

**BOARD OF THE METROPOLITAN SEWERAGE DISTRICT  
OCTOBER 21, 2015**

**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, October 21, 2015. Chairman VeHaun presided with the following members present: Belcher, Bryson, Frost, Kelly, Manheimer, Pelly, Root, Watts and Wisler. Mr. Ashley and Mr. Creighton were absent.

Others present were Thomas E. Hartye, General Manager, William Clarke, General Counsel, Forrest Westall with McGill Associates, PA, Marcus Jones, Henderson County, Dustin Wilharm, City Resident, Ed Bradford, Scott Powell, Peter Weed, Jim Hemphill, Ken Stines, Mike Stamey, Matthew Walter, Hunter Carson, and Sondra Honeycutt.

**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 September 16, 2015 Board Meeting:**

Mr. VeHaun asked if there any changes to the Minutes of the September 16, 2015 Board Meeting. Ms. Frost 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 Mr. Wilharm. Mr. VeHaun called for public comment.

Mr. Wilharm stated he is a resident of the Oakley neighborhood in Asheville. He reported about a year ago a \$1.2 million dollar sewer line repair project (Broadview) was awarded to Buckeye Bridge LLC, which is about one-half mile from his home. A vacant residential lot next door to his home was used to dump thousands of pounds of gravel and pipe. Although the project is complete, there is a lot of material and trash left on the site. He spoke with Mike Schraven, Senior Inspector with MSD, and said he was very polite and accommodating, but nothing has been done to date, therefore, Mr. Wilharm is asking the Board for help in resolving this issue. Mr. Hartye stated Mike Schraven made him aware of the situation, and the project involved heavy equipment and materials that needed to be close by.

He stated that Mike Schraven worked with the contractor to move most of the operation to separate areas. He further stated that Buckeye Bridge has a permit with the City of Asheville to stage its material. He presented slides showing what is left on the site. Mr. Hartye reported that MSD has informed Buckeye Bridge that it must remove the material by this Friday. In addition, the City was contacted to do a final inspection on Monday and to revoke Buckeye's permit.

**6. Report of General Manager:**

Mr. Hartye called on Mr. Clarke for a report on the water system litigation. Mr. Clarke reported that the North Carolina Court of Appeals reversed the trial court ruling that previously decided House Bill 488 was unconstitutional. The City of Asheville has indicated it will appeal the decision of the Court of Appeals to the North Carolina Supreme Court. He further reported that the City of Asheville's lawyers have asked that MSD not oppose the City's request to stay the transfer of the water system to MSD pending appeal. Mr. Clarke recommends MSD agree to this request. Mr. Root asked if the issue in the water lawsuit about the City's revenue bonds for the water system would still have to be litigated after the Supreme Court decision. Mr. Clarke stated that the Court of Appeals opinion was issued on October 6, 2015. The mandate from the Court of Appeals to the trial court will be issued on October 26, 2015. The City then has fifteen days to petition for rehearing or pursue an appeal to the Supreme Court. In its opinion, the Court of Appeals said that, because the issue about the bonds was not addressed by the trial court and not preserved on appeal, the issue has been abandoned. Mr. Clarke expects the City will appeal that ruling by the Court of Appeals as well. With no further discussion, it was the consensus of the Board that MSD not oppose the City's request for a stay of the transfer of the water system assets pending resolution of any appeal.

Mr. Hartye expressed appreciation to Owen Herbert for heading up the United Way Golf Tournament, and to Kaleena Anderson and Sheila Kilby for gaining sponsorships. The tourney was a great success and raised over \$7,000 (net of expenses) for United Way for the outing in which 61 people participated at the Grove Park.

Mr. Hartye reported a call was received from Terry Rice of Louisa Street to commend all of the workers that took care of his problem and said they did a fantastic job, were wonderful, and exceptional. Thanks to McKinley Hensley, Billy Cantrell, Mitch Metcalf, Grayson Hensley, Scott Graham, Pete Cole and James Beaver.

Mr. Hartye reported it has been a busy week at the Treatment Plant with removal of the Heat Exchanger. As a result, the solids processing end of the plant is shut down requiring sludge to be hauled to the Buncombe County Landfill. MSD has an agreement to take landfill leachate in return for the landfill taking MSD's sludge. Mr. Hartye presented slides showing

removal of the Heat Exchanger; burnt solids from the existing Exchanger, and the new Heat Exchanger. He stated MSD has a good contractor, and the project is going well.

Mr. Hartye reported the next ROW Committee meeting is scheduled for October 28<sup>th</sup> at 9 am. The next regular Board Meeting will be held November 18<sup>th</sup> at 2 pm.

**7. Consolidated Motion Agenda:**

**a. Consideration of Bids for Sanitary Sewer Rehabilitation Project – South French Broad Interceptor Grouting:**

Mr. Hartye reported this project is located along the French Broad River within the Biltmore Estate. Although the 36-inch concrete interceptor is in good structural condition, the joints have deteriorated over time. This has caused sinkholes in some areas, and allows for excessive infiltration when water levels are high. The work includes pressure testing each joint, and rehabilitating those which do not pass the pressure test. For each joint requiring rehabilitation, grout is pressure-injected and allowed to cure, thus sealing the joint from within the pipe. He presented an illustration showing how the grout is injected. He further reported the project is divided into two phases, over two budget years. The first phase is 12,000 LF, and the second phase is 10,000 LF. The contract was advertised and two bids were received on October 1, 2015. Since the required number of bids were not received, the contract was re-advertised and the following two bids were received on October 8, 2015: Bio-Nomic Services, Inc. with a total bid of \$547,998.00, and Lake County Sewer Co., Inc. with a total bid of \$503,599.00. Although the low bidder, Lake County Sewer, has not completed any previous projects for MSD, all references had positive comments regarding this company. The FY 15-16 construction budget for this project is \$567,000.00. Staff recommends award of this contract to Lake County Sewer Company, Inc. in the amount of \$503,599.00 subject to review and approval by District Counsel.

Mr. Watts asked if it is possible to bid the second phase while the contractor is still on site. Mr. Hartye stated it's a timing issue with the Estate in that the contractor needs to be in and out during their off season, which is the winter. Therefore, Phase 2 will be contracted between January and April the following year.

**b. Consideration of Developer Constructed Sewer Systems: Biltmore Terrace Phase 2 Sewer Extension; Bridle Path Sewer Extension; Chapel Park Sewer Extension; Echo Hill Sewer Extension, and Mallard Run Sewer Extension:**

Mr. Hartye reported the Biltmore Terrace Phase 2 sewer extension project is located inside the District boundary off Lamar Avenue in

Buncombe County. The project included extending approximately 656 linear feet of 8-inch public gravity sewer to serve the seventeen (17) unit residential development.

Mr. Hartye reported the Bridle Path sewer extension project is located inside the District boundary off Lookout Road in the City of Asheville. The project included extending approximately 129 linear feet of 8-inch public gravity sewer to serve the six (6) unit residential development.

Mr. Hartye reported the Chapel Park sewer extension project is located inside the District boundary. The project included extending approximately 247 linear feet of 8-inch public gravity sewer to serve the eight (8) unit residential development.

Mr. Hartye reported the Echo Hills Cottages sewer extension project is located inside the District boundary off Debra Lane in the City of Asheville. The project included extending approximately 530 linear feet of 8-inch public gravity sewer to serve the eleven (11) unit residential development.

Mr. Hartye reported the Mallard Run sewer extension project is located inside the District boundary off Glenn Bridge Road in Buncombe County. The project included extending approximately 1,806 linear feet of 8-inch public gravity sewer to serve the seventy-two (72) unit residential development.

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

**c. Consideration of Cash Commitment/Investment Report – Month Ended August 31, 2015:**

Mr. Powell reported Page 25 presents the makeup of the District's Investment Portfolio. There has not been a significant change in the makeup of the portfolio from the prior month. Page 26 is the MSD Investment Manager report as of the month of August. The weighted average maturity of the investment portfolio is 298 days. The yield to maturity is 0.53% and is exceeding MSD bench marks of the 6-month T-Bill and NCCMT cash portfolio. Page 27 is an analysis of the District's Cash Receipts. Monthly and YTD domestic and industrial sewer revenue is considered reasonable based on timing of cash receipts and historical trends. Facility and Tap Fees are considered reasonable taking into account the unpredictability of cash receipts. Page 28 is an analysis of the District's Expenditures. Monthly and YTD expenditures are considered reasonable based on historical trends for operation maintenance, debt service, and capital projects. Page 29 is the MSD Variable Debt Service report. Both the 2008A Series are performing better than budgeted expectations. As of the end of September, both

issues have saved District customers approximately \$4.1 million dollars in debt service since April 2008.

Mr. Watts moved the Board approve the Consolidated Motion Agenda as presented. Mr. Root seconded the motion. Roll call vote was as follows: 10 Ayes; 0 Nays.

**8. Old Business:**

None

**9. New Business:**

None

**10. Adjournment:**

With no further business, Mr. VeHaun called for adjournment at 2:27 pm.

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Jackie W. Bryson, Secretary/ Treasurer

<h1 style="margin: 0;">MSD</h1> <h2 style="margin: 0;">Regular Board Meeting</h2>
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Metropolitan Sewerage District  
of Buncombe County, NC

### AGENDA FOR 10/21/15

✓	Agenda Item	Presenter	Time	
	Call to Order and Roll Call	VeHaun	2:00	
	01. Inquiry as to Conflict of Interest	VeHaun	2:05	
	02. <a href="#">Approval of Minutes of the September 16, 2015 Board Meeting.</a>	VeHaun	2:10	
	03. Discussion and Adjustment of Agenda.	VeHaun	2:15	
	04. Informal Discussion and Public Comment	VeHaun	2:20	
	05. <a href="#">Report of General Manager</a>	Hartye	2:25	
	06. Consolidated Motion Agenda		2:40	
	a. <a href="#">Consideration of Bids – Sanitary Sewer Rehabilitation Project – South French Board Interceptor Grouting.</a>	Hartye		
	b. Consideration of Developer Constructed Sewer Systems: <a href="#">Biltmore Terrace Phase 2 Sewer Extension; Bridle Path Sewer Extension; Chapel Park Sewer Extension; Echo Hills Sewer Extension, and Mallard Run Sewer Extension.</a>	Hartye		
	c. <a href="#">Cash Commitment/Investment Report – Month Ended August 31, 2015.</a>	Powell		
	07. Old Business:	VeHaun	2:55	
	08. New Business:	VeHaun	3:00	
	09. Adjournment: (Next Meeting 11/18/15)	VeHaun	3:05	
	<a href="#">STATUS REPORTS</a>			

**BOARD OF THE METROPOLITAN SEWERAGE DISTRICT  
SEPTEMBER 16, 2015**

**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, September 16, 2015. Chairman VeHaun presided with the following members present: Ashley, Belcher, Bryson, Creighton, Kelly, Manheimer, Watts, and Wisler. Ms. Frost, Mr. Pelly and Mr. Root were absent.

Others present were: Thomas E. Hartye, General Manager, William Clarke, General Counsel, Joseph Martin with Woodfin Sanitary Water & Sewer District, Jade Dundas with Asheville Water Resources and MSD Staff, Ed Bradford, Scott Powell, Jim Hemphill, Ken Stines, Mike Stamey, Matthew Walter, Hunter Carson, and Sondra Honeycutt.

**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 19, 2015 Board Meeting:**

Mr. VeHaun asked if there were any changes to the Minutes of the August 19, 2015 Board Meeting. Mr. Creighton 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 Mr. Martin and Mr. Dundas. There was no public comment.

**6. Report of General Manager:**

Mr. Hartye called on Ed Bradford and Mike Stamey for a presentation on current construction projects for the Treatment Plant and Collection System.

Mr. Bradford reported there are two major projects underway at the Plant. The first is the Influent Pump Station rehabilitation. The first pump was replaced in 2014; the second pump in May 2015, and the third pump to be replaced in FY2017. He stated they will take the best parts of the three (3) existing pumps to use as a backup pump. These pumps have been in service for approximately 25 years and have seen a lot of wear. In addition to the Influent Pumps, The Adjustable Frequency Drives (AFD's) will be replaced as a result of equipment problems due to age and a corrosive environment. The AFD's allow the pumps to ramp their speed up and down to match the flow coming into the plant. He presented slides showing the new AFD enclosure, which will be placed on a slab, and the interior space air conditioned to protect the equipment. Completion of this project is expected in January 2016.

Mr. Bradford reported the second project is the Incinerator Emissions Upgrade. Total construction cost is \$5.6 million, which was reduced by approximately \$5 million by utilizing new technology. This was pilot tested a year ago with very successful results and MSD got permission to use this from the Air Quality Agency. Due to the accelerated schedule imposed upon MSD by the EPA, combined with equipment manufacturing schedules, MSD managed an accelerated design timeframe with Consultant (CDM Smith); Preapproved Venturi manufacturer November, 2014; Pre-purchased Heat

Exchanger December, 2014, and awarded the Construction Contract in February, 2015. MSD is currently ahead of schedule and expects to have the project operational by January, 2016. Mr. Hartye noted that as a part of this project the incinerator must be shut down for approximately a month to replace equipment. Mr. Bradford presented a slide showing the Heat Exchanger, which recovers heat, and the Venturi Scrubber, which removes particulates. He presented three dimensional renderings of the equipment that is currently in the building, which is shown in color. He presented slides showing the instrument used to measure/locate the existing system and the Mercury-removal system and Venturi Scrubber being lifted into the building, which was a very tight fit. Mr. Bradford mentioned the Headworks project currently in the design phase, which was a primary recommendation of the recent Facilities Plan that includes fine screens, grit removal, and storage for peak flows. Mr. Bradford noted the CIP Status report (entire program) is posted on-line and updated quarterly. He called on Mr. Stamey for a report on recent construction activities.

Mr. Stamey began his presentation with a report on Construction Inspections, which is done with all construction contractors MSD hires. Currently, the most active project is the Melody Circle sewer rehabilitation project located in Swannanoa, North of U.S. Highway 70, and East of New Salem Road. The project consists of approximately 4,500 LF of sewer line in the Melody Circle neighborhood. Terry Brothers Construction is the contractor on this project. He presented a map showing the location of the line. To date approximately 1,500 LF of sewer line has been installed. He presented a slide showing the natural terrain of the neighborhood, which drops off into a valley, where the original sewer line was located. As a result, a sub-contractor was hired to trim some of the trees, which was negotiated during the Right of Way phase. He presented slides showing the installation of 8-inch ductile iron pipe; back filling of trench, and installation of asphalt binder. He presented slides showing the lower end of the project closest to New Salem Road; pre-construction looking east; during construction looking east, and post construction looking west.

Mr. Stamey reported the Broadview Avenue Sewer Rehabilitation project is located in Oakley and consists of 4,500 LF of sewer line, which is now complete. Buckeye Bridge was the contractor on this project. He presented several slides showing the project prior to construction; rocky working conditions during construction, and post construction (9/14/15). Mr. Stamey stated the CIP Inspectors Group is responsible for inspecting sewer rehab projects with contractors. They are also required to inspect sewer extensions put in by private developers across the county that may eventually come to MSD for ownership and maintenance. He presented a map showing the 43 active projects.

Mr. Stamey reported that currently, the biggest job for In-house Construction Crews is Gracelyn Road @ Warwick Place Sewer Rehabilitation in North Asheville. The existing sewer in this area is 4" Orangeburg pipe to be replaced by an 8" public sewer system that will be easier to maintain and service. He presented slides showing the bottom end of Warwick Place at Gracelyn Road where the pipe bursting project will take place. Another project just completed last week is Covington Street located in West Asheville. This project consisted of 180 ft. of pipe bursting and repair. He presented slides showing the equipment used to complete this project. He presented a copy of the In-House Construction projects (31) for FY15-16 of which 9 projects are complete.

Mr. Hartye presented a flyer for the fund raising tournament to be held at the Grove Park Inn Golf Course on Thursday, September 24<sup>th</sup>.

Mr. Hartye reported a call was received from Hugh Murphy of Locust Court in Arden regarding the MSD crew replacing the sewer line. He said that he couldn't praise them enough. From start to finish they were always doing something. They are a great team and work hard all day long. Thanks to Gilbert Karn, Dale Dillingham, Jason Price,



Tim Haney, Mickey Roberts, and Nicolas Hercules. Also, a call was received from Emily Lacey on Cedar Street expressing her appreciation for Mitch Metcalf and Scott Graham responding to a problem at her residence. She said they were wonderful and did a great job, and went above and beyond to help her out.

Mr. Hartye reported the September ROW Committee Meeting is cancelled. The next meeting is scheduled for October 28<sup>th</sup> at 9am. The annual employee picnic will be held behind the Plant Maintenance Facility on September 22<sup>nd</sup> starting at 8am. The next regular Board Meeting will be held October 21<sup>st</sup> at 2pm.

**7. Consolidated Motion Agenda:**

**a. Consideration of FY2016 Auditing Services RFP:**

Mr. Powell reported an RFP for Auditing Services was sent to six auditing firms. On August 14<sup>th</sup> staff received responses from Cherry Bekaret LLP, McGladrey LLP, and Gould Killian CPA Group. All firms exhibited knowledge of the utility industry in North Carolina. The Selection Committee chose Cherry Bekaret due to their audit approach, firms staffing and turnover rate, and notably their governmental utility experience in North Carolina. The proposed fees for the FY2016 engagement were \$45,000, which is below the budgeted amount of \$46,500. The Selection Committee recommends Cherry Bekaret LLP as auditors for the FY2016 fiscal period.

**b. Cash Commitment/Investment Report – Month Ended, July 31, 2015:**

Mr. Powell reported Page 69 presents the makeup of the District's Investment Portfolio. There has been a \$7.6 million dollar decrease from the previous month report. This is a direct result of the District meeting its 7/1 debt service obligation. Page 70 is the MSD Investment Manager report as of the month of August. The weighted average maturity of the investment portfolio is 352 days. The yield to maturity is .52% and is exceeding MSD bench marks of the 6-month T-Bill and NCCMT cash portfolio. Page 71 is an analysis of the District 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 72 is an analysis of the District's Expenditures. Monthly and YTD expenditures are considered reasonable based on historical trends. Page 73 is the MSD Variable Debt Service report. Both the 2008 A Series are performing better than budgeted expectations. As of the end of August, both issues have saved District ratepayers approximately \$4.1 million dollars in debt service since April, 2008.

Mr. Watts moved the Board approve the Consolidated Motion Agenda as presented. Mr. Belcher seconded the motion. Roll call vote was as follows: 9 Ayes; 0 Nays.

**8. Old Business:**

None

**9. New Business:**

**10. Adjournment:**

With no further business, Mr. VeHaun called for adjournment at 2:30pm.

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Jackie W. Bryson, Secretary/Treasurer



## MEMORANDUM

TO: MSD Board  
FROM: Thomas E. Hartye, P.E., General Manager  
DATE: October 15, 2015  
SUBJECT: Report from the General Manager

- HB 488

The NC Appellate Court issued a ruling on October 6<sup>th</sup> that HB 488 is constitutional. The City of Asheville is going to appeal to the NC Supreme Court. The City is also seeking to stay the transfer pending final resolution, which makes sense from MSD's standpoint as well. Billy Clarke will report to the Board on the status and answer any questions that you may have. Here are links to articles related to the [ruling](#) and the [appeal](#).

- Kudos

- Owen Herbert for heading up the United Way Golf Tournament, and to Kaleena Anderson and Sheila Kilby for gaining sponsorships. The tourney was a great success. MSD raised over \$7,000 (net of expenses) for the United Way for that outing in which 61 people participated.
- Received a call from Terry Rice of Louisa Street to commend all of the workers that took care of his problem and said they did a fantastic job, were wonderful and exceptional. Thanks to McKinley Hensley, Billy Cantrell, Mitch Metcalf, Grayson Hensley, Scott Graham, Pete Cole and James Beaver.

- Board/Committee Meetings/Events

The next ROW is scheduled for October 28<sup>th</sup> at 9am. The Next Regular Board Meeting will be held November 18<sup>th</sup> at 2 pm.

# Metropolitan Sewerage District of Buncombe County

## BOARD ACTION ITEM

**BOARD MEETING DATE:** October 21, 2015

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

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

**SUBJECT:** South French Broad Interceptor Grouting Project: Consideration of Bids, MSD Project No. 2011033

**BACKGROUND:** This project is located along the French Broad River within the Biltmore Estate. The 36-inch concrete interceptor is in good structural condition; however, the joints have deteriorated over time. This has caused sinkholes in some areas, and allows for excessive infiltration when water levels are high.

The work includes pressure testing each joint, and rehabilitating those which do not pass the pressure test. For each joint requiring rehabilitation, grout is pressure-injected and allowed to cure, thus sealing the joint from within the pipe (please refer to Figure No. 1).

This project is divided into two phases, over two budget years. This first phase is 12,000 LF, the next phase is 10,000 LF. Flow monitoring will be performed pre-project and post-project in order to determine the viability of this method of joint rehabilitation.

The contract was advertised and two bids were received on October 1, 2015. The contract was therefore re-advertised and two bids were received on October 8, 2015 as follows:

<u>Contractor</u>	<u>Bid Amount</u>
1) Bio-Nomic Services, Inc.	\$547,998.00
<b>2) Lake County Sewer Co., Inc.</b>	<b>\$503,599.00</b>

The apparent low bidder is Lake County Sewer Co., Inc. with a bid amount of \$503,599.00. Lake County Sewer has not completed any previous projects for MSD. Staff therefore checked references for Lake County's work on previous projects of similar scope. The references all had positive comments regarding this company.

Please refer to the attached documentation for further details.

**FISCAL IMPACT:** The FY15-16 Construction Budget for this project is \$567,000.00.

**STAFF RECOMMENDATION:** Staff recommends award of this contract to Lake County Sewer Company, Inc. in the amount of \$503,599.00, subject to review and approval by District Counsel.

This is the “Packer”. The joint is isolated and sealed-off within its working limits, pressure tested, and grout is injected as required to seal the joint.

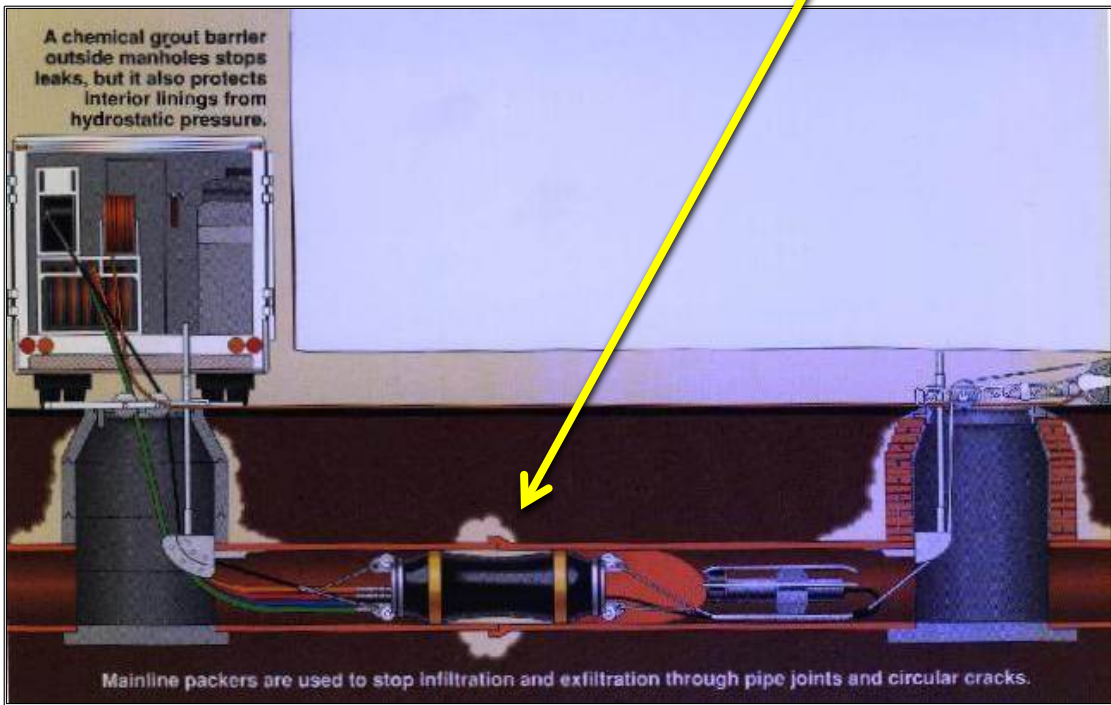


Figure No. 1 - Grouting Joints within a Sewer Line

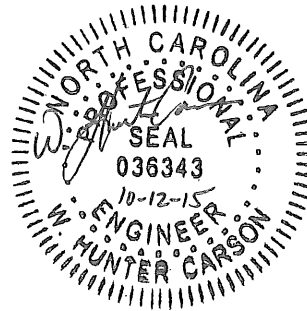
METROPOLITAN SEWERAGE DISTRICT OF BUNCOMBE COUNTY, NORTH CAROLINA

South French Broad Interceptor Grouting  
Project No. 2011033

BID TABULATION  
October 8, 2015

BIDDER	Bid Bond	MBE Form	Bid Forms (Proposal)	Total Bid Amount
Bio-Nomic Services, Inc. Charlotte, NC	5%	1	Yes	\$547,998.00
Lake County Sewer Company, Inc. Willowick, OH	5%	2	Yes	\$503,599.00

APPARENT LOW BIDDER



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

This is to certify that the bids tabulated herein were publicly opened and read aloud at 2:00 p.m. on the 8th day of October, 2015, 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, CIP Manager  
Hunter Carson, Project Engineer

**DATE:** October 13, 2015

**RE:** South French Broad Interceptor Grouting Sewer Rehabilitation Project,  
MSD Project No. 2011033

The South French Broad Interceptor Grouting project is located within 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 4.1 MGD of wastewater from South Asheville to MSD's Carrier Bridge Pump Station.

The interceptor 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.

Two methods of pipe rehabilitation were evaluated prior to this project: cured-in-place-pipe (CIPP) lining and chemical grouting. CIPP lining rehabilitates the entire pipe and is the most costly option, while chemical grouting targets pipe joints only. After determining that the interceptor is in good structural condition, but that the joints are the source of I&I, grouting was selected as the preferred method of rehabilitation.

Chemical grouting is a well-established method of pipe rehabilitation; however, this will be the first grouting project completed by the District to date. In order to accommodate other projects within the CIP, only 12,000 LF of the 22,000 LF interceptor line will be rehabilitated this fiscal year. In addition, staff will validate this rehabilitation process and confirm its effectiveness. If successful, the remaining 10,000 LF will be completed in FY '16-'17.

After receiving only two bids on October 1, 2015, the project was re-advertised per NC General Statutes. On October 8, 2015, two sealed bids were received at 2:00 pm. Results were as follows:

<u>Contractor</u>	<u>Bid Amount</u>
1) Bio-Nomic Services, Inc.	\$547,998.00
<b>2) Lake County Sewer Company, Inc.</b>	<b>\$503,599.00</b>

The apparent low bidder is Lake County Sewer Company, Inc. with a bid amount of \$503,599.00. The FY15/16 construction budget for this project is \$567,000.00. Since Lake County Sewer Company, Inc. has not performed work for the District in the past, references were checked to confirm quality of work, timeliness of completion, and work performed within budget. References were contacted by telephone in order to discuss Lake County's work; three responded and provided positive feedback.

Staff recommends award of this contract to Lake County Sewer Company, Inc. contingent upon review and approval by District Counsel.

## South French Broad Interceptor Grouting

MSD Project No. 2011033

### Reference Check for Lake County Sewer Company, Inc.

#### **Owner: City of Greenville, Ohio**

Contact: Ryan Delk (City of Greenville Street Superintendent); (937) 548-2215

Contract Amounts: unknown

Mr. Delk stated that Lake County Sewer Co. has performed work for the City of Greenville for over 10 years and has an excellent reputation. The City of Greenville contracts with Lake County Sewer on an annual basis to perform chemical grouting of sanitary sewer lines ranging in size from 6"-15". Much of the city's sewer infrastructure is 80+ year old clay pipe with 3-5' joints. Chemical grouting over the past 5 years has reduced flow into Greenville's WWTP by millions of gallons per day according to Mr. Delk. The City of Greenville does not have full-time inspection on grouting projects, so they rely on testing logs and CCTV provided by Lake County Sewer Co. to confirm project completeness. Mr. Delk said that Lake County is very organized and that they have never had a problem obtaining requested testing and grouting data.

#### **Owner: City of Strongville, Ohio**

Contact: Lori Daley, P.E. (City of Strongville Engineer); (440) 580-3120

Contract Amounts: (1) \$452,625; (2) \$463,585; (3) \$300,129

The City of Strongville has just completed its third grouting contract with Lake County Sewer Co. Ms. Daley stated that the contractor has performed well on each job and that she has been pleased with their work. Strongville does not have full-time inspection services, so she requested that all pressure testing data and CCTV work be handed over for review. She stated that Lake County Sewer Co.'s record keeping is meticulous. The most recent contract with Lake County Sewer was approximately \$452,000 for grouting 25,000 LF of 8" VCP. The two prior contracts were both in excess of 10,000 LF and \$300k. Strongville is in the process of collecting post-grouting flow data to confirm effectiveness of these projects.

#### **Owner: City of Fairview Park, Ohio**

Contact: Kim Kerber, P.E. (Mackay Engineering & Surveying); (440) 886-4500

Contract Amounts: (1) \$269,394; (2) \$191,822; (3) unknown; (4) unknown

Mackay Engineering has designed, bid, and managed many sanitary sewer grouting projects for the City of Fairview Park, four of which have been completed by Lake County Sewer Co. Fairview Park has an established grouting program, created in the early 1990s. Much of Fairview Park's collection system is 90-100 year old clay pipe. The projects completed by Lake County Sewer Co. included grouting mainline joints in pipes ranging from 8-18" in diameter, and grouting of 4" services laterals. Each project completed for the City of Fairview Park has been approximately 5,000-8,000 LF in length. Ms. Kerber stated that Lake County Sewer Co. has always performed well and she highly recommends them for grouting work. She expressed that Lake County gets the job completed quickly, and that the work is done correctly. Mackay Engineering has required Lake County Sewer Co. to retest line segments 2 years after initial application, and that they have never had to regrout pipe joints. Ms. Kerber's experience with grouting suggests that lines need to be regrouted every 10-15 years.

### **Similar Project History:**

#### **Summit County, Ohio**

WWTP No. 32 Sanitary Sewer Collection System Rehabilitation  
Contract Amount: \$99,690

#### **City of Dayton, Ohio**

c/o Miller Pipeline LLC  
Miami Shores Sanitary Sewer Rehabilitation  
Contract Amount: \$74,970

#### **City of Solon, Ohio**

2013 Annual Sewer Grouting Program  
Contract Amount: \$356,256

#### **City of Delaware, Ohio**

2013 Sanitary Sewer Grouting  
Contract Amount: \$116,568

2012 Sanitary Sewer Improvements Grouting & Lining  
Contract Amount: \$135,827

2008 Sanitary Sewer Improvements Grouting  
Contract Amount: \$423,000

2007 Sanitary Sewer Improvements Grouting & Sliplining  
Contract Amount: \$86,000

#### **Shelby County Engineers, Ohio**

Arrowhead Subdivision Sanitary Sewer Rehabilitation  
Contract Amount: \$309,780

#### **Charter Township of Shelby, Michigan**

c/o Fazal Khan & Associates, Inc.  
NW & SE Quadrant Sanitary Sewer Repairs  
Contract Amount: \$683,590

#### **Village of Cridersville, Ohio**

c/o Poggemeyer Design Group  
Sanitary Sewer Rehabilitation – Phase 1 Chemical Grouting  
Contract Amount: \$143,000



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

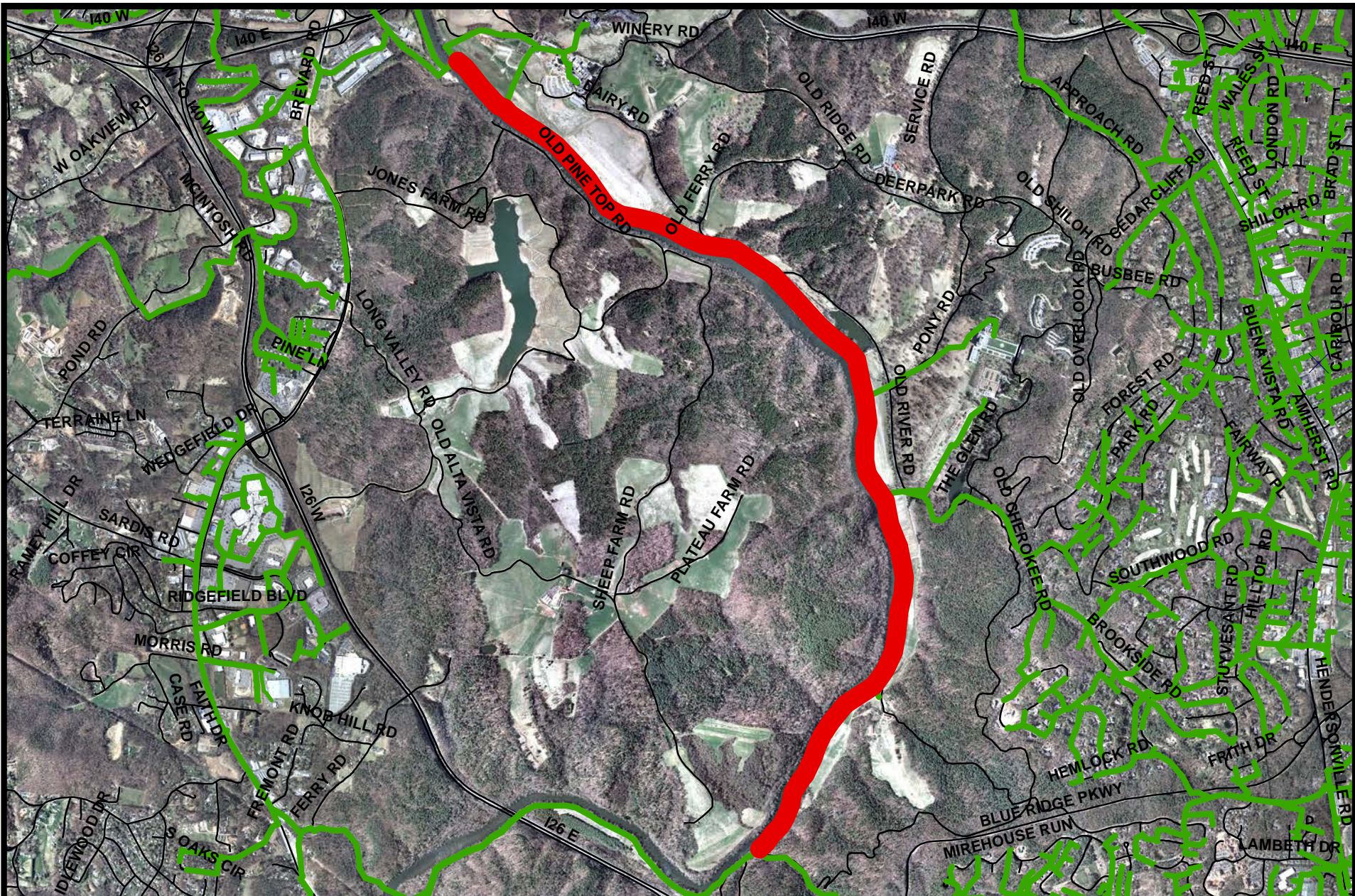
**BUDGET DATA SHEET - FY 2015 - 2016**

<b>PROJECT:</b> South French Broad Int. - Grouting	<b>LOCATION:</b> Biltmore Estate
<b>TYPE:</b> Interceptor	<b>PIPE RATING:</b> 8
<b>PROJECT NO.:</b> 2011033	<b>TOTAL LF:</b> 22,000
<b>PROJECT BUDGET:</b> \$1,251,550.00	<b>PROJECT ORIGIN:</b> Line Condition, Inflow & Infiltration

DESCRIPTION	ESTIMATED PROJECT COST	TOTAL EXPENDS THRU 12/31/14	EST. COST JAN - JUNE 2015	BUDGET FY 15-16
55310 - PRELIM. ENGINEERING				
55320 - SURVEY - DESIGN				
55330 - DESIGN				
55340 - PERMITS				
55350 - SPECIAL STUDIES				
55360 - EASEMENT PLATS				
55370 - LEGAL FEES				
55380 - ACQUISITION SERVICES				
55390 - COMPENSATION				
55400 - APPRAISAL				
55410 - CONDEMNATION				
55420 - CONSTRUCTION	\$1,242,550.00	\$203,550.00		\$567,000.00
55430 - CONST. CONTRACT ADM.				
55440 - TESTING	\$9,000.00			\$5,000.00
55450 - SURVEY - ASBUILT				
<b>TOTAL AMOUNT</b>	<b>\$1,251,550.00</b>	<b>\$203,550.00</b>	<b>\$0.00</b>	<b>\$572,000.00</b>

<b>ENGINEER:</b> MSD	HC	<b>ESTIMATED BUDGETS - FY '16 -'25</b>
<b>R.O.W. ACQUISITION:</b> N/A	# PLATS: [ 0 ]	FY 16-17 \$476,000.00
<b>CONTRACTOR:</b>		FY 17-18 \$0.00
<b>CONSTRUCTION ADM:</b> MSD		FY 18-19 \$0.00
<b>INSPECTION:</b> MSD		FY 19-20 \$0.00
		FY 20-21 \$0.00
		FY 21-22 \$0.00
		FY 22-23 \$0.00
		FY 23-24 \$0.00
		FY 24-25 \$0.00
<b>PROJECT DESCRIPTION:</b> 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 grouting joints along 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 two years.		
<b>SPECIAL PROJECT NOTES:</b> 12,000 LF in FY 15-16		
10,000 LF in FY 16-17		





**South French Broad Interceptor Grouting  
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 21, 2015

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

**PREPARED BY:** Kevin Johnson

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

**SUBJECT:** Acceptance of Developer Constructed Sewer System for the Biltmore Terrace Phase 2 Sewer Extension Project, MSD Project No. 2006212

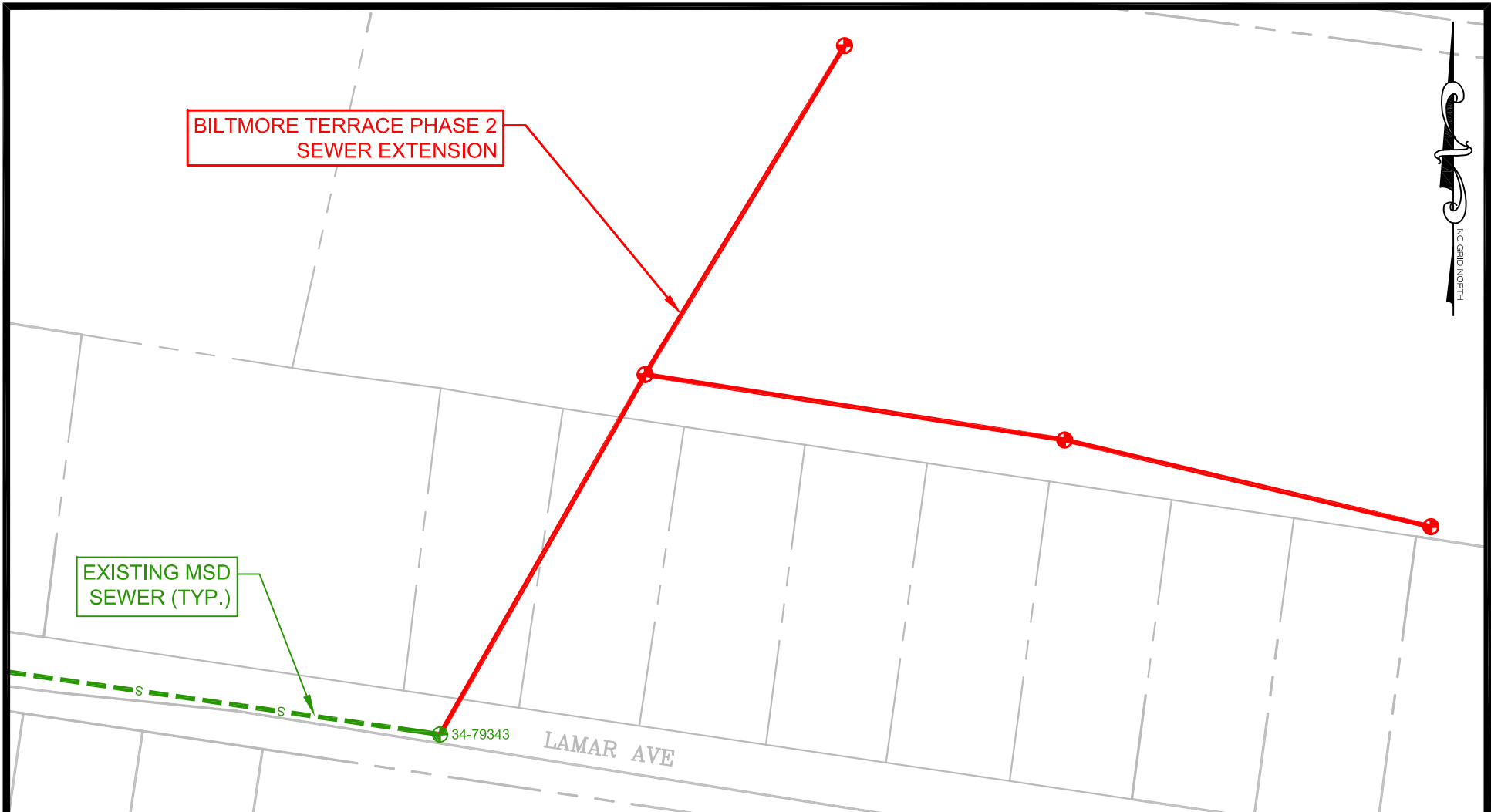
**BACKGROUND:** This project is located inside the District boundary off Lamar Avenue in Buncombe County. The developer of the project is David Ross of Falcon Development.

The project included extending approximately 656 linear feet of 8-inch public gravity sewer to serve the Seventeen (17) Unit Residential Development.

A wastewater allocation was issued in the amount of 5,100 GPD for the project. The estimated cost of the sewer construction is \$30,000.00.

All MSD requirements have been met.

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



**MSD**

Engineering Division

## BILTMORE TERRACE PH. 2 SEWER EXTENSION PROJECT #2006212

Metropolitan Sewerage District of Buncombe County

9/30/15

Scale: 1" = 60'

The Metropolitan Sewerage District of Buncombe County, NC has prepared these maps based on best available information for use in assisting District maintenance work, service area analysis, and planning. The District does not warrant the accuracy of any of the information shown. Field verification is advised for all information shown on the maps or included with manhole data. No guarantee is given as to the accuracy or currency of any of the data. Therefore, in no event shall the District be liable for any special, indirect, or consequential damages or any damages whatsoever resulting from loss of use, data, or profits, whether in an action of contract, negligence, or other action, arising out of or in connection with the use of the information herein provided. Grid shown is North Carolina State Plane Coordinate System NAD 1983 (North American Datum 1983).

# Metropolitan Sewerage District of Buncombe County

## Board Action Item

**BOARD MEETING DATE:** October 21, 2015

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

**PREPARED BY:** Kevin Johnson

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

**SUBJECT:** Acceptance of Developer Constructed Sewer System for the Bridle Path Sewer Extension Project, MSD Project No. 2014040

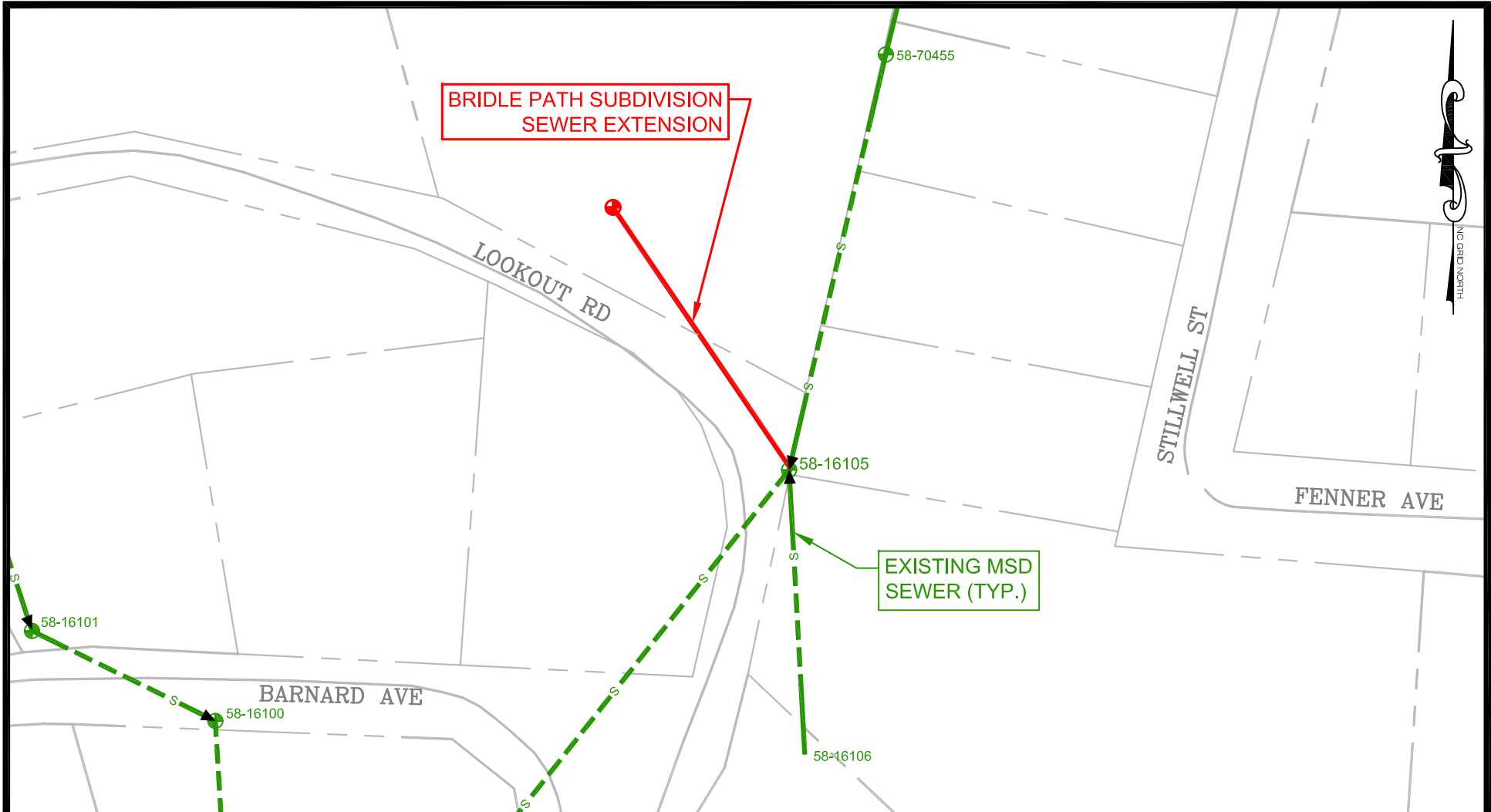
**BACKGROUND:** This project is located inside the District boundary off Lookout Road in the City of Asheville. The developer of the project is Tom Rackley.

The project included extending approximately 129 linear feet of 8-inch public gravity sewer to serve the Six (6) Unit Residential Development.

A wastewater allocation was issued in the amount of 2,400 GPD for the project. The estimated cost of the sewer construction is \$15,600.00.

All MSD requirements have been met.

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



**MSD**

Engineering Division

## BRIDLE PATH SUBDIVISION SEWER EXTENSION PROJECT #2014040

Metropolitan Sewerage District of Buncombe County

9/30/15  
Scale: 1" = 60'

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# Metropolitan Sewerage District of Buncombe County

## Board Action Item

**BOARD MEETING DATE:** October 21, 2015

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

**PREPARED BY:** Kevin Johnson

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

**SUBJECT:** Acceptance of Developer Constructed Sewer System for the Chapel Park Sewer Extension Project, MSD Project No. 2007083

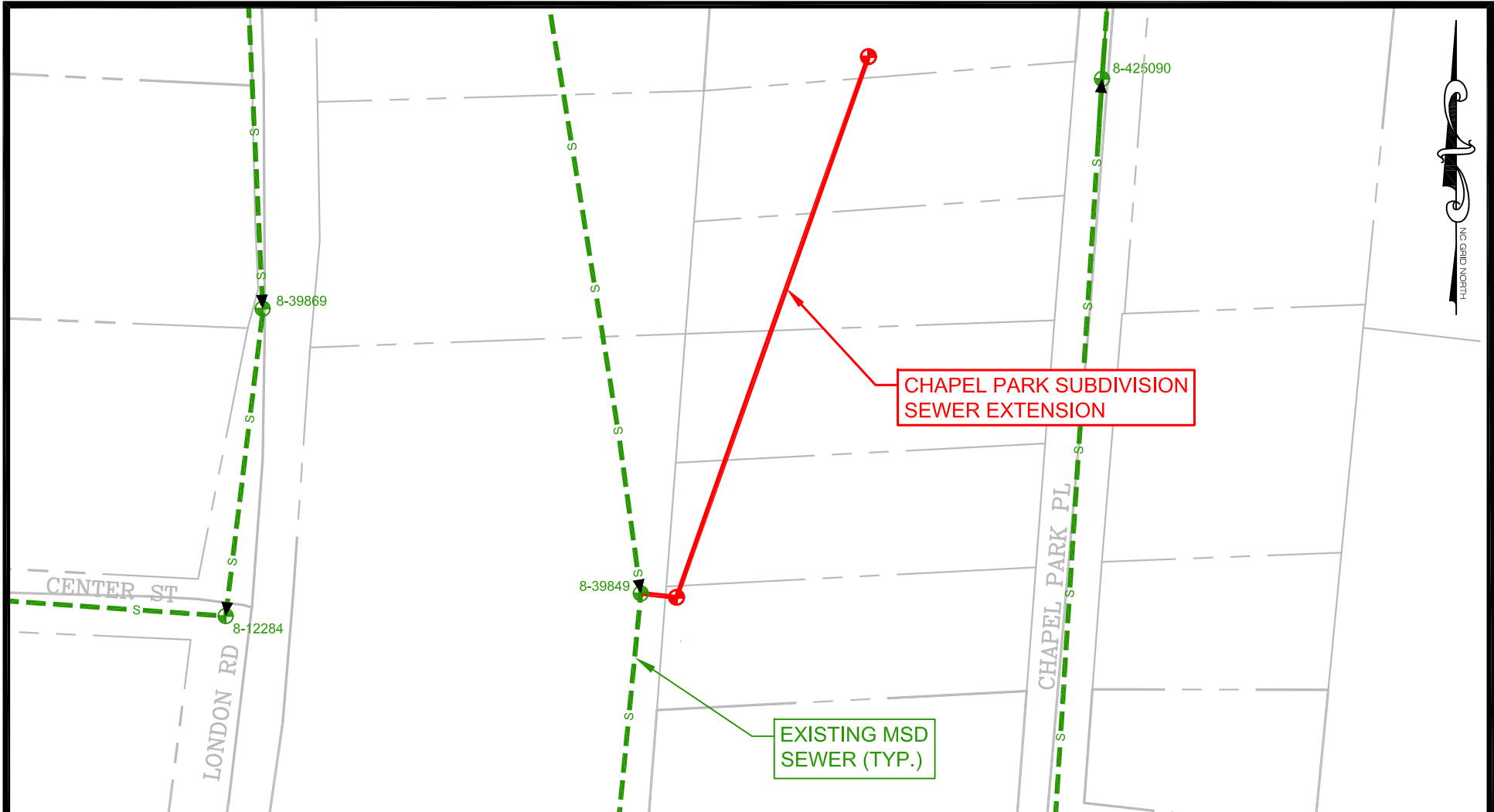
**BACKGROUND:** This project is located inside the District boundary off Chapel Park Place in the City of Asheville. The developer of the project is Carr Swicegood of JCS Investments, LLC.

The project included extending approximately 247 linear feet of 8-inch public gravity sewer to serve the Eight (8) Unit Residential Development.

A wastewater allocation was issued in the amount of 2,400 GPD for the project. The estimated cost of the sewer construction is \$19,300.00.

All MSD requirements have been met.

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



**MSD**

Engineering Division

## CHAPEL PARK SUBDIVISION SEWER EXTENSION PROJECT #2007083

Metropolitan Sewerage District of Buncombe County

9/30/15

Scale: 1" = 60'

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# Metropolitan Sewerage District of Buncombe County

## Board Action Item

**BOARD MEETING DATE:** October 21, 2015

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

**PREPARED BY:** Kevin Johnson

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

**SUBJECT:** Acceptance of Developer Constructed Sewer System for the Echo Hills Cottages Sewer Extension Project, MSD Project No. 2013121

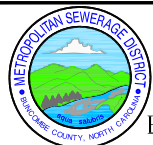
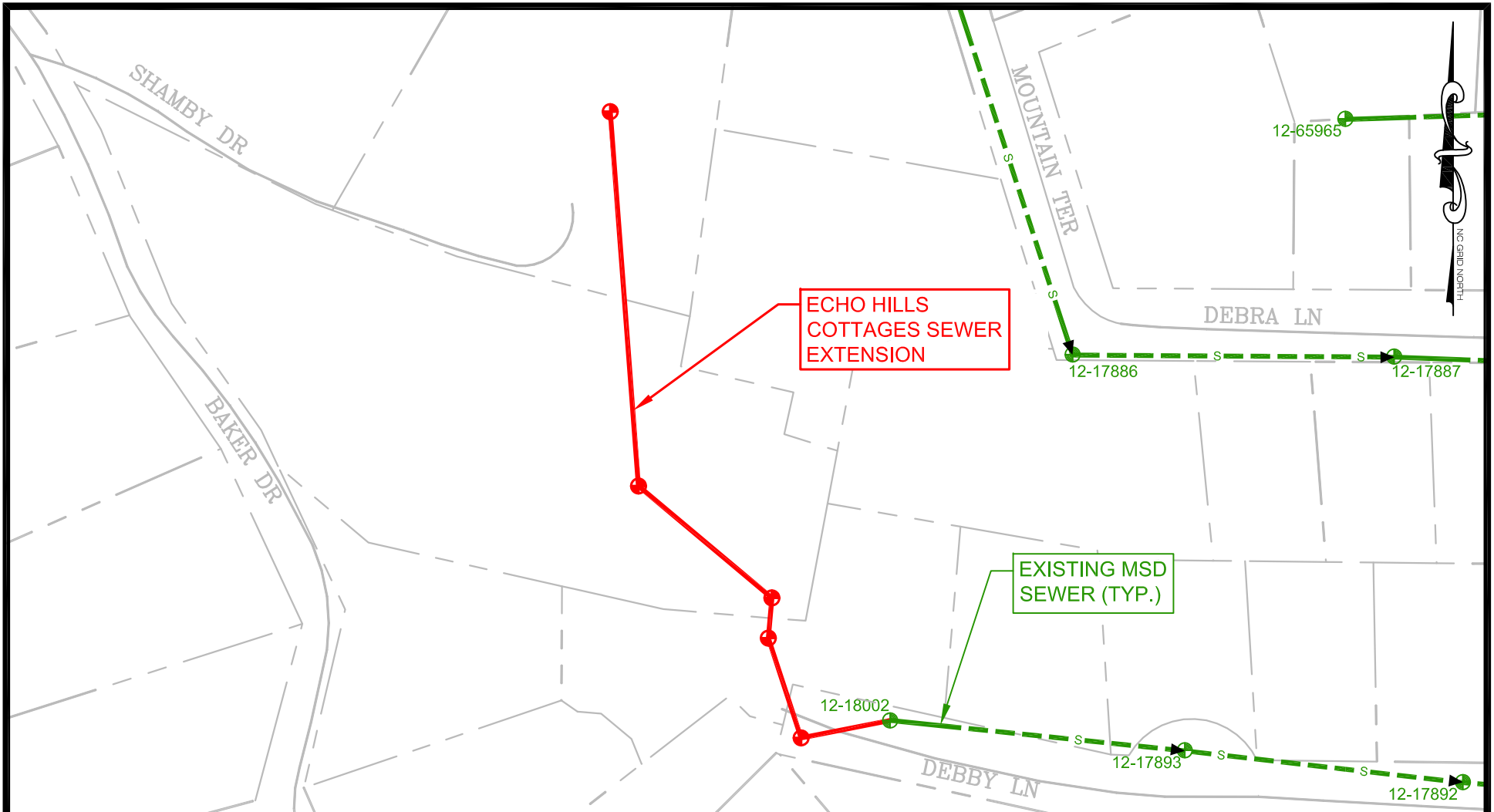
**BACKGROUND:** This project is located inside the District boundary off Debra Lane in the City of Asheville. The developer of the project is Ron Czecholinski.

The project included extending approximately 530 linear feet of 8-inch public gravity sewer to serve the Eleven (11) Unit Residential Development.

A wastewater allocation was issued in the amount of 2,800 GPD for the project. The estimated cost of the sewer construction is \$50,000.00.

All MSD requirements have been met.

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



**MSD**

Engineering Division

## ECHO HILLS COTTAGES SEWER EXTENSION PROJECT #2013121

Metropolitan Sewerage District of Buncombe County

9/30/15

Scale: 1" = 100'

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# Metropolitan Sewerage District of Buncombe County

## Board Action Item

**BOARD MEETING DATE:** October 21, 2015

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

**PREPARED BY:** Kevin Johnson

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

**SUBJECT:** Acceptance of Developer Constructed Sewer System for the Mallard Run Sewer Extension Project, MSD Project No. 2014109

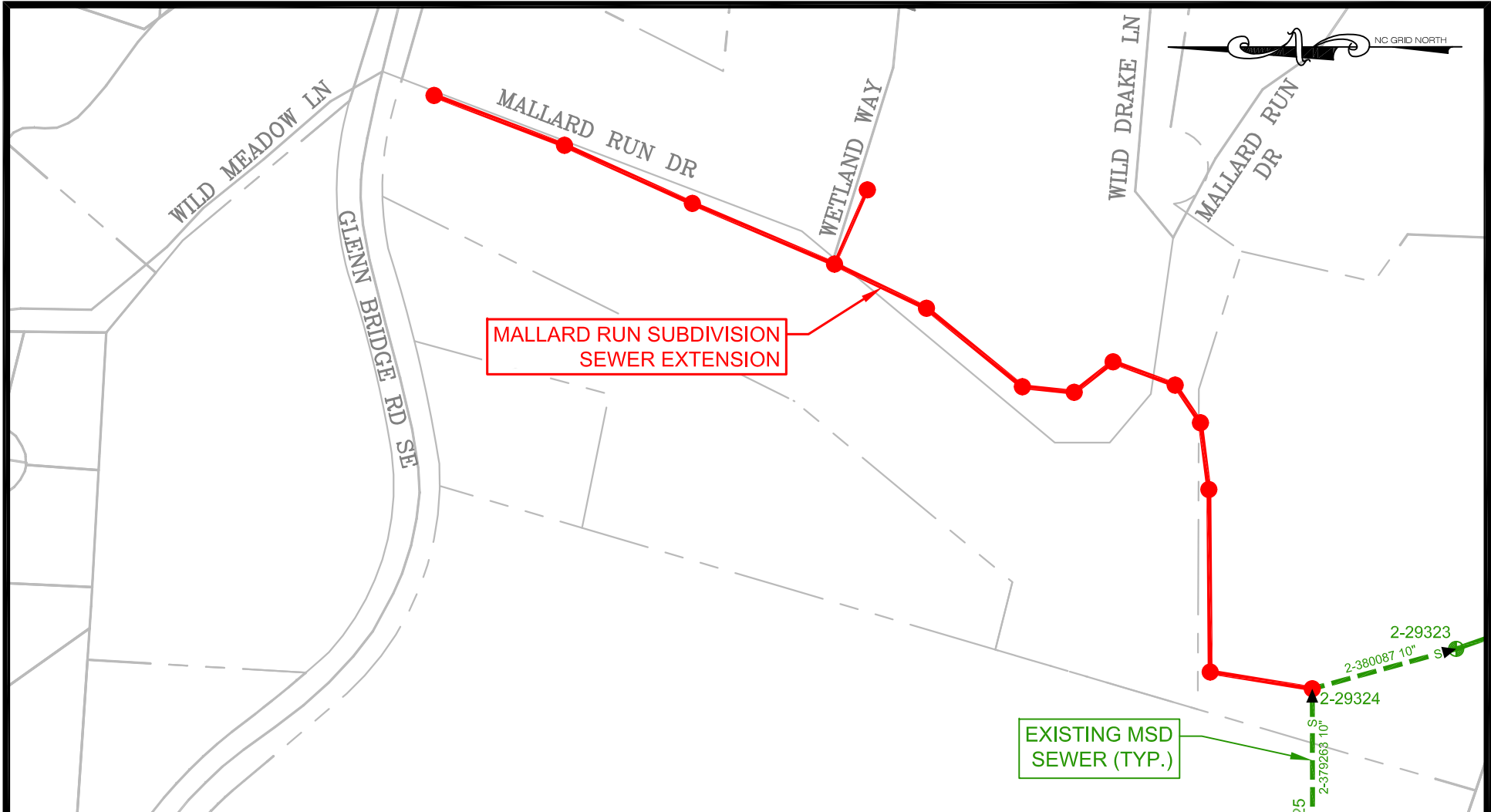
**BACKGROUND:** This project is located inside the District boundary off Glen Bridge Road in Buncombe County. The developer of the project is Drew Norwood of Windsor Built Homes.

The project included extending approximately 1,808 linear feet of 8-inch public gravity sewer to serve the Seventy-two (72) Unit Residential Development.

A wastewater allocation was issued in the amount of 14,400 GPD for the project. The estimated cost of the sewer construction is \$124,000.00.

All MSD requirements have been met.

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



**MSD**

Engineering Division

# MALLARD RUN SUBDIVISION SEWER EXTENSION PROJECT #2014109

Metropolitan Sewerage District of Buncombe County

5/28/15

Scale: 1" = 200'

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# Metropolitan Sewerage District of Buncombe County

## BOARD INFORMATIONAL ITEM

**Meeting Date:** October 21, 2015

**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, 2015

### **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, 2015 were \$46,998,928. The detailed listing of accounts is available upon request. The average rate of return for all investments is 0.449%. 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, 2015 do not reflect contractual commitments or encumbrances against said funds. Shown below are the total investments as of August 31, 2015 reduced by contractual commitments, bond funds, and District reserve funds. The balance available for future capital outlay is (\$390,306).

Total Cash & Investments as of 08/31/2015		46,998,928
Less:		
Budgeted Commitments (Required to pay remaining FY16 budgeted expenditures from unrestricted cash)		
Construction Funds	(20,089,823)	
Operations & Maintenance Fund	<u>(13,628,655)</u>	
		(33,718,478)
Bond Restricted Funds		
Bond Service (Funds held by trustee):		
Funds in Principal & Interest Accounts	(2,167)	
FY16 Principal & Interest Due	<u>(8,893,215)</u>	
		(8,895,382)
District Reserve Funds		
Fleet Replacement	(577,759)	
WWTP Replacement	(429,882)	
Maintenance Reserve	<u>(913,322)</u>	
		(1,920,963)
District Insurance Funds		
General Liability	(202,179)	
Worker's Compensation	(116,323)	
Post-Retirement Benefit	(1,357,968)	
Self-Funded Employee Medical	<u>(1,177,940)</u>	
		<u>(2,854,410)</u>
Designated for Capital Outlay		<u>(390,306)</u>

### **Staff Recommendation**

None. Information Only.

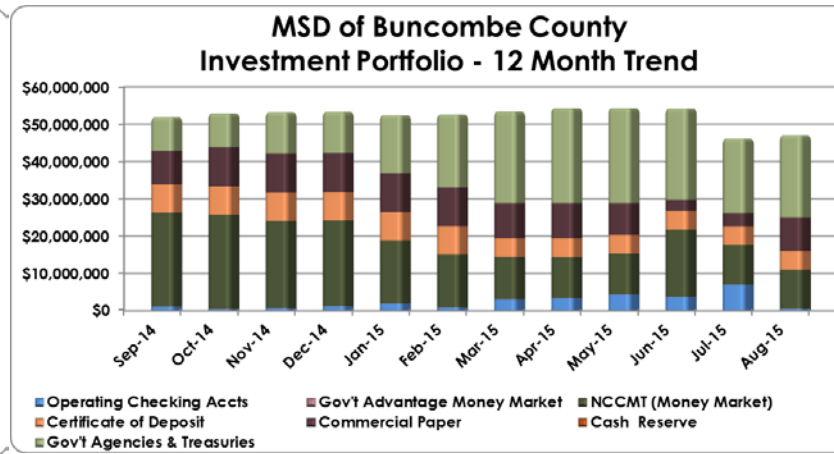
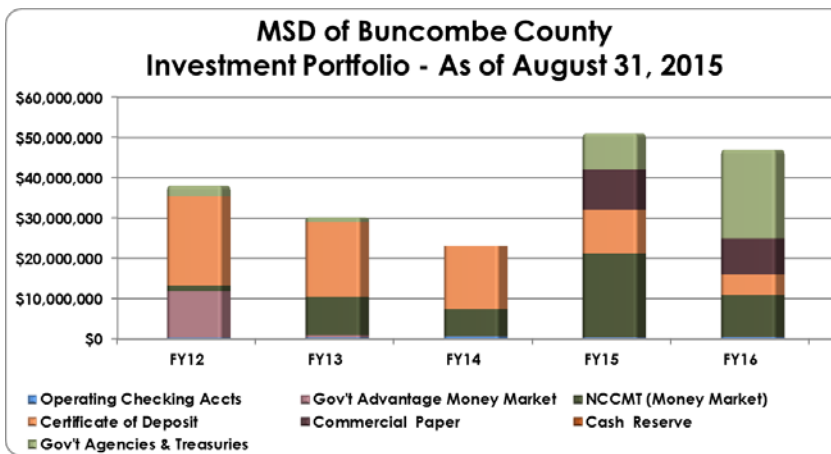
#### **Action Taken**

Motion by:	to	Approve	Disapprove
Second by:		Table	Send to Committee
Other:			
Follow-up required:			
Person responsible:			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	Cash Reserve	Gov't Agencies & Treasuries	Total
Held with Bond Trustee	\$ -	\$ -	\$ 2,167	\$ -	\$ -	\$ -	\$ -	\$ 2,167
Held by MSD	487,506	46,665	10,448,646	5,026,796	8,995,360	-	21,991,788	46,996,761
	<u>\$ 487,506</u>	<u>\$ 46,665</u>	<u>\$ 10,450,813</u>	<u>\$ 5,026,796</u>	<u>\$ 8,995,360</u>	<u>\$ -</u>	<u>\$ 21,991,788</u>	<u>\$ 46,998,928</u>

Investment Policy Asset Allocation	Maximum Percent	Actual Percent	
U.S. Government Treasuries, Agencies and Instrumentalities	100%	46.78%	No significant changes in the investment portfolio as to makeup or total amount.
Bankers' Acceptances	20%	0.00%	
Certificates of Deposit	100%	10.70%	The District 's YTM of .53% is exceeding the YTM benchmarks of the 6 month T-Bill and NCCMT Cash Portfolio.
Commercial Paper	20%	19.14%	
North Carolina Capital Management Trust	100%	22.24%	
Checking Accounts:	100%		All funds invested in CD's, operating checking accounts, Gov't Advantage money market are fully collateralized with the State Treasurer.
Operating Checking Accounts		1.04%	
Gov't Advantage Money Market		0.10%	

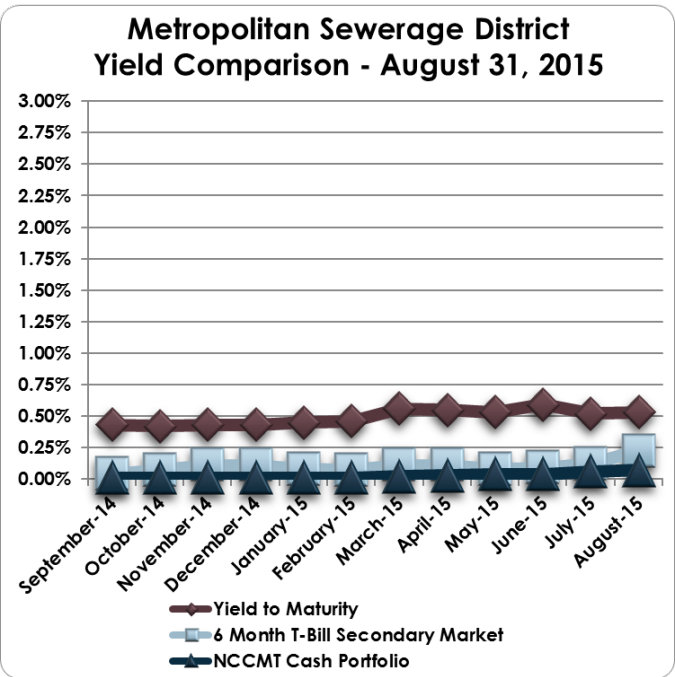
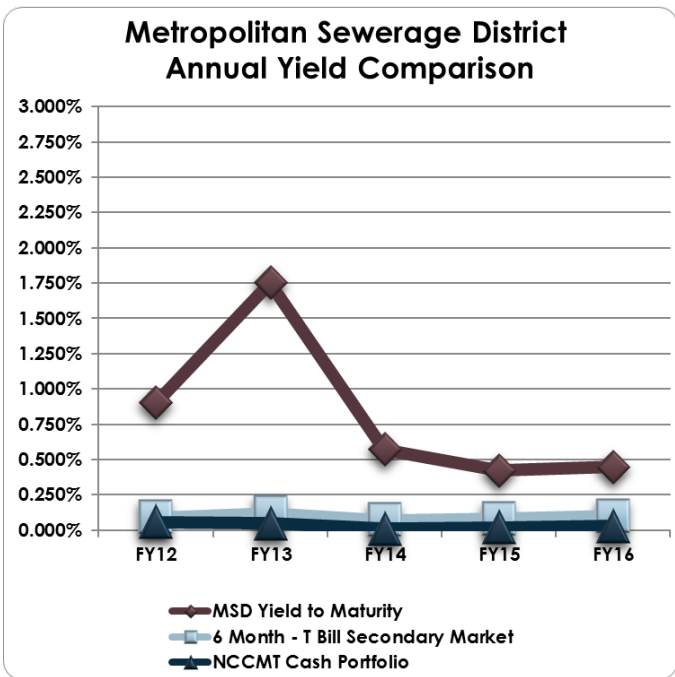


**METROPOLITAN SEWERAGE DISTRICT  
INVESTMENT MANAGERS' REPORT  
At August 31, 2015**

	Original		Interest Receivable
	Cost	Market	
Beginning Balance	\$ 37,181,414	\$ 37,181,414	\$ 429,273
Capital Contributed (Withdrawn)	7,393,204	7,393,204	
Realized Income	8,404	8,404	(7,343)
Unrealized/Accrued Income			16,440
Ending Balance	<u>\$ 44,583,022</u>	<u>\$ 44,583,022</u>	<u>\$ 438,370</u>

	Original Cost		Income	
	Cash Equivalents <91 Days	\$ 17,567,835	\$	6,896
Securities/CD's 91 to 365 Days	17,017,648	\$	6,680	
Securities/CD's > 1 Year	9,997,540	\$	3,925	
	<u>\$ 44,583,022</u>	<u>\$</u>	<u>17,501</u>	

<u>Month End Portfolio Information</u>	
Weighted Average Maturity	298
Yield to Maturity	0.53%
6 Month T-Bill Secondary Market	0.22%
NCCMT Cash Portfolio	0.07%



**Board Meeting:**

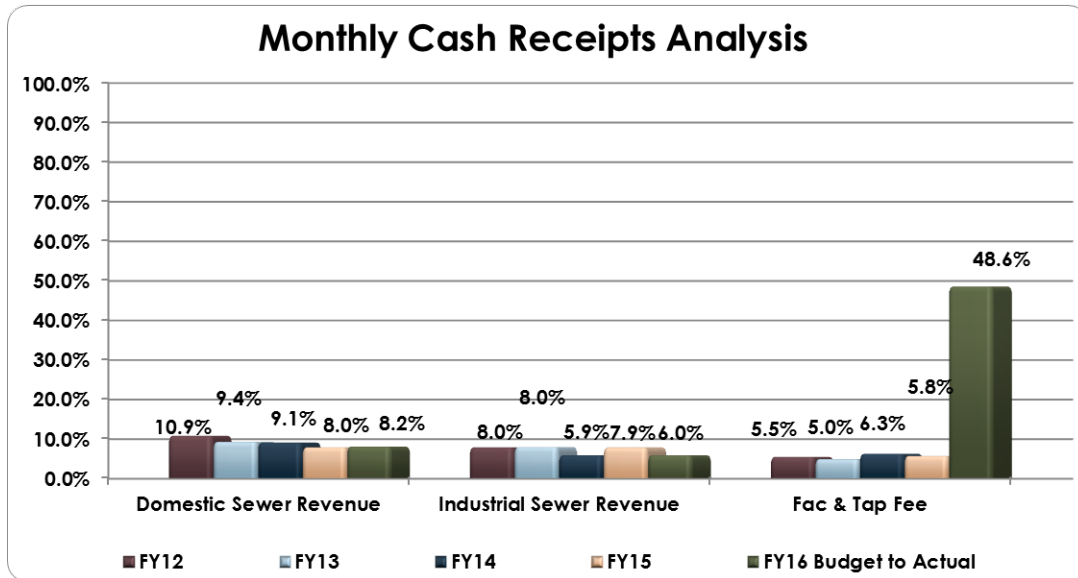
October 21, 2015

**Subject:**

Cash Commitment/Investment Report-Month Ended August 31, 2015

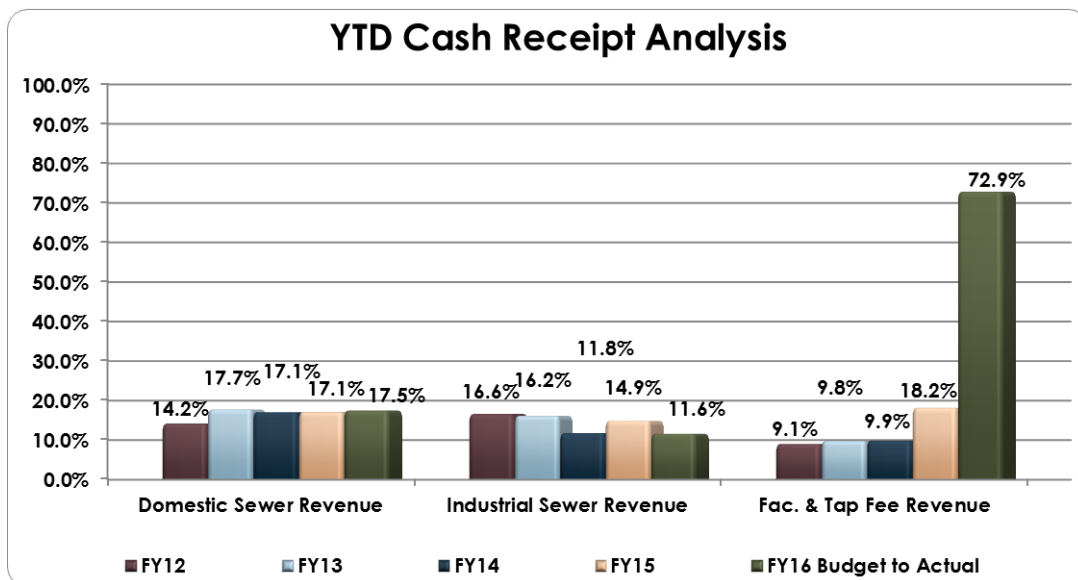
Page -4-

**METROPOLITAN SEWERAGE DISTRICT  
ANALYSIS OF CASH RECEIPTS  
As of August 31, 2015**



**Monthly Cash Receipts Analysis:**

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



**YTD Actual Revenue Analysis:**

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



**Board Meeting:**

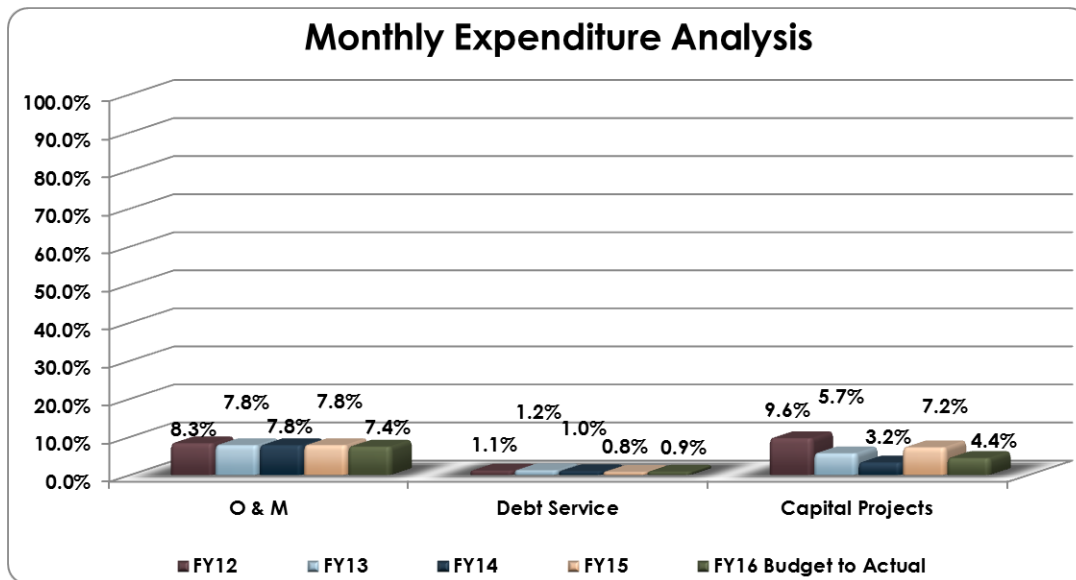
October 21, 2015

**Subject:**

Cash Commitment/Investment Report-Month Ended August 31, 2015

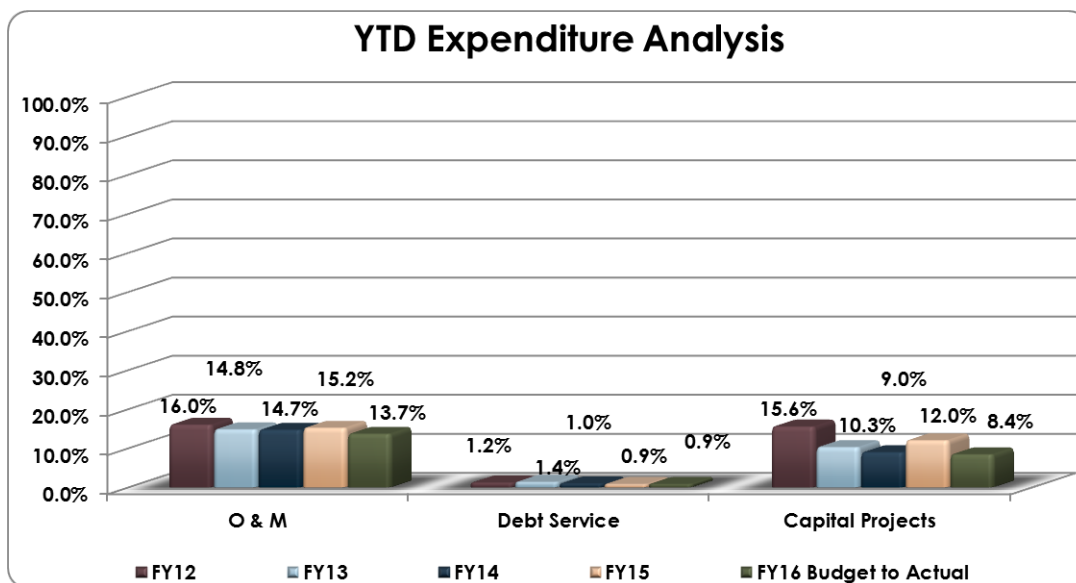
Page -5-

**METROPOLITAN SEWERAGE DISTRICT  
ANALYSIS OF EXPENDITURES  
As of August 31, 2015**



**Monthly Expenditure Analysis:**

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



**YTD Expenditure Analysis:**

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

**Board Meeting:**

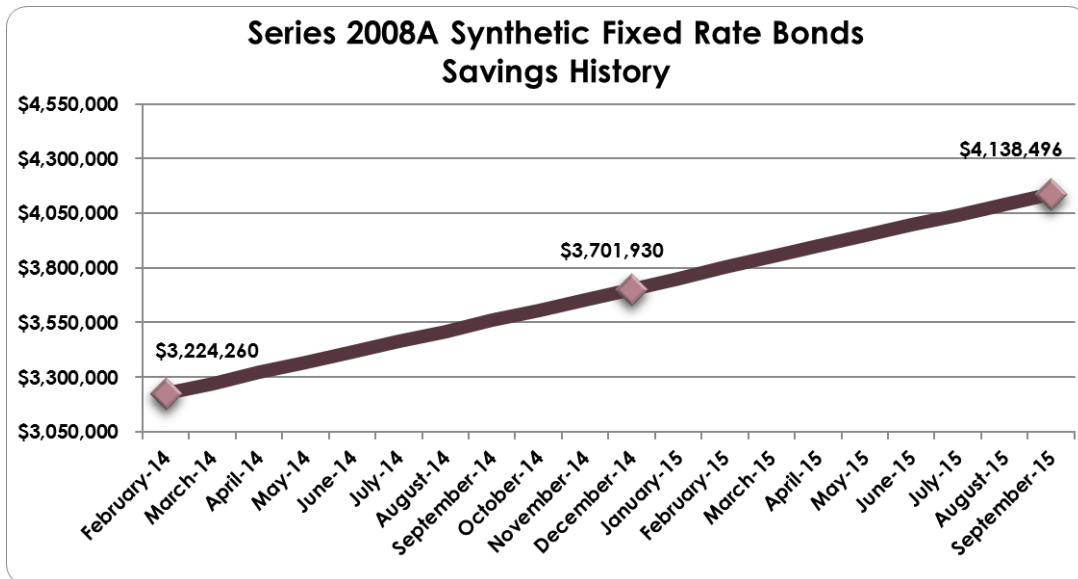
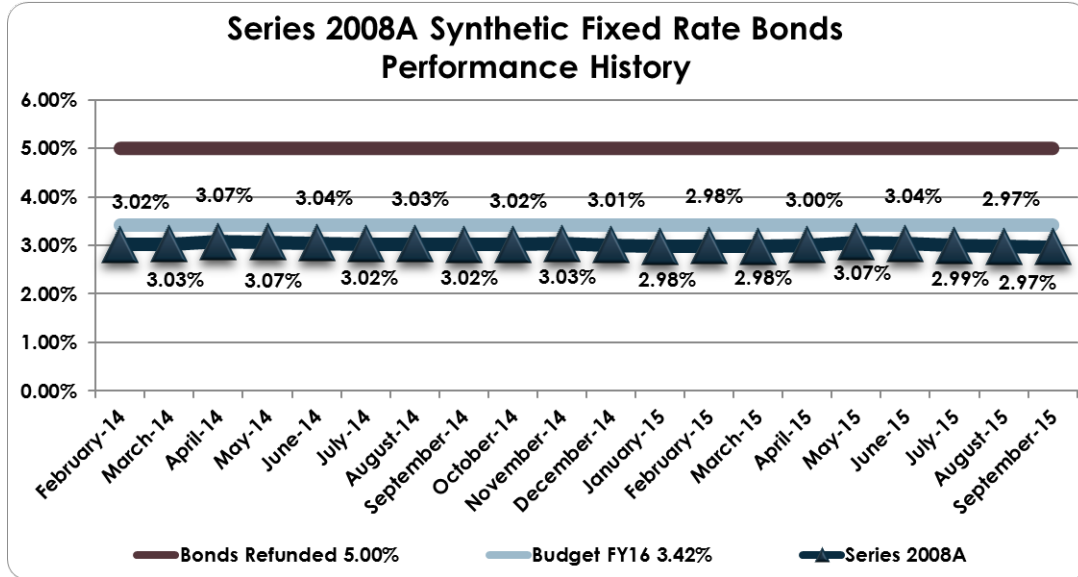
October 21, 2015

**Subject:**

Cash Commitment/Investment Report-Month Ended August 31, 2015

Page -6-

**METROPOLITAN SEWERAGE DISTRICT  
VARIABLE DEBT SERVICE REPORT  
As of September 30, 2015**



**Series 2008A:**

- Savings to date on the Series 2008A Synthetic Fixed Rate Bonds is \$4,138,496 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 \$5,133,930 to terminate the existing Bank of America Swap Agreement.

# **STATUS REPORTS**

**MSD System Services In-House Construction  
FY 15-16 PROJECTS**

PROJECT NAME		ESTIMATED FOOTAGE	ESTIMATED PROJECT DATES	WO#	CREW	COMPLETION DATE	ACTUAL FOOTAGE	Notes
Deanwood Circle Phase 2	Asheville	618	5/14/15 - 7/1/15	225521	631	7/1/2015	618	complete
590 Haywood Rd	W. Asheville	178	7/16/2015	225966	631	7/16/2015	180	complete
Rathfarham Circle	Arden	520	7/5/15 - 8/1/15	212218	631	7/23/2015	522	complete
26 Claxton Place	Asheville	121	7/29/2015	224709	631	7/29/2015	121	complete
418 Cedar Lane	Royal Pines	815	7/8/15 - 8/7/15	220605	647	8/6/2015	862	complete
Locust Court Rehab	Royal Pines	100	8/10/15-8/14/15	223590	647	8/17/2015	98	complete
Mount Claire Sewer Rehabilitation	Asheville	656	8/3/15-8/21/15	216742	631	8/21/2015	664	complete
New Salem Road Rehabilitation	Swannanoa	50	8/17/15-8/21/15	226294	647	8/18/2015	34	complete
4 Hawthorne Lane	Montford/Asheville	178	8/24/15 - 9/2/15	226596	631	9/2/2015	178	complete
355 Lakeshore Drive	N. Asheville	300	8/19/15 - 9/5/15	225006	647	9/4/2015	347	complete
Covington Street Improvements	W. Asheville	295	9/8/15-9/11/15	200349	631	9/4/2015	197	complete
83 Grayclyn Rd	Asheville	380	9/8/15-10/1/15	220546	647	9/24/2015	492	complete
Panola Street	Asheville	360	9/14/15 - 10/16/15	225178	631			In construction
Robindale Ave	Asheville	850	9/25/15 - 11/2/15	45877	647			In construction
Celia Place at Bond Street	Asheville	526	10/19/15 - 11/13/15	227752	TBA			ready for construction
Winnfred Street	W. Asheville	420	11/3/15 - 11/30/15	208234	TBA			ready for construction
Hunt Hill Place	Asheville	786	FY 15-16	46650	TBA			ready for construction
School Road at Cranford Road	W. Asheville	360	FY 15-16	224943	TBA			ready for construction, MSD Project 2014084
Sareva Place	N. Asheville	863	FY 15-16	20330	TBA			ready for construction
Starnes Avenue at Broadway Street	Asheville	400	FY 15-16	208325	TBA			ready for construction
18 Crestland Road	Asheville	270	FY 15-16	46826	TBA			ready for construction
Carjen Avenue	N. Asheville	918	FY 15-16	20331	TBA			ready for construction
111 Compton Drive	Asheville	360	FY 15-16	470614	TBA			In design
School Road at Woodland	W. Asheville	350	FY 15-16	224993	TBA			In design
149 Weston Rd	Arden	210	FY 15-16	225004	TBA			In design
Asheville County Club Phase 1	N. Asheville	1665	FY 15-16	225191	TBA			In design
Asheville Country Club Phase 2	N. Asheville	4030	FY 15-16	225192	TBA			In design
Spears Avenue Rehabilitation	Asheville	300	FY 15-16	225197	TBA			In design
Seventh St	Black Mountain	200	FY 15-16	225198	TBA			In design
Biltmore Avenue at Bryson Street	Asheville	200	FY 15-16	225195	TBA			In design



## CONSTRUCTION TOTALS BY DATE COMPLETED - Monthly

From 7/1/2015 to 8/31/2015

	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 2015	31	7	87	489	32	12	0	91	1116	408	13	1,057	2672
August 2015	27	7	84	418	12	11	6,757	377	307	280	18	1,378	2342
<b>Grand Totals</b>	<b>58</b>	<b>14</b>	<b>171</b>	<b>907</b>	<b>44</b>	<b>23</b>	<b>6,757</b>	<b>468</b>	<b>1423</b>	<b>688</b>	<b>31</b>	<b>2,435</b>	<b>5014</b>

\* Used to calculate Total Rehab Footage



## PIPELINE MAINTENANCE TOTALS BY DATE COMPLETED - Monthly

July 01, 2015 to August 31, 2015

	Main Line Wash Footage	Service Line Wash Footage	Rod Line Footage	Cleaned Footage	CCTV Footage	Smoke Footage	SL-RAT Footage
<b>2015</b>							
<b>July</b>	98,340	1,112	3,630	101,970	35,280	18,250	7,999
<b>August</b>	65,325	1,906	7,190	72,515	24,728	0	13,969
<b>Grand Total:</b>	<b>163,665</b>	<b>3,018</b>	<b>10,820</b>	<b>174,485</b>	<b>60,009</b>	<b>18,250</b>	<b>21,968</b>
<b>Avg Per Month:</b>	<b>81,833</b>	<b>1,509</b>	<b>5,410</b>	<b>87,243</b>	<b>30,004</b>	<b>9,125</b>	<b>10,984</b>



## CUSTOMER SERVICE REQUESTS

### Monthly - All Crews

CREW	MONTH	JOBS	AVERAGE RESPONSE TIME	AVERAGE TIME SPENT
<b>DAY 1ST RESPONDER</b>				
	July, 2015	80	32	38
	August, 2015	110	31	45
		<b>190</b>	<b>31</b>	<b>42</b>
<b>NIGHT 1ST RESPONDER</b>				
	July, 2015	14	19	25
	August, 2015	22	22	28
		<b>36</b>	<b>20</b>	<b>27</b>
<b>ON-CALL CREW *</b>				
	July, 2015	28	39	46
	August, 2015	24	48	30
		<b>52</b>	<b>43</b>	<b>39</b>
<b>Grand Totals:</b>		<b>278</b>	<b>32</b>	<b>39</b>

\* On-Call Crew Hours: 10:30pm-7:30am Monday-Friday, Weekends, and Holidays

**CAPITAL IMPROVEMENT PROGRAM**

**STATUS REPORT SUMMARY**

**October 14, 2015**

PROJECT	LOCATION OF PROJECT	CONTRACTOR	AWARD DATE	NOTICE TO PROCEED	ESTIMATED COMPLETION DATE	*CONTRACT AMOUNT	*COMPLETION STATUS (WORK)	COMMENTS
BROADVIEW AVENUE	Oakley	Buckeye Bridge	7/16/2014	9/8/2014	10/9/2015	\$1,127,961.19	100%	Project is complete and in final close out.
CLAYTON ROAD PUMP STATION	Skyland	J.S. Haren Company	11/19/2014	2/23/2015	11/6/2015	\$192,500.00	50%	Pump Station and piping work is complete as of 10-12-15. Site restoration work is ongoing. All site work is anticipated to be complete by November 6, 2015.
HILLIARD AVENUE @ ASTON PARK	Asheville	Buckeye Bridge, LLC	8/19/2015	10/12/2015	3/10/2016	\$542,732.50	0%	No work has begun yet.
MELODY CIRCLE	Swannanoa	Terry Brothers	7/15/2015	8/3/2015	1/30/2016	\$954,087.50	50%	Project is progressing on schedule.
SHADOWLAWN DRIVE PHASE I	Asheville	Buchanan & Sons	12/17/2014	1/26/2015	10/30/2015	\$923,946.00	98%	Contractor is working on punch list items.
WRF - INCINERATOR SYSTEM REHABILITATION AND EMISSIONS UPGRADES	Woodfin	Haren Construction Company	2/18/2015	3/25/2015	2/23/2016	\$4,624,000.00	15%	Scrubber support structure and scrubber/venturi in place. Piping is being run for supply and waste of same. Refractory lined piping is nearly ready for installation. All appear to be on schedule for shutdown of the process October 15th.
WRF - INCINERATOR BUILDING - MCC REPLACEMENT	Woodfin	Haren Construction Company	N/A	N/A	N/A	\$236,000.00	10%	This project is being done as part of the Incinerator Rehab project, via Change Order. Demo ongoing. Equipment pad poured in motor control room. MCC's delivered.
WRF - INFLUENT PUMP STATION REHABILITATION: AFD REPLACEMENT	Woodfin	M.B. Haynes	8/19/2015	10/5/2015	5/2/2016	\$428,370.00	1%	Submittal process underway. Walls to IPS cut and ready for conduits. Masonry work has begun and building is expected to be set in approximately 2 weeks.

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



## Planning & Development Project Status Report

### Active Projects

October 21, 2015

#	Project Name	Project Number	Work Location	Units	LF	Pre-Construction Conference Date	Comments
1	Governor's Western Residence	2014100	Buncombe Co.	Comm.	636	7/22/2015	Installing
2	Greenwood Park Phase 1	2014067	Weaverville	7	283	9/1/2015	Final Inspection complete, awaiting close-out docs
3	Rivermill Lofts Relocation	2014125	Asheville	254	314	8/21/2015	Testing wait period
4	Givens Gerber Park	2014065	Buncombe Co.	260	357	8/7/2015	Testing
5	Hawthorne South	2014130	Asheville	250	400	8/7/2015	Testing
6	Ingles - Smokey Park Highway	2013135	Asheville	Comm.	1,289	4/11/2014	Waiting on final inspection
7	Conestee	2014149	Asheville	7	113	8/7/2015	Pre-con held, ready for construction
8	Audubon Apts. Phase 2	2014027	Buncombe Co.	86	16	5/27/2015	Waiting on final inspection
9	Hunt Hill Apartments	2013111	Asheville	180	1,729	3/5/2014	Waiting on final inspection
10	Rosebriar	2007005	Black Mountain	12	309	8/28/2014	Waiting on final inspection
11	Ventana	2014085	Woodfin	100	5,430	8/12/2014	Partial final inspection complete.
12	Montreat Sports Complex	2015102	Montreat	Comm.	630	8/7/2015	Final Inspection complete, awaiting close-out docs
13	Dilworth Apartments	2015001	Asheville	168	950	8/3/2015	Waiting on final inspection
14	Isaac Dickson School Relocation	2013033	Asheville	School	504	1/13/2014	Waiting on final inspection
15	Gibson Road (aka Four Seasons)	2014138	Asheville	3	137	9/11/2015	Testing
16	Roberts Farm Phase 1	2015056	Black Mountain	250	1,165	7/29/2015	Installing
17	First Baptist Relocation	2015032	Asheville	Comm.	333	7/21/2015	Waiting on final inspection
18	Biltmore Lake Block "I"	2014128	Buncombe Co.	19	1,676	3/31/2015	Installing
19	Creekside Cottages	2014095	Buncombe Co.	7	504	3/12/2015	Waiting on final inspection
20	Crossings at Beaverdam	2014150	Woodfin	Comm.	119	2/18/2015	Waiting on final inspection
21	Creekside Village Phase 2	2014088	Weaverville	145	2,051	8/7/2015	Installing
22	Busbee Mountain	2007181	Asheville	9	580	9/29/2014	Testing
23	Country Inn & Suites - Westgate	2014089	Asheville	Comm.	204	1/22/2015	Waiting on final inspection
24	Burk Street - Phase III	2014079	Asheville	7	111	11/20/2014	Testing
25	Dillingham Woods	2014048	Asheville	27	375	3/4/2015	Installing
26	790 Riceville Road	2014078	Asheville	8	1,620	3/3/2015	Testing
27	Ramble Block "E"	2015030	Buncombe Co.	22	1,357	7/29/2015	Waiting to test
28	Haw Creek - Waters Road	2014086	Asheville	20	643	7/28/2015	Testing
29	Asheville Middle School	2013125	Asheville	School	214	9/30/2014	Waiting on final inspection
30	Robinhood Relocation	2013107	Asheville	5	230	7/23/2015	Installing
31	Lakeside Meadows	2013067	Weaverville	25	1,096	1/16/2015	Waiting on final inspection
32	Crest Mountain Phase 3B	2013041	Woodfin	69	1,329	10/15/2013	Waiting on final inspection
33	Evolve Mountain View	2013105	Asheville	148	347	10/21/2014	Punch-list pending
34	26 Carl Alwin Place	2014091	Buncombe Co.	Comm.	246	5/1/2015	Final Inspection complete, awaiting close-out docs
35	Bojangles - Smokey Park	2014124	Buncombe Co.	Comm.	382	8/18/2015	Installing
36	Pisgah View Subdivision	2015120	Buncombe Co.	6	176	9/11/2015	Pre-con held, ready for construction
37	Serenity Falls Subdivision	2015055	Woodfin	45	2,583	9/18/2015	Installing
38	26 Carl Alwin Place	2014091	Buncombe Co.	Comm.	246	5/1/2015	Final Inspection complete, awaiting close-out docs
			<b>TOTAL</b>	2,139	30,684		