

# Metropolitan Sewerage District

OF BUNCOMBE COUNTY, NORTH CAROLINA

# **MEETING NOTICE**

The Capital Improvement Program Committee of the Metropolitan Sewerage District will meet on

Thursday, April 25, 2024 at 9:00 a.m.

Questions? Please contact Pam Nolan at 225-8268, or pnolan@msdbc.org, for additional information.

~ Protecting Our Natural Resources ~



# Metropolitan Sewerage District of Buncombe County, NC

AGENDA FOR: April 25, 2024

TIME: 9:00 A.M.

**LOCATION:** In-person Meeting

presented from MSD Administration Bldg. 2028 Riverside Drive

Woodfin, N.C.

	Agenda Item	Presenter
1	Call to Order	Bob Watts, Chairman
2	Highlights of the Current and Proposed Capital Improvement Program	Tom Hartye - General Manager Hunter Carson - Director of Engineering
3	Capital Improvement Program Priorities & Review of Ten-Year CIP Document	Tom Hartye - General Manager Hunter Carson - Director of Engineering
4	Adjourn	Bob Watts, Chairman
	Date of Next Meeting: To be Announced	

#### Committee Members:

#### MSD Board Members

Bob Watts - Chairman Matt Ashley William Lapsley Chris Pelly Nathan Pennington

#### **Member Agencies**

City of Asheville Town of Biltmore Forest Town of Black Mountain Buncombe County Henderson Co. Town of Montreat Town of Weaverville Town of Woodfin Woodfin Sanitary Water & Sewer District

Debra Campbell Jonathan Kanipe Josh Harrold Avril Pinder Marcus Jones, P.E. Ben Blackburn Selena Coffey Shannon Tuch Seth Eckard

# Metropolitan Sewerage District of Buncombe County Capital Improvement Program Committee

COMMITTEE MEETING DATE: 4/25/24 BOARD MEETING DATE: 5/15/24

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

PREPARED BY: Hunter Carson, P.E. - Director of Engineering

**SUBJECT:** Highlights of the Current and Proposed Capital Improvement Program

BACKGROUND: ~ Collection System ~

The District's goal is to rehabilitate approximately 40,000 LF of sewer line each year. This is accomplished by using both in-house forces and outside contractors. Four new collection system projects have been added to the CIP for FY24-25 and beyond. Within the ten-year program, there are 80 collection system projects which range in length from 150 LF to over 18,000 LF.

The District's Pipe Rating Program is used to objectively prioritize collection system projects within the CIP each fiscal year. This rating takes into account overflow history, structural issues, customer service requests, and impacts to surface waters at each project location. Applying these inputs into a weighted matrix, the Pipe Rating Program helps staff identify the likelihood and consequence of pipe failure for each project.

Significant collection system projects currently underway or completed over the past year are Cherokee Road, Buchanan Avenue, CIPP Lining Contract No. 9, and Christian Creek Interceptor. Combined with in-house and developer-constructed rehabilitation projects, the total rehabilitated footage anticipated for FY23-24 is approximately 34,090 LF.

The Christian Creek Interceptor replacement project is a multi-year project that began in March 2022 to replace approximately 12,226 LF of old, undersized interceptor sewer in East Asheville. The project is complex and requires multiple bores underneath NCDOT roads (including I-40) and Norfolk Southern Railroad. Anticipated project completion is June 2024.

Design of the new Weaverville Pump Station and force main was completed this fiscal year and the project was publicly bid in December 2023. The project is currently in a 6-month "Construction Administration" period designed to procure long-lead time equipment and materials prior to mobilizing construction equipment to the site. The Construction Administration period is running in parallel with right-of-way acquisition which is anticipated to be complete early in FY24-25. The pump station serves Weaverville and the Reems Creek Valley and is being replaced and upsized to accommodate anticipated growth through the year 2070. Total project costs exceed \$24 million.

The Carrier Bridge Pump Station (the District's largest) will also be replaced in the near future. Carrier Bridge is a regional pump station which serves large areas of Buncombe County and Northern Henderson County. This significant \$85 million project will replace an aging pump station first constructed in the 1960's and upgraded multiple times over the years. Final design is underway and construction is expected to begin Fall 2025.

#### ~ Water Reclamation Facility ~

The District is preparing for major capital investments at the Water Reclamation Facility within the ten-year CIP program and beyond. The most significant project is the replacement of the plant's biological treatment process - the Rotating Biological Contactors (RBCs). These were installed in the 1980s and have functioned well over the years but are approaching the end of their functional lifespan. In addition, the timing of their replacement is also driven by a NCDEQ regulatory requirement for ammonia removal by December 2037.

MSD is currently completing a Preliminary Engineering Report which will involve process selection and preliminary design for the replacement technology. This will be followed by final design and construction. Replacement of the RBCs will be a phased project over several years and is currently projected at over \$200 million. Until this project is completed, the existing system must continue to run efficiently and meet compliance effluent limits. This fiscal year, all non-functional RBC units were removed to improve hydraulics through the treatment basins and to prepare for replacement of the failed units next fiscal year.

Another major project in the ten-year CIP is the Solids Handling Capacity Improvements project, currently budgeted at \$80 million. This project will provide redundancy and additional capacity to the existing fluidizing bed incinerator and solids handling processes. The Solids Handling Preliminary Engineering Report (to be completed early in FY24-25) will provide a phased plan and CIP recommendations for upgrading solids thickening, dewatering, and disposal to accommodate future growth and solids generation.

Construction of these improvements will not begin until FY29-30. Up until that time, the existing incinerator will undergo several rehabilitation projects, including a full rebuild of the vessel's interior in FY25-26. Earlier this month, the incinerator heat exchanger and preheat burner fuel system were replaced.

Staff will present information on a selection of significant projects within the District's ongoing Capital Improvement Program, as well as the proposed CIP Budget for FY24-25 and beyond.

Special thanks go to the Engineers, Angel Banks, Cheryl Rice, and the GIS Section for the many hours of preparation necessary to complete the District's annual CIP budget document.

**STAFF RECOMMENDATION:** This is presented as information only. No action by the Committee is required.

# Metropolitan Sewerage District of Buncombe County Capital Improvement Program Committee

COMMITTEE MEETING DATE: 4/25/24 BOARD MEETING DATE: 5/15/24

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

PREPARED BY: Hunter Carson, P.E. - Director of Engineering

**SUBJECT:** Capital Improvement Program Priorities & Review of Ten-Year CIP Document

BACKGROUND: Enclosed are the Fiscal Year 2025 budget recommendations for the District's

Capital Improvement Program (CIP), as well as projections for the following nine

fiscal years.

A budget summary showing the entire program is included in the committee package. The full budget document, with detailed information for each project, is posted on the main page of the District's website (www.msdbc.org/cip.php). It is also available to the public for viewing and comment.

#### **Capital Improvement Program**

The District's Capital Improvement Program is divided into the following six areas, generally based upon type of project or expense category:

- a. Interceptor & Wet Weather Rehabilitation
- b. General Sewer Rehabilitation
- c. Private Sewer Rehabilitation
- d. Treatment Plant, Pump Stations, and General Capital Improvements
- e. Design, ROW, and Construction Management Expenses
- f. Reimbursement Projects

In accordance with the State Collection System Permit, the District maintains a CIP which details necessary system improvements. The state permit requires a minimum of three years in the CIP; however, the District utilizes a ten-year window for better planning and financial projections. The District's goal is to rehabilitate approximately 40,000 LF of the collection system each year. These projects fall under Interceptor & Wet Weather Rehabilitation, General and Private Sewer Rehabilitation, and Pump Station Rehabilitation when sewer force mains are replaced.

Major plant projects have been guided by the 2015 Facility Plan, and include the Plant Headworks, High Rate Primary Treatment, and Biological Treatment projects. The Plant Headworks and High Rate Primary Treatment were completed in 2019 and 2023, respectively. These projects, totaling approximately \$28 million, will improve plant performance. Replacement of the RBCs is the final major plant project recommendation of the Facility Plan, and is regulatory-driven. The Biological Alternatives Evaluation will select the most appropriate technology for replacing the RBCs.

The Solids Handling PER will provide phased recommendations for solids handling processes at the plant, including the replacement of MSD's fluidizing bed incinerator.

Reimbursement Projects are sewer extensions that qualify for developer reimbursement under the District's Extension Policy. The FY24-25 CIP includes two Developer Reimbursement projects.

#### **Proposed Ten-Year Capital Improvement Program Document**

Listed within this document are the specific areas where proposed projects are to occur. Total expenditures for the current Fiscal Year 2024 are estimated at \$22.0 million.

The proposed capital budget for FY23-24 is \$37,475,712 which includes a proposed contingency of \$1,000,000. This level of contingency continues to provide sufficient reserves for the District's capital program.

The proposed budget for Reimbursement Projects is \$183,000.

Total project costs over the ten-year window are estimated at \$610.7 million. Costs are updated each year during budget preparation in order to accurately reflect current bid pricing and market conditions. Included in future years is an inflation factor of 3.35%, which is a ten-year average of the annual increases in the ENR Construction Cost Index. This factor is also updated each year.

Staff will review the proposed CIP document at the meeting and entertain questions at that time.

STAFF RECOMMENDATION:

Endorsement of the Capital Improvement Program budget for Fiscal Year 2024-2025.

#### **COMMITTEE RECOMMENDATION:**

### TEN YEAR CAPITAL IMPROVEMENT PROGRAM

PROJECT NAME	LOCATION OF PROJECT		PROJECT NUMBER	PIPE RATING	PROJE	T TOTAL SE ESTIMATED COS	TOTAL EST. EXPENDS	FY 24	-25	FY 25	-26	FY 26-27	Fì	27-28	FY 28	3-29	FY 29	-30	FY 30	0-31	FY 31	I-32	FY:	32-33	FY 33	-34
							THRU FY 24	BUDGET	FOOTAGE	BUDGET	FOOTAGE	BUDGET FOOT	GE BUDGET	FOOTAGE	BUDGET	FOOTAGE	BUDGET	FOOTAGE	BUDGET	FOOTAGE	BUDGET	FOOTAGE	BUDGET	FOOTAGE	BUDGET	FOOTAGE
INTERCEPTOR AND WET W	EATHER REHAB	ILITATI	ON		•	•	•									•		•	•	•	•	•	•			
Beaverdam Creek WW (CDM #10)	Buncombe County	BD	2001191		14 5	500 \$2,477,0	00 \$0	\$1		\$0		\$0	\$38,5	00	\$18,00	0	\$217,500		\$2,00	0	\$2,201,00	5,50	0	60	\$0	
Biltmore WW (CDM #3)	Biltmore	BD	2001192		24 2	200 \$1,192,40	00 \$0	\$1		\$0		\$0		\$0	\$15,40	0	\$158,400		\$	0	\$1,018,60	2,20	0	\$0	\$0	
Christian Creek Interceptor	Buncombe County	нс	2011110		24 2	000 \$8,411,8	\$8,036,462	\$375,392		\$0		\$0		\$0	\$	0	\$0		\$	0	\$	o		\$0	\$0	
Dingle Creek Interceptor	Asheville	TH	2006010		15 7	871 \$3,120,9	\$92,957	\$1		\$0		\$0		\$0	\$	D	\$0		\$	0	\$	0		\$0	\$3,028,000	7,871
Lower Swannanoa Interceptor	Asheville	BD	2004040		9 6	980 \$18,538,3	9 \$203,717	\$47,000		\$436,250		\$30,000	\$100,0	00	\$8,850,20	3,490	\$8,871,206	3,490	\$	0	\$	0		§0	\$0	
South Swannanoa WW (CDM #4)	Asheville	BD	2001195		36 8	040 \$5,911,00	00 \$0	\$1	,	\$57,000		\$6,000		\$0	\$1,529,00	2,000	\$4,319,000	6,040	\$	0	\$	0		\$0 O	\$0	1
Town Branch Int - Phase III	Asheville	DP	2017158		14 3	600 \$2,756,0	00 \$0	\$1	,	\$0		\$0		\$0	\$	0	\$0		\$25,00	0	\$8,00	0	\$210,0	00	\$2,513,000	3,600
SUBTOTAL					36	191 \$42,407,5	\$8,333,136	\$422,39	. 0	\$493,250	0	\$36,000	0 \$138,	00	\$10,412,60	5,490	\$13,566,106	9,530	\$27,00	0 0	\$3,227,60	7,70	\$210,0	00 0	\$5,541,000	11,471
Inflation per ENR Const. Cost Index	3.35%					1.00	1.0000	1.000		1.0335		1.0681	1.10	39	1.140	9	1.1791		1.218	6	1.259	4	1.30	16	1.3452	
SUBTOTAL with inflation					36	191 \$42,407,5	\$8,333,136	\$422,393	0	\$509,774	0	\$38,452	0 \$152,8	91	\$11,879,58	7 5,490	\$15,995,861	9,530	\$32,90	2 0	\$4,064,93	7,70	\$273,3	40 0	\$7,453,881	11,47

					1															
PROJECT NAME	LOCATION OF PROJECT		PROJECT NUMBER	PIPE RATING	PROJECT FOOTAGE	TOTAL ESTIMATED COST	TOTAL EST. EXPENDS	FY 24-	25	FY 25	-26	FY 26-27	FY 2	7-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32	FY 32-33	FY 33-34
							THRU FY 24	BUDGET	FOOTAGE	BUDGET	FOOTAGE	BUDGET FOOTAGE	BUDGET	FOOTAGE	BUDGET FOOTAGE	BUDGET FOOTAG	E BUDGET FOOTAG	BE BUDGET FOOTAGE	BUDGET FOOTAGE	BUDGET FOOTAGE
GENERAL SEWER REHABIL	LITATION																			
Antique Lane @ Canie Creek	Asheville	DP	2022023	2-	6,039	\$2,449,500	\$0	\$0		\$45,000		\$0	\$31,000		\$201,500	\$0	\$2,172,000 6,0	39 \$0	\$0	\$0
Arlington Street	Asheville	DP	2015008	2	3,230	\$1,452,500	\$0	\$0		\$0		\$0	\$0		\$0	\$36,500	\$0	\$1,416,000 3,230	\$0	\$0
Asheville Rd @ US Hwy 70	Swannanoa	TH	2023005	1	5,470	\$2,456,510	\$0	\$0		\$0		\$0	\$0		\$43,760	\$15,000	\$136,050	\$0	\$2,261,700 5,470	\$0
Atkins Street	Arden	BD	2014012		1,833	\$774,080	\$5,480	\$0		\$0		\$2,600	\$52,000		\$714,000 1,833	\$0	\$0	\$0	\$0	\$0
Avon Ave. @ Haywood Rd	West Asheville	BD	2021003	6	5 218	\$229,050	\$14,450	\$53,500		\$161,100	218	\$0	\$0		\$0	\$0	\$0	\$0	\$0	\$0
Beale Road at Copney Lane	Asheville	DP	2009129	4	5,430	\$2,327,525	\$24,025	\$20,000		\$217,500		\$47,000	\$2,019,000	5,430	\$0	\$0	\$0	\$0	\$0	\$0
Bellevue Road	S. Asheville	DP	2015175	4	1,100	\$594,600	\$9,600	\$57,000		\$528,000	1,100	\$0	\$0		\$0	\$0	\$0	\$0	\$0	\$0
Bent Tree Rd @ Old Toll Rd	Asheville	DP	2024034	N/	Α (	\$25,000	\$0	\$12,500		\$12,500		\$0	\$0		\$0	\$0	\$0	\$0	\$0	\$0
Braddock Way - PRP 20002	Asheville	TH	2006025	2	3,848	\$1,965,840	\$18,353	\$22,250		\$150,500		\$102,337	\$1,672,400	3,848	\$0	\$0	\$0	\$0	\$0	\$0
Calvin Trail @ Greybeard Trail	Asheville	TH	2021284	2	780	\$380,870	\$0	\$0		\$7,020		\$4,400	\$34,000		\$335,450 780	\$0	\$0	\$0	\$0	\$0
Central Ave. @ I-240	Asheville	SA	2014180	3	7 990	\$456,000	\$0	\$6,000		\$27,000		\$0	\$423,000	990	\$0	\$0	\$0	\$0	\$0	\$0
Chatham Road	Asheville	SA	2015019	4	1 1,330	\$597,925	\$4,800	\$0		\$44,500		\$1,000	\$0		\$547,625 1,330	\$0	\$0	\$0	\$0	\$0
Covewood Trail @ Chunns Cove Road	Asheville	DP	2021005	1	7 1,120	\$453,500	\$0	\$0		\$0		\$0	\$0		\$0	\$8,500	\$10,000	\$31,000	\$404,000 1,120	\$0
Cub Road	Asheville	TH	2018027	2	7 1,204	\$452,800	\$0	\$0		\$0		\$0	\$10,100		\$78,200	\$0	\$364,500 1,2	204 \$0	\$0	\$0
Dover St @ Merrimon Ave	Asheville	TH	2023006	2	223	\$117,300	\$0	\$0		\$1,900		\$1,700	\$12,000		\$0	\$101,700 23	23 \$0	\$0	\$0	\$0
Druid Drive	W. Asheville	SA	2020006	1	500	\$204,000	\$0	\$0		\$0		\$0	\$0		\$0	\$4,000	\$48,000	\$0	\$0	\$152,000 50
East Chestnut Ave @ Five Points	N. Asheville	SA	2015192	2	5,225	\$2,081,371	\$19,321	\$3,500		\$0		\$72,000	\$147,300		\$2,500	\$1,836,750 5,23	25 \$0	\$0	\$0	\$0
Edwards Ave @ US 70 Hwy	Swannanoa	BD	2021004	2	2,400	\$968,200	\$0	\$16,800		\$0		\$6,800	\$39,000		\$905,600 2,400	\$0	\$0	\$0	\$0	\$0
Elk Mountain Place	Woodfin	BD	2010094		4,137	\$1,739,955	\$236,610	\$1,503,345	4,137	\$0		\$0	\$0		\$0	\$0	\$0	\$0	\$0	\$0
Elk Park Drive - PRP 35001	Woodfin	SA	2006028	1	2,242	\$767,046	\$50,046	\$0		\$0		\$0	\$0		\$0	\$0	\$0	\$0	\$0	\$717,000 2,24
Fairmont Road	N. Asheville	DP	2015017	3	3,900	\$1,713,500	\$0	\$0		\$25,000		\$0	\$10,000		\$162,500	\$1,516,000 3,90	00 \$0	\$0	\$0	\$0
Forestdale Drive	S. Asheville	DP	2014002	3:	3 2,900	\$1,297,500	\$17,000	\$0		\$30,500		\$228,000	\$10,000		\$1,012,000 2,900	\$0	\$0	\$0	\$0	\$0
Four Inch Main - College Street	Asheville	SA	2012128	1	7 1,000	\$740,750	\$0	\$0		\$0		\$6,000	\$8,000		\$300,000	\$0	\$0	\$0	\$0	\$426,750 1,00
Harmony Lane	Asheville	DP	2016103	3	670	\$306,000	\$0	\$0		\$3,000		\$0	\$303,000	670	\$0	\$0	\$0	\$0	\$0	\$0
Hazel Mill Rd @ Richland St.	Asheville	SA	2014016	4	3,907	\$2,244,150	\$43,150	\$281,000		\$1,920,000	3,907	\$0	\$0		\$0	\$0	\$0	\$0	\$0	\$0
Hill Street @ Cross Place	Asheville	TH	2016249	4:	2 64	\$267,155	\$3,875	\$0		\$2,200		\$261,080 641	\$0		\$0	\$0	\$0	\$0	\$0	\$0
Howland Rd. @ Sunset Trail	Asheville	DP	2012134	4	3 994			\$5,000		\$66,000		\$404,000 994	\$0		\$0	\$0	\$0	\$0	\$0	\$0
Innsbrook Rd @ GPI	North Asheville	BD	2023256	3:	5,730	\$2,468,675		\$40,100		\$0		\$30,000	\$453,000		\$1,945,575 5,730	\$0	\$0	\$0	\$0	\$0
Johnston Blvd. @ Providence Rd.	W. Asheville	DP	2014013	3	7 2,000			\$0		\$12,000		\$71,000	\$823,000	2,000		\$0	\$0	\$0	\$0	\$0
Jonestown Road @ Riverside Drive	Woodfin	TH	2018028	5:	2 1,992			\$50,500		\$680,000		\$6,500	\$0	,,,,,,	\$0	\$0	\$0	\$0	\$0	\$0
Joyner Ave @ Amboy Rd	Asheville	SA	2021010	6	3 1.000		,,	\$317,000	1.000	\$0	.,502	\$0	\$0		\$0	\$0	\$0	\$0	\$0	\$0

## TEN YEAR CAPITAL IMPROVEMENT PROGRAM

PROJECT NAME	LOCATION OF PROJECT	PROJ. PROJE				MATERICOST	TOTAL EST. EXPENDS	FY 24-25		FY 25-	26	FY 26-27		FY 27	7-28	FY 28-	-29	FY 29-	-30	FY 30-31	FY 31-32		FY 32-3	33	FY 33-	-34
							THRU FY 24	BUDGET FO	OTAGE	BUDGET	FOOTAGE	BUDGET FO	OOTAGE	BUDGET	FOOTAGE	BUDGET	FOOTAGE	BUDGET	FOOTAGE	BUDGET FOOTAGE	BUDGET FO	OOTAGE	BUDGET F	OOTAGE	BUDGET	FOOTAGE
GENERAL SEWER REHABILI	TATION contin	ued	<u> </u>		<u> </u>				<u> </u>																	
Kimberly Ave. @ Sedley Avenue	Asheville	TH 2018	029	51	2,947	\$1,093,525	\$42,725	\$124,800		\$926,000	2,947	\$0		\$0		\$0		\$0		\$0	\$0		\$0		\$0	
Lakeview @ Glen Falls Rd.	N. Asheville	DP 2014	007	22	3,070	\$1,552,500	\$6,000	\$0		\$18,000		\$0		\$25,500		\$390,000		\$0		\$1,113,000 3,070	\$0		\$0		\$0	
Lincoln Avenue	Asheville	BD 2013	103	6	1,415	\$609,570	\$2,870	\$0		\$0		\$0		\$0		\$0		\$0		\$606,700 1,415	\$0		\$0		\$0	
Lining Contract #10	Various	TH 2024	035	NA	10,000	\$3,000,000	\$0	\$0		\$0		\$3,000,000	10,000	\$0		\$0		\$0		\$0	\$0		\$0		\$0	
Logan Avenue	W. Asheville	SA 2017	256	48	2,150	\$1,104,500	\$24,700	\$149,500		\$930,300	2,150	\$0		\$0		\$0		\$0		\$0	\$0		\$0		\$0	
Lower Glendale Ave.	E. Asheville	BD 2012	083	23	2,716	\$1,448,850	\$6,650	\$0		\$0		\$0		\$0		\$16,800		\$47,000		\$0	\$1,378,400	2,716	\$0		\$0	
Manetta Rd. @ Johnson Dr.	N. Asheville	TH 2014	022	24	5,340	\$2,881,587	\$363,594	\$1,000		\$350,650		\$14,000		\$2,152,343	5,340	\$0		\$0		\$0	\$0		\$0		\$0	
McDowell St @ Lily Carmichael Dr.	Asheville	SA 2021	011	30	1,660	\$721,500	\$0	\$0		\$11,000		\$1,000		\$0		\$0		\$0		\$709,500 1,660	\$0		\$0		\$0	
Meadow Road @ Train Yard	Asheville	BD 2015	207	6	2,001	\$2,255,500	\$7,000	\$0		\$3,000		\$92,500		\$2,153,000	2,001	\$0		\$0		\$0	\$0		\$0		\$0	
Merrimon Ave. at Clearview Terrace	Asheville	TH 2007	012	6	500	\$313,950	\$6,044	\$0		\$0		\$0		\$0		\$0		\$0		\$3,250	\$69,656		\$0		\$235,000	500
Montford Ave. @ Montford Park	Asheville	BD 2017	144	59	1,129	\$680,225	\$16,725	\$99,000		\$564,500	1,129	\$0		\$0		\$0		\$0		\$0	\$0		\$0		\$0	
New Haw Creek Rd. @ Dogwood Grove	E. Asheville	SA 2014	021	31	3,000	\$980,775	\$4,925	\$3,600		\$50,750		\$16,000		\$1,000		\$0		\$904,500	3,000	\$0	\$0		\$0		\$0	
New Stock Road	Weaverville	DP 2015	011	45	9,020	\$3,159,500	\$36,000	\$37,000		\$49,500		\$3,037,000	9,020	\$0		\$0		\$0		\$0	\$0		\$0		\$0	
North Market Street	Asheville	SA 2014	019	20	1,064	\$443,300	\$3,875	\$0		\$0		\$0		\$0		\$0		\$0		\$0	\$1,925		\$437,500	1,064	\$0	
Oakland Drive @ Church Street	Black Mountain	DP 2015	177	27	575	\$244,000	\$0	\$0		\$0		\$0		\$3,500		\$4,000		\$34,000		\$202,500 575	\$0		\$0		\$0	
Old Toll Rd. @ Blue Briar Rd.	Asheville	TH 2018	032	19	185	\$80,500	\$0	\$0		\$0		\$0		\$0		\$3,000		\$500		\$1,500	\$8,000		\$67,500	185	\$0	
Old Turnpike Rd @ Azalea	Arden	TH 2023	255	35	1,168	\$445,000	\$0	\$10,000		\$65,000		\$11,000		\$359,000	1,168	\$0		\$0		\$0	\$0		\$0		\$0	
Parkwood Ave.	Woodfin	TH 2021	286	31	1,165	\$451,335	\$0	\$0		\$0		\$0		\$11,485		\$85,350		\$0		\$354,500 1,165	\$0		\$0		\$0	
Riverside Dr @ Woodfin Ave	Woodfin	SA 2019	005	15	684	\$292,500	\$0	\$0		\$0		\$0		\$7,000		\$21,000		\$0		\$2,000	\$0		\$0		\$262,500	684
Riverview Drive	Asheville	BD 2013	104	54	2,302	\$992,980	\$7,880	\$0		\$0		\$985,100	2,302	\$0		\$0		\$0		\$0	\$0		\$0		\$0	
Rosewood Ave. @ Riverside Cemetery	Montford	BD 2019	023	25	180	\$90,000	\$0	\$0		\$0		\$0		\$1,300		\$2,600		\$24,000		\$62,100 180	\$0		\$0		\$0	
Royal Pines Drive - PRP 47009	Arden	SA 2007	020	28	7,050	\$2,738,850	\$10,100	\$0		\$30,000		\$6,000		\$39,000		\$2,653,750	7,050	\$0		\$0	\$0		\$0		\$0	
Sand Hill Road @ Baker Place	W. Asheville	SA 2015	223	56	1,582	\$941,450	\$118,950	\$822,500	1,582	\$0		\$0		\$0		\$0		\$0		\$0	\$0		\$0		\$0	
Starmount Dr	Asheville	SA 2023	007	19	775	\$274,600	\$0	\$0		\$6,000		\$14,100		\$20,000		\$0		\$0		\$234,500 775	\$0		\$0		\$0	
Stratford Road	N. Asheville	DP 2015	013	16	1,820	\$891,000	\$0	\$0		\$0		\$0		\$0		\$12,500		\$19,000		\$202,000	\$0		\$657,500	1,820	\$0	
Sulphur Springs Rd. @ Covington St.	W. Asheville	DP 2014	006	44	1,350	\$843,500	\$7,500	\$18,000		\$180,000		\$32,000		\$606,000	1,350	\$0		\$0		\$0	\$0		\$0		\$0	
Sweeten Creek Rd. @ Buck Shoals Rd.	S. Asheville	BD 2014	015	51	790	\$519,936	\$52,636	\$467,300	790	\$0		\$0		\$0		\$0		\$0		\$0	\$0		\$0		\$0	
Sweeten Creek Rd @ Holiday Dr	Asheville	DP 2022	022	22	3,053	\$1,299,000	\$0	\$0		\$0		\$0		\$0		\$25,000		\$162,000		\$0	\$1,112,000	3,053	\$0		\$0	
Tunnel Rd @ Pleasant Ridge Dr	E. Asheville	SA 2019	006	17	150	\$64,250	\$0	\$0		\$0		\$1,500		\$1,000		\$0		\$0		\$0	\$0		\$61,750	150	\$0	
US 70 @ Jordan Road	Swannanoa	DP 2015	014	21	4,550	\$2,146,500	\$0	\$0		\$0		\$0		\$0		\$30,000		\$6,000		\$263,000	\$30,000		\$1,817,500	4,550	\$0	
Walnut St. @ N. Lexington Ave.	Asheville	DP 2017	008	42	1,300	\$614,526	\$526	\$0		\$8,000		\$0		\$606,000	1,300	\$0		\$0		\$0	\$0		\$0		\$0	
Waynesville Ave. @ Brownwood Ave.	W. Asheville	SA 2014	183	28	3,022	\$1,429,500	\$0	\$0		\$19,500		\$28,000		\$467,500		\$0		\$914,500	3,022	\$0	\$0		\$0		\$0	
W. City View Dr @ Riverside Dr	Asheville	DP 2024	020	67	735	\$649,500	\$0	\$34,500		\$615,000	735	\$0		\$0		\$0		\$0		\$0	\$0		\$0		\$0	
Wildwood Park	Weaverville	DP 2015	194	16	1,542	\$717,000	\$2,380	\$0		\$0		\$0		\$0		\$0		\$0		\$6,620	\$0		\$708,000	1,542	\$0	
Wood Ave. @ Parker Rd.	Asheville	SA 2014	188	10	1,050	\$491,600	\$0	\$0		\$0		\$0		\$0		\$0		\$7,000		\$58,000	\$0		\$0		\$426,600	1,050
SSD Rehab. & Replacement	Various	MS 2002	101	N/A	150,000	\$51,425,000	\$5,142,500	\$5,142,500	15,000	\$5,142,500	15,000	\$5,142,500	15,000	\$5,142,500	15,000	\$5,142,500	15,000	\$5,142,500	15,000	\$5,142,500 15,000	\$5,142,500	15,000	\$5,142,500	15,000	\$5,142,500	15,000
Surveys for Design	Various	HC 2002	060	N/A	N/A	\$500,000	\$0	\$50,000		\$50,000		\$50,000		\$50,000		\$50,000		\$50,000		\$50,000	\$50,000		\$50,000		\$50,000	
SUBTOTAL				:	303,093	\$120,507,261	\$6,463,440	\$9,348,195	22,509	\$12,953,420	29,178	\$13,675,117	37,957	\$17,692,928	39,097	\$14,685,210	37,023	\$10,829,450	30,370	\$11,742,220 31,083	\$9,239,481	23,999	\$11,607,950	30,901	\$7,412,350	20,976
Inflation per ENR Const. Cost Index	3.35%					1.0000	1.0000	1.0000		1.0335		1.0681		1.1039		1.1409	<del>i i</del>	1.1791		1.2186	1.2594		1.3016		1.3452	
SUBTOTAL with inflation				;	303,093	\$120,507,261	\$6,463,440	\$9,348,195	22,509	\$13,387,360	29,178	\$14,606,697	37,957	\$19,531,300	39,097	\$16,754,138	37,023	\$12,769,056	30,370	\$14,309,126 31,083	\$11,636,462	23,999	\$15,109,127	30,901	\$9,971,265	20,976

### TEN YEAR CAPITAL IMPROVEMENT PROGRAM

PROJECT NAME	LOCATION OF PROJECT		PROJECT NUMBER	PIPE RATING	PROJECT FOOTAGE	TOTAL ESTIMATED COST	TOTAL EST. EXPENDS	FY 24-	25	FY 25-	-26	FY 26-:	27	FY 2	7-28	FY 28	-29	FY 29	9-30	FY 30-3	-31	FY 31	1-32	FY 32	-33	FY 33-	3-34
							THRU FY 24	BUDGET	FOOTAGE	BUDGET	FOOTAGE	BUDGET	FOOTAGE	BUDGET	FOOTAGE	BUDGET	FOOTAGE	BUDGET	FOOTAGE	BUDGET	FOOTAGE	BUDGET	FOOTAGE	BUDGET	FOOTAGE	BUDGET	FOOTAGE
PRIVATE SEWER REHABILI	TATION																										
Carver Ave. @ Owenby Lane	Asheville	DP	2022253	71	0	\$57,000	\$5,000	\$0		\$48,000		\$0		\$4,000	0	\$0		\$0	0	\$0		\$0	0	\$0		\$0	
Homeland Park	Asheville	TH	2016248	51	921	\$625,380	\$7,250	\$25,000		\$164,500		\$40,000		\$388,630	921	\$0		\$(	0	\$0		\$0	0	\$0		\$0	
Old County Home Rd PSR	W. Asheville	SA	2015221	55	4,204	\$2,592,300	\$130,300	\$49,000		\$2,413,000	4,204	\$0		\$0		\$0		\$(	0	\$0		\$0	0	\$0		\$0	
SUBTOTAL					5,125	\$3,274,680	\$142,550	\$74,000	0	\$2,625,500	4,204	\$40,000	0	\$392,630	921	\$0	0	\$(	0 0	\$0	0	\$0	0 0	\$0	0	\$0	0
Inflation per ENR Const. Cost Index	3.35%					1.0000	1.0000	1.0000		1.0335		1.0681		1.1039		1.1409		1.179	1	1.2186		1.2594	4	1.3016		1.3452	
SUBTOTAL with inflation					5,125	\$3,274,680	\$142,550	\$74,000	0	\$2,713,454	4,204	\$42,725	0	\$433,426	921	\$0	0	\$1	0 0	\$0	0	\$0	0	\$0	0	\$0	0

PROJECT NAME	LOCATION OF PROJECT			PIPE RATING	PROJECT FOOTAGE	TOTAL ESTIMATED COST	TOTAL EST. EXPENDS THRU FY 24	FY 24-2	25	FY 25-	-26	FY 26-27		FY 27	7-28	FY 28-29	FY 29-	-30	FY 30-	31	FY 31-32	FY 32-33	FY 33-34
							111101124	BUDGET	FOOTAGE	BUDGET	FOOTAGE	BUDGET FOOT	AGE B	BUDGET	FOOTAGE	BUDGET FOOTAGE	BUDGET	FOOTAGE	BUDGET	FOOTAGE	BUDGET FOOTAGE	BUDGET FOOTAGE	BUDGET FOOTAGE
TREATMENT PLANT, PUMP	STATIONS & GEI	VERAL	CAPITAL	IMPROVE	MENTS																		
Arc Flash Labeling	District-Wide	BD	2023008	N/A	0	\$340,225	\$78,625	\$126,600		\$15,000		\$15,000		\$15,000		\$15,000	\$15,000		\$15,000		\$15,000	\$15,000	\$15,000
Biological Treatment	MSD-Treatment Plant	нс	2016063	N/A	0	\$229,560,225	\$270,225	\$328,500		\$80,500		\$4,375,500		\$6,000,000		\$6,000,000	\$4,309,000		\$11,025,000		\$31,025,000	\$31,025,000	\$31,025,000
Building and Facility Rehabilitation	MSD-Treatment Plant	нс	2002068	N/A	0	\$600,000	\$60,000	\$60,000		\$60,000		\$60,000		\$60,000		\$60,000	\$60,000		\$60,000		\$60,000	\$60,000	\$60,000
Carrier Bridge PS Replacement	Asheville	DP	2019045	N/A	2,800	\$85,796,713	\$1,816,133	\$611,500		\$10,839,080		\$31,000,000	2,800	\$31,000,000		\$10,530,000	\$0		\$0		\$0	\$0	\$0
Collection System Master Plan Update	District-Wide	нс	2020011	N/A	0	\$299,500	\$49,500	\$250,000		\$0		\$0		\$0		\$0	\$0		\$0		\$0	\$0	\$0
Flow Monitoring	MSD-Treatment Plant	SA	2008013	N/A	0	\$525,000	\$90,000	\$75,000		\$50,000		\$50,000		\$50,000		\$50,000	\$50,000		\$50,000		\$50,000	\$50,000	\$50,000
HVAC Rehabilitation	MSD-Treatment Plant	нс	2020051	N/A	0	\$160,000	\$40,000	\$70,000		\$10,000		\$10,000		\$10,000		\$10,000	\$10,000		\$10,000		\$10,000	\$10,000	\$10,000
Hydroelectric Power Plant Rehab	MSD-Treatment Plant	TH	2021016	N/A	0	\$1,341,238	\$201,238	\$100,000		\$1,040,000		\$0		\$0		\$0	\$0		\$0		\$0	\$0	\$0
Incinerator Rehabilitation FY24	MSD-Treatment Plant	DP	2022057	N/A	0	\$6,383,000	\$2,173,000	\$1,210,000		\$1,200,000		\$1,800,000		\$0		\$0	\$0		\$0		\$0	\$0	\$0
Incinerator Sand Transport System	MSD Treatment Plant	TH	2024036	N/A	0	\$275,000	\$0	\$275,000		\$0		\$0		\$0		\$0	\$0		\$0		\$0	\$0	\$0
Int. Clarifier Eff. Trough Rehab	MSD - Treatment Plant	SA	2022024	N/A	0	\$3,278,597	\$376,197	\$1,490,000		\$1,412,400		\$0		\$0		\$0	\$0		\$0		\$0	\$0	\$0
ITT Pump Station Upgrade	Henderson County	SA	2020061	N/A	2,750	\$4,830,000	\$70,113	\$299,887		\$4,460,000	2,750	\$0		\$0		\$0	\$0		\$0		\$0	\$0	\$0
MCC Replacement	MSD - Treatment Plant	HC	2024040	N/A	0	\$524,000	\$0	\$524,000		\$0		\$0		\$0		\$0	\$0		\$0		\$0	\$0	\$0
Mud Creek PS Replacement	Henderson County	TH	2021073	N/A	0	\$740,000	\$120,000	\$15,000		\$605,000		\$0		\$0		\$0	\$0		\$0		\$0	\$0	\$0
Plant NPW Filter System	Asheville	SA	2023011	N/A	0	\$325,000	\$0	\$100,000		\$225,000		\$0		\$0		\$0	\$0		\$0		\$0	\$0	\$0
RBC Removal and Replacement	MSD-Treatment Plant	НС	2023029	N/A	0	\$1,840,800	\$490,500	\$1,350,300		\$0		\$0		\$0		\$0	\$0		\$0		\$0	\$0	\$0
Solids Handling Capacity Improvements	MSD-Treatment Plant	НС	2019087	N/A	0	\$79,880,000	\$0	\$0		\$30,000		\$500,000		\$3,500,000		\$3,000,000	\$36,425,000		\$36,425,000		\$0	\$0	\$0
Solids Handling PER	MSD-Treatment Plant	DP	2023048	N/A	0	\$508,770	\$433,770	\$75,000		\$0		\$0		\$0		\$0	\$0		\$0		\$0	\$0	\$0
South Storage Building	Arden	DP	2023009	N/A	0	\$1,076,000	\$0	\$50,000		\$1,026,000		\$0		\$0		\$0	\$0		\$0		\$0	\$0	\$0
Weaverville PS Replacement	Weaverville	SA	2019080	N/A	18,174	\$24,474,442	\$2,740,492	\$15,882,500	15,174	\$5,851,450	3,000	\$0	0	\$0		\$0	\$0		\$0		\$0	\$0	\$0
General Capital Equipment	Varies	нс	2016072	N/A	0	\$1,500,000	\$150,000	\$150,000		\$150,000		\$150,000		\$150,000		\$150,000	\$150,000		\$150,000		\$150,000	\$150,000	\$150,000
SUBTOTAL					23,724	\$444,258,510	\$9,159,793	\$23,043,287	15,174	\$27,054,430	5,750	\$37,960,500	2,800	\$40,785,000	0	\$19,815,000 0	\$41,019,000	0	\$47,735,000	0	\$31,310,000 0	\$31,310,000 0	\$31,310,000 0
Inflation per ENR Const. Cost Index	3.35%					1.0000	1.0000	1.0000		1.0335		1.0681		1.1039		1.1409	1.1791		1.2186		1.2594	1.3016	1.3452
SUBTOTAL with inflation					23,724	\$444,258,510	\$9,159,793	\$23,043,287	15,174	\$27,960,753	5,750	\$40,546,455	2,800	\$45,022,739	0	\$22,606,639 0	\$48,365,700	0	\$58,170,100	0	\$39,432,693	\$40,753,688 0	\$42,118,936

### TEN YEAR CAPITAL IMPROVEMENT PROGRAM

PROJECT NAME	LOCATION OF PROJECT		PROJECT NUMBER		PROJECT FOOTAGE	TOTAL ESTIMATED COST	TOTAL EST. EXPENDS THRU FY 24	FY 24	-25	FY 25	-26	FY 20	3-27	FY 2	7-28	FY 2	8-29	FY 29	9-30	FY 30	)-31	FY 31	1-32	FY 32	2-33	FY 33	3-34
							INKU FT 24	BUDGET	FOOTAGE	BUDGET	FOOTAGE	BUDGET	FOOTAGE	BUDGET	FOOTAGE	BUDGET	FOOTAGE	BUDGET	FOOTAGE	BUDGET	FOOTAGE	BUDGET	FOOTAGE	BUDGET	FOOTAGE	BUDGET	FOOTAGE
DESIGN, ROW, & CONSTRUC	TION MANAGEI	MENT E	XPENSES	3																							
Design, ROW, & Const. Mgmt. Exp.	MSD/ENG	нс	N/A	N/A	0	\$39,131,059	\$3,281,040	\$3,404,838		\$3,538,166	1	\$3,632,75	1	\$3,730,088		\$3,830,30	2	\$3,997,69	3	\$4,095,493	3	\$4,196,13	1	\$4,299,596		\$4,405,998	}
SUBTOTAL					0	\$39,131,059	\$3,281,040	\$3,404,838	0	\$3,538,166	0	\$3,632,75	4 0	\$3,730,088	0	\$3,830,30	2 0	\$3,997,69	3 0	\$4,095,493	0	\$4,196,13	1 0	\$4,299,596	0	\$4,405,998	0 د

PROJECT NAME	LOCATION OF PROJECT				PROJECT FOOTAGE	TOTAL ESTIMATED COST	TOTAL EST. EXPENDS THRU FY 24	FY 24	1-25	FY 25	-26	FY 26	-27	FY 2	27-28	FY 28	3-29	FY 29	)-30	FY 30	)-31	FY 31	-32	FY 32	2-33	FY 33	i-34
							THROTTI 24	BUDGET	FOOTAGE																		
DEVELOPER REIMBURSEM	ENTS																										
Black Mtn. Annex Craigmont Rd.	Black Mountain	нс	1992173	N/A	Α 0	\$0	\$0	\$0	0	\$(		\$0		\$0		\$1	0	\$0		\$0	0	\$0		\$0		\$0	
Developer Reimbursements	Various	НС	2004051	N/A	0	\$1,083,000	\$0	\$183,000	0	\$100,000		\$100,000		\$100,000		\$100,000	0	\$100,000		\$100,000	0	\$100,000		\$100,000		\$100,000	
SUBTOTAL					0	\$1,083,000	\$0	\$183,000	0 0	\$100,000	0	\$100,000	0	\$100,000	0	\$100,00	0 0	\$100,000	0	\$100,000	0 0	\$100,000	0	\$100,000	0	\$100,000	0

BUDGET SUMMARY																									
PROJECT NAME	LOCATION OF PROJECT	PROJECT NUMBER	PROJECT FOOTAGE	TOTAL ESTIMATED COST	TOTAL EST. EXPENDS	FY 24	-25	FY 25	-26	FY 26	-27	FY 27	'-28	FY 28	-29	FY 29	-30	FY 30-	-31	FY 31	-32	FY 32	2-33	FY 33	i-34
					THRU FY 24	BUDGET	FOOTAGE																		
SUBTOTAL with Inflation			368,133	\$650,662,100	\$27,379,959	\$36,475,712	37,683	\$48,209,508	39,132	\$58,967,083	40,757	\$68,970,444	40,018	\$55,170,666	42,513	\$81,228,309	39,900	\$76,707,622	31,083	\$59,430,215	31,699	\$60,535,751	30,901	\$64,050,080	32,447
CONTINGENCY						\$1,000,000																			
TOTAL			368,133	\$650,662,100	\$27,379,959	\$37,475,712	37,683	\$48,209,508	39,132	\$58,967,083	40,757	\$68,970,444	40,018	\$55,170,666	42,513	\$81,228,309	39,900	\$76,707,622	31,083	\$59,430,215	31,699	\$60,535,751	30,901	\$64,050,080	32,447