

BOARD OF THE METROPOLITAN SEWERAGE DISTRICT
September 18, 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 2:00 pm on Wednesday, September 18, 2019. Chairman VeHaun presided with the following members present: Ashley, Bryson, Kelly, Manheimer, Pelly, Pennington, Valois, Watts and Wisler. Pressley and Whitesides were absent.

Others present were: William Clarke, Roberts & Stevens; Marcus Jones with Cane Creek Water & Sewer District; Joseph Martin with Woodfin Sanitary Water & Sewer District; Matt Shultz with HDR Engineering Inc. of the Carolinas (HDR); Barry Bialik, Developer and Chair of the City of Asheville Affordable Housing Advisory Committee; Drew Crawford with DIY Tiny; Tom Hartye, Ed Bradford, Angel Banks, Scott Powell, Ken Stines, Kevin Johnson, Roger Edwards, Pam Thomas, Hunter Carson, Mike Stamey, Darin Prosser, Matthew Walter, Spencer Nay and Pam Nolan and Denise Moore, 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 August 21, 2019 Board Meeting:

Mr. VeHaun asked if there were any changes to the Minutes of the August 21, 2019 Board Meeting. Mr. Kelly moved for approval of the minutes as presented. Mr. Pennington 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 Matt Schultz, Marcus Jones, Joe Martin, Barry Bialik and Drew Crawford.

Mr. Bialik introduced himself and stated that he is CEO of Thirsty Monk, a private developer building affordable housing, and is Chair of the City of Asheville Affordable Housing Advisory Committee. He stated that one thing being pushed in Committee to help with affordable housing is interdepartmental communication, meaning there are many things that come through planning in the City that don't always connect with things from development services. MSD is a big part of that with things being driven by sewer. He stated he is seeking MSD's guidance in aiding with a conflict. The State Administrative Code says that you can only have one structure per single service line and doesn't allow a second structure. You can have a large 20-unit multi-family building and it may only need a single 4-inch line but if you build 2 small houses then you must have 2 separate service lines or have

to install a minimum 6-inch to 8-inch private main, which must be prepared by an Engineer. He noted that in 2015, this Board looked at and worked with the State and came up with a way to get an exemption to allow an Accessory Dwelling Unit (ADU), meaning there is an effective way to have 2 structures on the same parcel that share a service line. The State Administrative Code is clear in that you can't have 2 structures on one line. The State Plumbing Code says multiple buildings on the same lot shall not be prohibited from connecting to a common building sewer that connects to the public sewer. There is a conflict in these codes. Other municipalities such as Henderson, Brunswick and Raleigh have each come up with their own exceptions list. Brunswick County wrote an exception that a common sewer connection will be permitted to serve more than one building in the following categories: apartments, condos, townhomes, planning and developments, hotels, motels, hospitals, schools, mobile homes, shopping centers, churches, etc. He stated that he ran into this issue building ADU's, which means if you have a house on the same property you can build a guest house that then could be used for rental, personal use, etc. Last week the building code passed an amendment that now allows, if you have one piece of property, to put multiple houses on the property. According to plumbing codes, you can tie them onto the same line if it is on your property. State Administrative Code says you can't do that unless you have an engineer design a private line. Mr. Bialik stated that he is looking for guidance on how to deal with some rules that do not coincide and what process could be followed to change a rule, or if there are some exceptions that could be made. He stated that this was brought to his attention because on Sand Hill Road his children go to a small private school, a small church building. They had to go through changing the zoning and do a crazy amount of things to expand the school. They built a second structure on the property, so they have a 2400 square foot building and another 2400 square foot building. There was an existing 4-inch line to the property and according to plumbing code, they should be able to tie those structures in. Each building has four bathrooms. Because they are separate structures, he is now being forced to either put in a whole separate tap or re-engineer and re-design a 6-inch line to the property when everything is existing. He further stated that if he now built another 2400 square foot building that connects the two with 18 bathrooms in it he could go with what he has. He asked how this can be looked at and come up with a practical exception list. Mr. Bradford stated that this is a State of North Carolina issue. If this had been a 6-inch line to serve the property it could have been permitted through the State as a private system but it is a 4-inch line and the State does not allow this. MSD cannot make an exception in this matter because the State controls it. Ms. Manheimer asked about the exception that was granted for ADU. Mr. Bradford stated the State is looking back at that now and it will possibly change. Ms. Manheimer asked if that was a State exception or handled by MSD. Mr. Bradford stated that MSD contacted the State and they did allow that. He further stated that it is his understanding that the State is now looking at the issue and he believes the other municipalities Mr. Bialik mentioned will be addressed because they are out of compliance. Mr. Clarke stated one of the reasons for this was having separate owners of a property with someone on one property connecting to a 4-inch line that crossed the back of someone else's property. He stated that MSD has had a number of situations where people have a service line crossing their neighbor's back yard with both connected to a 4-inch sewer line, and MSD can't go on those properties.

Mr. Clarke reiterated this was a State issue. Mr. Bradford pointed out the property Mr. Bialik was speaking about on a map. He stated that there was originally a 4-inch line connected to MSD sewer. When Mr. Bialik came in for an allocation, he was given the two options MSD is allowed to give, either run a new 4-inch line or upsize the existing line to 6-inches and then connect the two buildings together and have a 6-inch private system. It was later determined Mr. Bialik connected these as a 4-inch system. Hydraulically it is fine but this is a code issue, a 4-inch would handle it just fine, it is really a regulatory issue and is the State's call. From what Staff is hearing, the State is going to be looking at these ADU's now. They haven't had those discussions yet but it may be forthcoming. Mr. Bialik stated that he is asking for MSD's help in this process because he doesn't have the same clout. Ms. Manheimer stated that one way to more effectively lobby the State on a change like this would be to go to the League of Municipalities and that she was wondering if they could go through Paul D'Angelo with the City of Asheville, Affordable Housing and Community Development. Mr. Hartye stated that Mr. Bradford and Mr. Johnson have spoken with local representatives of the State and explained all of this to them. Mr. Martin stated that this is run into at the Woodfin District a lot and a kind of practical thing happened this year, if someone has a little bit more land, maybe half an acre or more, with a house and add trailer for a child or something like that, then they piggy back their water line to the trailer. If everyone moves or the parent dies and they split the property into two separate units, then the new trailer occupant has a disagreement with the other property owner and they cut his water line in half. He says this happens frequently with water and sewer and if there is not some way of addressing that issue it makes it difficult. If you don't address the situation before the property is divided into several lots you will still have the same issue. Mr. Bradford stated that if they are on the same service line now, they cannot subdivide further. Mr. Martin stated that the things listed in the exceptions do not lend themselves to dividing such as apartment buildings and mobile home parks.

6. Report of General Manager:

Mr. Hartye reported that attached is a revised timeline and email from Billy Clarke to the Attorney for the Environmental Management Commission (EMC). The EMC, who must approve the consolidation, has a Water Quality Committee which must review this information first and give their findings to the full Commission presiding over the matter and authorizing the process to go forward to a public hearing. There is a 30-day waiting period required after the WQC makes their recommendation and the EMC can take up the matter. The EMC does not meet in December, February or April. In order for MSD to have a good shot at a transfer on July 1st, we need to adjust our timeline up a month so that the MSD Board may review the information at the October 16 regular Board Meeting. This will necessitate moving up the joint Planning/Finance Committee to review the matter to October 16th, just prior to the regular Board meeting.

Mr. Hartye reported that at the Right of Way Committee Meeting there was discussion regarding a situation at Reed Creek and Mr. Stines is going to give a brief presentation on the rest of the story. Mr. Stines reported that this issue was

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on WLOS and in the Asheville Citizen Times, regarding discolored water in Reed Creek. Reed Creek runs along Broadway by UNCA, crosses over Broadway, onto Catawba Street and runs from Catawba Street up to around Starnes Avenue and then into a culvert. He presented various slides. On Monday, August 19, 2019, the French Broad River Keeper called into MSD to report gray water in Reed Creek. He went out and started doing some investigating. He uses a fluorometer which is a quick test that detects detergent which he stated is a good indicator of a sewage leak. It is a quick test and you do not have to wait for e-coli or fecal reports to come back, which are 24-hour tests. During the River Keeper's investigations, he detected some high detergent levels. On Tuesday, August 20, 2019, he called and said he felt like he had found a sewer leak. MSD Supervisors went out and didn't see anything to cause huge concerns but proceeded to put some things together and setting up traffic control plans to do some work on Wednesday. The River Keeper had dyed some manholes which showed up in the creek and he told us it was a sewer leak. Later the next day he called back stating he had made a mistake, that he had dyed the storm drain instead of sewer lines so this was a false alarm. Later that Wednesday around 2:00 pm he called in and said he thought he had found another sewer leak. MSD Supervisors again went out and didn't find any issues. Mr. Stines stated that around 3:30 pm he received a call from John Boyle with the Asheville Citizen Times inquiring about the massive sewer leak on Reed Creek and what was MSD doing to make repairs. Mr. Stines stated that he told Mr. Boyle he was caught off guard and had no idea what he was talking about and told him he would make a few phone calls and get back with him. Mr. Stines then called the Supervisor who stated that they were looking but had not found anything. Mr. Stines then called the River Keeper and asked what was going on. The River Keeper told him that he went into the culvert below Starnes Avenue, which is probably a 60-inch culvert and very old. He stated he walked about 800 feet into the culvert and saw gray water coming into the side of the culvert. He then came out of the culvert and called MSD and the Citizen Times to report that he had found a massive sewer leak and that MSD was there making repairs. Mr. Stines presented a slide showing Staff performing a storm water entry in Weaverville last year. A storm drain is a confined space and staff cannot just enter one. There is a lot of coordination to be worked through. There has to be a team that enters the culvert, a team on site preparing for recovery and the fire department must be present. He stated when the River Keeper sent him pictures on Wednesday evening, he asked the MSD Safety Officer to go to the Asheville Fire Department to start the process in case they had to enter the culvert the next morning. Staff then began trying to find where this possible leak could be coming from. He presented a slide of a City of Asheville storm drain system showing where questionable flow from the culvert comes in, all of this is underground. He pointed out the side of Patton Avenue that flows down to Reed Creek and the other side flows toward Nasty Branch. He presented a slide of the storm drains underground together with MSD sewer lines running on top of those storm drains. It is important to note that most of the sewer lines in this area are 100–120 years old and it is clay pipe which formerly ran straight into the river and the pipes are not watertight. When you have a blockage in the pipe it pressurizes and can squeeze out through the joints and find its way to a storm drain and eventually end up in the creek. Once the culvert goes underground it leaves a task ahead of Staff to try to figure out where it is coming

from. Staff then began dye testing by placing the smaller tablets in the sewer line, which will turn the sewer either red, green or blue. The larger bottle is a die block. The smaller tablets are \$14.00 for a small bottle and the large blocks are \$100.00 each. Staff used 5 of the large blocks and a tremendous amount of the small tablets, performing dye testing from August 21 thru September 6 to try to locate the leak. During the time Staff was performing dye testing some of MSD crews ran across a leak on Lawyer's Alley, it was coming from a restaurant with large trash cans in the back which were being washed out. This was all being washed down the street, into the culvert and into the storm drain, which then goes into Reed Creek. Any kind of run off from anything, from washing out cans to a large storm event, goes right into Reed Creek. Mr. Stines contacted NCDWQ who came out and started doing their samples. NCDEQ notified the City of Asheville Storm Water Department. On Thursday, August 22, 2019, NCDWQ and Keith Roland, who is an industrial hygiene consultant with the North Carolina Department of Health and Human Services, held a conference call with the Buncombe County Environmental Health Director, Buncombe County Preparedness Coordinator and several folks from the Western North Carolina regional office of DWQ in regards to this sewage leak, trying to determine what type of action items needed to be taken. This is all from stained water and high e-coli testing. They decided they didn't have enough information to make any official advisory for Reed Creek. The Buncombe County Health Department decided to issue a general statement for precautions when entering natural bodies of water. Another conference call was scheduled for Friday, August 23, 2019. Staff continued to dye test and tv the lines all night on Thursday night, there was a tremendous amount of rain on Thursday and Friday, which results in run off contamination and runs up your numbers for e coli. Staff didn't dye test on Friday but resumed on Saturday and Sunday. In total, Staff put in over 200-man hours on this issue from August 21–September 6. On the evening of September 11, 2019, Mr. Stines received an e-mail at home from Lee Morgan, Project Manager over the City of Asheville storm water. Mr. Morgan had received a call earlier in the week regarding the same discoloration in Reed Creek, so they had started going into the culverts, looking and making pictures and traced the discoloration back to a leak at the old BB&T building where contractors were washing out paint buckets, plaster buckets and construction debris, which is all going into the storm drain, which goes directly to Reed Creek. He presented more slides showing the discharge point the City found, and of storm culverts and grates that you see throughout downtown, pointing out a sign that says "Dump no waste, it drains to the waterways". The point to take away today is that sewer can certainly affect the quality of water but there are a lot more things other than sewer and that he felt confident sewer was not the case this time. He presented a slide that was posted at the Botanical Gardens at UNCA by the River Keeper. Mr. Stines stated that from that picture, he has had several phone calls from a lady whose daughter got sick, she stated that the daughter was in Reed Creek and had been to the emergency room and contracted e coli. She wanted to send MSD her medical bills. She was told there was no possible way MSD would cover those, that no sewer leak was found to begin with and there is no telling where she could have contracted anything from that creek. He presented photographs taken as of this date showing the creek a lot clearer. He stated that he received another e-mail last night from the City stating that a notice of violation is being issued to MHG Tower LLC, the contractor doing the renovation of the old BB&T Building.

Mr. Hartye stated that there are a lot of sources of pollution throughout the City and MSD has worked with the River Keeper for the last several years. He stated that the other point is that when you get readings it doesn't tell you the source, and in this case, it was a different source. Some other things going on, such as the storm coming, cause everything to go off, in all the rivers and streams the e coli levels go up and the solids levels go up. There are two reasons, the wash off from city streets going into the storm system. The other reason, the main one, is the benthic layer on the bottom of the streams is disturbed. Most of these streams are running maybe in the mid hundreds for e-coli on a normal day and can go up to 5,000-7,000 quickly during a rain event.

Mr. Hartye reported that attached is a copy of a card sent by Anita Zubere and Lisa Bartoli regarding the patience and professionalism of Darin Prosser and Nick Harvey.

Mr. Hartye reported that Sheila Miller of Edgewood Road called to express her appreciation for the great job done by Grady Brooks in getting their stopped-up sewer back operating so that her daughter could shower and go to school.

Mr. Hartye reported that the Employee Picnic will be held September 19th along the river behind the Plant Maintenance Facility. The Right of Way Committee Meeting scheduled for Wednesday, September 25, 2019, has been cancelled. The next meeting is scheduled for October 23, 2019 at 9 am. MSD's United Way gold tournament will be held on October 3rd at 9 am at Broadmoor. The joint Planning and Finance Committee will be held on October 16th at 12:30 pm. The next regular Board Meeting will be held October 16th at 2 pm.

7. Report of Committees:

a. Right of Way Committee - August 28, 2019

Mr. Kelly reported that the Right of Way Committee met on August 28, 2019 and made routine recommendations which are included in this Board package.

8. Consolidated Motion Agenda:

a. Consideration of Engineering Design Contract: Carrier Bridge Pump Station Replacement Project:

Mr. Hartye reported that this is the largest pump station in the District. It serves a large portion of West Asheville, all of Southern and Western Buncombe County, all of South Asheville, and areas of Northern Henderson County (Cane Creek). It was constructed in 1966 and upgraded multiple times over the past 53 years. Its current capacity is about 22.6 mgd and will be upgraded to 40 mgd to get through the 50-year planning horizon. The new pump station will be constructed adjacent to the existing station on property currently owned by Duke Energy. Staff has been in contact with Duke Energy since March, 2019 and they have internally approved the sale. The process is underway with the survey and appraisal being completed. In accordance with

NCGS 143-64.31 the District advertised a Request for Qualifications for the design phase and received responses from CDM Smith and HDR. After careful review and consideration of each firm's capabilities, experience and staffing, the selection committee chose HDR as the most qualified engineering consultant to complete the design. HDR has designed numerous pump stations across the Eastern United States and has the expertise necessary to design this station. HDR most recently completed the Plant Headworks Project this past Spring and it is operating well. Staff therefore recommends the District contract with HDR for the engineering design of the new pump station. After receiving an initial proposal for HDR's Engineering Design Fee, Staff negotiated a reduced fee in the amount of \$1,853,885.00. Staff will also administer the geotechnical work in order to reduce these costs. The preliminary construction cost estimate for this project is roughly \$17 million. A Capital Project Ordinance for this project is included in this agenda item. This is needed because it will be a multi-year project. The FY20 and FY21 Design Budget for this project is \$2,040,000.00. Staff recommends award of the Engineering Design Contract to HDR in the amount of \$1,853,885.00 and the approval of the attached Capital Project Ordinance, subject to review and approval by District Counsel.

b. Consideration of Compensation Budgets-Bent Tree Road GSR; Chestnut Lodge Road GSR; 332 Wilson Avenue:

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

c. Informational Item-Land Purchase for Proposed Carrier Bridge Pump Station Site:

Mr. Hartye reported that this is an information item that Ms. Banks went over with the Right-of-Way Committee, letting them know that we are in the process of trying to buy 1.25 acres of land belonging to Duke Energy, adjacent to the existing pump station. Of other note, HDR came forward with several ideas on how to get across the river with the new station. They are going to have two large 36-inch diameter pipes going across the river. There are several ways of going underground construction or open pit construction across the river or they came up with an idea for a potential pedestrian bridge supporting this. This could be a win win because a pedestrian bridge was identified in the Wilma Dykeman Master Greenway Plan that was never included in the project because of cost. That idea is being explored. Staff thinks this was a pretty creative idea that came forward from HDR.

d. Consideration of Town of Weaverville/MSD Greenway Agreement:

Mr. Hartye reported that this agreement was prepared by Billy Clarke and Weaverville's attorney, Jennifer Jackson. MSD currently has greenway agreements in place for the Town of Fletcher, the Town of Black Mountain and the City of Asheville and this agreement is based on those. Staff and Right-of-

Way Committee recommends approval of this draft agreement to present to the Town of Weaverville for final review and approval.

e. Cash Commitment Investment Report – Month ended July, 2019:

Mr. Powell reported that Page 41 presents the makeup of the District's Investment Portfolio. There has been an approximate \$6 million decrease from the previous month. This is a direct result of the District making its July 1 debt service payment. Page 42 presents the MSD investment managers report for the month of July. The weighted average maturity of the investment portfolio is 134 days. The yield to maturity is 2.22%. Page 43 presents the analysis of the District's Cash Receipts. Monthly Domestic Sewer Revenue is considered reasonable based on historical trends. Monthly and YTD Industrial Sewer Revenue as well as Facility and Tap Fees are considered reasonable based on historical trends. Page 44 presents the analysis of the District's Expenditures. Monthly and YTD Expenditures are considered reasonable based on historical trends. Page 45 presents the MSD Variable Debt Service report. The 2008A Series is performing at budgeted expectations. As of the end of August, both issues have saved the District rate payers approximately \$6 million in debt service since April 2008.

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

9. Old Business:

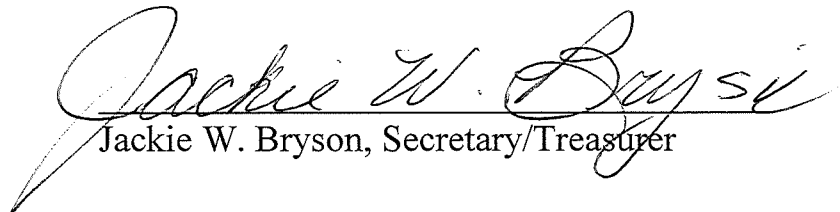
None.

10. New Business:

None.

11. Adjournment:

With no further business, Mr. VeHaun called for adjournment at 2:46 pm.


Jackie W. Bryson, Secretary/Treasurer

MSD

Regular Board Meeting

Metropolitan Sewerage District
of Buncombe County, NC

AGENDA FOR 9/18/19

✓	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 August 21, 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. Report of Committees		2:35	
	a. Right of Way Committee	Kelly		
	07. Consolidated Motion Agenda	Hartye	2:40	
	a. Consideration of Engineering Design Contract: Carrier Bridge Pump Station Replacement Project	Hartye		
	b. Consideration of Compensation Budgets – Bent Tree Road GSR; Chestnut Lodge Road GSR; 332 Wilson Avenue	Hartye		
	c. Informational Item – Land Purchase for Proposed Carrier Bridge Pump Station Site	Hartye		
	d. Consideration of Town of Weaverville/MSD Greenway Agreement	Hartye		
	e. Cash Commitment/Investment Report-Month ended July, 2019	Powell		
	08. Old Business:	VeHaun	2:55	
	09. New Business:	VeHaun	3:00	
	10. Adjournment: (Next Meeting 10/16/19)	VeHaun	3:05	
	STATUS REPORTS			

BOARD OF THE METROPOLITAN SEWERAGE DISTRICT
August 21, 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 2:00 pm Wednesday, August 21, 2019. Chairman VeHaun presided with the following members present: Ashley, Bryson, Kelly, Manheimer, Pelly, Pennington, Pressley, Valois, Watts, Whitesides and Wisler.

Others present were: Susan Russo Klein, Roberts & Stevens, Forest Westall with McGill Associates; Marcus Jones with Cane Creek Water & Sewer District; Tom Hartye, Ed Bradford, Roger Edwards, Pam Thomas, Ken Stines, Scott Powell, Hunter Carson, Mike Stamey, Matthew Walter, Spencer Nay and Pam Nolan, MSD.

2. Inquiry as to Conflict of Interest:

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

3. Approval of Minutes of the July 17, 2019 Board Meeting:

Mr. VeHaun asked if there were any changes to the Minutes of the July 17, 2019 Board Meeting. Mr. Kelly moved for approval of the minutes as presented. Mr. Watts seconded the motion. Voice vote in favor of the motion was unanimous.

4. Discussion and Adjustment of Agenda:

None.

5. Informal Discussion and Public Comment:

Mr. VeHaun welcomed Susan Russo Klein who was filling in for Billy Clarke and Marcus Jones with Cane Creek Water & Sewer District. There was no public comment.

6. Report of General Manager:

Mr. Hartye reported that this years United Way Golf Tournament will take place on October 3rd at Broadmoor Golf Course at 9 am. Please contact Owen Herbert at 828-225-8331 or OwenH@msdbc.org.

Mr. Hartye reported that MSD once again received the Excellence in Financial Reporting Recognition from the Government Finance Officers Association (GFOA) for the FY 2018 CAFR. Much thanks to Scott Powell and Teresa Gilbert.

Mr. Hartye reported that attached is a copy of a card sent by Racole Tackett of Lakewood Drive expressing his appreciation for the spectacular job done by the

MSD crew. Thanks to McKinley Hensley, Josh Matthews, Robert Honeycutt, Nathan Poteete and Devin Nash.

Mr. Hartye reported that Peter Wilson of Druid Drive called to pass on how impressed he was with Roy and his crew. Thanks to Roy Lytle, Jamie Foxx, Marvin Felder, McKinley Hensley, Shane Meadows, Robert Honeycutt, Nathan Poteete, Robert Denny and Keith Merrill.

Mr. Hartye reported that attached is a budget recap for FY 2020, this is a budget and rate synopsis for easy reference for the Board with salient points for the recently passed Budget.

Mr. Hartye reported that the next Right of Way Committee Meeting will be held on August 28th at 9 am. The next regular Board Meeting will be held September 18th at 2 pm.

7. Report of Committees:

a. Planning Committee – August 21, 2019

Mr. Pelly reported that the Planning Committee met at 1:00 pm on this day for a briefing from Mr. Hartye and Staff on the expansion of MSD to include Cane Creek Water and Sewer District, along with timelines, questions and discussion followed by a recommendation from Planning Committee to the MSD Board to instruct Staff to collect information and perform analysis pursuant to Session Law 2019-127 once the necessary information is received from Henderson County and to return back to Planning and Finance Committees with a report and required information in November. Planning Committee is asking for full MSD Board endorsement.

Mr. Hartye stated that included in this Board package is the Planning Committee package with a timeline attached. Staff will prepare a merger analysis and some additional information required by law and bring to Planning Committee in November, then Finance Committee, then to the full MSD Board. At that point, it will be submitted to the EMC and Henderson County and they will have about 8 months to hold their public hearing and for the EMC to review and approve. There were no questions. Mr. VeHaun called for a motion to accept Staff and Planning Committee's recommendation. Mr. Watts moved, Ms. Wisler seconded the motion. Roll call vote was as follows: 12 ayes; 0 Nays.

8. Consolidated Motion Agenda:

a. Consideration of Bids – Mull Building HVAC Rehabilitation Project:

Mr. Hartye reported that this building's HVAC system was installed when the building was constructed in 2001. McGill Associates has performed a study on all of the components and recommends a complete overhaul. This overhaul will greatly improve efficiency once installed. The project has been broken into

two phases. Phase I will be constructed in this fiscal year and consists of replacing the cooling tower with new outdoor air-cooled chillers, electrical upgrades, and an updated controls system. Phase II will be constructed next fiscal year. The contract was advertised and three informal bids were received on August 1, 2019, as follows: Superior Mechanical Services in the amount of \$222,000.00; Cooks Mechanical Services in the amount of \$200,318.00 and Pyatt Heating and Air Conditioning Inc. in the amount of \$186,338.00. Cooks Mechanical Services bid was rejected due to submittal of incorrect bid forms. The apparent low bidder is Pyatt Heating and Air Conditioning Inc. with a bid amount of \$186,338.00. Pyatt has not performed previous work for the District therefore, staff checked multiple references. All references were complimentary of Pyatt's work performance. The FY 19-20 Construction Budget for this project is \$225,000.00. Staff recommends award of this contract to Pyatt Heating and Air Conditioning, Inc. in the amount of \$186,338.00, subject to review and approval by District Counsel.

b. Consideration of Developer Constructed Sewer System: Sunrise Drive Homes Sewer Extension:

Mr. Hartye reported that the Sunrise Drive Homes Sewer Extension included extending approximately 218 linear feet of 8-inch public gravity sewer to serve a 5-unit single family residential development.

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

c. Reimbursement Resolution for Bond Projects:

Mr. Powell reported that to be in compliance with IRS regulations concerning tax exempt financing, all expenditures made with non-MSD bond funds and to be reimbursed from MSD bond funds must be properly identified and authorized. The proposed reimbursement resolution identifies major projects intended to be solely or substantially financed by bonds anticipated to be issued in FY 2023. Board approval is required to obtain the tax exemption of interest paid on MSD bonds by authorizing reimbursement from bond proceeds of the expenditures for the attached project listing. Staff has identified \$18.8 million of CIP projects in the current fiscal year that will be used with the next tax exemption issuance in 2023.

d. Consideration of Industrial Rate Adjustment:

Mr. Powell reported that in FY 2020, the District entered the final year of the industrial rate parity plan. The industrial charge for FY 2020 should have been \$4.73 per CCF which is the same as the approved residential and commercial rate. However, due to a typographical error the Board approved rate was \$4.58 per CCF. Staff is requesting the Board adjust the recent fees to \$4.73.

e. Fourth Quarter Budget to Actual Review – FY 2019:

Mr. Powell reported that Domestic Revenue is at budgeted expectations. Staff believes Domestic User Fee variance will end up around 101% when June's accounts receivable data is received from its member agencies in September. Industrial Revenue is trending better than budgeted expectations due to a temporary increase in revenue from one new industrial user. Facility and Tap Fees are above budgeted expectations due to receiving approximately \$2.5 million from five developments throughout the fiscal year. 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 92.4% of budget. This amount may vary slightly from audited numbers due to final accruals. This number is lower than the last fiscal year due to the deference of utility costs at the hydro-electric facilities. Bond principal and interest expenditures are better than budgeted expectations due to the interest rate swap associated with Series 2008A revenue refunding bonds. Capital project expenditures are at approximately 93.7% of budget. This reflects the Plant High Rate Primary project running a little behind schedule.

f. Cash Commitment Investment Report – Month ended June, 2019:

Mr. Powell reported that Page 42 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 43 presents the MSD investment managers report for the month of June. The weighted average maturity of the investment portfolio is 123 days. The yield to maturity is 2.59%. Page 46 presents the MSD Variable Debt Service report. The 2008A Series refunding bonds are performing at budgeted expectations. As of the end of July, the issue has saved the District rate payers approximately \$6 million in debt service since April 2008.

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

9. Old Business:

None.

10. New Business:

None.

11. Adjournment:

With no further business, Mr. VeHaun called for adjournment at 2:19 pm.



MEMORANDUM

TO: MSD Board
FROM: Thomas E. Hartye, P.E., General Manager
DATE: September 12, 2019
SUBJECT: Report from the General Manager

- MSD expansion to include Cane Creek WSD

Attached is a revised timeline and an email from Billy Clarke to the Attorney for the Environmental Management Commission (EMC). The EMC, who must approve the consolidation, has a Water Quality Committee which must review the information and findings prior to the full Commission presiding over the matter and authorizing the process to go forward to a public hearing. There is a 30-day waiting period required after the WQC makes their recommendation and the EMC can take up the matter. The EMC does not meet in December, February, or April. In order for MSD to have a good shot at a transfer on July 1st, we should best adjust our timeline up a month so that the MSD Board may review the information at the October 16 Regular Board Meeting. This will necessitate moving up the joint Planning/Finance Committee to review this matter to October 16th just prior to the Regular Board Meeting.

- Kudos

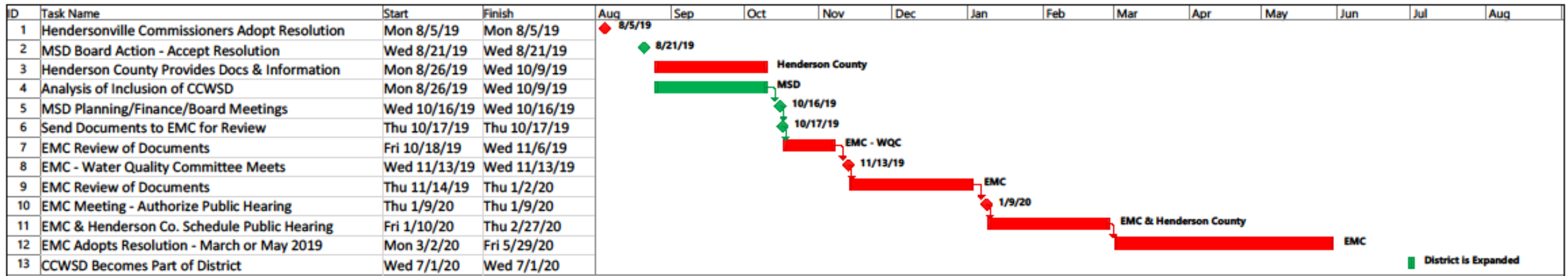
- Attached is a copy of a card sent by Anita Zubere and Lisa Bartoli regarding the patience and professionalism of Darin Prosser and Nick Harvey.
- Sheila Miller of Edgewood Road called to express her appreciation for the great job done by Grady Brooks in getting their stopped-up sewer back operating so that her daughter could shower and go to school.

- Board/Committee Meetings/Events

The Employee Picnic will be held September 19th along the river behind the Plant Maintenance Facility. The Right of Way Committee Meeting scheduled for Wednesday, September 25, 2019 has been cancelled. The next meeting is scheduled for October 23, 2019 at 9am. MSD's United way golf tournament will be held October 3rd at 9am (Broadmoor). The joint Planning and Finance Committee will be held October 16th at 12:30 pm. The next Regular Board Meeting will be held October 16th at 2 pm.

MSD-CCWSD Merger Timeline

Proposed Conclusion by June 30, 2020



Subject: Metropolitan Sewerage District of Buncombe County / Cane Creek Water and Sewer District / North Carolina Environmental Management Commission
Date: Thursday, September 5, 2019 at 12:24:57 PM Eastern Daylight Time
From: Billy Clarke <BClarke@roberts-stevens.com>
To: Reynolds, Phillip <PReynolds@ncdoj.gov>
CC: Hartye, Tom <THartye@msdbc.org>, rburrell@hendersoncountync.gov <rburrell@hendersoncountync.gov>
Attachments: H758_ Session Law 2019-127.PDF

Philip,

Thanks for talking this morning. This is to confirm the tentative schedule about which you and I spoke earlier this week and again this morning. I have reviewed the schedule with MSD and with Russ Burrell, County Attorney for Henderson County. The Henderson County Commissioners are the governing body of the Cane Creek Water and Sewer District.

- October 16 – MSD finalizes and sends to Water Quality Committee of EMC the information required by G.S. 162A-68.5 (b). I understand you are in the process of identifying the person or persons in the Division of Water Resources who will be presenting to the WQC. Please let us know to whom the information should be sent.
- November 13, 2019 – WQC reviews the information and makes recommendation to full EMC
- January, 2020, Full EMC authorizes public hearing, in conjunction with Henderson County. I assume the EMC chair would appoint a member as the Hearing Officer to conduct this hearing. I believe Henderson County will assign someone to assist with the logistics of this hearing. Henderson County is prepared to do the public notice.
- Hearing officer(s) make report to full EMC for consideration at March EMC or May EMC
- March or May 2020 - Full EMC makes finding required in G.S. 162A-68.5(d) and adopts resolution with effective date of July 1, 2020.

Thanks again for your help. Let me know if you have questions, or if we need to discuss as this matter moves forward.

Billy Clarke

William Clarke
Attorney | Roberts & Stevens, P.A.
City Centre Building | 301 College Street, Suite 400, Asheville, NC 28801
Office: 828-252-6600 | Direct: 828-258-6919
www.roberts-stevens.com

really helped Eva + Darin relieved us of a lot of anxiety when he came out to the property. Both of you expressed that you were just doing your jobs, but we so appreciated your patience + kindness in explaining this future project that we wanted to say so in words + a bag of cookies! Thank you for your professionalism + kindness!

Mitzi + Lisa Bartoli

5 Sept. 2019

Hello Nick + Darin,

Eva Hartman (realtor) said that you deserve home-made cookies because you two were so kind + so helpful concerning a future sewer project in Guan's Cove at the property we're purchasing this month:

19 Mountaenbrook Rd

We didn't ^{AVL 28805} meet Nick but you

**RIGHT OF WAY
COMMITTEE RECOMMENDATIONS
AND MINUTES
August 28, 2019**

I. Call To Order

The regular monthly meeting of the Right of Way Committee was held in the Boardroom of the William H. Mull Building and called to order at 9:08 a.m. on Wednesday, August 28, 2019. The following Right of Way Committee members were present: Glenn Kelly, Matt Ashley, Esther Manheimer, Chris Pelly, Nathan Pennington and Al Whitesides.

Others present were: Jerry VeHaun, Board Chair; Earl Valois, Board Member; William Clarke, MSD Counsel; Tom Hartye, Angel Banks, Ed Bradford, Mike Stamey, Hunter Carson, Ken Stines, Shaun Armistead, Wesley Banner and Pam Nolan, MSD.

Ms. Banks welcomed new Right of Way Committee member Nathan Pennington.

II. Inquiry as to Conflict of Interest

Mr. Kelly inquired if anyone had a conflict of interest with Agenda items. There was none.

III. Consideration of Compensation Budgets –

**Bent Tree Road GSR, Project No. 2016102
Chestnut Lodge Road GSR, Project No. 2014017
332 Wilson Avenue GSR, Project No. 2013136**

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

STAFF RECOMMENDATION: Approval of Compensation Budgets.

Ms. Banks reviewed the above compensation budgets. The Bee Tree Road project is located along the Bent Tree Road, Old Toll Road and Crestwood Lane areas of Town Mountain. It consists of replacing 1654 linear feet of 4” and 6” clay and DIP with 8” DIP. The Chestnut Lodge Road project is located off of Blue Ridge Road along Chestnut Lodge Road and Old Lakey Gap Road in Black Mountain. It consists of replacing 4,650 linear feet of existing 4”, 6” and 8” clay pipe with 8” and 12” iron pipe. The 332 Wilson Avenue project is located on Wilson Avenue in Swannanoa and consists of replacing 295 linear feet of 6” clay and PVC with 8” DIP.

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

COMMITTEE RECOMMENDATION: Approval of Compensation Budgets.

IV. Land Purchase for Proposed Carrier Bridge Pump Station Site –

This will provide the Right of Way Committee with further information as to the land necessary for construction of the proposed Carrier Bridge Pump Station. The need for a new pump station with increased capacity was reviewed at the July Board meeting. No action is required at this time. This is for information purposes only.

The existing pump station was built in 1966 along Riverview Drive, just off Amboy Road, near Carrier Bridge. All wastewater flow from South Buncombe County, North Henderson County and most of West Asheville are pumped through this station and force main, under the French Broad River to a gravity line along Riverside Drive. With the explosion of growth in these service areas, the station has reached its permitted capacity. Construction for a new 40 MGD pump station is planned to begin in 2021.

MSD owns 0.88 acres where the existing pump station sits. Our parcel abuts 48.36 acres of land owned by Progress Energy. MSD has received verbal agreement from Progress to sell approximately 1.25 acres of their land that abuts our northern boundary. Price is yet to be determined by appraisal. Billy Clarke is preparing a Memorandum of Agreement to address the process for the land sale.

STAFF RECOMMENDATION: For Information Only.

Ms. Banks reviewed the above. Mr. Ashley asked what the current flow is for this pump station. Mr. Bradford stated on a dry day it is about 8-9 mgd and can get up to about 18 mgd during wet weather.

V. Consideration of Town of Weaverville/MSD Greenway Agreement

The Town of Weaverville has requested the use of MSD easements for possible greenway corridors. Weaverville has adopted a Reems Creek Greenway Feasibility Study that contemplates the construction of trails or routes for public recreation and environmental preservation through Weaverville's corporate limits. Attached is a draft agreement prepared by Billy Clarke and Weaverville's attorney, Jennifer Jackson.

MSD currently has greenway agreements in place with the Town of Fletcher (2002), the Town of Black Mountain (2004), and the City of Asheville (2004). An agreement is currently pending with the Town of Woodfin.

STAFF RECOMMENDATION: Approval of this draft agreement to present to the Town of Weaverville for final review and approval.

Ms. Banks explained the above. There were no questions. Mr. Kelly made the motion to accept Staff's recommendation. Mr. Ashley seconded the motion. Voice vote was unanimous.

COMMITTEE RECOMMENDATION: Approval of this draft agreement to present to the Town of Weaverville for final review and approval.

VI. Other –

Mr. Kelly asked about the issue of a possible sewer leak in Reed Creek. Mr. Stines stated that Staff has been investigating this matter and has found nothing to date. There was some further discussion regarding safety issues in accessing a culvert in this area.

There being no further business, the meeting adjourned at 9:20 am.

Metropolitan Sewerage District of Buncombe County

BOARD ACTION ITEM

BOARD MEETING DATE: September 18, 2019

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

PREPARED BY: Ed Bradford, P.E. - Director of Engineering
Hunter Carson, P.E. - Assistant Director of Engineering
Darin Prosser, P.E. - Project Manager

SUBJECT: Consideration of Engineering Design Contract: Carrier Bridge Pump Station Replacement Project, MSD Project No. 2019045

BACKGROUND: The Carrier Bridge Pump Station is the largest pump station in the District's collection system. It serves a large portion of West Asheville, all of Southern and Western Buncombe County, all of South Asheville, and areas of Northern Henderson County (Cane Creek).

It was constructed in 1966, and has been upgraded multiple times over the past 53 years. Its current capacity is 22.6 million gallons per day, which cannot be further increased without significant modifications. Due to this constraint combined with the need for capacity improvements, a new pump station is required.

The new pump station will be constructed adjacent to the existing station on property currently owned by Duke Energy. Staff has been in contact with Duke Energy since March 2019, and Duke has internally approved the sale of 1.25 acres to the District for construction of this new station. This process is underway, with a survey and appraisal being completed.

In accordance with NCGS 143-64.31 the District advertised a Request for Qualifications for the design phase and received responses from CDM Smith and HDR. After careful review and consideration of each firm's capabilities, experience, and staffing, the selection committee selected HDR as the most qualified engineering consultant to complete the design.

HDR has designed numerous large pump stations across the Eastern United States, and has the expertise necessary to design this station. HDR has worked effectively on two significant previous projects with the District. They most recently completed the successful Plant Headworks Project (completed Spring 2019).

Staff therefore recommends that the District contract with HDR for the engineering design of the new pump station.

After receiving an initial proposal for HDR's engineering design fee, District staff negotiated a reduced fee in the amount of \$1,853,885.00. Staff will also administer the necessary Geotechnical work, in order to help reduce costs. The preliminary construction cost estimate for this project is \$17 million.

A Capital Project Ordinance for this project is included in this agenda item. This is needed due to the timing of significant expenditures for this project, which will span multiple fiscal years and budget cycles.

Please refer to the attached documentation, including the HDR Scope of Services, for further details.

FISCAL IMPACT: The FY20 and FY21 Design Budget for this project is \$2,040,000.00.

STAFF RECOMMENDATION: Staff recommends award of the Engineering Design contract to HDR in the amount of \$1,853,885.00 and the approval of the attached Capital Project Ordinance, subject to review and approval by District Counsel.

Interoffice Memorandum

TO: Tom Hartye, P.E. General Manager

FROM: Ed Bradford, P.E. Director of Engineering
Hunter Carson, P.E. Assistant Director of Engineering
Darin Prosser, P.E. Project Manager

DATE: September 6, 2019

RE: Consideration of Engineering Design Contract- Carrier Bridge Pump Station Replacement, MSD Project No. 2019045

The Carrier Bridge Pump Station, located at the corner of Amboy Road and Riverview Drive, is MSD's largest pump station, constructed in 1966. The station was upgraded in 1986 and has undergone several minor upgrades since then including grinder installation, motor and VFD replacement, MCC replacement, and the installation of larger pump impellers to maximize pumping capacity. The pump station collects flow conveyed from all of the southern and western areas of Buncombe County and northern Henderson County (Cane Creek Water & Sewer District). The station pumps from the west side of the French Broad River to a discharge manhole on the 54-inch French Broad Interceptor on the east side of the river.

The current firm capacity of the pump station is 22.6 mgd with an average daily flow of 7.4 mgd during dry weather. The pump station is currently 0.53 mgd over capacity per the North Carolina Department of Environmental Quality (NCDEQ) standards, primarily due to allocated flows which are not yet tributary to the station. The pump station is more than 50 years old and has been upgraded to its full potential. To meet NCDEQ requirements and per the French Broad Interceptor Carrier Bridge Preliminary Engineering Report (CDM Smith, May 2019), replacement of the existing pump station is necessary to meet current and future flows. The replacement pump station will be designed for a firm capacity of 34 mgd with the capability of increasing to 40 mgd in the future.

The new pump station will be constructed just north of the existing pump station on property currently being acquired from Duke Energy. The new pump station will be fully enclosed to reduce the visual and odor impacts to the adjacent French Broad River Park and residential areas. Several options are being evaluated for the force main crossing of the French Broad River such as open cut, micro-tunneling, horizontal directional drilling, and a pedestrian bridge. Along with the pump station construction, necessary rehabilitation will be completed on a portion of 54-inch interceptor downstream of the existing force main tie-in. Installation of a new junction box and 60-inch interceptor will be included upstream of the new station. The project has an estimated construction cost of approximately \$17 million and construction is scheduled to begin in FY21-22.

In accordance with NCGS 143-64.31 the District advertised a Request for Qualifications for the design phase and received Statement of Qualifications from CDM Smith and HDR. After careful review and consideration of each firm's capabilities, experience, and staffing, the selection committee selected HDR as the most qualified engineering consultant to complete the design.

HDR has designed and installed many pump stations and force mains 30 mgd or greater across the Eastern United States, and as a result has the expertise necessary to design and permit the new Carrier Bridge Pump Station. HDR has worked effectively on several projects with the District, most recently being the Plant Headworks Improvement project at the Water Reclamation Facility.

Staff, therefore, recommends that the District contract with HDR for the design work of the Carrier Bridge Pump Station Replacement project.

After receiving an initial proposal for HDR's engineering design fee, District staff negotiated a reduced fee in the amount of \$1,853,885.00. This fee is based on the design of the pedestrian bridge river crossing. If the bridge is not selected, the design fee will decrease \$100,000 to \$200,000 based on alternate river crossing option. As stated above, the preliminary construction cost estimate for this project is \$17,000,000.00. This estimate does not include the contingencies shown in the Preliminary Engineering Report, nor the pedestrian bridge alternative. If the bridge option is selected, construction costs will increase.

The design fee equates to approximately 11% of estimated construction costs. This aligns with previous District projects of this magnitude and is believed to be within industry standards.

The design budget for this project is \$2,040,000.00 with \$1,520,000.000 budgeted for this FY19-20. The design time is estimated at 18 months.

Scope of Services

Part A: Background

The Metropolitan Sewerage District of Buncombe County, NC (MSD) owns and operates a 1,034 mile wastewater collection system, which includes 30 pump stations, and a 40 MGD water reclamation facility. One of these pump stations is the Carrier Bridge Pump Station (CBPS), MSD's largest pump station, which was constructed in 1966. The current firm capacity of the CBPS is 22.6 MGD.

To meet increases in wastewater flow rates from upstream areas in the collection system, MSD will be replacing the existing pump station with a new facility that will be sized to convey an initial firm capacity of 34 MGD and a future firm capacity of 40 MGD. The new CBPS will be located adjacent to and just north of the existing site, which is located near the French Broad River Park along the west side of the river. As part of the project, two new 36-inch force main sewers will be installed from the new CBPS to the existing 54-inch gravity sewer on the east side of the river and a new 60-inch influent gravity sewer will convey flow for the existing pump station to the new.

Part B: Scope of Services

HDR Engineering, Inc. of the Carolinas (HDR) will assist MSD with implementation of the new CBPS and pipelines. The scope of services detailed below was developed based upon our understanding of the project and discussions between MSD and HDR staff. The following major scope tasks are described in detail in the following sections:

1. Preliminary Design
2. Request and Review Surveying and Geotechnical data provided by MSD
3. Final Design
4. Permitting
5. Bidding and Award

In addition, HDR will perform project administration activities throughout the duration of the project, including maintaining a project filing system for storage and retrieval of documents, preparing monthly invoices for services, and maintaining a project cost accounting system. HDR will apply on-going quality assurance and quality control procedures including having all design elements reviewed by senior level staff, who are not performing the design of the project.

Task 1 – Preliminary Design

HDR will perform tasks related to the preliminary design and prepare preliminary evaluations for both the pump station and force main and summarize these in a Preliminary Engineering Report. These tasks and evaluations will include:

PUMP STATION

- Prepare preliminary layout of the pump station site.
- Prepare preliminary layout of the pump station structure, pumps, piping, etc.

- Evaluate system hydraulics for the pumps, piping, etc., and size all infrastructure based on flow requirements provided by MSD.
- Prepare basis of design for the influent screens.
- Prepare basis of design for the odor control system, including odor control sampling at the existing pump station.
- Prepare basis of design for the electrical system.
- Prepare basis of design for plumbing and fire protection.
- Prepare basis of design for the HVAC system.
- Prepare basis of design for the instrumentation and control system.
- Prepare basis of design for the site security system.
- Prepare basis of design for building architecture.
- Prepare basis of design for storm water management.
- Prepare preliminary opinion of probable construction cost estimate for the pump station.
- Evaluate existing pump station for reuse or demolition.

PIPELINES

- Perform preliminary evaluation of horizontal directional drill river crossing option. This will include a review of project constraints and requirements related to layout areas for equipment and pipe stringing, horizontal and vertical alignment options, discussion of geotechnical data related to directional drill and construction cost estimate.
- Perform preliminary evaluation of microtunneling river crossing option. This will include an analysis of the subsurface conditions, horizontal and vertical layout, microtunnel slurry requirements, machine basal stability, heave and settlement potential, pipe loading, shaft construction considerations, design calculations and construction cost estimate.
- Perform preliminary evaluation of open cut river crossing option. This will include a discussion of the types of coffer dams available, review of river hydraulics based on readily available data that impact the design, pros and cons of this option and construction cost estimate.
- Perform preliminary evaluation of pedestrian / utility bridge river crossing option. This will include a discussion of types of supports and foundations, bridge style options to include aesthetic considerations, walkway deck, pipe supports, and construction cost estimate.
- Perform preliminary evaluation for rehabilitation or replacement of approx. 1,200 LF of the existing 54-inch gravity sewer. This will include consideration of CIPP, sliplining, cementitious lining, spiral wound lining, alternatives for pipe and manhole materials if replaced, temporary bypass pumping, and provide pros and cons for each and construction cost estimate.
- Prepare preliminary layout for pump station influent 60-inch gravity sewer including junction structure for the upstream existing 48-inch and future 60-inch gravity sewers.
- Prepare opinion of probable construction cost estimate for all pipeline construction based on the preliminary design.
- Evaluate options for future tie-in to AB-tech equalization tank.

HDR has assumed 5 meetings / workshops will be held during the preliminary design phase to discuss design specifics, update MSD on the work progressing and obtain input from staff. These will include the following topics: electrical, HVAC, instrumentation and control, security, architecture, influent screens, odor control, site layout, pipelines and pump station layout. Each meeting / workshop will focus on 3 or 4 topics that most relate to each other. Following completion of the preliminary evaluations a meeting will be scheduled to discuss the results and make decisions to allow progression into final design. HDR will also attend two additional meetings related specifically to the pedestrian bridge option.

Task 2 – Surveying and Geotechnical

HDR will request and review survey and geotechnical information provided by MSD. Information will be deciphered for best use practices. Additional information will be requested as needed.

Task 3 – Final Design

FINAL DESIGN

HDR will design the new pump station and force main in accordance with the Preliminary Engineering Report. HDR will prepare drawings and technical specifications of the proposed infrastructure for incorporation into the Contract Documents. These documents will be prepared to show the scope, extent, and character of the work to be furnished and performed by the Contractor for construction of the work elements described. All work will be designed, permitted and bid as a single project with only one set of plans and specifications

Five final design review meetings will be held to provide HDR an opportunity to discuss the progress being made on the Project design and allow MSD to provide input on the important decisions that need to be made. HDR will provide meeting agendas and minutes for all final design review meetings.

Based on the understanding of the Project, the major elements of the design include:

- New dry pit/wet pit pump station with submersible pumps operated with Variable Frequency Drives (VFDs). Station to include influent mechanical screens, effluent magnetic flow meter, and odor control system.
- Brick/Block or Split Face Block Building over dry pit to house electrical and I&C panels and equipment, HVAC system, storage room for spare parts, room for keeping plans and O&M documents, and bathroom with exterior entry. Hoisting capability will be provided with structure to enable removal of pumps and motors to outside loading area. Building will also include separate space for the influent screens and associated equipment with rollup door and roof hatches for screen removal.
- Update system hydraulics and pump selection.
- Construct small scale physical model of the pump station to confirm proper hydraulics, work to be performed by Clemson Hydraulics Laboratory.
- Site civil design including site grading, erosion and sediment control, storm water management, and access road connecting the existing road down to the new site.
- On site utilities to extend existing service from the current pump station site to the proposed. No offsite, beyond 300' from proposed pump station, utility design is included.

- Electrical system for operation of the facility and a standby diesel generator.
- SCADA system to meet MSD requirements.
- HVAC system for heating and cooling the building and for ventilating air out of the dry pit and screening areas.
- Demolition of the old pump station, which will only show a plan and section view indicating all equipment and piping and building to be removed and structure filled in, no other detailed plans or specifications.
- Influent 60-inch gravity sewer and junction box to connect the existing 48-inch gravity sewer and future 60-inch gravity sewer and the proposed 60-inch gravity sewer into the pump station. For any bypass pumping required, a specification will be prepared outlining general requirements and require Contractor to prepare specific plan based on his means and methods.
- Two 36-inch wastewater force main pipes extending from the pump station to the existing 54-inch gravity sewer, which includes a crossing of the French Broad River. The length of the force mains are each approximately 500 to 1,000 LF and will be installed parallel to each other. The method of crossing will be determined during the preliminary design phase. If the open cut river crossing is selected, performance based design and specifications will require contractor to provide detailed design of coffer dam based on his preferred means and methods. A Geotechnical Baseline Report will be prepared if any of the trenchless options are selected.
- Valves will be included at each end of the force main to provide flexibility in the operation of the system and for possible future pumping to a storage tank.
- Design of the selected improvements to the existing 54-inch gravity sewer for a length of up to 1,200 consecutive LF.
- Update the preliminary design opinion of probable construction costs at the 60% and 90% design stage. The final opinion of probable construction costs will be submitted no later than February 2021 for MSD's CIP budget.
- BIM model will be provided at 60% and 90% design stage.

Task 4 - Permitting

HDR will provide technical criteria, written descriptions, design data, drawings, and specifications for filing applications for permits with the governmental authorities having jurisdiction to approve the design of the project. The following permits may be required for this Project:

- NC DEQ – Authorization to Construct
- NC DEQ – Sediment and Erosion Control
- USACE – Section 404
- USACE – Section 10
- NC DWR – Section 401
- NC DOT – Encroachment Permit
- Buncombe County – Building Permit
- City of Asheville – Flood Plain Development
- Duke Energy – Right of Entry Permit (excavation under transmission lines)



MSD will be responsible for paying the cost of all permit fees. The project schedule is based on an assumed review and approval time for the regulatory agencies, actual time is outside of HDR’s control.

Task 5 - Bidding and Award

Following authorization from MSD, HDR shall perform the following services related to Bidding and Award:

- Assist MSD in advertising for construction, including copies of bid documents to Contractors.
- Attend pre-bid conference and site visits, preparing meeting notes, and respond to questions.
- Assist with preparation of addenda as appropriate to interpret, clarify, or further define the Contract Documents. Addenda will be issued by Owner.
- Consult with and advise MSD to determine the acceptability of substitute materials and equipment proposed by Contractor when substitution prior to the award of contracts is allowed by the Contract Documents.
- Attend the bid opening and certify the bid tabulation prepared by MSD. Assist MSD in contract award process.
- Prepare and submit conformed drawings and specifications.

Part C: Additional Services / Optional Tasks

Additional services and optional tasks may be performed under this scope of services with the written authorization of MSD. Detailed scope of services, schedules and engineering fees for the additional services will be provided at the request of MSD. No additional services will be initiated without the authorization of MSD.

Part D: Schedule

The schedule below has been prepared based on written authorization to proceed in October 2019. MSD is responsible for having the surveying and geotechnical work completed on time. Should the authorization to proceed, or surveying or geotechnical work, be delayed, the schedule will be moved out by the same duration as the delay. Project allows completion of construction in early 2024 per MSD’s goal.

Task	Completion Date
Surveying and Geotechnical	January 31, 2020
Preliminary Design	May 31, 2020
Final Design	January 31, 2021
Permitting	May 31, 2021
Bidding and Award	August 31, 2021



Part E: Engineering Fee

Compensation for professional engineering services associated with the Scope of Services detailed above will be based on a lump sum engineering fee of \$1,853,885. See the labor hours and cost breakdown per task on the attached fee table.

The fee a fee is based on the pedestrian bridge river crossing option since that results in the largest design cost. If the open cut crossing option is selected, fee will be reduced by \$102,000. If either the horizontal directional drilling or Microtunneling option is selected, fee will be reduced by \$210,000.

HDR will invoice MSD on a monthly basis for all activities related to this scope of services based on percent complete of the lump sum fee. The fees listed above will not be exceeded without written authorization from the MSD.

Task Description	Manhour Forecast (Hrs)									Labor Cost	Subs and Expenses Cost	Total Fee
	QC Sr Expert	PM PP	Design Mgr Sr Eng	Proj Eng Sr Env Sc	Eng	BIM Design Env Sc	CAD	Admin Account	Total Hours			
Hourly Rate	245	225	210	190	160	145	125	95				
Prelim Design	154	242	414	336	556	81	112	77	1972	\$ 364,980	\$ 42,150	\$ 407,130
Survey & Geotech	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -
Final Design	266	458	851	1695	1822	1138	1278	89	7597	\$ 1,293,715	\$ 63,300	\$ 1,357,015
Permitting	0	24	16	101	136	82	0	16	375	\$ 63,120	\$ 400	\$ 63,520
Bidding & Award	6	18	48	16	18	0	12	20	138	\$ 24,920	\$ 1,300	\$ 26,220
Total	426	742	1329	2148	2532	1301	1402	202	10082	\$ 1,746,735	\$ 107,150	\$ 1,853,885

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

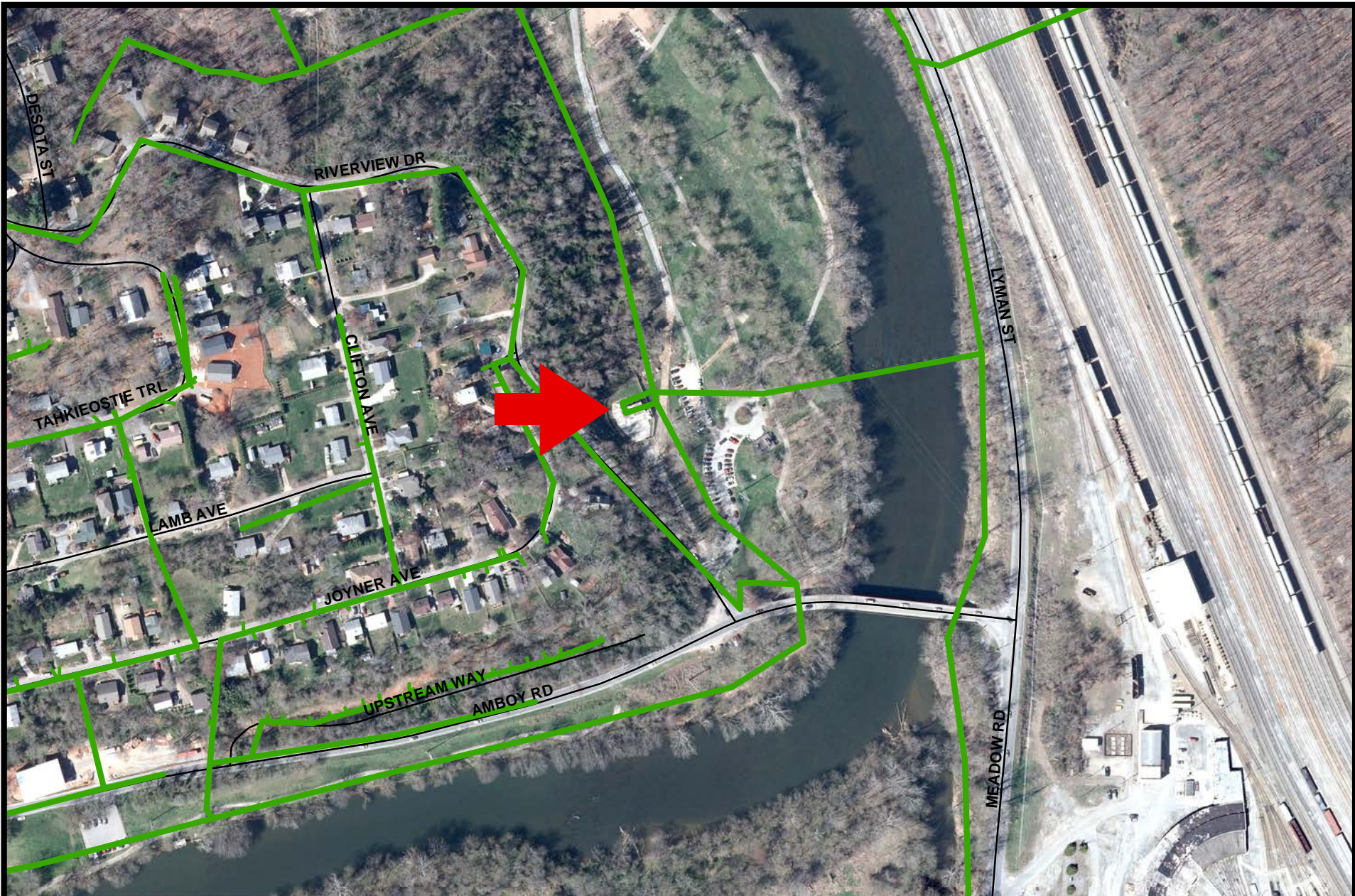
BUDGET DATA SHEET - FY 2019 - 2020

PROJECT: Carrier Bridge PS Replacement	LOCATION: Asheville
TYPE: Pump Station Improvements	PIPE RATING: N/A
PROJECT NO.: 2019045	TOTAL LF: 0
PROJECT BUDGET: \$20,012,250.00	PROJECT ORIGIN: CDM Preliminary Engineering Report

DESCRIPTION	ESTIMATED PROJECT COST	TOTAL EXPENDS THRU 12/31/18	EST. COST JAN - JUNE 2019	BUDGET FY 19-20
55310 - PRELIM. ENGINEERING				
55320 - SURVEY - DESIGN	\$10,000.00			\$10,000.00
55330 - DESIGN	\$2,040,000.00			\$1,520,000.00
55340 - PERMITS				
55350 - SPECIAL STUDIES				
55360 - EASEMENT PLATS	\$2,250.00			\$2,250.00
55370 - LEGAL FEES				
55380 - ACQUISITION SERVICES				
55390 - COMPENSATION	\$60,000.00			\$60,000.00
55400 - APPRAISAL				
55410 - CONDEMNATION				
55420 - CONSTRUCTION	\$17,000,000.00			
55430 - CONST. CONTRACT ADM.	\$850,000.00			
55440 - TESTING	\$50,000.00			
55450 - SURVEY - ASBUILT				
TOTAL AMOUNT	\$20,012,250.00	\$0.00	\$0.00	\$1,592,250.00

ENGINEER: CDM	EB/HC	ESTIMATED BUDGETS - FY 21 - 29	
R.O.W. ACQUISITION: MSD	# PLATS: [3]	FY 20-21	\$4,995,000.00
CONTRACTOR:		FY 21-22	\$8,950,000.00
CONSTRUCTION ADM.: MSD		FY 22-23	\$4,475,000.00
INSPECTION: MSD		FY 23-24	\$0.00
		FY 24-25	\$0.00
PROJECT DESCRIPTION: This project is to implement the recommendations of the French Broad/Carrier Bridge Preliminary Engineering Report. This project will increase the capacity of the Carrier Bridge Pump Station to 34MGD to accommodate future growth in south and west Asheville, as well as CCWSD. The estimated costs shown are planning level only, and incorporate a new pump station with screening, odor control, electrical building, and emergency generator. The project also includes a new 36" force main.		FY 25-26	\$0.00
		FY 26-27	\$0.00
		FY 27-28	\$0.00
		FY 28-29	\$0.00

SPECIAL PROJECT NOTES: CDM - PER



Carrier Bridge Pump Station Replacement Project No. 2019045

NOT TO SCALE



METROPOLITAN SEWERAGE DISTRICT
of
BUNCOMBE COUNTY, NORTH CAROLINA

Budget Map

Metropolitan Sewerage District of Buncombe County

Board Action Item - Right-of-Way Committee

COMMITTEE MEETING DATE: 8/28/2019

BOARD MEETING DATE: 9/18/2019

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

SUBJECT: Consideration of Compensation Budgets –

**Bent Tree Road GSR, Project No. 2016102
Chestnut Lodge Road GSR, Project No. 2014017
332 Wilson Avenue GSR, Project No. 2013136**

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

STAFF RECOMMENDATION: Approval of Compensation Budgets.

Ms. Banks reviewed the above compensation budgets. The Bent Tree Road project is located along the Bent Tree Road, Old Toll Road and Crestwood Lane areas of Town Mountain. It consists of replacing 1654 linear feet of 4” and 6” clay and DIP with 8” DIP. The Chestnut Lodge Road project is located off of Blue Ridge Road along Chestnut Lodge Road and Old Lakey Gap Road in Black Mountain. It consists of replacing 4,650 linear feet of existing 4”, 6” and 8” clay pipe with 8” and 12” iron pipe. The 332 Wilson Avenue project is located on Wilson Avenue in Swannanoa and consists of replacing 295 linear feet of 6” clay and PVC with 8” DIP.

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

COMMITTEE RECOMMENDATION: Approval of Compensation Budgets.

Bent Tree Road GSR

Project Number: 2016102

Compensation Budget

19-Aug-19

Pin Number and Name		Acres	Parcel SF	Land Value	LV/SF	Net PE SF	PE Assd. Value	50% PE Assd. Value	TCE SF	TCE Assd. Value	10% Annl Return	Proj Time	TCE Rent Value	Total Comp. (Rounded)		
27 Pin	83 Pin															
	9649985277	Ferguson	Thomas	0.92	40,075.20	\$214,500.00	\$5.35	6,189.00	\$33,111.15	\$16,555.58	5,425.00	\$29,023.75	\$2,902.38	3	\$725.59	\$17,281
	9649982108	Messick	Andrew	1.02	44,431.20	\$272,700.00	\$6.14	2,771.00	\$17,013.94	\$8,506.97	2,796.00	\$17,167.44	\$1,716.74	3	\$429.19	\$8,936
	9649974542	Myers	James	1.20	52,272.00	\$37,000.00	\$0.71	1,636.00	\$1,161.56	\$580.78	2,425.00	\$1,721.75	\$172.18	3	\$43.04	\$624
	9649984317	Patterson	Robert	1.11	48,351.60	\$266,800.00	\$5.52	1,311.00	\$7,236.72	\$3,618.36	6,488.00	\$35,813.76	\$3,581.38	3	\$895.34	\$4,514
	9649980383	Peterson	Terrance	0.80	34,848.00	\$210,400.00	\$6.04	1,122.00	\$6,776.88	\$3,388.44	2,005.00	\$12,110.20	\$1,211.02	3	\$302.76	\$3,691
													TOTALS:	\$35,046		
													Staff Contingency:	\$5,000		
													GM's Contingency	\$5,000		
													Amendment			
													Total Budget:	\$45,046		

Chestnut Lodge Road GSR

Project Number: 2014017

Compensation Budget

19-Aug-19

Pin Number and Name		Acres	Parcel SF	Land Value	LV/SF	Net PE SF	PE Assd. Value	50% PE Assd. Value	TCE SF	TCE Assd. Value	10% Annl Return	Proj Time	TCE Rent Value	Total Comp. (Rounded)		
27 Pin	83 Pin															
	1340.8	Barden	Clinton	7.32	318,859.20	\$134,100.00	\$0.42	0.00	\$0.00	\$0.00	244.90	\$102.86	\$10.29	7	\$6.00	\$6
	0609900707	Byers	Joseph	0.70	30,492.00	\$42,300.00	\$1.39	0.00	\$0.00	\$0.00	1,340.80	\$1,863.71	\$186.37	7	\$108.72	\$109
	0609807890	Dyer	Leigh	0.17	7,405.20	\$36,300.00	\$4.90	1,777.90	\$8,711.71	\$4,355.86	37.40	\$183.26	\$18.33	7	\$10.69	\$4,367
	0609807521	Fletcher et. al.	Klenna	0.97	42,253.20	\$56,200.00	\$1.33	4,924.30	\$6,549.32	\$3,274.66	5,778.30	\$7,685.14	\$768.51	7	\$448.30	\$3,723
	0609806371	Folkers	Herman	0.34	14,810.40	\$40,000.00	\$2.70	1,357.00	\$3,663.90	\$1,831.95	1,593.00	\$4,301.10	\$430.11	7	\$250.90	\$2,083
	0609916453	Hall	Jeffrey	1.54	67,082.40	\$27,700.00	\$0.41	8,973.80	\$3,679.26	\$1,839.63	12,894.00	\$5,286.54	\$528.65	7	\$308.38	\$2,148
	0609918533	Hall	Jeffrey	3.09	134,600.40	\$57,700.00	\$0.43	1,617.70	\$695.61	\$347.81	2,733.00	\$1,175.19	\$117.52	7	\$68.55	\$416
	0609915276	Halls Towing and Recovery		0.72	31,363.20	\$45,000.00	\$1.43	2,454.00	\$3,509.22	\$1,754.61	3,004.50	\$4,296.44	\$429.64	7	\$250.63	\$2,005
	0609901734	Isola	Beatrice	0.50	21,780.00	\$40,300.00	\$1.85	3,955.50	\$7,317.68	\$3,658.84	5,737.90	\$10,615.12	\$1,061.51	7	\$619.22	\$4,278
	0609806271	Little II	William	0.34	14,810.40	\$40,000.00	\$2.70	187.50	\$506.25	\$253.13	157.30	\$424.71	\$42.47	7	\$24.77	\$278
	0609806481	Lopez	Jose	0.34	14,810.40	\$40,000.00	\$2.70	1,586.30	\$4,283.01	\$2,141.51	1,903.80	\$5,140.26	\$514.03	7	\$299.85	\$2,441
	0609919491	M&M Mountain Properties		2.60	113,256.00	\$391,100.00	\$3.45	2,676.80	\$9,234.96	\$4,617.48	3,346.70	\$11,546.12	\$1,154.61	7	\$673.52	\$5,291
	0609807620	Mabe-Parker	Patricia	0.27	11,761.20	\$38,700.00	\$3.29	0.00	\$0.00	\$0.00	356.90	\$1,174.20	\$117.42	7	\$68.50	\$68
	0609808962	McNeese	Rex	0.53	23,086.80	\$42,500.00	\$1.84	1,218.20	\$2,241.49	\$1,120.74	37.40	\$68.82	\$6.88	7	\$4.01	\$1,125
	0609917814	Progress Energy of the Car		0.71	30,927.60	\$48,700.00	\$1.57	3,305.10	\$5,189.01	\$2,594.50	4,957.70	\$7,783.59	\$778.36	7	\$454.04	\$3,049
	0609809330	Quam	Jesse	2.26	98,445.60	\$87,300.00	\$0.89	2,993.00	\$2,663.77	\$1,331.89	6,581.70	\$5,857.71	\$585.77	7	\$341.70	\$1,674
	0609918989	Ross	David	3.17	138,085.20	\$81,100.00	\$0.59	1,118.60	\$659.97	\$329.99	1,451.20	\$856.21	\$85.62	7	\$49.95	\$380
	0609808763	Snyder	Colleen	0.28	12,196.80	\$38,900.00	\$3.19	2,138.20	\$6,820.86	\$3,410.43	1,658.80	\$5,291.57	\$529.16	7	\$308.68	\$3,719
	0609909658	The Stepp Nichols Co. Inc.		5.30	230,868.00	\$553,300.00	\$2.40	6,544.90	\$15,707.76	\$7,853.88	9,542.90	\$22,902.96	\$2,290.30	7	\$1,336.01	\$9,190
	0609807639	Wiest	William	0.39	16,988.40	\$40,700.00	\$2.40	1,579.50	\$3,790.80	\$1,895.40	1,423.80	\$3,417.12	\$341.71	7	\$199.33	\$2,095
	0609809694	Wolf	Sarah	0.76	33,105.60	\$42,700.00	\$1.29	6,006.20	\$7,748.00	\$3,874.00	7,031.50	\$9,070.64	\$907.06	7	\$529.12	\$4,403

Chestnut Lodge Road GSR

Project Number: 2014017

Compensation Budget

19-Aug-19

Pin Number and Name		Acres	Parcel SF	Land Value	LV/SF	Net PE SF	PE Assd. Value	50% PE Assd. Value	TCE SF	TCE Assd. Value	10% Annl Return	Proj Time	TCE Rent Value	Total Comp. (Rounded)
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27 Pin 83 Pin

TOTALS:	\$52,847
Staff Contingency:	\$15,000
GM's Contingency	\$15,000
Amendment	
Total Budget:	\$82,847

332 Wilson Avenue Sanitary Sewer Rehabilitation

Project Number: 2013136

Compensation Budget

19-Aug-19

Pin Number and Name		Acres	Parcel SF	Land Value	LV/SF	Net PE SF	PE Assd. Value	50% PE Assd. Value	TCE SF	TCE Assd. Value	10% Annl Return	Proj Time	TCE Rent Value	Total Comp. (Rounded)		
27 Pin	83 Pin															
	9699246633	Garland	Dina	0.29	12,632.40	\$37,400.00	\$2.96	3,271.00	\$9,682.16	\$4,841.08	2,452.17	\$7,258.42	\$725.84	1	\$60.49	\$4,902
	9699247567	Ogle	Phillip	0.16	6,969.60	\$34,500.00	\$4.95	270.91	\$1,341.00	\$670.50	354.93	\$1,756.90	\$175.69	1	\$14.64	\$685
TOTALS:														\$5,587		
Staff Contingency:														\$5,000		
GM's Contingency														\$5,000		
Amendment																
Total Budget:														\$15,587		

Metropolitan Sewerage District of Buncombe County

Board Information Item - Right-of-Way Committee

COMMITTEE MEETING DATE: 8/28/2019

BOARD MEETING DATE: 9/18/2019

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

SUBJECT: Land Purchase for Proposed Carrier Bridge Pump Station Site

This will provide the Right of Way Committee with further information as to the land necessary for construction of the proposed Carrier Bridge Pump Station. The need for a new pump station with increased capacity was reviewed at the July Board meeting. No action is required at this time. This is for information purposes only.

The existing pump station was built in 1966 along Riverview Drive, just off Amboy Road, near Carrier Bridge. All wastewater flow from South Buncombe County, North Henderson County and most of West Asheville are pumped through this station and force main, under the French Broad River to a gravity line along Riverside Drive. With the explosion of growth in these service areas, the station has reached its permitted capacity. Construction for a new 40 MGD pump station is planned to begin in 2021.

MSD owns 0.88 acres where the existing pump station sits. Our parcel abuts 48.36 acres of land owned by Progress Energy. MSD has received verbal agreement from Progress to sell approximately 1.25 acres of their land that abuts our northern boundary. Price is yet to be determined by appraisal. Billy Clarke is preparing a Memorandum of Agreement to address the process for the land sale.

STAFF RECOMMENDATION: For Information Only.

Ms. Banks reviewed the above. Mr. Ashley asked what the current flow is for this pump station. Mr. Bradford stated on a dry day it is about 8-9 mgd and can get up to about 18 mgd during wet weather.

COMMITTEE RECOMMENDATION: For Information Only.

Metropolitan Sewerage District of Buncombe County

Board Action Item - Right-of-Way Committee

COMMITTEE MEETING DATE: 8/28/2019

BOARD MEETING DATE: 9/18/2019

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

SUBJECT: Consideration of Town of Weaverville/MSD Greenway Agreement

The Town of Weaverville has requested the use of MSD easements for possible greenway corridors. Weaverville has adopted a Reems Creek Greenway Feasibility Study that contemplates the construction of trails or routes for public recreation and environmental preservation through Weaverville's corporate limits. Attached is a draft agreement prepared by Billy Clarke and Weaverville's attorney, Jennifer Jackson.

MSD currently has greenway agreements in place with the Town of Fletcher (2002), the Town of Black Mountain (2004), and the City of Asheville (2004). An agreement is currently pending with the Town of Woodfin.

STAFF RECOMMENDATION: Approval of this draft agreement to present to the Town of Weaverville for final review and approval.

Ms. Banks explained the above. There were no questions. Mr. Kelly made the motion to accept Staff's recommendation. Mr. Ashley seconded the motion. Voice vote was unanimous.

COMMITTEE RECOMMENDATION: Approval of this draft agreement to present to the Town of Weaverville for final review and approval.

STATE OF NORTH CAROLINA

COUNTY OF BUNCOMBE

GREENWAY AGREEMENT

THIS AGREEMENT, made and entered into this the ____ day of _____ 2019, by and between **METROPOLITAN SEWERAGE DISTRICT OF BUNCOMBE COUNTY, NORTH CAROLINA**, a body corporate and politic, established pursuant to Article V of Chapter 162A of the North Carolina General Statutes, hereinafter referred to as “MSD”, and the **TOWN OF WEAVERVILLE**, a municipal corporation chartered under the laws of the State of North Carolina, hereinafter referred to as “Weaverville”;

WITNESSETH:

WHEREAS, consistent with the mission of the Connect Buncombe program, Weaverville adopted a Reems Creek Greenway Feasibility Study (“RCGFS”) that contemplates the construction of trails or routes for public recreation and environmental preservation through Weaverville’s corporate limits (“Greenways”);

WHEREAS, the Town is working with Buncombe County in the design phase of the Greenways with the exact route yet to be determined;

WHEREAS, Weaverville will seek to acquire easements to effectuate the Greenways as contemplated by the RCGFS, or subsequently adopted Greenway Master Plan (“GMP”), from the owners of the properties over which the Greenways will cross;

WHEREAS, MSD is the holder of easements for certain public sewer lines located in Buncombe County and Weaverville located within the Greenways contemplated by the RCGFS, hereinafter referred to as the “Sewer Easements”;

WHEREAS, the Sewer Easements contain restrictions on the land subject to said Sewer Easements preventing certain improvements and uses;

WHEREAS, the construction of the Greenways may be prohibited over the land subject to the Sewer Easements by the terms and conditions thereof; and

WHEREAS, Weaverville and MSD desire to enter into an agreement which would allow Weaverville to use the land encumbered and restricted by the Sewer Easements in connection with any Greenways that are constructed within the Town;

NOW, THEREFORE, for valuable consideration, the receipt and sufficiency of which is hereby acknowledged, MSD and Weaverville, for themselves, their successor and assigns, agree as follows.

1. MSD will permit Weaverville to construct Greenways over land subject to the Easement Agreements for the implementation of Greenways, consistent with the RCGFS or subsequently adopted GMP, within the Town of Weaverville according to the terms and conditions set forth herein.
2. Weaverville shall identify portions of the Sewer Easements to be used for the construction of Greenways. Once the easement portions are identified, Weaverville will discuss the use of the Sewer Easement with MSD.
3. Upon location approval by MSD, Weaverville shall seek to obtain easements from the owners of the affected properties. Any easement obtained under this paragraph shall be subject to the prior approval of MSD as to form and content.
4. Prior to constructing the Greenway, Weaverville shall prepare plans and specifications for the construction of the Greenway and shall submit the plans and specifications to MSD for approval.
5. Weaverville covenants and agrees that it will construct the Greenway in such a manner that it will not interfere with MSD's ability to access the sewer lines for operation, maintenance, repair or replacement. Prohibited uses of the Sewer Easements by Weaverville include, but are not limited to, the following: the erection of a shed, building, structure or other obstruction within the Sewer Easements; the planting of trees within the Sewer Easements; the placing of additional fill in the permanent easements which would threaten the integrity of the line and placement of other utility lines within the permanent easements, without prior written approval by MSD
6. MSD may close the Greenway, or portions thereof, as necessary to operate, maintain, repair and replace the sewer system or any part thereof. MSD will give Weaverville a minimum of 48 hours' notice of any planned maintenance, repair or replacement of the sewer line, provided no such notice shall be required in the event of an emergency.
7. In the event it becomes necessary for MSD to access its sewer line, and in the course of so doing to remove the pavement or other surface within the Greenway, MSD shall only be responsible for replacing dirt and seeding the area with grass seed, if necessary. Weaverville shall at all times be responsible for repair and replacement of any pavement, gravel or other surface on the Greenway.
8. Weaverville shall pay for all costs and expenses relating in any way to the implementation, construction and maintenance of the Greenway, including any modifications to the MSD sewer system as may be deemed necessary by MSD, specifically including repair or relocation of the lines and obtaining new easements.
9. Weaverville covenants and agrees to defend, indemnify and hold harmless MSD from any claim for injury to person or property arising out of the construction, operation and use of the Greenway. This obligation to defend, indemnify and defend MSD shall extend to all losses, including all costs, expenses, and reasonable attorney's fees and expenses, which

MSD incurs in responding to, investigating or defending any claim for injury to person or property arising out of the design, construction or use of the Greenway. In the event a claim is made against MSD, MSD shall, within twenty (20) days of receipt of thereof, transmit the claim in writing to Weaverville, and Weaverville shall promptly assume the investigation and defense of such claim and shall confirm the same to MSD in writing.

10. All actions permitted or approvals required by MSD pursuant to this agreement shall be at MSD's sole and absolute discretion.

11. All notices shall be provided as follows.

To MSD:
Right of Way Manager
Metropolitan Sewerage District
2028 Riverside Drive
Asheville, NC 288804

To Weaverville:
Public Works Director
Town of Weaverville
15 Quarry Road
Weaverville, NC 28787

12. This Agreement shall inure to the benefit of and be binding upon the successors and assigns of MSD and Weaverville.

IN WITNESS WHEREOF, MSD and Weaverville have executed this Agreement as of the day and year first above written.

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

By: _____
Board Chair

ATTEST:

Secretary

(CORPORATE SEAL)

TOWN OF WEAVERVILLE

By: _____
Mayor

ATTEST:

_____ Town Clerk

(CORPORATE SEAL)

STATE OF NORTH CAROLINA
COUNTY OF _____

I, a Notary Public for said State and County, certify that _____ personally came before me this day and acknowledged that ___ he is _____ Secretary of **METROPOLITAN SEWERAGE DISTRICT OF BUNCOMBE COUNTY, NORTH CAROLINA**, a Public Body and Body Politic and Corporate, and that by authority duly given and as the act of the corporation, the foregoing instrument was signed in its name by its Chairman of the Board, sealed with its corporate seal, and attested by h___ as its Secretary.

WITNESS my hand and official stamp or seal, this ____ day of _____, 2019.

NOTARY PUBLIC

My Commission Expires:

(NOTARIAL SEAL)

STATE OF NORTH CAROLINA
COUNTY OF BUNCOMBE

I, a Notary Public for said State and County, certify that _____ personally came before me this day and acknowledged that ___ he is the Town Clerk of the **TOWN OF WEAVERVILLE**, a municipal corporation, and that by authority duly given and as the act of the corporation, the foregoing instrument was signed in its name by its Mayor, sealed with its corporate seal, and attested by him as its Clerk.

WITNESS my hand and official stamp or seal, this ____ day of _____, 2019.

NOTARY PUBLIC

My Commission Expires:

(NOTARIAL SEAL)

Metropolitan Sewerage District of Buncombe County

BOARD INFORMATIONAL ITEM

Meeting Date: September 18, 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 July 31, 2019

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 July 31, 2019 were \$71,697,512. The detailed listing of accounts is available upon request. The average rate of return for all investments is 2.263%. 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 July 31, 2019 do not reflect contractual commitments or encumbrances against said funds. Shown below are the total investments as of July 31, 2019 reduced by contractual commitments, bond funds, and District reserve funds. The balance available for future capital outlay is \$11,069,172.

Total Cash & Investments as of 07/31/19		71,697,512
<i>Less:</i>		
Budgeted Commitments (Required to pay remaining FY20 budgeted expenditures from unrestricted cash)		
Construction Funds	(28,521,570)	
Operations & Maintenance Fund	(16,452,746)	
		(44,974,316)
Bond Restricted Funds		
Bond Service (Funds held by trustee):		
Funds in Principal & Interest Accounts	(56,817)	
FY19 Principal & Interest Due	(9,715,207)	
		(9,772,024)
District Reserve Funds		
Fleet Replacement	(755,166)	
Pump Replacement	(183,692)	
WWTP Replacement	(288,498)	
Maintenance Reserve	(994,146)	
		(2,221,502)
District Insurance Funds		
General Liability	(4,668)	
Worker's Compensation	(382,453)	
Post-Retirement Benefit	(1,925,700)	
Self-Funded Employee Medical	(1,347,677)	
		(3,660,498)
Designated for Capital Outlay		<u>11,069,172</u>

Meeting Date: September 18, 2019

Subject: Cash Commitment/Investment Report-Month Ended July 31, 2019

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Staff Recommendation

None - Information Only.

Action Taken

Motion by:	to	<input type="checkbox"/> Approve	<input type="checkbox"/> Disapprove
Second by:		<input type="checkbox"/> Table	<input type="checkbox"/> Send to Committee
Other:			
Follow-up required:			
Person responsible:		Deadline:	

Meeting Date: September 18, 2019

Subject: Cash Commitment/Investment Report-Month Ended July 31, 2019

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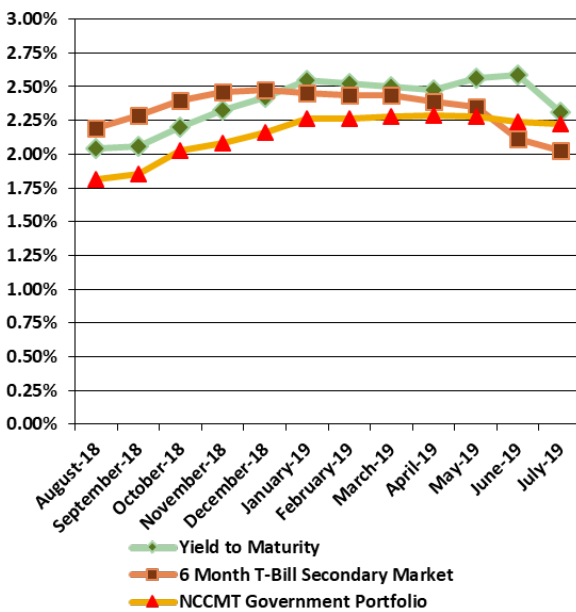
**Metropolitan Sewerage District
INVESTMENT MANAGERS' REPORT
At July 31, 2019**

Summary of Asset Transactions			
	Original Cost	Market	Interest Receivable
Beginning Balance	\$ 66,428,923	\$ 66,474,143	\$ 86,276
Capital Contributed (Withdrawn)	1,055,071	1,055,071	
Realized Income	72,150	72,150	(3,655)
Unrealized/Accrued Income		(8,797)	25,668
Ending Balance	<u>\$ 67,556,144</u>	<u>\$ 67,592,567</u>	<u>\$ 108,288</u>

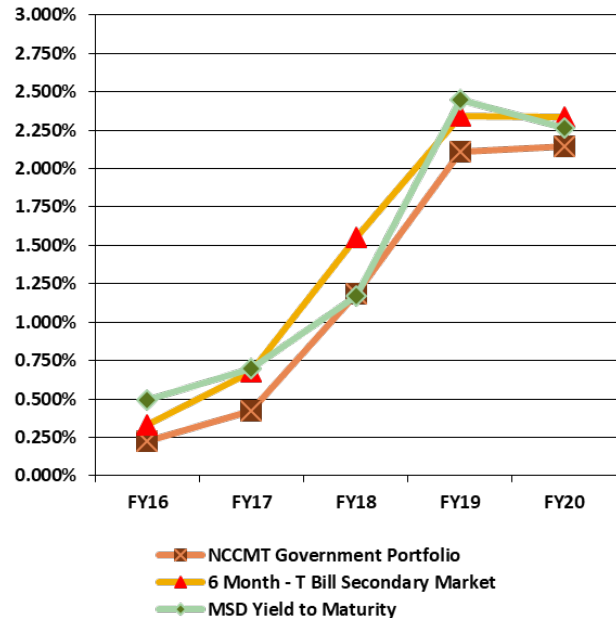
Value and Income by Maturity		
	Original Cost	Income
Cash Equivalents <91 Days	\$ 53,786,187	\$ 67,965
Securities/CD's 91 to 365 Days	3,999,510	5,054
Securities/CD's > 1 Year	9,770,447	12,346
	<u>\$ 67,556,144</u>	<u>\$ 85,365</u>

Month End Portfolio Information	
Weighted Average Maturity	134
Yield to Maturity	2.31%
6 Month T-Bill Secondary Market	2.03%
NCCMT Government Portfolio	2.22%

**Metropolitan Sewerage District
Yield Comparison - July 31, 2019**



**Metropolitan Sewerage District
Annual Yield Comparison**

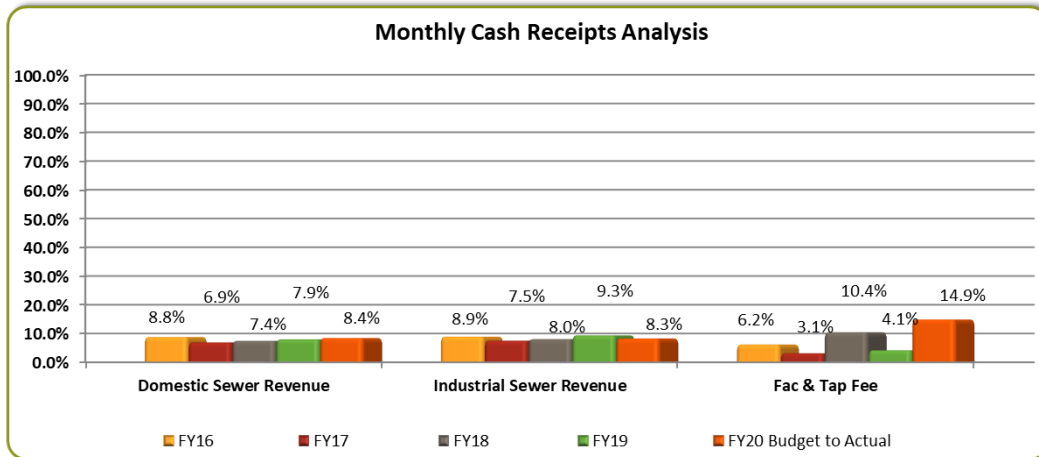


Meeting Date: September 18, 2019

Subject: Cash Commitment/Investment Report-Month Ended July 31, 2019

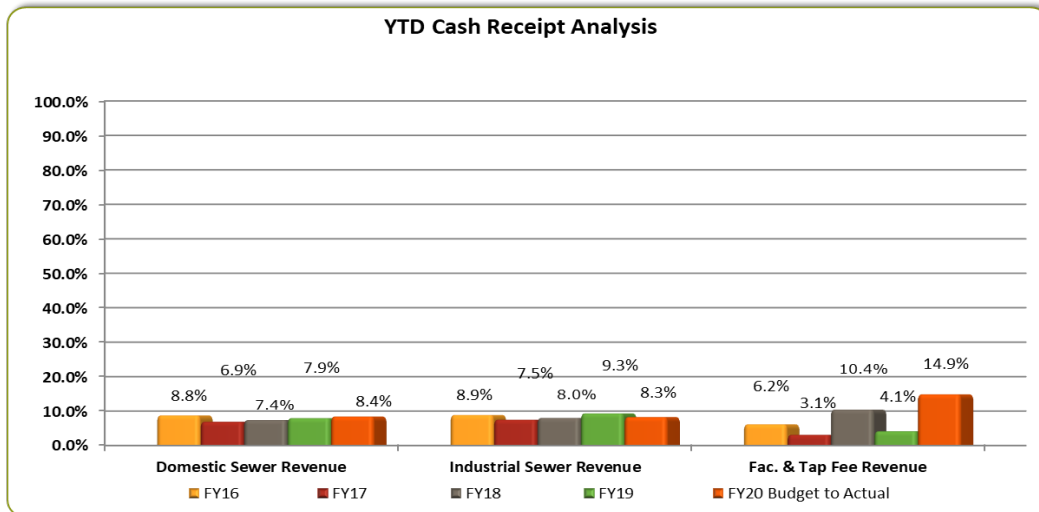
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Metropolitan Sewerage District
ANALYSIS OF CASH RECEIPTS
As of July 31, 2019



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:

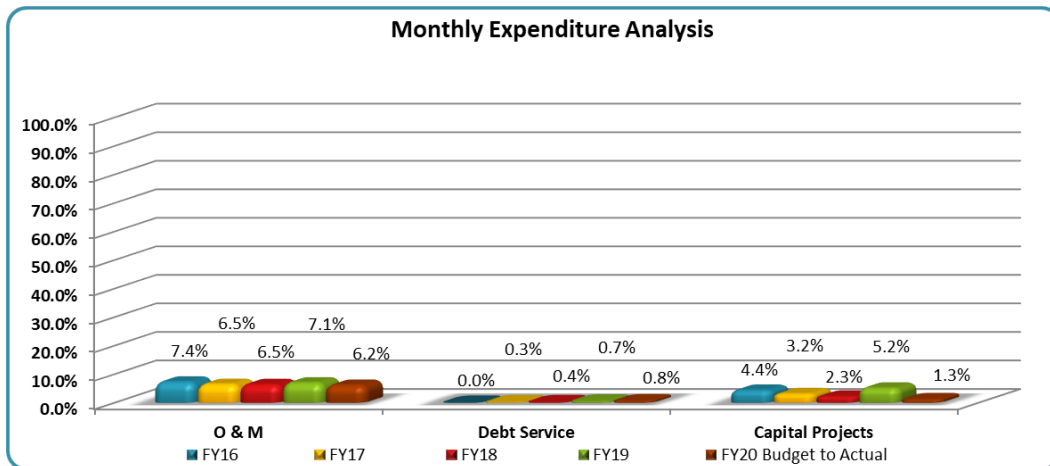
- YTD domestic sewer revenue is considered reasonable based on historical trends.
- YTD industrial sewer revenue is reasonable based on historical trends.
- Due to the unpredictable nature of facility and tap fee revenue, staff considers facility and tap fee revenue reasonable.

Meeting Date: September 18, 2019

Subject: Cash Commitment/Investment Report-Month Ended July 31, 2019

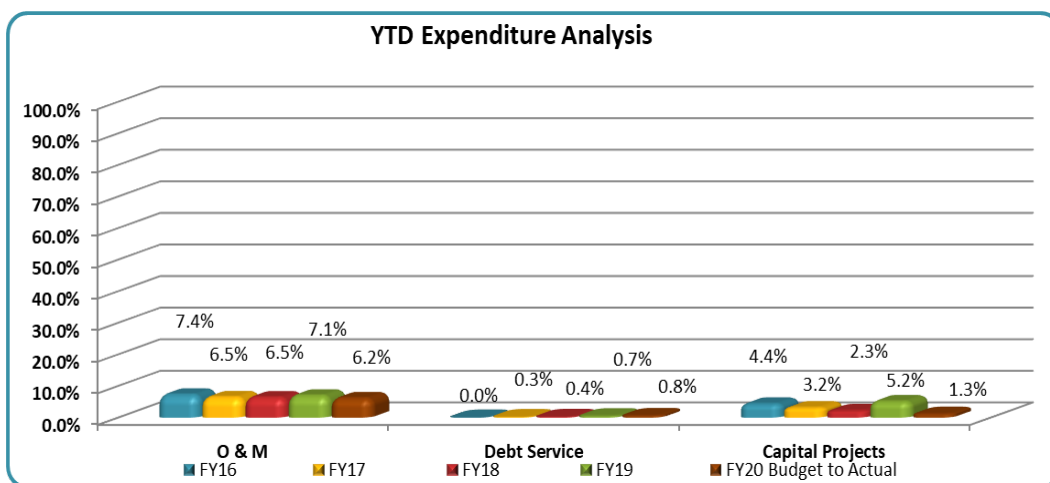
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Metropolitan Sewerage District
ANALYSIS OF EXPENDITURES
As of July 31, 2019



Monthly Expenditure Analysis:

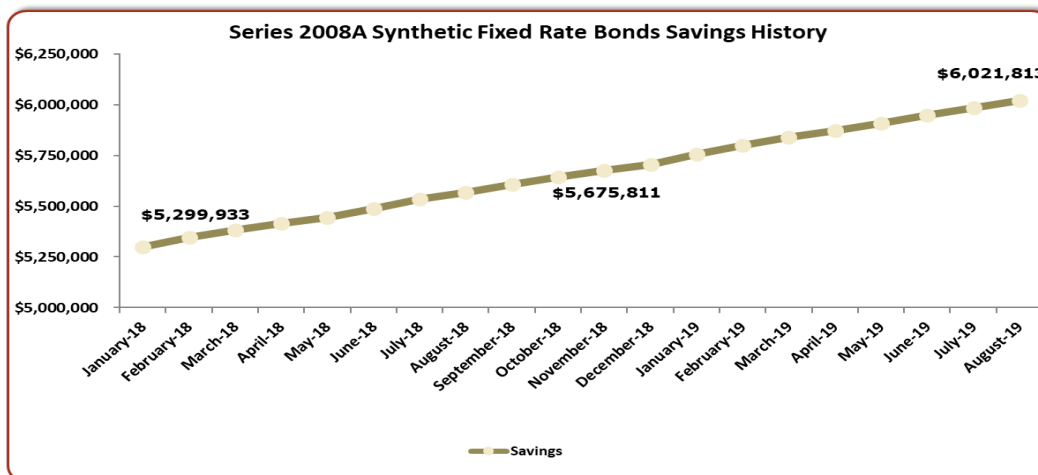
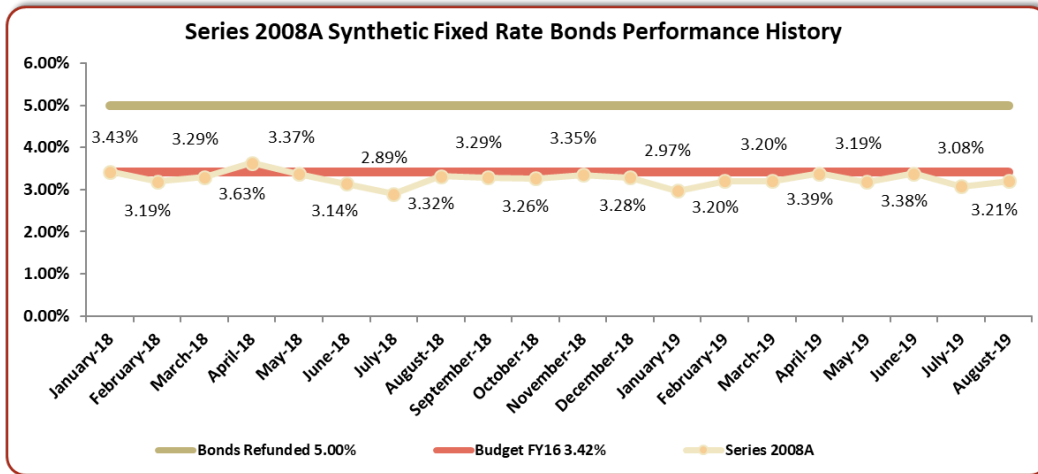
- ✘ Monthly O&M expenditures are considered reasonable based on historical trends and timing of expenditures in the current year.
- ✘ Due to the nature of the variable rate bond market, monthly expenditures can vary year to year. Based on current variable interest rates, monthly debt service expenditures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

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



Series 2008A:

- Savings to date on the Series 2008A Synthetic Fixed Rate Bonds is \$6,021,813 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 \$3,770,728 to terminate the existing Bank of America Swap Agreement.

STATUS REPORTS

**MSD System Services In-House Construction
FY 19-20**

PROJECT NAME	LOCATION	ZIP CODE	ESTIMATED FOOTAGE	ESTIMATED PROJECT DATES	WO#	CREW	COMPLETION DATE	ACTUAL FOOTAGE	NOTES
Saint Johns Street Force Main Replacement	Arden	28704	1040	6/10/19-7/5/19	238516	631	7/1/2019	1048	Complete
Brown Avenue at Elk Mtn Rd	Woodfin	28804	484	7/6/19 - 7/17/19	252976	631	7/17/2019	500	Complete
324 Brooklyn Road Sewer Rehabilitation	Asheville	28803	100	7/18/19-7/19/19	258462	631	7/19/2019	85	Complete
Tried Street Sewer Rehab	Asheville	28803	100	7/20/19 - 7/28/19	263127	631	7/25/2019	86	Complete
415 Chunn's Cove Road at Willow Ridge Sewer Rehabilitation	Asheville	28805	100	8/1/19 - 8/8/19	258463	631	8/2/2019	100	Complete
106 Seventh St Sewer Rehabilitation	Black Mountain	28711	200	8/9/19 - 8/20/19	225198	631	8/13/2019	200	Complete
122 Wendover Road Sewer Rehabilitation	Asheville	28806	113	8/14/19 - 8/16/19	258561	631	8/16/2019	112	Complete
2 Spartan Avenue Sewer Replacement	Asheville	28806	110	8/14/2019	264550	614	8/14/2019	110	Complete
Riverside Drive @ Vine Street	Woodfin	28804	220	8/19/19 - 8/21/19	264742	631	8/21/2019	220	Complete
Barnard Avenue at Lookout Sewer Rehabilitation	Asheville	28804	200	8/22/19 - 8/27/19	236089	631	8/27/2019	205	Complete
Waynensville Avenue at Brownwood	Asheville	28806	798	6/24/19 - 8/31/19	247283	674	8/30/2019	698	Complete
Lower Melody Lane Sewer Rehabilitation	Asheville	28803	694	8/28/19 - 10/1/19	256882	631			Construction beginning
149 State Street Sewer Rehabilitation	Asheville	28806	265	9/1/19 - 9/20/19	237791	674			Construction beginning
28 Mayflower Drive Sewer Replacement	Asheville	28804	272	9/21/19 - 10/1/19	265101	674			Ready for construction
Sarvena Place	Asheville	28804	160	10/2/19 - 10/9/19	262466	631			Ready for construction
12 Mayflower Drive Sewer Rehabilitation	Asheville	28804	279	10/2/19 - 10/20/19	247347	674			Ready for construction
Old Haw Creek Road at Dillingham Road Phase I	Asheville	28805	419	FY 19-20	385247	TBA			Ready for construction
217 Mountain View Road Sewer Rehabilitation Ph. 2	Asheville	28805	483	FY 19-20	260470	TBA			Ready for construction
East Grovestone Quarry Sewer Rehabilitation	Black Mountain	28711	780	FY 19-20	213459	TBA			Ready for construction
Starnes Avenue at Broadway Street	Asheville	28801	400	FY 19-20	208325	TBA			Ready for construction
154 Overbrook Road	Montreat	28757	470	FY 19-20	264010	TBA			Ready for construction
184 West Chestnut	Asheville	28801	320	FY 19-20	201957	TBA			Ready for construction
Old Asheland Ave to Phifer Street Sewer Rehabilitation	Asheville	28801	462	FY 19-20	258560	TBA			Ready for construction
72 Dillingham Road	Asheville	28805	234	FY 19-20	39327	TBA			In ROW
332 Wilson Avenue	Swannanoa	28778	235	FY 19-20	210202	TBA			In ROW
111 Compton Drive	Asheville	28806	360	FY 19-20	228741	TBA			In ROW
28 Woodward Avenue Sewer Rehabilitation	Asheville	28804	660	FY 19-20	249386	TBA			In Design
Brucemont Circle Phase 2 Sewer Rehabilitation	Asheville	28806	913	FY 19-20	256883	TBA			In Design
Lakewood Drive at Waverly Road Sewer Rehabilitation	Asheville	28803	1350	FY 19-20	258770	TBA			Being Surveyed
Coleman Avenue at Conestee	Asheville	28801	1026	FY 19-20	233875	TBA			Being Surveyed
Holiday Dr. at Sweeten Creek Rd. Sewer Rehabilitation	Arden	28704	730	FY 19-20	258461	TBA			Preliminary Engineering
48 Clarendon Road Sewer Rehabilitation	Asheville	28806	500	FY 19-20	258562	TBA			Preliminary Engineering
Briarcliff Dr at Oakwilde Dr Sewer Rehabilitation	Asheville	28803	860	FY 19-20	258768	TBA			Preliminary Engineering
Laurel Avenue at Ivy Street N Sewer Rehabilitation	Asheville	28804	700	FY 19-20	258769	TBA			Preliminary Engineering
Antique Lane to Colters Path Sewer Rehabilitation	Asheville	28806	1600	FY 19-20	258821	TBA			Preliminary Engineering
Daniel Road to Starnes Cove Place Sewer Rehabilitation	Asheville	28806	879	FY 19-20	258822	TBA			Preliminary Engineering
Moss Lane at Cedar Lane Sewer Rehabilitation	Arden	28704	911	FY 19-20	258823	TBA			Preliminary Engineering
Sweeten Creek Rd At Carrington Pl Sewer Rehabilitation	Arden	28704	1232	FY 19-20	258825	TBA			Preliminary Engineering
Vance Ave 4" Main Sewer Rehabilitation	Black Mtn	28711	565	FY 19-20	258826	TBA			Preliminary Engineering



CONSTRUCTION TOTALS BY DATE COMPLETED - Monthly

From 7/1/2019 to 7/31/2019

	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 2019	25	12	163	718	27	24	12,239	0	24	606	10	1,121	1751
Grand Totals	25	12	163	718	27	24	12,239	0	24	606	10	1,121	1751

* Used to calculate Total Rehab Footage



PIPELINE MAINTENANCE TOTALS BY DATE COMPLETED - Monthly

July 01, 2019 to July 31, 2019

	Main Line Wash Footage	Service Line Wash Footage	Rod Line Footage	Cleaned Footage	CCTV Footage	Smoke Footage	SL-RAT Footage
2019							
July	89,420	739	8,930	98,350	21,980	325	17,474
Grand Total:	89,420	739	8,930	98,350	21,980	325	17,474
Avg Per Month:	89,420	739	8,930	98,350	21,980	325	17,474



CUSTOMER SERVICE REQUESTS

Monthly - All Crews

CREW	MONTH	JOBS	AVERAGE RESPONSE TIME	AVERAGE TIME SPENT
DAY 1ST RESPONDER				
	July, 2019	108	25	35
		108	25	35
NIGHT 1ST RESPONDER				
	July, 2019	13	24	15
		13	24	15
ON-CALL CREW *				
	July, 2019	41	41	37
		41	41	37
Grand Totals:		162	29	34

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

CAPITAL IMPROVEMENT PROGRAM

STATUS REPORT SUMMARY

September 11, 2019

PROJECT	LOCATION OF PROJECT	CONTRACTOR	AWARD DATE	NOTICE TO PROCEED	ESTIMATED COMPLETION DATE	*CONTRACT AMOUNT	*COMPLETION STATUS (WORK)	COMMENTS
AVERY CREEK PUMP STATION IMPROVEMENTS	Arden 28704	NHM Constructors	11/21/2018	5/2/2019	10/1/2019	\$532,674.25	98%	Contractor is working on punch list items.
BEAUCATCHER ROAD @ KENILWORTH ROAD	Asheville 28805	Terry Brothers Construction Company	1/16/2019	6/24/2019	10/22/2019	\$171,908.00	0%	No work has started yet. Contractor on another MSD project.
BEAUCATCHER ROAD @ KENILWORTH ROAD PHASE 2	Asheville 28805	Terry Brothers Construction Company	7/17/2019	TBA	TBA	\$334,779.00	0%	A preconstruction meeting was held on August 28th. No work has begun yet.
KENILWORTH ROAD @ SPRINGDALE ROAD	Asheville 28805	Terry Brothers Construction Company	1/16/2019	6/24/2019	10/22/2019	\$252,324.00	40%	Work is progressing well.
MULL BUILDING HVAC PHASE 1	Woodfin	Pyatt Heating & Air Conditioning	8/21/2019	TBA	TBA	\$186,338.00	0%	Contracts are in process. A preconstruction meeting will be scheduled soon.
MULL BUILDING IT BACKUP GENERATOR	Woodfin	MB Haynes	9/10/2019	TBA	TBA	\$120,700.00	0%	Contracts are in process.
OLD HAW CREEK ROAD @ GREENBRIAR ROAD	Asheville 28805	Terry Brothers Construction Company	1/16/2019	4/15/2019	10/30/2019	\$821,552.00	99%	Ready for final paving.
OLD WEST CHAPEL ROAD	Asheville 28803	Terry Brothers Construction Company	11/21/2018	1/10/2019	9/1/2019	\$982,155.00	100%	Project complete and in close out.
WEAVERVILLE FORCE MAIN @ PLANT	Woodfin	Terry Brothers Construction Company	7/17/2019	TBA	TBA	\$2,188,114.10	0%	A preconstruction meeting was held on August 28th. No work has begun yet.
WRF- PLANT HIGH RATE PRIMARY TREATMENT	Woodfin	Shook Construction Company	10/17/2018	1/7/2019	12/31/2020	\$15,071,000.00	20%	Pump room slab has been poured. Preparing for mudmat pour in clarifier and maturation tank section.

*Updated to reflect approved Change Orders and Time Extensions

Planning & Development Project Status Report

Active Construction Projects Sorted by Work Location and Project Number

September 9, 2019

#	Project Name	Project Number	Work Location	Zip Code	Units	LF	Pre-Construction Conference Date	Comments
1	First Baptist Relocation	2015032	Asheville	28801	Comm.	333	7/21/2015	Final Inspection complete, awaiting close-out docs
2	8 Sulphur Springs Road	2015116	Asheville	28806	6	80	11/22/2016	Final Inspection complete, awaiting close-out docs
3	Towne Place Suites	2016012	Asheville	28801	83	342	9/11/2018	Installing
4	88 Southside Ave Phase 2	2016015	Asheville	28801	18	400	2/21/2017	Phase 2 not yet started
5	Hounds Ear (Mears Ave Cottages)	2016123	Asheville	28806	18	402	8/18/2017	Pre-con held, construction not yet started
6	Lausch Subdivision	2016153	Asheville	28805	4	248	5/16/2017	Waiting on final inspection/Punchlist items pending
7	Hawthorne at Mills Gap	2016222	Asheville	28803	272	442	10/3/2017	Waiting on final inspection
8	Ashecroft	2016229	Asheville	28806	40	2,450	2/20/2018	Phase 1 - Final complete, awaiting close-out docs / Phase 2 - on hold
9	Gerber Road Storage	2017049	Asheville	28803	Comm.	156	2/9/2018	Waiting on final inspection
10	RADTIP	2017052	Asheville	28801	0	919	2/13/2018	Installing
11	White Oak Grove	2017053	Asheville	28801	114	1,185	6/28/2019	Pre-con held, construction not yet started
12	Rock Hill Road	2017096	Asheville	28803	15	990	7/24/2018	Waiting on final inspection
13	Villa Heights	2017118	Asheville	28806	8	540	2/20/2018	Final Inspection complete, awaiting close-out docs
14	McCormick Place	2017150	Asheville	28801	17	210	8/3/2018	Waiting on final inspection
15	Wanoca Cottages	2017214	Asheville	29903	15	378	3/26/2019	Waiting on final inspection
16	Hawthorne Apartments @ Haywood	2017225	Asheville	28806	240	1,604	10/19/2018	Waiting on Final Inspection
17	17 N. Market Street	2017238	Asheville	28801	16	256	5/10/2019	Pre-con held, construction not yet started
18	Fernwood Avenue	2017251	Asheville	28806	3	368	10/30/2018	Final Inspection complete, awaiting close-out docs
19	Biltmore Terrace Ph. 3	2018000	Asheville	28803	15	294	7/16/2019	Pre-con held, construction not yet started
20	US 74 Commercial Development	2018010	Asheville	28803	4	265	5/25/2018	Pre-con held, construction not yet started
21	Alice Place Subdivision	2018066	Asheville	28803	19	480	6/19/2018	Final Inspection complete, awaiting close-out docs
22	Oakview Park Road	2018072	Asheville	28803	3	230	1/29/2019	Pre-con held, construction not yet started
23	Old Haywood Subdivision Phase 1	2018073	Asheville	28806	79	1,770	3/19/2019	Pre-con held, construction not yet started
24	Fern Street	2018081	Asheville	28803	8	60	2/15/2019	Testing
25	Cypress Knoll Gardens	2018121	Asheville	28803	7	90	10/30/2018	Final Inspection complete, awaiting close-out docs
26	Le An Hurst Road	2018127	Asheville	28803	5	245	3/22/2019	Final Inspection complete, awaiting close-out docs
27	Tru by Hilton	2018131	Asheville	28805	1	248	1/25/2019	Waiting on final inspection
28	Hamrick Farms	2018133	Asheville	28715	69	3,483	8/30/2019	Pre-con held, construction not yet started
29	Grove Park Views	2018239	Asheville	28801	7	150	2/19/2019	Waiting on final inspection
30	Habitat - Old Haywood Road	2018258	Asheville	28806	38	1,355	8/20/2019	Pre-con held, construction not yet started
31	Joyner Avenue	2018264	Asheville	28801	4	215	6/4/2019	Waiting on final inspection
32	UNC-A Edgewood Road Parking Lot	2019078	Asheville	28801	Comm.	373	7/19/2019	Installing
33	100 Airport Road Sewer Relocation	2019125	Asheville	28704	Comm.	548	8/23/2019	Installing
34	West Keesler Avenue	2007176	Black Mountain	28711	6	410	11/15/2016	Final Inspection complete, awaiting close-out docs
35	808 Montreat Road	2015126	Black Mountain	28711	4	371	4/18/2017	Final Inspection complete, awaiting close-out docs
36	Avadim	2017001	Black Mountain	28711	Comm.	2,286	1/11/2019	Installing
37	Sweet Birch Lane	2017111	Black Mountain	28711	65	780	9/28/2018	Final Inspection complete, awaiting close-out docs
38	Chapman's Cove	2017227	Black Mountain	28711	10	430	9/21/2018	Final Inspection complete, awaiting close-out docs
39	White Oak Circle	2018197	Black Mountain	28711	4	330	10/30/2018	Installing
40	402 Blue Ridge Road	2018206	Black Mountain	28711	6	372	2/5/2019	Pre-con held, construction not yet started
41	Padgettown Road - Phase 1	2019003	Black Mountain	28711	6	240	7/19/2019	Pre-con held, construction not yet started
42	Padgettown Road - Phase 2	2019085	Black Mountain	28711	43	1,308	7/19/2019	Pre-con held, construction not yet started
43	Hyde Park Phase 2	2013058	Buncombe Co.	28704	14	500	12/3/2013	Waiting on final inspection
44	Creekside Cottages	2014095	Buncombe Co.	28704	7	504	3/12/2015	Waiting on final inspection
45	Avondale Subdivision	2015052	Buncombe Co.	28803	4	215	4/7/2017	Final Inspection complete, awaiting close-out docs
46	Waightstill Mountain Phase 2B	2015155	Buncombe Co.	28704	16	1,784	4/23/2019	Installing
47	Bee Tree Village	2015158	Buncombe Co.	28778	26	1,118	3/17/2017	Waiting on final inspection
48	NC DOT I-5504 NC 191/L-26 Interchange	2016132	Buncombe Co.	28806	0	355	10/23/2017	Installing
49	Bradley Branch Ph. 4	2016189	Buncombe Co.	28704	27	2,420	5/10/2019	Installing
50	New Salem Heights	2016192	Buncombe Co.	28778	25	816	2/13/2018	Final Inspection complete, awaiting close-out docs
51	Villas of Avery Creek	2017068	Buncombe Co.	28704	270	3,170	9/18/2018	Waiting on final inspection
52	ABCCM	2017083	Buncombe Co.	28806	60	4,069	12/4/2018	Off-site portion has been installed, on-site in progress
53	240 Old Farm School Road	2017112	Buncombe Co.	28805	4	340	2/9/2018	Final Inspection complete, awaiting close-out docs
54	Glenn Bridge Meadows	2017151	Buncombe Co.	28704	30	1,692	7/19/2019	Installing
55	Sweetgrass Apartments	2018015	Buncombe Co.	28704	270	1,090	4/12/2019	Installing
56	Fields BMW	2018022	Buncombe Co.	28704	3	490	10/9/2018	Final Inspection complete, awaiting close-out docs
57	Rosscraggon Road Subdivision	2018048	Buncombe Co.	28704	4	370	4/20/2018	Final Inspection complete, awaiting close-out docs
58	The Ramble Block I	2018050	Buncombe Co.	28803	39	7,316	12/4/2018	Testing
59	Upper Grassy Branch Road	2018087	Buncombe Co.	28805	6	250	8/31/2018	Waiting on final inspection
60	412 Ridge Street	2018111	Buncombe Co.	28715	4	275	5/7/2019	Waiting on final inspection
61	Bee Tree Road	2018115	Buncombe Co.	28778	6	240	12/18/2018	Waiting on final inspection
62	New Riparian	2018156	Buncombe Co.	28778	5	275	9/28/2018	Final Inspection complete, awaiting close-out docs
63	Cedar Lane	2018164	Buncombe Co.	28704	9	145	3/22/2019	Pre-con held, construction not yet started
64	Fountain Park Subdivision	2018167	Buncombe Co.	28806	240	8,023	7/12/2019	Installing
65	Blake Ct.	2018174	Buncombe Co.	28704	5	307	7/30/2019	Pre-con held, construction not yet started
66	The Preserve at Avery's Creek Phase 2	2018188	Buncombe Co.	28704	141	4,000	6/16/2017	Waiting on final inspection
67	East Haven Apartments	2018198	Buncombe Co.	28778	95	34	7/30/2019	Pre-con held, construction not yet started
68	Reserve at Gashes Creek	2018208	Buncombe Co.	28803	190	1,940	8/2/2019	Installing
69	Biltmore Lake Block I-4	2018226	Buncombe Co.	28715	27	1,770	3/12/2019	Waiting on final inspection
70	Roberts Relocation	2018250	Buncombe Co.	28803	1	340	7/19/2019	Final Inspection complete, awaiting close-out docs
71	Wheeler Road	2017019	Weaverville	28787	72	1,535	3/28/2018	Final Inspection complete, awaiting close-out docs
72	44 Central Ave	2017107	Weaverville	28787	7	275	10/27/2017	Final Inspection complete, awaiting close-out docs
73	Ambler's Chase	2017249	Weaverville	28787	21	1,235	11/29/2018	Testing
74	Northridge Commons Townhomes	2018082	Weaverville	28787	53	1,380	4/9/2019	Pre-con held, construction not yet started
75	Maple Trace Ph. 4	2018214	Weaverville	28787	35	1,265	5/24/2019	Pre-con held, construction not yet started
76	Crest Mountain Phase 3B	2013041	Woodfin	28806	69	1,329	10/15/2013	Punchlist pending, awaiting closeout documents (roadwork remaining)
77	Reese & Jan Lasher (High Hopes)	2015152	Woodfin	28806	14	320	4/26/2016	Final Inspection complete, awaiting close-out docs
78	Olivette Development-Phase 1 Gravity	2016065	Woodfin	28804	356	1,155	3/29/2018	Working on punchlist items
79	Olivette Pump Station/Force Main	2016213	Woodfin	28804	356	1,740	2/27/2018	Installing
80	Ricky Robinson Property	2017088	Woodfin	28804	1	385	7/31/2018	Final Inspection complete, awaiting close-out docs
81	Apple Lane	2017130	Woodfin	28804	4	60	8/31/2018	Installing
82	88 North Merrimon Avenue	2017196	Woodfin	28804	Comm.	455	5/11/2018	Waiting on final inspection
83	Olivette Gravity Phase 2	2018116	Woodfin	28804	94	12,406	11/27/2018	Installing
84	Skylin-Terraces at Reynolds Mtn -Phase 3&4	2018187	Woodfin	28804	22	845	8/8/2017	Waiting on final inspection and phasing
85	Brown Avenue	2018267	Woodfin	28804	3	62	7/2/2019	Waiting for testing
	TOTAL					3,907	95,931	