BOARD OF THE METROPOLITAN SEWERAGE DISTRICT February 20, 2019

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 2pm Wednesday, February 20, 2019. Chairman VeHaun presided with the following members present: Ashley, Bryson, Holland, Kelly, Manheimer, Pelly, Pressley, Valois, Watts, Whitesides and Wisler.

Others present were: Thomas E. Hartye, PE, General Manager; William Clarke, General Counsel; Forrest Westall with McGill Associates; Joseph Martin with Woodfin Sanitary Water & Sewer District; Ed Bradford, Mike Stamey, Peter Weed, Roger Edwards, Scott Powell, Jim Hemphill, Ken Stines, Spencer Nay and Pam Nolan, MSD.

2. Inquiry as to Conflict of Interest:

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

3. Approval of Minutes of the January 16, 2019 Board Meeting:

Mr. VeHaun asked if there were any changes to the Minutes of the January 16, 2019 Board Meeting. Mr. Watts moved for approval of the minutes as presented. Mr. Pressley 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 Mr. Martin with Woodfin Sanitary Water and Sewer District. There was no discussion or public comment.

6. Report of General Manager:

Mr. Hartye gave an update on the plant bypass and new treatment system. He reported that this may have been one of the busiest two weeks in the last 20 years. He presented slides and explained the emergency by-pass system, which by-passes entire front of the plant to allow for the critical tie-ins to be made. During the process of getting ready to start the by-pass pumps yesterday, the Contractor dug down to inspect the connection and there was a leak. The by-pass had to be started immediately but luckily they missed the worst of the rain and everything worked out well. He stated that he would go into more detail next month.

Mr. Hartye reported that during one of System Services periodic inspections of the interceptors along the river, one of the employees discovered a joint nearly opened up but it had not yet started leaking. This was

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> an emergency situation that required pumps to be set up. He presented slides of the interceptors and the work performed to repair the problem. He explained that these are 2 twin interceptors, one an older 36" line, along the Swannanoa River. These lines were immediately adjacent to the retaining wall supporting the railroad tracks. Engineering employees surveyed the line and Mr. Bradford designed a strong back of two beams. Mr. Hartye thanked Ken Stines and his crew and Ed Bradford and Engineering for their quick reaction. Mike Stamey was also very instrumental in making this whole project work by getting up with the Norfolk Southern track supervisor and Duke Power to make them understand what we were contending with. Norfolk Southern basically shut down the closest series of tracks so that a crane could be brought in and the beams could be placed. Duke Power had to shut off the lower transmission lines. The beams were then welded together, and the joints of the failing interceptor were chained so they won't fall any further. The piers supporting the sewer lines have been washed away by the river and this is a temporary repair to keep it from failing and getting into the river. It will still need to be lined on the inside now that it is secure. The ultimate goal somewhere in the future is to replace both lines with one 60" line. Mr. Hartye again thanked Ed Bradford, Ken Stines and Mike Stamey and their Staff. He stated that luckily the employee saw it before it became a gusher in the middle of the river. Mr. VeHaun asked how much the temporary repair cost. Mr. Bradford stated that it was about \$80,000.00. This included the contractor, beams and mobilizing the crane. Mr. Hartye added that Ken's folks cost about another \$40,000.00 and that there will still be more spent on lining (approximately \$140,000.00), the interceptor until it can be replaced. Total repair at about ¼ million.

> Mr. Hartye thanked Lisa Tolley and Angel McCrain for running the MSD Booths to provide information and education at the Build and Remodel Expo (which saw approximately 4,000 people).

Mr. Hartye reported that RL Ellinburg of Black Mountain called to express his appreciation for the service provided by Grady Brooks who was courteous, helpful and did a wonderful job.

Mr. Hartye reported that Steve Heflin at 6 Imperial Court called to say that he was impressed with Pete Cole and Wayne Rice and their quick response time and how helpful they were.

Mr. Hartye thanked Roger Edwards for heading up the plant tours this year even amidst the extensive construction at the plant. Attached is a list of tours and number of attendees for this year which was very aggressive, about 620 attendees.

Mr. Hartye reported that attached is an article in the ACT regarding brewery waste and the impacts that it may have on public treatment works. The article was a bit confusing as it kept switching back and forth between MSD and Brevard and our experiences are quite a bit different. What was not

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mentioned was that MSD has a pretreatment group that manages all the significant industrial waste and has met frequently with the Brewers Alliance to educate them on how to mitigate waste impacts by side-stream separation, disposal, etc. MSD allowed New Belgium to temporarily discharge under certain permitted conditions while they constructed their pretreatment system. The larger breweries need to pretreat at their campus before they discharge to MSD. This was a win-win that was worked out with them. It was a very heavy financial outlay at the very beginning and they wanted a couple of years to put it on line. MSD had available capacity and allowed them to discharge a little higher strength waste on a temporary basis with permit limits and conditions. Just the extra strength portion over about 2 ½ years was about \$835,000.00 that MSD received from New Belgium which helps a lot for the improvements being done at the plant. MSD has regained that capacity now that New Belgium's pretreatment is on line.

Mr. Hartye reported the next Regular Board Meeting will be held on March 20, 2019 at 2 pm. The next Right of Way Committee meeting will be held on March 27, 2019 at 9 am.

7. Consolidated Motion Agenda:

a. Consideration of Bids: Long Shoals Road @ Allen Avenue Sanitary Sewer Rehabilitation Project:

Mr. Hartye reported that this project is in South Asheville near Long Shoals Road and Hendersonville Road and abuts the TC Roberson High School property. The line is in poor structural condition. Portions of the line have already been rehabilitated so this is a very small contract consisting of 458 LF. The contract was advertised and five bids were received on January 31, 2019 as follows: Thomas Construction Company in the amount of \$222,798.00; North American Pipeline Management in the amount of \$135,420.00; Buckeye Bridge LLC in the amount of \$135,322.00; Terry Brothers Construction Company in the amount of \$128,310.00 and Teraflex Group LLC in the amount of \$112,321.00. The apparent low bidder is Teraflex Group LLC with a bid amount of \$112,321.00. Teraflex has not previously done work for the District. Staff checked their references and they were very complimentary. The FY18-19 Construction Budget for this project is \$184,000.00. Staff recommends award of this contract to Teraflex Group LLC in the amount of \$112,321.00, subject to review and approval by District Counsel.

b. Consideration of Cost Participation: 17 North Market Street Development:

Mr. Hartye reported that this project is located in downtown Asheville between North Market Street and Langren Alley. It is a retrofit of an existing building with 16 new condominiums. The MSD line in Langren Alley which serves this project was previously identified as a Capital Improvement Project due to the condition of the old 6-inch clay line. MSD

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> staff has evaluated the project under our cost participation and there is an attached worksheet reflecting that they are eligible for 100% reimbursement. The cost estimate based on current bid pricing for MSD projects of similar scope is \$86,685.37. If the timing of it should be that they could finish before July 1, 2019, the funds will come out of CIP Contingency for this year. Should the actual timing of the project result in reimbursement likely to occur in FY 19-20, this reimbursement will be formally budgeted for next fiscal year. This item will be brought back before the Board for approval of actual cost upon completion. Ms. Manheimer asked if this would be a conflict of interest for her since it is located next to her law firm. Mr. Clarke stated that he did not believe it was a conflict. Staff recommends that the Board approve a reimbursement of \$86,685.37 to Spectrum Building Company Inc., contingent upon full completion of the sewer rehabilitation portion of their project. No payment shall be issued until the sewer is installed to MSD Standards and Specifications, all final paperwork is received including any easement conveyance, and the system is fully accepted by this Board.

c. Consideration of Developer Constructed Sewer Systems: Cisco Road Homes; Asheville Habitat – Curry Court (Affordable Housing Reimbursement); 605 Fairview Road; Grindstaff Subdivision; Maple Trace Phase 2; Villa Heights:

Mr. Hartye reported that the Cisco Road Homes project is located in the City of Asheville and consisted of extending approximately 168 linear feet of 8-inch public gravity sewer to serve a 7-lot single family residential development.

Mr. Hartye reported that the Asheville Habitat – Curry Court (Affordable Housing Reimbursement) project consisted of extending approximately 554 linear feet of 8-inch public gravity sewer to serve the 12-unit affordable housing development. This project also qualifies for the District's Cost Recovery Reimbursement for the lesser value of either the construction of the sewer extension or five years' estimated revenue. Attached is the calculation of the estimated five years' revenue. The estimated revenue is \$14,656.00. Staff recommends acceptance of this developer constructed sewer system and to authorize General Manager to disburse \$14,656.00 to Asheville Area Habitat for Humanity, Inc.

Mr. Hartye reported that the 605 Fairview Road project included extending approximately 362 linear feet of 8-inch public gravity sewer to serve the 6-lot single family residential development.

Mr. Hartye reported that the Grindstaff Subdivision project included extending approximately 110 linear feet of 8-inch public gravity sewer to serve the 5-lot single family residential development.

Mr. Hartye reported that the Maple Trace Phase 2 project is located in the Town of Weaverville and included extending approximately 2,560 Minutes February 20, 2019 Page Five

linear feet of 8-inch public gravity sewer to serve the 37-lot single family residential development.

Mr. Hartye reported that the Villa Heights project is located in the City of Asheville and included extending approximately 548 linear feet of 8-inch public gravity sewer to serve the 8-lot single family residential.

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

d. Second Quarter Budget to Actual FY19:

Mr. Powell reported that Page 42 presents the District's Second Quarter Budget to Actual Review and Expenditure Report. Domestic Revenue is at budget expectations. Industrial Revenue is trending better than budgeted expectations due to a temporary increase in revenue from one industrial user. Facility and Tap Fees are above budgeted expectations due to receiving approximately \$1.2 million from two developers. Interest and miscellaneous income are above budgeted expectations due to actual short-term interest rates being better than anticipated for the fiscal year. O&M expenditures are at 51% of budget. They include encumbered amounts. These amounts will be spent in future periods. encumbrances as of the end of the second quarter were approximately \$700,000.00. Bond principal and interest expenditures are reflected at 50%. This will aid the user to properly assess debt service commitments on a budgetary perspective. Actual amount spent as of the end of the second quarter is approximately 21.54%. This is due to the timing of the District's debt service payments. Amounts budgeted for capital equipment and capital projects are rarely expended proportionately throughout the year. Due to the timing of capital projects, these amounts are considered reasonable.

e. Cash Commitment/Investment Report Month ended December 2018:

Mr. Powell reported that Page 46 presents the makeup of the District's Investment Portfolio. There has been no significant change in the makeup of the portfolio from the prior month. Page 47 presents the MSD investment managers report for the month of December. The weighted average maturity of the investment portfolio is 196 days. The yield to maturity is 2.42% and is exceeding our bench marks of the NCCMT portfolio. Page 50 presents the MSD Variable Debt Service report. The 2008A Series is performing at budgeted expectations. As of the end of January this issue has saved the District rate payers approximately \$5.8 million in debt service since April of 2008.

With no further discussion, Mr. VeHaun called for a motion to approve the Consolidated Motion Agenda. Mr. Pelly moved. Mr. Whitesides seconded the motion. Roll call vote was as follows: 12 Ayes; 0 Nays. Minutes February 20, 2019 Page Six

8. Old Business:

None.

9. New Business:

None.

10. Adjournment:

With no further business, Mr. VeHaun called for adjournment at 2:26 pm.

Jackie W. Bryson, Secretary/Treasurer

MSD

Regular Board Meeting

Metropolitan Sewerage District of Buncombe County, NC

AGENDA FOR 2/20/19

_		, ,	, , , , , , , , , , , , , , , , , , , ,
✓	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 January 16, 2019 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. Consolidated Motion Agenda	Hartye	2:40
	a. Consideration of Bids: Long Shoals Road @ Allen Avenue	Hartye	
	b. Consideration of Cost Participation: 17 N. Market Street Development	Hartye	
	 c. Consideration of Developer Constructed Sewer Systems: Cisco Road Homes; Asheville Habitat – Curry Court (Affordable Housing Reimbursement); 605 Fairview Road; Grindstaff Subdivision; Maple Trace Phase 2; Villa Heights 	Hartye	
	d. Second Quarter Budget to Actual Review – FY 2019	Powell	
	e. Cash Commitment Investment Report-Month ended December, 2018	Powell	
	09. Old Business:	VeHaun	3:00
	10. New Business:	VeHaun	3:05
	11. Adjournment: (Next Meeting 3/20/19)	VeHaun	3:10
	STATUS REPORTS		

BOARD OF THE METROPOLITAN SEWERAGE DISTRICT January 16, 2019

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 2pm Wednesday, January 16, 2019. Chairman VeHaun presided with the following members present: Ashley, Bryson, Kelly, Pelly, Pressley, Valois, Watts, Whitesides and Wisler. Holland and Manheimer were absent.

Others present were: Thomas E. Hartye, PE, General Manager; William Clarke, General Counsel; Al Root, retiring Board Member; Angela Reece with the Town of Black Mountain; Patty Beaver with CIBO; Joseph Martin with Woodfin Sanitary Water & Sewer District; Ed Bradford, Mike Stamey, Roger Edwards, Scott Powell, Matthew Walter, Jim Hemphill, Ken Stines, Spencer Nay and Pam Nolan, MSD.

Mr. Vehaun reported that Mr. Root is retiring from the MSD Board. Mr. Root was presented with a Resolution from the MSD Board of Directors, honoring him for his service. Mr. VeHaun called for a motion to adopt the Resolution. Mr. Watts moved. Ms. Wisler seconded the Motion. Voice vote in favor of the motion was unanimous. Mr. VeHaun thanked Mr. Root and congratulated him on his retirement from the MSD Board then presented him with an engraved MSD clock. Mr. Hartye stated that it has been his pleasure working with Mr. Root and that he approaches everything at MSD with such alacrity. He reported that Mr. Root took over the helm of the Planning Committee during a tough time and helped handle that really well with his sense of humor. Mr. Root contributed to the congeniality of the Board and has strongly supported Staff through-out the years but was never afraid to ask the tough questions. Mr. Hartye presented Mr. Root with an MSD hat, t-shirt and plaque with gold manhole hook. Mr. Root stated that he wanted to call attention to Mr. Clarke. He said no one realizes how tricky the job of a Board attorney can be. You must come prepared for a lot of different issues during meetings, know when to talk and when not to talk. He stated that Mr. Clarke embodies exactly what a Board attorney should be. He further stated when he talked to Mr. Valois about coming onto this Board he stated what a good job Staff does. It becomes easy to mail it in as a Board Member. Staff does such an incredibly good job that it rarely will lead to a smoking gun. He stated that he very much appreciates his time here, has tried to copy some of the things he has seen here over in Weaverville and will very much miss this Board. He stated that this Board exemplifies what public service should be. Mr. VeHaun stated that Mr. Root's comments about Mr. Clarke and MSD Staff were right on, and that's the way he has felt for a long time, and he hears a lot of compliments from the public regarding how well things are run at MSD and overseen by Mr. Clarke.

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 December 19, 2018 Board Meeting:

Mr. VeHaun asked if there were any changes to the Minutes of the December 19, 2018 Board Meeting. Mr. Watts moved for approval of the minutes as presented. Ms. Bryson 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 Ms. Beaver with CIBO, Ms. Reece with the Town of Black Mountain and Mr. Martin with Woodfin Sanitary Water and Sewer District. There was no discussion or public comment.

6. Report of General Manager:

Mr. Hartye presented before and after pictures of the Treatment Plant Headworks Improvements and reviewed the work that has been completed and the work to be performed. He presented slides of the emergency by-pass system in front of the plant, the hydro-electric flume and the pump station for surge control during wet or high weather events, the RBC's, the Plant, Maintenance and Administration Buildings, the back-up generators, and the defunct microscreens which will be replaced during the next phase of these improvements. At some point in the next couple weeks, the entire front of the plant will have to be bypassed with temporary pumps to allow for the critical tie-ins to be made and an isolation wall to be built. Ms. Wisler asked if, over the next three weeks when by-passing the old system and before the new system gets set up, there are any risks or concerns operationally such as weather. Mr. Hartye stated yes there are risks and yes, Staff is worried about weather. There is a by-pass plan with several pumps in redundancy as well so if one goes out it gets replaced with another. The flow is still running high both in the system and out in the river. Hopefully, there will be a series of days with good, dry weather so the flows will be a little more manageable.

Mr. Hartye reported that attached is an email from Scott Smiles of Middlemont Avenue expressing his gratitude for the response of Mike Rice and Carl Ellington and their calm and professional encouragement in helping him work through sewer issues on his property.

Mr. Hartye reported that attached is an email from Drake Fowler regarding the emergency call out over the Holiday weekend and past calls to MSD. Thanks to Mike Rice and Carl Ellington.

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Mr. Hartye reported the Right of Way Committee meeting scheduled for January 23, 2019 is cancelled. The next Right of Way Committee meeting will be held on February 27, 2019 at 9am. The next regular Board Meeting will be held on February 20, 2019 at 2pm.

7. Consolidated Motion Agenda:

a. Consideration of Annual Meeting Dates FY2019:

Mr. Hartye presented the Annual Meeting Dates for 2019.

b. Consideration of Budget Calendar FY 2019-2020:

Mr. Hartye presented the Budget Calendar for FY 2019-2020. MSD is required to have a Preliminary Budget no later than June 1 and a Final Budget no later than June 15.

c. Consideration of Bids: Old Haw Creek Road @ Greenbriar Road Sanitary Sewer Rehabilitation Project:

Mr. Hartye reported that this project is in the Haw Creek area of Asheville and consists of replacing 6-inch clay lines in poor condition that have triggered numerous customer service requests and SSO's. The total project length is 3,755 LF of 8-inch DIP. The contract was advertised and four bids were received on December 20, 2018 as follows: Buckeye Bridge, LLC in the amount of \$1,317,844.00; Thomas Construction Company in the amount of \$1,311,930.00; Teraflex Group, LLC in the amount of \$997,244.50 and Terry Brothers Construction Company in the amount of \$821,552.00. The apparent low bidder is Terry Brothers Construction Company in the amount of \$821,552.00. Terry Brothers has completed numerous MSD projects and their work quality has remained excellent. The FY18-19 Construction Budget for this project is \$1,017,000.00. Staff recommends award of this contract to Terry Brothers Construction Company in the amount of \$821,552.00, subject to review and approval by District Counsel.

d. Consideration of Bids: Kenilworth Road @ Springdale Road and Beaucatcher Road @ Kenilworth Road Sanitary Sewer Rehabilitation Project:

Mr. Hartye reported that these two projects are located in the Kenilworth area of Asheville. Design on these sections has been accelerated to complete construction prior to an upcoming City of Asheville Bond Road Resurfacing project. The City paving project is expected to begin in Summer 2019. The projects consist of replacing problematic 6-inch clay and Orangeburg lines that are in poor structural condition. The two projects total 1,618 LF of 8-inch DIP. The contract was advertised and three bids were received on December 20, 2018 as follows: Thomas Construction Company in the amount of \$394,325.00

for Kenilworth at Springdale and \$270,740.50 for Beaucatcher at Kenilworth, for a total bid amount of \$665,065.50; Buckeye Bridge, LLC in the amount of \$338,026.00 for Kenilworth at Springdale and \$247,931.00 for Beaucatcher at Kenilworth for a total bid amount of \$585,957.00; Terry Brothers Construction Company in the amount of \$252,324.00 for Kenilworth at Springdale and \$171,908.00 for Beaucatcher at Kenilworth for a total bid amount of \$424,232.00. The apparent low bidder is Terry Brothers Construction Company with a bid amount of \$424,232.00. The FY18-19 Construction Budget for Kenilworth at Springdale is \$295,000.00. Funding for Beaucatcher at Kenilworth was originally planned for FY20-21 but the City accelerated their original schedule to this year. Funds are available in the CIP Contingency for the \$171,908.00. Staff recommends award of this contract to Terry Brothers Construction Company in the amount of 424,232.00, subject to review and approval by District Counsel.

e. Consideration of Developer Constructed Sewer Systems: 42 Old County Home Road; Perry Lane Apartments; The Preserve @ Avery's Creek Phase 1; Beacham's Curve (Cost Participation):

Mr. Hartye reported that the 42 Old County Home Road project consisted of extending approximately 200 linear feet of 8-inch public gravity sewer to serve a 5-lot single family residential development.

Mr. Hartye reported that the Perry Lane Apartments project is located along Hendersonville Road in Buncombe County and consisted of extending approximately 670 linear feet of 8-inch public gravity sewer to serve the 120-unit affordable apartment complex.

Mr. Hartye reported that the Preserve @ Avery's Creek Phase 1 project is located along Avery Creek Road and included extending approximately 3,740 linear feet of 8-inch public gravity sewer to serve the 70 single family residential units for this phase of the development.

Mr. Hartye reported that the Beacham's Curve Sewer Relocation project is located along Haywood Road in the City of Asheville. The project included relocating 735 linear feet of 8-inch public gravity sewer and abandoning approximately 240 linear feet of public gravity sewer to accommodate the Mixed-Use Development. The sewer relocation on the site not only serves the new development but also solved some problems MSD had with the public sewer system. The Board previously approved a 60% cost participation with this Developer, up to \$138,600.00, at the July 18, 2018 Board Meeting. The actual cost of the sewer construction was \$197,958.00. MSD staff reviewed this cost and determined that the reimbursement amount should be \$112,999.80.

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

f. Cash Commitment/Investment Report Month ended November 2018:

Mr. Powell reported that Page 38 presents the makeup of the District's Investment Portfolio. There has been no significant change in the makeup of the portfolio from the prior month. Page 39 presents the MSD investment managers report for the month of November. The weighted average maturity of the investment portfolio is 192 days. The yield to maturity is 2.33% and is exceeding our bench marks of the NCCMT portfolio. Page 40 presents the District's analysis of cash receipts. Domestic user fees are considered reasonable based on timing of cash receipts and historical trends. The 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 \$640,000.00 from one developer. Page 41 is an analysis of the District's Expenditures. O&M, Debt Service and Capital Projects expenditures are considered reasonable based on historical trends and timing of capital projects. Page 42 presents the MSD Variable Debt Service report for the month of December. The 2008A Series is performing at budgeted expectations. As of the end of December this issue has saved the District rate payers approximately \$5.7 million in debt service since April of 2008. Mr. Kelly asked if as the District issues new bonds, will they be synthetic fixed rates or regular fixed rates. Mr. Powell stated that as it pertains to the bonds that we have slated in our ten year business plan, those are budgeted as fixed rate bonds. Mr. Kelly asked if that was because we can't get any more synthetic fixed rates. Mr. Powell stated that we can get synthetic fixed rates but as it stands now the market is more receptive to vanilla fixed rate debt issuances. Mr. Kelly asked what percentage the District is at now with synthetic fixed rate vs. regular fixed rates. Synthetic fixed rate is approximately 30% of our total outstanding debt. Mr. Kelly asked if that was declining. Mr. Powell stated that was declining over time. Mr. Kelly asked if the interest rates stay where they are, will there eventually be no synthetic fixed rates. Mr. Powell stated that is correct.

With no further discussion, Mr. VeHaun called for a motion to approve the Consolidated Motion Agenda. Mr. Watts moved. Mr. Pressley seconded the motion. Roll call vote was as follows: 10 Ayes; 0 Nays.

8. Old Business: None.

9. New Business: None.

10. Adjournment:

With no further business, Mr. VeHaun called for adjournment at 2:37 pm.



MEMORANDUM

TO: MSD Board

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

DATE: February 15, 2019

SUBJECT: Report from the General Manager

Plant Bypass and Emergency Interceptor Repair

I will give a brief update on the plant bypass and new treatment system coming online along with the emergency repair of an interceptor that was nearing failure in the Swannanoa River.

Kudos

- Thanks to Lisa Tolley and Angel McCrain for running the MSD Booth to provide information and education at the Build and Remodel Expo (which saw approximately 4,000 people).
- R.L. Ellinburg of Black Mountain called to express his appreciation for the service provided by Grady Brooks who was courteous, helpful and did a wonderful job.
- Steve Heflin at 6 Imperial Ct. called to say that he was impressed with Pete Cole and Wayne Rice and their quick response time and how helpful they were.
- Thanks to Roger Edwards for heading up the plant tours this year even amidst the extensive construction at the plant. Attached is a list of tours and number of attendees for the year.

• ACT article on Brewery Waste

Attached is an article in the ACT regarding brewery waste and the impacts that it may have on public treatment works. What was not mentioned was the fact that MSD has a Pretreatment group that manages all significant industrial waste discharges and has met frequently with the Brewers Alliance and is educating them on how to mitigate waste impacts by side-stream separation, cleaning and disposal techniques. MSD allowed New Belgium temporarily discharge under certain permitted conditions while they constructed their pretreatment system which is now up and running. This was a win-win as significant revenue was gained by MSD for utilizing excess capacity that has now been regained.

Board/Committee Meetings/Events

The next Regular Board Meeting will be held on March 20th at 2 pm. The next Right of Way Committee meeting will be held on March 27th at 9 am.

Plant Tours 2018

Date	Name of Facility	Type	<u>Attendees</u>
1/24/18	Christ School	Plant Tour	3
2/3/18	AmeriCorps	Plant Tour	14
2/7/18	Zig Zag School	Plant Tour	10
3/2/18	Pinewood Prep School	Plant Tour	12
3/7/18	Franklin School of Innovation	Plant Tour	42
3/7/18	Franklin School of Innovation	Plant Tour	43
3/15/18	Nesbitt Discovery Academy	Plant Tour	20
3/22/17	French Broad River Academy - Girls	Plant Tour	28
3/28/18	Asheville High	Plant Tour	16
3/28/18	Asheville High School	Plant Tour	25
3/28/18	Students at Work	Plant Tour	17
4/4/18	AB Tech	Plant Tour	11
4/13/18	AB Tech	Plant Tour	10
4/12/18	Asheville School	Plant Tour	12
4/12/18	Asheville School	Plant Tour	11
4/12/18	Asheville School	Plant Tour	16
4/5/18	Home School Group	Plant Tour	10
4/25/18	TC Roberson	Plant Tour	24
4/11/18	Leadership Asheville	Plant Tour	47
5/22/18	City of Asheville	Plant Tour	4
6/26/18	UNCA Science Teachers	Plant Tour	13
8/1/18	Science Teachers	Plant Tour	6
8/10/18	MSD Employees	Plant Tour	12
9/14/18	UNCA Students	Plant Tour	16
9/28/18	UNCA Students	Plant Tour	15
10/16/18	Nesbitt Discovery Academy	Plant Tour	23
10/18/18	Nesbitt Discovery Academy	Plant Tour	22
10/24/18	IC Imagine (AM)	Plant Tour	37
10/24/18	IC Imagine (PM)	Plant Tour	39
11/8/18	Enka - Human Geography	Plant Tour	21
11/8/18	French Broad River Academy - Girls	Plant Tour	14
11/8/18	French Broad River Academy - Girls	Plant Tour	13
11/30/18	Warren Wilson	Plant Tour	<u>14</u>
			620

Local breweries

put unique strain



Treatment has delicate biochemical balance

Mackensy Lunsford Asheville Citizen Times
USA TODAY NETWORK

ASHEVILLE - Wastewater management is important, odoriferous work.

"We're not in the business of growing flowers out here," said Roger Edwards, the operations manager for the Metropolitan Sewerage District of Buncombe County, as he led a tour of one of the most crucial — and least-appreciated — facilities in the area.

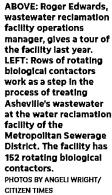
As distinctive as wastewater can smell, local breweries have the potential to override that aroma, as happened when Oskar Blues in Brevard first began using the small city's water reclamation facility.

After routine brewery tasks, the brewery's wastewater would often overwhelm Brevard's small plant with the strong scent of hops, even though Oskar Blues was in compliance with discharge regulations.

"Because we were so close to the plant, the stuff arriving to the plant did not have the chance to mix with anything," marketing manager Aaron Baker

See WASTEWATER, Page 4A







Wastewater

Continued from Page 1A

explained.

The brewery has since constructed a \$1.5 million wastewater treatment facility to help mitigate its load on the plant, illustrating the complexity and cost of managing one of the industry's most important resources: water.

In Buncombe County, the MSD's 20acre facility provides wastewater collection and treatment services to about 42,000 residences and business, plus the dozens of breweries in the county.

Managing more than 1,000 miles of public sewer pipes, the plant essentially serves as Buncombe County's stomach, processing about 20 million gallons of wastewater per day.

Aiding in digestion are 152 air-driven rotating biological contactors, or RBCs, teeming with billions of bacterial organisms breaking down organic solids floating their way in the waste stream.

This is the largest collection of RBCs on the planet, at least to Edwards' knowledge.

Even still, Asheville's brewing industry has the potential to disrupt that biological balance, testing the plant's very limits.

"Without pre-treatment, the two largest breweries, Sierra Nevada and New Belgium Brewing, would greatly challenge us," said Peter Weed, director of treatment for the MSD.

'We didn't know we'd be Beer City'

When textiles thrived in Western North Carolina, the major concern for the MSD was how much water the industry used.

"Dyeing and finishing was a large water consumer, and therefore a large wastewater discharge," Weed said.

And although Western North Carolina's textile industry has faded from its halcyon days, breweries keep booming, taking the place of their industrial forebears in water consumption.

But it's the unique chemical makeup of brewery wastewater that keeps plant managers on their toes.

"There were not the sugar and starches associated with the textiles as there was with the brewery industry," Weed said.

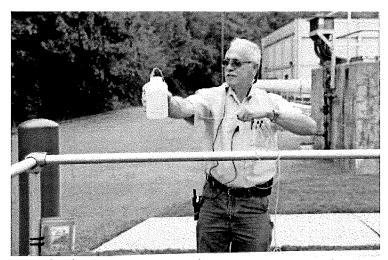
In 2015, New Belgium secured an industrial pre-treatment permit from the MSD, establishing flow, biochemical oxygen demand, or BOD, and solids of process-water discharge to the sewer system.

Then, as it began to ramp up production, it began to tax the MSD's ability to manage BOD, a measure of wastewater strength describing its capacity to consume oxygen.

Untreated, brewery wastewater has the potential to disrupt accelerate biological growth on the RBCs, Edwards explained.

If the plant is the county's stomach, brewery waste is the fast food that can throw it into gastrointestinal distress.

There was always a margin of safety, Weed said, and things have stabilized significantly over the past few months as the brewery's new \$7 million anaerobic water treatment facility has come online. "Their system appears to be doing your year."



Roger Edwards, wastewater reclamation facility operations manager, shows how clean the water leaving the facility has become after treatment as it is released back into the French Broad River on Oct. 9. ANGELI WRIGHT/CITIZEN TIMES

one end of the facility to the other, serves as a sort of buffet line for the bacteria, with the influent wastewater acting as the food.

The bacteria are flush and well fed in the beginning of the line, but a bit starved for nutrients near the end, where the water is cleaner — or picked over, like a buffet at midnight.

"Down here," Edwards said, stopping by a relatively clean RBC, "You're getting to where there's nothing left but liver and Brussels sprouts. No desserts."

It's a natural process, mimicking what already goes on in our waterways— just greatly accelerated, Weed explained. "And the reason it has to be accelerated is people like to come together and live."

Beer wastewater, however, could wreak havoc on the plant's biological balance, and also the health of aquatic life in the nearby French Broad River, where the MSD releases its clean water.

When the balance is upset

Beer is 95 percent water, so it's in brewers' best interest to preserve it, too.

From a legal perspective, the MSD has state regulations to which it has to adhere; without processing, brewery wastewater could easily force the MSD into noncompliance of its discharge permit, resulting in steep fines.

That happened in Brevard in 2014, when the city was cited by the state for 15 violations in about a year and a half, mostly for exceeding state pollutant standards in its discharges to the French Broad River.

According to a 2014 Hendersonville Times-News report, a settlement agreement indicated Oskar Blues Brewery, the largest user of the town's discharge plant, had several times overwhelmed the plant's ability to process biochemical oxygen demand.

In a conversation with the Citizen Times in late 2018, Oskar Blues general manager Brian Spotts said the brewery was already meeting the parameters for wastewater pre-treatment as laid out by Rreyard.

The brewery's proximity to the plant played a major role in the strength of its waste; with less than a mile to flow before it reaches the facility, there's little change of dilution measures. The brewery now hauls solid waste like yeast and other byproducts in dairy tankers to farms far away from the watershed, where it's used as an organic fertilizer and sometimes as a washdown medium for moving animal waste into lagoons.

Process water is funneled, 20,000 gallons per day, into 40,000-gallon equalization tanks to eliminate temperature, pH and BOD spikes. A third party measures water samples every 15 minutes.

It all comes at great cost, Spotts said. "But it's the best option, and it allows us to be good stewards."

Managing wastewater also creates jobs, Baker said.

"We spend hours and hours, in addition to making beer, managing wastewater and its byproducts."

Breweries: Money for MSD

Oskar Blues Brevard had initially planned to add a more advanced water treatment center, but after working closely with the wastewater management facility, they found phase two was unnecessary.

"We upgraded, the city upgraded, and combined that was enough to help mitigate the problems we were seeing," Baker said.

Oskar Blues is now more conscious of

its water use and ranks among the cleanest facilities of its size, he said. Quality is a craft-beer buzzword, but it usually refers to the end product, he added.

"You don't get to quality without detailed and strict processes, from raw ingredients to brewing to cleaning, and that includes what's going down the drain as well."

Opening a brewery in Buncombe County requires a similarly close relationship with the local sewer system.

Based on the strength of discharge and chemical complexity of wastewater, breweries pay the MSD an industrial treatment fee, a big revenue source.

New Belgium was one such source of income for the plant, before the brewery's high-tech pre-treatment system went online.

"They chose to run for a while without pre-treatment, and that was a revenue source for us to handle the waste stream, and now that paradigm has changed," Edwards said.

'Everyone's downstream'

New Belgium has tasked April Bilisoly, who holds a degree in ecology and environmental biology and a master's degree in coastal management, with managing its half-acre industrial anaerobic wastewater treatment plant.

She described her job as looking for anything abnormal in the brewery's wastewater with near-constant monitoring in an on-site lab. "The brewing industry in general is science: It's chemistry, it's biology, it's sensory," she said.

The brewery's proximity to the sewerage plant makes vigilance particularly important, though Bilisoly said any spills would be easy to isolate.

"But if we had an overflow or any sort of spill, they'll have it within three hours."

Sugar-rich, high-BOD wastewater isn't limited to breweries, but can also come from bakeries and other different industrial operations.

But Edwards said few, if any, pretreat their water on the same level as the big beer-makers.

To make sure the water stays pristine, MSD employees test water quality daily, with the exception of weekends and holidays, remaining ever-vigilant for BOD surges as required by the state.

"We have to protect the water," said Edwards. "There's not any more now than there was 2,000 years ago." ing very well."

The breweries have never created a panic situation, since plant managers take a proactive approach to water management, getting into ground-floor talks with potential incoming industries.

However, the sheer number of beer makers flooding the county took the MSD by surprise, Edwards said.

"We knew the breweries were coming in. We worked with them. But we didn't know we would be Beer City USA. We nau no way or knowing unat.

How beer disrupts the balance

Bacteria, Edwards said over the din of the RBCs, are like people. "They like to have somewhere to live,

"They like to have somewhere to live, they like to have air to breathe, and they like to have a reasonably constant food source."

The line of 152 RBCs, extending from

chance of dilution.

The past few years have seen the brewery invest at least \$1.5 million in equipment to improve water discharge.

Oskar Blues continues to pay Brevard's plant industrial waste treatment surcharges on top of the residential rate, which has in turn helped the wastewater facility make improvements. "We never had an adversarial relationship (with Brevard)," Baker said. "It was like, "lat's figure this out.'"

With Blevardy, Baker said. It was like, "let's figure this out."

Once we began communicating and working together, it went pretty smooth," Brevard Mayor Jimmy Harris told the Citizen Times in 2014. "We've never had a manufacturer on our water system before."

Baker last week said Oskar Blues managers could not have foreseen how intricate water treatment could get. The Longmont, Colorado, location doesn't require the same precautionary

Sunday, 02/03/2019 Pag.A04

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Metropolitan Sewerage District of Buncombe County BOARD ACTION ITEM

BOARD MEETING DATE: February 20, 2019

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

PREPARED BY: Ed Bradford, P.E. - Director of Engineering

Hunter Carson, P.E. - Ass't Director of Engineering

SUBJECT: Consideration of Bids: Long Shoals Road @ Allen Avenue Sanitary Sewer

Rehabilitation Project, MSD Project No. 2010013

BACKGROUND: This project is located in South Asheville near the intersection of Long

Shoals Road and Hendersonville Road, and abuts the TC Roberson High School property. It consists of replacing problematic six-inch clay lines that

are in poor structural condition.

Portions of this line were previously relocated/rehabilitated during a development project, when apartments were constructed in this area.

The total project length is 458 LF of 8-inch DIP.

Contractor

The contract was advertised and five bids were received on January 31, 2019 in the following amounts:

Rid Amount

Contractor	<u> Dia Ambant</u>
 Thomas Const. Co. N. American Pipeline Mgmt. Buckeye Bridge, LLC Terry Brothers Const. Co. Teraflex Group, LLC 	\$ 222,798.00 \$ 135,420.00 (*) \$ 135,322.00 \$ 128,310.00 \$ 112,321.00
-,	· /

^(*) Corrected Bid Amount

The apparent low bidder is Teraflex Group, LLC with a bid amount of \$112,321.00. Teraflex has not previously worked for the District; therefore, staff checked references. They were complementary of Teraflex's performance; therefore, staff recommends award to them.

Please refer to the attached documentation for further details.

FISCAL IMPACT: The FY18-19 Construction Budget for this project is \$184,000.00.

STAFF RECOMMENDATION: Staff recommends award of this contract to Teraflex Group,

LLC in the amount of \$112,321.00, subject to review and

approval by District Counsel.

METROPOLITAN SEWERAGE DISTRICT OF BUNCOMBE COUNTY, NORTH CAROLINA

LONG SHOALS ROAD @ ALLEN AVENUE SEWER REHABILITATION Project No. 2010013

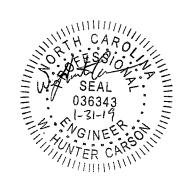
BID TABULATION January 31, 2019

BIDDER	MBE Form	Bid Forms (Proposal)	TOTAL BID AMOUNT
Thomas Construction Company			
Johnson City, TN	1	Yes	\$222,798.00
North American Pipeline Mgmt. Inc.			
Marietta, GA	2	Yes	(*) \$135,420.00
Buckeye Bridge, LLC			
Canton, NC	1	Yes	\$135,322.00
Terry Brothers Construction Co.			
Leicester, NC	2	Yes	\$128,310.00
Teraflex Group LLC			
Williston, ND	2	Yes	\$112,321.00

APPARENT LOW BIDDER

(*) Indicates correction in contractor's bid amount.

W. Hunter Carson, P.E.
Project Engineer
Metropolitan Sewerage District of
Buncombe County, North Carolina



This is to certify that the bids tabulated herein were publicly opened and read aloud at 2:00 p.m. on the 31st day of January, 2019, in the W.H. Mull Building at the Metropolitan Sewerage District of Buncombe County, Asheville, North Carolina. This was an informal bid and no bid bonds were required.

Interoffice Memorandum

TO: Tom Hartye, General Manager

FROM: Ed Bradford, Engineering Director

Hunter Carson, Asst. Director of Engineering

DATE: February 7, 2019

RE: Long Shoals Road @ Allen Avenue Sewer Rehabilitation, MSD Project No. 2010013

The Long Shoals @ Allen Avenue Sanitary Sewer Rehabilitation project is located in South Asheville, approximately 0.25 mile northwest of the Long Shoals Road/Hendersonville Road intersection. The project borders TC Roberson High School. Approximately 458 linear feet of 8-inch DIP sewer line will be installed to replace existing 6-inch VCP that is in poor condition. The existing pipe has numerous offset joints, sags, pipe fractures and holes, and scores moderately high in the District's Pipe Rating program with a 59. The line is also a visible source of infiltration.

On Thursday, January 31, 2019, five (5) sealed bids were received at 2:00pm. Results were as follows:

<u>Contractor</u>	<u>Bid Amount</u>
1) Thomas Construction Company	\$222,798.00
2) North American Pipeline Mgmt.	\$135,420.00 (*)
3) Buckeye Bridge, LLC	\$135,322.00
4) Terry Brothers Construction Company	\$128,310.00
5) Teraflex Group, LLC	\$112,321.00

(*) Corrected bid amount.

The apparent low bidder is Teraflex Group, LLC with a bid amount of \$112,321.00. The FY18/19 construction budget for this project is \$184,000.00. Teraflex Group, LLC has not performed work for the District; however, references were checked and were favorable. A summary of those discussions is attached to this document.

Staff recommends award of this contract to Teraflex Group, LLC contingent upon review and approval by District Counsel.

Long Shoals @ Allen Avenue

Sanitary Sewer Rehabilitation Project MSD Project No. 2010013

Reference Check for Teraflex Group, LLC

February 2019

Williams County, ND

Madison Ridge Subdivision (2017) - \$198,000

Clyde Bradshaw, PM with Northern Improvement Company stated that Teraflex Group was a subcontractor to them on the Madison Ridge Subdivision project. Teraflex's scope included installation of 18"-66" storm drain piping and minor grading work. Teraflex was "very professional and timely" per Mr. Bradshaw. There were no issues with installation, restoration, or requests for change orders. Mr. Bradshaw would recommend Teraflex Group. Mark Craig was the site superintendent and Zack Brown was the project manager for Teraflex (both individuals are being proposed for MSD's Long Shoals project).

City of Williston, ND

2017 Drainage Improvements (2017) - \$709,069

Vestal Properties Sewer and Water Extension (2015) - \$776,000

Wayne Weidrich (City of Williston Operations Engineer) worked with Teraflex on both projects listed above. The Drainage Improvements project included the installation of approx. 8,000LF of 8" interceptor lines within city streets to collect residential sump pump discharge. According to Mr. Weidrich, storm water discharged from residential sump pumps is problematic in the winter due to freezing temperatures. The Drainage Improvements project provided a central conveyance system and disposal of storm water from residences.

The Vestal Properties project was a public/private partnership to extend utilities to a new development. Teraflex installed both water and gravity sewer lines. Mr. Weidrich was asked specifically about the sewer installation and he said that "several thousand feet of PVC SDR-35" sewer pipe was installed for the project.

Mr. Weidrich said that Teraflex did good work and he had no problems with them on either project. They "took direction" well and were quick to fix any mistakes. Mr. Weidrich was disappointed to learn that Teraflex had relocated to North Carolina and said that he would miss working with them. Mark Craig was the site superintendent and Zack Brown was the project manager for both projects (*both individuals are being proposed for MSD's Long Shoals project*).

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

BUDGET DATA SHEET - FY 2018 - 2019 PROJECT: Long Shoals Rd. @ Allen Ave. LOCATION: Arden TYPE: General Sewer Rehab. PIPE RATING: 59 PROJECT NO. 2010013 TOTAL LF: 621 PROJECT BUDGET: PROJECT ORIGIN: \$286,472.00 SSO's, Work Orders, Line Condition **ESTIMATED** TOTAL EXPENDS EST. COST RUDGET DESCRIPTION PROJECT COST THRU 12/31/17 **JAN - JUNE 2018** FY 18-19 55310 - PRELIM. ENGINEERING 55320 - SURVEY - DESIGN \$11,025.00 \$11,025.00 55330 - DESIGN 55340 - PERMITS 55350 - SPECIAL STUDIES 55360 - EASEMENT PLATS \$6,000.00 \$4,280.00 \$1,720.00 55370 - LEGAL FEES \$6,000.00 \$2,543.00 \$3,457.00 55380 - ACQUISITION SERVICES 55390 - COMPENSATION \$40,000.00 \$40,000.00 55400 - APPRAISAL \$3,500.00 \$3,500.00 55410 - CONDEMNATION \$7,500.00 \$7,500.00 55420 - CONSTRUCTION \$208,847.00 \$184,000.00 \$24,847.00 55430 - CONST. CONTRACT ADM. 55440 - TESTING \$2,000.00 \$2,000.00 55450 - SURVEY - ASBUILT \$1,600.00 \$1,600.00 TOTAL AMOUNT \$286,472.00 \$42,695.00 \$56,177.00 \$187,600.00 ENGINEER: MSD **ESTIMATED BUDGETS - FY 20 - 28** R.O.W. ACQUISITION: MSD # PLATS: [6] FY 19-20 \$0.00 CONTRACTOR: FY 20-21 \$0.00 CONSTRUCTION ADM: MSD FY 21-22 \$0.00 INSPECTION: MSD FY 22-23 \$0.00 FY 23-24 \$0.00 FY 24-25 \$0.00 PROJECT DESCRIPTION: This project is located at the west end of Allen Ave., close to the intersection of FY 25-26 \$0.00 Hendersonville Rd. and Long Shoals Rd. in Arden. It is comprised of approximately 621 LF of 8-inch ductile FY 26-27 iron pipe. There are structural problems at various locations, and the line is in poor condition overall. \$0.00 FY 27-28 \$0.00

This project as originally designed was 2,263LF. In FY 16-17, MSD approved a sewer allocation for the Skyland

Exchange development located in the middle of the proposed CIP project. Skyland Exchange will install new 8" sewer through the proposed development.

SPECIAL PROJECT NOTES:





Long Shoals Road at Allen Avenue Project No. 2010013



METROPOLITAN SEWERAGE DISTRICT of BUNCOMBE COUNTY, NORTH CAROLINA

Budget Map

Metropolitan Sewerage District of Buncombe County BOARD ACTION ITEM

BOARD MEETING DATE: February 20, 2019

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

REVIEWED BY: Billy Clarke, Esq. - District Counsel

PREPARED BY: Ed Bradford, P.E. - Director of Engineering

Kevin Johnson, P.E. - Planning & Development Manager

Darin Prosser, P.E. - Project Engineer

SUBJECT: Consideration of Cost Participation for the 17 North Market Street

Development, MSD Project No. 2017238

BACKGROUND: This project is located in downtown Asheville between North Market Street

and Langren Alley. It has been allocated for 4,800 GPD for retrofit of an existing building with 16 new condominiums. The developer for this project

is Charles Caputo of Spectrum Building Company, Inc.

The MSD line located within Langren Alley which serves this project was previously identified as part of a future Capital Improvement Project known as Walnut Street at North Lexington Avenue, MSD Project No. 2017008. The existing pipe is 6-inch clay with both structural problems and capacity

issues.

MSD staff has evaluated the project under Cost Participation guidelines, and determined that a 100% reimbursement is appropriate. Staff prepared a cost estimate for this line, which is based on current bid pricing for MSD

projects of similar scope. The cost for this portion is \$86.685.37.

At a 100% participation level, MSD's share is \$86,685.37. A copy of the CIP budget map showing this line segment and evaluation form are included. This project is expected to be completed in FY18-19.

Please refer to the attached documentation for further details.

FISCAL IMPACT: The Cost Participation amount is \$86,685.37, which is 100% of the

estimated construction cost. Funds are available in the CIP Contingency

for this amount.

Should the actual timing of the project result in the reimbursement likely to occur in FY19-20, this reimbursement will be formally budgeted for next

fiscal year.

STAFF RECOMMENDATION:

Staff recommends that the District approve a reimbursement of \$86,685.37 to Spectrum Building Company, Inc. contingent upon full completion of the sewer rehabilitation portion of their project.

No payment shall be issued until the sewer is installed to MSD Standards and Specifications, all final paperwork is received including any easement conveyance, and the system is fully accepted by the District Board.

APPENDIX A Rehabilitation of Existing Sewer Lines

Project Name: 17 N. MARKET ST CONDOS	/ 2017008 WALNUT @ N. LEXINGTON
Applicant: SPECTRIM RINADIAGE CO. INC.	(MCREN MICH)

Based on the TOTAL POINTS EARNED, MSD's participation in the construction costs is calculated in accordance with the following table:

TOTAL POINTS EARNED	MSD PARTICIPATION
0-25 Points	0%
25-50 Points	25%
51-75 Points	50%
76-84 Points	75%
85-100 Points	100%

* No points are available for replacing pipe with new pipe of same size

** No points are available for replacing pipe with new pipe of same size unless required due to I/I.

					Points Earned
A. Rehabilitation Needs					G.
Project Scheduled for CIP Funding	No	6-10 Yrs	3-5 Yrs 🗸	1-2 Yrs	
Point Value	0	10	15	20	15
Percent of I/I Rehab vs. Upgrade Costs	0-10%	11-25%	26-50%	Over 50% 🗸	
Point Value	0	10	15	20	20
Age of Pipe Segment in years	0-10 Yrs	11-25 Yrs	26-50 Yrs	Over 50 Yrs 🏑	
Point Value	0	3	7	10	10
Size of Existing Pipe Segment *	Over 10"	8-10"	6" 🗸	4"	
Point Value	0	3	7	10	7
B. Pipe Capacity					
Existing Users Percent including I/I **	11-35%	36-55%	66-95%	Over 95% 🗸	
Point Value	5	10	15	25	25
New Development Percent *	Over 75%	36-75%	11-35%	0-10% 🗸	
Point Value	0	3	7	10	10
C. Location of Development					
Distance from Existing Sewer in feet	0-500' 🗸	501-1,000'	1,001-2,500'	Over 2,500	
Point Value	0	2	4	5	D

Where Applicant's on-site activities (landscaping, building over existing sewers, etc.) require pipe relocation, MSD's percentage of participation shall be limited to the estimated costs for upgrading existing pipe in existing location.

MSD participation is dependent upon availability of funds.

				1-1.0	
Evaluated	by:	Marin and a second	Date:	6/25/18	
	-				

LANGREN ALLEY SEWER REHABILITATION

				OPTION 1: DIG & REPLACE		
ITEM #	ITEM DESCRIPTION	UNITS	PRICES	QUANTITY	COST	
MP-5.01	MOBILIZATION (3% MAX)	LS	3% MAX		\$ 2,643.	
MP-5.02.8(d)	8" DIP (CLASS 350) ALL DEPTHS	LF	\$ 160	256	\$ 40,960.	
MP-5.02.6(p)	6" PVC (SCH 40) ALL DEPTHS, INCLUDING BEDDING	LF	\$ 100	120	\$ 12,000.00	
MP-5.03.4(s)	4' DIAMETER STANDARD MANHOLE 0-6 FT.	EA	\$ 3,900	1	\$ 3,900.00	
MP-5.04.4(s)	4' ADDITIONAL MANHOLE DEPTH	VF	\$ 300	4	\$ 1,200.	
MP-5.05(6)	8" X 8" X 6" DI WYE	EA	\$ 500	12	\$ 6,000.	
MP-5.06.4(t)	6" CLEANOUT ASSEMBLY TRAFFIC LOAD RATED	EA	\$ 375	12	\$ 4,500.	
MP-5.10	CONNECT TO EXISTING MANHOLE	EA	\$ 1,500	1	\$ 1,500.	
MP-5.13	COMPACTED AGGREGATE BASE COURSE	CY	\$ 42	32	\$ 1,344.	
MP-5.21.6(b)	BITUMINOUS PAVEMENT REPAIRS TYPE I-19.0 B) 6" DEPTH	SY	\$ 54	140	\$ 7,560.	
MP-5.21.2(s)	BITUMINOUS ASPHALT RESURFACING (TYPE SF 9.5A) 2" MIN. DEPTH	SY	\$ 15	*611	\$ 9,165.	

SUBTOTAL: \$ 88,129.00 TOTAL: \$ 90,772.87

*CITY OF ASHEVILLE STORMWATER DEPARTMENT TO COST SHARE WITH REPAVING LANGREN ALLEY APPROXIMATELY 545 SY OF 2" ASPHALT 2" 545 SY @ \$15/SY = \$8,175 COST SHARE AMOUNT = \$4,087.50

COA PAVE COST SHARE: \$ 4,087.50

100% REIMBURSMENT: \$ 86,685.37

STATE OF NORTH CAROLINA	()	AGREEMENT REGARDING CONSTRUCTION
)	OF AND REIMBURSMENT FOR PUBLIC
COUNTY OF BUNCOMBE)	SEWER REHABILITATION FOR 17 NORTH
)	MARKET ST. CONDOMINUM PROJECT

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

Whereas, the District has a Sewer Rehabilitation Cost Participation program wherein the District will participate in the cost of sewer improvements based on a point system; and

Whereas, SBC is remodeling/developing an existing building on property (Buncombe County PIN: 9649404876) in the City of Asheville fronting Market Street with Langren Alley to the rear, which it desires to develop for residential purposes and connect to the District Sewerage System; and

Whereas, MSD has a General Sewer Rehabilitation Capital Improvement Project known as Walnut Street at North Lexington, MSD Project Number 2017008, a portion of which is within Langren Alley where the **SBC** property currently connects; and

Whereas, MSD issued a wastewater allocation approval to SBC in the amount of 4,800 gallons per day for the multi-family residential development with a condition of said allocation being that a portion of the existing 6-inch MSD sewer line be upgraded with new 8-inch gravity sewer to provide sewer service for the new development; and

Whereas, SBC petitioned the District to participate in the cost of the sewer line upgrade required by MSD; and

Whereas, MSD determined that SBC would qualify for cost participation; and

Whereas, MSD completed the attached Cost Participation Worksheet and determined that MSD will participate up to 100 percent of the cost of the required sewer rehabilitation; and

Whereas, MSD engineering staff has estimated the cost of sewer rehabilitation for Langren Alley to be \$86,685.37; and

Whereas, the **District** will participate up to \$86,685.37 not to exceed 100 percent of the lesser amount of the **MSD** cost estimate or actual sewer construction cost; and

Whereas, the **District** Board considered the petition to participate in the Sewer Rehabilitation Cost Participation, and approved the project for cost participation at the February 20, 2019 **MSD** regular Board meeting and agreed to a cost participation of 100 percent up to \$86,685.37, subject to compliance with all District requirements; and

Now, Therefore, in exchange for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and the covenants and conditions set forth herein, **MSD** and **SBC** hereby agree as follows:

- 1. **SBC** agrees to hire a public utility contractor currently licensed in the State of North Carolina to construct the 8-inch sewer line within the public right of way of Langren Alley under applicable permits from the City of Asheville. The contractor shall have prior successful experience with MSD rehabilitation projects, and shall be approved by MSD.
- 2. The 8-inch gravity sewer system will be constructed in a good and workmanlike manner, in accordance with plans and specifications prepared by Civil Design Concepts, PA and approved by MSD dated October 23, 2018 and requirements of the non-discharge permit issued by MSD for the sewer extension. MSD issued an approved copy of plans to Civil Design Concepts, PA, SBC, and its contractor, _______ at the preconstruction meeting held on ______, 2019. The plans, specifications, and permits are incorporated into and made a part of this Agreement by reference.
- 3. **SBC** and **MSD** acknowledge and agree that MSD will pay 100% of actual sewer construction cost not to exceed \$86,685.37. To the extent the construction cost exceeds \$86,685.37, **SBC** shall pay any excess. **MSD** and **SBC** agree that **MSD** shall make no additional reimbursement or payments to **SBC** except as set forth in this Agreement.
- 4. **MSD** agrees to reimburse **SBC** the amount set forth in Paragraph 3 at full project completion. Full project completion shall be defined as:
 - 1) All construction and testing is 100% complete and passing in accordance with **MSD** specifications.
 - 2) All applicable permitting requirements, including, but not limited to, restoration of pre-construction contours as defined in paragraph 7 below, have been met.
 - 3) All restoration on properties except **SBC's** is 100% complete including the City of Asheville public right of way.
 - 4) Submission of all final closeout documents including:

- Engineer's Certification
- Engineering As-Built Drawings
- Survey Easement Plat
- Contractor's Certification to include one-year warranty
- MSD Final Inspection Approval
- Conveyance of Sewer System and Easement Documents
- 5) Conveyance of the gravity sewer system and easements therefor to **MSD** and acceptance of the same by the MSD Board of Directors.

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

- 5. **MSD** will employ construction inspectors, at its expense, to inspect the construction of the 8-inch gravity sewer system. **SBC** and its contractor further agree to coordinate all sewer construction activities with **MSD** to facilitate timely completion and restoration of affected areas.
- 6. Change(s) to the project made in the field must be reviewed and approved by MSD prior to implementation. It shall be the responsibility of SBC and its contractor to make MSD's Construction Division aware of any proposed change(s) and to obtain approval for the change(s) from MSD. Upon receipt of a request for change(s) in the project design and/or construction, MSD will promptly review such change(s) and shall indicate approval or denial of such change(s) within reasonable time of receipt thereof and not more than three (3) business days. Any proposed change(s) which shall affect the quality of the design, the integrity of the sewer system, additional costs to MSD or any matter involving right of way revisions shall be submitted in writing by SBC and shall be approved/disapproved in writing by MSD within three (3) business days of receipt. To the extent such change(s) increase the cost of the 8-inch gravity sewer system, MSD and SBC shall mutually agree upon additional reimbursement to SBC, if any for such increase in cost.
- 7. **SBC** shall require its contractor to restore off-site areas affected by the work to preconstruction contours and conditions, or to those contours as directed or specified by permitting agencies, if different.
- 8. Upon completion of construction, **SBC** will convey the 8-inch gravity sewer system and easements to **MSD**. Such conveyance will be prepared by **SBC** attorney using an instrument in form and content similar to Exhibit A attached hereto. Upon finding conveyance is in accord with relevant provisions of its bond order and applicable law, **MSD** will issue approval to record conveyance and subsequently accept the conveyance of the 8-inch gravity sewer system and easements.
- 9. This agreement shall be governed by and under the laws of the State of North Carolina and any litigation hereunder shall be in the General Court of Justice for the 28th Judicial District of North Carolina.

10. This Agreement represents the entire agreement between **MSD** and **SBC** with respect to the subject matter hereof. Any amendment to this agreement shall be in writing and signed by the parties hereto.

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

METROPOLITAN SEWERAGE DISTRICT
OF BUNCOMBE COUNTY, NORTH
CAROLINA
By:
Thomas E. Hartye, P.E. General Manager
SPECTRUM BUILDING COMPANY, INC.
D
By: Charles A. Caputo, President
Charles A. Capato, President





Walnut Street at North Lexington Avenue Project No. 2017008



METROPOLITAN SEWERAGE DISTRICT of BUNCOMBE COUNTY, NORTH CAROLINA

Budget Map

Metropolitan Sewerage District of Buncombe County

Board Action Item

BOARD MEETING DATE: February 20, 2019

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

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

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

SUBJECT: Acceptance of Developer Constructed Sewer System for the Cisco Road

Homes Sewer Extension, MSD Project No. 2017220

BACKGROUND: This project is located inside the District boundary at Cisco Road and Old

Haw Creek Road in the City of Asheville. The developer of the project is

Esther Godfrey of Good Luck Cricket, LLC.

The project included extending approximately 168 linear feet of 8-inch

public gravity sewer to serve the seven (7) lot single family residential

development.

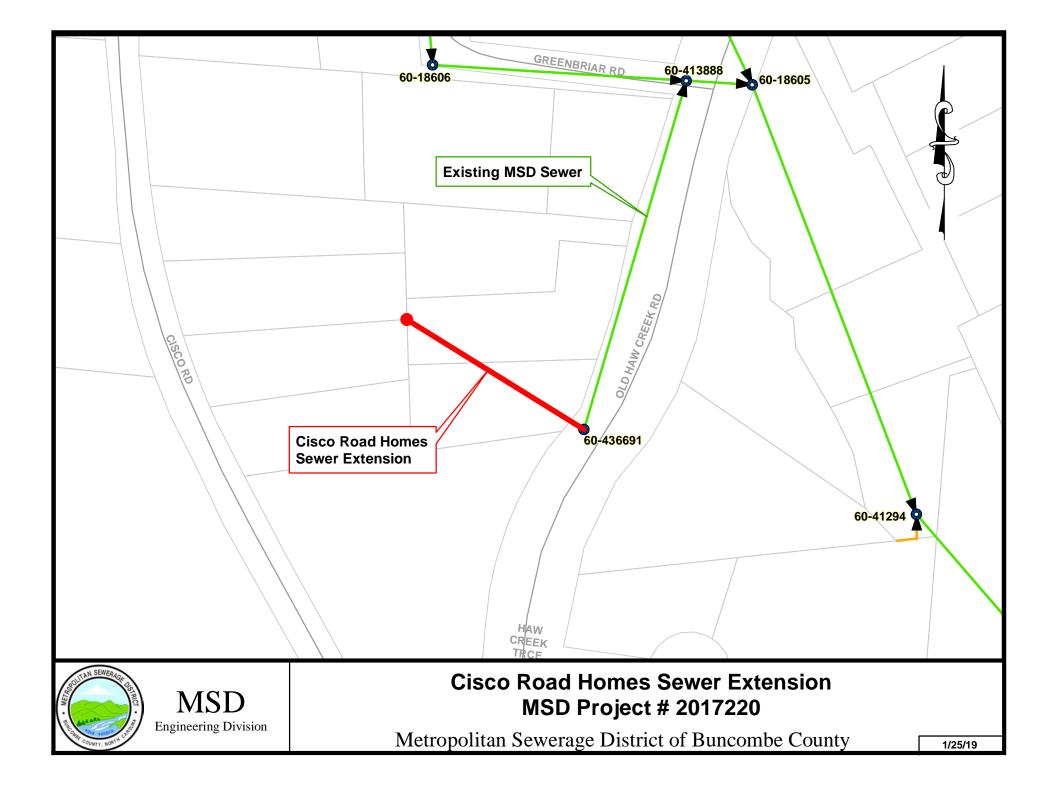
A wastewater allocation was issued in the amount of 2,800 GPD for the

project. The estimated cost of the sewer construction is \$36,500.00.

All MSD requirements have been met.

STAFF RECOMMENDATION: Staff recommends acceptance of this developer constructed

sewer system.



Metropolitan Sewerage District of Buncombe County

Board Action Item

BOARD MEETING DATE: February 20, 2019

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

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

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

SUBJECT: Acceptance of Developer Constructed Sewer System for the Asheville

Habitat Curry Court Sewer Extension, MSD Project No. 2017086

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

Street in Buncombe County. The developer of the project is Paul Reeves of

the Asheville Area Habitat for Humanity, Inc.

The project included extending approximately 554 linear feet of 8-inch

public gravity sewer to serve the twelve (12) unit affordable housing

development.

A wastewater allocation was issued in the amount of 3,600 GPD for the

project. The estimated cost of the sewer construction is \$53,901.00.

This project also qualifies for the District's Cost Recovery Reimbursement

for the lesser of the construction of the sewer extension or five years' estimated revenue. The estimated revenue is \$14,656.00.

All MSD requirements have been met.

STAFF RECOMMENDATION: Staff recommends acceptance of this developer constructed

sewer system and authorize the General Manager to disburse

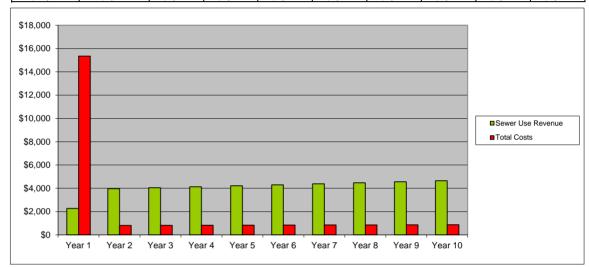
\$14,656.00 to Asheville Area Habitat for Humanity, Inc.

Curry Court - Cost Recovery

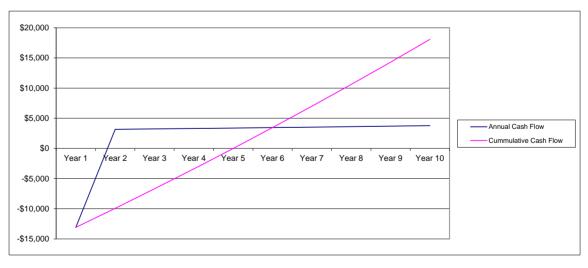
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Wastewater Treatment	\$154	\$269	\$274	\$280	\$285	\$291	\$297	\$303	\$309	\$315
Collection System PM	\$112	\$115	\$117	\$119	\$122	\$124	\$127	\$129	\$132	\$134
Total O & M Costs	\$266	\$383	\$391	\$399	\$407	\$415	\$423	\$432	\$440	\$449

Sewer Line Participation	\$14,656									
Depreciation	\$425	\$425	\$425	\$425	\$425	\$425	\$425	\$425	\$425	\$425
Total Capital Costs	\$15,081	\$425	\$425	\$425	\$425	\$425	\$425	\$425	\$425	\$425

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Sewer Use Revenue	\$2,270	\$3,968	\$4,048	\$4,129	\$4,211	\$4,296	\$4,382	\$4,469	\$4,559	\$4,650
Total Costs	\$15,347	\$808	\$816	\$824	\$832	\$840	\$848	\$856	\$865	\$874
Net Revenue	-\$13,078	\$3,160	\$3,232	\$3,305	\$3,380	\$3,456	\$3,534	\$3,613	\$3,693	\$3,776



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Annual Cash Flow	-\$13,078	\$3,160	\$3,232	\$3,305	\$3,380	\$3,456	\$3,534	\$3,613	\$3,693	\$3,776
Cummulative Cash Flow	-\$13,078	-\$9,917	-\$6,685	-\$3,380	\$0	\$3,456	\$6,990	\$10,602	\$14,296	\$18,072



Service Connections
Off-site Construction Costs
On-site Public Sewer Mains (for Depreciation & P.M.)
Off-site Sewer Mains
Estimated 5-Year Revenue
MSD Sewer Line Participation

12 (5/8" Meters) \$14,300 0 feet 194 feet \$14,656 \$14,656

State of North Carolina County of Buncombe

Cost Recovery Agreement Sewer System Extension Asheville Habitat Curry Court MSD Project #2017086 Affordable Housing Project

This Agreement made this ______ day of ______, 2019, by and between the Metropolitan Sewerage District of Buncombe County, North Carolina, (hereinafter "District" or "MSD") a body corporate and politic with an office and place of business at 2028 Riverside Drive, Woodfin, in Buncombe County, North Carolina, and Asheville Area Habitat for Humanity, Inc., a corporation with an office and place of business at 33 Meadow Road, in Asheville, Buncombe County, North Carolina;

Whereas, the District, in February, 2011, adopted a Cost Recovery Policy applicable only to Affordable Housing wherein the District would participate in the extension of wastewater service based on the expected fees to be generated from new development served by the extension;

Whereas, Asheville Area Habitat for Humanity petitioned the District to recover a portion of the cost of extending sewer service to a project known as Asheville Habitat Curry Court being more particularly described in a deed recorded in Deed Book 5573, Page 1012, and Plat Book 0059 Page 0128.

Whereas, Asheville Area Habitat for Humanity have provided certain financial information to the District prior to the execution of this Agreement;

Whereas, projected revenues from Asheville Habitat Curry Court, over a period of five years, less the cost of operation and maintenance, are \$14,656.00.

Whereas, the actual cost of the sewer system extension for this project was \$53,901.00.

Whereas, the District Board has considered the petition to participate in the Cost Recovery Program, and the District Board has approved this project for participation, subject to compliance with all District requirements;

Whereas, the estimated cost of the revenue projections for this project are attached hereto and incorporated herein by reference;

Whereas, Asheville Area Habitat for Humanity has conveyed the sewer system extension serving the Curry Court Development;

It is Now Therefore Agreed as follows:

Receipt of satisfactory documentation from Asheville Area Habitat for Humanity evidencing the cost of the sewer system extension to be \$53,901.00 is acceptable. The District will reimburse Asheville Area Habitat for Humanity \$14,656.00.

Asheville Area Habitat for Humanity has conveyed the sewer system extension for Asheville Habitat Curry Court together with easements therefore (the "Sewer System") to MSD recorded and accepted by the MSD Board at its regular meeting on February 20, 2019. The conveyance

R&S:312020-1

of the Sewer System has been made by instrument duly recorded at BK 5733 PG 592-595 and satisfactory to MSD or its counsel. MSD is under no obligation to accept any extension, on site or off site, until all requirements of its Bond Order or applicable law have been met. Any obligation of MSD to reimburse Asheville Area Habitat for Humanity shall be subject to conveyance of the Sewer System to MSD and acceptance by the MSD Board in accordance with Section 714 of the MSD Bond Order.

Asheville Area Habitat for Humanity acknowledges and agrees that MSD's reimbursement is based on the fact that MSD expects to recover the reimbursement from sewer service charges and maintenance fees to be paid by residents in the twelve lot subdivision. Asheville Area Habitat for Humanity agrees that, if sewer service charges and maintenance fees from the twelve lot subdivision over a five year period, beginning with the date of reimbursement, do not equal or exceed amounts reimbursed pursuant to this Agreement, then Asheville Area Habitat for Humanity shall pay back to MSD any difference.

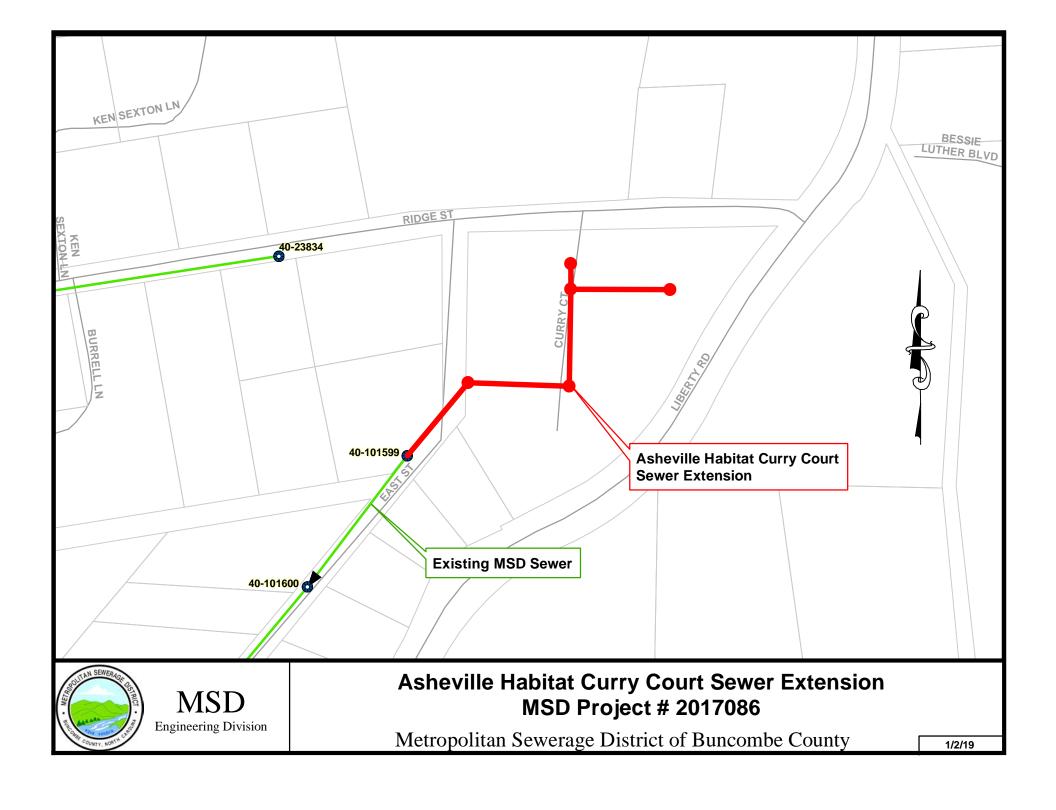
For purposes of this Agreement, sewer service charges and maintenance fees shall mean only those fees paid for monthly sewer service and shall not include any facility fee or connection fee charged by the District.

While it is District policy to require that a developer purchase a letter of credit or other appropriate security to ensure the commitment to repay any reimbursement not covered by sewer service charges and maintenance fees, the District, in light of the relatively small amount of reimbursement for this project, the expected recovery over a five year period and the personal guarantee of Asheville Area Habitat for Humanity, has determined to waive the security requirement in this case.

This Agreement shall be governed by and under the laws of the State of North Carolina. Any action arising hereunder must be brought in the General Court of Justice for the 28th Judicial District of North Carolina and Asheville Area Habitat for Humanity hereby consent to the jurisdiction of such Court.

This Agreement represents the entire agreement between the parties.

ASHEVILLE AREA HABITAT FOR HUMANITY	
By AFA	(SEAL)
Andy Barnett, Executive Director	
MET O DOLLT AN OFWED A OF DIOTRICT	
METROPOLITAN SEWERAGE DISTRICT	
Ву	(SEAL)
Thomas E. Hartye, General Manager	



Board Action Item

BOARD MEETING DATE: February 20, 2019

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

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

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

SUBJECT: Acceptance of Developer Constructed Sewer System for the 605 Fairview

Road Sewer Extension, MSD Project No. 2017103

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

the City of Asheville. The developer of the project is Chris Eller of Cane Creek

Vistas, LLC.

The project included extending approximately 362 linear feet of 8-inch public gravity sewer to serve the six (6) lot single family residential

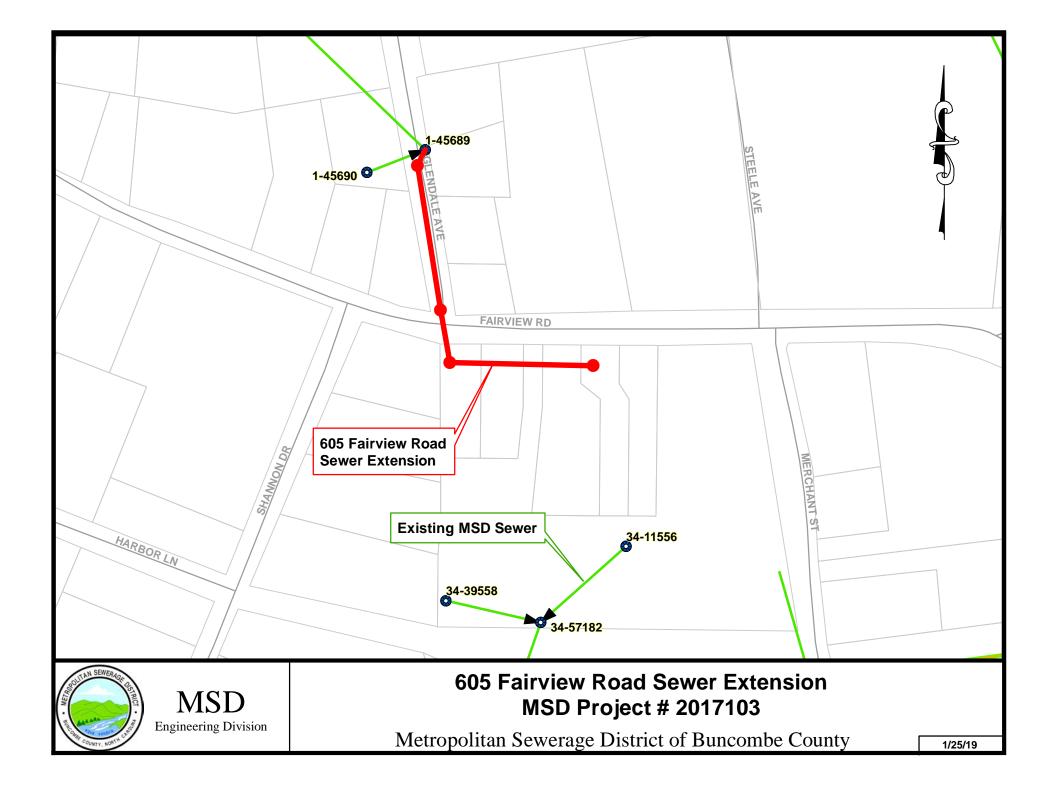
development.

A wastewater allocation was issued in the amount of 3,000 GPD for the

project. The estimated cost of the sewer construction is \$92,000.00.

All MSD requirements have been met.

STAFF RECOMMENDATION: Staff recommends acceptance of this developer constructed



Board Action Item

BOARD MEETING DATE: February 20, 2019

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

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

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

SUBJECT: Acceptance of Developer Constructed Sewer System for the Grindstaff

Subdivision Sewer Extension, MSD Project No. 2016246

BACKGROUND: This project is located inside the District boundary along Grindstaff Drive in

the City of Asheville. The developer of the project is Charley Wilson.

The project included extending approximately 110 linear feet of 8-inch public gravity sewer to serve the five (5) lot single family residential

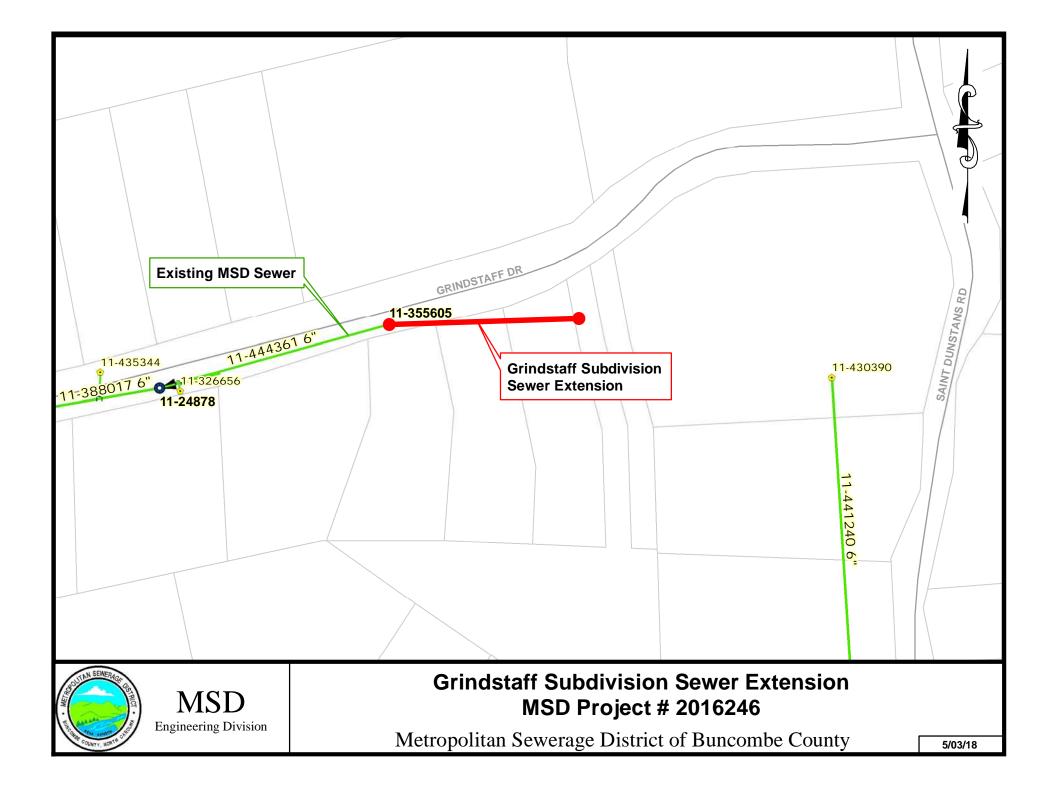
development.

A wastewater allocation was issued in the amount of 1,200 GPD for the

project. The estimated cost of the sewer construction is \$20,600.00.

All MSD requirements have been met.

STAFF RECOMMENDATION: Staff recommends acceptance of this developer constructed



Board Action Item

BOARD MEETING DATE: February 20, 2019

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

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

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

SUBJECT: Acceptance of Developer Constructed Sewer System for the Maple Trace

Phase 2 Sewer Extension, MSD Project No. 2017160

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

the Town of Weaverville. The developer of the project is Drew Norwood of

Windsor Built Homes, Inc.

The project included extending approximately 2,560 linear feet of 8-inch public gravity sewer to serve the thirty-seven (37) lot single family

public gravity server to serve the thirty seven

residential development.

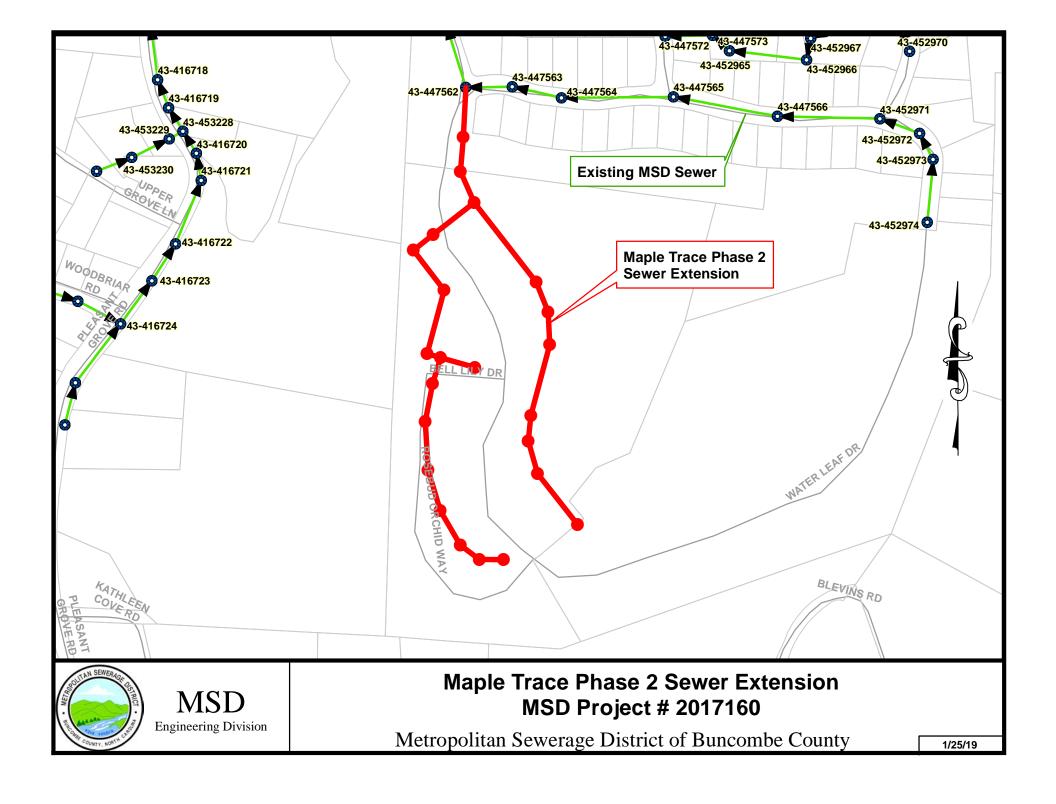
A wastewater allocation was issued in the amount of 11,100 GPD for this

phase of the project. The estimated cost of the sewer construction is

\$173,000.00.

All MSD requirements have been met.

STAFF RECOMMENDATION: Staff recommends acceptance of this developer constructed



Board Action Item

BOARD MEETING DATE: February 20, 2019

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

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

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

SUBJECT: Acceptance of Developer Constructed Sewer System for the Villa Heights

Sewer Extension, MSD Project No. 2017118

BACKGROUND: This project is located inside the District boundary between Dellwood Street

and Wilmington Street in the City of Asheville. The developer of the project

is Richard Hensley.

The project included extending approximately 548 linear feet of 8-inch

public gravity sewer to serve the eight (8) lot single family residential

development.

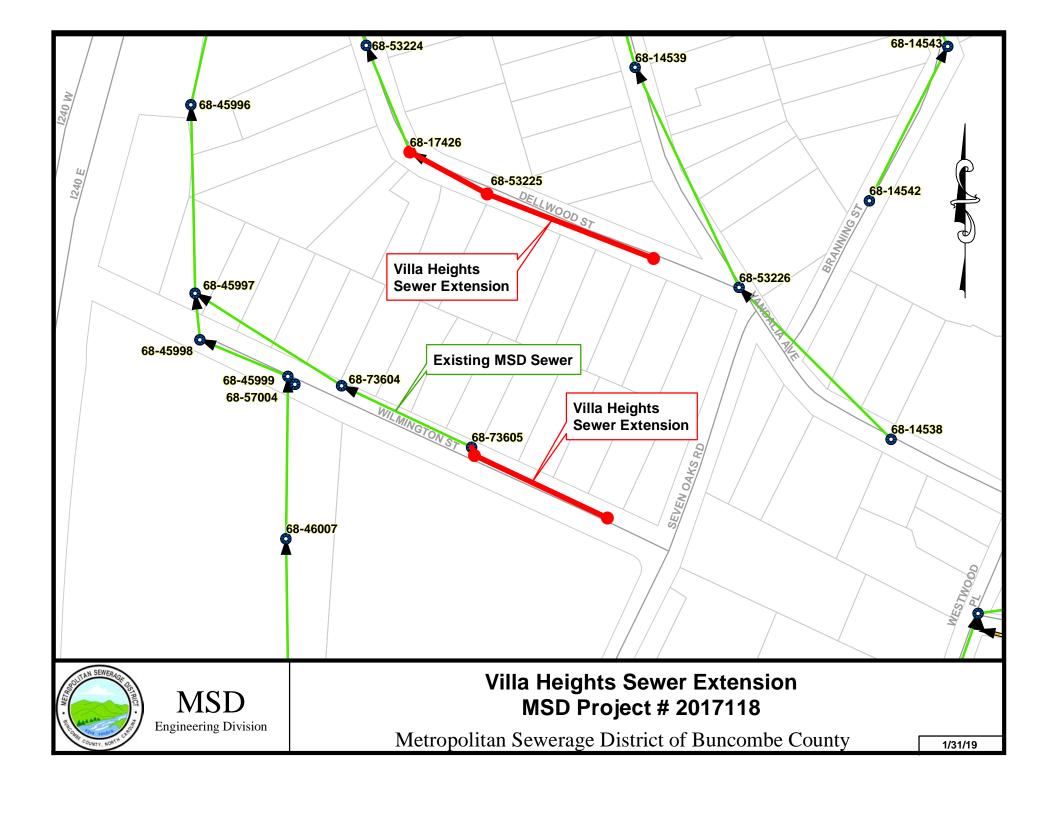
A wastewater allocation was issued in the amount of 2,400 GPD for this

phase of the project. The estimated cost of the sewer construction is

\$156,000.00.

All MSD requirements have been met.

STAFF RECOMMENDATION: Staff recommends acceptance of this developer constructed



Metropolitan Sewerage District of Buncombe County BOARD INFORMATIONAL ITEM

Meeting Date: February 20, 2019

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

Subject: Second Quarter Budget to Actual Review – FY2019

Background

At the end of each quarter, actual revenue and expenditure amounts are compared with the budget to evaluate performance. This information is based on cash revenues and invoices received prior to December 31, 2018 and may not include some accruals of revenue and expenditures.

Discussion

There are several explanatory notes at the bottom of the attached Budget to Actual schedule. Other considerations are as follows:

- * Domestic Revenue is at budget expectations. Industrial Revenue is better than budgeted expectations temporary increased revenue from one industrial user. Staff Monitors consumption trends as they have a direct effect on the District's current revenue projections.
- * Facility and Tap Fees are budgeted conservatively. The unusually large variance as of the end of the second quarter is due to receiving unanticipated revenue of \$1.2 million from two developments.
- * Interest and miscellaneous income are above budgeted expectations. Actual short-term interest rates were better than anticipated for the fiscal year.
- Rental income reflects expected earnings.
- * O&M expenditures are at 51.24% of budget. The expenditures include encumbered amounts, which has elevated the budget to actual ratio above 50%. The aforementioned encumbrances will be spent in future quarters.
- * Bond principal and interest are reflected at 50%. This will aid the user to properly assess the District's overall debt service commitments. Actual amount spent is 21.54%. The District is required to make semi-annual interest payments on December 1, 2018 and principal and semi-annual interest payments on July 1, 2019.
- * Amounts budgeted for capital equipment and capital projects are rarely spent proportionately throughout the year and are expected to be fully spent prior to the end of the year.

Staff Recommendation

None - Information Only.

□Approve	□Disapprove
□Table	□Send to Committee
Deadline:	
	□Table

Metropolitan Sewerage District
Budget to Actual Revenue and Expenditure Report
For the six months ended December 31, 2018
UNAUDITED--NON-GAAP

	Budget	Ac	tual to Date	% Budget to Actual
REVENUES				
Domestic User Fees ¹	\$ 32,431,584	\$	16,980,382	52.36%
Industrial User Fees	3,422,373		1,988,786	58.11%
Facility Fees ²	2,000,000		2,772,289	138.61%
Tap Fees³	175,000		321,083	183.48%
Billing and Collection	816,660		404,006	49.47%
Interest and Misc. Income	1,164,716		1,053,734	90.47%
Employee Contribution to Health Ins.	421,467		188,394	44.70%
City of Asheville (Enka Bonds)	35,000		-	0.00%
Rental Income	71,641		36,424	50.84%
Use of (Contributions to) Available Funds ⁴	10,243,546		8,509,841	83.08%
Total Revenues⁵	\$ 50,781,987	\$	32,254,941	63.52%
EXPENDITURES				
Operations and Maintenance ⁶	\$ 16,874,954	\$	8,647,411	51.24%
Bond Principal and Interest ⁷	9,448,115		4,724,058	50.00%
Capital Equipment (Other than O&M) ⁶	966,000		466,644	48.31%
Capital Projects ⁶	22,492,718		18,416,828	81.88%
Contingency	 1,000,000		-	0.00%
Total Expenditures	\$ 50,781,787	\$	32,254,941	63.52%

Notes:

¹ Revenues are accounted for on the cash basis method

² Increase due to unanticipated revenue from two developments at \$ 1,230,000

³ Increase in number of Taps requiring Pavement Disturbance

⁴ Pay-as-go funds to be used for CIP

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

⁶ Includes encumbered amounts as well as actual insurance expenditures

⁷ Bond principal and interest expenditures are reflected a 50%. Actual spend amount is 21.54%.

Metropolitan Sewerage District of Buncombe County BOARD INFORMATIONAL ITEM

Meeting Date: February 20, 2019

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 December 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 December 31, 2018 were \$75,554,425. The detailed listing of accounts is available upon request. The average rate of return for all investments is 1.835% 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 December 31, 2018 do not reflect contractual commitments or encumbrances against said funds. Shown below are the total investments as of December 31, 2018 reduced by contractual commitments, bond funds, and District reserve funds. The balance available for future capital outlay is \$34,681,958.

Total Cash & Investments as of 12/31/2018		75,554,425
Less:		
Budgeted Commitments (Required to pay remaining		
FY19 budgeted expenditures from unrestricted cash)		
Construction Funds	(15,352,149)	
Operations & Maintenance Fund	<u>(9,312,015)</u>	
		(24,664,164)
Bond Restricted Funds		
Bond Service (Funds held by trustee):		
Funds in Principal & Interest Accounts	(1,654,380)	
FY19 Principal & Interest Due	<u>(8,897,559)</u>	
		(10,551,939)
District Reserve Funds		
Fleet Replacement	(714,941)	
Pump Replacement	(201,115)	
WWTP Replacement	(242,298)	
Maintenance Reserve	<u>(984,442)</u>	
		(2,142,796)
District Insurance Funds		
General Liability	(106,839)	
Worker's Compensation	(321,604)	
Post-Retirement Benefit	(1,831,084)	
Self-Funded Employee Medical	<u>(1,254,041)</u>	
		(3,513,568)
Designated for Capital Outlay		<u>34,681,958</u>

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

Page 2

Staff Recommendation

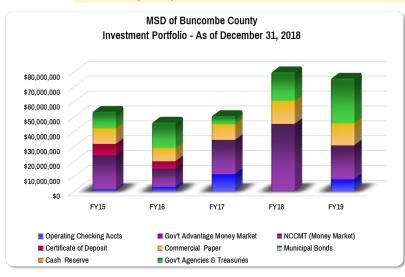
None - Information Only.

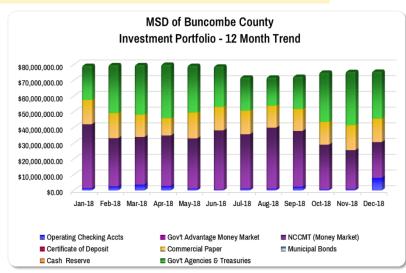


Metropolitan Sewerage District of Buncombe County Investment Portfolio

	C	Operating	Gov'	t Advantage		NCCMT	Ce	rtificate of		Commercial	Mu	ınicipal		Cash		G	ov't Agencies	
	Check	king Accounts	Mo	ney Market	(M	oney Market)		Deposit		Paper	E	Bonds		Reserve		8	Treasuries	Total
Held with Bond Trustee	\$	-	\$	-	\$	1,656,054	\$		-	\$ -	\$		-	\$	-	\$	-	\$ 1,656,054
Held by MSD		7,973,788		46,680		21,092,669			-	14,897,503			-		-		29,887,731	 73,898,371
	\$	7,973,788	\$	46,680	\$	22,748,723	\$		-	\$ 14,897,503	\$		-	\$	-	\$	29,887,731	\$ 75,554,425

Investment Policy Asset Allocation	Maximum Percent	Actual Percent	
U.S. Government Treasuries,			
Agencies and Instrumentalities	100%	39.56%	No significant changes in the investment portfolio as to makeup or total amount.
Bankers' Acceptances	20%	0.00%	
Certificates of Deposit	100%	0.00%	The District 's YTM of 2.42% is exceeding the YTM benchmark of the
Commercial Paper	20%	19.72%	NCCMT Government Portfolio.
Municipal Bonds	100%	0.00%	
North Carolina Capital Management Trust	100%	30.11%	
Checking Accounts:	100%		All funds invested in CD's, operating checking accounts, Gov't Advantage money market
Operating Checking Accounts		10.55%	are fully collaterlized with the State Treasurer.
Gov't Advantage Money Market		0.06%	





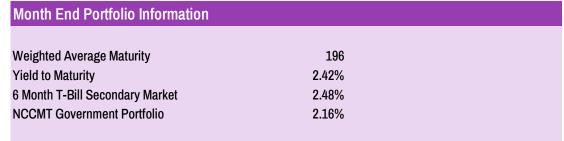
Subject: Cash Commitment/Investment Report-Month Ended December 31, 2018

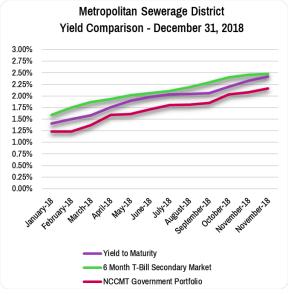
Page 4

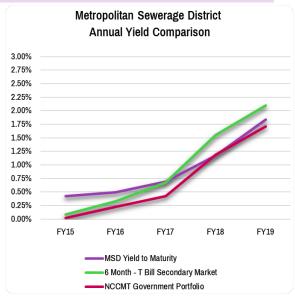
Metropolitan Sewerage District INVESTMENT MANAGERS' REPORT At December 31, 2018

Summary of Asset Transactions			
	Original		Interest
	Cost	Market	Receivable
Beginning Balance	\$ 71,791,632	\$ 71,837,904	\$ 93,857
Capital Contributed (Withdrawn)	(8,578,283)	(8,578,283)	
Realized Income	68,847	68,847	(26,879)
Unrealized/Accrued Income		26,548	60,263
Ending Balance	\$ 63,282,196	\$ 63,355,016	\$ 127,241

Value and Income by Maturity			
	0	riginal Cost	Income
Cash Equivalents <91 Days	\$	33,394,466	\$ 67,958
Securities/CD's 91 to 365 Days		14,456,610	\$ 29,419
Securities/CD's > 1 Year		15,431,120	\$ 31,402
	\$	63,282,196	\$ 128,779



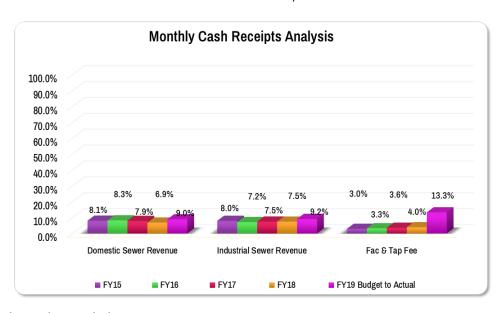




Subject: Cash Commitment/Investment Report-Month Ended December 31, 2018

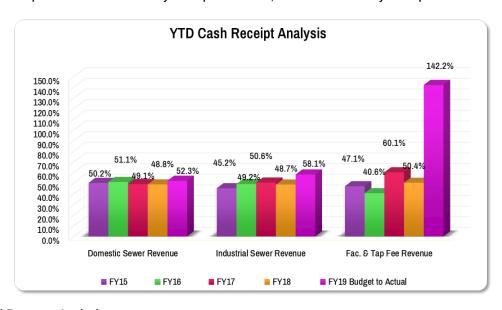
Page 5

Metropolitan Sewerage District ANALYSIS OF CASH RECEIPTS As of December 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.



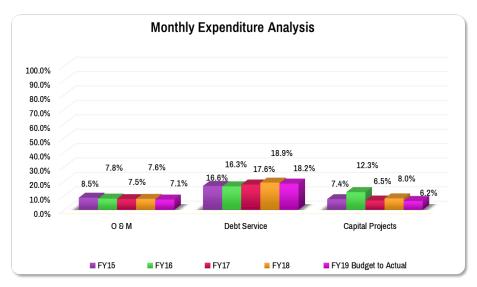
YTD Actual Revenue Analysis:

- 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.

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

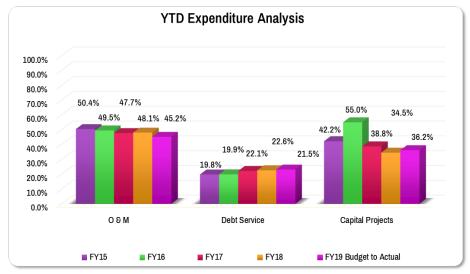
Page 6

Metropolitan Sewerage District ANALYSIS OF EXPENDITURES As of December 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.



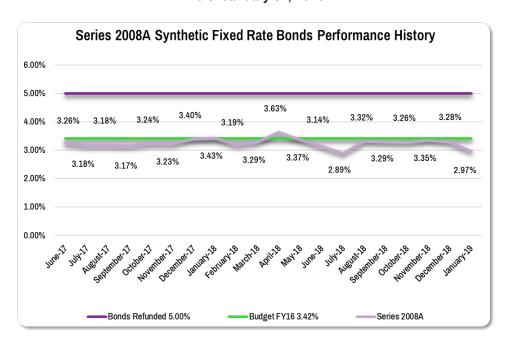
YTD Expenditure Analysis:

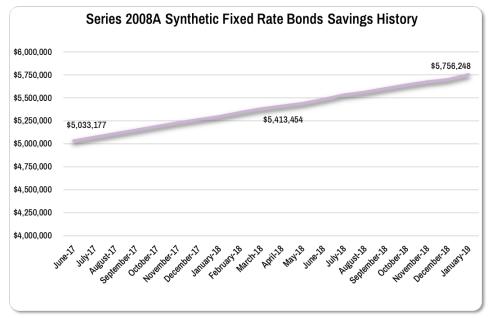
- YTD O&M expenditures are considered reasonable based on historical trends.
- Due to the nature of the variable rate bond market, YTD expenditures can vary year to year. Based on current variable interest rates, YTD debt service expenditures are considered reasonable.
- Due to nature and timing of capital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

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

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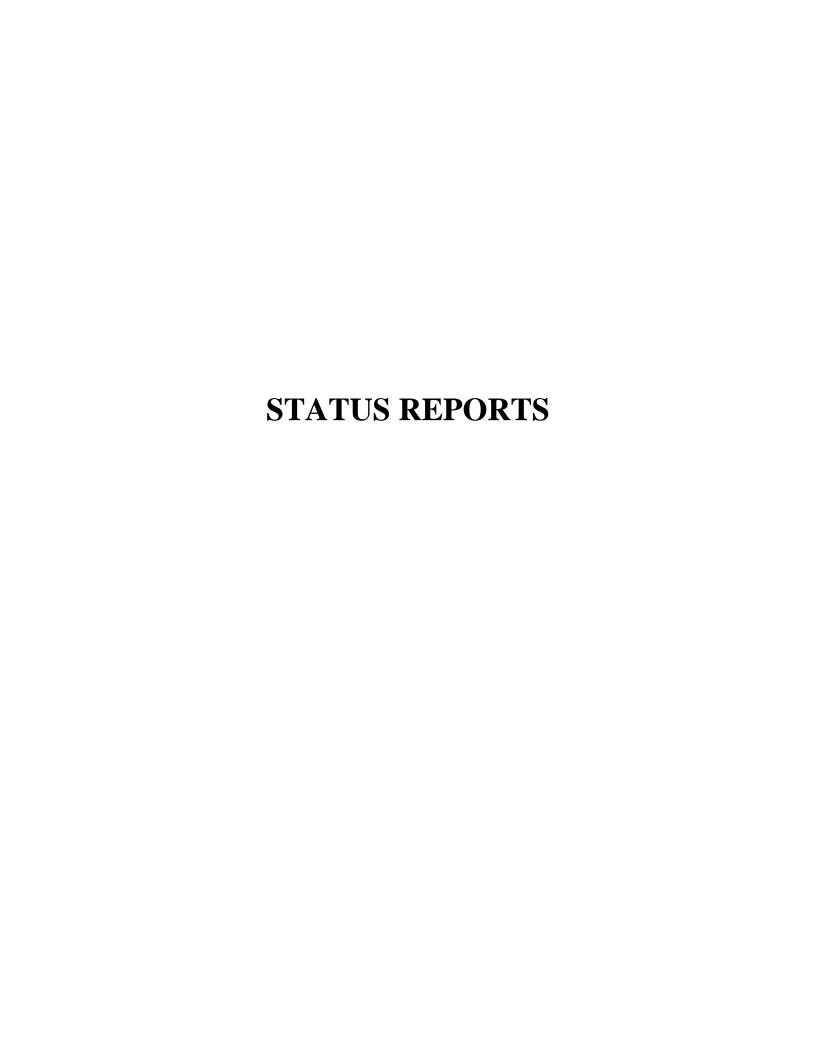
Metropolitan Sewerage District VARIABLE DEBT SERVICE REPORT As of January 31, 2019





Series 2008A:

- Savings to date on the Series 2008A Synthetic Fixed Rate Bonds is \$5,756,248 as compared to 4/1/2008 fixed rate of 4.85%.
- Assuming 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 \$2,719,421 to terminate the existing Bank of America Swap Agreement.





CONSTRUCTION TOTALS BY DATE COMPLETED - Monthly

From 7/1/2018 to 12/31/2018

	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 2018	27	8	99	986	23	39	4,335	0	321	660	19	412	1393
August 2018	25	8	104	1,238	24	41	17,360	0	677	968	12	576	2221
September 2018	23	8	171	974	21	36	450	0	216	1317	11	0	1533
October 2018	37	9	256	601	46	27	2,630	0	205	916	9	507	1628
November 2018	24	15	54	416	16	8	2,377	0	514	287	2	0	801
December 2018	22	7	41	578	20	15	1,200	0	0	1452	10	0	1452
Grand Totals	158	55	724	4,793	150	166	28,352	0	1933	5600	63	1,495	9028

02/05/2019

MSD System Services In-House Construction FY 18-19

PROJECT NAME	LOCATION	ZIP CODE	ESTIMATED FOOTAGE	ESTIMATED PROJECT DATES	WO#	CREW	COMPLETION DATE	ACTUAL FOOTAGE	NOTES
Emergency Weaverville #2 FM Repair Section 1	Woodfin	28804	60	7/10/2018	254177	631	7/10/2018	61	Complete
West Skyland Circle Sewer Rehabilitation	Woodfin	28804	520	6/18/18 - 7/20/18	246546	631	7/11/2018	515	Complete
Waynesville Avenue Sewer Rehab Ph. 2	Asheville	28806	400	6/15/18 - 7/15/18	253710	674	7/16/2018	372	Complete
Williamette Circle Sanitary Sewer Rehabilitation	Weaverville	28787	183	7/12/18 - 7/18/18	233748	631	7/18/2018	185	Complete
Emergency Weaverville #2 FM Repair Section 2	Woodfin	28804	330	8/4/18-8/5/18	254896	674	8/5/2018	321	Complete
3 Cliffridge Parkway Emerency Replacement	Avery's Creek	28704	80	8/7/2018	477071	608	8/7/2018	80	Complete
56 Fairway Drive Sewer Rehabilitation	Asheville	28805	451	7/17/18 - 8/31/18	240884	674	8/13/2018	452	Complete
Livingston Street at Erskine Sewer Rehabilitation	Asheville	28801	710	7/19/18 - 8/31/18	247502	631	8/15/2018	720	Complete
Myrtle Street Sewer Rehabilitation	Arden	28704	410	8/14/18 - 8/29/18	251129	674	8/29/2018	372	Complete
105 Midland Ave Sewer Rehabilitation	Black Mountain	28711	810	8/16/18 - 9/28/18	242836	631	9/12/2018	825	Complete
12 Melody Lane Sewer Replacement	Asheville	28803	215	9-24-18 - 9-26-18	256028	631	9/26/2018	216	Complete
110 Beaver Drive	Woodfin	28804	425	9/3/18-9/28/18	210211	674	9/28/2018	492	Complete
14 Shiloh Road Sewer Replacement	Asheville	28803	145	10/1/18 - 10/7/18	256024	631	10/3/2018	145	Complete
51 Hillcrest Road Sewer Replacement	Woodfin	28804	1320	10/7/18 - 11/7/18	255110	631	10/31/2018	1270	Complete
2229 Riverside Drive FM Repair Section 3	Woodfin	28804	182	11/16/2018	257443	631	11/16/2018	182	Complete
Blue Ridge Assembly Drive Sewer Replacement	Black Mountain	28711	250	10/29/18 - 11/9/18	256869	674	11/26/2018	287	Complete
Kanawha Drive GSR	Montreat	28757	495	11/1/18 - 12/1/18	255722	674	11/30/2018	332	Complete
38 Dunsmore Avenue	Black Mountain	28711	260	12/2/18 - 12/18/18	237426	674	12/18/2018	236	Complete
32 Klondyke Avenue Sewer Rehabilitation	Asheville	28801	1165	11/17/18 - 1/2/18	257226	631	12/28/2018	1216	Complete
28 Roebling Circle Sewer Rehabilitation	Asheville	28803	600	12/27/18 - 1/ 15/19	256370	674	1/18/2019	646	Complete
217 Mountain View Road Sewer Rehabilitation Ph. 1	Asheville	28805	979	1/2/19 - 2/1/19	257484	631	1/31/2019	752	Complete
70 Hampton Street Sewer Replacement	Asheville	28803	273	2/1/19 - 2/10/19	256291	631			Construction 50% complete
26 Wilshire Drive Sewer Rehabilitation	West Asheville	28806	1478	2/1/19 - 3/15/19	235158	674			Construction just underway
Laurel Road Phase 2B	Arden	28704	800	2/11/19 - 3/15/19	250366	631			Ready for construction
26 Wilshire Drive Phase II Sewer Rehabilitation	West Asheville	28806	284	3/16/19 - 3/20/19	259181	674			Ready for construction
217 Mountain View Road Sewer Rehabilitation Ph. 2	Asheville	28805	227	FY 18-19	TBA	631			Ready for construction
252 Kenilworth Road (Phase 1)	Asheville	28803	800	FY 18-19	234632	TBA			Ready for construction
Weaverville #2 FM By-pass	Woodfin	28804	2300	FY 18-19	258476	TBA			Ready for construction
Saint Johns Street Force Main Replacement	Arden	28704	1040	FY 18-19	238516	TBA			Ready for construction
149 State Street Sewer Rehabilitation	Asheville	28806	265	FY 18-19	237791	TBA			Ready for construction
Waynensville Avenue at Brownwood	Asheville	28806	370	FY 18-19	247283	TBA			In ROW
15 Dew Waite Road	Ridgecrest	28770	533	FY 18-19	236553	TBA			In ROW
12 Mayflower Drive Sewer Rehabilitation	Asheville	28804	350	FY 18-19	247347	TBA			In Desin
Barnard Avenue at Lookout Sewer Rehabiltation	Asheville	28804	200	FY 18-19	236089	TBA			Preliminary Engineering
East Grovestone Quarry Sewer Rehabilitation	Black Mountain	28711	780	FY 18-19	213459	TBA			Preliminary Engineering



CUSTOMER SERVICE REQUESTS Monthly - All Crews

CREW MONTH	JOBS	AVERAGE REPSONSE TIME	AVERAGE TIME SPENT
DAY 1ST RESPONDER			
July, 2018	97	20	35
August, 2018	127	28	30
September, 2018	75	21	40
October, 2018	94	25	35
November, 2018	76	28	35
December, 2018	116	30	41
	585	25	36
NIGHT 1ST RESPONDER			
July, 2018	11	17	25
August, 2018	19	15	23
September, 2018	13	21	20
October, 2018	20	28	22
November, 2018	20	29	33
December, 2018	12	22	25
	95	22	25
ON-CALL CREW *			
July, 2018	44	46	54
August, 2018	37	41	40
September, 2018	31	34	44
October, 2018	38	51	38
November, 2018	42	58	53
December, 2018	49	39	30
	241	45	43
Grand Totals:	921	30	37

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



PIPELINE MAINTENANCE TOTALS BY DATE COMPLETED - Monthly

July 01, 2018 to December 31, 2018

	Main Line Wash	Service Line Wash	Rod Line	Cleaned	CCTV	Smoke	SL-RAT
	Footage	Footage	Footage	Footage	Footage	Footage	Footage
2018							
July	78,545	1,208	693	79,238	23,634	0	1,683
August	67,431	1,082	1,765	69,196	35,905	35,328	23,056
September	61,707	856	8,164	69,871	17,818	300	12,942
October	94,807	1,141	11,984	106,791	19,250	10,504	4,765
November	85,234	1,974	8,074	93,308	14,766	24,371	3,595
December	47,029	1,200	2,758	49,787	16,156	38,524	0
Grand Total:	434,753	7,461	33,438	468,191	127,529	109,027	46,041
Avg Per Month:	72,459	1,244	5,573	78,032	21,255	18,171	7,674

CAPITAL IMPROVEMENT PROGRAM

STATUS REPORT SUMMARY

February 13, 2019

CALITAL IVII KOVEMENT I KOOKAM	AL IMPROVEMENT PROGRAM STATUS REPORT SUMMARY							February 15, 2019
PROJECT	LOCATION	CONTRACTOR	AWARD	NOTICE TO	ESTIMATED	*CONTRACT	*COMPLETION	COMMENTS
	OF		DATE	PROCEED	COMPLETION	AMOUNT	STATUS (WORK)	
	PROJECT				DATE		, ,	
AVERY CREEK PUMP STATION								Submittals have been reviewed and
IMPROVEMENTS	Arden 28704	NHM Constructors	11/21/2018	3/1/2019	4/30/2019	\$513,420.00	0%	approved. Equipment being ordered.
		Terry Brothers						
		Construction						
BEAUCATCHER ROAD @ KENILWORTH ROAD	Asheville 28805	Company	1/16/2019	TBA	TBA	\$171,908.00	0%	Contracts have been executed.
		Buckeye Bridge,						
DRY RIDGE ROAD (4-INCH MAIN)	Asheville 28804	LLC	9/19/2018	11/12/2018	4/1/2019	\$282,853.90	30%	Project is progressing.
		Terry Brothers						
		Construction						Minor punchlist item remains. To be
HILL STREET	Asheville 28801	Company	7/18/2018	8/1/2018	4/1/2019	\$654,969.00	99%	completed in Spring when paving resumes.
		Terry Brothers						
WENN WORTH BOAR O GRANNER ALE BOAR		Construction						
KENILWORTH ROAD @ SPRINGDALE ROAD	Asheville 28805	Company	1/16/2019	TBD	TBD	\$252,324.00	0%	Contracts have been executed.
								Project was bid on January 31st. Teraflex
								Group LLC is the apparent low bidder.
LONG SHOALS ROAD @ ALLEN AVENUE	Arden 28704	TBA	TBA	TBA	TBA	TBA	0%	Project will be presented at the February Board meeting.
LONG SHOALS ROAD @ ALLEN A VENCE	7 Huch 20704	TDA	IDA	IDA	IBA	IBA	070	Board meeting.
		Terry Brothers						
		Construction						All mainline construction and services are
MEMORY LANE	Asheville 28805	Company	6/13/2018	10/1/2018	4/1/2019	\$652,274.80	90%	complete. Paving will be done in the Spring.
		Terry Brothers						
		Construction						
OLD HAW CREEK ROAD @ GREENBRIAR ROAD	Asheville 28805	Company	1/16/2019	TBD	TBD	\$821,552.00	0%	Contracts have been executed.
		Terry Brothers						
OLD WEST CHAREL BOAD	A -l:11 - 20002	Construction	11/01/0010	1/10/2010	6/0/2010	#000 155 00	100/	Project is progressing well. The 8-inch
OLD WEST CHAPEL ROAD	Asheville 28803	Company	11/21/2018	1/10/2019	6/9/2019	\$982,155.00	10%	pipebursting is complete.
SOUTH FRENCH BROAD INTERCEPTOR -		0						T . H . I.C . L
LINING (FY 18-19)	Biltmore Estate	Granite Inliner, LLC	10/17/2019	1/2/2019	4/2/2019	¢1 044 670 00	15%	Installed first liner section on 2/11/19 at the uppermost end of the project.
Enviro (F1 18-19)	Bittillore Estate	LLC	10/17/2018	1/2/2019	4/2/2019	\$1,044,679.00	13%	appermost end of the project.
WRF - INTERMEDIATE CLARIFIER SLIDE GATES								Six getes have been installed. Work on two
REPLACEMENT	Woodfin	NHM Constructors	9/19/2018	11/5/2018	5/4/2019	\$154,300.00	70%	Six gates have been installed. Work on two additional gates is underway.
REI L'ICEIVEI (1	Woodini	TVIIVI Constructors	9/19/2018	11/3/2018	3/ 1/2017	\$154,500.00	7070	additional gates is under way.
								D
								By-pass is live, tie-in piping complete, concrete pour for isolation wall scheduled
		Judy Construction						2/13/19. New equipment tentatively
WRF - PLANT HEADWORKS IMPROVEMENTS	Woodfin	Company	1/18/2017	4/3/2017	4/1/2019	\$9,444,462.62	90%	scheduled to be on-line the week of 2/18/19.
								Chook has been an air
		Shook Construction						Shook has begun on-site work activities. Non- potable water line construction and site demo
WRF- PLANT HIGH RATE PRIMARY TREATMENT	Woodfin	Company	10/17/2018	1/7/2019	10/28/2020	\$15,071,000.00	5%	work is underway.
THE TEATH INGITIATED FROM THE TREATMENT	TT OOUIIII		10/11/2010	1/1/2017	10/20/2020	Ψ13,071,000.00	370	

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

Planning & Development Project Status Report

Active Construction Projects Sorted by Work Location and Project Number ${\it January\,4,2019}$

#	Project Name	Project Number	Work Location	Zip Code	Units	LF	Pre-Construction Conference Date	Comments
2	Dillingham Woods First Baptist Relocation	2014048 2015032	Asheville Asheville	28805 28801	Comm.	375 333	3/4/2015 7/21/2015	Waiting on final inspection Final Inspection complete, awaiting close-out docs
3	8 Sulphur Springs Road	2015032	Asheville	28806	Comm.	80	11/22/2016	Final Inspection complete, awaiting close-out docs Final Inspection complete, awaiting close-out docs
4	Atkins Street	2015110	Asheville	28803	45	903	1/20/2017	Final Inspection complete, awaiting close-out docs
5	Towne Place Suites	2016012	Asheville	28801	83	342	9/11/2018	Pre-con held, construction not yet started
	Hounds Ear (Mears Ave Cottages)	2016123	Asheville	28806	18	402	8/18/2017	Pre-con held, construction not yet started
7	Lausch Subdivision	2016153	Asheville	28805	4	248	5/16/2017	Relocation of portion of line
8	The Peaks Shopping Center	2016175	Asheville	28805	4	850	5/11/2018	Waiting on final inspection
	Hawthorne at Mills Gap	2016222	Asheville	28803	272	442	10/3/2017	Waiting on final inspection
10	Ashecroft	2016229	Asheville	28806	40	2,450	2/20/2018	Phase 1 - Punchlist items pending / Phase 2 - Installing
11	Grindstaff Subdivision	2016246	Asheville	28805	4	132	6/23/2017	Final Inspection complete, awaiting close-out docs
12	Onteora	2017002	Asheville	28803	6	417 156	7/18/2017	Final Inspection complete, awaiting close-out docs
	Gerber Road Storage RADTIP	2017049 2017052	Asheville Asheville	28803 28801	Comm.	919	2/9/2018 2/13/2018	Waiting on final inspection Installing
	Panda Express	2017032	Asheville	28805	Comm.	100	9/8/2017	Waiting on final inspection
	Rock Hill Road	2017096	Asheville	28803	15	990	7/24/2018	Installing
17	605 Fairview Road	2017103	Asheville	28803	10	380	5/18/2018	Waiting on final inspection
18	Villa Heights	2017118	Asheville	28806	8	540	2/20/2018	Testing
19	McCormick Place	2017150	Asheville	28801	17	210	8/3/2018	Waiting on final inspection
20	Flint Street	2017176	Asheville	28801	2	90	12/28/2018	Pre-con held, construction not yet started
21	Cisco Road	2017220	Asheville	28805	7	170	9/25/2018	Waiting on final inspection
22	Hawthorne Apartments @ Haywood	2017225	Asheville	28806	240	1,604	10/19/2018	Installing
23	Fernwood Avenue	2017251	Asheville	28806	3	368	10/30/2018	Pre-con held, construction not yet started
24	US 74 Commercial Development	2018010	Asheville	28803	4	265	5/25/2018	Pre-con held, construction not yet started
	Sunrise Drive Homes	2018046	Asheville	28806 28803	5 19	220 480	7/20/2018 6/19/2018	Waiting on final inspection
	Alice Place Subdivision Ingles Smokey Park Highway	2018066 2018074	Asheville Asheville	28803	19	1,289	6/19/2018 4/11/2014	Punchlist pending Installing
28	Cypress Knoll Gardens	2018074	Asheville	28803	7	90	10/30/2018	Pre-con held, construction not yet started
	West Keesler Avenue	2007176	Black Mountain	28711	6	410	11/15/2016	Final Inspection complete, awaiting close-out docs
30	808 Montreat Road	2015126	Black Mountain	28711	4	371	4/18/2017	Final Inspection complete, awaiting close-out docs
31	Sweet Birch Lane	2017111	Black Mountain	28711	65	780	9/28/2018	Testing
32	Chapman's Cove	2017227	Black Mountain	28711	10	430	9/21/2018	Waiting on final inspection
	White Oak Circle	2018197	Black Mountain	28711	4	330	10/30/2018	Pre-con held, construction not yet started
34	Hyde Park Phase 2	2013058	Buncombe Co.	28704	14	500	12/3/2013	Waiting on final inspection
	Creekside Cottages	2014095	Buncombe Co.	28704	7	504	3/12/2015	Waiting on final inspection
	Avondale Subdivision	2015052	Buncombe Co.	28803	4	215	4/7/2017	Final Inspection complete, awaiting close-out docs
37 38	Bee Tree Village	2015158	Buncombe Co.	28778 28804	26 154	1,118	3/17/2017	Waiting on final inspection
39	Newbridge Pkwy Apts. Phase II Weatherwood Subdivision	2016013 2016034	Buncombe Co. Buncombe Co.	28804	154	785	10/27/2017 7/21/2017	Final Inspection complete, awaiting close-out docs Final Inspection complete, awaiting close-out docs
	The Preserve at Avery's Creek Phase 2	2018034	Buncombe Co.	28704	141	4,000	6/16/2017	Installing
41	NCDOT I-5504 NC 191/I-26 Interchange	2016132	Buncombe Co.	28806	0	355	10/23/2017	Installing
42	New Salem Heights	2016192	Buncombe Co.	28778	25	816	2/13/2018	Waiting on final inspection
43	Villas of Avery Creek	2017068	Buncombe Co.	28704	270	3,170	9/18/2018	Installing
44	ABCCM	2017083	Buncombe Co.	28806	60	4,069	12/4/2018	Pre-con held, construction not yet started
45	Curry Court - Habitat	2017086	Buncombe Co.	28715	12	557	4/13/2018	Waiting on final inspection
46	240 Old Farm School Road	2017112	Buncombe Co.	28805	4	340	2/9/2018	Final Inspection complete, awaiting close-out docs
47	Fields BMW	2018022	Buncombe Co.	28704	3	490	10/9/2018	Testing
48	Rosscraggon Road Subdivision	2018048	Buncombe Co.	28704	4	370	4/20/2018	Waiting on final inspection
50	The Ramble Block I	2018050 2018087	Buncombe Co.	28803 28805	39 6	7,316 250	12/4/2018 8/31/2018	Pre-con held, construction not yet started Testing
	Upper Grassy Branch Road Bee Tree Road	2018087	Buncombe Co. Buncombe Co.	28805	6	250	12/18/2018	Pre-con held, construction not yet started
52	New Riparian	2018115	Buncombe Co.	28778	5	275	9/28/2018	Waiting on final inspection
53	Starview Heights	2016184	Weaverville	28787	16	Private	1/12/2018	Final Inspection complete, awaiting close-out docs
	Wheeler Road	2017019	Weaverville	28787	72	1,535	3/28/2018	Waiting on final inspection
55	44 Central Ave	2017107	Weaverville	28787	7	275	10/27/2017	Final Inspection complete, awaiting close-out docs
56	Maple Trace Phase 2	2017160	Weaverville	28787	37	2,560	3/27/2018	Waiting on final inspection
57	Ambler's Chase	2017249	Weaverville	28787	21	1,235	11/29/2018	Installing
58	Crest Mountain Phase 3B	2013041	Woodfin	28806	69	1,329	10/15/2013	Punchlist pending, awaiting closeout documents (roadwork remaining)
59	Reese & Jan Lasher (High Hopes)	2015152	Woodfin	28806	14	320	4/26/2016	Final Inspection complete, awaiting close-out docs
60	Ventana Phase 2A	2016059	Woodfin	28806	8	900	2/17/2017	Final Inspection complete, awaiting close-out docs
61	Olivette Development-Phase 1 Gravity	2016065	Woodfin	28804	356	1,155	3/29/2018	Installing Grading has been / Weiting on group station
62	Olivette Pump Station/Force Main	2016213 2017088	Woodfin Woodfin	28804 28804	356 1	1,740 385	2/27/2018 7/31/2018	Grading has begun / Waiting on pump station Waiting on final inspection
64	Ricky Robinson Property Apple Lane	2017088	Woodfin	28804	4	60	8/31/2018	Pre-con held, construction not yet started
65	88 North Merrimon Avenue	2017196	Woodfin	28804	Comm.	455	5/11/2018	Waiting on final inspection
66	Greenwood Fields Phase 2	2017196	Woodfin	28804	158	2,200	3/9/2018	Final Inspection complete, awaiting close-out docs
67	Olivette Gravity Phase 2	2018116	Woodfin	28804	94	12,406	11/27/2018	Pre-con held, construction not yet started
68	Skyfin-Terraces at Reynolds Mtn -Phase 3&4	2018187	Woodfin	28804	22	845	8/8/2017	Waiting on final inspection and phasing
			TOTAL		2,943	70,929		