTEST: (Corporation)	(Corporate Seal)
BY:	
TITLE: (Corporate Secretary or Assistant Secretary only)	
WITNESS:	Surety (name of Surety Company)
	BY: TITLE: Attorney-in-Fact (Corporate Seal of Surety)
	(Address of Attorney-in-Fact)

PAYMENT BOND

(Form)

Date of Execution of this Bond:		
Name and Address of Principal (Contractor):	Terra Dominus I, LLC, Greensboro, N.C.	
Name and Address of Surety:		m
Name and Address of Contracting Body:	The Metropolitan Sewerage District of Buncombe County, North Carolina 2028 Riverside Drive Asheville, North Carolina 28804	

Amount of Bond \$462,000

Contract: Estimated cost of constructing the English Drive Ragsdale Creek Master Plan

Sewer Line as described in that AGREEMENT REGARDING

CONSTRUCTION OF AND REIMBURSEMENT FOR INCREASED CAPACITY FOR GRAVITY MASTER PLAN LINE TO SERVE RAGSDALE CREEK BASIN MSD PROJECT # 2021216 between

MSD and Terra Dominus I dated March , 2023.

KNOW ALL MEN BY THESE PRESENTS, That we, the PRINCIPAL and SURETY above named, are held and firmly bound unto the above named Contracting Body, hereinafter called the Contracting Body, in the penal sum of the amount stated above for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal entered into a certain contract with the Contracting Body, as identified and shown above and hereto attached:

NOW THEREFORE, if the Principal shall promptly make payment to all persons supplying labor and material in the prosecution of the work provided for in said contract, and any and all duly authorized modifications and extensions of time of said contract that may hereafter be made, notice of which R&S 3073613_1

Section XIV - Bonds

modifications and extensions of time to the surety being hereby waived, then this obligation to be void; otherwise to remain in full force and virtue.

THIS PAYMENT BOND is made and given pursuant to the requirements and provisions of Section 129 of Chapter 143 of the General Statutes of North Carolina and pursuant to Article 3 of Chapter 44-A of the General Statutes of North Carolina, and each and every provision set forth and contained in Article 3 of Chapter 44-A of the General Statutes of North Carolina is incorporated herein, made a part hereof, and deemed to be conclusively written into this Bond.

IN WITNESS WHEREOF, the principal and surety parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

	Terra Dominus I, LLC
WITNESS:	
(Proprietorship or Partnership)	BY: (SEAL) TITLE: (owner, partner, office held in corporation,
ATTEST: (Corporation) BY:	joint venture) (Corporate Seal)
TITLE:(Corporate Secretary or Assistant Secretary only)	
WITNESS:	Surety (name of Surety Company)
	BY:
	TITLE: <u>Attorney-in-Fact</u> (Corporate Seal of Surety)
	(Address of Attorney-in-Fact)

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

BUDGET DATA SHEET - FY 2022 - 2023

PROJECT:	Developer Reimbursements	LOCATION:	Various						
TYPE:	Reimbursement - Annual								
PROJECT NO.	2004051	TOTAL LF:	0						
PROJECT BUDGET:	\$1,490,000.00	PROJECT ORIGIN:	Economic Development	onomic Development Policy					
		l l							
DESCRIPTION	ESTIMATED	TOTAL EXPENDS	EST. COST	BUDGET					
	PROJECT COST	THRU 12/31/21	JAN - JUNE 2022	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	\$1,490,000.00	\$0.00	\$0.00	\$590,000.00					
55430 - CONST. CONTRACT ADM.									
55440 - TESTING									
55450 - SURVEY - ASBUILT									
TOTAL AMOUNT	\$1,490,000.00	\$0.00	\$0.00	\$590,000.00					
ENGINEER:		KJ	ESTIMATED BUD	GETS - FY 24 - 32					
R.O.W. ACQUISITION:		#PLATS: []	FY 23-24	\$100,000.00					
CONTRACTOR:			FY 24-25	\$100,000.00					
CONSTRUCTION ADM:			FY 25-26	\$100,000.00					
INSPECTION:			FY 26-27	\$100,000.00					
			FY 27-28	\$100,000.00					
			FY 28-29	\$100,000.00					
PROJECT DESCRIPTION: This is	s for reimbursements for extensions that qu	ualify under the District's	FY 29-30	\$100,000.00					
information.	Policy and Procedures for the Extension of S	sewer Service for further	FY 30-31 \$100,000.00						
		FY 31-32 \$100,000.00							
SPECIAL PROJECT NOTES:	Total estimated project cost shown is the total wi	ithin the ten year window. \$2	200,000 per year is approved.						
	, , , , , , , , , , , , , , , , , , , ,	, v =	, ,						





English Drive Subdivison Project No. 2021216



METROPOLITAN SEWERAGE DISTRICT of BUNCOMBE COUNTY, NORTH CAROLINA

Budget Map

Metropolitan Sewerage District of Buncombe County Board Action Item - Right-of-Way Committee

COMMITTEE MEETING DATE: 1/25/2023 BOARD MEETING DATE: 3/15/2023

SUBMITTED BY: Tom Hartye, PE, General Manager PREPARED BY: Angel Banks, Right of Way Manager

Wesley Banner, Right of Way Agent

REVIEWED BY: Hunter Carson, PE, Director of CIP

SUBJECT: Consideration of Condemnation –

Elk Mountain Place GSR MSD Project Number 2010094

Property Owner: Billy R. & Peggy H. Clement, Pin 9730-44-1125

Subject parcel is currently unimproved. The existing sewer line is located on an adjacent property due east and cannot be replaced in the same trench due to close proximity to an existing mobile home dwelling. The proposed sewer line was shifted to run along the eastern portion of subject property. Negotiations with the owner began on August 1, 2022 and have progressed very slowly. A response was received after two months, and the owner stated that she will not allow MSD to perform any work on her property. Standard compensation amount is \$2152, and the owner refused to provide a compensation counteroffer when asked. Negotiations have stalled with the owner.

Contacts: 4

STAFF RECOMMENDATION: Authority to obtain appraisal and proceed with condemnation, if necessary.

Ms. Banks stated that Mr. Banner will be reviewing this condemnation. Mr. Banner explained the above situation. Ms. Banks added that this parcel is the last holdout of 37 parcels on this project. Mr. Ashley asked if the easement would eliminate use of this property. Mr. Banner stated that per the Town of Woodfin Zoning Ordinances, the minimum lot size for R-7 Zoning is 7,000 square feet and the subject parcel is only 4,791 square feet. Due to the non-conforming lot size and building setbacks, building on this lot would be difficult. There was discussion regarding lot size and easement location. There was some further discussion regarding another parcel this owner has across the road.

Mr. Ashley made the motion to accept Staff's recommendation. Mr. Pennington seconded the motion. Voice vote was unanimous.

COMMITTEE RECOMMENDATION: Authority to obtain appraisal and proceed with condemnation, if necessary.

Metropolitan Sewerage District of Buncombe County Board Action Item - Right-of-Way Committee

COMMITTEE MEETING DATE: 1/25/2023 BOARD MEETING DATE: 3/15/2023

SUBMITTED BY: Tom Hartye, PE, General Manager PREPARED BY: Angel Banks, Right of Way Manager REVIEWED BY: Hunter Carson, PE, Director of CIP

SUBJECT: Consideration of Compensation Budgets-

6 Cottage Street SSR, Project No. 2022090 Buchanan Avenue GSR, Project No. 2014023

The attached Compensation Budgets are based on current ad valorem tax values and follow the MSD approved formula.

STAFF RECOMMENDATION: Approval of Compensation Budgets.

Mr. Ashley made the motion to accept Staff's recommendation. Mr. Pennington seconded the motion. Voice vote was unanimous.

COMMITTEE RECOMMENDATION: Approval of Compensation Budgets.

6 Cottage Street Sanitary Sewer Rehabilitation

Project Number: 2022090

Compensation Budget

05-Jan-23

PIN and Name								Net PE	PE Assd.	50% PE		TCE Assd.	10% Annl	Proj	TCE Rent	Total Comp.
27 Pin	83 Pin			Acres	Parcel SF	Land Value	LV/SF	SF	Value	Assd. Value	TCE SF	Value	Return	Time	Value	(Rounded)
	9730548464	Durr	William	0.13	5,662.80	\$63,300.00	\$11.18	145.80	\$1,630.04	\$815.02	0.00	\$0.00	\$0.00	1	\$0.00	\$815
	9730546590	Hill	Brian	0.36	15,681.60	\$72,800.00	\$4.64	3,979.30	\$18,463.95	\$9,231.98	4,618.30	\$21,428.91	\$2,142.89	1	\$178.57	\$9,411
	9730546623	Rice	Benny	0.07	3,049.20	\$14,500.00	\$4.76	1,109.30	\$5,280.27	\$2,640.13	1,044.60	\$4,972.30	\$497.23	1	\$41.44	\$2,682
	9730547489	Smith	Robert	0.15	6,534.00	\$64,500.00	\$9.87	1,002.10	\$9,890.73	\$4,945.36	981.50	\$9,687.41	\$968.74	1	\$80.73	\$5,026
	9730547366	Young	Steven	0.97	42,253.20	\$83,500.00	\$1.98	2,214.80	\$4,385.30	\$2,192.65	3,322.20	\$6,577.96	\$657.80	1	\$54.82	\$2,247
	9730548439	Young, Trustee	Kimberly	0.10	4,356.00	\$61,000.00	\$14.00	958.10	\$13,413.40	\$6,706.70	520.30	\$7,284.20	\$728.42	1	\$60.70	\$6,767
														T	\$26,948	
													S	taff Co	\$5,000	
													G	M's Co	\$5,000	

Amendment
Total Budget:

\$36,948

Buchanan Avenue GSR

Project Number: 2014023

Compensation Budget

05-Jan-23

PIN and Name 27 Pin	83 Pin			Acres	Parcel SF	Land Value	LV/SF		PE Assd. Value	50% PE Assd. Value	TCE SF	TCE Assd. Value	10% Annl Return	Proj Time		Total Comp. (Rounded)
	9648465868	Al-Saadi	Jassim	0.17	7,405.20	\$139,800.00	\$18.88	0.00	\$0.00	\$0.00	694.00	\$13,102.72	\$1,310.27	5	\$545.95	\$546
	9648465881	Baliles	Paul	0.35	15,246.00	\$154,500.00	\$10.13	0.00	\$0.00	\$0.00	535.00	\$5,419.55	\$541.96	5	\$225.81	\$226
														T	OTALS:	\$772
													St	Staff Contingency:		\$5,000
													G	GM's Contingency		\$5,000
													A	Amendment		
													T	otal Bu	dget:	\$10,772

Board Action Item

BOARD MEETING DATE: March 15, 2023

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 328 Emma

Road Sewer Extension, MSD Project No. 2021131

BACKGROUND: This project is located inside the District boundary along Emma Road in the

City of Asheville. The developer of the project is Donald Nicholson of

Nicholson and Sun, LLC.

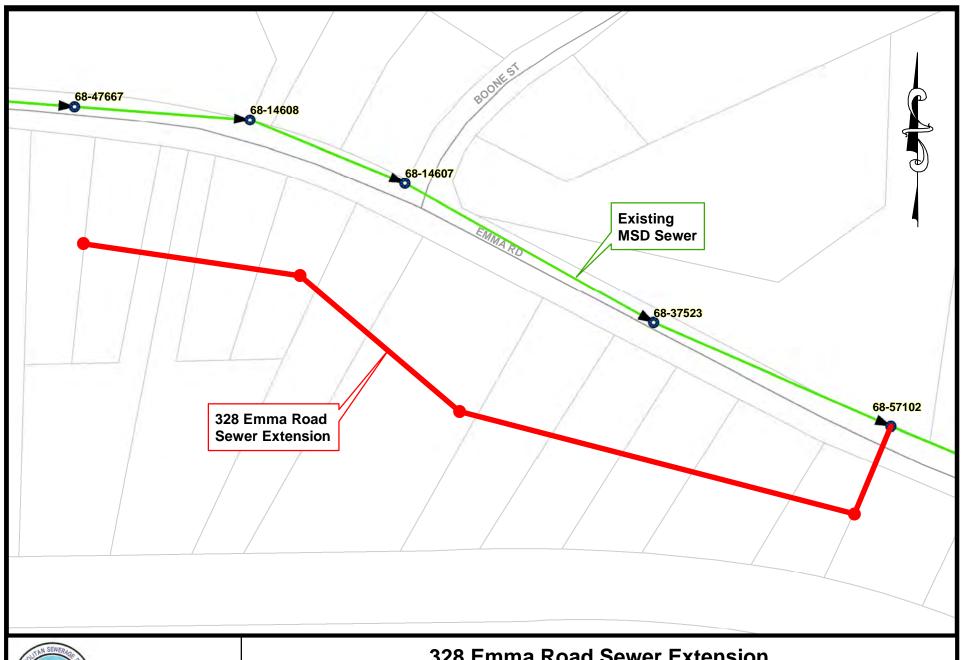
The project included extending approximately 665 linear feet of 8-inch public gravity sewer to serve the Single-Family Residential Development.

A wastewater allocation was issued in the amount of 5,100 GPD for the seventeen (17) homes in the residential development. The estimated cost

of the sewer construction is \$116,000.00.

All MSD requirements have been met.

STAFF RECOMMENDATION: Staff recommends acceptance of this developer constructed





328 Emma Road Sewer Extension MSD Project # 2021131

Metropolitan Sewerage District of Buncombe County

03/01/2023

Board Action Item

BOARD MEETING DATE: March 15, 2023

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 Farm at Pond

Road Phase 1 Sewer Extension, MSD Project No. 2020009

BACKGROUND: This project is located inside the District boundary off Pond Road in

Buncombe County. The developer of the project is Brian Wise of Fall Line

Development, Inc.

The project included extending approximately 3,540 linear feet of 8-inch

public gravity sewer to serve the Multi-Family Residential Apartment

Development.

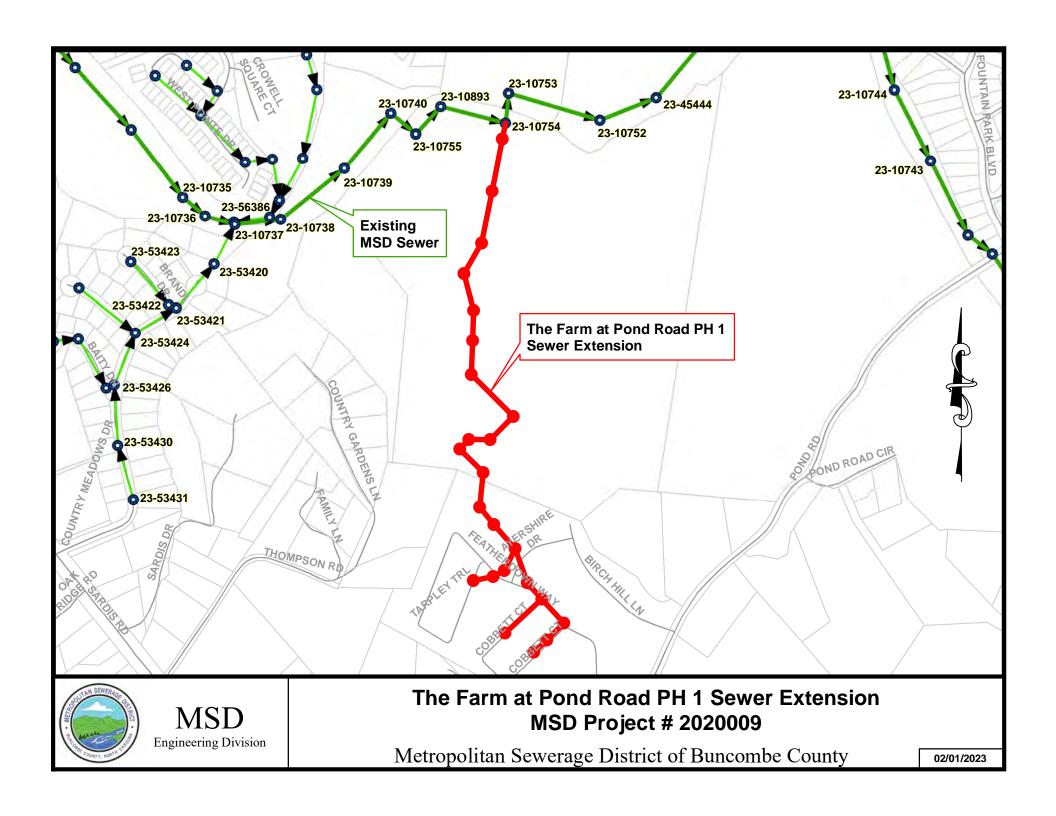
A wastewater allocation was issued in the amount of 50,400 GPD for the 168

apartments in this phase of the residential development. The estimated cost

of the sewer construction is \$510,000.00.

All MSD requirements have been met.

STAFF RECOMMENDATION: Staff recommends acceptance of this developer constructed



Board Action Item

BOARD MEETING DATE: March 15, 2023

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 Jasper

Apartments Sewer Extension, MSD Project No. 2019086

BACKGROUND: This project is located inside the District boundary along US Highway 70 in

Buncombe County. The developer of the project is Jim Yamin of Workforce

Homestead, Inc.

The project included extending approximately 765 linear feet of 8-inch

public gravity sewer to serve the Affordable Multi-Family Residential

Apartment Development.

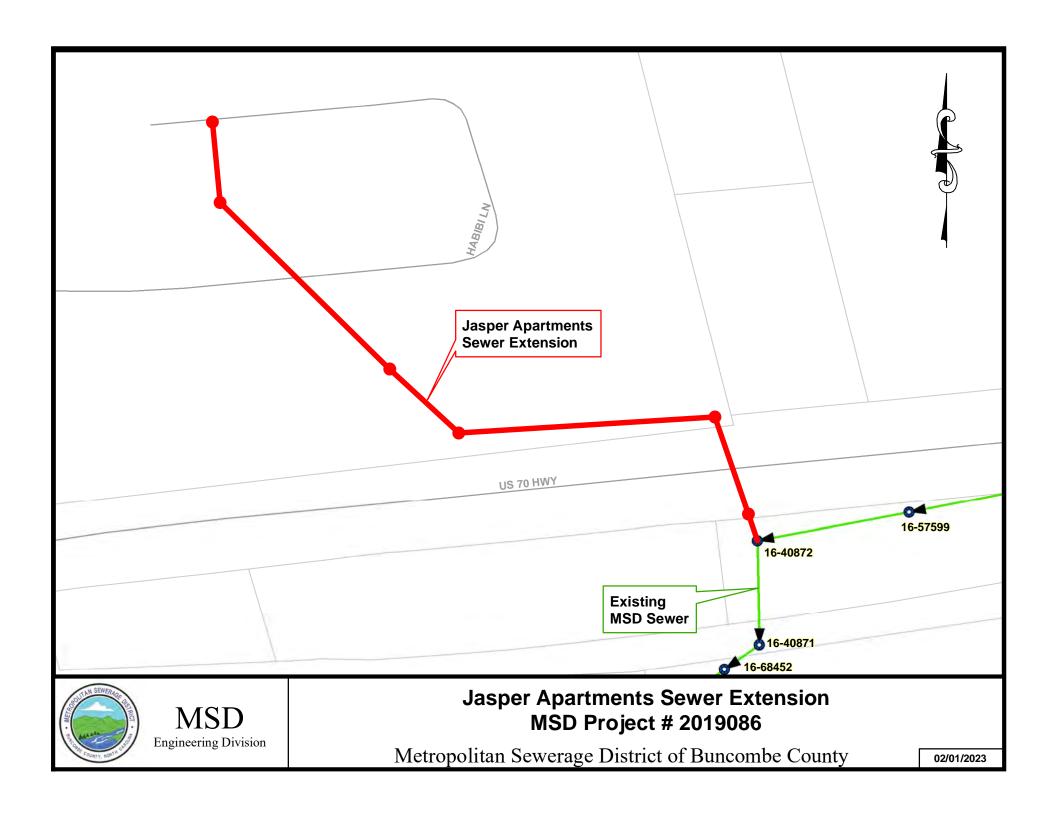
A wastewater allocation was issued in the amount of 19,600 GPD for the 100

affordable apartments in this residential development. The estimated cost

of the sewer construction is \$98,752.00.

All MSD requirements have been met.

STAFF RECOMMENDATION: Staff recommends acceptance of this developer constructed



Board Action Item

BOARD MEETING DATE: March 15, 2023

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 Overlook

Circle Sewer Extension, MSD Project No. 2019256

BACKGROUND: This project is located inside the District boundary at Overlook Circle and

Overlook Place in the City of Asheville. The developer of the project is John

Squires of Round Table LLC.

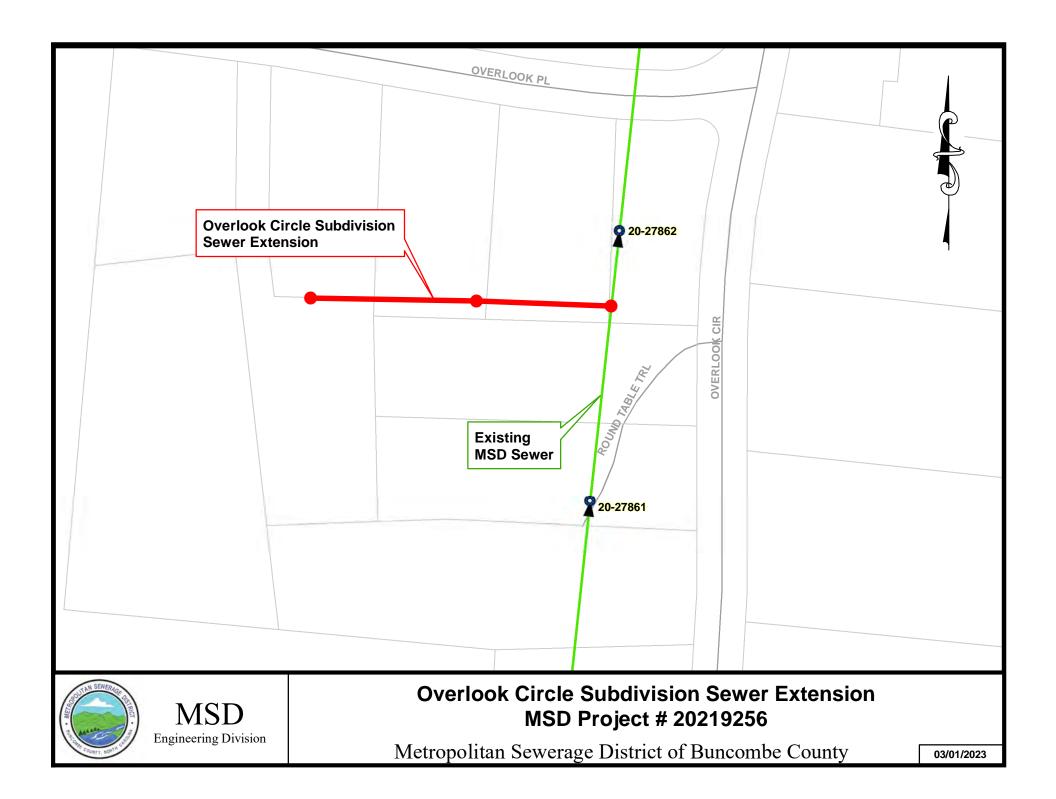
The project included extending approximately 180 linear feet of 8-inch public gravity sewer to serve the Single-Family Residential Development.

A wastewater allocation was issued in the amount of 2,100 GPD for the seven (7) homes in this residential development. The estimated cost of the

sewer construction is \$37,783.75.

All MSD requirements have been met.

STAFF RECOMMENDATION: Staff recommends acceptance of this developer constructed



Board Action Item

BOARD MEETING DATE: March 15, 2023

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 Project Ranger

Sewer Extension, MSD Project No. 2020194

BACKGROUND: This project is located inside the District boundary off Brevard Road in

Buncombe County. The developer of the project is Daniel Field of Pratt &

Whitney.

The project included extending approximately 250 linear feet of 12-inch and 3,060 linear feet of 10-inch gravity sewer for a total of approximately 3,310 linear feet of new public gravity sewer to serve the Commercial

Development.

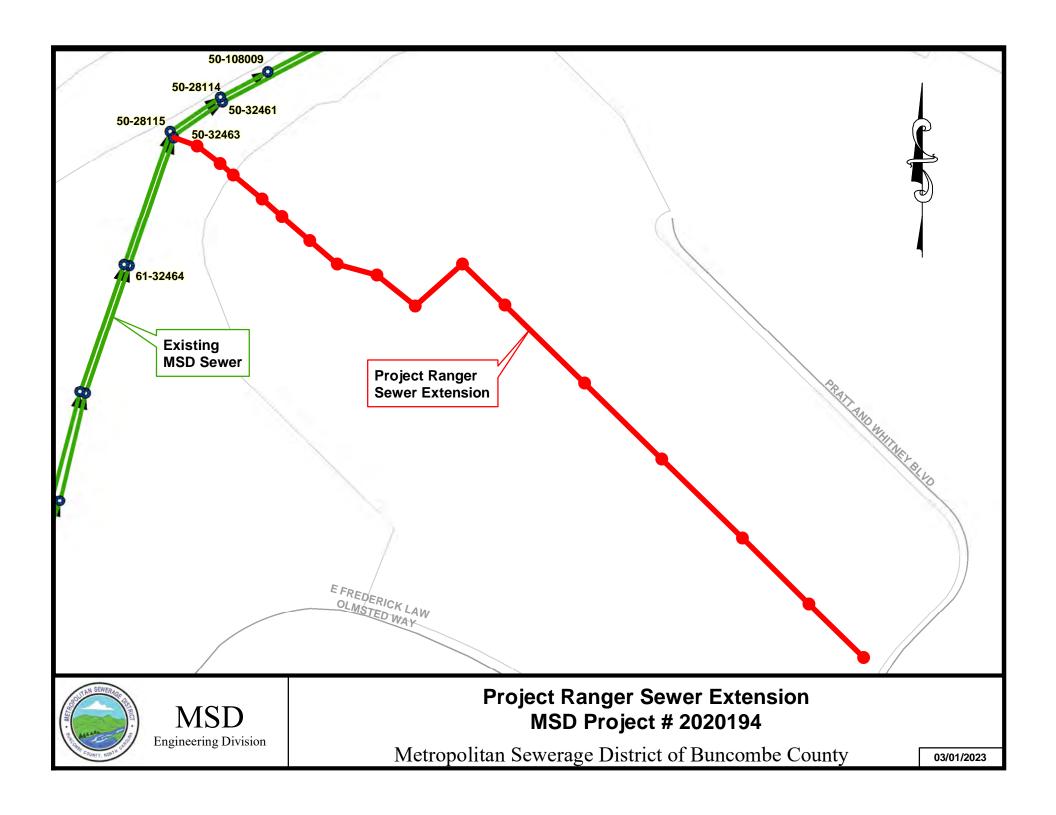
A wastewater allocation was issued in the amount of 41,250 GPD for the manufacturing facility. The estimated cost of the sewer construction is

\$541,000.00.

This project qualified for MSD's Economic Development Fee Waiver.

All MSD requirements have been met.

STAFF RECOMMENDATION: Staff recommends acceptance of this developer constructed



Board Action Item

BOARD MEETING DATE: March 15, 2023

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 Springs at

North Asheville Phase 2 Sewer Extension, MSD Project No. 2020190

BACKGROUND: This project is located inside the District boundary off Old Marshall Highway

in Buncombe County. The developer of the project is David Dupree of North

State Development, LLC.

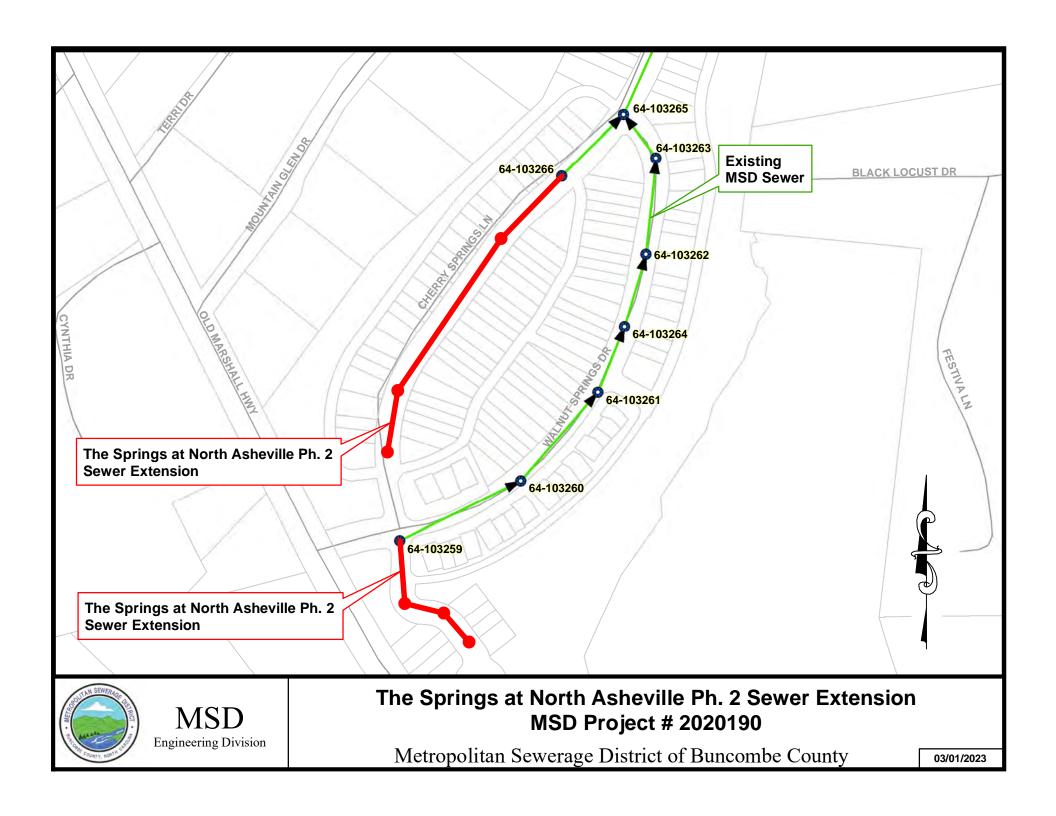
The project included extending approximately 855 linear feet of 8-inch public gravity sewer to serve the Single-Family Residential Development.

A wastewater allocation was issued in the amount of 36,000 GPD for the 120 townhomes in this residential development. The estimated cost of the

sewer construction is \$250,000.00.

All MSD requirements have been met.

STAFF RECOMMENDATION: Staff recommends acceptance of this developer constructed



Board Action Item

BOARD MEETING DATE: March 15, 2023

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 Sterling

Property Sewer Extension, MSD Project No. 2018231

BACKGROUND: This project is located inside the District boundary at Burton Street and

Mardell Circle in the City of Asheville. The developer of the project is John

Sterling.

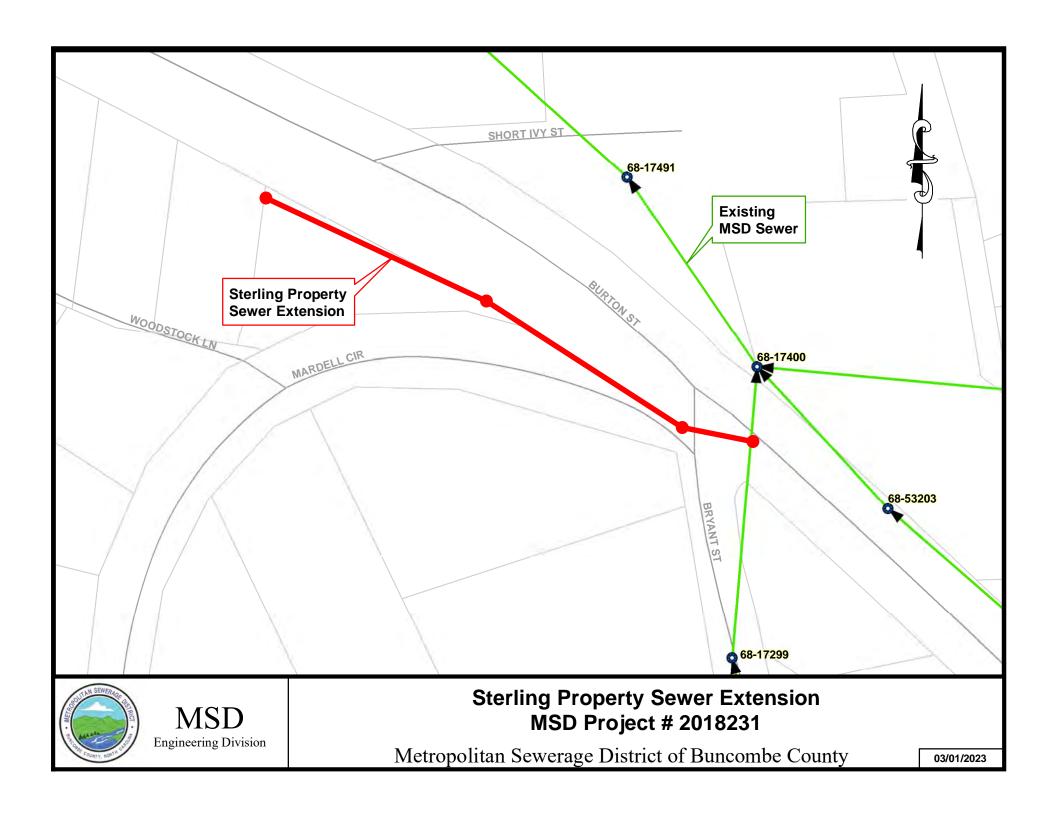
The project included extending approximately 262 linear feet of 8-inch public gravity sewer to serve the Single-Family Residential Development.

A wastewater allocation was issued in the amount of 1,200 GPD for the four (4) homes in this residential development. The estimated cost of the sewer

construction is \$120,000.00.

All MSD requirements have been met.

STAFF RECOMMENDATION: Staff recommends acceptance of this developer constructed



Board Action Item

BOARD MEETING DATE: March 15, 2023

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 Victoria Hills

Subdivision Sewer Extension, MSD Project No. 2018094

BACKGROUND: This project is located inside the District boundary off Lance Road in

Buncombe County. The developer of the project is Vladimir Grebenyuk of

Lance Road Holdings, LLC.

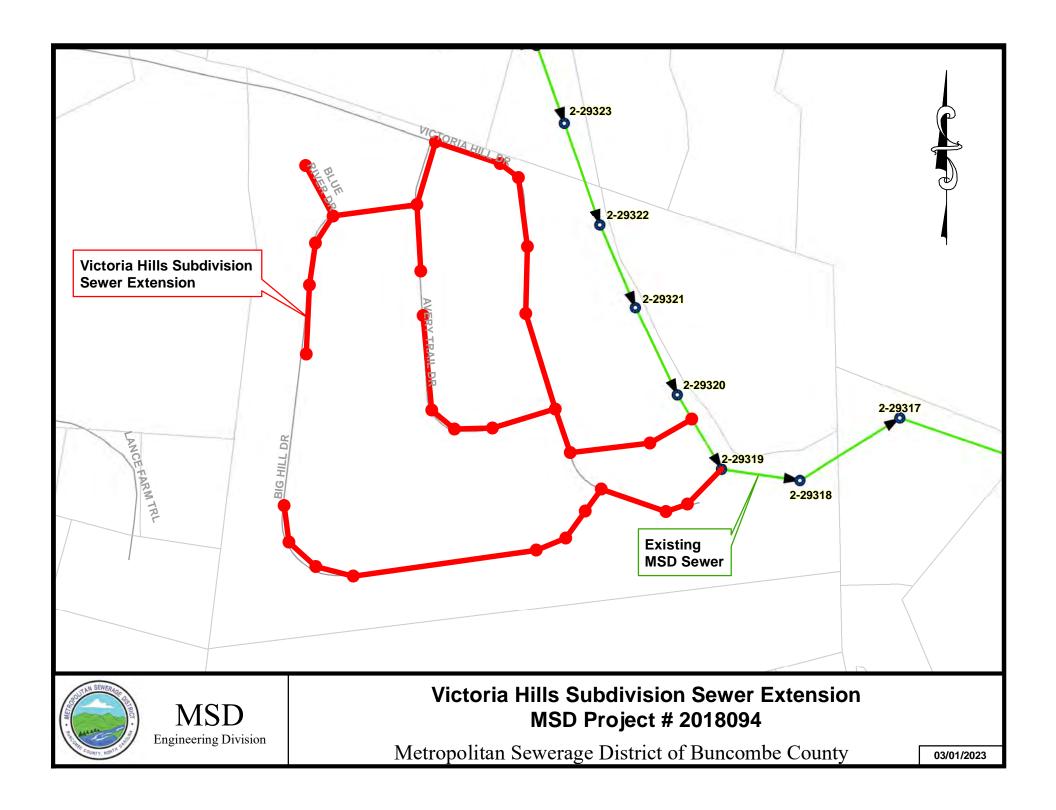
The project included extending approximately 4,180 linear feet of 8-inch public gravity sewer to serve the Single-Family Residential Development.

A wastewater allocation was issued in the amount of 28,500 GPD for the ninety-five (95) homes in this residential development. The estimated cost

of the sewer construction is \$324,000.00.

All MSD requirements have been met.

STAFF RECOMMENDATION: Staff recommends acceptance of this developer constructed



Board Action Item

BOARD MEETING DATE: March 15, 2023

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 Whitney Drive

Subdivision Sewer Extension, MSD Project No. 2018057

BACKGROUND: This project is located inside the District boundary off Hi Alta Avenue in the

City of Asheville. The developer of the project is Kevin Griffin of Hi Alta

Investments, LLC.

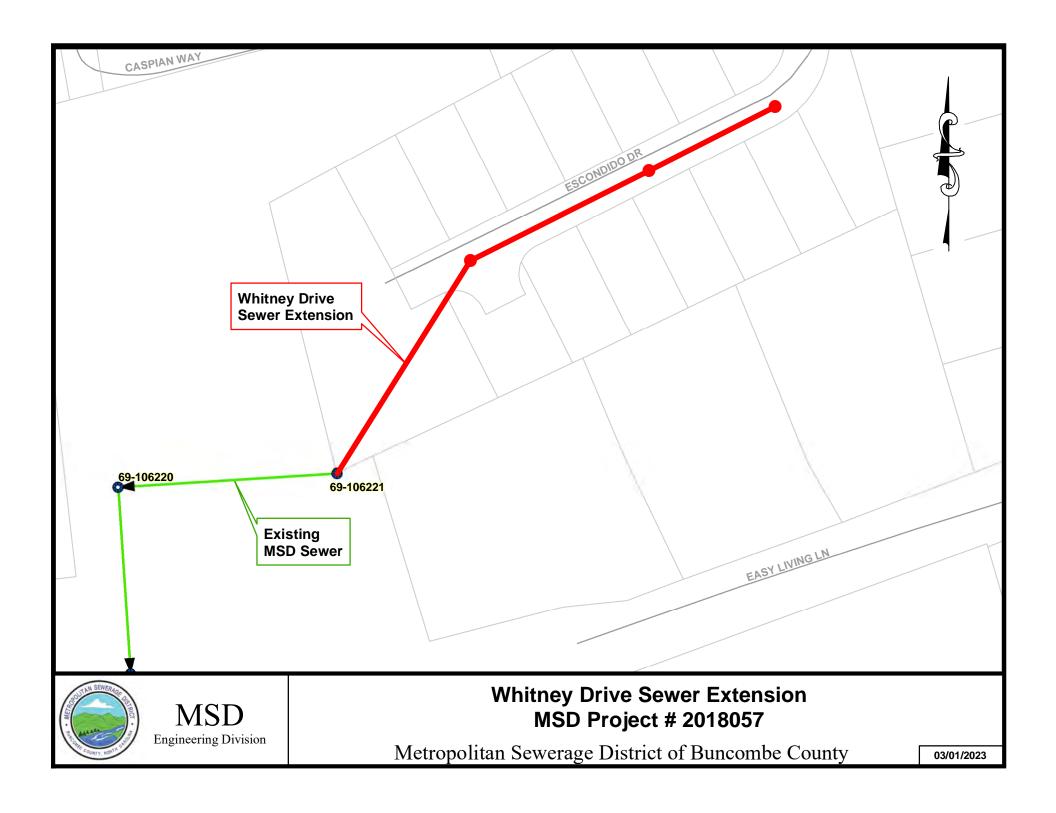
The project included extending approximately 425 linear feet of 8-inch public gravity sewer to serve the Single-Family Residential Development.

A wastewater allocation was issued in the amount of 4,500 GPD for the fifteen (15) homes in this residential development. The estimated cost of

the sewer construction is \$40,000.00.

All MSD requirements have been met.

STAFF RECOMMENDATION: Staff recommends acceptance of this developer constructed



Metropolitan Sewerage District of Buncombe County BOARD INFORMATIONAL ITEM

Meeting Date: March 15, 2023

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 January 31, 2023

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 January 31, 2023 were \$81,858,217. The detailed listing of accounts is available upon request. The average rate of return for all investments is 1.733% 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 January 31, 2023 do not reflect contractual commitments or encumbrances against said funds. Shown below are the total investments as of January 31, 2023 reduced by contractual commitments, bond funds, and District reserve funds. The balance available for future capital outlay is \$37,081,723.

Total Cash & Investments as of 01/31/2023		81,858,217
Less:		
Budgeted Commitments (Required to pay remaining		
FY23 budgeted expenditures from unrestricted cash)		
Construction Funds	(18,780,254)	
Operations & Maintenance Fund	(10,056,153)	
		(28,836,407)
Bond Restricted Funds		
Bond Service (Funds held by trustee):		
Funds in Principal & Interest Accounts	(66,254)	
FY23 Principal & Interest Due	(7,211,259)	
		(7,277,513)
District Reserve Funds		
Fleet Replacement	(1,389,637)	
Pump Replacement	(205,992)	
WWTP Replacement	(335,986)	
Maintenance Reserve	(1,046,404)	
		(2,978,019)
District Insurance Funds		
General Liability	(460,315)	
Worker's Compensation	(455,915)	
Post-Retirement Benefit	(2,470,068)	
Self-Funded Employee Medical	(2,298,257)	
		(5,684,555)
Designated for Capital Outlay		37,081,723

Subject: Cash Commitment/Investment Report-Month Ended January 31, 2023

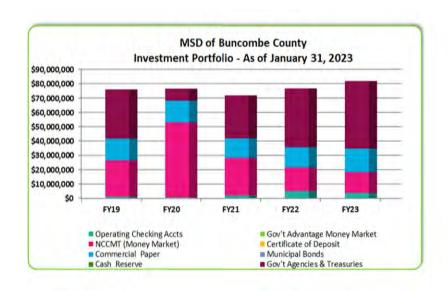
Page 2

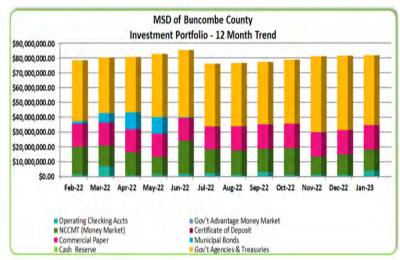
Staff Recommendation None - Information Only.

Action Taken Motion by:	to	□Approve	□Disapprove
Second by:		□Table	☐Send to Committee
Other:			
Follow-up required:			
Person responsible:		Deadl	ine:

	Operating			NCCMT (Money Market)				A CONTRACTOR OF THE CONTRACTOR		rtificate of Commercial Municipal Deposit Paper Bonds		Sov't Agencies	Total
\$	-	money market	\$	66,254		Берозіс	Tuper	\$	-	\$ -		a freasures	\$ 66,254
_	3,841,306	46,699		14,389,133			16,362,687		-			47,152,138	81,791,963
\$	3,841,306	\$ 46,699	\$	14,455,387	\$; - '	\$16,362,687	\$		\$ -	(47,152,138	\$ 81,858,217

Investment Policy Asset Allocation	Maximum Percent	Actual Percent	
U.S. Government Treasuries,			
Agencies and Instrumentalities	100%	57.60%	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 4.23 % is exceeding the YTM benchmark of the
Commercial Paper	20%	19.99%	NCCMT Government Portfolio.
Municipal Bonds	100%	0.00%	
North Carolina Capital Management Trust	100%	17.66%	All funds invested in CD's, operating checking accounts, Gov't Advantage money market
Checking Accounts:	100%		are fully collaterlized with the State Treasurer.
Operating Checking Accounts		4.69%	
Gov't Advantage Money Market		0.06%	





Ending Balance

Subject: Cash Commitment/Investment Report-Month Ended January 31, 2023

Page 4

Metropolitan Sewerage District Investment Managers' Report On January 31, 2023

Summary of Asset Transactions	Original		Interest
	Cost	Market	Receivable
Beginning Balance	\$ 73,031,528 \$	73,301,230	\$ 64,76
Capital Contributed (Withdrawn)	(1,199,236)	(1,199,236)	
Realized Income	28,587	28,587	
Unrealized/Accrued Income		5,347	54,96

\$

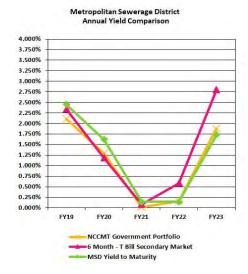
71,860,879 \$

72,135,928 \$

119,736

	0	riginal Cost	Income
Cash Equivalents <91 Days	\$	42,681,886	\$ 52,804
Securities/CD's 91 to 365 Days		22,137,757	\$ 27,388
Securities/CD's > 1 Year		7,041,236	\$ 8,711
	\$	71,860,879	\$ 88,903

Month End Portfolio Information		
Weighted Average Maturity	119	
Yield to Maturity	4.23%	
6 Month T-Bill Secondary Market	4.67%	
NCCMT Government Portfolio	4.22%	



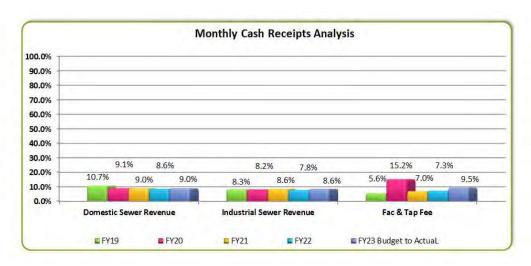


Subject: Cash Commitment/Investment Report-Month Ended January 31, 2023

Page 5

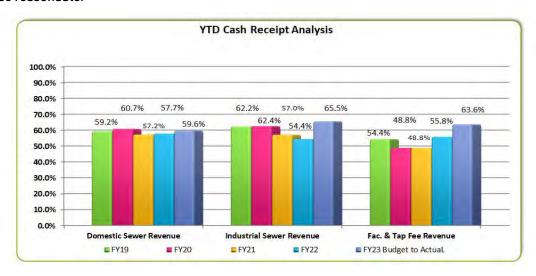
Metropolitan Sewerage District Analysis of Cash Receipts

As of January 31, 2023



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:

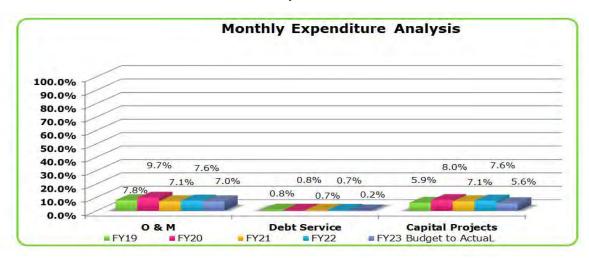
- * YTD domestic sewer revenue is considered reasonable based on historical trends.
- * YTD industrial sewer revenue is reasonable based on historical trends.
- * Due to the unpredictable nature of facility and tap fee revenue, staff considers facility and tap fee revenue reasonable.

Subject: Cash Commitment/Investment Report-Month Ended January 31, 2023

Page 6

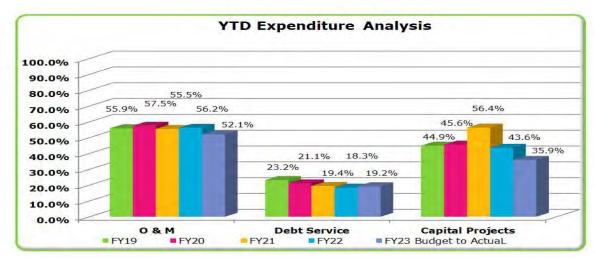
Metropolitan Sewerage District Analysis of Expenditures

As of January 31, 2023



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.



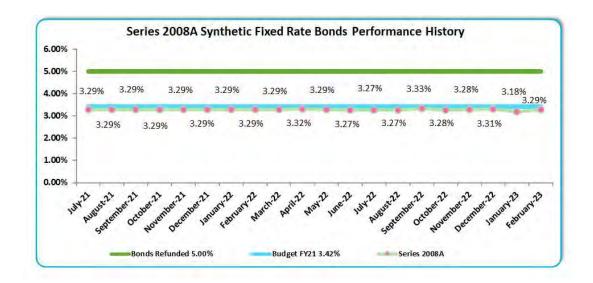
YTD Expenditure Analysis:

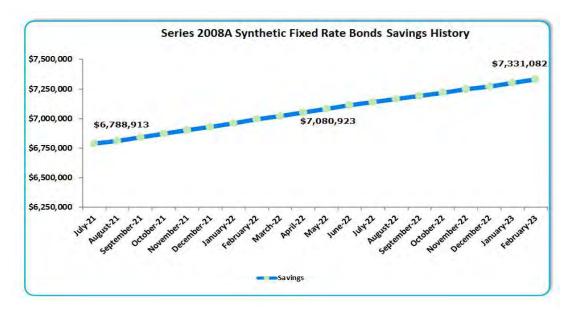
- YTD 0&M expenditures are considered reasonable based on historical trends.
- * Due to the nature of the variable rate bond market, YTD expenditures can vary year to year. Based on current variable interest rates, YTD debt service expenditures are considered reasonable.
- * Due to nature and timing 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.

Subject: Cash Commitment/Investment Report-Month Ended January 31, 2023

Page 7

Metropolitan Sewerage District Variable Debt Service Report As of January 31, 2023





Series 2008A:

- * Savings to date on the Series 2008A Synthetic Fixed Rate Bonds is \$7,331,082 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 receive \$55,744 to terminate the existing Bank of America Swap Agreement.

Metropolitan Sewerage District of Buncombe County BOARD INFORMATIONAL ITEM

Meeting Date: March 15, 2023

Submitted By: Thomas E. Hartye, PE., General Manager
Prepared By: W. Scott Powell, CLGFO Director of Finance

Subject: Second Quarter Budget to Actual Review – FY2023

Background

At the end of each quarter, actual revenue and expenditure amounts are compared with the budget to evaluate performance. This information is based on cash revenues and invoices received prior to December 31, 2022 and may not include some accruals of revenue and expenditures.

Discussion

There are several explanatory notes at the bottom of the attached Budget to Actual schedule.

Other considerations are as follows:

- Domestic and Industrial Revenue are at budget expectations. Staff Monitors consumption trends as they have a direct effect on the District's current revenue projections.
- Facility and Tap Fees are budgeted conservatively. The better than expected variance as of the end of the second quarter is due to receiving revenue from various development.
- Interest and miscellaneous income are above budgeted expectations. Actual short-term interest rates are higher than anticipated for the fiscal year.
- Rental income reflects are at budgeted expectations.

Subject: Second Quarter Budget to Actual Review – FY2023

Page 2

Discussion (continued)

- ◆ 0&M expenditures are at 50.4% of budget. The expenditures include encumbered amounts, which has elevated the budget to actual ratio above 50%. The aforementioned encumbrances will be spent in future quarters.
- ♣ Bond principal and interest are reflected at 50%. This will aid the user to properly assess the District's overall debt service commitments. Actual amount spent is 16.43%. The District is required to make semi-annual interest payments on January 1, 2023 and principal and semi-annual interest payments on July 1, 2023.
- Amounts budgeted for capital equipment and capital projects are rarely expended proportionately throughout the year and are expected to be fully spent prior to the end of the year.

Staff Recommendation

None - Information Only.

Action Taken	4-		□D:
Motion by: Second by:	to	□Approve □Table	□Disapprove □Send to
Committee		U l'able	
Other:			
Follow-up required:			
Person responsible:		Deadl	line:

Metropolitan Sewerage District

Budget to Actual Revenue and Expenditure Report

For the three months ended December 31, 2022 UNAUDITED--NON-GAAP

	Amended Budget	Ac	tual to Date	% Budget to Actual
REVENUES				
Domestic User Fees ¹	\$ 36,801,493	\$	18,650,238	50.68%
Industrial User Fees	3,370,488		1,915,467	56.83%
Facility Fees ²	3,000,000		3,086,343	102.88%
Tap Fees ³	175,000		318,163	181.81%
Billing and Collection	1,019,478		491,961	48.26%
Interest and Misc. Income	1,145,536		1,147,004	100.13%
Employee Contribution to Health Ins.	379,669		192,153	50.61%
City of Asheville (Enka Bonds)	35,000		-	0.00%
Rental Income	96,000		48,188	50.20%
Use of (Contributions to) Available Funds ⁴	 14,029,434		10,436,138	74.39%
Total Revenues ⁵	\$ 60,052,098	\$	36,285,653	60.42%
EXPENDITURES				
Operations and Maintenance ⁶	\$ 19,859,655	\$	10,005,884	50.38%
Bond Principal and Interest ⁷	8,889,361		4,449,681	50.00%
Capital Equipment (Other than O&M) ⁶	978,200		453,277	46.34%
Capital Projects ⁶	29,314,882		21,376,881	72.92%
Contingency	 1,000,000		-	0.00%
Total Expenditures	\$ 60,052,098	\$	36,285,653	60.42%

Notes:

¹Revenues are accounted for on the cash basis method

²Increase due to unanticipated revenue from various developments

³Increase in number of Taps requiring Pavement Disturbance

⁴Pay-as-go funds to be used for CIP

⁵Budget-to-Actual Ratio does not include use of available funds

⁶Includes encumbered amounts as well as actual insurance expenditures

⁷Bond principal and interest expenditures are reflected at 50%. Actual spent amount is 16.43%.



MSD System Services In-House Construction FY 2022-2023

			ESTIMATED	ESTIMATED			COMPLETION	ACTUAL	
PROJECT NAME	LOCATION	ZIP CODE	FOOTAGE	PROJECT DATES	WO#	CREW	DATE	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	8/9/22 - 8/29/22	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	10/25/2022	592	Construction Complete
Warren Haynes Drive Sag Removal	Asheville	28715	350	10/26/2022	291565	Cantrell	10/26/2022	350	Construction Complete
Albermarle Commons PS Elimination	Asheville	28805	625	10/31/22 - 12/9/22	284482	Dockery	11/30/2022	627	Construction Complete
Ash Line Repair	Woodfin	28804	8	15-Dec	292579	G. Hensley	12/15/2022	8	Construction Complete
Mountain View Rd at Maxwell Rd Sewer Rehabilitation	Asheville	28805	521	12/5/22 - 1/15/23	265289	Dockery	12/30/2022	375	Construction Complete
24 Woodgate Road Construction Rehabilitation	Asheville	28806	223	12/21/2022	292583	Cantrell	12/21/2022	223	Construction Complete
Wynn St. @ Mountain St. Sewer Rehabilitation	Asheville	28801	437	1/16/23 - 2/15/23	263129	Dockery	1/25/2023	434	Construction Complete
Bell Rd at New Haw Creek Rd Sewer Rehabilitation Phase 1	Asheville	28805	990	2/16/23 - 2/28/23	248044	McDevitt	2/28/2023	987	Construction Complete
Bell Rd at New Haw Creek Rd Sewer Rehabilitation Phase 2	Asheville	28805	50	3/1/23 - 3/7/23	294564	McDevitt			Construction underway
Mace Avenue Sewer Relocation	Asheville	28806	100	3/7/23 - 3/20/23	293586	McDevitt			Ready for construction
Grindstaff Dr @ McDowell St	Asheville	28803	603	FY 22-23	284606	McDevitt			Ready for construction
Briarcliff Dr at Oakwilde Dr Construction Rehab Ph. 2	Asheville	28803	257	FY 22-23	285342	McDevitt			Ready for construction
Naples PS Elimination and Gravity Conversion Ph. 2	Cane Creek	28760	422	FY 22-23	285603	McDevitt			Ready for construction
Norwood Ave Sewer Rehabilitation	Asheville	28804	1022	FY 22-23	275810	TBA			Ready for construction
44 Galax Sewer Rehab	Asheville	28806	294	FY 22-23	280827	TBA			Ready for Construction
Old Asheland Ave to Phifer Street Sewer Rehabilitation	Asheville	28801	462	FY 22-23	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 22-23	275849	TBA			Ready for construction
Highland Farms Road Sewer Rehabilitation	Black Mountain	28711	850	FY 22-23	275837	TBA			Ready for construction
Old Fairview Rd @ Willington Road	Asheville	28803	732	FY 22-23	276005	TBA			Ready for construction
5 Golf Street	Asheville	28801	240	FY 22-23	284586	TBA			Ready for construction



CONSTRUCTION TOTALS BY DATE COMPLETED - Monthly

From 7/1/2022 to 1/31/2023

	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 *
July 2022	28	6	63	433	17	10	25,839	0	435	1233	7	30	1698
August 2022	30	6	70	904	14	27	14,647	0	0	1040	6	0	1040
September 2022	20	7	32	494	12	17	6,291	0	0	435	3	0	435
October 2022	15	5	46	507	16	29	3,940	0	350	592	7	0	942
November 2022	10	5	27	348	17	19	26,106	0	0	627	4	0	627
December 2022	12	9	31	320	10	50	0	0	223	383	4	0	606
January 2023	39	9	49	605	17	15	0	0	40	434	3	0	474
Grand Totals	154	47	317	3,611	103	167	76,823	0	1048	4744	34	30	5822

02/24/2023



CUSTOMER SERVICE REQUESTS Monthly - All Crews

CREW MONTH	JOBS	AVERAGE REPSONSE TIME	AVERAGE TIME SPENT
DAY 1ST RESPONDER			
July, 2022	115	28	34
August, 2022	83	30	37
September, 2022	90	30	40
October, 2022	83	29	36
November, 2022	85	28	32
December, 2022	71	27	50
January, 2023	129	28	31
	656	29	36
NIGHT 1ST RESPONDER			
July, 2022	41	25	19
August, 2022	41	26	24
September, 2022	35	35	26
October, 2022	28	28	34
November, 2022	34	41	38
December, 2022	33	33	34
January, 2023	69	33	22
	281	31	27
ON-CALL CREW *			
July, 2022	29	40	39
August, 2022	29	29	60
September, 2022	27	56	67
October, 2022	35	62	58
November, 2022	28	49	51
December, 2022	48	60	53
January, 2023	60	67	33
	256	54	49
Grand Totals:	1,193	35	37

2/24/2023 Page 1 of 1

^{*} 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 January 31, 2023

	Main Line Wash	Service Line Wash	Rod Line	Cleaned	CCTV	Smoke	SL-RAT
	Footage	Footage	Footage	Footage	Footage	Footage	Footage
2022							
July	100,862	4,736	1,390	102,252	14,226	50	1,886
August	95,363	1,583	0	95,363	29,701	0	6,165
September	51,254	1,193	1,816	53,070	21,909	0	5,747
October	60,901	1,089	5,221	66,122	24,032	493	10,894
November	15,578	1,676	1,365	16,943	17,617	450	16,220
December	30,535	1,598	2,136	32,671	8,109	0	26,472
2023							
January	46,850	2,797	3,209	50,059	13,499	0	25,849
Grand Total:	401,343	14,672	15,137	416,480	129,093	993	93,233
Avg Per Month:	57,335	2,096	2,162	59,497	18,442	142	13,319

CAPITAL IMPROVEMENT PROGRAM

STATUS REPORT SUMMARY

March 8, 2023

CATTIAL INITIO VENIENT TROOKAM	STATUS KEI OKT SUMMAKT							Wiai Cii 0, 2025
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	3/30/2023	\$684,695.00	98%	Waiting on paving and final inspection.
BENT TREE ROAD	Asheville 28804	Terry Brothers Construction Co.	11/19/2022	12/5/2022	3/5/2023	\$980,781.00	60%	Construction progressing well. 1,000 LF of mainline installed to date.
CALEDONIA ROAD	Asheville 28803	Hyatt Pipeline LLC	11/16/2022	1/23/2023	5/23/2023	\$799,489.50	40%	Construction progressing well. 760 LF of mainline installed to date.
CHRISTIAN CREEK INTERCEPTOR	Buncombe County	Buckeye Bridge LLC	12/15/2021	3/14/2022	7/7/2023	\$6,000,556.30	70%	Construction progressing well. 7,600 LF of mainline installed to date.
LE AN HURST ROAD	Asheville 28803	Terry Brothers Construction Co.	1/18/2023	TBD	TBD	\$259,040.00	0%	Project has not started yet.
LINING CONTRACT NO. 9	Buncombe County	Terry Brothers Construction Co.	1/18/2023	3/20/2023	3/14/2024	\$2,130,890.00	0%	Anticipated start date is March 20th.
SPRINGSIDE ROAD @ OVERLOOK ROAD	Asheville 28803	Huntley Construction Company	5/19/2021	9/23/2021	3/30/2023	\$836,550.16	99%	Waiting on final inspection.
TOXAWAY STREET	Asheville 28806	Terry Brothers Construction Co.	7/20/2022	8/16/2022	3/30/2023	\$329,485.00	99%	Contractor working on small punch list.
WRF - EQUIPMENT STORAGE FACILITY	Woodfin	Cooper Construction Company	10/20/2021	3/28/2022	3/28/2023	\$3,090,823.18	96%	Working on items needed for temporary C.O.
WRF - INTERMEDIATE CLARIFIER EFFLUENT TROUGH REHAB, PHASE 1	Woodfin	Carolina Management Team LLC	1/31/2023	TBD	TBD	\$255,651.89	0%	Preconstruction meeting to be scheduled.
WRF - RBC SLIDE GATE REPLACEMENT PHASE 2	Woodfin	Harper Corp.	11/16/2022	3/27/2023	11/22/2023	\$624,000.00	0%	No work has begun yet.

^{*}Updated to reflect approved Change Orders and Time Extensions

Planning & Development Project Status Report

Active Construction Projects Sorted by Work Location and Project Number

March	1	20	2

				iviaici	1 1, 2023			
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	Lake Julian Crossing	2018271	Asheville	28704	Comm.	1,134	11/30/2022	Intalling
6	Timber Hollow Subdivision	2019049	Asheville	28805	18	525	7/28/2020	On hold
7	Millbrook Cottages	2019066	Asheville	28806	7	322	2/15/2022	Pre-con held, construction not yet started
8	3927 Sweeten Creek Rd (Rumi Way)	2019076	Asheville	28704	16	590	2/1/2023	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	Waiting on Testing
12	Hawthorne at Haywood Phase 2	2019130	Asheville	28806	92	668	12/15/2020	Final Inspection complete, awaiting close-out docs
13	Burton Street	2021048	Asheville	28806	4	64	10/29/2021	Pre-con held, construction not yet started
14	Beloved Asheville	2021070	Asheville	28805	12	272	4/29/2022	Waiting on Testing
15	Busbee Ph. 1	2021245	Asheville	28803	210	4,245	4/26/2022	Installing
16	MAHEC Parking Deck	2021083	Asheville	28803	Comm.	550	6/1/2022	Waiting on final inspection
17	Old Home Road Subdivision	2021094	Asheville	28804	21	1,790	5/4/2022	Installing
18	Woodfield (RAD Lofts)	2021063	Asheville	28801	235	403	6/8/2022	Installing
19	Reed Creek Mixed Use	2022008	Asheville	28801	49	295	2/23/2023	Pre-con held, construction not yet started
20	Crossroads Community Ph1 Apartments	2022068	Asheville	28806	660	595	8/25/2022	Waiting on Paving
21	Selwyn Townhomes	2021209	Asheville	28806	45	993	8/19/2022	Waiting on final inspection
22	Waynesville Avenue Cottages	2021211	Asheville	28806	7	128	8/25/2022	Waiting on Paving
23	Reddick Road	2021108	Asheville	28805	5	507	9/2/2022	Pre-con held, construction not yet started
24	Randolph Avenue Commercial	2021149	Asheville	28806	Comm.	650	6/30/2022	Waiting on testing
25	The Ramble - Block K	2022015	Asheville	28803	38	4,516	1/25/2023	Pre-con held, construction not yet started
26	Friendly Hollow Way	2022064	Asheville	28803	5	166	1/25/2023	Pre-con held, construction not yet started
27	Jumbo Storage III	2022128	Asheville	28803	Comm.	283	11/9/2022	Final Inspection complete, awaiting close-out docs
28	Holiday Villa	2022172	Asheville	28704	7	355	2/15/2023	Pre-con held, construction not yet started
29	808 Montreat Road	2015126	Black Mountain	28711	4	371	4/18/2017	Final Inspection complete, awaiting close-out docs
30	Givens Highland Farms-Cottage Development	2018272	Black Mountain	28711	16	1,355	9/13/2019	Final Inspection complete, awaiting close-out docs
31	Sweet Birch Lane Phase 3	2020151	Black Mountain	28711	20	800	6/30/2021	Waiting on final inspection
32	Old Toll Road Subdivision	2020182	Black Mountain	28711	14	637	8/17/2021	Waiting on final inspection
33	Tudor Croft - Phase 2D	2018004	Black Mountain	28711	5	224	6/8/2022	Waiting on final inspection
34	NCDOT I-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	Rockdale Subdivision	2018145	Buncombe Co.	28778	9	630	3/17/2020	Final Inspection complete, awaiting close-out docs
38	Roberson Relocation	2019037	Buncombe Co.	28715	Comm.	200	4/24/2020	Pre-con held, construction not yet started
39	Aiken Road Multi-Family	2019128	Buncombe Co.	28804	407	4,620	10/2/2020	Final Inspection complete, awaiting close-out docs
40	The Ramble - Tea House Ridge	2019159	Buncombe Co.	28803	22	8,050	9/21/2021	Installing
41	841 Charlotte Hwy	2019222	Buncombe Co.	28730	Comm.	110	4/20/2021	Pre-con held, construction not yet started
42	Creekside Cottages	2019255	Buncombe Co.	28704	6	400	3/12/2015	Phase 2 Construction Not started
43	Fisher Mill Road	2020015	Buncombe Co.	28704	3	380	10/20/2020	Final Inspection complete, awaiting close-out docs
44	Fountain Park Subdivision - Ph. 2	2020026	Buncombe Co.	28806	120	4,611	7/12/2019	Final Inspection complete, awaiting close-out docs
45	CMH Avery Creek	2020080	Buncombe Co.	28704	10	580	2/8/2022	Waiting on final inspection
46	Kirkwood MHP (aka Rice MHP on-site)	2020166	Buncombe Co.	28715	75	2,610	12/21/2021	Final Inspection complete, awaiting close-out docs
47	Habitat- Glenn Bridge Road	2020178	Buncombe Co.	28704	30	908	12/14/2021	Final Inspection complete, awaiting close-out docs
48	Town Mountain Preserve Ph. 2	2020197	Buncombe Co.	28804	6	1,210	5/28/2021	Waiting of final inspection
49	Village at Bradley Branch Ph. 4B	2021120	Buncombe Co.	28704	16	393 114	11/2/2021	Waiting of final inspection
50 51	Enka Oak Street	2021224 2022160	Buncombe Co.	28715	3 Comm	569	6/3/2022 12/15/2022	Final Inspection complete, awaiting close-out docs
51	1102 New Salem Road Collett Industrial (Banner Farm)	2022160	Buncombe Co. Cane Creek	28778 28759	Comm.	255	11/20/2020	Waiting on testing Final Inspection complete, awaiting close-out docs
52	Pardee Partners	2020108	Cane Creek	28759	Comm.	1,105	11/2/2020	Final Inspection complete, awaiting close-out does
53	Appalachian Mountain Brewery	2021058	Cane Creek	28759	Comm.	224	10/6/2022	Final Inspection complete, awaiting close-out does
55	B&F Ceramics	2022112	Cane Creek	28759	Comm.	2,360	11/1/2022	Waiting on testing
56	Tap Root Ph. 1	2021143	Fletcher	28732	198	8,397	4/29/2022	Installing
56	Fernleaf Charter School	2020024	Fletcher	28732	Comm.	780	3/25/2022	Waiting on final inspection
58	Suncap Warehouse	2020177	Fletcher	28732	Comm.	803	12/3/2021	Final Inspection complete, awaiting close-out docs
		2021039	Fletcher	28732	63	2,653	9/6/2022	Installing
59 60	Heritage Park Mills River Fire & Rescue HQ Station	2021275	Mills River	28759	Comm.	160	11/1/2022	Waiting on testing
	Palisades at Reems Creek	2022038	Weaverville	28787	132	1,020	3/24/2022	Installing
62	Greenwood Park Ph. 2	2020066	Weaverville	28787	25	1,560	5/25/2021	COMPLETE
62	Union Chapel (Views at Reems Creek)	2020245	Weaverville	28787	11	650	8/2/2022 8/2/2022	Final Inspection complete, awaiting close-out docs
63	Stoney Knob Commercial	2021030	Weaverville	28787	3	273	1/26/2023	Pre-con held, construction not yet started
	18 Wildwood Park Sewer Relocation	2021102	Weaverville	28787	1	147	2/22/2022	Final Inspection complete, awaiting close-out docs
65	Crest Mountain Phase 3B	2021129	Woodfin	28806	69	1,329	10/15/2013	Final Inspection complete, awaiting close-out docs Final Inspection complete, awaiting close-out docs
66 67	Reese & Jan Lasher (High Hopes)	2013041	Woodfin	28806	14	320	4/26/2016	Final Inspection complete, awaiting close-out docs Final Inspection complete, awaiting close-out docs
67 68	Brown Avenue aka Wolf Tract	2015152	Woodfin	28806	6	219	6/4/2021	Waiting on Paving
	Skyfin-Terraces at Reynolds Mtn - Phase 4	2017029	Woodfin	28804	5	100	8/8/2017	Final Inspection complete, awaiting close-out docs
69	Skytin-Terraces at Reynolds Mtn - Phase 4 Serenity Townhomes		Woodfin	28804 28804		480	8/8/2017 7/14/2020	Final Inspection complete, awaiting close-out docs Final Inspection complete, awaiting close-out docs
70	-	2020037 2020123		28804	8			1 1 2
71	Weaverville Road Subdivision West City View	2020123	Woodfin Woodfin		21	600	4/6/2021	Pre-con held, construction not yet started
72	Rydele Heights			28804		845	7/23/2021	Final Inspection complete, awaiting close-out docs Pre-con held, construction not yet started
73	Ryucic rieignts	2021098	Woodfin	28804	73	1,880	3/1/2023	1 10-con neia, construction not yet started
l		TOTAL		3,472	80,990			