

BOARD OF THE METROPOLITAN SEWERAGE DISTRICT

May 16, 2018

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, May 16, 2018. Chairman VeHaun presided with the following members present: Bryson, Holland, Kelly, Manheimer, Pelly, Root, Watts and Wisler. Ashley, Frost and Pressley were absent.

Others present were: Thomas E. Hartye, PE, General Manager; William Clarke, General Counsel; John Mastracchio with Raftelis; CJ Cody with Roberts & Stevens; Joseph Martin with Woodfin Sanitary Water and Sewer District; Ed Bradford, Hunter Carson, Scott Powell, Peter Weed, Mike Stamey, Matthew Walter, Jim Hemphill, 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 April 18, 2018 Board Meeting:

Mr. VeHaun asked if there were any changes to the Minutes of the April 18, 2018 Board Meeting. Mr. Kelly moved for approval of the minutes as presented. Mr. Pelly seconded the motion. Voice vote in favor of the motion was unanimous.

4. Discussion and Adjustment of Agenda:

None.

5. Informal Discussion and Public Comment:

Mr. VeHaun welcomed John Mastracchio with Raftelis Financial Consultants, Inc., CJ Cody with Roberts & Stevens and Joe Martin with Woodfin Sanitary Water and Sewer District. There was no public comment.

6. Report of General Manager:

Mr. Hartye reported that he met yesterday with the Department of Environmental Quality (DEQ) in Raleigh and it was a very good meeting. They successfully negotiated a new draft permit which dovetails with what is projected in the CIP, a very deliberate, methodical upgrade to the plant and distribution system. In addition, they gave a presentation on the Actiflow process, a new technology that MSD intends to use in the next phase of the plant upgrade. It has been successful in other states, but has not been used in North Carolina and DEQ looked favorably upon our presentation of its capabilities. Hopefully, the authorization to construct permit will arrive shortly and we can move on to the next phase which should begin at the end of this year or beginning of next year.

Mr. Hartye thanked the MSD Staff who participated in the river clean-up along the area of the French Broad River that MSD has adopted. Twenty-eight bags of trash were picked up from the two parks and along the road from Woodfin Park to the prison. Special thanks to Sandra Moore for heading up this effort.

Mr. Hartye reported that MSD once again received the Excellence in Financial Reporting Recognition from the Government Finance Officers Association (GFOA) for the Fiscal Year 2017. Much thanks to Scott Powell and Teresa Gilbert.

Mr. Hartye reported that DJ Gerken of Baker Place called to express his delight that MSD crews were able to accomplish their work without messing up his garden. Thanks to McKinley Hensley, Carl Ellington, Jamie Foxx, Josh Matthews and Grayson Hensley.

Mr. Hartye reported that pursuant to NCGS 162A Article 8, Raftelis Consulting Firm performed the prescribed system development fee calculations for MSD. This report was made public on the MSD website on March 28th and Staff discussed with the Finance Committee on May 3rd. At this Board Meeting today, under Item 8, there will be a Public Hearing as prescribed by the statute along with a presentation by Mr. Mastracchio.

Mr. Hartye reported that this month the Board will consider the Preliminary Budget and Rate Recommendations based upon recommendations of the Personnel, CIP and Finance Committees. The fee section was presented to the Finance Committee and includes the recommendations of the above-referenced report. The Final Budget and a Public Hearing will be held at the regular Board Meeting on June 13th.

Mr. Hartye reported that the next regular Board Meeting will be held on June 13th at 2 pm. The next Right of Way Committee meeting will be held on June 27th at 9 am. A Planning Committee meeting will be held on June 13th at 1 pm to discuss potential development areas that are hamstrung by lack of sewer. There will be a discussion on special assessments.

7. Report of Committees:

a. CIP Committee – April 24, 2018

Mr. Watts reported that the CIP Committee met on April 24, 2018. He thanked Mr. Bradford for an excellent and enlightening presentation. The CIP Committee recommended approval of the CIP Budget.

b. Personnel Committee – April 24, 2018

Ms. Bryson reported that the Personnel Committee met on April 24, 2018. Ms. Thomas gave a good presentation on human resource activities. Mr. Hemphill gave a report on the self-insured health plan and pay adjustment.

Personnel Committee recommends that the Board approve a 3.0% wage adjustment for all employees, an additional 6.5% increase in contributions from the Board for medical insurance cost, and a 6.5% increase in employee premiums for medical insurance.

c. Finance Committee – May 3, 2018

Mr. Kelly reported that the Finance Committee met on May 3, 2018. Finance Committee Minutes are attached and Committee recommends approval of the Proposed FY 19 Budget and Schedule of Rates and Fees.

8. Consolidated Motion Agenda:

a. Consideration of Developer Constructed Sewer Systems: The District; Malvern Walk (aka Bear Creek Homes); Moody Avenue; The Ramble Block G; The Ramble Block H, Ph. 1; The Settings of Black Mountain Phase 3 and 3A; Shiloh Cottages:

Mr. Hartye reported that The District project is located off Fairview Road in Asheville and included extending approximately 914 linear feet of 8-inch public gravity sewer to serve the 390 unit apartment complex.

Mr. Hartye reported that the Malvern Walk Subdivision project is located off Bear Creek Road and included extending approximately 1,390 linear feet of 8-inch public gravity sewer to serve the 30 unit single family residential development.

Mr. Hartye reported that the Moody Avenue project is located off of Moody Avenue and included extending approximately 180 linear feet of 8-inch public gravity sewer to serve the 3 unit single family residential development.

Mr. Hartye reported that the Ramble Biltmore Forest Block G project is located off Ramble Way in Buncombe County and included extending approximately 4,340 linear feet of 8-inch public gravity sewer to serve 34 units for this phase of the single family residential development.

Mr. Hartye reported that the Ramble Biltmore Forest Block H-Phase 1 project is located off Ramble Way in Buncombe County and included extending approximately 1,434 linear feet of 8-inch public gravity sewer to serve 6 units for this phase of the single family residential development.

Mr. Hartye reported that The Settings of Black Mountain Phases 3 & 3A project is located off Hwy. 9 in the Town of Black Mountain and included extending approximately 3,499 linear feet of 8-inch public gravity sewer to serve the 30 units for this phase of the single family residential development.

Mr. Hartye reported that the Shiloh Cottages project is located off Shiloh Road in Asheville and included extending approximately 180 linear feet of 8-

inch public gravity sewer to serve the 7 unit single family residential development.

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

b. Cash Commitment/Investment Report Month ended March, 2018:

Mr. Powell reported that Page 38 presents the makeup of the District's Investment Portfolio. There has been no significant change in makeup of the portfolio from the prior month. Page 39 presents the MSD investment managers report for the month of March. The weighted average maturity of the investment portfolio is 118 days. The yield to maturity is 1.58%. Page 40 presents the District's analysis of cash receipts. Monthly and YTD Domestic and Industrial sewer revenue are considered reasonable based on timing of cash receipts in their respective fiscal periods. YTD Industrial sewer revenue is above historical trends due to a temporary increase in revenue from one industrial user. YTD facility and tap fees are above historical trends due to the timing of 3 cash receipts from developers as well as these fees being budgeted conservatively. Page 41 presents the District's analysis of expenditures. Monthly and YTD O&M expenditures are considered reasonable based on historical trends. Due to the nature of the variable rate bond market, monthly and YTD expenditures can vary year to year. Based on the current variable interest rates, debt service expenditures are considered reasonable. Due to the timing of capital projects, YTD expenditures can vary year to year. Based on the current outstanding capital projects, YTD capital project expenditures are considered reasonable. Page 42 presents MSD's Variable Debt Service report. The 2008A Series refunding bonds are performing better than budgeted expectations. As of the end of April, this issue has saved the District rate payers approximately \$5.4 million in debt service since April, 2008.

c. Review of Investment Policy:

Mr. Powell reported that since the last review of the District's Investment Policy, the commercial paper market has experienced substantial changes. In 2006, the average A-1/P-1 commercial paper issuer issued commercial paper in denominations ranging from \$250,000 to \$500,000. In 2018, the same issuers are issuing in denominations ranging from \$500,000 to \$5,000,000. This change, due to the nature of what the District can invest in, has limited staff's ability to access more competitive rates of returns. The Finance Committee recommends the modification of the Investment Policy to read:

“To limit the District's risk associated with holding individual securities (e.g. non-systematic risk) so that up to \$5,000,000 of the portfolio may be invested in a single non-governmental issue”.

As the policy states now, this number is at \$500,000. The District's Investment Policy limits how much we can invest in commercial paper and that number is at 20%, so no more than 20% of our investment portfolio can be in

commercial paper. This allows us to access more companies that offer commercial paper as well as more competitive rates.

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

9. Public Hearing: Sewer System Development Fee Study:

MINUTES OF PUBLIC HEARING

Mr. Hartye reported that, as mentioned in his Manager's Report, this is a general statute requirement and the system development fees will be updated every five years. All water and sewer utilities across the State are required to have these calculations done, there must be a public hearing held after posting the public notice. This proposed policy was posted on the MSD website on March 28, 2018. Mr. Clarke reported that by way of background there was some litigation involving the legality of system development fees, and in partial response to that litigation, the legislature passed this statute describing specifically what system development fees water and sewer districts including MSD's can have and how you have to do them which is what MSD is doing.

Mr. VeHaun announced the opening of the Public Hearing at 2:20 pm.

Mr. Hartye introduced Mr. Mastracchio who stated that system development fees are one time fees that a new development pays at the time of connection or at the time the application to commit for sewer service is provided. Those fees are calculated under Article 8 of Chapter 162A and have been in place since July, 2017. Water and sewer systems across the State need to comply with the prescribed way of how those fees are calculated by July 1, 2018. The Statute provides the authority to impose those fees. MSD has had those fees in place for some time so they are nothing new but the way they are calculated has to follow the Statutes. There are three ways of calculating system development fees in accordance with the new law. The first is using a System Buy-In approach which is basically looking back historically at what sewer system assets cost originally and trending those costs to current replacement value and then making adjustments for the remaining useful life of the assets. It is a current value less depreciation value, then that amount gets divided by the system capacity. The second is an Incremental Cost method. The law allows you to look forward ten to twenty years and see what you will need for additional system capacity at what cost, and then use the same calculation with the future cost divided by future capacity. The law also allows you to use a Combined Method of the two. For each of those methods you have to make adjustments for developer contributed assets and outstanding debt. The Capacity Buy-In Method was used to calculate the sewer system development fees for MSD since MSD's existing sewer treatment facilities have adequate capacity to accommodate anticipated future growth. He presented charts and explained the steps used to calculate the fees and arrive at a cost per unit of system capacity. The current System Development Fee for a single-family residential dwelling is \$2,500; the new fee is \$2,836. The fee is also scaled up by meter size for larger

developments, commercial and industrial users. He stated they specifically looked at the amount of usage for multifamily units and mobile homes. The study found that the typical multifamily unit contributes wastewater at about a 70% factor compared to mobile homes and single family homes. Ms. Manheimer asked if he had performed calculations for other systems and if so does he have a sense of how the District compares. Mr. Mastracchio stated yes and the District is probably below the average. He stated that in some areas the fees for a single family residential can go from \$1,000-\$1,500 and other areas from \$8,000-\$10,000. Ms. Wisler asked if we are locked into using the same methodology five years from now and how was it decided which methodology to use. Mr. Mastracchio stated no we aren't locked into the same methodology. The Capacity Buy-In Method is appropriate when you are not tapped out of capacity or you have some capacity to serve new development. Where the Incremental Cost Method makes the most sense is when you are in the process of expanding the system significantly and you have future costs that may be a lot higher than your historical cost. Mr. Watts asked if there was an application for when a lot of your water is not being discharged to sewer and you typically have a 4" or 6" meter, would you be better off with another smaller meter for domestic water. Mr. Mastracchio stated that there are some large commercial customers who have deduct meters that measure water that is used for outdoor purposes so they would have two meters, the regular domestic meter and an irrigation or outdoor meter. Those are instances where a customer uses a lot of outdoor water. Mr. Root stated that he was looking at old numbers where a 4-6" justified a rather large increase and the numbers now do not seem to match up and asked why that was thought appropriate in the past. Mr. Hartye stated that he wasn't here when those numbers were originally established. Mr. Root stated that in Weaverville's water study it was suggested that there might be a reason to back off 100% of the calculations simply because there was an ongoing responsibility of monitoring and you could actually end up going over where you were supposed to be if you were at 100%. He asked if that was anything Mr. Mastracchio was aware of. Mr. Mastracchio stated these fees are based on how you plan for new development and what capacity you need to serve. Those numbers come from the planning that MSD does and at this point that satisfies the Statute requirement. Mr. Hartye stated that the Capacity Buy-In Method would not be encumbered by that. If the District is using capacity buy-in we are using money that has already been spent. Whereas using the Incremental Method you would be worried about actual costs to do improvements for the next ten years, versus estimates. Those costs may be different. Mr. Clarke stated that the Statute sets a limit on how much you can charge but it doesn't say you have to charge to the maximum, you just can't charge any higher. MSD is charging less. Mr. Pelly asked if you could change the amount for different classes or is it all a strictly math based calculation, such as mobile homes which are perceived as affordable housing. Mr. Clarke stated that the Statute says that you can't discriminate rates between classes of customers. Cities and counties have that authority but MSD's do not. Mr. Holland asked if there was any information regarding how many mobile homes connect in a year that would be subject to the fee. Mr. Powell stated that average is about 2% of the District's total growth. There are not a lot of new mobile homes that are in close proximity to the sewer system. This is only going to affect new services and there is still a 70% rebate available for affordable housing as

determined by either Buncombe County or City of Asheville.

Mr. Hartye reported that this item will be incorporated in with the Preliminary Budget and there was no need for a separate vote.

With no further questions or comments, Mr. VeHaun closed the Public Meeting at 2:37 pm.

10. Consideration of Resolution Adopting the Preliminary Budget for FY 18-19 and Schedule of Sewer Rates and Fees:

Mr. Powell reported that the Finance Committee reviewed the Preliminary Budget at the May 3, 2018 meeting. Page 20 presents the proposed FY 18-19 budget of \$50,781,987 which includes a 2.5% domestic rate increase which is a .73 cent increase in the average single family monthly bill. The average monthly bill will go from 30.62 to 31.36. We will continue the Industrial Rate Parity Plan which is in year 19 of 20. There will be a 3.8% average increase for the industrial section. Sewer System Development Fees and Sewer Connection Fees change in accordance with consultant and staff recommendations. There is a projected 1.5% rate of return on investments. Construction is at \$23.5 million which was endorsed by the CIP Committee. The Operation and Maintenance Budget is \$16.7 million. This includes a 4.27% increase in Salaries and Benefits which has an impact of \$563,125 and Personnel Committee recommendations for salary adjustments, self-insurance funding and GASB 45/75 OPEB funding as well as State required retirement contribution and insurance funding. Also included in the Operation and Maintenance Budget is a 1.80% increase in materials, supplies and service which has an impact of \$116,624. Mr. Powell reported that there was a Flow of Funds Chart included which is a graphical representation of the Budget Resolution that the Board is being asked to approve for this fiscal year. Also included is the Schedule of Sewer Rates and Fees which incorporates the Consultant's recommendation for the Sewer System Development Fees. Mr. Pelly stated that although he doesn't like to see any rate increase he feels the 2.5% is a good sweet spot to go with and not feel like it's more than it needs to be. Mr. Powell further stated that NACWA, which has over 116 participants, is projecting average increases of 4%-4.7% over the next five years.

Mr. VeHaun called for a motion to approve the Resolution Adopting the Preliminary Budget for FY 2018-2019 and the Schedule of Sewer Rates and Fees. Mr. Kelly moved. Mr. Pelly seconded the motion. Roll call vote was as follows: 9 Ayes; 0 Nays.

11. Old Business:

None

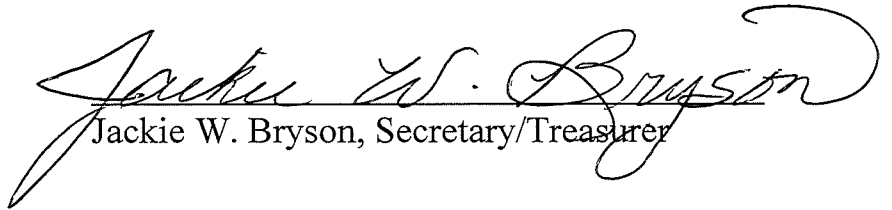
12. New Business:

None

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11. Adjournment:

With no further business, Mr. VeHaun called for adjournment at 2:41 pm.


Jackie W. Bryson, Secretary/Treasurer

MSD

Regular Board Meeting

Metropolitan Sewerage District
of Buncombe County, NC

AGENDA FOR 5/16/18

✓	Agenda Item	Presenter	Time	
	Call to Order and Roll Call	VeHaun	2:00	
	01. Inquiry as to Conflict of Interest	VeHaun	2:05	
	02. Approval of Minutes of the April 18, 2018 Board Meeting	VeHaun	2:10	
	03. Discussion and Adjustment of Agenda	VeHaun	2:15	
	04. Informal Discussion and Public Comment	VeHaun	2:20	
	05. Report of General Manager	Hartye	2:25	
	06. Report of Committees	VeHaun	2:35	
	a. CIP Committee – April 24, 2018	Watts		
	b. Personnel Committee – April 24, 2018	Bryson		
	c. Finance Committee – May 3, 2018	Kelly		
	07. Consolidated Motion Agenda	Hartye	2:45	
	a. Consideration of Developer Constructed Sewer Systems: The District; Malvern Walk (aka Bear Creek Homes; Moody Avenue; The Ramble Block G; The Ramble Block H, Ph. 1; The Settings of Black Mountain Ph. 3 & 3A; Shiloh Cottages	Hartye		
	b. Cash Commitment Investment Report-Month ended March, 2018	Powell		
	c. Review of Investment Policy	Powell		
	08. Public Hearing –Sewer System Development Fee Study	Hartye	3:00	
	09. Consideration of Resolution Adopting Preliminary Budget for FY 18-19 and Schedule of Sewer Rates and Fees	Powell	3:10	
	10. Old Business:	VeHaun	3:15	
	11. New Business:	VeHaun	3:20	
	12. Adjournment: (Next Meeting 6/13/18)	VeHaun	3:25	
	STATUS REPORTS			

BOARD OF THE METROPOLITAN SEWERAGE DISTRICT
April 18, 2018

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 2:01 pm Wednesday, April 18, 2018. Chairman VeHaun presided with the following members present: Ashley, Bryson, Frost, Holland, Kelly, Manheimer, Pelly, Pressley, Watts and Wisler. Root was absent.

Others present were: Thomas E. Hartye, PE, General Manager; William Clarke, General Counsel; Forrest Westall with McGill Associates; Joseph Martin with Woodfin Sanitary Water and Sewer District; Ed Bradford, Hunter Carson, Scott Powell, Ken Stines, Mike Stamey, Jim Hemphill, 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 March 21, 2018 Board Meeting:

Mr. VeHaun asked if there were any changes to the Minutes of the March 21, 2018 Board Meeting. Mr. Watts moved for approval of the minutes as presented. Mr. Pelly seconded the motion. Voice vote in favor of the motion was unanimous.

4. Approval of Closed Session Minutes of the March 21, 2018 Board Meeting:

Mr. VeHaun asked if there were any changes to the Minutes of the March 21, 2018 Closed Session. Mr. Pelly moved for approval of the minutes as presented. Ms. Bryson seconded the motion. Voice vote in favor of the motion was unanimous.

5. Discussion and Adjustment of Agenda:

None.

6. Informal Discussion and Public Comment:

Mr. VeHaun welcomed Joe Martin. There was no public comment.

7. Report of General Manager:

Mr. Hartye reported that attached is an e-mail from Nancy Alenier filing her complaint with MSD along with expressing her appreciation for the response to the complaint. Thanks to Ken Stines, Ricky Bates and the in-house construction crew.

Mr. Hartye reported that on July 20, 2017 the North Carolina General Assembly signed into law N.C. General Statute 162A Article 8, which started out

as House Bill 436. This provides for the uniform authority to implement system development fees for public water and sewer systems in North Carolina. The Statute sets out the limitations and requirements that must be met prior to July 1, 2018. MSD contracted with the Raftelis Consulting Firm to perform the prescribed system development fee calculations for MSD. This report was made public on the MSD website on March 28, 2018. Staff will bring this to the Finance Committee on May 3rd and provide for a public hearing on May 16th at the Regular Board Meeting. The last time MSD raised fees was approximately 6 years ago. Basically the same methodology has been used by MSD as was used for the study.

Mr. Hartye reported that MSD has no PIO's on Staff and he wanted to recognize efforts that are made above and beyond normal jobs. Aside from occasional Chamber and Rotary Presentations, MSD hosts booths at area expos and events. Lisa Tolley and Kay Farlow head up MSD's effort to educate the public at these events, often with the help of Jackie Bryson. These events include the Build and Remodel Expo which was a 2 day event with about 3000 people in attendance, the Live Well Expo which was a 1 day event with about 8,000 people in attendance, and the VA Hospital Earth Day Fair which will be held on April 24th. Additionally, Roger Edwards heads up the effort for guided tours at the plant, which for 2017 included approximately 500 individuals including elementary schools, a lot of high schools, and senior citizens. The typical 2 hour tour is now part of the regular curriculum for the AB Tech Environmental Engineering Program.

Mr. Hartye reported that the CIP Committee will meet April 24th at 8:30 am. Personnel Committee will also meet the same day, April 24th at 11 am. The Finance Committee will meet May 3rd at 9 am. The next regular Board meeting will be held on May 16th at 2 pm. The next Right of Way Committee meeting will be held on May 23rd at 9 am. A Planning Committee meeting will be held on June 13th at 1 pm, right before the 2 pm Board Meeting.

8. Report of Committees:

a. Right of Way Committee—March 28, 2018

Mr. Kelly reported that the Right of Way Committee met on March 28, 2018, and made recommendations, all of which are routine and included in this Board package. There were no questions.

9. Consolidated Motion Agenda:

a. Consideration of Condemnation – Old Haw Creek @ Greenbriar Road GSR:

Mr. Hartye reported that Staff and Right of Way Committee recommend authority to obtain appraisal and proceed with condemnation, if necessary.

b. Consideration of Compensation Budget – Thurland Avenue Sewer Extension:

Mr. Hartye reported that Staff and Right of Way Committee recommend approval of this compensation budget.

c. Consideration of Revised Compensation Budget – Old West Chapel Road GSR:

Mr. Hartye reported that Staff and Right of Way Committee recommend approval of this revised compensation budget.

d. Consideration of Bids – Patton Hill Road, School Road @ Cranford Road and Sheppard Drive:

Mr. Hartye reported that this is a grouping of three smaller projects under one contract. Patton Hill Road is located in Swannanoa, while School Road and Sheppard Drive are both located in West Asheville. These are 4-inch and 6-inch lines in very bad condition. Pipe Ratings for each of the three projects are high due to rood intrusion and pipe defects. The three projects combined add up to 1,533 LF of 8-inch ductile iron pipe and 8-inch HDPE pipe. Two formal bids were received on March 27, 2018; therefore, the contract was re-advertised and again two bids were received on April 5, 2018 as follows: Terry Brothers Construction Company in the amount of \$508,267.60 and Fuller & Company Construction, LLC in the amount of \$500,616.34. The apparent low bidder is Fuller & Company Construction, LLC with a bid amount of \$500,616.34. Fuller & Company has not previously worked for the District; therefore, staff checked multiple references. The references were highly complementary of Fuller & Company's work. The combined FY 17-18 Construction Budgets for the three projects is \$495,940.00. Sufficient funds are available in the Contingency for overage. Staff recommends award of this contract to Fuller & Company Construction, LLC in the amount of \$500,616.34, subject to review and approval by District Counsel.

e. Consideration of Budget Amendment:

Mr. Powell reported that in the current fiscal year, the District has incurred higher than expected general liability claims. As such, Staff recommends amending the financial plan of the Insurance Fund in the amount of \$300,000.00. This amount will cover existing claims as well as potential claims for the remainder of the fiscal year. Funds for this amendment will be appropriated out of the Insurance Funds Reserve.

f. Cash Commitment/Investment Report Month ended February, 2018:

Mr. Powell reported that Page 33 presents the makeup of the District's Investment Portfolio. There has been no change in makeup of the portfolio from the prior month. Page 34 presents the MSD investment managers report for the

month of February. The weighted average maturity of the investment portfolio is 120 days. The yield to maturity is 1.5%. Page 35 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 taking into consideration a temporary increase in revenue from one industrial user. Facility and tap fees are above budgeted expectations due to receiving approximately \$1.1 million from three developers. Page 36 presents the District's analysis of expenditures. The District's O&M expenditures are considered reasonable based on historical trends and current year budgeted needs. Debt Service expenditures are below budgeted expectations due to lower than expected interest rates on the District's Series 2008A Revenue refunding bonds. Due to the nature and timing of Capital Projects, YTD expenditures can vary from year to year. Based on the current outstanding capital projects, YTD expenditures are considered reasonable. Page 37 presents MSD's Variable Debt Service report. The 2008A Series are performing better than budgeted expectations. As of the end of March, both issues have saved the District rate payers approximately \$5.4 million in debt service since April, 2008.

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

9. Old Business:

None

10. New Business:

Ms. Manheimer reported that Mr. Powell has agreed to serve on the City of Asheville's Audit Committee and thanked him for his time serving in that capacity.

Ms. Frost thanked Mr. Hartye for attending the Buncombe County Commissioner's Meeting this week.

11. Adjournment:

With no further business, Mr. VeHaun called for adjournment at 2:17 pm.

Jackie W. Bryson, Secretary/Treasurer



MEMORANDUM

TO: MSD Board
FROM: Thomas E. Hartye, P.E., General Manager
DATE: May 11, 2018
SUBJECT: Report from the General Manager

- Kudos

- To the MSD staff who participated in the River Clean-up along the area of the French Broad River that MSD has adopted. Twenty-eight bags of trash were picked up from the 2 parks and along the road and river from Woodfin Park to the prison. Special thanks to Sandra Moore who led the effort.
- MSD once again received the Excellence in Financial Reporting Recognition from the Government Finance Officers Association (GFOA) for the FY 2017 CAFR. Much thanks to Scott Powell and Teresa Gilbert.
- DJ Gerken of Baker Place called to express his delight with the fact that the MSD crew were able to accomplish their work without messing up his garden. Thanks to McKinley Hensley, Carl Ellington, Jamie Foxx, Josh Matthews, and Grayson Hensley.

- System Development Fee Study

Pursuant to NCGS 162A Article 8, Raftelis Consulting Firm performed the prescribed system development fee calculations for MSD. This report was made public on the MSD website on March 28th and Staff discussed with the Finance Committee on May 3rd. There will be a Public Hearing at the May 16th Regular Board meeting as prescribed by the statute along with a presentation by John Mastracchio of Raftelis.

- FY 2019 Budget Process

This month the Board will consider the Preliminary Budget and Rate Recommendations based upon the recommendations of the Personnel, CIP and Finance Committees. The Fee section was presented to the Finance Committee and includes the recommendations of the above-referenced report. The Final Budget and a Public Hearing will be held at the Regular Board Meeting on June 13th.

- Board/Committee Meetings/Events

The next Regular Board Meeting will be held on June 13th at 2 pm. The next Right of Way Committee meeting will be held on June 27th at 9am.

CAPITAL IMPROVEMENT PROGRAM COMMITTEE

Minutes

April 24, 2018

8:30 a.m.

The Capital Improvement Program Committee of the Metropolitan Sewerage District met on April 24, 2018 at 8:30 a.m. in the MSD Administration Building on Riverside Drive in Woodfin with the following persons present: Bob Watts-Committee Chairman; Matt Ashley, Chris Pelly, David Melton, Marcus Jones, Terry Crouch and Joe Martin-CIP Committee Members; Jackie Bryson and Glenn Kelly-MSD Board Members; Tom Hartye-MSD General Manager; William Clarke-Roberts & Stevens; Forrest Westall-McGill Associates; Greg Wiggins-Henderson County & CCWSD; Ed Bradford, Scott Powell, Angel Banks, Hunter Carson, Peter Weed, Ken Stines and Pam Nolan-MSD.

1. Call to Order

Mr. Watts called the meeting to order at 8:30 a.m. He welcomed all guests in attendance and thanked everyone for coming. He stated that this was a very important time for the Capital Improvement Program, giving everyone an opportunity to review the 10 year schedule. He then turned the meeting over to Mr. Hartye who also thanked everyone for coming. Mr. Hartye reported that the meeting format and expenditures are about the same as last year but the big change will be in the CIP. The 10 year window has been moved out and there are major improvements coming for the treatment plant and some larger interceptors. In early 2000, this program was running about \$15 Million a year, generally doing smaller line rehabilitation. The last couple of years it has gone up to a little over \$20 Million a year. This year's CIP is up to over \$30 Million per year average. Generally, MSD's financial MO is equal parts of pay as go vs. debt and that will continue. The facilities at the treatment plant and interceptors are being built in the 10 year window. Staff feels it is reasonable to do a 50/50 pay as go and spread the obligation over existing and future customers.

Mr. Hartye reported that there will be a Planning Committee Meeting on June 13, 2018 at 1 pm, prior to the Board Meeting, to review some development areas of interest, discuss development fees, costs of extensions, and to talk about MSD's inability to special assess. Mr. Hartye encouraged all members or their planners to attend this meeting. He then turned the meeting over to Ed Bradford, CIP Director.

2. Highlights of the Current and Proposed Capital Improvement Program

Mr. Bradford stated that if anyone had any questions or comments he would be glad to stop and answer them. He then proceeded with a Power Point presentation beginning with a summary of the proposed CIP Budget for the coming fiscal year. The proposed budget for FY 18-19 is \$23,492,718. The inflationary component for this year is 3.03% based on the ENR index and is a 10 year average. He stated that a copy of the budget is posted on MSD's website at www.msdbc.org.

Mr. Bradford reported that MSD maintains over 1,021 miles of sewer line at this time. He explained that the reduction of SSO's is a key objective. Over the past sixteen years, this has been accomplished using a three-prong approach: an effective Management, Operations and Maintenance program (MOM) – to reduce line blockages and optimize response time when blockages do occur (we maintain a first responder system with a 35 minute or less response time to any point on our system); an aggressive CIP program to improve the structural condition of the system; and lastly, by providing sufficient capacity by sizing lines for current

as well as future flows. An important part of that is also actively searching for and eliminating sources of inflow and infiltration.

The primary approach for collection system rehabilitation is minimizing SSO's utilizing our pipe rating program. Projects are prioritized and scheduled based on their pipe rating and system needs, without regard to political jurisdiction. The pipe rating program includes the following general aspects in rating rehabilitation projects: SSO and overflow history; customer service requests; proximity to streams and waterways; structural condition of the pipes, and monitoring schedule by MSD Staff. Pipe rating inputs include project length, customer service requests, flooded structures, sanitary sewer overflows, manhole overflows, monitoring schedule, structural age or condition, impacts to surface waters and potential for remote SSO's. Pipe rating is our primary tool but other data and considerations matter too. MSD coordinates with other agencies for street/neighborhood improvements or private interests like golf courses. The Grove Park Inn Golf Course, Biltmore Forest Country Club and The Asheville Country Club are examples. This program was developed with in-house staff and off-the-shelf software, there was no black-box programming or outside consultant to rely on to keep it updated. It been published multiple times and Staff has given numerous presentations over the years. MSD was one of the first utilities in the country to implement a system like this. It was developed in 2001 and received a National Environmental Achievement Award from NACWA in 2003. It has been tweaked over the years as information and data has gotten better. It was most recently published in November 2017 in NC Currents.

Mr. Bradford explained that MSD rehabilitates 40,000-50,000 LF of line each year. In-house crews rehabilitate 20,000 LF per year of that amount in addition to handling taps and emergency repairs. From 1991 to 2017, 1.12 million LF have been rehabilitated or replaced which is 221.1 miles or 21.7% of the total system.

Mr. Bradford presented snapshots of in-house rehabilitation projects either completed or underway this year. One of these projects is Sutton Avenue in downtown Black Mountain. This consisted of replacing about 3,700 LF of old 6" and 8" clay lines on multiple streets in the downtown area. This was a pipe bursting project. The Elkwood Avenue Project is located in Woodfin and is the largest Dig and Replace project for FY 17-18, consisting of approximately 4,882 LF. He presented slides of the staging area at New Bridge Baptist Church, manholes waiting to be installed and 8-inch DIP typically used in most projects. Mr. Bradford reported that MSD maintains 29,988 manholes. Mr. Martin asked if the ladders in the risers are cast in or are they put in later. Mr. Bradford stated that this was no longer done due to safety and confined space issues. Paving on the first section of this project is expected to start the week of April 30th and then they will mobilize to the next phase which runs to Riverside Drive. The South French Broad Interceptor Lining project is located through the Biltmore Estate. Phase Two consisted of a little over 6,600 LF and was completed this fiscal year. The total amount of lining on the project is about 22,000 LF with approximately 6,200 LF completed in FY16-17. 5,111 LF is proposed to be completed this coming fiscal year and the remaining balance to be complete in FY19-20. He presented a map showing the scale of the project in relation to the Biltmore House and the Asheville Outlets and snapshots and a video and explained the process. The pipe is in good structural condition but the inner surface is suffering from concrete degradation. The pipe will remain in service. Capacity needs will be addressed with the new parallel line through the Estate. MSD Staff has worked very closely with the Biltmore Estate to coordinate work and timing. Mr. Martin asked if all bypass was done with pumps. Mr. Bradford stated yes. Mr. Martin asked if there was ever a case where it built up enough head to push through without a pump. Mr. Bradford stated no, that would have to be a very unique situation. MSD even requires two pumps in case one fails. Mr. Hartye stated that this is all of the flow from the south. Mr. Ashley asked how thick the liner is. Mr. Carson stated ¾-inch. Mr.

Martin asked if there were service lines, did we go back and cut them out. Mr. Bradford stated yes. Mr. Martin asked if those were GPS'd before the work started to know where there were service lines. Mr. Bradford stated that typically a camera was used, but sometimes, especially on smaller lines, they use pressure and you can see a dimple where the service lines are. Mr. Stines stated that on the large interceptor pipe most of the services connect to manholes. Mr. Carson stated that there are no service lines in the 22,000 feet of this project. The Commerce Street Project is located in downtown Asheville and consists of approximately 530 LF in the area of Pritchard Park and Central Methodist Church. This was a small project but in a very congested area. Staff made a sign for this project and had it place to inform the public of what was going on together with contact information. Mr. Bradford reported that MSD will partner with any member agency. MSD is partnering with the City of Asheville on the Walnut Street @ Rankin Avenue Project. This project is also in downtown Asheville near Pritchard Park. The City of Asheville is getting ready to perform extensive rehabilitation work in this area. It is important to let MSD know as early as practical for effective planning.

He then reviewed some in-house System Services projects. The Fairfax Avenue Rehabilitation Project is located in West Asheville and consisted of a little over 200 LF of 12-inch line. Work started in January of 2018 and was completed in about 10 days. Mr. Martin asked if the clearing was contracted out. Mr. Bradford stated yes. The next project is Laurel Road Phase 2A and is located in the Royal Pines area of Arden. This project was rushed to construction due to maintenance issues in the Fall of 2017. The project consisted of a little over 400 LF of 8-inch line. The work started on January 30, 2018 and was completed on February 19, 2018. Trenchless construction was chosen to preserve the existing road surface. Mr. Bradford presented slides of the work including the horizontal directional drilling machine. He further reported that Mike Stamey and RL Haynes gave a presentation on this process at last month's spring conference. The Emergency Creek Crossing Replacement is located off Blue Ridge Road in Black Mountain. A surveyor was in this area doing some work and noticed a problem with the line. MSD crews responded immediately. This replacement occurred on April 2, 2018 and consisted of approximately 59 LF of 8-inch line crossing the Swannanoa River. MSD Technical Services crews did bypassing during pipe replacement.

Mr. Bradford then reviewed the Private Sewer Rehabilitation. This program is for the rehabilitation of private, failing, unclaimed systems that were not built to any public standard, nor were they accepted by any entity— either public or private – before we took over ownership of the system. These are usually of poor quality, with no manholes, laid in a crooked manner, etc. There are currently three PSR's scheduled for rehabilitation, no new ones have been added for this fiscal year.

Mr. Bradford then reviewed the upcoming projects for FY18-19. He explained that each slide shows the location and general vicinity. Upcoming projects include the South French Broad Interceptor Lining Project (Phase 3 of 4) through the Biltmore Estate at 5,111 LF; Caledonia Road in the Kenilworth area consists of 1,066 LF and is being coordinated with the City of Asheville Bond Project (Paving); Four Inch Main-Dry Ridge Road project is located in North Asheville near Beaver Lake and consists of 908 LF; Hill Street Project is located in the Montford area and consists of 2,088 LF; Kenilworth Road @ Springdale Road is another project being coordinated with the City of Asheville and consists of approximately 1,061 LF of the road portion only; Long Shoals Road @ Allen Avenue is located south near Lake Julian and consists of 621 LF, being the smallest dig and replace project; Memory Lane is located in the Haw Creek area and consists of 1,900 LF; Old Haw Creek Road @ Greenbriar Road is also located in the Haw Creek area and consists of 3,755 LF; and Old West Chapel Road is located in Oakley and consists of 5,200 LF of pipe bursting and dig and replace.

The French Broad Interceptor/Carrier Bridge PER is a Hydraulic Analysis of interceptors in this area for current and future flows, particularly south. Mr. Bradford presented a map and stated this is a function of several lines all tied together. This will become a planning document for significant projects in this area with a 50 year planning window. It will accommodate growth in South, East and West areas including Cane Creek Water & Sewer District. Carrier Bridge and its possible elimination are being studied. Completion is expected in the summer of this year. The South French Broad Interceptor currently consists of a single 36-inch line through the Biltmore Estate. A relief interceptor is placed within CIP. It is currently sized @ 60-inch but the final size will be determined by the study. Surveys through the Estate are currently underway and should be complete soon. This project consists of 36,330 LF at a cost of \$35.1 Million. Carrier Bridge Capacity Improvements is for capacity improvements for Carrier Bridge Pump Station and will also be providing peak storage. Exact storage size is not known yet but will probably be in the range of 5-10 million gallons. The location is not final at this time. Preliminary estimate for this work is \$17.8 Million. Mr. Martin asked if the storage was an underground tank. Mr. Bradford stated that it could be buried somewhere but will probably be above ground. They are also looking at two tanks. Mr. Martin asked if there was any significant storage in the system now and Mr. Bradford stated there is not. Mr. Hartye stated that there is some being made at the plant. The Northwest French Broad Interceptor will be required only if Carrier Bridge Pump Station can be eliminated. It will depend on the ability to cross the river @ Smith Mill Creek using a siphon. Storage near Carrier Bridge will still be required. This will consist of 10,650 LF of new interceptor with a preliminary estimate of \$16.1 Million.

Mr. Bradford then presented a snapshot of our Capital Program showing over 120 projects in all phases. He also presented slides describing the Master Plan which was prepared in 2008. This Master Plan was prepared under the guidance of the member agencies and regional stakeholders and was adopted by the MSD Board in November 2008. It is used as a basis to ensure that extensions are located in an orderly, predictable fashion. This essentially means there are no pump stations. There are areas in the Master Plan where pump stations are recommended north of the plant and west across the river. Other than that, MSD does require gravity. One of the larger projects guided under this plan was the Reems Creek Interceptor, which included 2 phases, both of which are complete. The West French Broad Interceptor is also a completed Master Plan project. Olivette Development is the newest one and is located in Woodfin. The gravity portion of this construction has just begun. Mr. Bradford pointed out that construction is funded by the developer on these projects – the line is sized in accordance with the master plan, and is sized for future growth, and MSD pays for the size differential. Mr. Bradford presented snapshots of the location of the Olivette Development and stated that it consisted of 346 acres. This project will involve a pump station and he pointed out the location of the river crossing and where the project will tie into the force main. The MSD Board approved this reimbursement in November 2017. There was a pre-construction meeting held last week and they are ready to begin the river bore and pump station. He presented snapshots of the Horizontal Directional Drilling rig at the site and a video showing the scale of the bore. Mr. Martin asked what size the line would be. Mr. Carson stated that it is a 6-inch force main in a 14-inch casing pipe that will be sized for MSD to install a future 8-inch line to serve the Lee Creek Basin. Mr. Martin asked if the line will go to the edge of the development where it can be picked up. Mr. Bradford stated no, that it only has to serve their development, but before MSD contributes any money the line has to be fully installed to MSD standards and they have to give MSD an easement all the way through their property so that others can tie on to it in the future. Mr. Martin asked where the line would come out at. Mr. Bradford stated that the interceptor follows Lee Creek and will come out near Olivette Road.

Mr. Bradford then turned the meeting over to Hunter Carson, MSD's Assistant Director of Engineering, for highlights of projects at the Water Reclamation Facility. Mr. Carson reviewed the Plant Headworks Improvements Project which is currently under construction. This project is located at the south end of the plant and encompasses the influent pump station, the area to the east of the influent pump station where an old gas chlorine building use to sit (this is where the new fine screen and grit facility will be located) and the two old digester tanks (these are being converted to surge or equalization tanks to help mitigate peak wet weather flows). The scope of work includes replacement of existing 3/4-inch influent bar screens with 1/2-inch screens. The bar screens are located just upstream from the influent pumps. These are stainless steel bars that remove very large debris coming down the 66-inch interceptor. There will be a new fine screening facility with 1/4-inch perforated plate fine screens. This is an additional screening measure required for a lot of biological upgrades that were studied during the recent facilities plan upgrade. The existing grit removal facility will be replaced using vortex grit removal technology. There will be a surge pumping system for peak flow shaving utilizing the old digester tanks at 2.1 MG each which will give over 4 MG storage ability. This project began construction in April of 2017 and is expected to be complete in about 8 months with a cost of approximately \$9.2 Million. Mr. Carson presented slides and video of the two re-purposed digester tanks, the surge system, fine screens and grit removal and construction progress. He stated that there was some complex formwork required to achieve circular basins with a smooth interior finish and Judy Construction has done an excellent job. Mr. Martin asked if the grit went directly to the landfill. Mr. Carson stated yes. Mr. Carson pointed out that the new structure is 8-feet higher than the existing grit process. The hydraulic grade line through the plant will be raised to eliminate the future need for the intermediate pumps.

Mr. Carson then reviewed the Sodium Hypochlorite Storage Tank Replacement Project which is located in the far northwest corner of the plant and is to be completed this week. He presented slides of this work including the new tanks and temporary chemical storage and feed system constructed by Staff. The building contains the storage and feed system with four 15,000 gallon fiber reinforced plastic tanks. These tanks house 6.25% sodium hypochlorite, your common household bleach, which is used to disinfect wastewater prior to being discharged. The old tanks were installed in 2001 with the average life expectancy of 10-15 years. There was some weeping discovered from the bottom of several tanks and repairs have been made on two occasions but despite efforts to prolong the service life of these tanks it was time for them to be replaced. Not only were the tanks in poor condition but a lot of pvc pipe joints were leaking, some of which are overhead, which presented safety concerns for staff. Construction cost for this project is \$167,000.

Mr. Carson then reviewed the RBC Blower Motor Control Replacement. The building is located centrally at the plant and houses five large (450HP) blowers. These blowers provide diffused air to the RBC basins to promote unit rotation and provide an oxygen rich environment to the water which helps the bugs in the wastewater do their job. Without blowers, the plant's biological process would fail. Each of these blowers has an electric motor that drives them and each of the motors has a starter. The starters were installed in 1988 and are now obsolete. The replacement parts are hard to find and expensive when you do find them. The starters that we have now are "across-the line". Basically, when the start button is hit, 2400 volts is provided to that blower instantaneously. That provides an incredible amount of inrush current during startup with a lot of stress on the motor and the blower drive shaft. Staff recommended replacement with motor "soft-starters" which will allow a more gradual ramp up of the starting sequence and a lot less stress on the equipment. Construction cost of all of the materials and installation is \$303,000. Mr. Martin asked how the RBC's from West Virginia were working out. Mr. Weed stated that there have been 40 replaced with 20 spares.

Mr. Carson reviewed projects for the coming fiscal year. The High Rate Primary Treatment will be located where the existing primary micro screen building is located. He presented a video and explained the process. The micro screen building will be demolished. The High Rate Primary Treatment will improve efficiency of our downstream biological treatment. Currently there is no primary treatment after screening/grit removal. There is a very tight footprint due to site restrictions so the high rate primary treatment is well suited for our plant. This will help the RBC's perform better and help the plant better treat the peak flows. Final design and permit submittal is expected in the next week. Construction is expected to begin in early 2019, following completion of the Headworks Project. The estimated construction cost is \$15 Million. The Actiflo process was selected due to being pilot tested against two other manufacturers and it performed best.

Mr. Carson then reviewed the Intermediate Clarifier Slide Gate Replacement project which is located in the northwest corner of the plant beside the Sodium Hypochlorite Building. There are four intermediate clarifiers and each clarifier has two slide gates. Those gates were installed 30 years ago. They are difficult to operate up and down and don't seal well which makes maintenance in the clarifiers very difficult. The gates and installation for this project are \$243,000.

The Biological Treatment is a future project and is being driven by future water quality regulations. Staff has spoken with DEQ and believes there will be an ammonia limit but are still waiting on the draft permit. The RBC's were not designed to fully nitrify (convert ammonia into other form of N). The RBC's are 30 years old and eventually will have been replaced. Construction of this project is estimated to be about 8-10 years out with a very high construction cost of approximately \$50 million. Mr. Martin asked how much the RBC's from West Virginia cost. Mr. Bradford stated that the latest batch was cheaper than the first. Mr. Weed stated that MSD was given a discount on the most recent ones at \$10,000.00 each plus shipping. The first batch of ten was north of \$165,000.00.

Mr. Bradford then reviewed the financial aspects of the Capital Improvement Program. He stated that the total budget for this fiscal year is \$55.3 Million; and since we operate with a balanced budget, expenditures are also estimated at \$55.3 Million, with about two-thirds of the budget being project-related. Cost saving measures include project coordination with other agencies; utilizing lining/trenchless methods when feasible, utilizing in-house forces to complete rehabilitation work and claiming the value of prescriptive easements. He then presented a snapshot of the ENR Construction Cost Index and explained that an inflationary component is added for years 2 through 10, which is 3.03% for this budget cycle. FY19 is not inflated. Estimates for all projects are based on current prices and costs are updated each year. He then presented a snapshot of the next 10 years with total expenditures estimated at approximately \$310.4 Million. Interceptor and Wet Weather Rehabilitation is at about \$80 Million, Collection Rehabilitation is at about \$117 Million, Treatment Plant and Pump Stations are at about \$112.2 Million and Reimbursement Projects are at about \$1.2 Million. He also pointed out that from Consolidation through the end of FY 17, MSD has reinvested \$374.6 Million back into the system.

Mr. Bradford then covered Reimbursement Projects. There are no NCDOT betterments scheduled for the coming year and the District is only required to pay for betterments. All annexation agreement projects since Consolidation have been completed with the exception of Craigmont Road in Black Mountain. There are various forms of reimbursements for FY18-19 such as the Olivette Development.

Mr. Bradford stated that MSD has made significant progress over the past eighteen years and presented a chart and several snapshots showing the reduction in SSO's.

Mr. Bradford then presented information regarding MSD's website and stated that a copy of the proposed CIP budget has been posted on the website for public viewing and comment. He also gave a special thanks to Staff Engineers; Angel Banks, Right of Way Manager; Cheryl Rice, Finance Department; Pam Nolan, Right of Way Department; and the GIS Section. He then asked for any questions or comments.

Mr. Jones asked where the physical threshold between the plant and collection system was. Mr. Stines stated anything inside the fence at the plant. Mr. Jones asked if there was a financial threshold as well or are there separate funds for the plant vs. collection system. Mr. Bradford stated that we do delineate the areas of the Capital Improvement Program and he would further review that under the next item but they are all under the CIP umbrella. Mr. Hartye stated that operationally they are broken out.

There were no further questions.

3. Capital Improvement Program Priorities & Review of the Ten-Year CIP Document

Mr. Bradford presented the Ten Year CIP Summary document and stated that there were 93 projects this year. He stated that the Summary Sheet is also organized by municipality. The entire document may be found on-line, including information on each project and a map. He stated that project costs are based upon bid prices we have seen over the last year. There are 8 Interceptor and Wet Weather projects this year with an estimated budget of \$1,366,293. There are 71 General Sewer Rehabilitation projects totaling \$10,377,703. There are 3 Private Sewer Rehabilitation projects coming up in future years but none for this fiscal year. There are 9 projects under Treatment Plant, Pump Stations and General Capital Improvements totaling \$7,777,500. The total amount projected for Design, Right of Way and Construction Management Expenses for next year is \$2,705,222. He stated that the subtotal for the proposed budget for FY18-19 is \$22,226,718. A flat contingency of \$1,000,000 is proposed, which has worked well and provides sufficient reserve. Reimbursement funding of an additional \$266,000 is recommended. This brings the total proposed CIP Budget for FY18-19 to \$23,492,718 and is the amount for which staff is seeking the Committee's endorsement.

There were no further questions.

Mr. Watts called for a motion recommending endorsement of the CIP Budget for FY18-19 in the total amount of \$23,492,718. Mr. Martin moved. Mr. Pelly seconded the motion. Voice vote was unanimous in favor of the motion.

4. Adjourn

There was no further business or discussion. The meeting was adjourned at 9:49 a.m.

PERSONNEL COMMITTEE MEETING

April 24, 2018

11:00 a.m.

1. Call to Order

Jackie Bryson called the meeting to order at 11:02 a.m. in the W.H. Mull Building of the Metropolitan Sewerage District. In attendance were the following members: Al Root, and Jim Holland. Also present were Billy Clarke, Tom Hartye, Jim Hemphill, Scott Powell, Matthew Walter, and Pam Thomas.

2. Inquiry as to Conflict of Interest

Mrs. Bryson stated there was none at this time.

3. Human Resource Activities

Ms. Thomas reviewed several areas of activity within the Human Resource Department: an organizational chart showing a total of 149 full time employees, and a chart on personnel fluctuations from FY 2004. She also presented demographic information showing a vacancy for a Pump Station Technician; Charts showing that the average MSD employee is 47 years old and averages 13 years of service; the turnover rate for last year was 6.08% totaling 9 people. Over a ten year span there were 35 (2.3%) retirements and 30 (2.0%) resigned or dismissed.

Ms. Thomas also presented information about our Employee Events: Annual Company Picnic, Christmas Meal, Christmas Games, Lunch with the Boss, Halloween, Solar Eclipse Event, and Wellness programs: a) Cooking with Comedy b) Weight Watchers c) Zumba d) Tai Chi. She also reviewed our Succession Planning Program with continuous training of employees for future jobs. Mr. Holland asked about our Educational Assistance program. Ms. Thomas went over our policy and Mr. Hemphill stated that the amount of money given towards tuition and books is \$400.00 per class.

4. Consideration of Self Insured Health Plan & Pay Adjustment

Mr. Hemphill presented staff recommendations of a 3.0% wage adjustment for all employees, an additional 6.5% increase in contributions from the Board for medical insurance costs; and a 6.5% increase in Employee premiums for medical insurance. Our recommendations have the support from the Management Team as well as the Employee Advisory.

Mr. Hemphill presented some medical trend information which included:

- Benefits, especially medical insurance, are a significant factor in maintaining a workforce that averages 47 years old and has 13 years of service with the District. Our employees range in age from 22 to 74 years old.
- In the United States, medical “trend”, the actual cost of medical care, is projected to increase by 6.5% and drug costs are expected to increase by 10-17%.
- This year we are requesting an additional 6.5% from the Board. This is in line with medical “trend”. MSD is a small, self-funded insurance plan that can be affected by any single high cost medical problem. If you have several it can affect you deeply.

In response to rising medical costs, staff has taken several actions including:

- Partnering with Park Ridge Hospital & Open MRI to save employees and the plan significant costs;
- Using our brokers to identify Pharmacy Benefits Managers (PBM), with different business models, that can save significant costs;
- Providing secondary coverage to working spouses who have insurance, through their employer. This approach allows us to reduce MSD's "high dollar" risks, while providing better coverage for doctor's visits. Covering the spouse improves medical outcomes by encouraging them to seek medical treatments earlier.
- Continuing to encourage healthy living practices, for example by providing training on diet, exercise and healthy eating.
- Earlier medical interventions, by requiring all adults to have a medical examination every 2 years. We feel this is the most critical component thus far.
- Continuing onsite services with a Nurse Practitioner or Doctor at no cost to the employee.

Mr. Holland asked how we know that requiring a physical every 2 years is affective. Mr. Hemphill stated requiring physical forced employees to the Doctor. Doctors found problems that would not have been found otherwise. These physicals found medical problems earlier. Mr. Powell also stated that our Third Party Administrator gives us a benchmark sheet on costs related to claims and comparisons to past performances. Mr. Holland asked who was our TPA? Mr. Powell stated that we use CWI Benefits, a regional company out of Greenville South Carolina. Also our Network is through Crescent and Southern Scripts is our PBM. Mr. Hartye stated that employees have always said that our benefits have been a major part of their decision to stay at MSD. At MSD we have an advocate on staff that will help with their claims and resolve any conflicts as needed and is unheard of any other places. Mr. Holland would like a copy of our benefit summary, and what are the consequences for not getting a physical every 2 years. Mr. Hemphill stated that the employee would have a \$100.00 per pay period increase in their premiums. Mr. Root asked if the insurance was set up through its own entity or a general fund account. Mr. Powell said that insurance has its own fund account.

Mr. Hemphill said with regards to keeping wage costs as reasonable as possible, whenever there is a vacancy, we evaluate the job to see if it can be eliminated or restructured. Our goal continues to be, to provide excellent service to the ratepayers.

Staff's request for a 3% wage adjustment is based on several factors: the cost of living as shown by consumer price index (CPI), the local labor market, national trends, local agencies and similar utilities.

- The CPI for the South Urban region rose 1.89% from December 2016 to December 2017. However, the CPI has increased by over ½% in January & February 2018, and the price of gasoline is projected to go up over the next several months.
- The local labor market information published by Western Carolina Industries projects local raises in the 3.0 to 3.2% range.

- National Wage increases, as reported by 10 major consulting firms, are planned to be 3% or more in 2018.
- In January 2018, Price Waterhouse Cooper issued a report of interviews with 300 CEO's & CFO's that indicated they planned to grant raises up to 4.27%. The reasons they cited for the larger raises were: increased revenue & hiring, confidence in Economic Growth, and the Tax Cut. They felt these factors would "create upward pressure on wages during the year."
- Attachment 2 reflects the local & similar agencies planned increases. As you can see Staff's recommendation is right in the middle of the range.

Mr. Hemphill stated that if the lowest paid employee gets a 3.0% increase with the 6.5% increase in premiums they will still take home an increase in pay. Mr. Root asked if the employees have been told about the increase in premiums. Mr. Hemphill stated the employees are well informed and information is relayed back to them.

In summary staff is recommending that the Board:

- Grant a 3.0% wage adjustment for all employees
- Increase medical contributions by 6.5%
- Require employees to contribute an additional 6.5% to medical insurance.

Fiscal Impact:

The proposed salary and benefit adjustment costs are approximately \$419,000 higher than last years' budget.

5. Recommendation:

Mr. Root moved and Mr. Holland seconded the recommendation that the Board approve a 3.0% wage adjustment for all employees, an additional 6.5% increase in contributions from the Board for medical insurance cost, and a 6.5% increase in employee premiums for medical insurance.

Mrs. Bryson called for the vote. It was unanimous in favor of the motion.

6. Other

Mrs. Bryson stated there was no other business at this time.

7. Adjourn

With no further business, Mrs. Bryson adjourned the meeting at 11:40 AM. No future meeting has been scheduled.

Finance Committee Minutes

May 3, 2018

Call to Order:

The Finance Committee of the Metropolitan Sewerage District met in the Boardroom of the Administration Building on Thursday, May 03, 2018. Chairman Kelly presided and called the meeting to order at 9:00 am with the following members present: Jackie Bryson, Jim Holland, Esther Manheimer, and Gwen Wisler.

Others present were Board Member Jerry Vebaun, Thomas Hartye, General Manager; Scott Powell, Director of Finance, and Jim Hemphill, Director of Human Resources.

1. Third Quarter Budget to Actual Review:

Scott Powell started with a PowerPoint presentation of the Third Quarter Budget to Actual by saying that domestic revenues are slightly above budgeted expectations, while industrial revenues are exceeding budgeted expectations due to the increased flow from one industrial user. Facility Fees are higher due to receiving unanticipated revenue from three (3) commercial/residential developers of \$1.1 million. Investment and miscellaneous income is performing better than expected due to the amount of money on hand in addition to the current market yield. Operation and Maintenance expenditures include encumbrances so they are a little above 75%, with monies expected to be spent by the end of the fiscal year. Year-end projections are in line or better than budget expectations for domestic, industrial revenue, and facility fees. Expenditures will be in line with the budget which includes the budget amendment of \$300,000 approved last month. CIP expenditures will be lower than budget. This is due to the timing of the Plant Headworks. Amounts not spent in the current year have been budgeted in next year's CIP.

2. FY2019 Proposed Budget:

Mr. Powell continued with highlights of the FY2019 Proposed Budget. The Operations and Maintenance budget is \$16.75 million, CIP \$23.49 million, Capital Equipment Replacement \$1.09 million, and Debt Service \$9.45 million for a total of \$50.78 million.

Operations & Maintenance budget includes a 4.27% increase in salaries and benefits with a total budget impact of \$563,125. This includes a 3% salary increase for all employees, a 6.5% increase in self-insurance funding, GASB 45 OPEB superseded by GASB 75 OPEB funding, unemployment compensation funding, and a state mandated increase in North Carolina Retirement funding of 3.33%.

Finance Committee Minutes

May 3, 2018

Materials, Supplies, and Services includes a 1.8% increase of \$116,624 with an \$80,000 increase in utility expense line item due to enhancements at the Treatment Plant.

Mr. Powell next discussed information on Personnel Growth, and Trends in Health Care Cost. Personnel Growth has trended downward since 2001 with current staffing holding steady at 149 employees. Health Care Costs are trending below medical inflation.

Operation and Maintenance expenses have increased an average of 2.7% over the past 9 years, while averaging 95.8% Actual-to-Budget Ratio. This is primarily due to the deferred utility costs which is a direct result of operations of the hydroelectric facility. The FY2018 proposed Capital Improvement Program budget is \$23.49 million. The majority of the money will be spent for collection rehabilitation and treatment plant.

Major Capital Improvement projects for FY2019 are the \$3.19 million for Plant Headworks Improvements, High Rate Primary Treatment project of \$3.51 million, South French Broad Interceptor Lining project of \$1.07 million, and Old West Chapel Road project of \$1.45 million.

Capital Equipment Replacement includes Operations & Maintenance of \$128,110; Fleet Replacement requests are seven (7) vehicles, a CCTV Van, mini excavator, and backhoe totaling \$721,000; Pump Station Replacement of \$85,000, and Water Reclamation Facility \$160,000. Vehicles that cannot be reutilized through our Fleet are sold through GovDeals. Typically, the District receive 10% of what is spent, with FY2019 projected revenue from the sales at \$72,000.

Mr. Powell reported Long Term Bonds Payable increase as the need for CIP funding arises. When bonds are issued, funds are made available to unrestricted reserves through reimbursement resolutions and are used for future CIP needs.

The District's debt composition as of June 30, 2018 is just over \$110 million in total, with 74% (\$81.0) in traditional fixed income, and 26% (\$28.9) in synthetic fixed debt. As of April 30, 2018, the swap had a termination value of \$2.6 million. FY2019 debt service is \$9.45 million, which consists of \$5.27 million in principal and \$4.18 million for interest.

Budgeted revenue highlights include .75% growth in residential users, .75% increase in domestic consumption, sewer system development and tap fees budgeted at \$2.2 million, and a 1.5% rate of

Finance Committee Minutes

May 3, 2018

return on investments. To maintain a balanced budget, proposed revenues of \$50.8 million are made up of \$32.4 million (65%) in domestic user fees, \$3.3 million (6.9%) in industrial user fees, and \$10.2 million (20.5%) other sources and uses.

3. Business Plan

The Business Plan covers the long-term (ten-year) plan for projected sewer rates and revenues, operating expenses, CIP needs, and debt coverage ratio. Staff uses the District's master plan objectives, regulatory requirements, debt service requirements, the CPI, and other indexes to decide on the level incremental sewer rate increases and equalize the rates over the 10-year period. Budget assumptions used include 0.75% growth in residential users, 0.75% increase in domestic consumption, facility and tap fees budgeted at \$2.2 million, and a 1.5% rate of return on investments.

In the next ten years, the District will be investing \$310.4 million into our infrastructure. From consolidation through June 30, 2017, the District has invested \$374.6 million in infrastructure. The CIP Program is made up mostly of collection system rehabilitation funding at 37% and 36% in the treatment plant, respectively.

Additionally, the District's business plan projects three (3) debt issuances over the course of the next 10 years as well as 2.5% to 2.75% projected increases for the ratepayers. Debt coverage ratios will exceed the 1.5% target rate. Additionally, capital assets, net of accumulated depreciation as of 2017 are over \$416 million as a direct result of CIP funding.

4. Facility Fee Study:

Mr. Powell said the District's last increase to the Sewer System Development Fee (Facility Fee) was in 2012. On July 20, 2017, the North Carolina General Assembly signed into law North Carolina General Statute 162A Article 8, which provided for the uniform authority to implement system development fees for public water and sewer systems. All fees must be prepared by a financial professional or licensed professional engineer.

Finance Committee Minutes

May 3, 2018

Mr. Powell stated the District engaged Raftelis Financial Consultants, Inc. to perform the calculation. Based on Raftelis's analysis, proposed changes are as follows:

- ▲ Single-family residential unit fee is proposed to increase from \$2,500 to \$2,836.
- ▲ Mobile homes were found to have the same monthly usage of a single-family residential unit. Raftelis recommended to charge the same as a single-family residential unit, a proposed increase from \$1,740 to \$2,836.
- ▲ Multifamily residential units were found to have 67% flow of a single-family residential unit. Raftelis recommended scaling the fee based on these results. The proposed fee would decrease from \$2,500 to \$1,900.

Mr. Holland and Mr. Kelly inquired as to legality of charging the amounts identified in the study. Mr. Clarke stated the District could not charge fees in excess of the amounts identified in the study. Mr. Hartye stated that if we raised the rate 2 percent a year we would be at the calculated single-family fee. The proposed changes are for new construction only. Mr. Hartye further stated that the District does allow an affordable housing credit (of about 70%) which is determined by the respective municipal units' affordable housing criteria.

Mr. Powell stated that the District's last increase to the Sewer Connection Fee (Tap Fee) was in 2008. Staff evaluated connection costs over the last three years and is proposing the following changes:

- ▲ Sewer Connection Fee proposed to increase from \$650 to \$1,300
- ▲ Pavement Disturbance/Boring Fee proposed to increase from \$ 2,200 to \$2,300

Ms. Wisner inquired as to whether or not there was an established procedure as to the frequency of evaluating the sewer connection fees. Mr. Powell communicated there was not an established procedure as to the frequency of evaluation, but staff will be evaluating these fees on a more frequent basis.

5. Rate Information:

Mr. Powell stated the District uses NACWA as an information source because they give average monthly bills, including both flow and maintenance costs. Based on data for EPA Region IV – Southeast, the District's average monthly residential bill compares favorably. Additionally, the District's average monthly bill compares well to other North Carolina AA and AAA sewer providers.

Staff recommends Sewer System Development Fees and Sewer Connection Fees change in accordance with consultant and staff recommendations; a 2.5% increase in the Domestic Rate; this would be a 74-cent increase in average single family monthly bill bringing the average bill from \$29.88 to \$30.62. Additionally, staff recommends continuing the Industrial rate parity plan, which includes a 3.8% average increase for the industrial user and incorporates the 2.5% domestic rate increase.

Finance Committee Minutes

May 3, 2018

The District's proposed rate increase is to provide funding for the CIP Program, maintain favorable debt service ratio to minimize future interest expense, and to keep rate increases small and uniform per industry standards and previous District Board directions.

In closing, Scott Powell gave special thanks to Division Heads, his finance team, and Teresa Gilbert, Budget Analyst.

Recommendation for Proposed FY19 Budget and Schedule of Rates & Fees for FY19:

Following Mr. Powell's presentation, Chairman Kelly called for any questions or comments. With no further questions, Chairman Kelly moved to recommend the Proposed FY19 Budget and Schedule of Rates & Fees to the Board of Directors; Ms. Bryson seconded the motion. With no further discussion, the motion was carried unanimously.

Review of the District's Investment Policy:

Mr. Powell stated the District's investment policy hasn't been updated since August 15, 2007. Since that time, the commercial paper market has experienced substantial changes. In 2006 the average A-1/P-1 commercial paper issuer issued commercial paper in denominations ranging from \$250,000 to \$500,000. In 2018, the same issuers issue in denominations ranging from \$500,000 to \$5,000,000. This change has limited staff's ability to access more competitive rates of returns. Staff recommends that the applicable portion of the investment policy be modified as follows;

To limit the District's risk associated with holding individual securities (e.g. non-systematic risk), no more than the greater of up to \$5,000,000 or 10% of the portfolio may be invested in a single non-government issue.

Finance Committee Minutes

May 3, 2018

Ms. Wisler expressed concerns about the “10% of the portfolio” language and would like to see staff work on diversifying its individual holdings. Mr. Powell stated he understood and had no problem changing the language as follows:

To limit the District’s risk associated with holding individual securities (e.g. non-systematic risk), up to \$5,000,000 of the portfolio may be invested in a single non-government issue.

Chairman Kelly called for any questions or comments. With no further questions, Chairman Kelly moved to recommend the revised wording to the Board of Directors: Ms. Bryson seconded the motion. With no further discussion, the motion was carried unanimously.

Adjournment:

With no further discussion, Chairman Kelly called for adjournment at 9:45 am.

Metropolitan Sewerage District of Buncombe County

Board Action Item

BOARD MEETING DATE: May 16, 2018

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

REVIEWED BY: Ed Bradford, P.E. - Engineering Director

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

SUBJECT: Acceptance of Developer Constructed Sewer System for The District, MSD Project No. 2015113

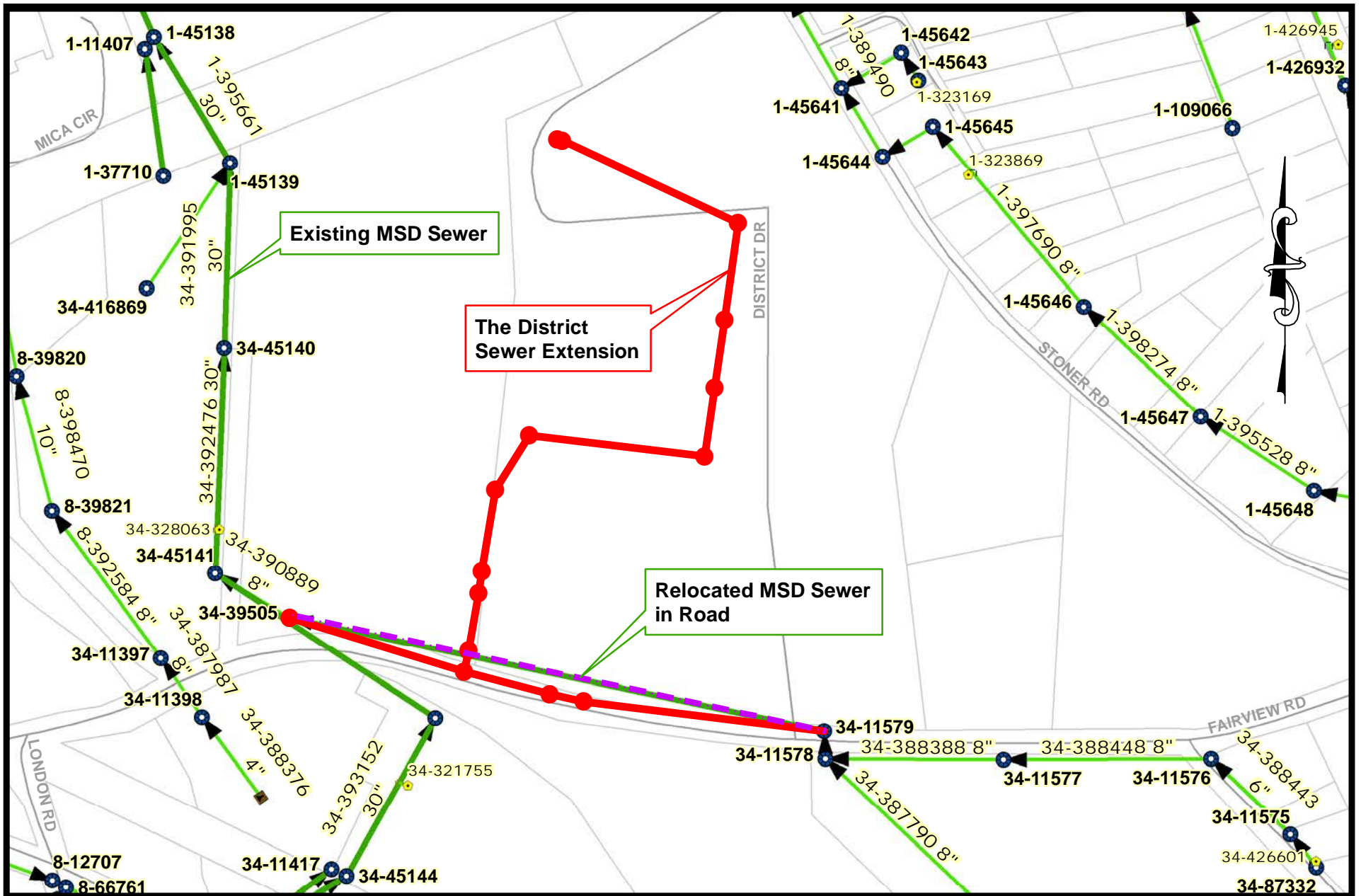
BACKGROUND: This project is located inside the District boundary off Fairview Road in the City of Asheville. The developer for this project is Ryan Foster of Flournoy Development.

The project included extending approximately 914 linear feet of 8-inch public gravity sewer to serve the 390 unit apartment complex plus retail space for the Mixed Use Development.

A wastewater allocation was issued in the amount of 51,500 GPD for the project. The estimated cost of the sewer construction is \$71,000.00.

All MSD requirements have been met.

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



MSD
Engineering Division

**The District Sewer Extension
MSD Project # 2015113**

Metropolitan Sewerage District of Buncombe County

5/03/18

Metropolitan Sewerage District of Buncombe County

Board Action Item

BOARD MEETING DATE: May 16, 2018

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

REVIEWED BY: Ed Bradford, P.E. - Engineering Director

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

SUBJECT: Acceptance of Developer Constructed Sewer System for the Malvern Walk Subdivision, MSD Project No. 2016220

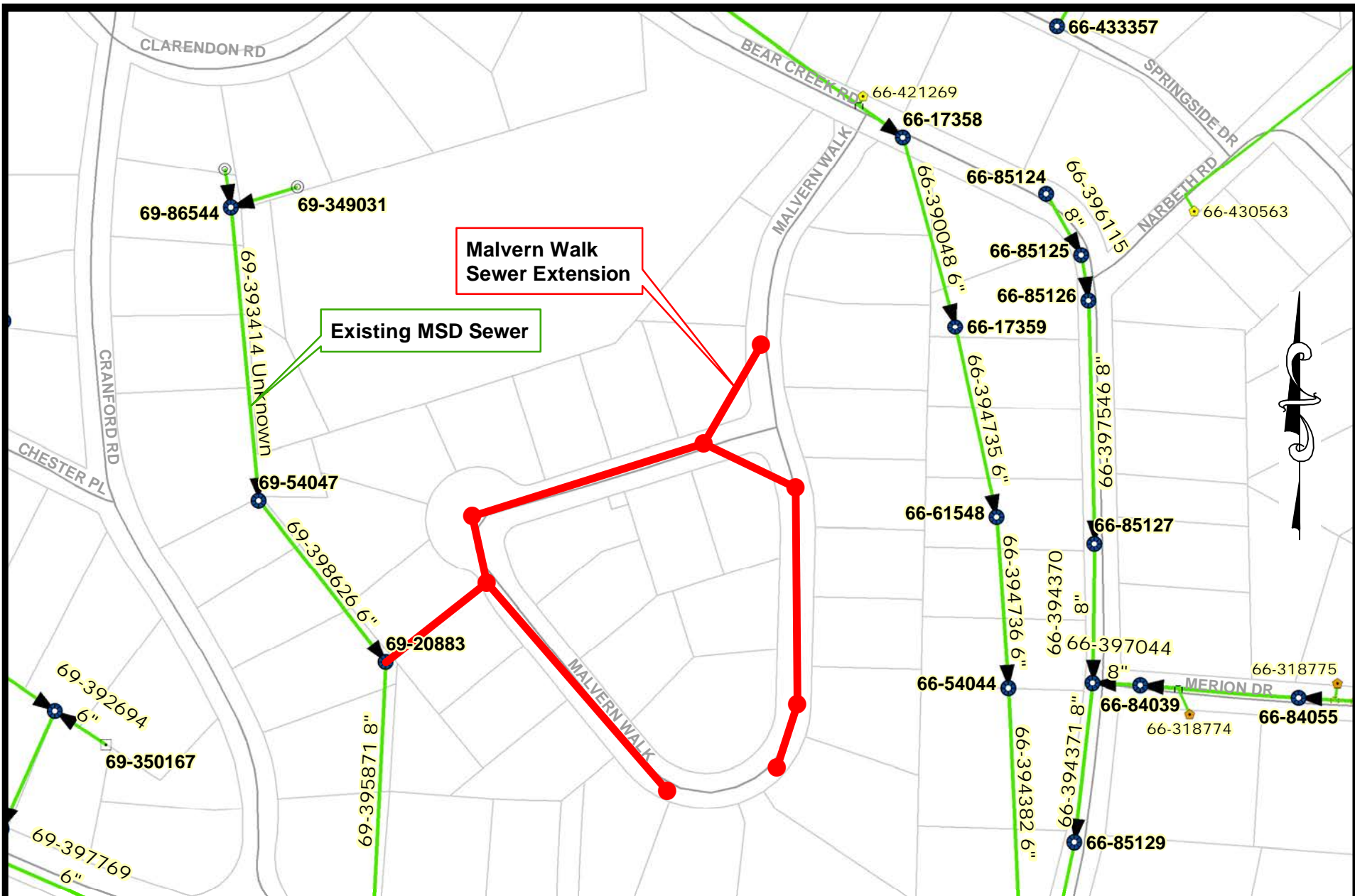
BACKGROUND: This project is located inside the District boundary off Bear Creek Road in Buncombe County. The developer for this project is Terry Powell of Blossom & Huge LLC.

The project included extending approximately 1,390 linear feet of 8-inch public gravity sewer to serve the thirty (30) units for the single family residential development.

A wastewater allocation was issued in the amount of 12,000 GPD for the project. The estimated cost of the sewer construction is \$95,000.00.

All MSD requirements have been met.

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



MSD
Engineering Division

**Malvern Walk Sewer Extension
MSD Project # 2016220**

Metropolitan Sewerage District of Buncombe County

5/03/18

Metropolitan Sewerage District of Buncombe County

Board Action Item

BOARD MEETING DATE: May 16, 2018

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

REVIEWED BY: Ed Bradford, P.E. - Engineering Director

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

SUBJECT: Acceptance of Developer Constructed Sewer System for the Moody Avenue Sewer Extension, MSD Project No. 2016050

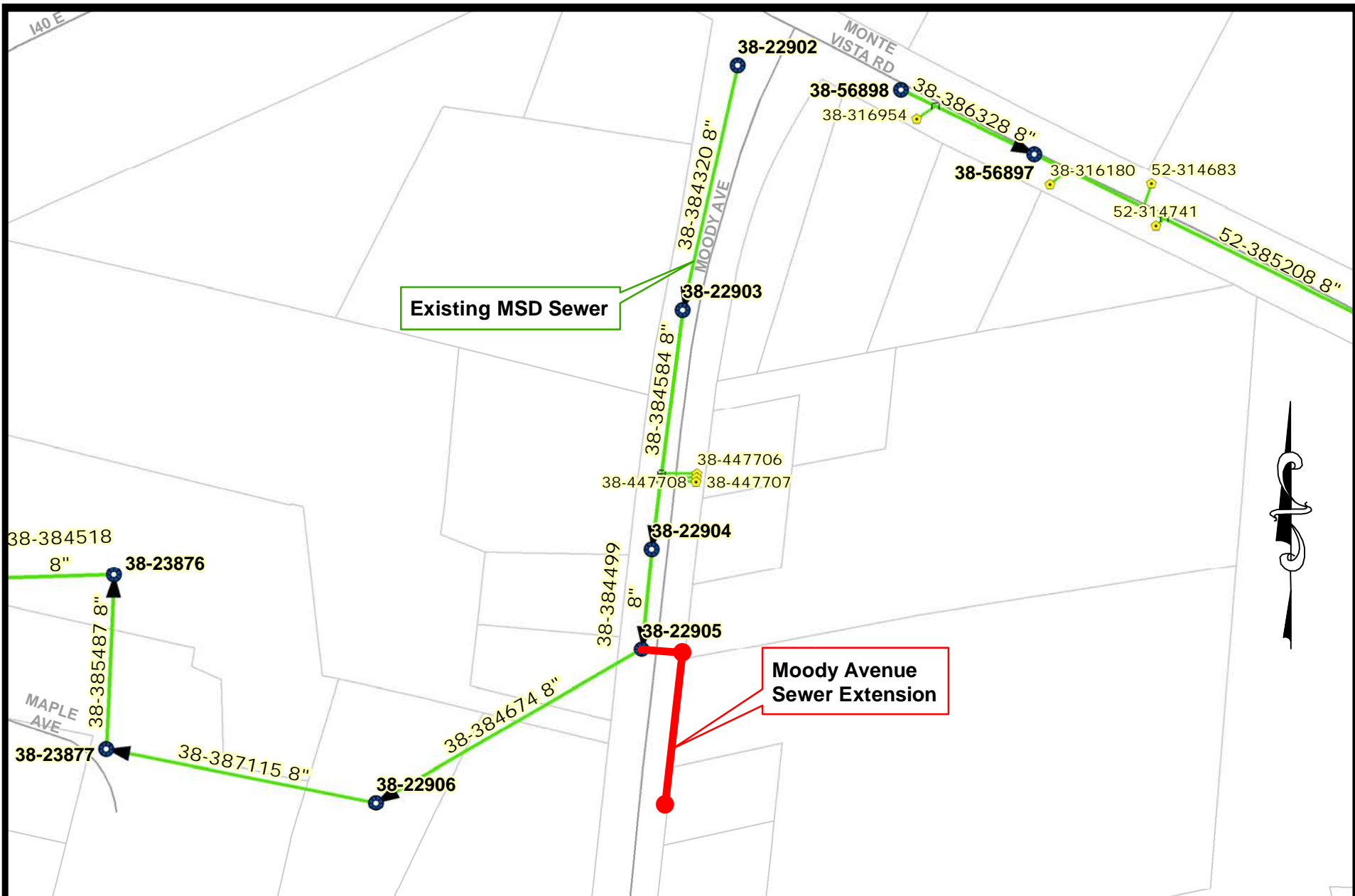
BACKGROUND: This project is located inside the District boundary off Moody Avenue in Buncombe County. The developer for this project is Chris Kaselak of Risiko Eins LLC.

The project included extending approximately 180 linear feet of 8-inch public gravity sewer to serve the three (3) units for the single family residential development.

A wastewater allocation was issued in the amount of 900 GPD for the project. The estimated cost of the sewer construction is \$45,000.00.

All MSD requirements have been met.

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



MSD
Engineering Division

**Moody Avenue Sewer Extension
MSD Project # 2016050**

Metropolitan Sewerage District of Buncombe County

5/03/18

Metropolitan Sewerage District of Buncombe County

Board Action Item

BOARD MEETING DATE: May 16, 2018

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

REVIEWED BY: Ed Bradford, P.E. - Engineering Director

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

SUBJECT: Acceptance of Developer Constructed Sewer System for the Ramble Biltmore Forest Block G, MSD Project No. 2017025

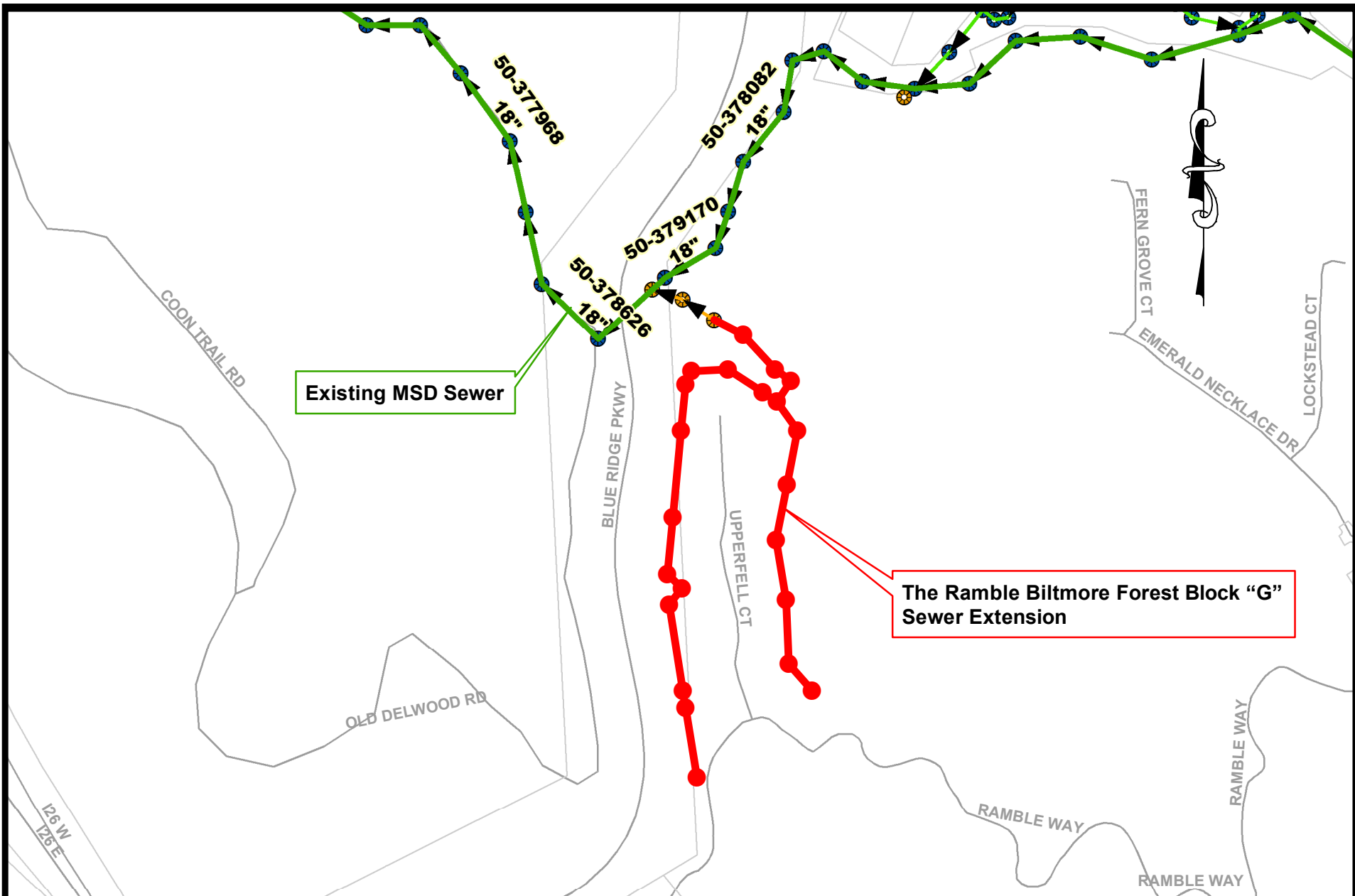
BACKGROUND: This project is located inside the District boundary off Ramble Way in Buncombe County. The developer for this project is Lee Thomason of Ramble Biltmore Forest, LLC.

The project included extending approximately 4,340 linear feet of 8-inch public gravity sewer to serve the thirty-four (34) units for this phase of the single family residential development.

A wastewater allocation was issued in the amount of 10,200 GPD for the project. The estimated cost of the sewer construction is \$254,000.00.

All MSD requirements have been met.

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



Existing MSD Sewer

The Ramble Biltmore Forest Block "G" Sewer Extension



MSD
Engineering Division

The Ramble Biltmore Forest Block "G" Sewer Extension
MSD Project # 2017025

Metropolitan Sewerage District of Buncombe County

5/03/18

Metropolitan Sewerage District of Buncombe County

Board Action Item

BOARD MEETING DATE: May 16, 2018

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

REVIEWED BY: Ed Bradford, P.E. - Engineering Director

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

SUBJECT: Acceptance of Developer Constructed Sewer System for the Ramble Biltmore Forest Block H - Phase 1, MSD Project No. 2017039

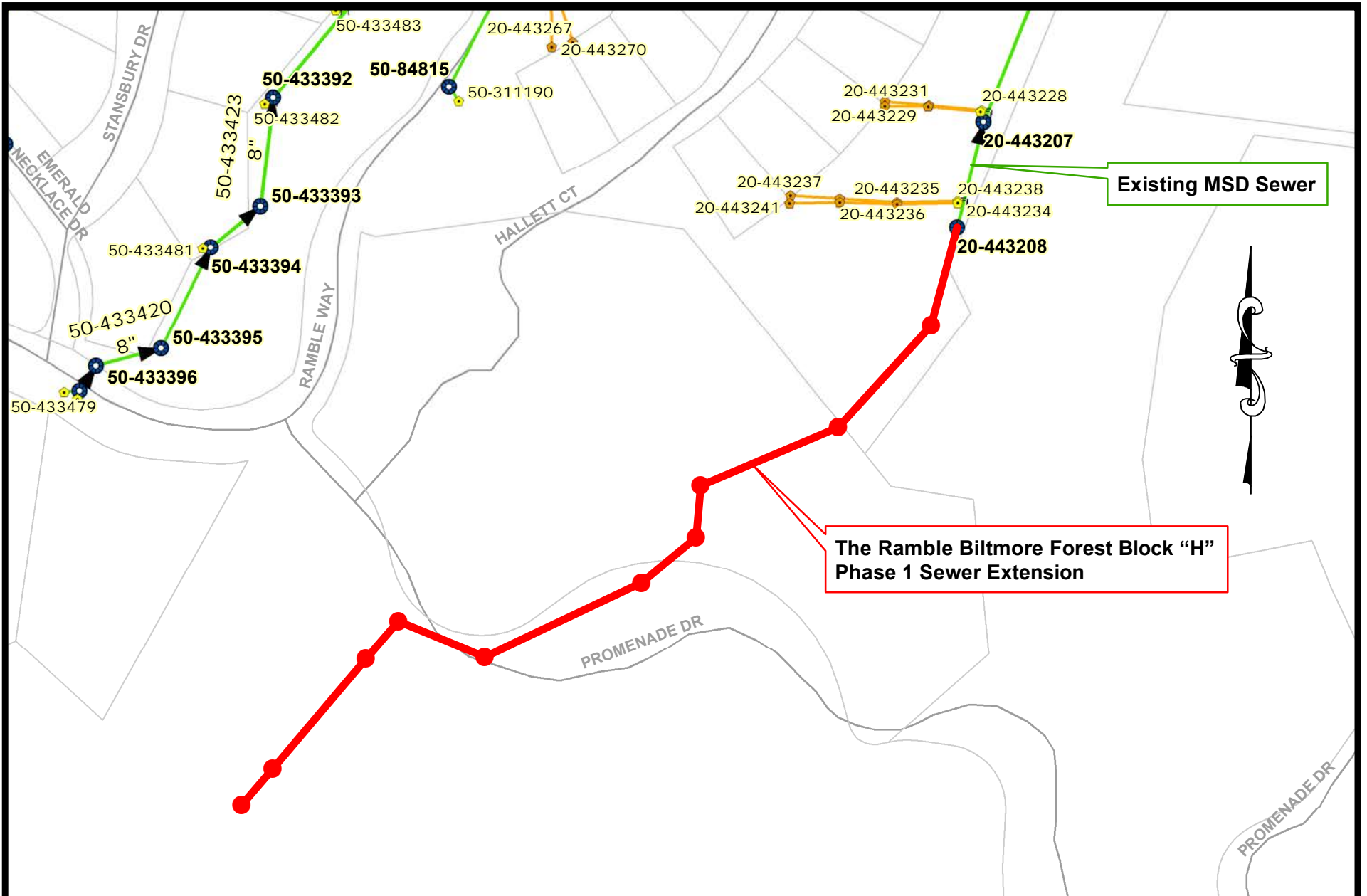
BACKGROUND: This project is located inside the District boundary off Ramble Way in Buncombe County. The developer for this project is Lee Thomason of Ramble Biltmore Forest, LLC.

The project included extending approximately 1,434 linear feet of 8-inch public gravity sewer to serve the six (6) units for this phase of the single family residential development.

A wastewater allocation was issued in the amount of 1,800 GPD for the project. The estimated cost of the sewer construction is \$87,000.00.

All MSD requirements have been met.

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



MSD
Engineering Division

**The Ramble Biltmore Forest Block "H" Phase 1 Sewer Extension
MSD Project # 2017039**

Metropolitan Sewerage District of Buncombe County

5/03/18

Metropolitan Sewerage District of Buncombe County

Board Action Item

BOARD MEETING DATE: May 16, 2018

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

REVIEWED BY: Ed Bradford, P.E. - Engineering Director

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

SUBJECT: Acceptance of Developer Constructed Sewer System for The Settings of Black Mountain Phases 3 & 3A, MSD Project No. 2008016

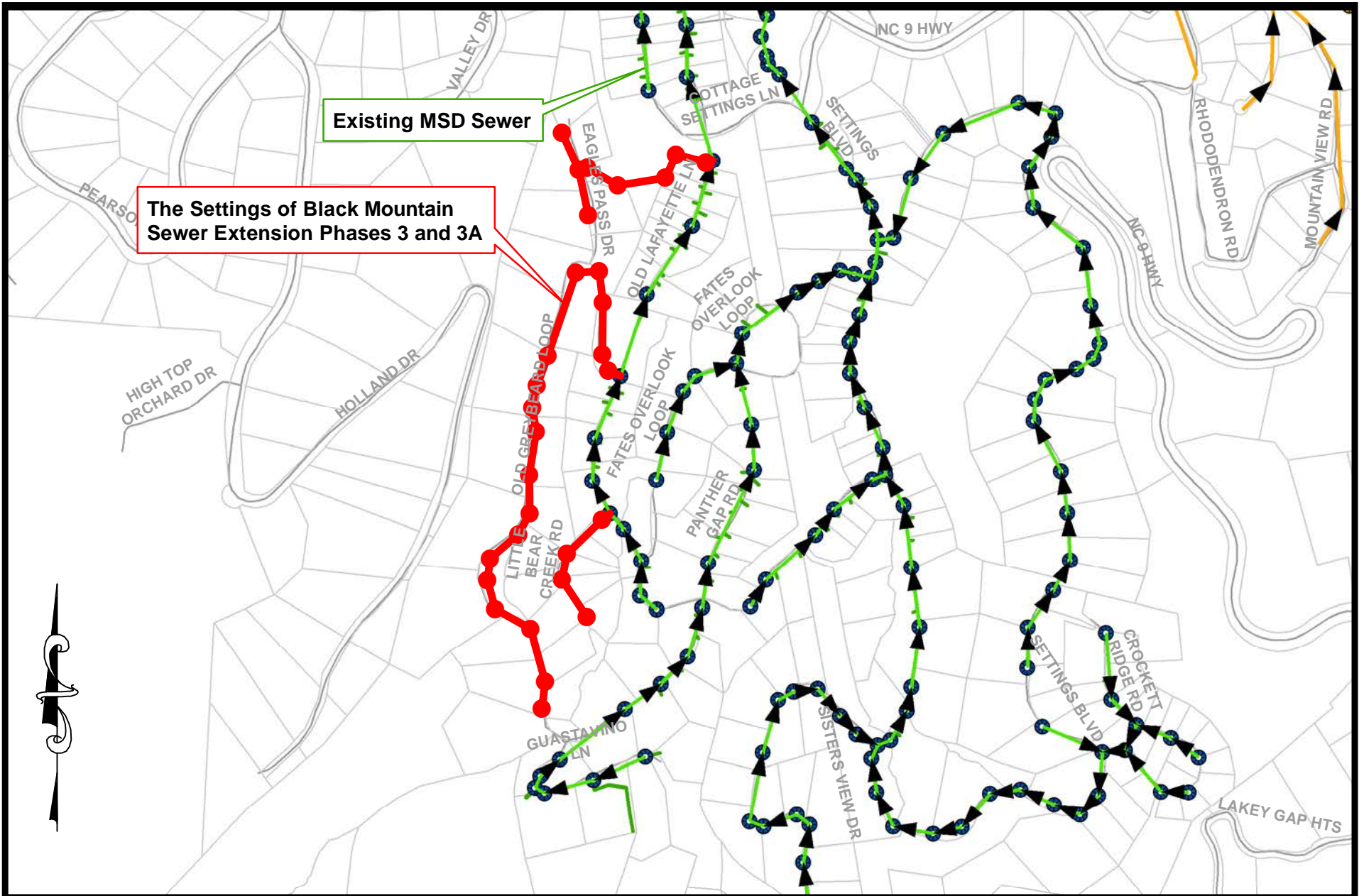
BACKGROUND: This project is located inside the District boundary off Hwy NC-9 in the Town of Black Mountain. The developer for this project is Mitzec Pritchard of The Settings of Black Mountain Association Inc.

The project included extending approximately 3,499 linear feet of 8-inch public gravity sewer to serve the thirty (30) units for this phase of the single family residential development.

A wastewater allocation was issued in the amount of 12,000 GPD for this phase of the project. The estimated cost of the sewer construction is \$305,441.00.

All MSD requirements have been met.

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



Existing MSD Sewer

The Settings of Black Mountain Sewer Extension Phases 3 and 3A



MSD
Engineering Division

The Settings of Black Mountain Sewer Extension Phases 3 and 3A
MSD Project # 2008016

Metropolitan Sewerage District of Buncombe County

5/03/18

Metropolitan Sewerage District of Buncombe County

Board Action Item

BOARD MEETING DATE: May 16, 2018

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

REVIEWED BY: Ed Bradford, P.E. - Engineering Director

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

SUBJECT: Acceptance of Developer Constructed Sewer System for Shiloh Cottages, MSD Project No. 2016252

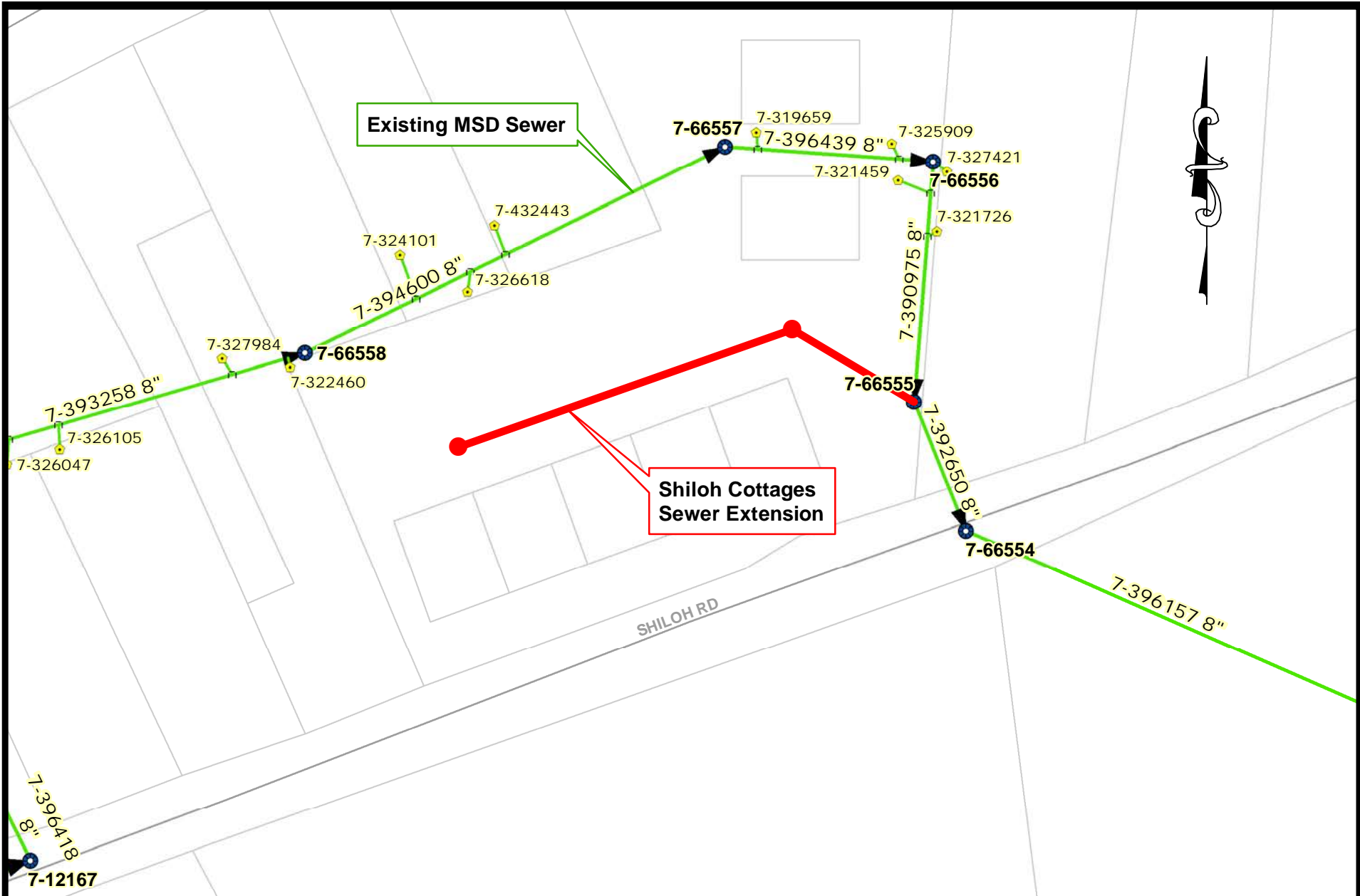
BACKGROUND: This project is located inside the District boundary off Shiloh Road in the City of Asheville. The developer for this project is George Morosani of FI Realty LLC.

The project included extending approximately 180 linear feet of 8-inch public gravity sewer to serve the seven (7) units for the single family residential development.

A wastewater allocation was issued in the amount of 2,100 GPD for the project. The estimated cost of the sewer construction is \$25,000.00.

All MSD requirements have been met.

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



MSD
Engineering Division

**Shiloh Cottages Sewer Extension
MSD Project # 2016252**

Metropolitan Sewerage District of Buncombe County

5/03/18

Metropolitan Sewerage District of Buncombe County

BOARD INFORMATIONAL ITEM

Meeting Date: May 16, 2018
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 March 31, 2018

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 March 31, 2018 were \$79,698,285. The detailed listing of accounts is available upon request. The average rate of return for all investments is 1.051%. 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 March 31, 2018 do not reflect contractual commitments or encumbrances against said funds. Shown below are the total investments as of March 31, 2018 reduced by contractual commitments, bond funds, and District reserve funds. The balance available for future capital outlay is \$48,506,363.

Total Cash & Investments as of 03/31/2018		79,698,285
Less:		
Budgeted Commitments (Required to pay remaining FY18 budgeted expenditures from unrestricted cash)		
Construction Funds	(14,280,055)	
Operations & Maintenance Fund	(4,997,272)	
		(19,277,327)
Bond Restricted Funds		
Bond Service (Funds held by trustee):		
Funds in Principal & Interest Accounts	(41,019)	
FY18 Principal & Interest Due	(6,464,673)	
		(6,505,692)
District Reserve Funds		
Fleet Replacement	(650,172)	
Pump Replacement	(39,355)	
WWTP Replacement	(450,753)	
Maintenance Reserve	(967,520)	
		(2,107,800)
District Insurance Funds		
General Liability	(324,216)	
Worker's Compensation	(323,005)	
Post-Retirement Benefit	(1,741,560)	
Self-Funded Employee Medical	(912,322)	
		(3,301,103)
Designated for Capital Outlay		48,506,363

Staff Recommendation

None. Information Only.

Action Taken

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

Board Meeting: May 16, 2018

Subject: Cash Commitment/Investment Report-Month Ended March 31, 2018

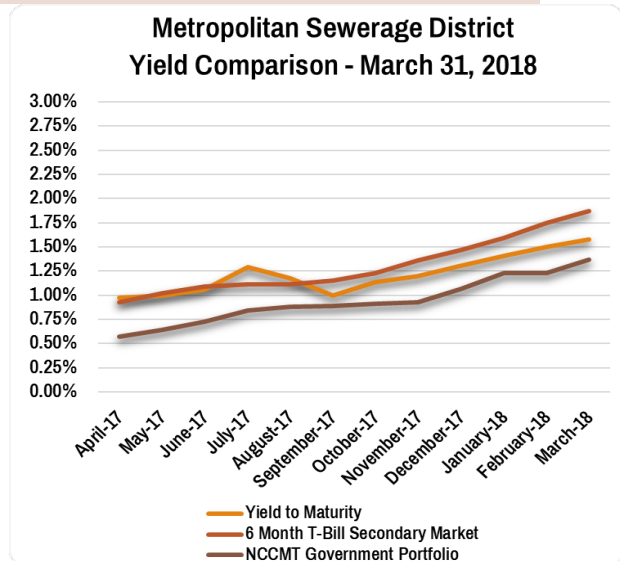
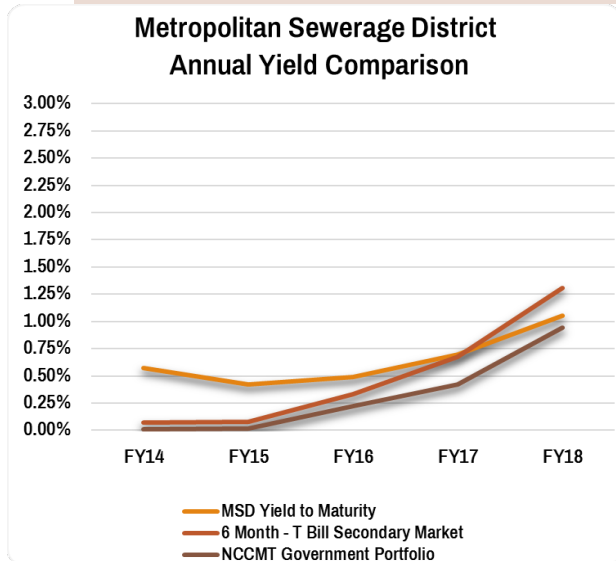
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**METROPOLITAN SEWERAGE DISTRICT
INVESTMENT MANAGERS' REPORT
At March 31, 2018**

Summary of Asset Transactions			
	Original Cost	Market	Interest Receivable
Beginning Balance	\$ 70,084,534	\$ 70,132,112	\$ 89,509
Capital Contributed (Withdrawn)	(1,250,812)	(1,250,812)	
Realized Income	44,194	44,194	19,713
Unrealized/Accrued Income		20,491	(10,526)
Ending Balance	\$ 68,877,916	\$ 68,945,985	\$ 98,696

Value and Income by Maturity			
	Original Cost	Income	
Cash Equivalents <91 Days	\$ 37,431,219	\$ 40,145	
Securities/CD's 91 to 365 Days	25,946,697	\$ 27,828	
Securities/CD's > 1 Year	5,500,000	\$ 5,899	
	\$ 68,877,916	\$ 73,872	

Month End Portfolio Information	
Weighted Average Maturity	118
Yield to Maturity	1.58%
6 Month T-Bill Secondary Market	1.87%
NCCMT Government Portfolio	1.37%

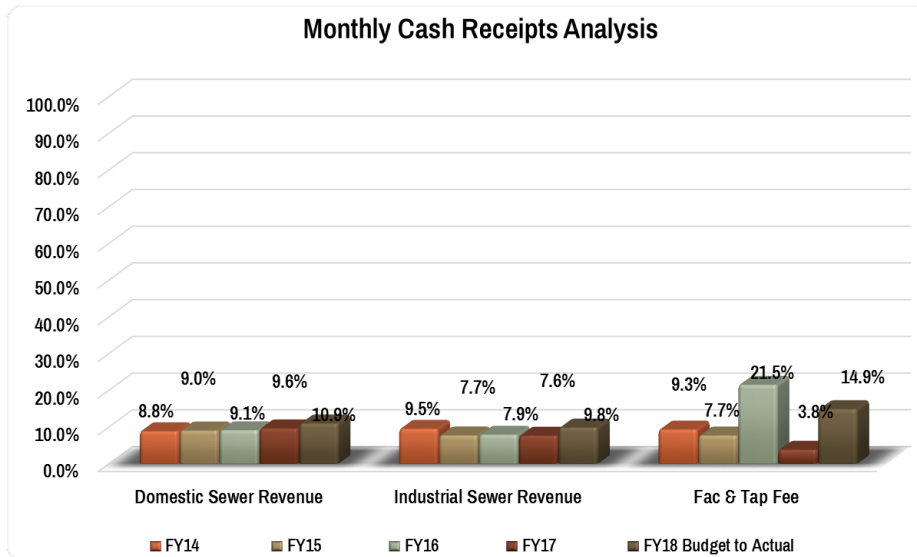


Board Meeting: May 16, 2018

Subject: Cash Commitment/Investment Report-Month Ended March 31, 2018

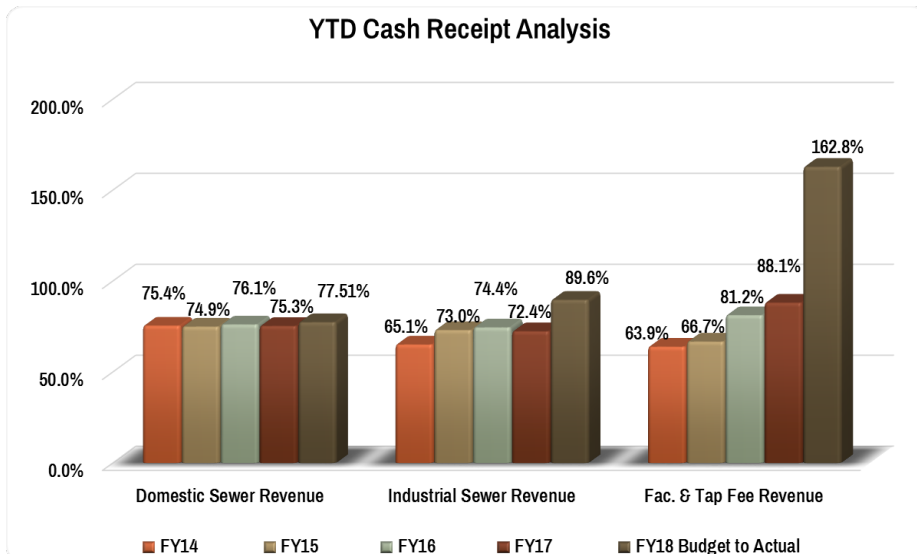
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**METROPOLITAN SEWERAGE DISTRICT
ANALYSIS OF CASH RECEIPTS
As of March 31, 2018**



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:

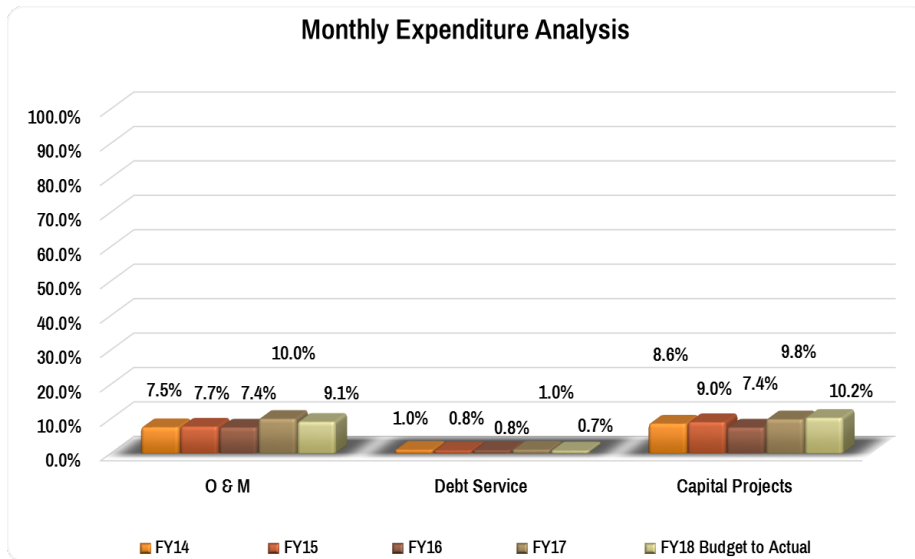
- YTD domestic sewer revenue is considered reasonable based on historical trends.
- YTD industrial sewer revenue is reasonable based on historical trends.
- Due to the unpredictable nature of facility and tap fee revenue, staff considers facility and tap fee revenue reasonable.

Board Meeting: May 16, 2018

Subject: Cash Commitment/Investment Report-Month Ended March 31, 2018

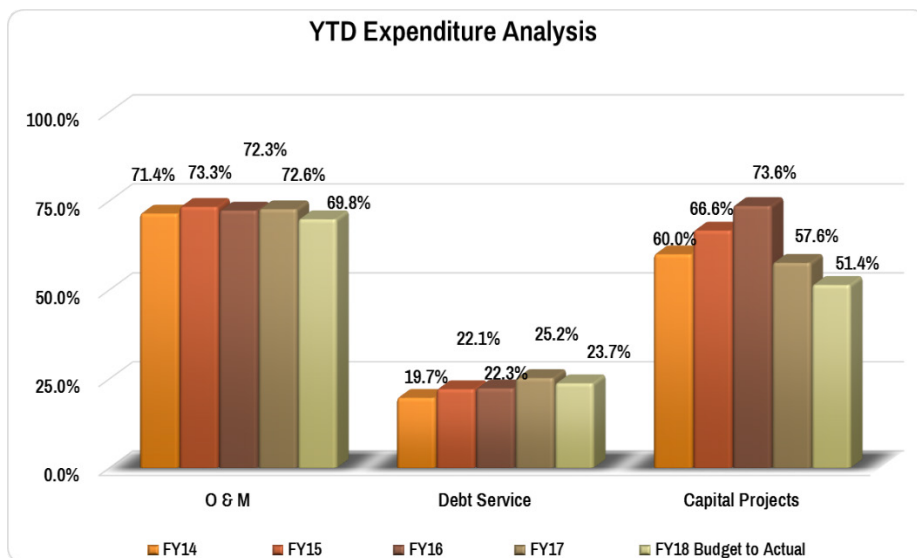
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**METROPOLITAN SEWERAGE DISTRICT
ANALYSIS OF EXPENDITURES
As of March 31, 2018**



Monthly Expenditure Analysis:

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



YTD Expenditure Analysis:

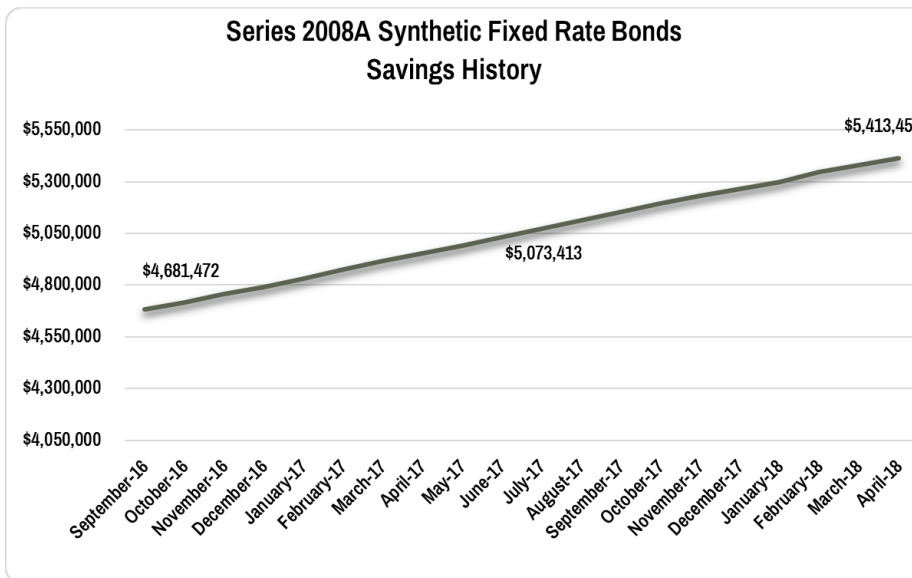
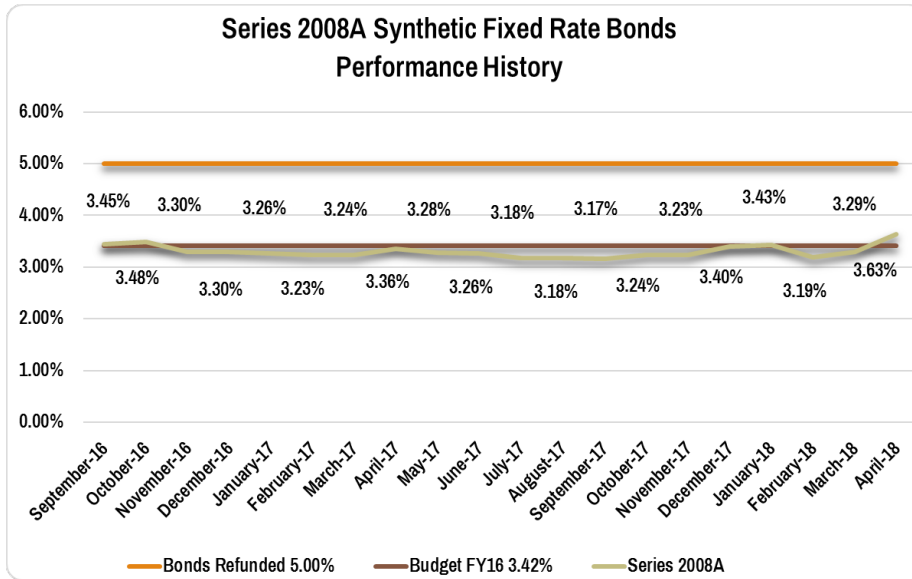
- YTD O&M expenditures are considered reasonable based on historical trends.
- Due to the nature of the variable rate bond market, YTD expenditures can vary year to year. Based on current variable interest rates, YTD debt service expenditures are considered reasonable.
- Due to nature and timing of capital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

Board Meeting: May 16, 2018

Subject: Cash Commitment/Investment Report-Month Ended March 31, 2018

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**METROPOLITAN SEWERAGE DISTRICT
VARIABLE DEBT SERVICE REPORT
As of April 30, 2018**



Series 2008A:

- Savings to date on the Series 2008A Synthetic Fixed Rate Bonds is \$5,413,454 as compared to 4/1/2008 fixed rate of 4.85%.
- Assuming that the rate on the Series 2008A Bonds continues at the current all-in rate of 3.9475%, MSD will achieve cash savings of \$4,670,000 over the life of the bonds.
- MSD would pay \$2,613,848 to terminate the existing Bank of America Swap Agreement.

Metropolitan Sewerage District of Buncombe County

BOARD ACTION ITEM

Meeting Date: May 16, 2018

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

Reviewed By: Billy Clarke, District Counsel

Subject: Review of Investment Policy

Background

On February 18, 2004 the Board adopted a resolution establishing the District's Investment Policy. The policy is in compliance with the *North Carolina Budget and Fiscal Control Act, North Carolina General Statute 159*, and incorporates best practices from *Governmental Accounting Standards Board*. The Board has amended the policy on September 15, 2006 as well as August 15, 2007 to improve the District's ability to secure commercial paper with the best rates of return while continuing to manage non-systemic risk. The Board receives monthly reports summarizing the amount of investments and investment income received, along with charts showing diversification by investment type.

Discussion

During the past year, short-term investment rates have increased steadily and gradually as the FOMC has pushed up the Fed Funds rate. At the same time, the yield curve for intermediate and long-term rates has remained relatively flat. As a result, during this time the majority of the District's investments have been short-term.

Since the last review of the District's investment policy, the commercial paper market has experienced substantial changes. In 2006, the average A-1/P-1 commercial paper issuer issued commercial paper in denominations ranging from \$250,000 to \$500,000. In 2018, the same issuers issue in denomination ranging from \$500,000 to \$5,000,000. This change has limited staff's ability to access more competitive rates of returns.

As noted above, in the current interest rate environment the District has focused on short-term investments. Within short-term investments, the highest yield is usually offered by commercial paper with durations ranging from 30 to 270 days. Commercial paper often yields 15-25 basis points higher than Treasuries or Agencies.

Meeting Date: May 16, 2018
Subject: Review of Investment Policy
Page 2

The minimum amount of commercial paper brokers will sell is \$500,000, while others will not consider any amounts less than \$2,000,000 to \$5,000,000.

To limit the District's risk associated with holding individual securities (non-systemic risk); the policy currently limits investment in any one non-governmental entity to a greater of \$500,000 or 1% of the total portfolio.

To improve the District's ability to secure commercial paper with the best rates of return, while continuing to manage the non-systemic risk, staff suggests that the policy be revised to allow the limit to be 10% of the portfolio or up to \$5,000,000.

Staff believes that this change will be in the best interest of the District ratepayers by allowing access to more competitive rates of return without unduly compromising management of the risk of investing in any one company. The District only invests in commercial paper with the highest ratings and there has not been a failure of A1/P1 rated paper since the early 1970's.

Finance Committee Recommendation

The Finance Committee recommends the modification of the Investment Policy to read:

To limit the District's risk associated with holding individual securities (e.g. non-systematic risk), up to \$5,000,000 of the portfolio may be invested in a single non-governmental issue.

Voice vote was unanimous in favor of change and recommends forwarding to the Board for approval.

Action Taken

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

Investment Policy

Investment Philosophy:

The purpose of this investment policy is to guide the Metropolitan Sewerage District of Buncombe County (the “District”) in managing cash on hand, to preserve principal, and generate income to provide cash for District daily operational and capital needs.

The District shall manage all investments in a manner consistent with the District Bond Order and in compliance with applicable law and regulation.

The District will strive to maximize income and manage risk using strategic asset allocation including diversification and prudent active management. Market timing shall be avoided. The overall program shall be designed and managed with a degree of professionalism worthy of the public trust.

Scope:

This investment policy applies to all financial assets of the District and is specifically subject to all of the provisions of the District's Bond Order and applicable laws and regulations. These funds are accounted for in the District's annual financial report and include:

- Operation and Maintenance
- Self-Funded Insurance
- Maintenance Reserve Fund
- Fleet Replacement Fund
- WWTP Replacement Fund
- Revenue Fund (approved by Board October 16, 1996)
- Construction
- General
- Trust and Agency Funds
- Any new fund created by the District Board, unless specifically exempted by the District Board

Objectives:

The investment portfolio of the District shall be designed to attain a rate of return (yield) consistent with investments allowed under the Bond Order and applicable laws and regulations while minimizing risk (safety) and retaining liquidity.

1. Preservation of Principal

Preservation of principal shall be the foremost investment objective of the District. Investments of the District shall be undertaken in a manner that seeks to ensure the preservation of capital in the overall

portfolio.

The objective will be to mitigate credit risk and interest rate risk.

Credit risk (non-systematic risk) is the risk of loss due to the failure of the security issuer or backer. Credit risk may be mitigated by:

- a. Limiting investments to the safest types of securities;
- b. Pre-qualifying the financial institutions, brokers/dealers, intermediaries, and advisors with which an entity will do business; and
- c. Diversifying the investment portfolio so that potential losses on individual securities will be minimized.

Interest rate risk (systematic risk) is the risk that the market value of securities in the portfolio will fall due to changes in general interest rates. Interest rate risk may be mitigated by:

- a. Structuring the investment portfolio so that securities mature to meet cash requirements for ongoing operations, thereby avoiding the need to sell securities on the open market prior to maturity, and
- b. By investing operating funds primarily in shorter-term securities.

2. Liquidity

The investment portfolio shall remain sufficiently liquid to meet all operating requirements that may be reasonably anticipated. This will be accomplished by structuring the portfolio so that securities mature concurrent with cash needs to meet anticipated demands (static liquidity). Furthermore, since all possible cash demands cannot be anticipated, the portfolio should consist largely of securities with active secondary or resale markets (dynamic liquidity).

3. Yield

The investment portfolio shall be designed with the objective of attaining a market rate of return throughout budgetary and economic cycles, taking into account the investment risk constraints and liquidity needs. Return on investment is less important than preservation of capital and liquidity. The core of investments is limited to relatively low risk securities in anticipation of earning a fair return relative to the risk being assumed. Securities shall not be sold prior to maturity with the following exceptions:

- a. A declining credit security could be sold early to minimize loss of principal;
- b. A security swap would improve the quality, yield, or target duration in the portfolio; or
- c. Liquidity needs of the portfolio require that the security be sold.

Delegation of Authority:

The Director of Finance serves as the District's Finance Officer who is responsible for conducting investment transactions in accordance with North Carolina G.S. 159-25 (a) (6) and 159-30 (a). The Finance Officer shall establish and maintain written procedures for the operation of the investment program consistent with this investment policy. Such procedures shall include explicit delegation of authority by the Finance Officer to persons responsible for investment transactions. No person may engage in an investment transaction except as provided under the terms of this policy and the procedures established by the Finance Officer and approved by the District Board. The Finance Officer shall be responsible for all transactions undertaken and shall establish a system of controls to regulate the activities of subordinates.

Standard of Care

The standard of care to be used by investment officials shall be the "prudent person" standard and shall be applied in the context of managing an overall portfolio.

Conflicts of Interest:

Officers and employees involved in the investment program, namely the General Manager, the Director of Finance, the Accounting Manager, and any members of the Finance Committee assisting in the selection of individual investments, shall refrain from personal investment activity that conflicts, or appears to conflict, with proper execution of the District's investment program. Employees and officers involved in the investment program shall disclose to the District Board any material financial interests in financial institutions conducting business with the District. Employees and officials shall refrain from undertaking personal investment transactions with the same individual who provides such services to the District.

Investment Instruments:

The District is authorized to invest idle funds in compliance with North Carolina General Statute 159-30 and the District Bond Order. A list of permitted investments is attached as Exhibit A.

In accordance with North Carolina General Statute 159-31(b), full collateralization will be required on deposits at interest and savings certificates of deposit. The District shall utilize the pooling method of collateralization and shall use only banking institutions approved by the North Carolina Local Government Commission.

Maturities:

The District's general intent is to make investments and hold until maturity. However, early liquidation may be necessary if cash flow demand warrants an earlier date of sale.

To the extent possible, the District will attempt to match its investments with anticipated cash flow requirements. Unless matched to a specific cash flow, the District will not directly invest in securities maturing more than two (2) years from the date of purchase. The Finance Director shall determine what the appropriate average weighted maturity of the portfolio shall be.

Reserve funds may be invested in securities exceeding two (2) years if the maturity of such investments is made to coincide as nearly as practicable with the expected use of funds.

Asset Allocation and Diversification:

The District, in consultation with an investment professional as deemed prudent by the Finance Officer, shall develop a strategic asset allocation plan. The goal of the asset allocation plan shall be to provide an optimal mix of investments designed to produce the desired returns and meet the current and future liabilities, with the least amount of fluctuation in the overall value of the investment portfolio. By diversifying funds among several types, there is an increased probability that if one investment type is decreasing in value, another is increasing.

Asset Allocation Maximum	Maximum Percent
U.S. Government Treasuries, Agencies and Instrumentalities	100%
Bankers' Acceptances	20%
Certificates of Deposit	100%
Commercial Paper	20%
North Carolina Capital Management Trust	100%

To limit the District's risk associated with holding individual securities (e.g. non-systematic risk), no more than 1% of the portfolio may be invested in a single non-governmental issue.

To allow the investment in any one issue of commercial paper to be up to \$5,000,000 of the portfolio, which would allow the District to access more competitive markets to achieve greater rates of return.

Safekeeping and Custody:

All security transactions entered into by the District shall be conducted on a delivery-versus-payment (DVP) basis. This ensures that securities are deposited in the eligible financial institution prior to the release of funds. Securities will be held by a contracted third-party custodian designated by the Finance Officer and evidenced by safekeeping receipts. The custody agreement shall be in form approved by District Legal Counsel.

Investment Trading Relationship Agreement:

Dealers providing services to the District must execute an investment trading relationship agreement with the Finance Officer in a form approved by District Legal Counsel.

Any financial institution or broker/dealer providing services to the District shall provide evidence of credit worthiness and appropriate state and federal licensure to the Finance Officer. The Finance Officer reserves the right to decline to do business with any entity based upon less-than-optimal financial condition, licensure, or managerial integrity.

Reporting:

The purpose of monitoring and reporting on investment performance is for the Board to be able to ① ensure compliance with District policy and applicable law, ② manage portfolio risk, and ③ assess the performance of District employees and other professional, if any, responsible for investment decisions.

The Finance Officer is charged with the responsibility of a monthly investment inventory report, which includes investment type, cost, market value, maturity date, and yield. This report shall be submitted to the Board of Directors and General Manager.

EXHIBIT A
Investment Obligations Allowed By
The 1999 Amended Bond Order

“Investment Obligations” means, to the extent permitted by law,

- a. Government Obligations;
- b. Obligations of the Federal Financing Bank, the Federal Home Loan Banks, the Federal Home Loan Mortgage Corporation (excluded are stripped mortgage securities which are purchased at prices exceeding their principal amounts), the Federal National Mortgage Association (excluded are stripped mortgage securities which are purchased at prices exceeding their principal amounts), the Government National Mortgage Association, the Federal Housing Administration and the Farmers Home Administration;
- c. Direct general obligations of the State secured by the full faith and credit and taxing power of the State rated in one of the two highest rating categories by Moody's and S&P;
- d. Bonds and notes of any North Carolina local government or public authority (other than the District), subject to such restrictions as the Secretary of the Local Government Commission may impose, provided such bonds or notes are rated in one of the two highest rating categories by Moody's and S&P;
- e. Savings certificates or certificates of deposit issued by any commercial bank or savings and loan association organized under the laws of the State or by any federal bank or savings and loan association having its principal office in the State; provided, however, that any principal amount of such certificates in excess of the amount insured by the federal government or any agency thereof, or by a mutual deposit guaranty association authorized by the Administrator of the Savings Institutions Division of the Department of Commerce of the State, be fully collateralized by obligations described in (a) or (b) above;
- f. Prime quality commercial paper (having original maturities of not more than 270 days) bearing the highest rating of Moody's and S&P and not bearing a rating below the highest by any nationally recognized rating service which rates the particular obligation;
- g. Participating shares in the cash portfolio of North Carolina Capital Management Trust, provided that the investments of such fund are limited to those qualifying for investment under this definition and that said fund is certified by the Local Government Commission;
- h. A commingled investment pool established and administered by the State Treasurer pursuant to G.S. 147-69.3;
- i. Repurchase agreements with respect to Government Obligations if entered into with a broker or dealer, as defined by the Securities Exchange Act of 1934, which is a dealer recognized as a primary dealer by a Federal Reserve Bank with a long-term rating of not less than “A2” from Moody's and “A” from S&P, or any domestic commercial bank, domestic trust company or domestic national banking association (or a domestic branch of a foreign commercial bank, trust company or national banking association) with a long-

term rating of not less than “A2” from Moody’s and “A” from S&P, the deposits of which are insured by the Federal Deposit Insurance Corporation or any successor thereof, if:

- i. such obligations that are subject to such repurchase agreement are delivered (in physical or in book entry form) to the District, or any financial institution serving either as trustee for the District or as fiscal agent for the District or are supported by a safekeeping receipt issued by a depository satisfactory to the District, provided that such repurchase agreement must provide that the value of the underlying obligations shall be maintained at a current market value, calculated at least daily, of not less than one hundred percent (100%) of the repurchase price, and, provided further, that the financial institution serving either as trustee or as fiscal agent for the District holding the obligations subject to the repurchase agreement hereunder or the depository issuing the safekeeping receipt shall not be the provider of the repurchase agreement;
 - ii. a valid and perfected first security interest in the obligations which are the subject of such repurchase agreement has been granted to the District or its assignee or book entry procedures conforming, to the extent practicable, with federal regulations and satisfactory to the District have been established for the benefit of the District or its assignee;
 - iii. such securities are free and clear of any adverse third-party claims;
 - iv. such repurchase agreement is in a form satisfactory to the District; and
 - v. such repurchase agreement shall state and an opinion of counsel shall be rendered at the time the obligations which are the subject of such reimbursement agreement are delivered that the holder of the collateral has a perfected first priority security interest in the collateral, any substituted collateral and all proceeds thereof; and
- j. any other investment now or hereafter permitted for investment of funds by the District by the General Statutes of North Carolina, including, without limitation, Section 159-30 of the General Statutes of North Carolina.

EXHIBIT B

Excerpts from The 1999 Amended Bond Order pertaining to Depositories of Money, Security for Deposits, Investment of Funds and Covenant as to Arbitrage

Section 1.02. Security for Deposits. Any and all money received by the District under the provisions of this Order shall be deposited as received with the Trustee or one or more other Depositories as provided in this Order and shall, in the case of deposits with the Trustee, be trust funds under the terms hereof, and, to the extent permitted by law in the case of the Construction Fund, shall not be subject to any lien or attachment by any creditor of the District.

All money deposited with the Trustee or any Depository hereunder in excess of the amount guaranteed by the Federal Deposit Insurance Corporation or other federal agency shall be continuously secured, for the benefit of the District and the Owners, either (a) by lodging with a bank or trust company chosen by the Trustee or Depository or, if then permitted by law, by setting aside under control of the trust department of the bank or trust company holding such deposit, as collateral security, Government Obligations or other marketable securities eligible as security for the deposit of trust funds under regulations of the Comptroller of the Currency of the United States or applicable State law or regulations, having a market value (exclusive of accrued interest) not less than the amount of such deposit, or (b) if the furnishing of security as provided in clause (a) above is not permitted by applicable law, then in such other manner as may then be required or permitted by applicable State or federal laws and regulations regarding the security for, or granting a preference in the case of, the deposit of trust funds; provided, however, that it shall not be necessary for the Trustee or any Depository to give security for the deposit of any money with it for the payment of the principal of or the redemption premium or the interest on any Bonds, or for the Trustee or any Depository to give security for any money that shall be represented by Investment Obligations purchased under the provisions of this Article as an investment of such money.

All money deposited with the Trustee or any Depository shall be credited to the particular fund, account or subaccount to which such money belongs.

Section 1.03. Investment of Money. Money held for the credit of all funds, accounts and subaccounts shall be continuously invested and reinvested by the Trustee or the Depositories, whichever is applicable, in Investment Obligations to the extent practicable. Except as hereinafter provided in this Section with respect to the disposition of investment income, the particular investments to be made and other related matters in respect of investments shall, as to each Series of Bonds, be provided in the applicable Series Resolution.

Except as hereinafter provided in this Section with respect to the Parity Reserve Account, Investment Obligations shall mature or be redeemable at the option of the holder thereof not later than the respective dates when the money held for the credit of such funds, accounts and subaccounts will be required for the purposes intended.

At the time that the Parity Reserve Account is first funded in connection with the issuance of a Series of Bonds or the incurrence of Parity Debt, the District shall determine in the Parity Resolution the maximum number of years of the average life of the Investment Obligations in the Parity Reserve Account, and thereafter such Investment Obligations in the Parity Reserve Account shall mature or be redeemable at the option of the Trustee so that all such Investment Obligations in the Parity Reserve Account shall have an average life from the date of such investment of not more than the amount of years so determined by the District.

Notwithstanding the foregoing, no Investment Obligations pertaining to any Series in any fund, account or subaccount shall mature on a date beyond the latest maturity date of the respective Series of Bonds Outstanding at the time such Investment Obligations are deposited. For purposes of this Section, the maturity date of any repurchase agreement shall be deemed to be the stated maturity date of such agreement and not the maturity dates of the underlying Investment Obligations.

An Authorized Officer or his designee shall give to the Trustee or any Depository directions respecting the investment of any money required to be invested hereunder, subject, however, to the provisions of this Article, and the Trustee or such Depository shall then invest such money as so directed. The Trustee or any Depository may request additional direction or authorization from the Authorized Officer or his designee in writing with respect to the proposed investment of money under the provisions of this Order. Upon receipt of such directions, the Trustee or any Depository shall invest, subject to the provisions of this Article, such money in accordance with such directions. The Trustee shall have no liability for investments made in accordance with this Section.

For purposes of making any investment hereunder, the Trustee or any Depository may consolidate money held by it in any fund, account or subaccount with money in any other fund, account or subaccount. Transfers from any fund, account or subaccount to the credit of any other fund, account or subaccount provided for in this Order may be effectuated on the books and records of the Trustee, the District, or any Depository without any actual transfer of funds or liquidation of investments. Investment Obligations purchased with consolidated funds shall be allocated to each fund, account, or subaccount on a pro rata basis in accordance with the initial amount so invested from each such fund, account, or subaccount.

METROPOLITAN SEWERAGE DISTRICT OF BUNCOMBE COUNTY

Board Action Item

Meeting Date: May 16, 2018
Submitted By: Thomas E. Hartye, PE., General Manager
Prepared By: W. Scott Powell, CLGFO, Director of Finance
Reviewed By: Billy Clarke, District Counsel
Subject: Sewer System Development Fee Study

Background

On July 20, 2017 the North Carolina General Assembly signed into law N.C. General Statute 162A Article 8 (“Article 8”), which provides for the uniform authority to implement system development fees for public water and sewer systems in North Carolina. The Statute sets out the limitations and requirements that must be met prior to July 1, 2018. MSD contracted with the Raftelis Financial Consultants, Inc. (“Raftelis”) to perform the prescribed system development fee calculations for MSD (Exhibit 1). This report was made public on the MSD website on March 28th.

Discussion

System development fees are one-time charges assessed to new utility customers for their use of system capacity and serve as an equitable method by which to recover up-front system capacity costs from those using the capacity. They are calculated based on a cost analysis of the value of existing or planned infrastructure that is in place, or will be constructed, to serve new capacity demands, and the existing or additional capacity associated with these assets.

According to the statute, system development fees must be adopted in accordance with the conditions and limitations of Article 8, and those fees in effect as of October 1, 2017 must conform to the requirements set forth in the Article no later than July 1, 2018. The system development fees must also be prepared by a financial professional or licensed professional engineer. Finally, the system development fee shall be updated at least every five years. The District last proposed a Sewer System Development increase was in FY2012.

Article 8 identifies 3 methods to calculate system development fees. Raftelis used the Capacity Buy-In Method to calculate the District’s sewer system development fees due to its facilities having adequate capacity to accommodate anticipated future growth over the near term.

Meeting Date: May 16, 2018
Subject: Sewer System Development Fee Study
Page 2

The study identified the following:

- Single-family residential unit fee is proposed to increase from \$2,500 to \$2,836.
- Mobile homes were found to have the same flow of a single-family residential unit. Raftelis recommends to charge the same as a single-family residential unit. A proposed increase from \$1,740 to \$2,836.
- Multifamily residential units were found to have 67% flow of a single-family residential unit. Raftelis recommended scaling the fee based on these results. The proposed fee would decrease from \$2,500 to \$1,900.

Staff Recommendation

Staff recommends to accept the study prepared by Raftelis and to incorporate the recommended changes in the FY2019 Schedule Rates and Fees.

Action Taken

Motion by:

Second by:

Other:

Person responsible:

to Approve
Table

Follow-up required:

Deadline:

Disapprove
Send to Committee

March 27, 2018

Board of Directors
Metropolitan Sewerage District of Buncombe County, NC
2028 Riverside Drive
Asheville, NC 28804

RE: Sewer System Development Fees

Dear MSD Board Members:

Raftelis Financial Consultants, Inc. (“Raftelis”) has completed an evaluation to develop cost-justified sewer system development fees for consideration by Metropolitan Sewerage District of Buncombe County (“MSD”). This letter documents the results of the analysis, which is based on an approach for establishing system development fees set forth in North Carolina General Statute 162A Article 8 – “System Development Fees.” As one of the largest and most respected utility financial, rate, management, and operational consulting firms in the U.S., and having prepared system development fee calculations for utilities in North Carolina and across the U.S. since 1993, Raftelis is qualified to perform system development fee calculations for MSD.

Background

System development fees are one-time charges assessed to new utility customers for their use of system capacity and serve as an equitable method by which to recover up-front system capacity costs from those using the capacity. North Carolina General Statute 162A Article 8 (“Article 8”) provides for the uniform authority to implement system development fees for public water and sewer systems in North Carolina, and was recently passed by the North Carolina General Assembly and signed into law on July 20, 2017. According to the statute, system development fees must be adopted in accordance with the conditions and limitations of Article 8, and those fees in effect as of October 1, 2017 must conform to the requirements set forth in the Article no later than July 1, 2018. In addition, the system development fees must also be prepared by a financial professional or licensed professional engineer, qualified by experience and training or education, who, according to the Article, shall:

-)] Document in reasonable detail the facts and data used in the analysis and their sufficiency and reliability.
-)] Employ generally accepted accounting, engineering, and planning methodologies, including the buy-in, incremental cost or marginal cost, and combined cost methodologies for each service, setting forth appropriate analysis to the consideration and selection of an approach

appropriate to the circumstances and adapted as necessary to satisfy all requirements of the Article.

- J Document and demonstrate the reliable application of the methodologies to the facts and data, including all reasoning, analysis, and interim calculations underlying each identifiable component of the system development fee and the aggregate thereof.
- J Identify all assumptions and limiting conditions affecting the analysis and demonstrate that they do not materially undermine the reliability of conclusions reached.
- J Calculate a final system development fee per service unit of new development and include an equivalency or conversion table for use in determining the fees applicable for various categories of demand.
- J Consider a planning horizon of not less than 10 years, nor more than 20 years.

This letter report documents the results of the calculation of sewer system development fees for MSD in accordance with these requirements.

In general, system development fees are calculated based on (1) a cost analysis of the value of existing or planned infrastructure that is in place, or will be constructed, to serve new capacity demands, and (2) the existing or additional capacity associated with these assets. Article 8 is relatively explicit in the identification of infrastructure assets that may be included as part of the system development fee calculation, as the Article defines allowable assets to include the following types, as provided in Section 201:

“A water supply, treatment, storage, or distribution facility, or a wastewater collection, treatment, or disposal facility, including for reuse or reclamation of water, owned or operated, or to be owned and operated, by a local government unit and land associated with such facility.”

The method used to calculate system development fees for MSD included system facility assets that satisfies this definition.

Article 8 references three methodologies that could be used to calculate system development fees. These include the buy-in method, the incremental cost method, and the combined cost method. A description of each of these methods is as follows:

Capacity Buy-In Method:

Under the Capacity Buy-In Method, a system development fee is calculated based on the proportional cost of each user’s share of existing system capacity. This approach is typically used when existing facilities are able to provide adequate capacity to accommodate future growth. The cost of capacity is derived by dividing the estimated value of existing facilities by the current capacity provided by existing facilities. Certain adjustments to the value of existing facilities are made for developer contributed assets, grant funds, and the amount of outstanding debt.

Incremental Cost Method:

Under the Incremental Cost (or Marginal Cost) Method, a system development fee is calculated based on a new customer's proportional share of the incremental future cost of system capacity. This approach is typically used when existing facilities have limited or no capacity to accommodate future growth. The cost of capacity is calculated by dividing the total cost of growth-related capital investments over a period of time by the additional capacity provided as a result of the investments.

Combined Method:

Under the Combined Method, a system development fee is calculated based on the blended value of both the existing and expanded system capacity. As such, it is a combination of the Capacity Buy-In and Incremental Cost methods. This method is typically used when existing facilities provide adequate capacity to accommodate a portion of the capacity needs of new customers, but where significant investment in new facilities to address a portion of the capacity needs of future growth is also anticipated, or where some capacity is available in parts of the existing system, but incremental capacity will be needed for other parts of the system to serve new customers at some point in the future.

The Capacity Buy-In Method was used to calculate the sewer system development fees for MSD, since, in general, MSD's existing sewer treatment facilities have adequate capacity to accommodate the anticipated future growth over the near term. The following steps were completed to calculate the fees under the Capacity Buy-In Method:

1. The replacement value of existing system facilities was calculated and adjustments were made to derive a net replacement value estimate in accordance with Article 8. Adjustments to the calculated replacement value included deducting indexed accumulated depreciation, developer contributions, and outstanding debt.¹
2. The unit cost of system capacity was estimated by dividing the net replacement value of existing system facilities by the current capacity of the system.
3. The amount of capacity associated with a service unit of new development was estimated. One equivalent residential unit ("ERU") was defined as the smallest service unit of new development.
4. The system development fee for one service unit of development was calculated by multiplying the cost per unit of system capacity by the capacity associated with one ERU, as defined below.
5. The calculated system development fee for one ERU was scaled for different categories of demand. The number of dwelling units was used to scale system development fees for new

¹ According to Article 8, "the basis for the buy-in calculation for previously completed capital improvements shall be determined by using a generally accepted method of valuing the actual or replacement costs of the capital improvement for which the buy-in fee is being collected less depreciation, debt credits, grants, and other generally accepted valuation adjustments."

multi-family connections, and meter capacity ratios were used to scale system development fees for other connection types from a base meter size, which is the smallest unit of new development (one ERU), to different categories of demand, defined by different customer meter sizes.

System Development Fee Calculation

Step 1 – Estimate the Replacement Value of System Facilities and Apply Adjustments

System facilities owned and operated by MSD and allowable under Article 8 include a wastewater treatment plant, a network of over 900 miles of collector sewers, and 100 miles of interceptor lines connecting the collector sewers to the treatment plant.

A fixed asset listing of wastewater treatment plant assets currently in service, as of June 30, 2017, was provided by MSD and used to estimate the replacement value of wastewater treatment plant assets. The listing was reviewed and each asset's original cost, as contained in the fixed asset listing, was escalated to current year (2017) dollars based on the year the asset was purchased and the corresponding escalation factor for that year. Escalation factors for each year were identified using the Engineering News Record's Construction Cost Index ("ENR CCI"), which provides an annual index value representing the relative change in construction related costs for each year from 1908 to 2017. Using the ENR's CCI to estimate an asset's current replacement cost is an industry-accepted method by which to value system facilities. Based on this approach, the replacement cost of the wastewater treatment plant assets was estimated to be approximately \$191,639,000.

The replacement value of MSD's collection system was estimated using the replacement value of interceptor pipe, collection system pipe, and manholes. The length of pipe and pipe diameters were gathered and used to estimate the replacement value of existing interceptor and collection system. The unit cost of installed pipe for each pipe diameter was estimated based on recent material pricing data obtained from manufacturers and installation costs from recent bids provided by contractors to MSD to install interceptor or collection system pipe. The length of pipe for each pipe diameter was then multiplied by the corresponding unit cost for materials and installation. The unit cost, length of pipe, and resulting estimated replacement cost by pipe diameter is shown in Table 1.

Table 1. Interceptor and Collection System Pipe Replacement Value by Pipe Diameter

Pipe Diameter	Length (feet)	Unit Cost	Replacement Cost
4"	324,312	\$207.23	\$ 67,207,619
6"	1,035,290	\$207.23	214,544,770
8"	2,987,349	\$207.23	619,073,184
10"	138,109	\$212.61	29,363,543
12"	200,547	\$219.43	44,006,309
14"	218	\$228.55	49,722
15"	51,050	\$228.55	11,667,484
16"	34,444	\$232.82	8,019,198
18"	79,615	\$331.94	26,427,887
20"	33,604	\$341.32	11,470,028
21"	42,114	\$341.32	14,374,709
24"	72,868	\$362.56	26,419,371
27"	44,335	\$410.81	18,213,588
30"	94,668	\$410.81	38,891,014
36"	70,527	\$456.11	32,168,608
42"	15,794	\$506.88	8,005,879
48"	51,602	\$581.91	30,028,259
54"	6,809	\$655.34	4,462,250
60"	31,887	\$716.95	22,861,652
64"	0	\$767.93	0
66"	5,485	\$818.91	4,491,903
Total	5,320,627		\$1,231,746,979

Note: Individual unit cost includes both material and installation costs were obtained from product manufacturers and recent contractor bids provided to MSD, respectively.

As shown in the table, the replacement cost of interceptor and collection system pipe was estimated to be approximately \$1.23 billion.

The replacement cost of manholes was also included as part of the estimated replacement cost of the collection system. MSD's collection system includes 30,074 manholes. The replacement cost of a manhole was estimated by bids provided by contractors to MSD to install manholes as part of recent repair and replacement projects. The average cost to install a manhole was estimated to be \$2,864; therefore, the replacement value of manholes within MSD's collection system was estimated to be \$86,132,044 (30,074 × \$2,864).

Therefore, the total replacement value of MSD's collection system was estimated to be approximately \$1.32 billion (\$1,231,746,979 for the interceptors and collection piping and \$86,132,044 for manholes).

The value of land and easements are allowed to be included in the system development fee calculation under Article 8, and therefore were included as part of the replacement value of system

facilities. The book value of these assets was obtained from MSD’s Comprehensive Annual Financial Report (“CAFR”) dated June 30, 2017. The book value of land held by MSD was \$2,516,666, while the book value of its easements was \$9,311,594.

The replacement costs of the depreciable assets were then adjusted for depreciation using depreciation information contained in MSD’s 2017 CAFR. For example, according to Note 4 of the CAFR, assets related to MSD’s treatment plant were reported to be 51.1 percent depreciated (book value of \$54,353,521, accumulated depreciation of \$27,756,579), while assets related to its interceptor and collection systems were reported to be 21.9 percent depreciated (book value of \$436,515,337, accumulated depreciation of \$95,713,056). Using the percentage of asset value depreciated, the accumulated depreciation attributable to the replacement cost of MSD’s treatment plant and collection system assets were calculated to be \$97,863,961 and \$250,505,611, respectively. These calculations are shown in Table 2. Land and easements are not depreciable assets; therefore, no adjustment was made for their depreciation.

Table 2. Calculation of Depreciation Adjustment

Description	Amount
Treatment Plant:	
Book Value	\$54,353,521
Accumulated Depreciation	27,756,579
Percent Depreciated	51.1%
Treatment Plant – RCN	\$191,639,281
Percent Depreciated	51.1%
Accumulated Depreciation – RCN	\$97,863,961
Interceptor and Collection System:	
Book Value	\$436,515,337
Accumulated Depreciation	95,713,056
Percent Depreciated	21.9%
Interceptor and Collection – RCN	\$1,317,879,023
Less: Contributions	<u>-175,406,450</u>
Net RCN Value	\$1,142,472,574
Percent Depreciated	21.9%
Accumulated Depreciation – RCN	\$250,505,611

RCN = Replacement cost new

In addition to depreciation, several additional adjustments were made to the RCNLD value in accordance with Article 8, which included adjustments for developer contributed assets and outstanding debt, as described below.

Developer Contributed Assets:

MSD provided a listing of assets that were contributed or paid for by developers, and these assets were subtracted from the RCNLD value, as these assets do not represent investment in the system by MSD. The total RCNLD value of contributed wastewater system assets was estimated to be \$175,406,450.

Outstanding Debt Credit:

A credit was applied to the RCNLD value to reflect that a portion of the outstanding debt associated with system facilities may be repaid with user charges of the system. MSD's outstanding debt is comprised of Revenue Bonds and totaled approximately \$90.0 million, as of June 30, 2017, based information contained in MSD's fiscal year 2017 CAFR. This full amount was netted from the RCNLD value.

The resulting adjustments to the wastewater system RCNLD value for developer contributions and outstanding debt are shown in Table 3.

Table 3. Calculation of Net System Value

Description	Amount
Asset Value	
Land	\$2,515,666
Easements	9,311,594
Treatment Plant	191,639,281
Collection System	<u>1,317,879,023</u>
Total Replacement Cost New	\$1,521,345,565
Less: Depreciation	<u>-348,369,572</u>
System Facilities RCNLD	\$1,172,975,992
Less: Developer Contributed Assets	-175,406,450
Less: Credit for Outstanding Debt	<u>-90,037,715</u>
Net System Value (RCNLD)	\$907,531,828

Step 2 – Calculate the Unit Cost of System Capacity

The cost per unit of system capacity was calculated by dividing the adjusted RCNLD values (derived in Step 1) by the system capacity. MSD's average day system capacity is 40 million gallons per day ("MGD"). Therefore, the cost per unit of system capacity was calculated to be \$22.69 per gallon, per day (\$907,531,828 ÷ 40.0 MGD).

Step 3 – Estimate the Amount of Capacity Per Service Unit of New Development

The smallest service unit of new development was defined as one ERU. Based on historical average and peak day demand data provided by MSD, one ERU of capacity was defined to be 125 gallons per day ("GPD").

Step 4 – Calculate the System Development Fees for Single-Family and Multi-Family Residential Customers

The system development fees for single-family residential customers was calculated by multiplying the unit cost of capacity from Step 2 by the capacity associated with one ERU from Step 3. The calculations are provided in Table 4. The fee amount associated with one ERU corresponds to the base meter size (5/8-inch), and is the recommended fee to be charged to a single-family residential dwelling.

Table 4. Calculation of System Development Fees for One ERU/Base Meter Size

Description	Amount
Net System Value	\$907,531,828
System Average Day Capacity (MGD)	40.0
Unit Cost of Capacity (\$/gallon per day)	\$22.69
Capacity Required for 1 ERU (gallons per day)	125.0
System Development Fee (for 1 ERU or a 5/8-inch meter)	\$2,836

The scaling factor for a multifamily residential dwelling unit was calculated to be equal to 0.67 of an ERU. This scaling factor was calculated by comparing the average day demand for a typical single-family dwelling unit with that of a typical multifamily residential dwelling unit. The average day demand for a typical single-family unit was estimated by analyzing the historical annual water consumption data attributable to single-family residential accounts served by MSD. The average day demand for a typical multifamily unit was estimated by analyzing the historical annual water consumption for a sample of multifamily accounts within MSD’s service area, and then dividing the consumption by the number of dwelling units associated with each multifamily account. Using this approach, the historical average day consumption for a single-family dwelling was estimated to be approximately 109.4 gallons per day (“GPD”). The historical average day consumption for a multifamily unit was estimated to be 73.4 GPD. Therefore, the scaling of capacity attributable to multifamily units was calculated to be 0.67 (73.4 GPD ÷ 109.4 GPD). The system development fee for multifamily connections per dwelling unit is shown in Table 5.

The system development fee evaluation also included the evaluation of water usage per dwelling unit for a sample of mobile home customers of MSD. Using this sample data, the estimated water usage per unit was compared to average usage for a typical single-family dwelling unit. The results of this comparison indicated that mobile home water usage per dwelling unit is approximately 1.3 times the water usage of a typical single-family dwelling unit. This higher dwelling unit usage for mobile homes may be due to potentially higher occupancy in mobile homes, potential leaks in the private mobile home water lines, and potentially older and less water efficient fixtures in the mobile home units as compared to the typical single-family dwelling unit.

Currently, MSD charges new mobile home connections a system development fee that is 70 percent of that of a new single-family residential connection. Based on the water usage analysis, MSD

should consider increasing the scaling factor for mobile home connections. We have assumed MSD will increase the scaling factor for mobile homes to 100 percent of the system development fee for a single-family connection in the system development fee table shown in Step 5. The system development fee for mobile homes per dwelling unit is shown in Table 5.

Step 5 – Calculate the System Development Fees for Commercial and Industrial Customers

The system development fees for commercial and industrial customers were developed by scaling the system development fee for a 5/8” meter size (one ERU) to larger meter sizes using rated meter capacities for each meter size, as published by the American Water Works Association². The meter scaling factors are shown in Table 5, along with the fee amounts which were calculated by multiplying the system development fee for one ERU by the demand scaling factors by meter size.

Summary

The calculated system development fees shown in Table 5 represent the cost justified level of system development fees that were calculated for MSD according to Article 8. If MSD chooses to assess fees that are less than those shown in the table, the adjusted fee amounts should still reflect the scaling factors by meter size, as shown in Table 5.

Table 5. Calculated System Development Fees and Associated Scaling Factors

Meter Size / Customer Type	Rated Meter Capacity (GPM)	Scaling Factor	Fee Amount
5/8”	20	1.0	\$ 2,836
3/4”	30	1.5	4,254
1”	50	2.5	7,090
1-1/2”	100	5.0	14,180
2”	160	8.0	22,688
3”	320	16.0	45,376
4”	500	25.0	70,900
6”	1,000	50.0	141,800
8”	1,600	80.0	226,880
10”	4,200	210.0	595,560
12”	5,300	265.0	751,540
Multifamily Unit	n/a	0.67	1,900
Mobile Home	n/a	1.0	2,836

GPM = Gallons per minute

² Principles of Water Rates, Fees, and Charges, Manual M1, 7th Edition, American Water Works Association, Table VII.2-5, p. 338.

Raftelis appreciates the opportunity to assist MSD with the calculation of its sewer system development fees. Should you have questions or need any additional information, please do not hesitate to contact me at 518-391-8944.

Very truly yours,

RAFTELIS FINANCIAL CONSULTANTS, INC.

A handwritten signature in cursive script that reads "John M. Mastracchio".

John M. Mastracchio, CFA
Vice President

Metropolitan Sewerage District of Buncombe County

BOARD ACTION ITEM

Meeting Date: May 16, 2018

Submitted By: Thomas E. Hartye, PE., General Manager

Prepared By: W. Scott Powell, CLGFO, Director of Finance

Reviewed By: Billy Clarke, Legal Counsel

Subject: Consideration of the Resolution Adopting the Preliminary Budget for FY 2018-2019 and the Schedule of Sewer Rates & Fees

Background

The District Budget process must comply with North Carolina General Statutes and the MSD Revenue Bond Order. The Bond order requires that the District adopt its final budget on or before June 15 of each year. The North Carolina General Statutes required that an annual balanced budget ordinance, based upon expected revenues, along with a budget message, to be presented to the governing board no later than June 1 of each year.

Staff/Committee Recommendations

BUDGET:

The Finance Committee unanimously approved staff's recommendation to forward to the Board for approval of the attached [FY 2018-2019 Preliminary Budget](#) along with the Resolution.

SEWER RATES & FEES:

The Finance Committee unanimously approved staff's recommendation to forward to the Board for approval of the attached Proposed Schedule of Fees and Charges – FY2019.

Action Taken

Motion by:

Second by:

Other:

Follow-up Required:

to

Approve
Table

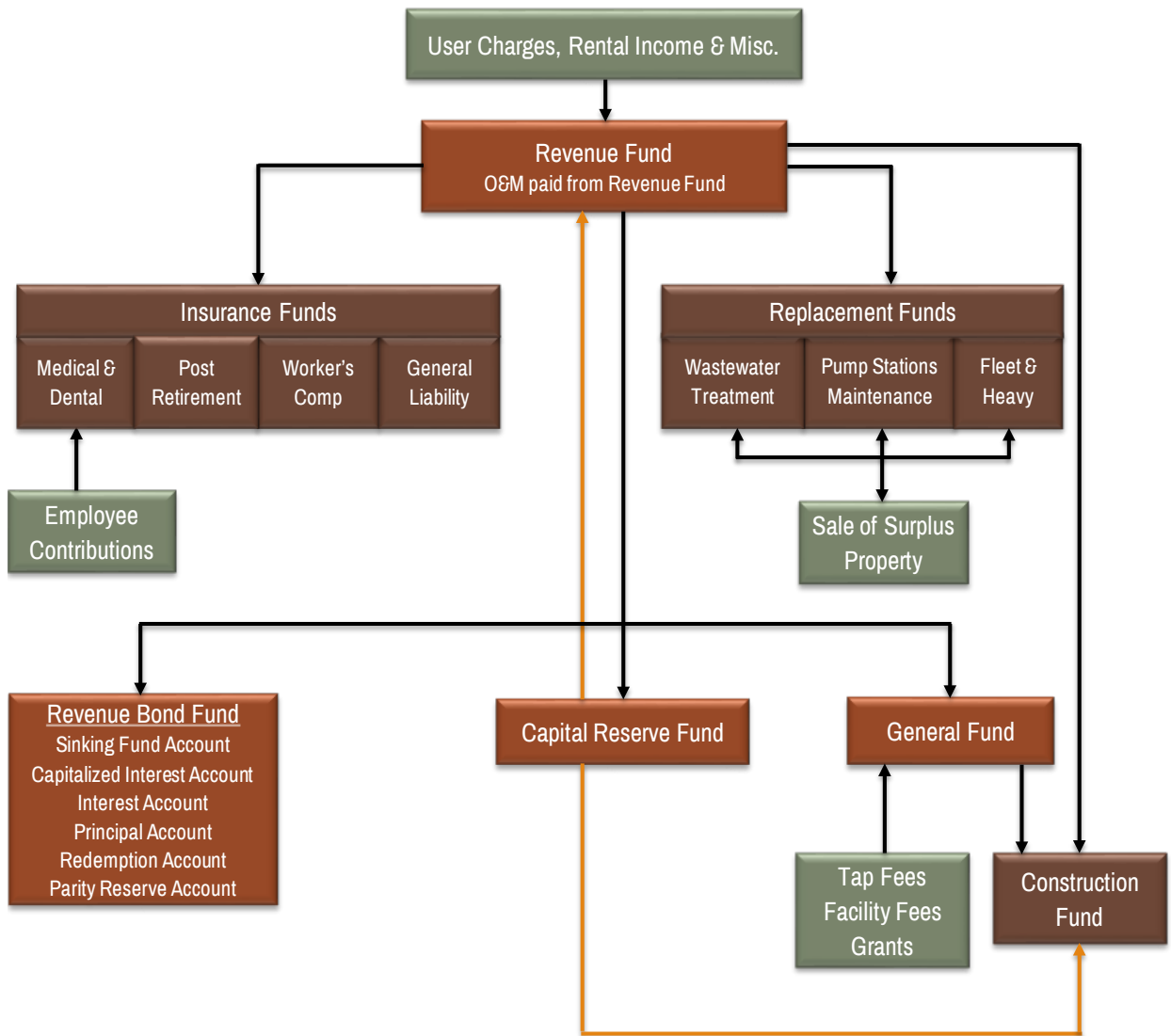
Person Required:

Disapprove

Send to Committee

Deadline:

Flow of Funds Chart



Priority of expenditures per Bond Order

1. Current Expenditures
2. Debt Service
3. Capital Reserve

Income Sources
 Trustee Funds
 Expenditures

— Flow of Funding

— Flow of Funding if required for emergency repairs or maintenance

Budget Resolution

**Resolution Adopting Preliminary and Sewer Use Charges
For The
Metropolitan Sewerage District
of Buncombe County, North Carolina
For the Fiscal Year July 1, 2018 Thru June 30, 2019**

WHEREAS, the Board of Directors has reviewed the Operations and Maintenance, Bond, Reserves, Construction Expenditures of the District, and the sources of revenue and allocations (uses) of expenditures for the 2018-2019 fiscal year; and

NOW, THEREFORE, BE IT RESOLVED:

1. The following amounts are hereby appropriated in the Revenue Fund for the Operations and Maintenance of the District and for transfers to the Debt Service, General Fund, and Insurance Funds for the fiscal year beginning July 1, 2018 and ending June 30, 2019:

Operating and Maintenance Expenses	\$ 12,949,616
Transfer to Insurance Accounts	\$ 3,313,447
Transfer to Fleet & Heavy Equipment Fund	\$ 500,000
Transfer to Wastewater Treatment Plant Fund	\$ 180,000
Transfer to Pump Stations Reserve	\$ 50,000
Transfer to General Fund	<u>\$ 5,000,000</u>
Subtotal O&M	\$ 21,993,063
Transfer to Debt Service Fund	<u>\$ 9,448,115</u>
	<u>\$ 31,441,178</u>

It is estimated that the following revenues will be available in the Revenue Fund for the fiscal year beginning July 1, 2018 and ending June 30, 2019:

Domestic User Fees	\$ 32,431,584
Industrial User Fees	\$ 3,422,373
Billing and Collection Fees	\$ 816,660
Investment Interest	\$ 764,965
Reimbursement for Debt Service from COA	\$ 35,000
Rental Income	\$ 71,641
Contribution to Net Position	<u>\$ (6,101,045)</u>
	<u>\$ 31,441,178</u>

2. The following amounts are hereby appropriated in the General Fund for the transfers to the Construction Fund for the fiscal year beginning July 1, 2018 and ending June 30, 2019:

Transfer into Construction	<u>\$ 16,000,000</u>
----------------------------	----------------------

Budget Resolution

It is estimated that the following revenues will be available in the General Fund for the fiscal year beginning July 1, 2018 and ending June 30, 2019:

Facility and Tap Fees	\$ 2,175,000
Transfer from the Revenue Fund	\$ 5,000,000
Investment Income	\$ 142,311
Appropriated Net Position	<u>\$ 8,682,689</u>
	<u>\$ 16,000,000</u>

3. The following amounts are hereby appropriated in the Construction Fund for Capital Improvement Plan expenditures for the fiscal year beginning July 1, 2018 and ending June 30, 2019.

Capital Improvements Projects	<u>\$ 23,492,718</u>
-------------------------------	----------------------

It is estimated that the following revenues will be available to the Construction Fund for the fiscal year beginning July 1, 2018 and ending June 30, 2019.

Investment Income	\$ 135,921
Transfer from General Fund	\$ 16,000,000
Appropriated Net Position	<u>\$ 7,356,797</u>
	<u>\$ 23,492,718</u>

4. The following amounts are presented as the financial plan of the Insurance Funds that are used to provide insurance services. Estimated operating expenditures for the fiscal year beginning July 1, 2018 and ending June 30, 2019 are:

Operating Expenditures	<u>\$ 3,925,538</u>
------------------------	---------------------

It is estimated that the following revenues will be available in the Insurance Funds for the fiscal year beginning July 1, 2018 and ending June 30, 2019:

Transfer from the Revenue Fund	\$ 3,313,447
Investment Income	\$ 28,000
Employee/Retirees Medical Contributions	\$ 421,467
Appropriated Net Position	<u>\$ 162,624</u>
	<u>\$ 3,925,538</u>

5. The following amounts are presented as the financial plan of the Fleet & Heavy Equipment Fund designated for capital equipment expenditures for the fiscal year beginning July 1, 2018 and ending June 30, 2019 estimated as follows:

Capital Equipment	<u>\$ 721,000</u>
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Budget Resolution

It is estimated that the following revenues will be available in the Fleet & Heavy Equipment Fund for the fiscal year beginning July 1, 2018 and ending June 30, 2019:

Transfer from the Revenue Fund	\$	500,000
Sale of Surplus Property	\$	72,100
Investment Income	\$	3,681
Appropriated Net Position	\$	<u>145,219</u>
	\$	<u>721,000</u>

6. The following amounts are presented as the financial plan of the Wastewater Treatment Plant Replacement Fund designated for wastewater treatment plant capital expenditures for the fiscal year beginning July 1, 2018 and ending June 30, 2019 estimated as follows:

Capital Equipment	\$	<u>160,000</u>
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It is estimated that the following revenues will be available in the Wastewater Treatment Plant Replacement Fund for the fiscal year beginning July 1, 2018 and ending June 30, 2019:

Transfer from the Revenue Fund	\$	180,000
Investment Income	\$	5,258
Transfer Out to Pump Station Replacement Fund	\$	(50,000)
Appropriated Net Position	\$	<u>24,742</u>
	\$	<u>160,000</u>

7. The following amounts are presented as the financial plan in the Pump Station Replacement Fund designated for pump capital expenditures for the fiscal year beginning July 1, 2018 and ending June 30, 2019 estimated as follows:

Capital Equipment	\$	<u>85,000</u>
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It is estimated that the following revenues will be available in the Pump Station Replacement Fund for the fiscal year beginning July 1, 2018 and ending June 30, 2019:

Transfer from the Revenue Fund	\$	50,000
Transfer from the Wastewater Replacement Fund	\$	50,000
Investment Income	\$	1,458
Contribution to Net Position	\$	<u>(16,480)</u>
	\$	<u>85,000</u>

Budget Resolution

8. The following amounts are hereby appropriated in the Debt Service Fund for principal and interest payments for the fiscal year beginning July 1, 2018 and ending June 30, 2019:

Debt Service	<u>\$ 9,448,115</u>
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It is estimated that the following revenues will be available in the Debt Service Fund for the fiscal year beginning July 1, 2018 and ending June 30, 2019:

Transfer from the Revenue Fund	\$ 9,448,115
Investment Income	\$ 1,000
Contribution to Net Position	<u>\$ (1,000)</u>
	<u>\$ 9,448,115</u>

9. That the Board of the Metropolitan Sewerage District does hereby approve an increase in the Budgets to the amount necessary to reflect any contributions to the Debt Service Reserve Fund or Capital Reserve Fund as determined by the Bond Trustee to be necessary to comply with covenants in the Bond Order.
10. The General Manager is hereby authorized to transfer appropriations as contained herein under the following conditions:
- He may transfer amounts without limitation between departments in a fund.
 - He may transfer any amounts within Debt Service and Reserve Funds designated as excess by the Trustee into another fund.
 - He may transfer up to 10% of Insurance Fund reserves to meet current year expenditures in excess of budget.
11. That the attached Schedule of Fees and Charges be adopted as effective July 1, 2018.
12. That this resolution shall be entered in the minutes of the District and within five (5) days after its adoption, copies thereof are ordered to be filed with the Finance and Budget Officer and Secretary of the Board as required by G.S. 159-13 (d).

Adopted this 16th day of May 2018

M. Jerry VeHaun, Chairman
Metropolitan Sewerage District of
Buncombe County, North Carolina

Attest:

Jackie W. Bryson
Secretary/Treasurer

Schedule of Rates, Fees, and Charges - FY2019

Effective July 1, 2018

	CURRENT FY18 RATE	PROPOSED FY19 RATE
Rate increase		2.5%
Average Monthly Sewer Charge (Without Billing Charges)	\$ 29.44	\$ 30.16
Average Monthly Sewer Charge (With 1/2 Billing Charges-COA example)	\$ 30.62	\$ 31.36
Collection Treatment Charge		
Residential & Commercial Volume Charges (per CCF) Inside	\$ 4.50	\$ 4.61
Industrial Volume Charges (per CCF) Inside	\$ 4.21	\$ 4.47
Industrial Surcharge for BOD (per lb., BOD >250 mg/l) Inside	\$ 0.314	\$ 0.307
Industrial Surcharge for TSS (per lb., TSS >250 mg/l) Inside	\$ 0.256	\$ 0.253
Residential & Commercial Volume Charges (per CCF) Outside	\$ 4.51	\$ 4.62
Industrial Volume Charges (per CCF) Outside	\$ 4.22	\$ 4.48
Industrial Surcharge for BOD (per lb., BOD >250 mg/l) Outside	\$ 0.314	\$ 0.307
Industrial Surcharge for TSS (per lb., TSS >250 mg/l) Outside	\$ 0.256	\$ 0.253
Base Meter/Maintenance Charge & Billing Fee		
5/8"	\$ 6.94	\$ 7.11
3/4"	\$ 10.10	\$ 10.35
1"	\$ 17.92	\$ 18.37
1 1/2"	\$ 41.01	\$ 42.04
2"	\$ 72.53	\$ 74.34
3"	\$ 160.85	\$ 164.87
4"	\$ 287.03	\$ 294.21
6"	\$ 646.60	\$ 662.77
8"	\$ 1,148.12	\$ 1,176.82
10"	\$ 1,797.89	\$ 1,842.84
Billing Fee (per bill)	\$ 2.36	\$ 2.40
Sewer System Development Fees		
This impact fee is for allotted capacity in the treatment and transmission system. A differential fee will be charged for increases to an existing meter size.		
Residential		
Per Unit (single family detached and mobile home)	\$ 2,500.00	\$ 2,836.00
Multifamily Unit	\$ 2,500.00	\$ 1,900.00
Affordable Housing	\$ 670.00	\$ 670.00

Schedule of Rates, Fees, and Charges - FY2019

Effective July 1, 2018

continued

	CURRENT FY18 RATE	PROPOSED FY19 RATE
Sewer System Development Fees (continued)		
Nonresidential		
5/8"	\$ 2,500.00	\$ 2,836.00
3/4"	\$ 2,830.00	\$ 4,254.00
1"	\$ 5,560.00	\$ 7,090.00
1 1/2"	\$ 11,350.00	\$ 14,180.00
2"	\$ 20,000.00	\$ 22,688.00
3"	\$ 45,000.00	\$ 45,376.00
4"	\$ 87,500.00	\$ 70,900.00
6"	\$ 225,400.00	\$ 141,800.00
8"	\$ 237,500.00	\$ 226,800.00
10"	\$ -	\$ 595,560.00
12"	\$ -	\$ 751,540.00
Additions < 1,400 GPD	\$ 870.00	\$ 870.00
Additions over 1,400 GPD	Based on flow	Based on flow
Sewer Connection Fees**		
This fee is to provide new or re-establish existing service connections to the MSD system.		
Sewer Connection by MSD	\$ 650.00	\$ 1,300.00
Pavement Disturbance and Boring Fee	\$ 2,200.00	\$ 2,300.00
Inspection Fee for Developer (or Utility Contractor) Installed Sewer Connection	\$ 140.00	\$ 140.00
<p>**The Sewer Connection Fee will apply to all new construction, as well as existing structures which have been demolished/rebuilt and sewer service is reinstated under new property ownership. MSD reserves the right to require that a licensed utility contractor install any sewer connection/service line. Sewer service lines within public rights-of-way between 75 and 300 feet shall be constructed by a licensed utility contractor to MSD Standards. All work will be subject to MSD inspection.</p>		
Manhole Installation/Replacement		
Cost per foot	\$ 250.00	\$ 250.00
Pavement replacement (if required)	\$ 1,800.00	\$ 1,800.00

Schedule of Rates, Fees, and Charges - FY2019

Effective July 1, 2018

continued

	CURRENT FY18 RATE	PROPOSED FY19 RATE
Other Fees		
Allocation Fee	\$ 170.00	\$ 170.00
Non-Discharge Permit	\$ 200.00	\$ 200.00
Plan Review Fee	\$ 450.00	\$ 450.00
Plan re-review Fee	\$ 350.00	\$ 350.00
Final Inspection	\$ 350.00	\$ 350.00
Pump Station Acceptance Fee	Note 1	Note 1
Note 1—See policy for details of computation of O&M and equipment replacement costs for upcoming 20 years; 50% discount for affordable housing		
Bulk Charges		
Volume Charge for Septic Haulers (per 1,000 Gal.)	\$ 45.00	\$ 45.00
Biochemical Oxygen Demand >250 mg/l (per lb.)	\$ 0.314	\$ 0.307
Total Suspended Solids >250 mg/l (per lb.)	\$ 0.256	\$ 0.253
Returned Check Charge		
Returned Check (per event)	\$ 25.00	\$ 25.00
Dishonored Draft (per event)	\$ 25.00	\$ 25.00
Copy/Printing Fees/Miscellaneous (each)		
8x11 first print of standard GIS inquiry	\$ 1.00	\$ 1.00
8x14 first print of standard GIS inquiry	\$ 1.00	\$ 1.00
11x17 first print of standard GIS inquiry	\$ 2.00	\$ 2.00
24x36 first print of standard GIS inquiry	\$ 7.00	\$ 7.00
34x44 first print of standard GIS inquiry	\$ 12.00	\$ 12.00
36x48 first print of standard GIS inquiry	\$ 14.00	\$ 14.00
8x11 or 8x14 copies after first print	\$ 0.11	\$ 0.11
11x17 copies after first print	\$ 0.20	\$ 0.20
24x36 copies after first print	\$ 0.94	\$ 0.94
34x44 copies after first print	\$ 1.76	\$ 1.76
36x48 copies after first print	\$ 2.03	\$ 2.03
Foam Core mounting per sq. foot	\$ 3.00	\$ 3.00
Data CD	\$ 30.00	\$ 30.00
Shipping for CD	\$ 5.00	\$ 5.00
Permit Decals for Septic Haulers	\$ 50.00	\$ 50.00

STATUS REPORTS

MSD System Services In-House Construction

FY 17-18 PROJECTS

PROJECT NAME	LOCATION	ZIP CODE	ESTIMATED FOOTAGE	ESTIMATED PROJECT DATES	WO#	CREW	COMPLETION DATE	ACTUAL FOOTAGE	NOTES
11 Greenbriar Emergency Repair	Asheville	TBA	50	7/1/17 - 7/10/17	244238	632	7/7/2017	52	complete
Sycamore Drive @ Walnut Street (Phase 2)	Arden	28704	290	7/1/17 - 7/31/17	244350	631	7/14/2017	291	complete
Windsor Road @ Beaverbrook Road	North Asheville	28804	726	7/8/17-7/31/17	228305	632	7/31/2017	725	complete
Nebraska Street Emergency Rehabilitation (Ph. 1)	W. Asheville	28806	415	8/1/17 - 9/1/17	240563	631	8/10/2017	414	complete
Celia Place at Bond Street (Rework)	N. Asheville	28801	250	8/1/17 - 8/11/17	244891	632	8/10/2017	80	complete
Windsor Road @ Beaverbrook Road (Ph. 2)	North Asheville	28804	125	8/14/17 - 9/1/17	244938	632	8/17/2017	124	complete
Sycamore Drive @ Walnut Street (Phase 3)	Arden	28704	494	8/11/17 - 9/1/17	245100	631	8/30/2017	479	complete
185 Mississippi Road	Montreat	28757	143	9/2/15 - 9/5/17	245783	632	9/5/2017	143	complete
Cedar Lane @ Oak Terrace	Arden	28704	1000	9/1/17 - 10/2/17	237374	631	9/28/2017	1001	complete
Penelope Street @ W. Cotton Ave	Black Mountain	28711	700	9/2/17 - 10/2/17	222331	632	9/29/2017	741	complete
Raliegh Avenue @ Marietta Street	Asheville	28803	655	10/2/17 - 11/1/17	237100	631	10/31/2017	746	complete
Manila Street	Asheville	28806	650	10/2/17-11/10/17	246373	632	11/10/2017	654	complete
44 Forsythe St	Asheville	28801	350	11/2/17 - 11/30/17	237035	631	11/17/2017	344	complete
School Road at Woodland (Ph. 1)	W. Asheville	28806	350	11/13/17 - 12/13/17	224993	632	11/29/2017	319	complete
School Road at Woodland (Ph. 2)	W. Asheville	28806	150	11/13/17 - 12/13/17	224993	632	11/29/2017	154	complete
Wilson Avenue at Grovemont Avenue	Swannanoa	28778	1480	12/1/17 - 1/3/18	247244	631	12/18/2017	1491	complete
Buchanan Ave Ph. 1 Sewer Rehabilitation	Asheville	28801	340	12/4/17 - 12/31/17	247996	632	12/19/2017	206	complete
209 Cane Creek Road Sewer Replacement	Fletcher	28732	337	12/28/17 - 1/12/18	232970	632	1/9/2018	348	complete
149 Weston Rd	Arden	28704	210	12/28/17 - 1/12/18	225004	631	1/10/2018	188	complete
Carlyle Way @ Sweeten Creek Rd	South Asheville	28803	100	1/13/18 - 1/23/18	248915	TBA	1/23/2018	79	complete
Fairfax Avenue	Asheville	28806	208	1/15/18 - 1/31/18	246376	632	1/26/2018	231	complete
100 Airport Road	Arden	28704	150	1/24/18 - 1/29/18	248988	631	1/29/2018	146	complete
Laurel Road Phase 2A	Arden	28704	1496	1/30/18 - 2/23/18	248227	631	2/19/2018	417	complete
Roberts Street	Asheville	28801	311	2/1/18 - 2/23/18	246375	632	2/21/2018	308	complete
4 Westview Ave	Asheville - Oakley	28803	740	2/26/18 - 3/16/18	238683	632	3/16/2018	775	complete
Asheville Country Club Phase 1C	North Asheville	28804	1210	2/26/18 - 3/30/18	237431	631	3/28/2018	1315	complete
Sunset Dr. @ Vance Drive	Black Mountain	28711	1010	3/18/18 - 3/30/18	237499	632	3/26/2018	950	complete
169 Windsor Avenue Sewer Rehabilitation	Asheville	28804	650	4/2/18 - 4/20/18	240566	631	4/24/2018	670	complete
Governors View Road @ Bull Mountain Road	Asheville	28805	785	4/2/18 - 5/16/18	238394	632	4/26/2018	1020	complete
Royal Pines @ Oak Terrace	Arden	28704	1000	4/25/18 - 5/18/18	237372	631			construction underway
Waynesville Avenue Sewer Rehabilitation	Asheville	28806	2047	4/27/18 - 6/15/18	251622	632			construction underway
Royal Pines Drive at Mount Royal Drive	Arden	28704	1000	5/21/18 -6/22/18	247812	631			Ready for Construction
Williamette Circle Sanitary Sewer Rehabilitation	Weaverville	28787	183	FY17-18	233748	TBA			ready for construction
Charlotte Street @ N Ridgeway Avenue	Black Mountain	28711	1073	FY17-18	232699	TBA			ready for construction



CONSTRUCTION TOTALS BY DATE COMPLETED - Monthly

From 7/1/2017 to 3/31/2018

	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 2017	34	3	148	1,187	28	28	10,760	0	8	632	11	436	1076
August 2017	41	12	280	1,174	21	31	6,251	0	148	618	8	399	1165
September 2017	36	6	169	685	25	18	688	0	151	741	10	1,001	1893
October 2017	29	6	87	1,184	37	32	60	314	71	18	6	728	1131
November 2017	38	9	301	773	27	39	10,310	0	8	1043	13	428	1479
December 2017	22	9	120	879	31	26	10	0	432	8	6	1,697	2137
January 2018	36	11	131	859	21	19	541	0	194	992	7	0	1186
February 2018	33	17	400	1,033	17	35	240	0	70	402	8	323	795
March 2018	35	13	64	1,017	26	29	600	0	16	2418	14	622	3056
Grand Totals	304	86	1,699	8,791	233	257	29,460	314	1098	6872	83	5,634	13918

* Used to calculate Total Rehab Footage



PIPELINE MAINTENANCE TOTALS BY DATE COMPLETED - Monthly

July 01, 2017 to March 31, 2018

	Main Line Wash Footage	Service Line Wash Footage	Rod Line Footage	Cleaned Footage	CCTV Footage	Smoke Footage	SL-RAT Footage
2017							
July	98,213	1,440	4,785	102,998	24,704	5,840	3,104
August	96,254	1,640	11,382	107,636	16,351	5,000	12,283
September	101,162	932	10,615	111,777	21,245	2,975	8,303
October	110,273	1,822	4,063	114,336	30,290	9,189	11,470
November	111,848	1,741	9,682	121,530	27,909	4,106	13,927
December	73,143	1,985	5,846	78,989	21,444	2,500	18,487
2018							
January	54,306	2,847	5,488	59,794	26,202	1,100	15,660
February	65,931	2,730	7,335	73,266	28,138	500	6,068
March	77,539	3,991	1,735	79,274	23,245	500	0
Grand Total:	788,669	19,128	60,931	849,600	219,528	31,710	89,302
Avg Per Month:	87,630	2,125	6,770	94,400	24,392	3,523	9,922



CUSTOMER SERVICE REQUESTS

Monthly - All Crews

CREW	MONTH	JOBS	AVERAGE RESPONSE TIME	AVERAGE TIME SPENT
DAY 1ST RESPONDER				
	July, 2017	93	32	31
	August, 2017	97	27	38
	September, 2017	104	33	50
	October, 2017	107	25	37
	November, 2017	110	23	35
	December, 2017	95	28	30
	January, 2018	137	26	30
	February, 2018	132	22	41
	March, 2018	125	28	41
		1,000	27	37
NIGHT 1ST RESPONDER				
	July, 2017	16	29	31
	August, 2017	8	16	60
	September, 2017	18	24	40
	October, 2017	20	23	35
	November, 2017	21	11	18
	December, 2017	16	18	33
	January, 2018	30	26	26
	February, 2018	28	32	39
	March, 2018	19	22	23
		176	23	32
ON-CALL CREW *				
	July, 2017	41	47	31
	August, 2017	31	41	57
	September, 2017	29	36	45
	October, 2017	48	51	35
	November, 2017	45	43	39
	December, 2017	70	50	37
	January, 2018	55	48	32
	February, 2018	53	47	43

* On-Call Crew Hours: 8:00pm-7:30am Monday-Friday, Weekends, and Holidays



CUSTOMER SERVICE REQUESTS Monthly - All Crews

CREW	MONTH	JOBS	AVERAGE RESPONSE TIME	AVERAGE TIME SPENT
ON-CALL CREW *				
	March, 2018	55	56	53
		427	48	41
Grand Totals:		1,603	32	37

* On-Call Crew Hours: 8:00pm-7:30am Monday-Friday, Weekends, and Holidays

CAPITAL IMPROVEMENT PROGRAM

STATUS REPORT SUMMARY

May 9, 2018

PROJECT	LOCATION OF PROJECT	CONTRACTOR	AWARD DATE	NOTICE TO PROCEED	ESTIMATED COMPLETION DATE	*CONTRACT AMOUNT	*COMPLETION STATUS (WORK)	COMMENTS
ELKWOOD AVENUE	Woodfin	Thomas Construction Company	9/20/2017	11/6/2017	7/13/2018	\$1,215,002.00	55%	Final re-paving for the northern section of Elkwood Avenue being scheduled. Work beginning on southern section of project.
HENDERSONVILLE ROAD @ BLAKE DRIVE	Arden	Terry Brothers Construction Company	12/20/2017	1/2/2018	6/1/2018	\$164,152.00	99%	Contractor is working on minor punchlist items.
HENDERSONVILLE ROAD @ PEACHTREE ROAD	Asheville 28803	Terry Brothers Construction Company	8/16/2017	9/25/2017	6/1/2018	\$426,062.00	90%	Final paving complete. Final Inspection to be scheduled.
HENDERSONVILLE ROAD @ ROSSCRAGGON DRIVE, PHASE 2	Arden	Terry Brothers Construction Company	1/17/2018	4/16/2018	9/13/2018	\$1,258,010.80	10%	Pipebursting on upper end of project.
JONESTOWN ROAD	Woodfin	Terry Brothers Construction Company	1/17/2018	2/12/2018	6/12/2018	\$725,002.10	90%	Waiting on final paving.
MOUNTAIN VIEW ROAD	Asheville 28805	Thomas Construction Company	2/21/2018	4/2/2018	7/31/2018	\$490,112.00	25%	Construction is progressing well.
PATTON HILL ROAD (4-INCH MAIN)	Swannanoa	Fuller & Company Construction	4/18/2018	TBA	TBA	\$227,415.11	0%	A preconstruction meeting is scheduled for May 10th.
POINT REPAIR CONTRACT NO. 2	Various	Patton Construction Group	7/19/2017	8/14/2017	6/30/2018	\$215,610.00	83%	Contractor has completed 13 point repairs.
SCHOOL ROAD @ CRANFORD ROAD	Asheville 28806	Fuller & Company Construction	4/18/2018	TBA	TBA	\$116,949.44	0%	A preconstruction meeting is scheduled for May 10th.
SHEPPARD DRIVE	Asheville 28806	Fuller & Company Construction	4/18/2018	TBA	TBA	\$156,251.79	0%	A preconstruction meeting is scheduled for May 10th.
SOUTH FRENCH BROAD INTERCEPTOR LINING (FY 17-18)	Biltmore Estate	Insituform Technologies	10/18/2017	1/2/2018	6/1/2018	\$1,171,314.00	99%	Work is complete; Reviewing test results on the lining.
SUTTON AVENUE	Black Mountain	Terry Brothers Construction Company	11/15/2017	1/15/2018	6/1/2018	\$1,076,986.00	80%	Pipe installation is complete. Final paving and sidewalk repair yet to be done.
WRF - PLANT HEADWORKS IMPROVEMENTS	Woodfin	Judy Construction Company	1/18/2017	4/3/2017	2/25/2019	\$9,269,323.87	60%	Operating floor slab pored in surge pump station, awaiting pump installation; pista grit structure pored May 10th. North bar screen in place and pit rehabbed. Start up expected May 15th. Thickener overflow drain re-routed. Submittals completed on electrical substation.

*Updated to reflect approved Change Orders and Time Extensions

Planning & Development Project Status Report

Active Construction Projects Sorted by Work Location and Project Number

May 2, 2018

#	Project Name	Project Number	Work Location	Zip Code	Units	LF	Pre-Construction Conference Date	Comments
1	Dillingham Woods	2014048	Asheville	28805	22	375	3/4/2015	Installing
2	First Baptist Relocation	2015032	Asheville	28801	Comm.	333	7/21/2015	Final Inspection complete, awaiting close-out docs
3	Ascot Point Apartments Phase 3	2015114	Asheville	28803	104	213	9/9/2016	Punchlist pending, awaiting closeout documents
4	8 Sulphur Springs Road	2015116	Asheville	28806	6	80	11/22/2016	Final Inspection complete, awaiting close-out docs
5	Hampton Inn & Suites	2015144	Asheville	28806	Comm.	286	11/8/2016	Waiting on final inspection
6	340 Emma Road	2015216	Asheville	28806	8	138	12/15/2017	Final Inspection complete, awaiting close-out docs
7	Atkins Street	2016009	Asheville	28803	45	903	1/20/2017	Waiting on final inspection
8	88 Southside Avenue	2016015	Asheville	28801	18	400	2/21/2017	Waiting on final inspection
9	Hounds Ear (Mears Ave Cottages)	2016123	Asheville	28806	18	402	8/18/2017	Pre-con held, construction not yet started
10	Lausch Subdivision	2016153	Asheville	28805	4	248	5/16/2017	Waiting on final inspection
11	Hawthorne at Mills Gap	2016222	Asheville	28803	272	442	10/3/2017	Waiting on final inspection
12	Ashecroft	2016229	Asheville	28806	40	2,450	2/20/2018	Installing
13	Grindstaff Subdivision	2016246	Asheville	28805	4	132	6/23/2017	Final Inspection complete, awaiting close-out docs
14	Onteora	2017002	Asheville	28803	6	417	7/18/2017	Waiting on final inspection
15	Gerber Road Storage	2017049	Asheville	28803	Comm.	156	2/9/2018	Waiting on final inspection
16	RADTIP	2017052	Asheville	28801	0	919	2/13/2018	Installing
17	Cedar Street	2017063	Asheville	28803	6	196	2/22/2018	Final Inspection complete, awaiting close-out docs
18	Panda Express	2017080	Asheville	28805	Comm.	100	9/8/2017	Awaiting As-Built Drawing
19	42 Old County Home Road	2017109	Asheville	28805	5	198	3/29/2018	Pre-con held, construction not yet started
20	Villa Heights	2017118	Asheville	28806	8	540	2/20/2018	Pre-con held, construction not yet started
21	Westover Hills	2017177	Asheville	28801	1	105	10/6/2017	Final Inspection complete, awaiting close-out docs
22	Ingles Smokey Park Highway	2018074	Asheville	28806	1	1,289	4/11/2014	New plans under review
23	West Keesler Avenue	2007176	Black Mountain	28711	6	410	11/15/2016	Final Inspection complete, awaiting close-out docs
24	808 Montreat Road	2015126	Black Mountain	28711	4	371	4/18/2017	Testing
25	Tudor Croft (aka Roberts Farm) Ph.2	2016170	Black Mountain	28711	46	1,320	1/3/2017	Phase 2A inspected, waiting on closeout docs
26	Swannanoa Valley Christian Min.	2017043	Black Mountain	28711	12	195	8/1/2017	Final Inspection complete, awaiting close-out docs
27	Cherokee Trail	2017065	Black Mountain	28711	4	90	8/18/2017	Final Inspection complete, awaiting close-out docs
28	Peregrine's Ridge	2006160	Buncombe Co.	28730	14	635	11/8/2016	Final Inspection complete, awaiting close-out docs
29	Hyde Park Phase 2	2013058	Buncombe Co.	28704	14	500	12/3/2013	Waiting on final inspection
30	Creekside Cottages	2014095	Buncombe Co.	28704	7	504	3/12/2015	Waiting on final inspection
31	Glenn Bridge Road	2014157	Buncombe Co.	28704	30	1,400	1/20/2017	Waiting on final inspection
32	Avondale Subdivision	2015052	Buncombe Co.	28803	4	215	4/7/2017	Final Inspection complete, awaiting close-out docs
33	Greymont Apartments	2015108	Buncombe Co.	28806	312	3,193	5/17/2016	Final Inspection complete, awaiting close-out docs
34	Liberty Oaks Ph. 1A	2015157	Buncombe Co.	28715	125	705	1/17/2017	Final Inspection complete, awaiting close-out docs
35	Bee Tree Village	2015158	Buncombe Co.	28778	26	1,118	3/17/2017	Waiting on final inspection
36	Skyland Exchange	2015217	Buncombe Co.	28704	292	1,090	2/7/2017	Waiting on final inspection
37	Newbridge Pkwy Apts. Phase II	2016013	Buncombe Co.	28804	154	1,368	10/27/2017	Waiting on testing
38	Weatherwood Subdivision	2016034	Buncombe Co.	28704	19	785	7/21/2017	Installing
39	Long Shoals Apts.	2016070	Buncombe Co.	28704	475	930	7/10/2017	Waiting on final inspection
40	Perry Lane Apartments	2016075	Buncombe Co.	28704	120	710	11/7/2017	Waiting on final inspection
41	The Preserve at Avery's Creek	2016089	Buncombe Co.	28704	141	4,000	6/16/2017	Installing
42	New Salem Heights	2016192	Buncombe Co.	28778	25	816	2/13/2018	Pre-con held, construction not yet started
43	Biltmore Lake Block I, Phase 3	2016234	Buncombe Co.	28803	23	1,887	5/23/2017	Waiting on final inspection
44	The Ramble Block F, Phase 1	2017038	Buncombe Co.	28803	34	3,845	11/3/2017	Testing
45	South Cliff Village	2017041	Buncombe Co.	28730	34	1,345	9/1/2017	Testing
46	Curry Court - Habitat	2017086	Buncombe Co.	28715	12	557	4/13/2018	Installing
47	240 Old Farm School Road	2017112	Buncombe Co.	28805	4	340	2/9/2018	Installing
48	Baldwin Road Subdivision	2017138	Buncombe Co.	28704	68	1,740	3/28/2018	Installing
49	NC DOT I-5504 NC 191/I-26 Interchange	2016132	Buncombe Co.	28806	0	355	10/23/2017	Installing
50	Rosscraggon Road Subdivision	2018048	Buncombe Co.	28704	4	370	4/20/2018	Installing
51	Greenwood Park Phase I	2014067	Weaverville	28787	7	283	9/1/2015	Final Inspection complete, awaiting close-out docs
52	Creekside Village Phases III, IV, & V	2015167	Weaverville	28787	45	1,835	1/17/2017	Final Inspection complete, awaiting close-out docs
53	New Homes at North Main (Crittter)	2016052	Weaverville	28787	54	1,808	2/10/2017	Final Inspection complete, awaiting close-out docs
54	Starview Heights	2016184	Weaverville	28787	16	Private	1/12/2018	Installing
55	Maple Trace Phase 3	2016245	Weaverville	28787	24	1,260	5/2/2017	Final Inspection complete, awaiting close-out docs
56	Wheeler Road	2017019	Weaverville	28787	72	1,535	3/28/2018	Installing
57	Mattera Subdivision	2017023	Weaverville	28787	6	264	11/3/2017	Final Inspection complete, awaiting close-out docs
58	Lake Louise	2017104	Weaverville	28787	4	80	12/15/2017	Waiting on final inspection
59	44 Central Ave	2017107	Weaverville	28787	7	275	10/27/2017	Testing
60	Lakeshore Drive	2017137	Weaverville	28787	4	70	10/27/2017	Installing
61	Maple Trace Phase 2	2017160	Weaverville	28787	37	2,560	3/27/2018	Installing
62	Crest Mountain Phase 3B	2013041	Woodfin	28806	69	1,329	10/15/2013	Punchlist pending, awaiting closeout documents
63	Reese & Jan Lasher (High Hopes)	2015152	Woodfin	28806	14	320	4/26/2016	Final Inspection complete, awaiting close-out docs
64	Ventana Phase 2A	2016059	Woodfin	28806	8	900	2/17/2017	Final Inspection complete, awaiting close-out docs
65	Olivette Development-Phase I Gravity	2016065	Woodfin	28804	356	1,155	3/29/2018	Installing
66	West Skyland Circle	2016083	Woodfin	28806	4	280	8/15/2017	Final Inspection complete, awaiting close-out docs
67	Skyfin	2016205	Woodfin	28806	40	978	8/8/2017	Waiting on final inspection
68	Olivette Pump Station/Force Main	2016213	Woodfin	28804	356	1,740	2/27/2018	Pump station not started, Pilot bore under river
69	Greenwood Fields Phase 2	2018006	Woodfin	28804	158	2,200	3/9/2018	Installing
			TOTAL			3,836	59,613	