

BOARD OF THE METROPOLITAN SEWERAGE DISTRICT
October 18, 2017

1. Call to Order and Roll Call:

The regular monthly meeting of the Metropolitan Sewerage District Board was held in the Boardroom of MSD's Administration building at 2pm Wednesday, October 18, 2017. Vice-Chairman Kelly presided in Chairman VeHaun's absence, with the following members present: Bryson, Creighton, Frost, Manheimer, Pelly, Pressley, Root and Wisler. Ashley and Collins were absent.

Others present were: Thomas E. Hartye, PE, General Manager; William Clarke, General Counsel; Forrest Westall with McGill Associates; David Tuch with Equinox Environmental; Jason Young and Ben Dannemiller with the Town of Woodfin; Will Baldwin, Karla Furnari and Josh O'Conner with Buncombe County; Joe Calderwood with Starview Heights; Ed Bradford, Scott Powell, Mike Stamey, Angel Banks, Darin Prosser, Hunter Carson, Matthew Walter, Pam Thomas, Peter Weed, Spencer Nay and Pam Nolan, MSD.

2. Inquiry as to Conflict of Interest:

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

3. Approval of Minutes of the September 20, 2017 Board Meeting:

Mr. Kelly asked if there were any changes to the Minutes of the September 20, 2017 Board Meeting. Ms. Wisler moved for approval of the minutes as presented. Mr. Pelly seconded the motion. Voice vote in favor of the motion was unanimous.

4. Discussion and Adjustment of Agenda:

None

5. Informal Discussion and Public Comment:

Mr. Kelly welcomed David Tuch with Equinox Environmental; Will Baldwin, Karla Furnari and Josh O'Conner with Buncombe County; and Jason Young and Ben Dannemiller with the Town of Woodfin. There was no discussion or public comment.

6. Report of General Manager:

Mr. Hartye called on Mr. Tuch to report on the NC251 Greenway. Mr. Tuch reported this project runs from the intersection of Broadway and Riverside Drive up to MSD and is about a 3 mile section. He stated that they are now in the process of schematic design which involves looking at possible alternative routes. The desire is for this greenway to be along the French Broad River as much as possible. They are currently talking with landowners, which will be ongoing for a few months. In discussion with

landowner's they will also be asking for letters of support. This process is anticipated to be complete by the end of February, 2018. Mr. Hartye asked if they had any preliminary concepts of what they are particularly looking at through MSD's property at the Mull Building and crossing the stream. Mr. Tuch stated that in 2010 a feasibility study was done and one of the alternative options was along the river at the back of the property, then up to and crossing the creek. He stated that another alternative was putting some type of path through the parking lot in front of the Mull Building. He stated that when working with the NCDOT, they want several alternatives. These options have been assessed even if they are not the best options. There was some discussion regarding the amount of traffic and safety concerns with the parking lot. Mr. Tuch stated that they were very aware of the safety concerns and were taking that into account. Mr. Hartye asked if they were involved with the greenway with the pre-fab bridge under Hillside. Mr. Tuch stated they were not, but were involved with the New Belgium Greenway Project. He further commented that the County just completed a study that would connect this study area to RADTIP. Mr. O'Conner stated that they were also aware of the traffic issues with the parking lot. He stated that this portion of greenway is the first part of their concept to have the greenway all the way to Lake Julian Park. Mr. Hartye asked if they were intertwined with "the wave" effort or separate. Mr. Young stated that the greenway will be by and part of the larger park area where "the wave" will be but the greenway is funded separately and will be handled as a stand-alone project. Mr. Hartye asked how this project was being funded. Mr. Young stated through bond proceeds, non-profits and private sector. Mr. O'Conner stated that for this section of the greenway there is \$660,000.00 for design and property acquisition from the Federal Highway Administration and earlier they were awarded an additional 3 million to devote to this section of greenway and another 2 million for the section of greenway that will pick up along Elk Mountain Road parallel to Beaverdam Creek. He stated that was certainly not all the money they would need but is a sizeable chunk. Ms. Frost asked what the total projected cost was. Mr. Tuch stated that the 3 mile section is estimated at about 1.25 million per mile. There was some discussion regarding various reasons costs fluctuated. There was no further discussion.

Mr. Hartye reported that MSD and Henderson County representatives met on October 10th to kick things off as far as reviewing the merger process and what would be entailed for MSD to do our due diligence. The goal is to shoot for next fiscal year, by July 1, 2018. The Planning Committee discussed a few items just before this Board meeting. Mr. Root will report on those in his Committee Report.

The next regular Board meeting will be held on November 15th at 2 pm. The next Right of Way Committee meeting will be held on November 22nd at 9 am.

7. Report of Committees:

Right of Way Committee:

Mr. Kelly reported that the Right of Way Committee met on September 27, 2017. There was not a quorum but the recommendations of those members present are included in this package. There is one correction to the Committee Minutes, on Page 2 the reference to “Old Burnsville Highway” should be changed to “Old Burnsville Hill Road”.

Planning Committee:

Mr. Root reported that the Planning Committee met on this date @ 1:15 pm to discuss two items. The first item was regarding the Cane Creek Water & Sewer Merger which has a very ambitious schedule. Mr. Hartye brought everyone up to date. No recommendation required.

The second item discussed was consideration of Private System built to Public Standards. Mr. Bradford explained that the Developer wanted to put in a system that will connect to his private system, and he also initially proposed a low pressure sewer system, both of which are against MSD Policy. Mr. Root expressed his appreciation to MSD for dealing with this issue in a creative manner. The Planning Committee recommendation is to approve this private system, subject to the following conditions: 1) The private gravity extension is constructed to MSD standards – including 8-inch lines and standard manholes; 2) A twenty foot wide easement is provided to permanently protect the line, in a form that is legally conveyable to MSD in the future; 3) Additional easement(s) shall be provided downstream of the pump station and through the developer’s properties, for the possible future gravity connection; 4) The plans for the gravity collection system and easements shall be reviewed and approved by MSD. The pump station shall be located such that a future gravity extension to the existing MSD system is economically feasible; 5) The gravity collection system shall be inspected and approved by MSD (excluding the private pump station); 6) This system will be owned, operated and maintained by the homeowner’s association.

Mr. Kelly called for a motion to approve the Planning Committee recommendation. Ms. Wisler moved. Ms. Bryson seconded the motion. Voice vote in favor of the motion was unanimous.

8. Consolidated Motion Agenda:

a. Consideration of Condemnation – Dry Ridge Road Four Inch Main:

Mr. Hartye reported that the Right of Way Committee recommendation for this parcel is to give Staff authority to obtain appraisal and proceed with condemnation, if necessary.

b. Consideration of Compensation Budgets: Elkwood Avenue GSR, Memory Lane GSR, Old Haw Creek @ Greenbriar Road GSR, Old West Chapel Road GSR and Long Shoals Road @ Allen Avenue GSR:

Mr. Hartye reported that Right of Way Committee recommendation for these projects is approval of the compensation budgets.

c. Consideration of Bids: South French Broad Interceptor Lining Project:

Mr. Hartye reported that this project is located within the Biltmore Estate along the 36-inch interceptor which serves the southern portions of the District's service area, including Cane Creek Water & Sewer. The project is comprised of lining the interceptor with Cured-in-Place-Pipe (CIPP), which will further extend the future service life of this line. This line will eventually be parallel with a "relief" line in the next 3–10 years to add capacity for future growth. The sections to be lined under this contract are approximately 6,632 LF. MSD has worked closely with the Biltmore Estate staff to schedule this work during the winter season. The contract was advertised and seven bids were received on September 28, 2017, as follows: VacVision Environmental in the amount of \$2,449,723.00, Spiniello Companies in the amount of \$1,696,790.00, Layne Inliner LLC in the amount of \$1,321,745.00, IPR Southeast LLC in the amount of 1,197,973.00, Am-Liner East in the amount of \$1,196,696.00, SAK Construction Company in the amount of \$1,182,516.00 and Insituform Technologies in the amount of \$1,171,314.00. The apparent low bidder is Insituform Technologies in with a bid amount of \$1,171,314.00. Insituform has not recently performed work for MSD but has performed a lot of work nationwide. Staff checked their references which all came back good. The FY 17-18 Construction Budget for this project is \$1,701,000.00. Staff recommends award of this contract to Insituform Technologies in the amount of \$1,171,314.00, subject to review and approval by District Counsel.

d. Consideration of Letter of Support – NC 251 Greenway:

Mr. Hartye reported that Staff's recommendation is for the Board to approve the concept of the NC251 Greenway, and authorize the Chairman to sign the attached MSD Letter of Support.

e. Acceptance of Developer Constructed Sewer System: Greenwood Fields Subdivision – Phase 1:

Mr. Hartye reported that the Greenwood Fields Subdivision – Phase 1 is located off of Old Marshall Highway in the Town of Woodfin. The project included extending approximately 2,971 linear feet of 8-inch

public gravity sewer to serve the thirty single family residential subdivision.

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

f. Cash Commitment/Investment Report Month ended August, 2017:

Mr. Powell reported that Page 32 presents the makeup of the District's Investment Portfolio. There has been no change in makeup of the portfolio from the prior month. Page 33 presents the MSD investment managers report for the month of August. The weighted average maturity of the investment portfolio is 93 days. The yield to maturity is 1.17% and exceeds our bench marks of 6 month T-Bill and North Carolina Capital Management Trust government portfolio. Page 34 presents an analysis of the District's cash receipts. Monthly and YTD domestic sewer and industrial revenue is considered reasonable based on timing of cash receipts and historical trends. Facility and Tap fees are considered reasonable taking into consideration the unpredictability of cash receipts as it pertains to development in the region as well as the District conservatively budgeting these impact fees. Page 35 presents the analysis of the District's expenditures. Monthly and YTD expenditures are considered reasonable based on historical trends. Page 36 presents the MSD Variable Debt Service report for the month of September. The 2008A Series bonds are performing at budgeted expectations. As of the end of September the issue has saved the District rate payers approximately \$5.2 million in debt service since April, 2008. There were no questions pertaining to this item.

Mr. Kelly called for a motion to approve the Consolidated Motion Agenda. Mr. Pelly moved. Ms. Bryson seconded the motion. Roll call vote was as follows: 9 Ayes; 0 Nays.

9. Old Business:

None

10. New Business:

None

11. Adjournment:

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


Jackie W. Bryson, Secretary/Treasurer

MSD

Regular Board Meeting

Metropolitan Sewerage District
of Buncombe County, NC

AGENDA FOR 10/18/17

✓	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 September 20, 2017 Board Meeting	VeHaun	2:10	
	03. Discussion and Adjustment of Agenda.	VeHaun	2:15	
	04. Informal Discussion and Public Comment	VeHaun	2:20	
	05. Report of General Manager	Hartye	2:25	
	06. Report of Committees	VeHaun	2:35	
	a. Right of Way Committee – September 27, 2017	Kelly		
	07. Consolidated Motion Agenda	Hartye	2:40	
	a. Consideration of Condemnation: Dry Ridge Road Four Inch Main, Project No. 2012009	Hartye		
	b. Consideration of Compensation Budgets: Elkwood Avenue GSR; Memory Lane GSR; Old Haw Creek @ Greenbriar Road GSR; Old West Chapel Road GSR; Long Shoals Road @ Allen Avenue GSR	Hartye		
	c. Consideration of Bids: South French Broad Interceptor Lining Project	Hartye		
	d. Consideration of Letter of Support – NC251 Greenway	Hartye		
	e. Consideration of Developer Constructed Sewer System: Greenwood Fields Subdivision – Phase 1	Hartye		
	f. Cash Commitment/Investment Report Month Ended August, 2017	Powell		
	08. Old Business:	VeHaun	3:10	
	09. New Business:	VeHaun	3:15	
	10. Adjournment: (Next Meeting 11/15/17)	VeHaun	3:20	
	STATUS REPORTS			

**BOARD OF THE METROPOLITAN SEWERAGE DISTRICT
SEPTEMBER 20, 2017**

1. Call to Order and Roll Call:

The regular monthly meeting of the Metropolitan Sewerage District Board was held in the Boardroom of MSD's Administration building at 2pm Wednesday, September 20, 2017. Chairman VeHaun presided with the following members present: Ashley, Bryson, Collins, Creighton, Frost, Kelly, Manheimer, Pelly, Root and Wisler. The following members were absent: Pressley.

Others present were: Thomas E. Hartye, General Manager; William Clarke, General Counsel; Joseph Martin with Woodfin Sanitary Water & Sewer District; Ed Bradford, Scott Powell, Jim Hemphill, Matthew Walter, Roger Edwards, Mike Stamey, Ken Stines, Hunter Carson, Spencer Nay and Pam Nolan.

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 16, 2017 Board Meeting:

Mr. Vahaun asked if there were any changes to the Minutes of the August 16, 2017 Board Meeting. Ms. Wisler moved for approval of the minutes as presented. Mr. Root 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. Vahaun welcomed Joe Martin. There was no public comment.

6. Report of General Manager:

Mr. Hartye reported that MSD's French Broad River Reclamation Facility received the Platinum Award for five years of complete and consistent discharge (NPDES) compliance. Congratulations to Roger Edwards and all treatment plant operation and maintenance personnel.

Mr. Hartye reported that attached is an email from Jamie Plot regarding MSD's response time. Thanks to Eric Bryant and our first response team.

Mr. Hartye reported that attached is an article that appeared in the Mountain Xpress regarding some of MSD's current efforts.

Mr. Hartye reported the next regular Board Meeting will be held October 18th at 2pm. The next Right of Way Committee meeting will be held on September 27th at 9am. The employee picnic will be held behind the maintenance building on October 5th.

Mr. Hartye presented slides of construction at the Treatment Plant. He stated this was a pretty critical time about 2 weeks ago as the main that carries everything from the influent pump station and everything in the system to be treated through the plant was suspended with straps and an “I beam”.

7. Consolidated Motion Agenda:

a. Consideration of Bids: Elkwood Avenue Sewer Rehabilitation Project:

Mr. Hartye reported that this project is located in Woodfin and runs along Elkwood Avenue from Riverside Drive to Merrimon Avenue. There have been a lot of problems with this line including flooded structures, manhole overflows and many customer service requests. The new line is comprised of 4,882 LF of 8-inch DIP to be installed by dig and replace. The project was advertised and two bids were received on August 31, 2017. Since there were only two bids, the project was re-advertised and again two bids were received on September 7, 2017, as follows: Terry Brothers Construction Company Inc. in the amount of \$1,314,221.00 and Thomas Construction Company in the amount of \$1,215,002.00. The apparent low bidder is Thomas Construction Company with a bid amount of \$1,215,002.00. Thomas Construction Company has completed one MSD project and their work quality was excellent. The FY 17-18 Construction Budget for this project is \$1,364,000.00. Staff recommends award of this contract to Thomas Construction Company in the amount of \$1,215,002.00 subject to review and approval by District Counsel.

b. Consideration of Equipment Sole Source: Soft Start Controls for Weaverville & Erwin Hills Pump Stations:

Mr. Hartye reported that the Weaverville and Erwin Hills pump stations have electrical systems which are aged and do not meet current safety standards. Staff plans to replace the control systems in these stations with safer equipment which meets current standards. In addition, “soft start” controls will be added to reduce mechanical wear, add programmable functionality, and reduce operational costs over time. There is only one manufacturer, Allen Bradley, that will guarantee these types of starters to properly function over 10 cycles per hour, which is needed for these stations, particularly during wet weather events. This purchase will require a sole source of the Allen Bradley SMC-Flex starters. The actual installation of the panels, equipment pad, and new

wiring will be performed by a separate contractor. The price for equipment, panels and programming is \$238,070.00 for all three locations. CITI, Inc. is a systems integrator and will build the new cabinets/panels with the starters and program the new systems. Staff recommends that the District sole-source specify the Allen Bradley SMC-Flex starter systems from CITI, LLC in the amount of \$238,070.00 to be installed at the Weaverville and Erwin Hills pump stations based upon the fact that the performance or price competition for this equipment is not available.

c. Consideration of Developer Constructed Sewer Systems: Craggy Park Phase 1 and Williams-Baldwin Teacher Campus:

Mr. Hartye reported that the Craggy Park Phase 1 project included extending approximately 560 linear feet of 8-inch public gravity sewer to serve the 19 unit single family residential development.

Mr. Hartye reported that the Williams-Baldwin Teacher Campus project included extending approximately 311 linear feet of 8-inch public gravity sewer to serve the 24 unit multi-family residential development.

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

d. Cash Commitment/Investment Report Month ended July 30, 2017:

Mr. Powell reported that Page 40 presents the makeup of the District's Investment Portfolio. There has been an approximately \$23 million dollar increase from the previous months report. This is a result of the District issuing debt on July 11. Page 41 presents the MSD Investment Manager report as of the month of July. The weighted average maturity of the investment portfolio is 148 days. The yield to maturity is 1.29% and is exceeding MSD bench marks of the 6 month T-Bill and NCCMT cash portfolio. Page 42 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 is a little higher than in the past due to the consumption of one of our industrial users. Facility and tap fees are considered reasonable based on historical trends. Page 43 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 better than budgeted expectations. As of the end of August both issues have saved the District rate payers approximately \$5.1 million dollars in debt service since April 2008.

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

8. Old Business:

Mr. Hartye asked Mr. Hemphill to explain the “artifact” in the Boardroom. Mr. Hemphill stated that Staff had a clean-up afternoon for Beaverdam Creek, which runs behind the Mull Building. The “artifact” was one of many bricks pulled out of the creek. After further investigation, it appears that these bricks came from the 250 foot smoke stack that was part of the original power plant which was torn down during construction of this building. Basically, this brick came from the smoke stack that was put into operation in 1916, knocked down in approximately 1998 and recovered in 2017.

9. New Business:

None

10. Adjournment:

With no further business, Mr. VeHaun called for adjournment at 2:16 pm.

Jackie W. Bryson, Secretary/Treasurer



MEMORANDUM

TO: MSD Board
FROM: Thomas E. Hartye, P.E., General Manager
DATE: October 13, 2017
SUBJECT: Report from the General Manager

- Cane Creek WSD Merger

Representatives from Henderson County and MSD met October 10th to kick things off and to review the merger process (for Cane Creek WSD) and a list of items that were to be considered and information that was needed for MSD staff to perform a “due diligence” detailed analysis of both the operation and the finances. The hope is to accomplish this entire process by July 1, 2018 so as to dovetail with the change in fiscal year. This will require a lot of information to be exchanged in the next 2 weeks so that Staff may come to the Planning Committee and the full board in November with a recommendation whether to proceed.

- Board/Committee Meetings/Events

The Planning Committee will meet at 1:15pm on October 18th. The next Regular Board Meeting will be held on November 15th at 2 pm. The next Right of Way Committee meeting will be held on November 22nd at 9am.

**RIGHT OF WAY
COMMITTEE RECOMMENDATIONS
AND MINUTES
September 27, 2017**

I. Call To Order

The regular monthly meeting of the Right of Way Committee was held in the Boardroom of the William H. Mull Building and called to order at 9:00 a.m. on Wednesday, September 27, 2017. The following Right of Way Committee members were present: Glenn Kelly, Ellen Frost & Chris Pelly.

Others present were: Jerry VeHaun, Chairman of the Board; Tom Hartye, PE, General Manager; Ed Bradford, Angel Banks, Darin Prosser, Hunter Carson, Wesley Banner and Pam Nolan, MSD.

II. Inquiry as to Conflict of Interest

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

Ms. Banks explained that since there are only 3 voting members present we do not have a quorum. Billy Clarke was consulted and stated that normal presentations and discussions could be held, all voting members present could vote and make a recommendation to the full Board. However, this will not be an official meeting. Committee Members not present today will have an opportunity to vote at the Board meeting on these same issues.

III. Consideration of Condemnation–Dry Ridge Road Four Inch Main, Project No. 2012009

Property Owner: Robert & Mercedes Kaufman, Pin Number 9740-28-1905–

Subject parcel is improved with residential use and is located off Dry Ridge Road in North Asheville. The existing sewer line runs nearly parallel to, and is five feet inside eastern side property line. The line cannot be replaced in its current location due to conflict with a six inch water line. This water line conflict resulted in the proposed sewer location lying approximately 15 feet further into the property.

The owner's main concern is potential rock excavation adjacent to a large concrete retaining wall. MSD's Project Engineer offered an alternate alignment to shift the proposed sewer line further away from the retaining wall, however the owner objected due to tree loss. The Project Engineer went a step further and had an outside Geotechnical firm perform soil borings along the path of the proposed sewer to test for the presence of rock. Owner was provided with copies of the geotechnical report that showed rock present at approximately 2.5 feet in depth. Additionally, MSD performed spot digs and determined that significant rock is not present until an average depth of 3 feet. The Project Engineer will raise the elevation of the sewer line to avoid rock excavation. The owner is not satisfied with this and has requested that MSD assume liability for the retaining wall indefinitely.

The standard compensation is \$10,106. Property Owner seems to be ok with the compensation offered, however, will not agree to sign due to his concerns regarding his retaining wall. Despite numerous on-site meetings with the Project Engineer present, emails and telephone calls, we cannot reach an agreement with the owner. We have worked with this owner for over a year and must move on.

Total Contacts: 27

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

Ms. Banks presented maps of the parcel and reviewed the location and situation with this property owner. She also stated that Staff had provided a Special Provision that if rock is encountered, the Project Engineer will re-evaluate the design, that we will have the inspector on the job take pictures and video of the retaining wall before and after construction to document it's condition. After construction is complete we will have our surveyor go back and locate the wall's position to see if it's moved, cracked, sunk, etc. If any kind of settling, moving, cracking is observed Staff will immediately go back to Owner's engineer. Owner is also offered a one year warranty after construction so that any damages that occur directly because of our actions will be covered.

Mr. Prosser stated that at the top of where the wall starts, the retaining wall is about 5'tall, when you get to the bottom, the retaining wall is about 20' tall. The biggest concern is the area where the wall is the shortest. In that area construction will be taking place about 12' away from the wall. Rock was not encountered in that area until about 3 ½' deep. Mr. Prosser stated that he usually likes about 3' of cover and here he didn't have any problem raising the line above 3'. He further stated that he may have the contractor trench the whole length before laying any pipe to see if they encounter any rock. The bottom area where the wall is about 20' tall, construction is about 16' away from the wall. He further stated the owner was not happy about alternate location due to the loss of trees and requested the original alignment. MSD paid the first geotechnical bill. Owner wanted a geotechnical firm on site for the duration of construction which is not necessary. Mr. Prosser stated that he feels this owner will drag this out as long as possible.

There was no discussion. Mr. Kelly made the motion to accept Staff's recommendation. Ms. Frost seconded the motion. Voice vote was unanimous by voting members present.

IV. Consideration of Compensation Budgets –

Elkwood Avenue GSR, Project No. 2011080
Memory Lane GSR, Project No. 2016099
Old Haw Creek @ Greenbriar Road GSR, Project No. 2012109
Old West Chapel Road GSR, Project No. 2014004
Long Shoals Road @ Allen Avenue GSR, Project No. 2010013

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 explained the projects. The Elkwood Avenue project is in Woodfin and is located mostly in the right of way of Elkwood Road and Old Burnsville Highway. This project consists of approximately 4,700 linear feet of 8" DIP to replace 6" VCP. The Memory Lane project consists of approximately 1,900 linear feet of 8" DIP to replace 4" and 6" VCP. The Old Haw Creek @ Greenbriar Road project consists of approximately 3,700 linear feet of 8" DIP to replace 6" VCP. The Old West Chapel Road project consists of approximately 5,200 linear feet of 8" DIP and 8" and 12" HDPE to replace 8" and 10" VCP. The Long Shoals Road @ Allen Avenue project consists of approximately 1,200 linear feet of 8" DIP and HDPE to replace 6" VCP.

There was no discussion. Mr. Kelly made the motion to accept Staff's recommendation. Ms. Frost seconded the motion. Voice vote was unanimous by voting members present.

COMMITTEE RECOMMENDATION: Approval of Compensation Budgets.

V. Other business:

There being no further business the meeting adjourned at 9:16 am.

Metropolitan Sewerage District of Buncombe County

Board Action Item - Right-of-Way Committee

COMMITTEE MEETING DATE: 9/27/2017

BOARD MEETING DATE: 10/18/2017

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 Condemnation–
Dry Ridge Road Four Inch Main, Project No. 2012009**

Property Owner: Robert & Mercedes Kaufman, Pin Number 9740-28-1905–

Subject parcel is improved with residential use and is located off Dry Ridge Road in North Asheville. The existing sewer line runs nearly parallel to, and is five feet inside eastern side property line. The line cannot be replaced in its current location due to conflict with a six inch water line. This water line conflict resulted in the proposed sewer location lying approximately 15 feet further into the property.

The owner's main concern is potential rock excavation adjacent to a large concrete retaining wall. MSD's Project Engineer offered an alternate alignment to shift the proposed sewer line further away from the retaining wall, however the owner objected due to tree loss. The Project Engineer went a step further and had an outside Geotechnical firm perform soil borings along the path of the proposed sewer to test for the presence of rock. Owner was provided with copies of the geotechnical report that showed rock present at approximately 2.5 feet in depth. Additionally, MSD performed spot digs and determined that significant rock is not present until an average depth of 3 feet. The Project Engineer will raise the elevation of the sewer line to avoid rock excavation. The owner is not satisfied with this and has requested that MSD assume liability for the retaining wall indefinitely.

The standard compensation is \$10,106. Property Owner seems to be ok with the compensation offered, however, will not agree to sign due to his concerns regarding his retaining wall. Despite numerous on-site meetings with the Project Engineer present, emails and telephone calls, we cannot reach an agreement with the owner. We have worked with this owner for over a year and must move on.

Total Contacts: 27

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

Ms. Banks presented maps of the parcel and reviewed the location and situation with this property owner. She also stated that Staff had provided a Special Provision that if rock is encountered, the Project Engineer will re-evaluate the design, that we will have the inspector on the job take pictures and video of the retaining wall before and after construction to document it's condition. After construction is complete we will have our surveyor go back and locate the wall's position to see if it's moved, cracked, sunk, etc. If any kind of settling, moving, cracking is observed Staff will immediately go back to Owner's engineer. Owner is also offered a one year warranty after construction so that any damages that occur directly because of our actions will be covered.

Mr. Prosser stated that at the top of where the wall starts, the retaining wall is about 5' tall, when you get to the bottom, the retaining wall is about 20' tall. The biggest concern is the area where the wall is the shortest. In that area construction will be taking place about 12' away from the wall. Rock was not encountered in that area until about 3 ½' deep. Mr. Prosser stated that he usually likes about 3' of cover and here he didn't have any problem raising the line above 3'. He further stated that he may have the contractor trench the whole length before laying any pipe to see if they encounter any rock. The bottom area where the wall is about 20' tall, construction is about 16' away from the wall. He further stated the owner was not happy about alternate location due to the loss of trees and requested the original alignment. MSD paid the first geotechnical bill. Owner wanted a geotechnical firm on site for the duration of construction which is not necessary. Mr. Prosser stated that he feels this owner will drag this out as long as possible.

There was no discussion. Mr. Kelly made the motion to accept Staff's recommendation. Ms. Frost seconded the motion. Voice vote was unanimous by voting members present.

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

Metropolitan Sewerage District of Buncombe County

Board Action Item - Right-of-Way Committee

COMMITTEE MEETING DATE: 9/27/2017

BOARD MEETING DATE: 10/18/2017

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 –

Elkwood Avenue GSR, Project No. 2011080
Memory Lane GSR, Project No. 2016099
Old Haw Creek @ Greenbriar Road GSR, Project No. 2012109
Old West Chapel Road GSR, Project No. 2014004
Long Shoals Road @ Allen Avenue GSR, Project No. 2010013

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 explained the projects. The Elkwood Avenue project is in Woodfin and is located mostly in the right of way of Elkwood Road and Old Burnsville Highway. This project consists of approximately 4,700 linear feet of 8” DIP to replace 6” VCP. The Memory Lane project consists of approximately 1,900 linear feet of 8” DIP to replace 4” and 6” VCP. The Old Haw Creek @ Greenbriar Road project consists of approximately 3,700 linear feet of 8” DIP to replace 6” VCP. The Old West Chapel Road project consists of approximately 5,200 linear feet of 8” DIP and 8” and 12” HDPE to replace 8” and 10” VCP. The Long Shoals Road @ Allen Avenue project consists of approximately 1,200 linear feet of 8” DIP and HDPE to replace 6” VCP.

There was no discussion. Mr. Kelly made the motion to accept Staff’s recommendation. Ms. Frost seconded the motion. Voice vote was unanimous by voting members present.

COMMITTEE RECOMMENDATION: Approval of Compensation Budgets.

Elkwood Avenue GSR

Project Number: 2011080

Compensation Budget

21-Sep-17

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															
	9730757582	Blackwell	Samuel	0.51	22,215.60	\$36,000.00	\$1.62	567.50	\$919.35	\$459.68	664.40	\$1,076.33	\$107.63	6	\$53.82	\$513
	9730755224	EWT 24, LLC		6.85	298,386.00	\$1,491,900.00	\$5.00	5,351.00	\$26,755.00	\$13,377.50	4,199.10	\$20,995.50	\$2,099.55	6	\$1,049.78	\$14,427
	9730759922	Like A Frog Inc.		0.13	5,662.80	\$8,500.00	\$1.50	1,394.80	\$2,092.20	\$1,046.10	0.00	\$0.00	\$0.00	6	\$0.00	\$1,046
TOTALS:														\$15,987		
Staff Contingency:														\$5,000		
GM's Contingency														\$5,000		
Amendment																
Total Budget:														\$25,987		

Memory Lane GSR

Project Number: 2016099

Compensation Budget

21-Sep-17

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															
	9668095528	Erickson	Tyrone	0.17	7,405.20	\$37,100.00	\$5.01	1,563.40	\$7,832.63	\$3,916.32	1,441.60	\$7,222.42	\$722.24	2	\$120.37	\$4,037
	9668195961	Ledford	Alma	0.45	19,602.00	\$42,400.00	\$2.16	102.20	\$220.75	\$110.38	0.00	\$0.00	\$0.00	2	\$0.00	\$110
	9668190451	Schwarz	Steven	1.86	81,021.60	\$78,500.00	\$0.97	164.90	\$159.95	\$79.98	966.90	\$937.89	\$93.79	2	\$15.63	\$96
	9668097542	West	David	0.47	20,473.20	\$44,400.00	\$2.17	721.70	\$1,566.09	\$783.04	704.20	\$1,528.11	\$152.81	2	\$25.47	\$809
	9668097542	West Trust	David	0.47	20,473.20	\$44,400.00	\$2.17	1,500.40	\$3,255.87	\$1,627.93	1,186.70	\$2,575.14	\$257.51	2	\$42.92	\$1,671
	9668096533	West Trust	David	0.51	22,215.60	\$44,900.00	\$2.02	2,659.50	\$5,372.19	\$2,686.10	2,865.10	\$5,787.50	\$578.75	2	\$96.46	\$2,783

TOTALS:	\$9,505
Staff Contingency:	\$5,000
GM's Contingency	\$5,000
Amendment	
Total Budget:	\$19,505

Old Haw Creek @ Greenbriar Road GSR

Project Number: 2012109

Compensation Budget

21-Sep-17

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															
	9659606429	Austin	Karen	0.40	17,424.00	\$60,900.00	\$3.50	2,348.40	\$8,219.40	\$4,109.70	3,331.60	\$11,660.60	\$1,166.06	6	\$583.03	\$4,693
	9659608053	Benitez	Bisael	0.31	13,503.60	\$50,400.00	\$3.73	3,514.90	\$13,110.58	\$6,555.29	3,741.80	\$13,956.91	\$1,395.69	6	\$697.85	\$7,253
	9658698659	Buddenberg	Andrew	0.43	18,730.80	\$52,700.00	\$2.81	122.90	\$345.35	\$172.67	512.30	\$1,439.56	\$143.96	6	\$71.98	\$245
	9659608815	Chaet	Judith	0.58	25,264.80	\$43,900.00	\$1.74	1,113.10	\$1,936.79	\$968.40	1,472.50	\$2,562.15	\$256.22	6	\$128.11	\$1,097
	9659606159	Cox Trustee	Mack	0.37	16,117.20	\$60,200.00	\$3.74	0.00	\$0.00	\$0.00	136.50	\$510.51	\$51.05	6	\$25.53	\$26
	9658697880	Davies	Norman	0.61	26,571.60	\$55,300.00	\$2.08	0.00	\$0.00	\$0.00	108.50	\$225.68	\$22.57	6	\$11.28	\$11
	9659604837	Feren	Stephen	2.82	122,839.20	\$152,000.00	\$1.24	1,945.40	\$2,412.30	\$1,206.15	3,028.60	\$3,755.46	\$375.55	6	\$187.77	\$1,394
	9659608747	Hanley	Sylvia	0.53	23,086.80	\$43,400.00	\$1.88	0.00	\$0.00	\$0.00	50.10	\$94.19	\$9.42	6	\$4.71	\$5
	9658699812	Lindsey Jr.	Willaim	0.16	6,969.60	\$11,500.00	\$1.65	2,465.30	\$4,067.75	\$2,033.87	2,595.70	\$4,282.91	\$428.29	6	\$214.15	\$2,248
	9658790676	Lindsey Jr.	William	0.82	35,719.20	\$57,600.00	\$1.61	3,137.20	\$5,050.89	\$2,525.45	4,762.40	\$7,667.46	\$766.75	6	\$383.37	\$2,909
	9659606328	Lunsford	Mackensy	0.34	14,810.40	\$59,500.00	\$4.02	1,045.10	\$4,201.30	\$2,100.65	1,311.70	\$5,273.03	\$527.30	6	\$263.65	\$2,364
	9658791692	Miller	Mary	1.88	81,892.80	\$104,900.00	\$1.28	749.10	\$958.85	\$479.42	1,756.70	\$2,248.58	\$224.86	6	\$112.43	\$592
	9658698819	Mountain Realty Builders L		0.52	22,651.20	\$27,000.00	\$1.19	28.80	\$34.27	\$17.14	1,477.00	\$1,757.63	\$175.76	6	\$87.88	\$105
	9659607330	Palas Trust	Denise	0.43	18,730.80	\$52,700.00	\$2.81	4,151.90	\$11,666.84	\$5,833.42	5,258.20	\$14,775.54	\$1,477.55	6	\$738.78	\$6,572
	9658698992	Sagaribay Jr.	Pablo	0.44	19,166.40	\$52,900.00	\$2.76	2,212.00	\$6,105.12	\$3,052.56	2,583.60	\$7,130.74	\$713.07	6	\$356.54	\$3,409
	9659605642	Short	Susan	1.16	50,529.60	\$76,000.00	\$1.50	2,867.80	\$4,301.70	\$2,150.85	3,976.80	\$5,965.20	\$596.52	6	\$298.26	\$2,449
	9659607494	Stranges	Marcia	0.83	36,154.80	\$57,700.00	\$1.60	0.00	\$0.00	\$0.00	547.30	\$875.68	\$87.57	6	\$43.78	\$44
	9659606955	Tennant	Belinda	0.51	22,215.60	\$43,200.00	\$1.94	3,861.20	\$7,490.73	\$3,745.36	5,715.00	\$11,087.10	\$1,108.71	6	\$554.36	\$4,300
	9659616175	Tennant	Pauline	2.12	92,347.20	\$66,700.00	\$0.72	4,271.80	\$3,075.70	\$1,537.85	2,224.00	\$1,601.28	\$160.13	6	\$80.06	\$1,618

TOTALS:	\$41,332
Staff Contingency:	\$10,000
GM's Contingency	\$10,000
Amendment	
Total Budget:	\$61,332

Old West Chapel Road GSR

Project Number: 2014004

Compensation Budget

21-Sep-17

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															
	9657563487	Ahearn	Kati	0.61	26,571.60	\$41,500.00	\$1.56	1,521.99	\$2,374.30	\$1,187.15	1,594.28	\$2,487.08	\$248.71	5	\$103.63	\$1,291
	9657463875	Amarx Construction LLC		3.30	143,748.00	\$90,000.00	\$0.63	2,198.32	\$1,384.94	\$692.47	3,217.82	\$2,027.23	\$202.72	5	\$84.47	\$777
	9657577194	American Eagle Investment		0.37	16,117.20	\$54,200.00	\$3.36	99.90	\$335.66	\$167.83	141.23	\$474.53	\$47.45	5	\$19.77	\$188
	9657577093	American Eagle Investment		0.37	16,117.20	\$54,200.00	\$3.36	882.45	\$2,965.03	\$1,482.52	1,613.06	\$5,419.88	\$541.99	5	\$225.83	\$1,708
	9657655735	Bryant	Eric	0.35	15,246.00	\$36,700.00	\$2.41	1,905.17	\$4,591.46	\$2,295.73	2,821.95	\$6,800.90	\$680.09	5	\$283.37	\$2,579
	9657568903	Cassada	Jeffrey	0.31	13,503.60	\$52,900.00	\$3.92	546.16	\$2,140.95	\$1,070.47	735.00	\$2,881.20	\$288.12	5	\$120.05	\$1,191
	9657655592	Costache	Carolyn	0.25	10,890.00	\$36,700.00	\$3.37	3,109.15	\$10,477.84	\$5,238.92	1,615.83	\$5,445.35	\$544.53	5	\$226.89	\$5,466
	9657568805	Ferrari	Eli	0.29	12,632.40	\$52,400.00	\$4.15	852.66	\$3,538.54	\$1,769.27	1,290.09	\$5,353.87	\$535.39	5	\$223.08	\$1,992
	9657655485	Fong	Sammy	0.17	7,405.20	\$34,800.00	\$4.70	0.00	\$0.00	\$0.00	716.59	\$3,367.97	\$336.80	5	\$140.33	\$140
	9657563500	Harris	Rachel	0.55	23,958.00	\$40,900.00	\$1.71	1,532.49	\$2,620.56	\$1,310.28	1,545.67	\$2,643.10	\$264.31	5	\$110.13	\$1,420
	9657650190	Highland Property Group L		4.21	183,387.60	\$219,100.00	\$1.19	4,920.24	\$5,855.09	\$2,927.54	5,445.96	\$6,480.69	\$648.07	5	\$270.03	\$3,198
	9657563284	Hudgins	Robert	0.57	24,829.20	\$57,500.00	\$2.32	0.00	\$0.00	\$0.00	1,187.50	\$2,755.00	\$275.50	5	\$114.79	\$115
	9657560539	Huxley III	William	0.23	10,018.80	\$50,700.00	\$5.06	0.00	\$0.00	\$0.00	900.00	\$4,554.00	\$455.40	5	\$189.75	\$190
	9657576045	Laughter	John	0.62	27,007.20	\$58,200.00	\$2.16	1,576.07	\$3,404.31	\$1,702.16	1,568.22	\$3,387.36	\$338.74	5	\$141.14	\$1,843
	9657655692	Rhodes Jr.	William	0.22	9,583.20	\$34,400.00	\$3.59	2,342.66	\$8,410.15	\$4,205.07	1,817.73	\$6,525.65	\$652.57	5	\$271.90	\$4,477
	9657656578	Rhodes Jr.	William	0.88	38,332.80	\$43,600.00	\$1.14	4,654.07	\$5,305.64	\$2,652.82	2,611.31	\$2,976.89	\$297.69	5	\$124.04	\$2,777
	9657468801	Toms Revocable Trust	Margaret	0.32	13,939.20	\$53,100.00	\$3.81	219.75	\$837.25	\$418.62	310.78	\$1,184.07	\$118.41	5	\$49.34	\$468

TOTALS:	\$29,819
Staff Contingency:	\$10,000
GM's Contingency	\$10,000
Amendment	
Total Budget:	\$49,819

Long Shoals Road @ Allen Avenue GSR

Project Number: 2010013

Compensation Budget

21-Sep-17

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															
	9645918251	Gasperson	Ray	0.67	29,185.20	\$60,700.00	\$2.08	0.00	\$0.00	\$0.00	823.00	\$1,711.84	\$171.18	3	\$42.80	\$43
	9645917062	Gasperson	Ray	0.86	37,461.60	\$62,800.00	\$1.68	2,250.51	\$3,780.86	\$1,890.43	3,335.10	\$5,602.97	\$560.30	3	\$140.07	\$2,031
	9645918111	Gasperson	Ray	0.73	31,798.80	\$61,400.00	\$1.93	5,295.90	\$10,221.09	\$5,110.54	7,120.85	\$13,743.24	\$1,374.32	3	\$343.58	\$5,454
	9645906910	Huck	Kenneth	0.27	11,761.20	\$18,700.00	\$1.59	742.75	\$1,180.97	\$590.49	1,075.45	\$1,709.97	\$171.00	3	\$42.75	\$633
	9645905091	Progress Energy of the Car		0.50	21,780.00	\$35,000.00	\$1.61	1,889.40	\$3,041.93	\$1,520.97	1,963.37	\$3,161.03	\$316.10	3	\$79.03	\$1,600
	9645907314	RCG Skyland LLC		4.12	179,467.20	\$2,063,900.00	\$11.50	914.73	\$10,519.40	\$5,259.70	974.33	\$11,204.80	\$1,120.48	3	\$280.12	\$5,540

TOTALS:	\$15,300
Staff Contingency:	\$5,000
GM's Contingency	\$5,000
Amendment	
Total Budget:	\$25,300

Metropolitan Sewerage District of Buncombe County

BOARD ACTION ITEM

BOARD MEETING DATE: October 18, 2017

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

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

SUBJECT: Consideration of Bids: South French Broad Interceptor - Lining, MSD Project No. 2011033

BACKGROUND: This project is located within the Biltmore Estate, along the main 36-inch interceptor. This major line serves large southern portions of the District's service area, including the Cane Creek Water & Sewer District in northern Henderson County.

This project is comprised of lining the interceptor with Cured-in-Place-Pipe (CIPP), which will further extend the future service life of this line. The line is in good structural condition, but has suffered some degradation of the inner surface due to hydrogen sulfide. The CIPP process will provide an integral structural liner which is inert and impervious to the hydrogen sulfide present within the line.

It is important to note that this interceptor is planned to remain in-service for the foreseeable future. Capacity needs will be addressed by adding a parallel "relief" line - the planning for which is already underway. For these reasons, it is important to protect and maintain the long-term viability of this line.

The sections to be lined under this contract total 6,632 LF. MSD has worked closely with Biltmore Estate staff in order to schedule this work during Biltmore's slower winter season.

The contract was advertised and seven bids were received on September 28, 2017 in the following amounts:

<u>Contractor</u>	<u>Bid Amount</u>
1) VacVision Environmental	\$2,449,723.00
2) Spiniello Companies	\$1,696,790.00
3) Layne Inliner, LLC	\$1,321,745.00
4) IPR Southeast, LLC	\$1,197,973.00
5) Am-Liner East	\$1,196,696.00
6) SAK Construction Company	\$1,182,516.00
7) Insituform Technologies	\$1,171,314.00

The apparent low bidder is Insituform Technologies. Insituform has not recently performed work for MSD; therefore, staff checked references with favorable results.

Please refer to the attached documentation for further details, including the reference check.

FISCAL IMPACT: The FY17-18 Construction Budget for this project is \$1,701,000.00.

STAFF RECOMMENDATION: Staff recommends award of this contract to Insituform Technologies in the amount of \$1,171,314.00, subject to review and approval by District Counsel.

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

SOUTH FRENCH BROAD INTERCEPTOR - LINING (FY 17-18)

Project No. 2011033

BID TABULATION

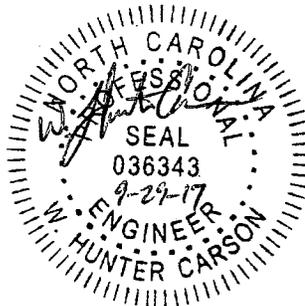
September 28, 2017

BIDDER	Bid Bond	MBE Form	Bid Forms (Proposal)	TOTAL BID AMOUNT
VacVision Environmental Tampa, FL	5%	2	Yes	\$2,449,723.00
Spiniello Companies Livingston, NJ	5%	2	Yes	\$1,696,790.00
Layne Inliner, LLC Gastonia, NC	5%	1	Yes	\$1,321,745.00
IPR Southeast LLC Stone Mountain, GA	5%	1	Yes	\$1,197,973.00
Am-Liner East, Inc. Berryville, VA	5%	2	Yes	\$1,196,696.00
SAK Construction Company O'Fallon, MO	5%	1	Yes	\$1,182,516.00
Insituform Technologies Chesterfield, MO	5%	1	Yes	\$1,171,314.00

APPARENT LOW BIDDER



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



This is to certify that the bids tabulated herein were publicly opened and read aloud at 2:00 p.m. on the 28th day of September, 2017, in the W.H. Mull Building at the Metropolitan Sewerage District of Buncombe County, Asheville, North Carolina, and that said bids were accompanied by acceptable bidders bonds in the amount of 5% of the bid.

Interoffice Memorandum

TO: Tom Hartye, General Manager

FROM: Ed Bradford, Director of Engineering
Hunter Carson, Project Manager

DATE: October 9, 2017

RE: South French Broad Interceptor Lining (FY17-18) Sewer Rehabilitation;
MSD Project No. 2011033

The South French Broad Interceptor Lining project is located on the Biltmore Estate in Asheville. A 36-inch sewer interceptor runs through the Estate, adjacent to the French Broad River for approximately 22,000 linear feet. The interceptor conveys an average daily flow of 5.5 MGD of wastewater from South Asheville to MSD's Carrier Bridge Pump Station.

The interceptor, installed in 1966, is believed to be a major source of Inflow & Infiltration (I&I) into MSD's collection system. Leaking pipe joints (confirmed via CCTV), and the development of sinkholes over the line provide evidence of joint failure. The reinforced concrete pipe (RCP) also shows signs of hydrogen sulfide (H₂S) degradation with exposed aggregate being visible in portions of the pipe above normal operating water levels. Exposed reinforcing steel is also visible in locations with elevated levels of H₂S. Continuous exposure to H₂S will attack and thin the concrete pipe wall, compromise the pipe's structural integrity, and ultimately lead to failure.

Cured-in-place-pipe (CIPP) lining is the preferred rehab method for combatting I&I and chemical corrosion. The end product is a new, corrosion-resistant, seamless pipe that is structurally capable of functioning in the absence of its surrounding host pipe. A CIPP liner system seals the entire pipe segment, eliminating I&I from joints and pipe holes/fractures, and has a 50-year life expectancy. Longevity and preservation of this line are critical since the 36-inch interceptor will remain in service indefinitely.

The South French Broad Interceptor Lining project began in FY16-17 and is being phased over four years. During FY16-17, approximately 6,195 linear feet of 36-inch interceptor were successfully lined. For the current fiscal year and subsequent two years, the following footages will be rehabilitated: 6,631 linear feet (FY17-18), 6,368 linear feet (FY18-19), 2,717 linear feet (FY19-20). In addition to pipe lining, all manholes on the Estate will be rehabilitated with a non-cementitious, corrosion-resistant liner system.

On September 28, 2017, seven (7) sealed bids were received at 2:00 pm. Results were as follows:

<u>Contractor</u>	<u>Bid Amount</u>
1) VacVision Environmental	\$2,449,723.00
2) Spiniello Companies	\$1,696,790.00
3) Layne Inliner, LLC	\$1,321,745.00
4) IPR Southeast, LLC	\$1,197,973.00
5) Am-Liner East	\$1,196,696.00
6) SAK Construction Company	\$1,182,516.00
7) Insituform Technologies	\$1,171,314.00

The apparent low bidder is Insituform Technologies with a bid amount of \$1,171,314.00. The FY17-18 construction budget for this project is \$1,701,000.00. Since Insituform Technologies has not performed work for the District in the recent past, references were checked to confirm

quality of work, experience and reputation of project management, timeliness of project completion, and to confirm that work was performed within budget.

Three references were contacted and all provided positive feedback. It should be noted that all three municipalities contacted have performed multiple projects with Insituform Technologies over the past 10+ years, a true testament to their quality of work.

Staff recommends award of this contract to Insituform Technologies contingent upon review and approval by District Counsel.

South French Broad Interceptor – Lining Project

MSD Project No. 2011033

Reference Check for Insituform, October 2017

North Charleston Sewer District, SC

Cooper Basin Interceptor Rehabilitation – Phase 3 (2014)

18,864 LF of 42”- 54” CIPP

Phillip Sexton, PE, Capital Improvements Director said that NCSD has a good relationship with Insituform Technologies and has been working with the company since 1994-95. Insituform started off performing small-diameter lining jobs for the District and they continued to give them larger diameter projects as their experience and relationship grew. Insituform has now completed 3 of 7 large diameter CIPP lining contracts that the District has publicly bid. Mr. Sexton has been pleased with the quality of work provided by Insituform, and stated that they have not had any issues with the Contractor exceeding their completion date and/or budget. Mr. Sexton recommends Insituform Technologies.

Metropolitan Sewer Subdistrict, Greenville, SC

Annual CIPP Lining Contract (multiple years)

8” CIPP

David Scott, PE, Project Manager said that the Metropolitan Sewer Subdistrict issues year-long CIPP lining contracts and that Insituform Technologies has been awarded two or three of the contracts in the past. The annual contracts range from \$500k to \$1M and the majority of the lines rehabilitated are 8-inch diameter. Mr. Scott said that Insituform has performed well and that they are responsive when issues arise. He went on to say that Insituform is quick to complete the work and that they generally finish well ahead of the scheduled completion date. Mr. Scott said that there have not been any substantial change orders associated with the lining contracts, and that he would recommend Insituform Technologies.

Fayetteville Public Works Commission, NC

Various Lining Contracts (multiple years)

8”- 54” CIPP

John Allen, PE, Senior Engineer said that Fayetteville PWC has worked with Insituform Technologies for approximately 10-12 years. Fayetteville PWC issues two types of CIPP lining contracts; an annual “on call” rehab contract, extendable up to five years for line segments 8-inch to 36-inch, and fixed-duration contracts for line segments 36-inch and greater. Insituform has completed work under both types of contracts for PWC, and most recently (FY16-17) completed approximately 60,000LF under the annual rehab contract. Mr. Allen said that Insituform has performed well on all projects, has completed work on time and within budget, and that he would recommend Insituform.

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

BUDGET DATA SHEET - FY 2017 - 2018

PROJECT:	South French Broad Int. - Lining	LOCATION:	Biltmore Estate
TYPE:	Interceptor	PIPE RATING:	8
PROJECT NO.	2011033	TOTAL LF:	21,950
PROJECT BUDGET:	\$5,429,236.00	PROJECT ORIGIN:	Line Condition, Inflow & Infiltration

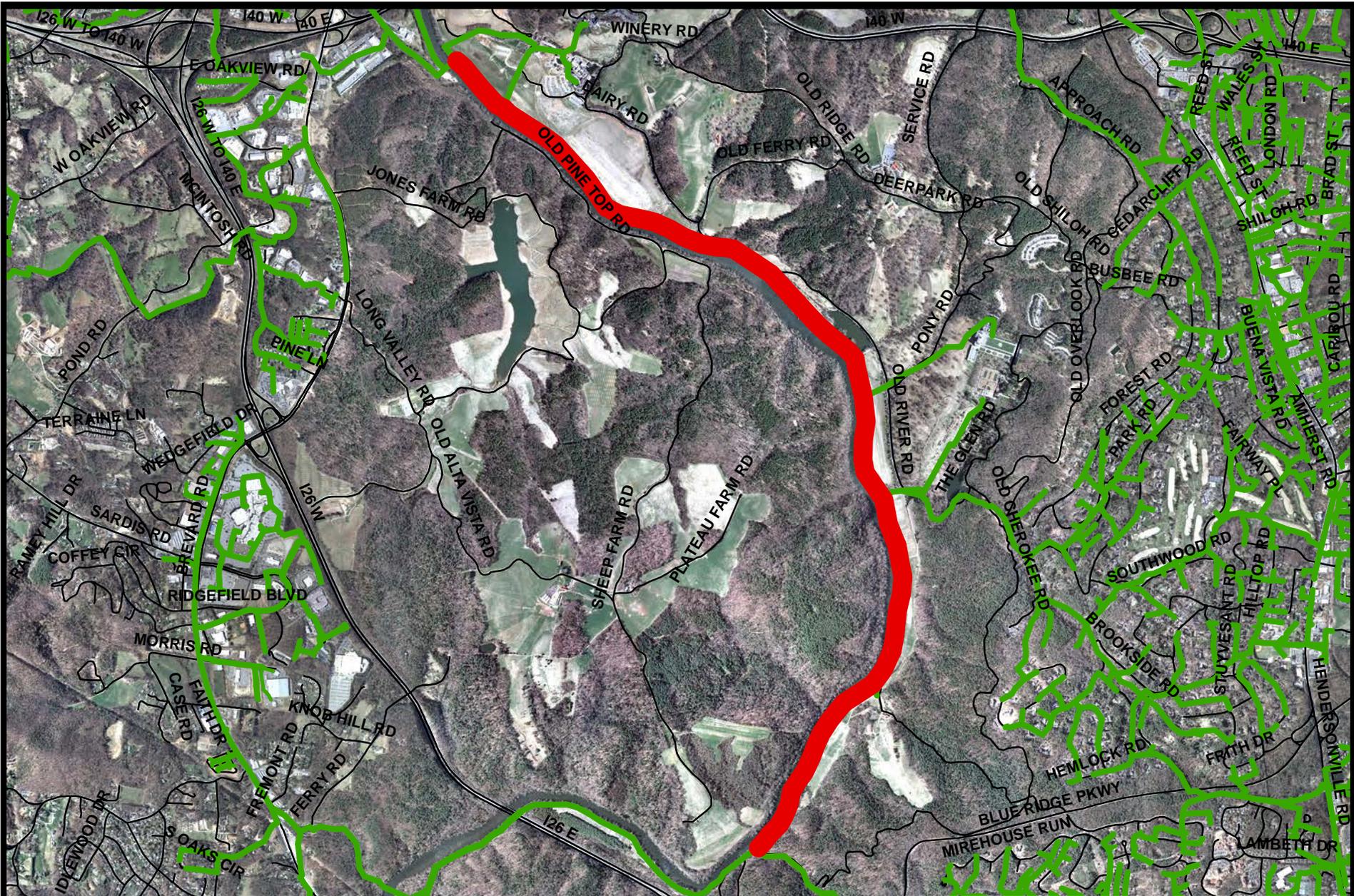
DESCRIPTION	ESTIMATED PROJECT COST	TOTAL EXPENDS THRU 12/31/16	EST. COST JAN - JUNE 2017	BUDGET FY 17-18
55310 - PRELIM. ENGINEERING				
55320 - SURVEY - DESIGN				
55330 - DESIGN				
55340 - PERMITS				
55350 - SPECIAL STUDIES				
55360 - EASEMENT PLATS				
55370 - LEGAL FEES	\$180.00	\$180.00		
55380 - ACQUISITION SERVICES				
55390 - COMPENSATION				
55400 - APPRAISAL				
55410 - CONDEMNATION				
55420 - CONSTRUCTION	\$5,422,450.00	\$590,124.00	\$768,326.00	\$1,701,000.00
55430 - CONST. CONTRACT ADM.				
55440 - TESTING	\$6,606.00	\$606.00		\$2,000.00
55450 - SURVEY - ASBUILT				
TOTAL AMOUNT	\$5,429,236.00	\$590,910.00	\$768,326.00	\$1,703,000.00

6631

ENGINEER:	MSD	HC	ESTIMATED BUDGETS - FY '19 -'27	
R.O.W. ACQUISITION:	N/A	# PLATS: [0]	FY 18-19	\$1,631,000.00
CONTRACTOR:			FY 19-20	\$738,000.00
CONSTRUCTION ADM:	MSD		FY 20-21	\$0.00
INSPECTION:	MSD		FY 21-22	\$0.00
			FY 22-23	\$0.00
			FY 23-24	\$0.00
			FY 24-25	\$0.00
			FY 25-26	\$0.00
			FY 26-27	\$0.00

PROJECT DESCRIPTION: This project is located within the Biltmore Estate along the French Broad River. The southern terminus of the project is located where the Dingle Creek Int. flows into the South French Broad Int. The project consists of CIPP lining approx. 22,000 LF of existing 36-inch Reinforced Concrete Pipe. The line is a major source of inflow and infiltration. Construction will be phased over several years.

SPECIAL PROJECT NOTES: 6,195LF in FY 16-17; 6,631LF in FY 17-18; 6,368LF in FY 18-19; 2,717LF in FY 19-20. Pricing includes manhole rehab.



**South French Broad Interceptor Lining
Project No. 2011033**

NOT TO SCALE



METROPOLITAN SEWERAGE DISTRICT
of
BUNCOMBE COUNTY, NORTH CAROLINA

Budget Map

Metropolitan Sewerage District of Buncombe County

BOARD ACTION ITEM

BOARD MEETING DATE: October 18, 2017

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

PREPARED BY: Ed Bradford, P.E. - Director of Engineering
Angel Banks, SR/WA - Right of Way Manager

SUBJECT: Consideration of Letter of Support: NC251 Greenway

BACKGROUND: A feasibility study is underway for the proposed greenway along the French Broad River. This is for the portion beginning near the Reed Creek/Broadway Ave. area (near UNCA), and ending at the MSD Administration building.

MSD staff recently met with Equinox Environmental to review issues concerning MSD lines. This includes the main 66-inch interceptor along the river, as well as several smaller lines that connect to it. MSD staff supports greenways - not only for the public benefit they provide, but also because it helps to provide more attention to the system and earlier alerts if problems occur.

It is important to note that 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). As a part of this project, MSD and The Town of Woodfin will also need to have a greenway agreement in place.

Mr. David Tuch, of Equinox Environmental, will present a brief overview of the proposed greenway and will be available to answer any questions that the Board may have.

Please refer to the attached map for further details - a large map will be presented at the Board meeting.

FISCAL IMPACT: There is no fiscal impact.

STAFF RECOMMENDATION: Staff recommends that the Board approve the concept of the NC251 Greenway, and authorize the Chairman to sign the attached MSD Letter of Support.

MSD Letter of Support

For the HWY 251/French Broad River Greenway

Preliminary plans for the HWY251 Greenway Project were presented to the MSD Board on October 18, 2017 by David Tuch of Equinox Environmental. MSD understands that the proposed greenway will be located between Riverside Drive (NC 251) and the French Broad River. It will ideally be located along the French Broad River, as in many cases this will be the only feasible location for a pathway. MSD understands that the greenway will include a permanent trail that may be between 10 and 12 feet wide and will execute an appropriate easement for said greenway to the Town of Woodfin.

MSD understands that this “Letter of Support” is not a legal document and does not bind MSD in any way to the proposed greenway. MSD understands that the design of the greenway will be based on MSD’s intent to support the project. By signing below, MSD is expressing that it now possesses an understanding of the proposed greenway, and the benefits of the proposed greenway to the community. By signing below, MSD also expresses its support of the proposed HWY 251/French Broad River Greenway and intent to provide a greenway easement as necessary and as approved by MSD. MSD also understands that even though a donation of an easement would be the way by which the greenway project moves forward, a fair market valuation of the property will be made available to MSD in due course in accordance with the requirements of the Federal Uniform Act.

MSD supports this project subject to the following conditions:

- The greenway design is safe for users.
- The greenway design and operation will not interfere with MSD’s ability to operate, maintain, repair or replace the public sewer system.
- The public sewer system is protected before, during, and after greenway construction.
- The Town of Woodfin and MSD will execute a Greenway Agreement for the use of MSD sewer easements throughout the greenway project.

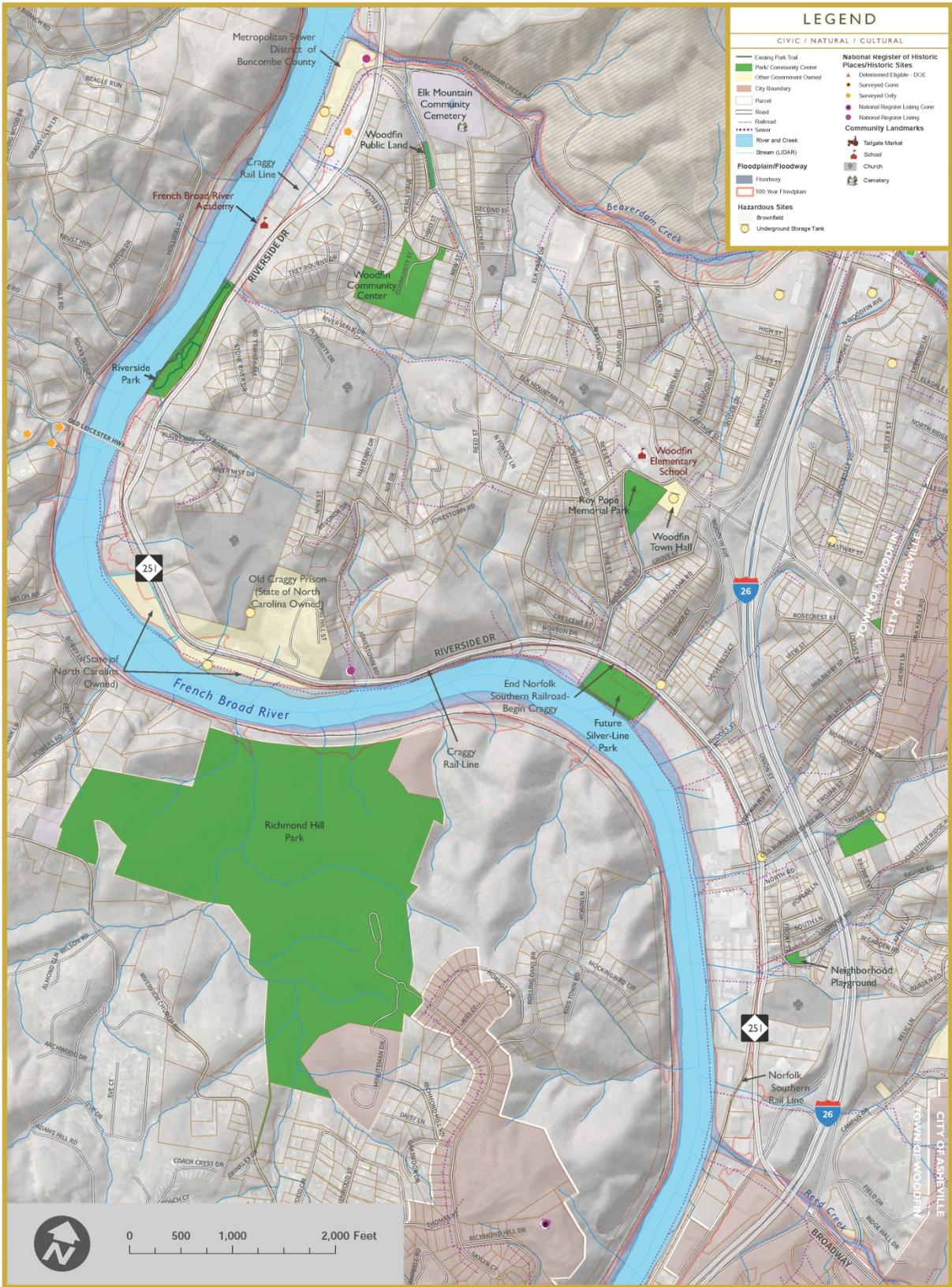
Signature: _____ Date: _____

M. Jerry Vehaun, MSD Board Chairman

Attest: _____ Date: _____

Jackie W. Bryson, MSD Board Secretary/Treasurer

Address: 2028 Riverside Drive, Asheville, NC 28804



EXISTING CONDITIONS

NCDOT TIP ID: EB-5774

NC 251 GREENWAY FEASIBILITY STUDY • WOODFIN, NORTH CAROLINA

CREATED BY:



CREATED FOR:



Metropolitan Sewerage District of Buncombe County

Board Action Item

BOARD MEETING DATE: October 18, 2017

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

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

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

SUBJECT: Acceptance of Developer Constructed Sewer System for the Greenwood Fields Subdivision - Phase 1 Sewer Extension, MSD Project No. 2015204

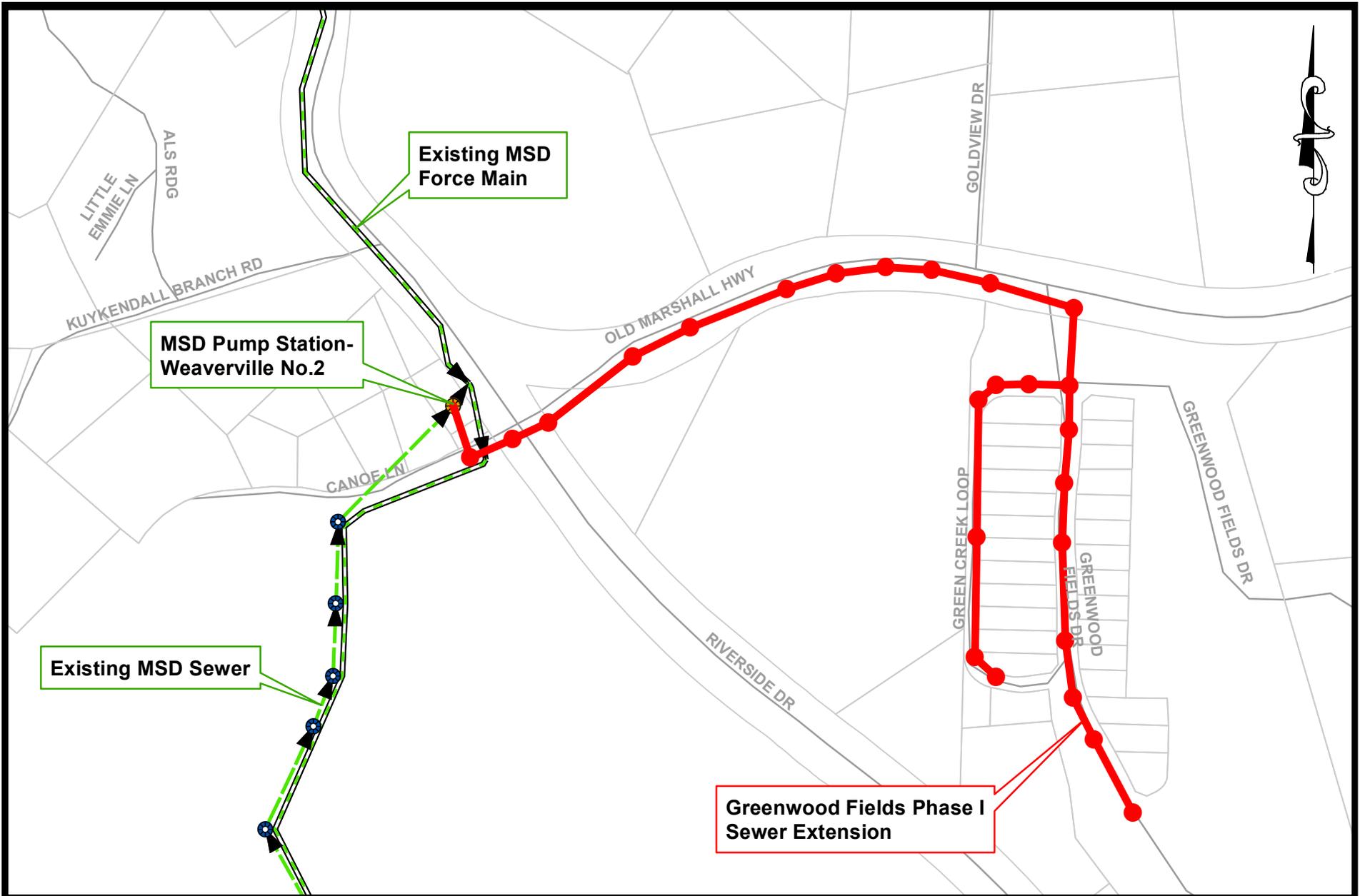
BACKGROUND: This project is located inside the District boundary off Old Marshall Highway in the Town of Woodfin. The developer for this project is Elbert Brown, Jr. of Greenwood Fields, LLC.

The project included extending approximately 2,971 linear feet of 8-inch public gravity sewer to serve the development.

A wastewater allocation was issued in the amount of 12,000 GPD for Phase 1 consisting of thirty (30) single family residential units. The estimated cost of the sewer construction is \$230,000.00.

All MSD requirements have been met.

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



MSD
Engineering Division

Greenwood Fields Phase I Sewer Extension
MSD Project # 2015204
Metropolitan Sewerage District of Buncombe County

10/05/17

Metropolitan Sewerage District of Buncombe County

BOARD INFORMATIONAL ITEM

Meeting Date: October 18, 2017

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

Prepared By: W. Scott Powell, CLGFO, Director of Finance
Cheryl Rice, Accounting Manager

Subject: Cash Commitment/Investment Report-Month Ended August 31, 2017

Background

Each month, staff presents to the Board an investment report for all monies in bank accounts and specific investment instruments. The total investments as of August 31, 2017 were \$78,520,583. The detailed listing of accounts is available upon request. The average rate of return for all investments is 0.737%. These investments comply with North Carolina General Statutes, Board written investment policies, and the District's Bond Order.

The attached investment report represents cash and cash equivalents as of August 31, 2017 do not reflect contractual commitments or encumbrances against said funds. Shown below are the total investments as of August 31, 2017 reduced by contractual commitments, bond funds, and District reserve funds. The balance available for future capital outlay is \$23,520,540.

Total Cash & Investments as of 08/31/2017		\$ 78,520,583
Less:		
Budgeted Commitments (Required to pay remaining FY18 budgeted expenditures from unrestricted cash)		
Construction Funds	(26,776,169)	
Operations & Maintenance Fund	(14,331,451)	(41,107,620)
Bond Restricted Funds		
Bond Service (Funds held by trustee):		
Funds in Principal & Interest Accounts	(26,285)	
FY18 Principal & Interest Due	(8,660,850)	(8,687,135)
District Reserve Funds		
Fleet Replacement	(554,278)	
Pump Replacement	(51,247)	
WWTP Replacement	(437,066)	
Maintenance Reserve	(962,836)	(2,005,427)
District Insurance Funds		
General Liability	(232,261)	
Worker's Compensation	(141,159)	
Post-Retirement Benefit	(1,589,477)	
Self-Funded Employee Medical	(1,236,964)	(3,199,861)
Designated for Capital Outlay		\$ 23,520,540

Staff Recommendation

None. Information Only.

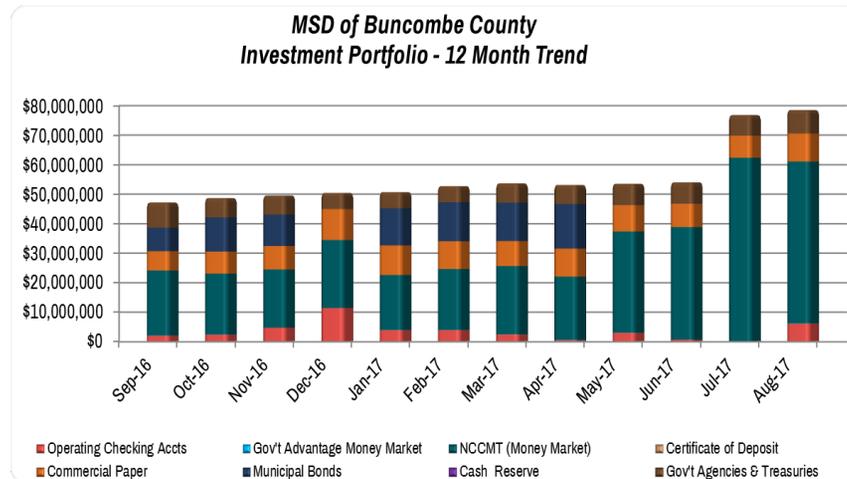
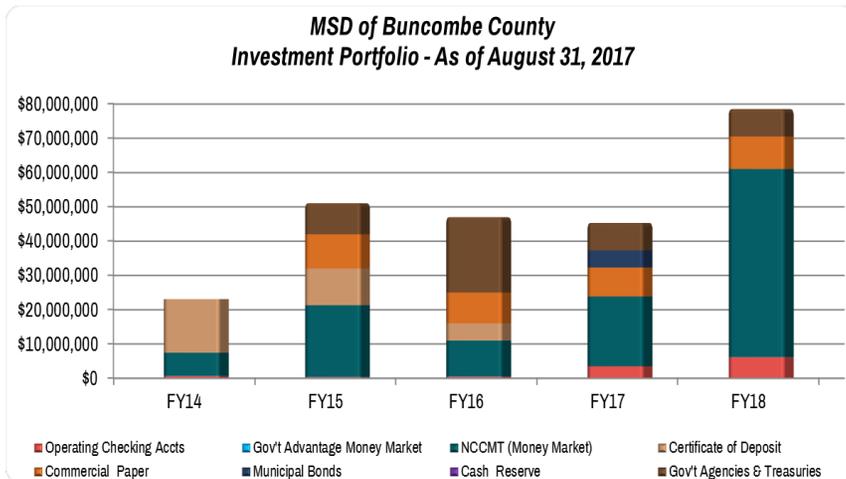
Action Taken

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

Metropolitan Sewerage District of Buncombe County Investment Portfolio

	Operating Checking Accounts	Gov't Advantage Money Market	NCCMT (Money Market)	Certificate of Deposit	Commercial Paper	Municipal Bonds	Cash Reserve	Gov't Agencies & Treasuries	Total
Held with Bond Trustee	\$ -	\$ -	\$ 28,234,213	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28,234,213
Held by MSD	6,190,560	46,674	26,583,837	-	9,479,877	-	-	7,985,422	50,286,370
	\$ 6,190,560	\$ 46,674	\$ 54,818,050	\$ -	\$ 9,479,877	\$ -	\$ -	\$ 7,985,422	\$ 78,520,583

Investment Policy Asset Allocation	Maximum Percent	Actual Percent	
U.S. Government Treasuries, Agencies and Instrumentalities	100%	10.17%	No significant changes in the investment portfolio as to makeup or total amount.
Bankers' Acceptances	20%	0.00%	
Certificates of Deposit	100%	0.00%	The District 's YTM of 1.17% is exceeding the YTM benchmarks of the 6 month T-Bill and NCCMT Cash Portfolio.
Commercial Paper	20%	12.07%	
Municipal Bonds	100%	0.00%	
North Carolina Capital Management Trust	100%	69.81%	
Checking Accounts:	100%		
Operating Checking Accounts		7.89%	
Gov't Advantage Money Market		0.06%	All funds invested in CD's, operating checking accounts, Gov't Advantage money market are fully collateralized with the State Treasurer.



Board Meeting: October 18, 2017

Subject: Cash Commitment/Investment Report-Month Ended August 31, 2017

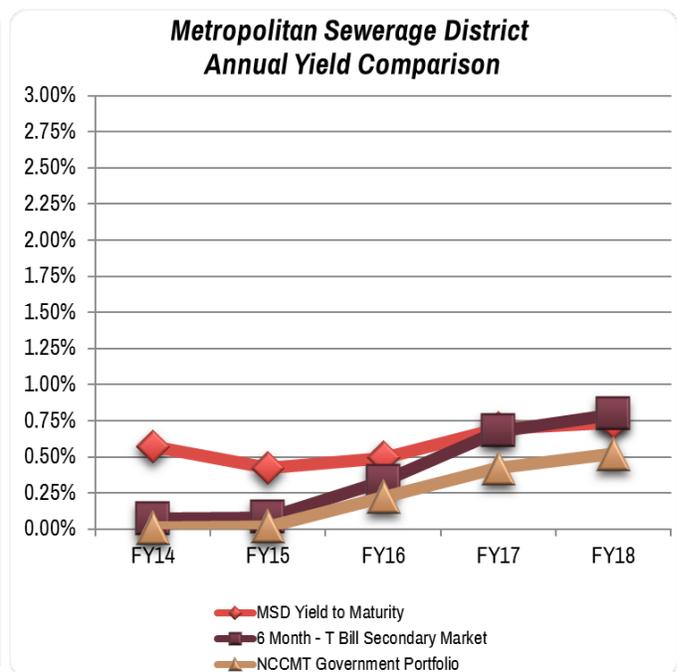
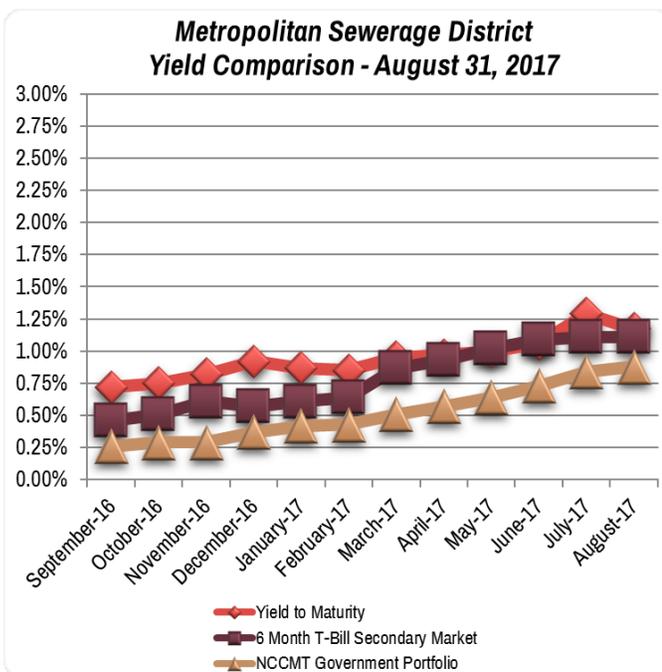
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**METROPOLITAN SEWERAGE DISTRICT
INVESTMENT MANAGERS' REPORT
At August 31, 2017**

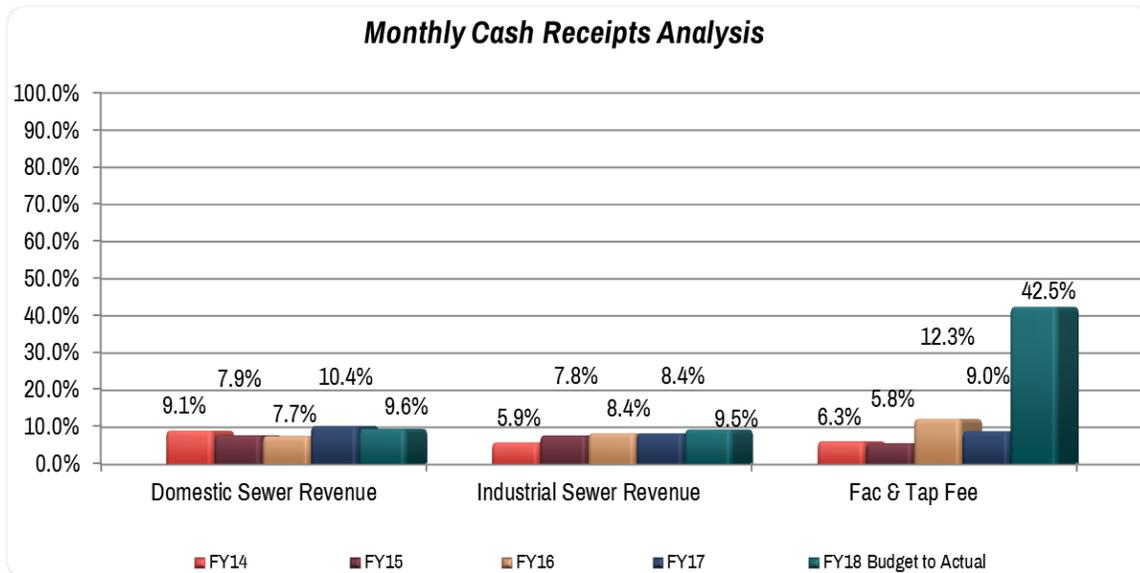
Summary of Asset Transactions			
	Original Cost	Market	Interest Receivable
Beginning Balance	\$ 46,253,091	\$ 46,264,756	\$ 21,991
Capital Contributed (Withdrawn)	(4,507,179)	(4,507,179)	
Realized Income	46,062	46,062	(10,531)
Unrealized/Accrued Income		1,494	3,463
Ending Balance	\$ 41,791,974	\$ 41,805,133	\$ 14,923

Value and Income by Maturity			
	Original Cost	Income	
Cash Equivalents <91 Days	\$ 33,810,161	\$ 32,755	
Securities/CD's 91 to 365 Days	3,981,812	\$ 3,858	
Securities/CD's > 1 Year	4,000,000	\$ 3,875	
	\$ 41,791,974	\$ 40,488	

Month End Portfolio Information	
Weighted Average Maturity	93
Yield to Maturity	1.17%
6 Month T-Bill Secondary Market	1.11%
NCCMT Government Portfolio	0.88%

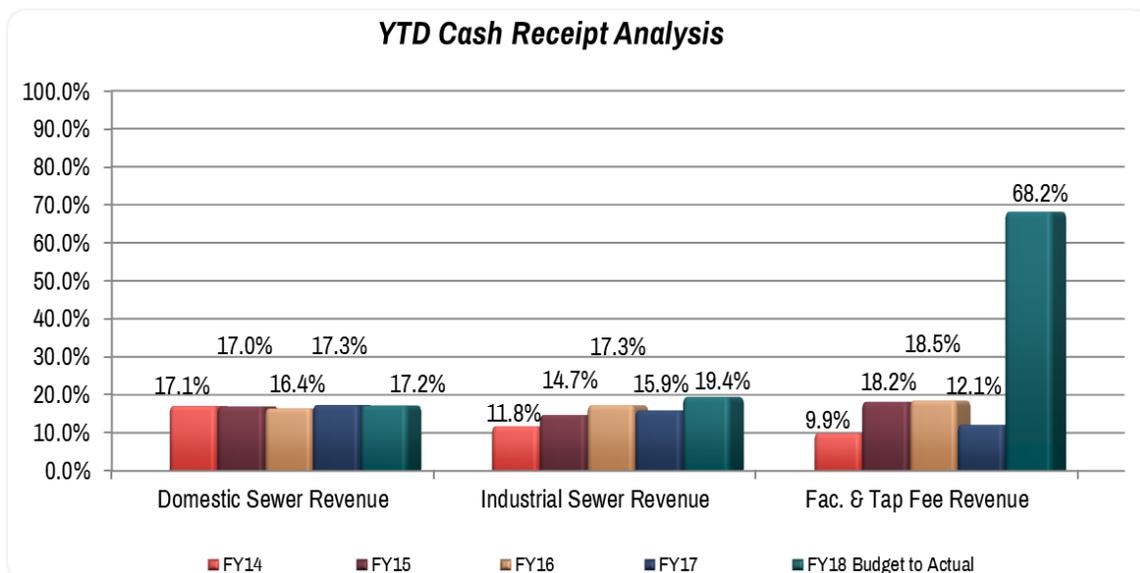


**METROPOLITAN SEWERAGE DISTRICT
 ANALYSIS OF CASH RECEIPTS
 As of August 31, 2017**



Monthly Cash Receipts Analysis:

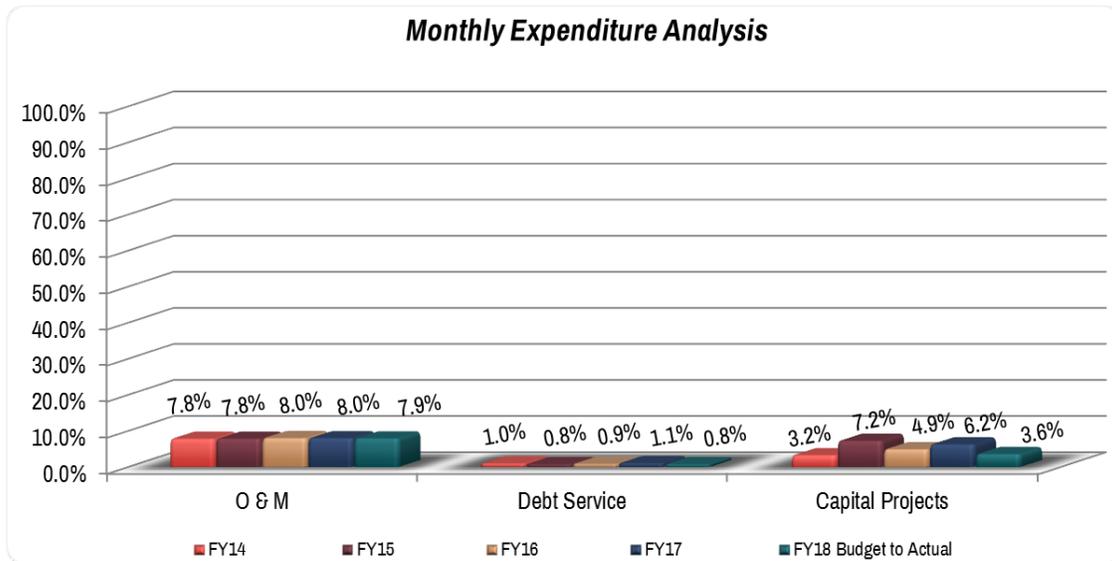
- ◀ Monthly domestic sewer revenue is considered reasonable based on timing of cash receipts in their respective fiscal periods.
- ◀ Monthly industrial sewer revenue is reasonable based on historical trends.
- ◀ Due to the unpredictable nature of facility and tap fee revenue, staff considers facility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



YTD Actual Revenue Analysis:

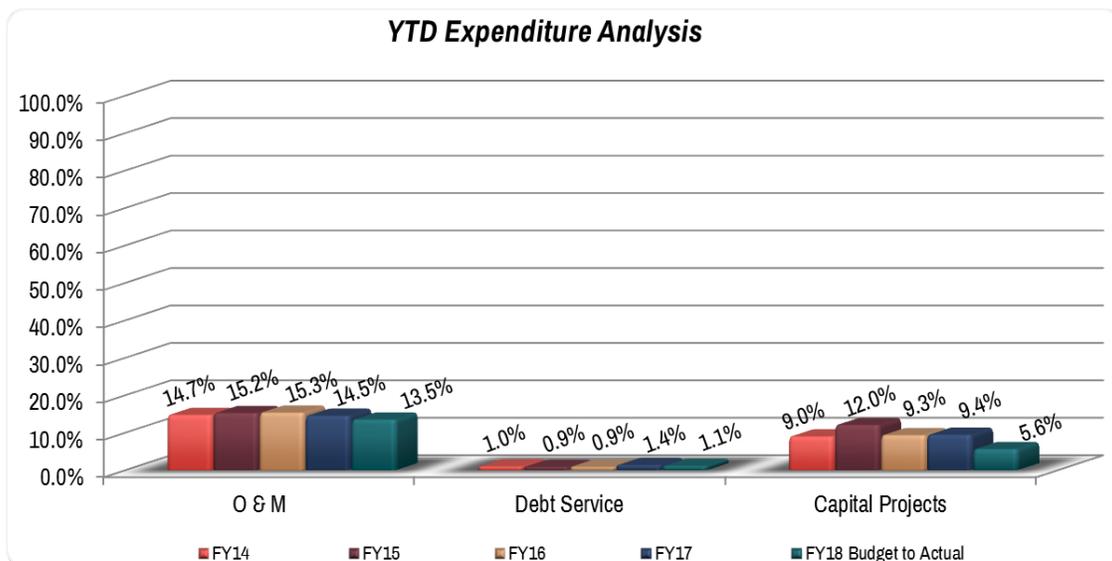
- ◀ YTD domestic sewer revenue is considered reasonable based on historical trends.
- ◀ YTD industrial sewer revenue is reasonable based on historical trends.
- ◀ Due to the unpredictable nature of facility and tap fee revenue, staff considers facility and tap fee revenue reasonable.

**METROPOLITAN SEWERAGE DISTRICT
ANALYSIS OF EXPENDITURES
As of August 31, 2017**



Monthly Expenditure Analysis:

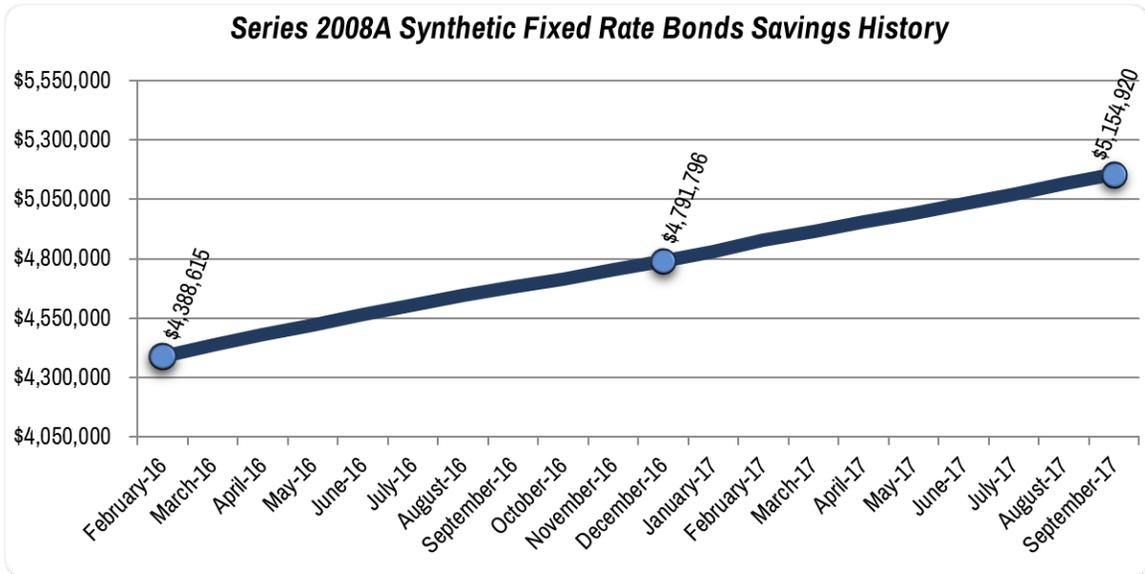
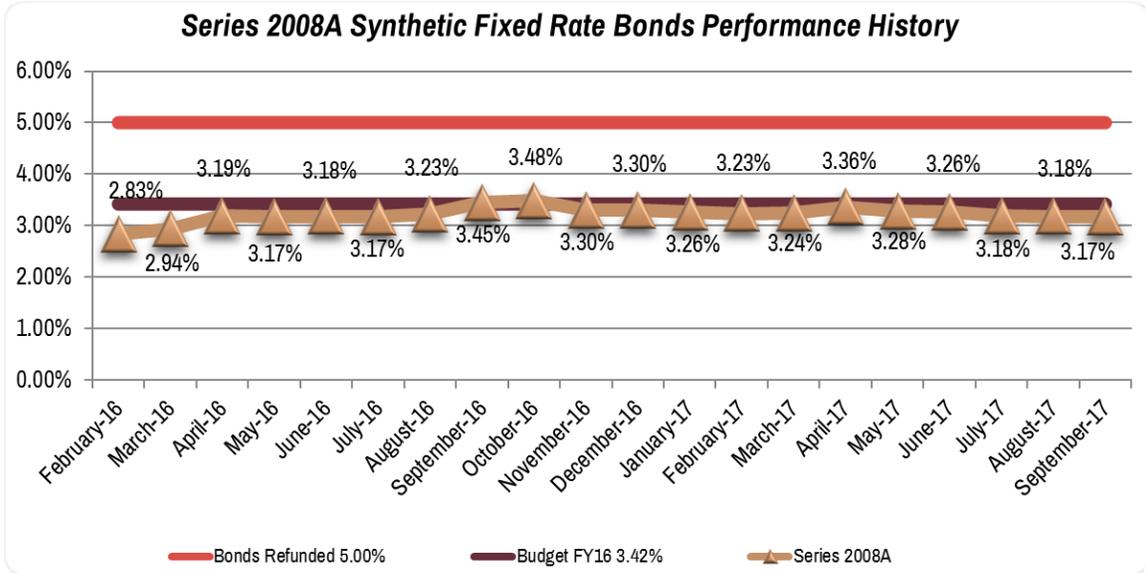
- Monthly O&M expenditures are considered reasonable based on historical trends and timing of expenditures in the current year.
- Due to the nature of the variable rate bond market, monthly expenditures can vary year to year. Based on current variable interest rates, monthly debt service expenditures 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 September 30, 2017**



Series 2008A:

- Savings to date on the Series 2008A Synthetic Fixed Rate Bonds is \$5,154,920 as compared to 4/1/2008 fixed rate of 4.85%.
- Assuming that the rate on the Series 2008A Bonds continues at the current all-in rate of 3.9475%, MSD will achieve cash savings of \$4,670,000 over the life of the bonds.
- MSD would pay \$3,728,743 to terminate the existing Bank of America Swap Agreement.

STATUS REPORTS

MSD System Services In-House Construction

FY 17-18 PROJECTS

PROJECT NAME	LOCATION	ZIP CODE	ESTIMATED FOOTAGE	ESTIMATED PROJECT DATES	WO#	CREW	COMPLETION DATE	ACTUAL FOOTAGE	NOTES
11 Greenbriar Emergency Repair	Asheville	TBA	50	7/1/17 - 7/10/17	244238	632	7/7/2017	52	complete
Sycamore Drive @ Walnut Street (Phase 2)	Arden	28704	290	7/1/17 - 7/31/17	244350	631	7/14/2017	291	complete
Windsor Road @ Beaverbrook Road	North Asheville	28804	726	7/8/17-7/31/17	228305	632	7/31/2017	725	complete
Nebraska Street Emergency Rehabilitation (Ph. 1)	W. Asheville	28806	415	8/1/17 - 9/1/17	240563	631	8/10/2017	414	complete
Celia Place at Bond Street (Rework)	N. Asheville	28801	250	8/1/17 - 8/11/17	244891	632	8/10/2017	80	complete
Windsor Road @ Beaverbrook Road (Ph. 2)	North Asheville	28804	125	8/14/17 - 9/1/17	244938	632	8/17/2017	124	complete
Sycamore Drive @ Walnut Street (Phase 3)	Arden	28704	494	8/11/17 - 9/1/17	245100	631	8/30/2017	479	complete
185 Mississippi Road	Montreat	28757	143	9/2/15 - 9/5/17	245783	632	9/5/2017	143	complete
Cedar Lane @ Oak Terrace	Arden	28704	1000	9/1/17 - 10/2/17	237374	631	9/28/2017	1001	complete
Penelope Street @ W. Cotton Ave	Black Mountain	28711	250	9/2/17 - 10/2/17	222331	632	9/29/2017	741	complete
Raleigh Avenue @ Marietta Street	Asheville	28803	655	10/2/17 - 11/1/17	237100	631			Construction to begin 10/3/17
Williamette Circle Sanitary Sewer Rehabilitation	Weaverville	28787	183	10/9/17 - 11/1/17	233748	632			Construction to begin 10/9/17
44 Forsythe St	Asheville	28801	350	11/2/17 - 12/2/17	237035	631			ready for construction
Manila Street	Asheville	28806	650	11/2/17 - 12/2/17	246373	632			ready for construction
Roberts Street	Asheville	28801	311	FY17-18	246375	632			In ROW
Fairfax Avenue	Asheville	28806	208	FY17-18	246376	631			In ROW
Asheville Country Club Phase 1C	North Asheville	28804	1210	FY17-18	237431	631			In ROW
Royal Pines @ Oak Terrace	Arden	28704	1000	FY17-18	237372	TBA			ready for construction
School Road at Cranford Road	W. Asheville	28806	360	FY17-18	224943	TBA			ready for construction
Governors View Road @ Bull Mountain Road	Asheville	28805	785	FY17-18	238394	TBA			In Design
15 Dew Waite Road	Ridgecrest	28770	533	FY17-18	236553	TBA			In Design
252 Kenilworth Road	Asheville	28803	800	FY17-18	234632	TBA			In Design
817 Montreat Road	Black Mountain	28711	340	FY17-18	228942	TBA			In Design
4 Westview Rd	Asheville - Oakley	28803	740	FY17-18	238683	TBA			In Design
Lapsley Lane @ Brevard Road	Avery's Creek	28704	576	FY17-18	237319	TBA			Preliminary Engineering
Tabernacle Road @ Avena Street	Black Mountain	28711	600	FY17-18	237353	TBA			Preliminary Engineering
38 Dunsmore Avenue	Black Mountain	28711	260	FY17-18	237426	TBA			Preliminary Engineering
Carlyle Way @ Sweeten Creek Rd	South Asheville	28803	100	FY17-18	232211	TBA			Preliminary Engineering
165 Coleman Avenue	Asheville	28801	200	FY17-18	233875	TBA			Preliminary Engineering
72 Dillingham Road	Asheville	28805	234	FY17-18	39327	TBA			Preliminary Engineering
Sunset Dr. @ Vance Drive	Black Mountain	28711	1010	FY17-18	237499	TBA			Preliminary Engineering
Charlotte Street @ N Ridgeway Avenue	Black Mountain	28711	1073	FY17-18	232699	TBA			Preliminary Engineering
Empire Drive @ Hendersonville Road	Asheville	28803	287	FY17-18	229444	TBA			Preliminary Engineering
Saint Johns Street Force Main Replacement	Arden	28704	1040	FY17-18	28704	TBA			Preliminary Engineering



CONSTRUCTION TOTALS BY DATE COMPLETED - Monthly

From 7/1/2017 to 8/31/2017

	Dig Ups	Emergency Dig Ups	Dig Up ML Ftg	Dig Up SL Ftg	Manhole Repairs	Taps Installed	ROW Ftg	IRS Rehab Ftg *	Const Rehab Ftg *	D-R Rehab Ftg *	Manhole Installs	Bursting Rehab Ftg *	Total Rehab Ftg *
July 2017	34	3	148	1,187	28	28	10,760	0	8	632	11	436	1076
August 2017	41	12	280	1,134	21	30	6,251	0	148	618	8	399	1165
Grand Totals	75	15	428	2,321	49	58	17,011	0	156	1250	19	835	2241

* Used to calculate Total Rehab Footage



PIPELINE MAINTENANCE TOTALS BY DATE COMPLETED - Monthly

July 01, 2017 to August 31, 2017

	Main Line Wash Footage	Service Line Wash Footage	Rod Line Footage	Cleaned Footage	CCTV Footage	Smoke Footage	SL-RAT Footage
2017							
July	98,213	1,440	4,785	102,998	24,704	5,840	3,104
August	96,254	1,640	11,382	107,636	16,351	5,000	12,283
Grand Total:	194,467	3,080	16,167	210,634	41,055	10,840	15,387
Avg Per Month:	97,234	1,540	8,084	105,317	20,528	5,420	7,694



CUSTOMER SERVICE REQUESTS

Monthly - All Crews

CREW	MONTH	JOBS	AVERAGE RESPONSE TIME	AVERAGE TIME SPENT
DAY 1ST RESPONDER				
	July, 2017	93	32	31
	August, 2017	97	27	38
		190	30	34
NIGHT 1ST RESPONDER				
	July, 2017	16	29	31
	August, 2017	8	16	60
		24	24	41
ON-CALL CREW *				
	July, 2017	41	47	31
	August, 2017	31	41	57
		72	44	42
Grand Totals:		286	33	37

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

Right of Way Section Summary Open Projects

<i>Project</i>	<i>Total ROW Budget</i>	<i>Total Expends to Date</i>	<i>Comment</i>
Asheville Country Club GSR	\$34,879	\$21,637	Access 75% complete with 62% of Total Budget expended to date. Two condemnations likely. To be built in-house by SS.
Dingle Creek Interceptor (formerly Ph II)	\$64,657	\$48,004	Access 100% complete with 74% of Total Budget expended to date. One condemnation filed with judgment pending. Construction moved out from 7/09 to 7/25 due to low pipe rating.
Dry Ridge Road 4" Main	\$22,904	\$2,882	Access 67% complete with 13% of Total Budget expended to date. One condemnation likely.
Elkwood Avenue GSR	\$25,987	\$15,473	Project 100 complete with 60% of Total Budget expended and no condemnations.
Fairfax Ave. @ I-240 GSR	\$15,864	\$6,139	Project 100% complete with 39% of Total Budget expended to date and no condemnations. To be built in-house by SS.
Hendersonville Rd. @ Rosscraggon Drive Phase 2	\$101,370	\$81,379	Project 100% complete with 80% of Total Budget expended and no condemnations.
Jonestown Road GSR	\$26,122	\$20,412	Project 100% complete with 78% of Total Budget expended and no condemnations.
Memory Lane GSR	\$19,505		Negotiations begun 8/28/17.

CAPITAL IMPROVEMENT PROGRAM

STATUS REPORT SUMMARY

October 11, 2017

PROJECT	LOCATION OF PROJECT	CONTRACTOR	AWARD DATE	NOTICE TO PROCEED	ESTIMATED COMPLETION DATE	*CONTRACT AMOUNT	*COMPLETION STATUS (WORK)	COMMENTS
COMMERCE STREET	Downtown Asheville 28801	Terry Brothers Construction Company	6/14/2017	7/17/2017	10/20/2017	\$190,657.00	90%	Final paving tentatively scheduled for 10/12/17.
ELKWOOD AVENUE	Woodfin 28804	Thomas Construction Company	9/20/2017	TBA	TBA	\$1,215,002.00	0%	Preconstruction meeting is scheduled for 10/19/17.
FRENO DRIVE PSR	Asheville 28803	Terry Brothers Construction Company	2/15/2017	5/1/2017	10/20/2017	\$511,623.00	98%	Clean up in progress. Final inspection to be scheduled soon.
HENDERSONVILLE ROAD @ PEACHTREE ROAD	Asheville 28803	Terry Brothers Construction Company	8/16/2017	9/25/2017	12/24/2017	\$426,062.00	0%	Work expected to begin on or near 10/23/17.
LINING CONTRACT NO. 8	Various	IPR Southeast, LLC	1/18/2017	2/20/2017	11/3/2017	\$777,622.50	90%	Working on punchlist.
LOUISIANA AVENUE @ BRUCEMONT CIRCLE	Asheville 28806	Terry Brothers Construction Company	7/19/2017	8/21/2017	11/19/2017	\$363,252.00	85%	All mainline is complete and crew is working on services.
POINT REPAIR CONTRACT NO. 2	Various	Patton Construction Group	7/19/2017	8/14/2017	6/30/2018	\$215,610.00	20%	Contractor has completed first three point repairs.
SOUTH FRENCH BROAD INTERCEPTOR LINING (FY 17-18)	Biltmore Estate 28803	TBA	TBA	TBA	TBA	TBA	0%	Bids were opened on September 28th. Insituform Technologies is the apparent low bidder. Project will be presented at the October Board meeting.
WRF - PLANT HEADWORKS IMPROVEMENTS	Woodfin 28804	Judy Construction Company	1/18/2017	4/3/2017	2/25/2019	\$8,481,600.00	20%	Effluent Wet Well complete. 48-inch effluent main complete. Forming and tying steel for the main base slab of the Fine Grit Screening Facility has begun. Work to install 12-inch drain to future High Rate Primary project complete. Locating existing infrastructure has begun for construction of 20 inch mains to and from Surge Pump Building.

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

Planning & Development Project Status Report

Active Construction Projects Sorted by Work Location and Project Number

October 4, 2017

#	Project Name	Project Number	Work Location	Zip Code	Units	LF	Pre-Construction Conference Date	Comments
1	Dillingham Woods	2014048	Asheville	28805	27	375	3/4/2015	Waiting on final inspection - Project delayed
2	Franklin School of Innovation	2014096	Asheville	28806	School	359	11/4/2016	Final Inspection complete, awaiting close-out docs
3	Rivermill Lofts Relocation	2014125	Asheville	28803	254	314	8/21/2015	Punch-list pending
4	First Baptist Relocation	2015032	Asheville	28801	Comm.	333	7/21/2015	Final Inspection complete, awaiting close-out docs
5	Ascot Point Apartments Phase 3	2015114	Asheville	28803	104	213	9/9/2016	Punchlist pending, awaiting closeout documents
6	8 Sulphur Springs Road	2015116	Asheville	28806	6	80	11/22/2016	Final Inspection complete, awaiting close-out docs
7	The District	2015113	Asheville	28803	309	912	2/26/2016	Waiting on final inspection
8	Hampton Inn & Suites	2015144	Asheville	28806	Comm.	286	11/8/2016	Waiting on final inspection
9	Fairfield Inn & Suites - Tunnel Road	2015203	Asheville	28805	Comm.	350	4/29/2016	Punchlist pending, awaiting closeout documents
10	Atkins Street	2016009	Asheville	28803	45	903	1/20/2017	Waiting on final inspection
11	88 Southside Avenue	2016015	Asheville	28801	18	400	2/21/2017	Waiting on final inspection
12	Woodbridge Park	2016082	Asheville	28803	20	615	2/17/2017	Punchlist pending, awaiting closeout documents
13	Hounds Ear (Mears Ave Cottages)	2016123	Asheville	28806	18	402	8/18/2017	Pre-con held, construction not yet started
14	Lausch Subdivision	2016153	Asheville	28805	4	248	5/16/2017	Waiting on final inspection
15	Bear Creek Homes	2016220	Asheville	28806	30	1,400	3/28/2017	Final Inspection complete, awaiting close-out docs
16	Hawthorne at Mills Gap	2016222	Asheville	28803	272	442	10/3/2017	Pre-con held, construction not yet started
17	Grindstaff Subdivision	2016246	Asheville	28805	4	132	6/23/2017	Pre-con held, construction not yet started
18	Shiloh Cottages	2016252	Asheville	28803	7	180	3/3/2017	Waiting on final inspection
19	Onteora	2017002	Asheville	28803	6	417	7/18/2017	Waiting on final inspection
20	Panda Express	2017080	Asheville	28805	Comm.	100	9/8/2017	Pre-con held, construction not yet started
21	West Keesler Avenue	2007176	Black Mountain	28711	6	410	11/15/2016	Testing
22	Settings at Black Mountain	2008016	Black Mountain	28711	30	907	11/13/2015	Final Inspection complete, awaiting close-out docs
23	808 Montreat Road	2015126	Black Mountain	28711	4	371	4/18/2017	Pre-con held, construction not yet started
24	Tudor Croft (aka Roberts Farm) Ph.2	2016170	Black Mountain	28711	46	1,320	1/3/2017	Installing
25	Swannanoa Valley Christian Min.	2017043	Black Mountain	28711	12	195	8/1/2017	Final Inspection complete, awaiting close-out docs
26	Cherokee Trail	2017065	Black Mountain	28711	4	90	8/18/2017	Pre-con held, construction not yet started
27	Peregrine's Ridge	2006160	Buncombe Co.	28730	14	635	11/8/2016	Final Inspection complete, awaiting close-out docs
28	Hyde Park Phase 2	2013058	Buncombe Co.	28704	14	500	12/3/2013	Waiting on final inspection
29	Creekside Cottages	2014095	Buncombe Co.	28704	7	504	3/12/2015	Waiting on final inspection
30	Governor's Western Residence	2014100	Buncombe Co.	28804	Comm.	636	7/22/2015	Awaiting Easement Plat/Conveyance of Sewer System
31	Glenn Bridge Road	2014157	Buncombe Co.	28704	30	1,400	1/20/2017	Waiting on final inspection
32	Avondale Subdivision	2015052	Buncombe Co.	28803	4	215	4/7/2017	Pre-con held, construction not yet started
33	Greymont Apartments	2015108	Buncombe Co.	28806	312	3,193	5/17/2016	Punchlist pending, awaiting closeout documents
34	Liberty Oaks Ph. 1A	2015157	Buncombe Co.	28715	125	705	1/17/2017	Waiting on final inspection
35	Bee Tree Village	2015158	Buncombe Co.	28778	26	1,118	3/17/2017	Testing
36	The Haven at Enka Lake	2015191	Buncombe Co.	28715	259	1,595	9/27/2016	Final Inspection complete, awaiting close-out docs
37	Skyland Exchange	2015217	Buncombe Co.	28704	292	1,090	2/7/2017	Waiting on final
38	Weatherwood Subdivision	2016034	Buncombe Co.	28704	19	785	7/21/2017	Installing
39	Moody Ave	2016050	Buncombe Co.	28715	3	180	6/15/2017	Final Inspection complete, awaiting close-out docs
40	Long Shoals Apts.	2016070	Buncombe Co.	28704	475	930	7/10/2017	Waiting on final
41	The Preserve at Avery's Creek	2016089	Buncombe Co.	28704	141	4,000	6/16/2017	Installing
42	Long Shoals Village Phase 2	2016109	Buncombe Co.	28704	Comm.	330	8/16/2016	Waiting on testing
43	Biltmore Lake Block I, Phase 3	2016234	Buncombe Co.	28803	23	1,887	5/23/2017	Installing
44	Biltmore Lake Bock D2-E	2016243	Buncombe Co.	28803	19	3,265	5/23/2017	Testing
45	The Ramble Block G	2017025	Buncombe Co.	28803	34	1,980	8/29/2017	Installing
46	The Ramble Block H, Phase 1	2017039	Buncombe Co.	28803	4	1,440	5/23/2017	Testing
47	South Cliff Village	2017041	Buncombe Co.	28730	34	1,345	9/1/2017	Installing
48	Greenwood Park Phase 1	2014067	Weaverville	28787	7	283	9/1/2015	Final Inspection complete, awaiting close-out docs
49	Creekside Village Phases III, IV, & V	2015167	Weaverville	28787	45	1,835	1/17/2017	Testing
50	New Homes at North Main (Crittter)	2016052	Weaverville	28787	54	1,808	2/10/2017	Punchlist pending, awaiting closeout documents
51	Maple Trace Phase 3	2016245	Weaverville	28787	24	1,260	5/2/2017	Punchlist pending, awaiting closeout documents
52	Crest Mountain Phase 3B	2013041	Woodfin	28806	69	1,329	10/15/2013	Punchlist pending, awaiting closeout documents
53	Reese & Jan Lasher (High Hopes)	2015152	Woodfin	28806	14	320	4/26/2016	Punchlist pending, awaiting closeout documents
54	Ventana Phase 2A	2016059	Woodfin	28806	8	900	2/17/2017	Waiting on Final
55	West Skyland Circle	2016083	Woodfin	28806	4	280	8/15/2017	Punchlist pending, awaiting closeout documents
56	Skyfin	2016205	Woodfin	28806	40	978	8/8/2017	Installing
TOTAL					3,326	48,480		