

**SANITARY SEWER COLLECTION SYSTEM MASTER PLAN
FINAL REPORT
BOARD OF WATER AND SEWER COMMISSIONERS OF THE CITY OF SARALAND
PROJECT No. 1074304
JUNE 2022**



APPENDIX E

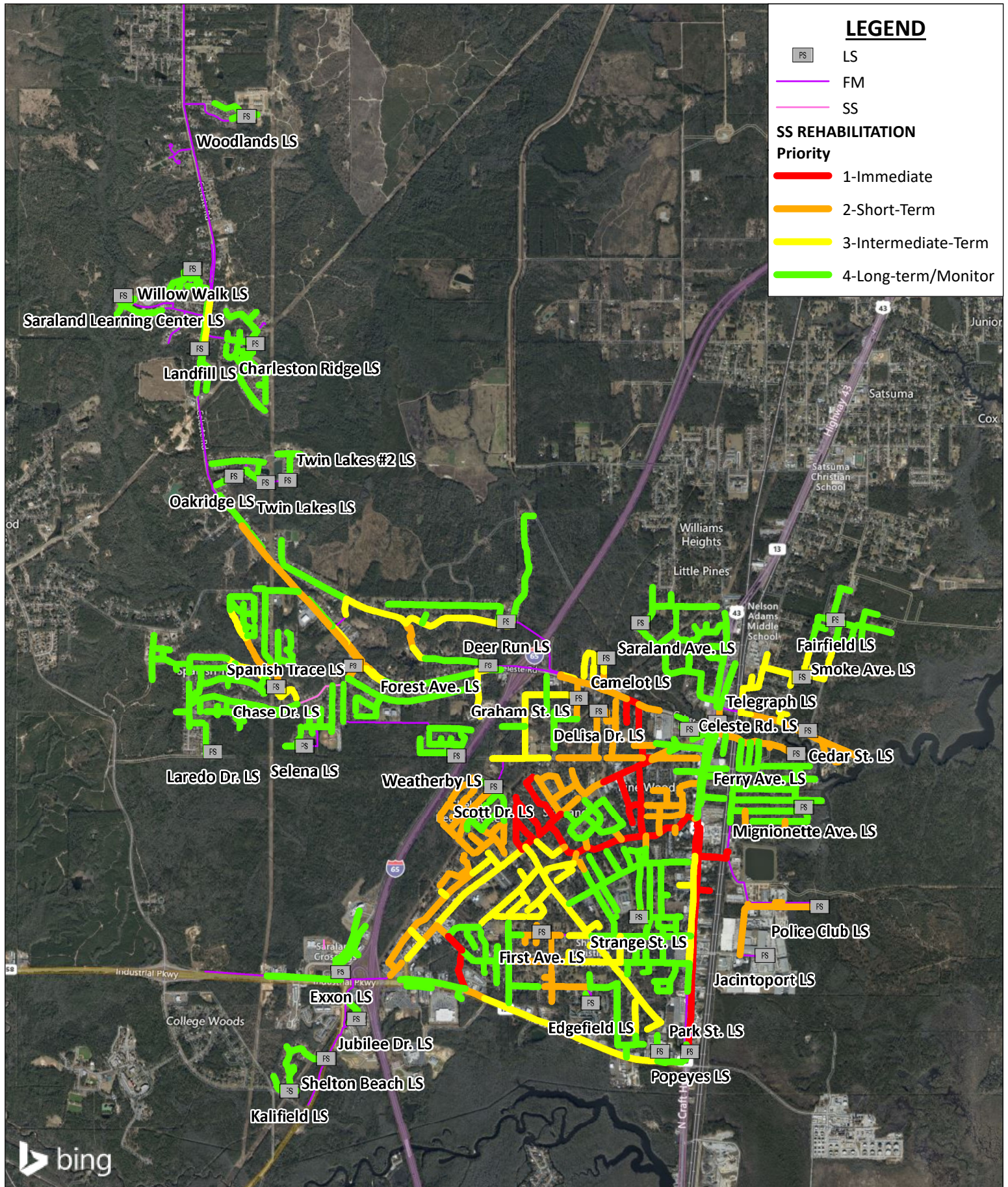
MASTER PLAN GRAVITY SEWER PROJECTS

By: Volkert, Inc.

Dated: June 2022



PRIORITY CATEGORY OVERVIEW

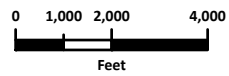
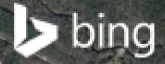


LEGEND

- FS LS
- FM
- SS

SS REHABILITATION Priority

- 1-Immediate
- 2-Short-Term
- 3-Intermediate-Term
- 4-Long-term/Monitor



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category Overview



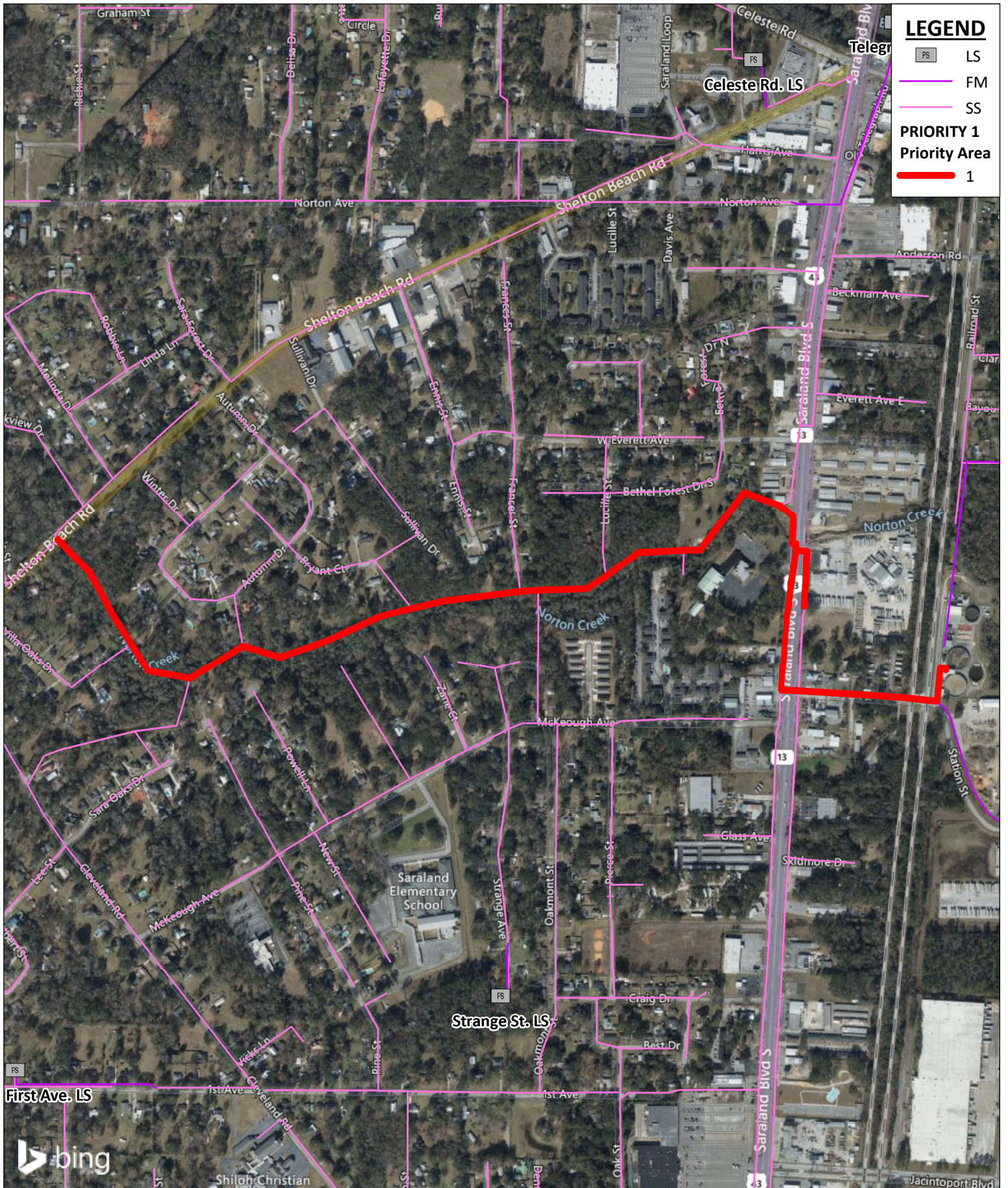
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Summaries

GRAVITY SEWER AND MANHOLES COST SUMMARIES					
Priority	Priority Area	Engineering	Construction	CEI	Total Project Cost
1	1	\$ 780,000	\$ 5,997,000	\$ 360,000	\$ 7,137,000
1	2	\$ 42,000	\$ 318,000	\$ 20,000	\$ 380,000
1	3	\$ 585,000	\$ 4,498,000	\$ 270,000	\$ 5,353,000
1	4	\$ 56,000	\$ 429,000	\$ 26,000	\$ 511,000
1	5	\$ 171,000	\$ 1,313,000	\$ 79,000	\$ 1,563,000
1	6	\$ 69,000	\$ 528,000	\$ 32,000	\$ 629,000
1	7	\$ 52,000	\$ 398,000	\$ 24,000	\$ 474,000
IMMEDIATE TOTALS:		\$ 1,755,000	\$ 13,481,000	\$ 811,000	\$ 16,047,000
2	1	\$ 193,000	\$ 1,479,000	\$ 89,000	\$ 1,761,000
2	2	\$ 263,000	\$ 2,019,000	\$ 122,000	\$ 2,404,000
2	3	\$ 146,000	\$ 1,120,000	\$ 360,000	\$ 1,626,000
2	4	\$ 143,000	\$ 1,098,000	\$ 66,000	\$ 1,307,000
2	5	\$ 52,000	\$ 394,000	\$ 24,000	\$ 470,000
2	6	\$ 251,000	\$ 1,928,000	\$ 116,000	\$ 2,295,000
2	7	\$ 34,000	\$ 260,000	\$ 16,000	\$ 310,000
2	8	\$ 42,000	\$ 320,000	\$ 20,000	\$ 382,000
2	9	\$ 92,000	\$ 704,000	\$ 43,000	\$ 839,000
2	10	\$ 35,000	\$ 268,000	\$ 17,000	\$ 320,000
2	11	\$ 437,000	\$ 3,360,000	\$ 202,000	\$ 3,999,000
2	12	\$ 96,000	\$ 735,000	\$ 45,000	\$ 876,000
2	13	\$ 57,000	\$ 434,000	\$ 27,000	\$ 518,000
2	14	\$ 67,000	\$ 508,000	\$ 31,000	\$ 606,000
2	15	\$ 62,000	\$ 470,000	\$ 29,000	\$ 561,000
SHORT-TERM TOTALS:		\$ 1,970,000	\$ 15,097,000	\$ 1,207,000	\$ 18,274,000
3	1	\$ 121,000	\$ 924,000	\$ 56,000	\$ 1,101,000
3	2	\$ 385,000	\$ 2,959,000	\$ 178,000	\$ 3,522,000
3	3	\$ 37,000	\$ 279,000	\$ 17,000	\$ 333,000
3	4	\$ 63,000	\$ 483,000	\$ 29,000	\$ 575,000
3	5	\$ 26,000	\$ 195,000	\$ 12,000	\$ 233,000
3	6	\$ 36,000	\$ 275,000	\$ 17,000	\$ 328,000
3	7	\$ 76,000	\$ 582,000	\$ 35,000	\$ 693,000
3	8	\$ 518,000	\$ 3,977,000	\$ 239,000	\$ 4,734,000
3	9	\$ 441,000	\$ 3,389,000	\$ 204,000	\$ 4,034,000
3	10	\$ 47,000	\$ 359,000	\$ 22,000	\$ 428,000
3	11	\$ 89,000	\$ 679,000	\$ 41,000	\$ 809,000
3	12	\$ 108,000	\$ 824,000	\$ 50,000	\$ 982,000
3	13	\$ 173,000	\$ 1,328,000	\$ 80,000	\$ 1,581,000
3	14	\$ 53,000	\$ 402,000	\$ 25,000	\$ 480,000
3	15	\$ 20,000	\$ 153,000	\$ 10,000	\$ 183,000
3	16	\$ 73,000	\$ 557,000	\$ 34,000	\$ 664,000
3	17	\$ 52,000	\$ 400,000	\$ 24,000	\$ 476,000
3	18	\$ 47,000	\$ 360,000	\$ 22,000	\$ 429,000
3	19	\$ 44,000	\$ 337,000	\$ 21,000	\$ 402,000
3	20	\$ 17,000	\$ 128,000	\$ 8,000	\$ 153,000
3	21	\$ 30,000	\$ 228,000	\$ 14,000	\$ 272,000
3	22	\$ 28,000	\$ 213,000	\$ 13,000	\$ 254,000
3	23	\$ 41,000	\$ 309,000	\$ 19,000	\$ 369,000
3	24	\$ 25,000	\$ 190,000	\$ 12,000	\$ 227,000
3	25	\$ 17,000	\$ 127,000	\$ 8,000	\$ 152,000
INTERMEDIATE-TERM TOTALS:		\$ 2,567,000	\$ 19,657,000	\$ 1,190,000	\$ 23,414,000
4	1	\$ 48,000	\$ 362,000	\$ 22,000	\$ 432,000
LONG-TERM/MONITOR TOTALS:		\$ 48,000	\$ 362,000	\$ 22,000	\$ 432,000
TOTAL FOR ALL GS/MH PROJECTS:		\$ 6,340,000	\$ 48,597,000	\$ 3,230,000	\$ 58,167,000



PRIORITY CATEGORY 1

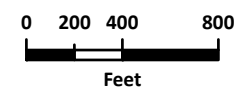
IMMEDIATE PRIORITY



LEGEND

- PS LS
- FM
- SS
- PRIORITY 1**
- Priority Area**
- 1

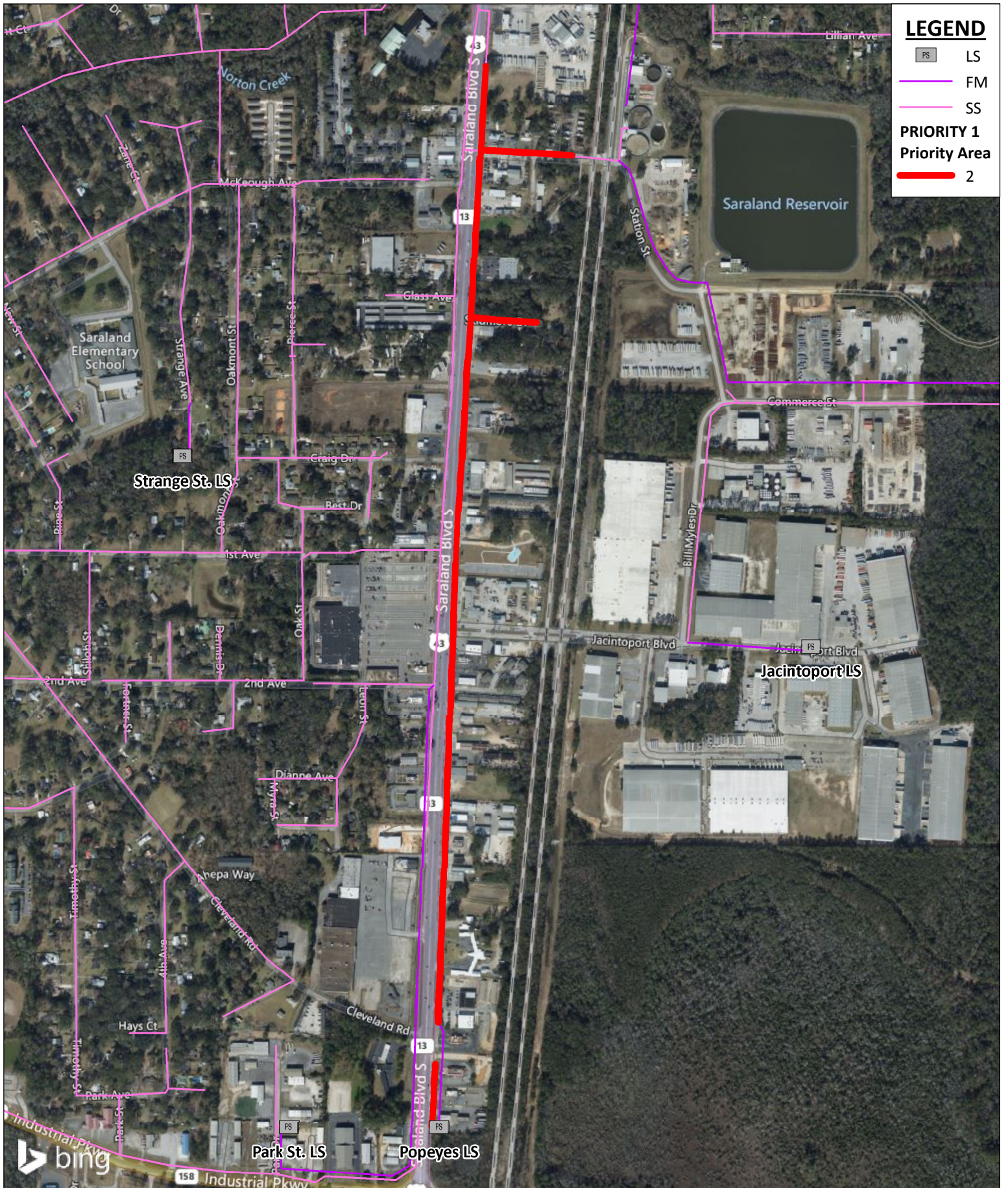
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 1 - Priority Area 1



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

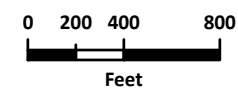
PRIORITY CATEGORY 1 - IMMEDIATE					
PRIORITY AREA 1					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 229,000.00	\$ 229,000.00
2	Clearing and Grubbing	AC	4	\$ 5,000.00	\$ 20,000.00
3	Bypass Pumping	LS	1	\$ 1,750,000.00	\$ 1,750,000.00
4	Traffic Control	LS	1	\$ 50,000.00	\$ 50,000.00
5	Erosion Control/BMPs	LS	1	\$ 25,000.00	\$ 25,000.00
6	Smoke Testing	LF	0	\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	430	\$ 1.00	\$ 1,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF	8020	\$ 4.00	\$ 33,000.00
11	Sewer Cleaning - 8" to 10"	LF	430	\$ 4.00	\$ 2,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF	8020	\$ 6.00	\$ 49,000.00
15	Pipe Replacement - 8" - 10"	LF		\$ 200.00	\$ -
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF	3000	\$ 375.00	\$ 1,125,000.00
19	8" CIPP Mainline Rehabilitation	LF	430	\$ 40.00	\$ 18,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF	6579	\$ 140.00	\$ 922,000.00
27	30" CIPP Mainline Rehabilitation	LF	1441	\$ 160.00	\$ 231,000.00
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	29	\$ 10,000.00	\$ 290,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA	4	\$ 13,000.00	\$ 52,000.00
SUBTOTAL:					\$ 4,797,000.00
25% CONTINGENCY:					\$ 1,199,250.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 5,997,000.00
*ENGINEERING DESIGN (13.0%):					\$ 780,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 360,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 7,137,000.00

* Cost rounded up to nearest thousand.



LEGEND

- PS LS
- FM
- SS
- PRIORITY 1**
- Priority Area**
- 2



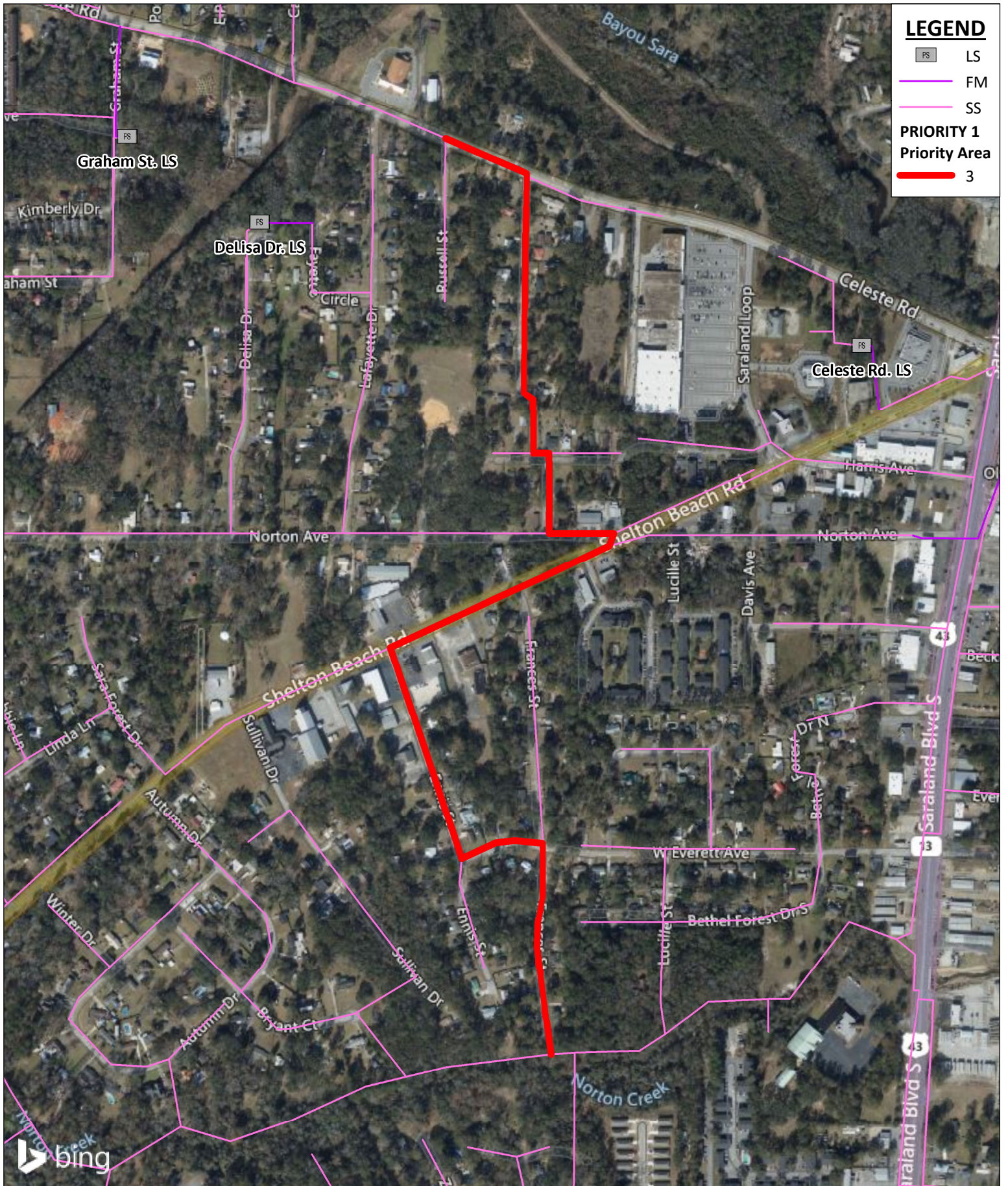
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 1 - Priority Area 2



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

PRIORITY CATEGORY 1 - IMMEDIATE					
PRIORITY AREA 2					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 13,000.00	\$ 13,000.00
2	Clearing and Grubbing	AC			\$ -
3	Bypass Pumping	LS	1	\$ 20,000.00	\$ 20,000.00
4	Traffic Control	LS		\$ 20,000.00	\$ -
5	Erosion Control/BMPs	LS		\$ 25,000.00	\$ -
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	7598	\$ 1.00	\$ 8,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	7598	\$ 4.00	\$ 31,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF	760	\$ 200.00	\$ 152,000.00
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF		\$ 40.00	\$ -
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	3	\$ 10,000.00	\$ 30,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 254,000.00
25% CONTINGENCY:					\$ 63,500.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 318,000.00
*ENGINEERING DESIGN (13.0%):					\$ 42,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 20,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 380,000.00

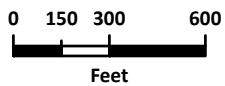
* Cost rounded up to nearest thousand.



LEGEND

- FS LS
- FM
- SS
- PRIORITY 1**
- Priority Area**
- 3

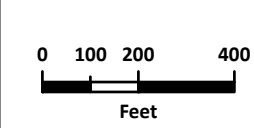
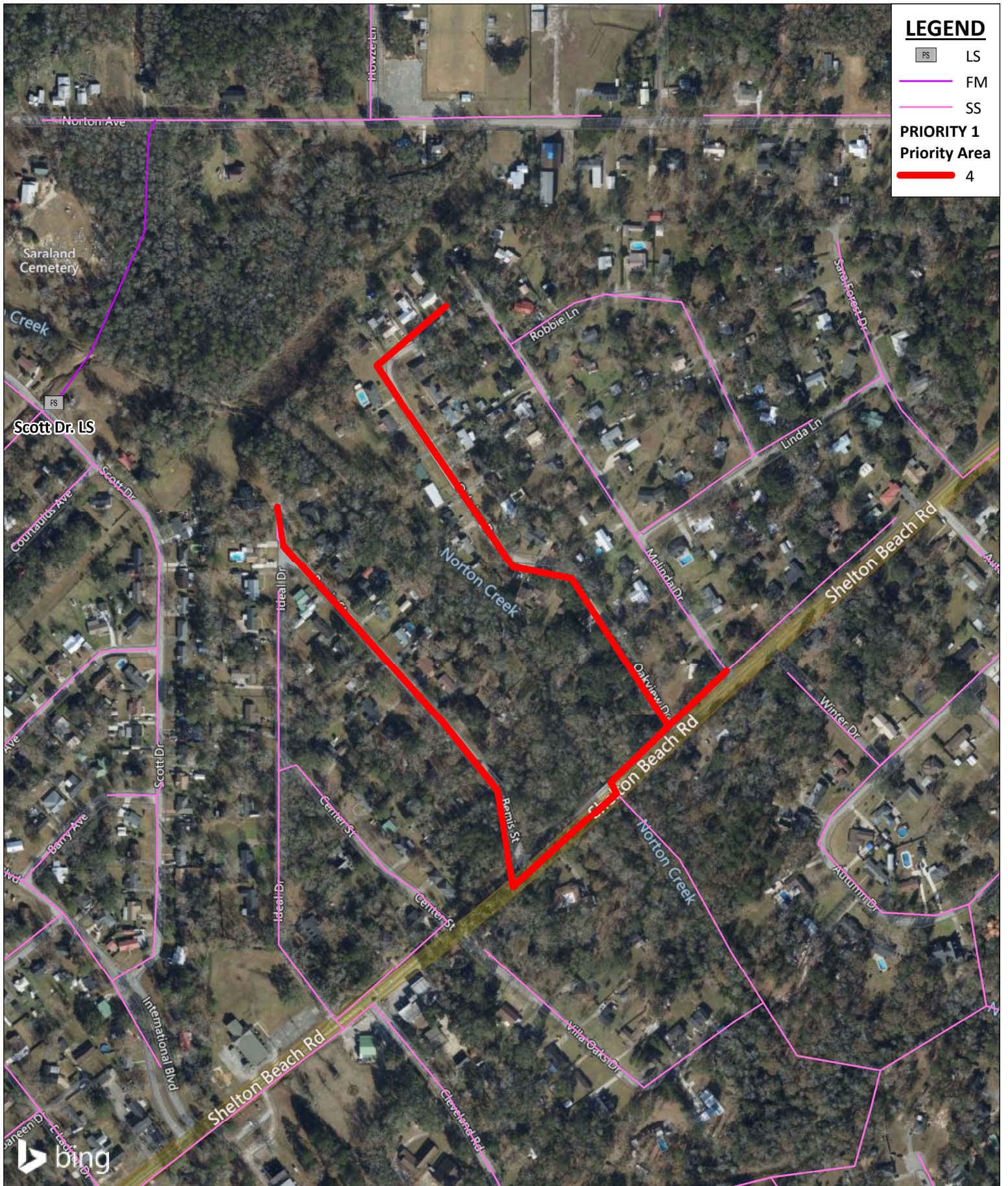
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 1 - Priority Area 3



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

PRIORITY CATEGORY 1 - IMMEDIATE					
PRIORITY AREA 3					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 172,000.00	\$ 172,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 750,000.00	\$ 750,000.00
4	Traffic Control	LS	1	\$ 100,000.00	\$ 100,000.00
5	Erosion Control/BMPs	LS	1	\$ 50,000.00	\$ 50,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF		\$ 1.00	\$ -
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF	428	\$ 3.00	\$ 2,000.00
10	CCTV Inspection - 21" to 30"	LF	5872	\$ 4.00	\$ 24,000.00
11	Sewer Cleaning - 8" to 10"	LF		\$ 4.00	\$ -
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF	428	\$ 5.00	\$ 3,000.00
14	Sewer Cleaning - 21" to 30"	LF	5872	\$ 6.00	\$ 36,000.00
15	Pipe Replacement - 8" - 10"	LF		\$ 200.00	\$ -
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF	428	\$ 300.00	\$ 129,000.00
18	Pipe Replacement - 21" - 30"	LF	5872	\$ 375.00	\$ 2,202,000.00
19	8" CIPP Mainline Rehabilitation	LF		\$ 40.00	\$ -
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA		\$ 10,000.00	\$ -
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA	10	\$ 13,000.00	\$ 130,000.00
SUBTOTAL:					\$ 3,598,000.00
25% CONTINGENCY:					\$ 899,500.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 4,498,000.00
*ENGINEERING DESIGN (13.0%):					\$ 585,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 270,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 5,353,000.00

* Cost rounded up to nearest thousand.



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 1 - Priority Area 4



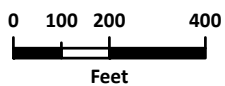
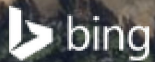
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

PRIORITY CATEGORY 1 - IMMEDIATE					
PRIORITY AREA 4					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 17,000.00	\$ 17,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 30,000.00	\$ 30,000.00
4	Traffic Control	LS	1	\$ 15,000.00	\$ 15,000.00
5	Erosion Control/BMPs	LS	1	\$ 25,000.00	\$ 25,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	4322	\$ 1.00	\$ 5,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	4322	\$ 4.00	\$ 18,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF		\$ 200.00	\$ -
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	4322	\$ 40.00	\$ 173,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	6	\$ 10,000.00	\$ 60,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 343,000.00
25% CONTINGENCY:					\$ 85,750.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 429,000.00
*ENGINEERING DESIGN (13.0%):					\$ 56,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 26,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 511,000.00

* Cost rounded up to nearest thousand.

LEGEND

- SS
- PRIORITY 1**
- Priority Area**
- 5**



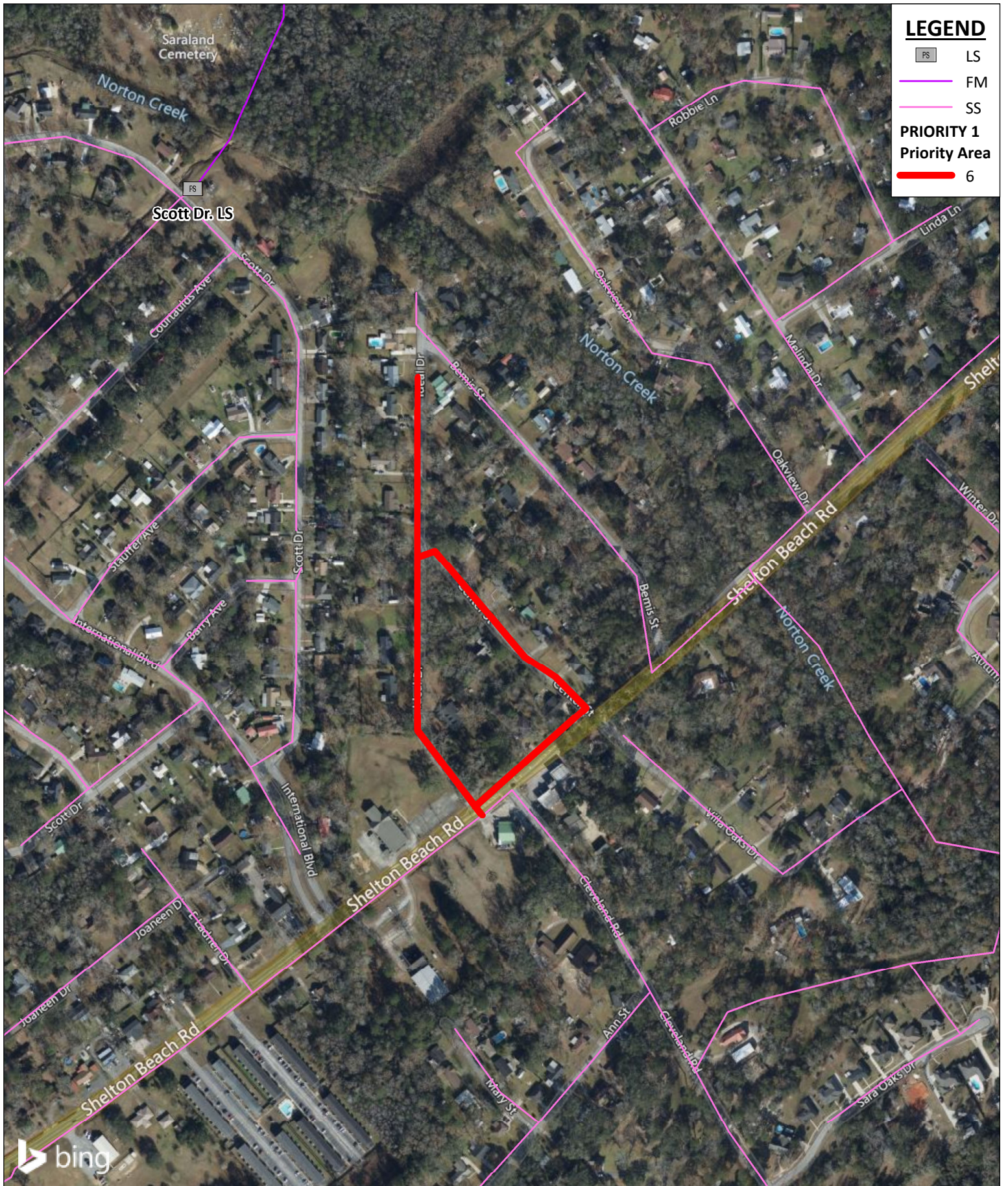
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 1 - Priority Area 5



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

PRIORITY CATEGORY 1 - IMMEDIATE					
PRIORITY AREA 5					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 50,000.00	\$ 50,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 250,000.00	\$ 250,000.00
4	Traffic Control	LS	1	\$ 50,000.00	\$ 50,000.00
5	Erosion Control/BMPs	LS	1	\$ 25,000.00	\$ 25,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF		\$ 1.00	\$ -
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF	1934	\$ 3.00	\$ 6,000.00
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF		\$ 4.00	\$ -
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF	1934	\$ 5.00	\$ 10,000.00
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF		\$ 200.00	\$ -
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF	1934	\$ 300.00	\$ 581,000.00
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF		\$ 40.00	\$ -
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA		\$ 10,000.00	\$ -
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA	6	\$ 13,000.00	\$ 78,000.00
SUBTOTAL:					\$ 1,050,000.00
25% CONTINGENCY:					\$ 262,500.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 1,313,000.00
*ENGINEERING DESIGN (13.0%):					\$ 171,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 79,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 1,563,000.00

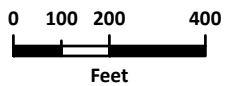
* Cost rounded up to nearest thousand.



LEGEND

- PS LS
- FM
- SS
- PRIORITY 1**
- Priority Area**
- 6

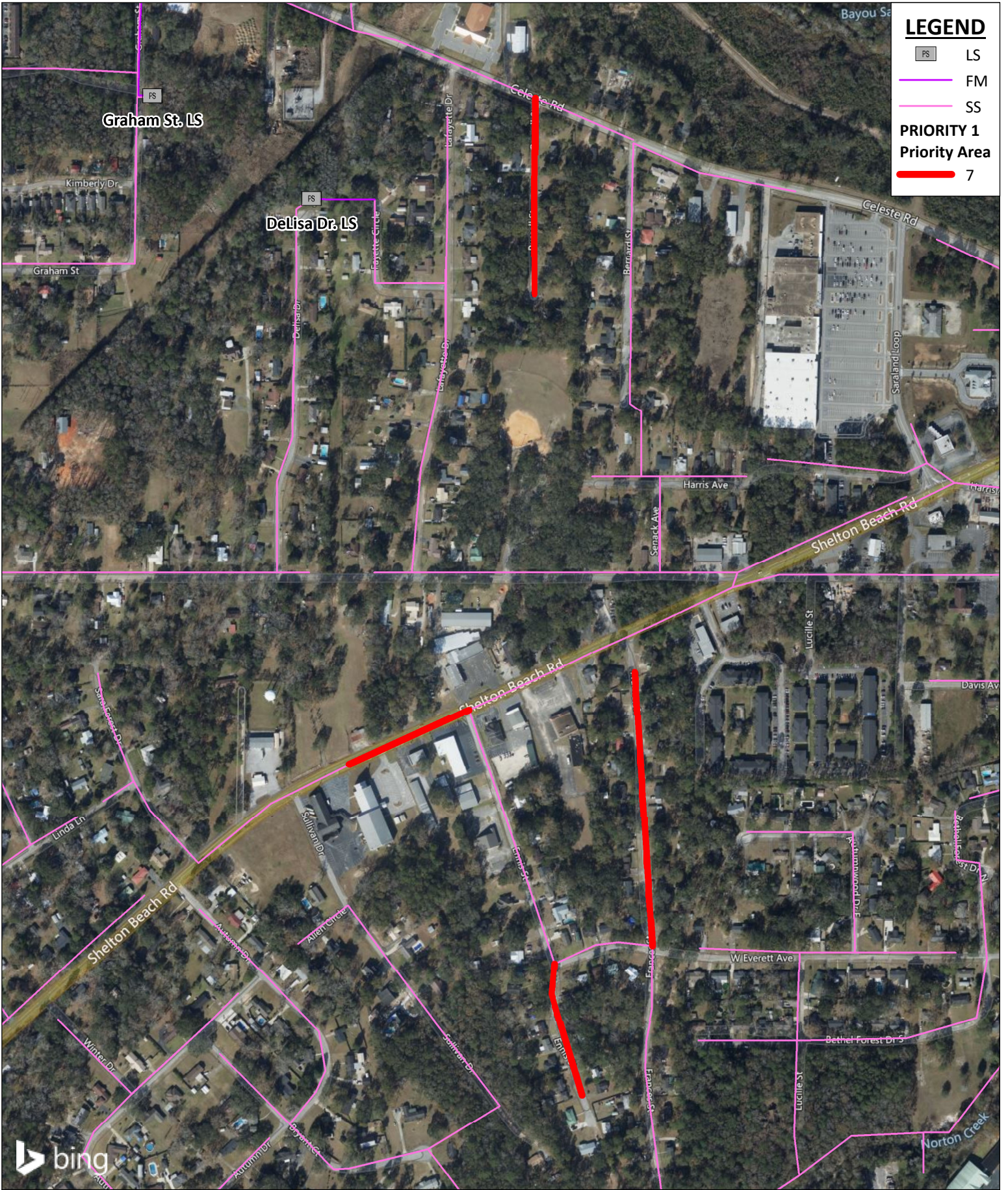
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 1 - Priority Area 6



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

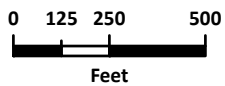
PRIORITY CATEGORY 1 - IMMEDIATE					
PRIORITY AREA 6					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 21,000.00	\$ 21,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 100,000.00	\$ 100,000.00
4	Traffic Control	LS	1	\$ 50,000.00	\$ 50,000.00
5	Erosion Control/BMPs	LS	1	\$ 25,000.00	\$ 25,000.00
6	Smoke Testing	LF	2717	\$ 0.75	\$ 3,000.00
7	CCTV Inspection - 8" to 10"	LF	2717	\$ 1.00	\$ 3,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	2717	\$ 4.00	\$ 11,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF	272	\$ 200.00	\$ 55,000.00
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	1240	\$ 40.00	\$ 50,000.00
20	10" CIPP Mainline Rehabilitation	LF	1477	\$ 50.00	\$ 74,000.00
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	3	\$ 10,000.00	\$ 30,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 422,000.00
25% CONTINGENCY:					\$ 105,500.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 528,000.00
*ENGINEERING DESIGN (13.0%):					\$ 69,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 32,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 629,000.00

* Cost rounded up to nearest thousand.



LEGEND

- FS LS
- FM
- SS
- PRIORITY 1**
- Priority Area**
- 7



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 1 - Priority Area 7



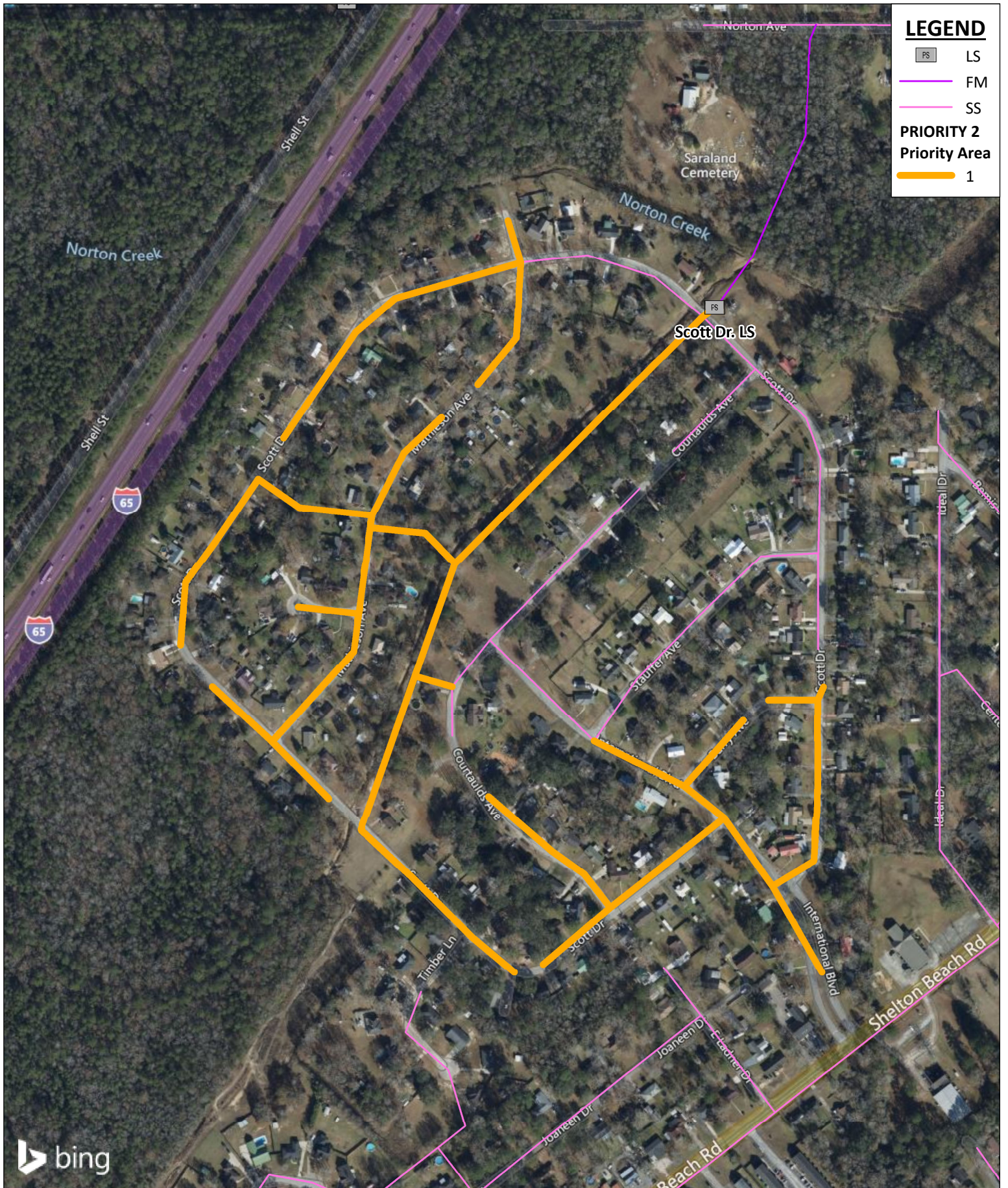
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

PRIORITY CATEGORY 1 - IMMEDIATE PRIORITY AREA 7					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 16,000.00	\$ 16,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 20,000.00	\$ 20,000.00
4	Traffic Control	LS	1	\$ 25,000.00	\$ 25,000.00
5	Erosion Control/BMPs	LS		\$ 25,000.00	\$ -
6	Smoke Testing	LF	2951	\$ 0.75	\$ 3,000.00
7	CCTV Inspection - 8" to 10"	LF		\$ 1.00	\$ -
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF	1071	\$ 4.00	\$ 5,000.00
11	Sewer Cleaning - 8" to 10"	LF	785	\$ 4.00	\$ 4,000.00
12	Sewer Cleaning - 12" to 16"	LF	1095	\$ 4.50	\$ 5,000.00
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF	1071	\$ 6.00	\$ 7,000.00
15	Pipe Replacement - 8" - 10"	LF		\$ 200.00	\$ -
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	785	\$ 40.00	\$ 32,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF	1095	\$ 65.00	\$ 72,000.00
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF	1071	\$ 120.00	\$ 129,000.00
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA		\$ 10,000.00	\$ -
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 318,000.00
25% CONTINGENCY:					\$ 79,500.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 398,000.00
*ENGINEERING DESIGN (13.0%):					\$ 52,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 24,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 474,000.00

* Cost rounded up to nearest thousand.



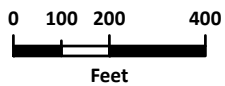
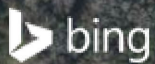
PRIORITY CATEGORY 2
SHORT-TERM PRIORITY



LEGEND

- PS LS
- FM
- SS
- PRIORITY 2**
- Priority Area**
- 1

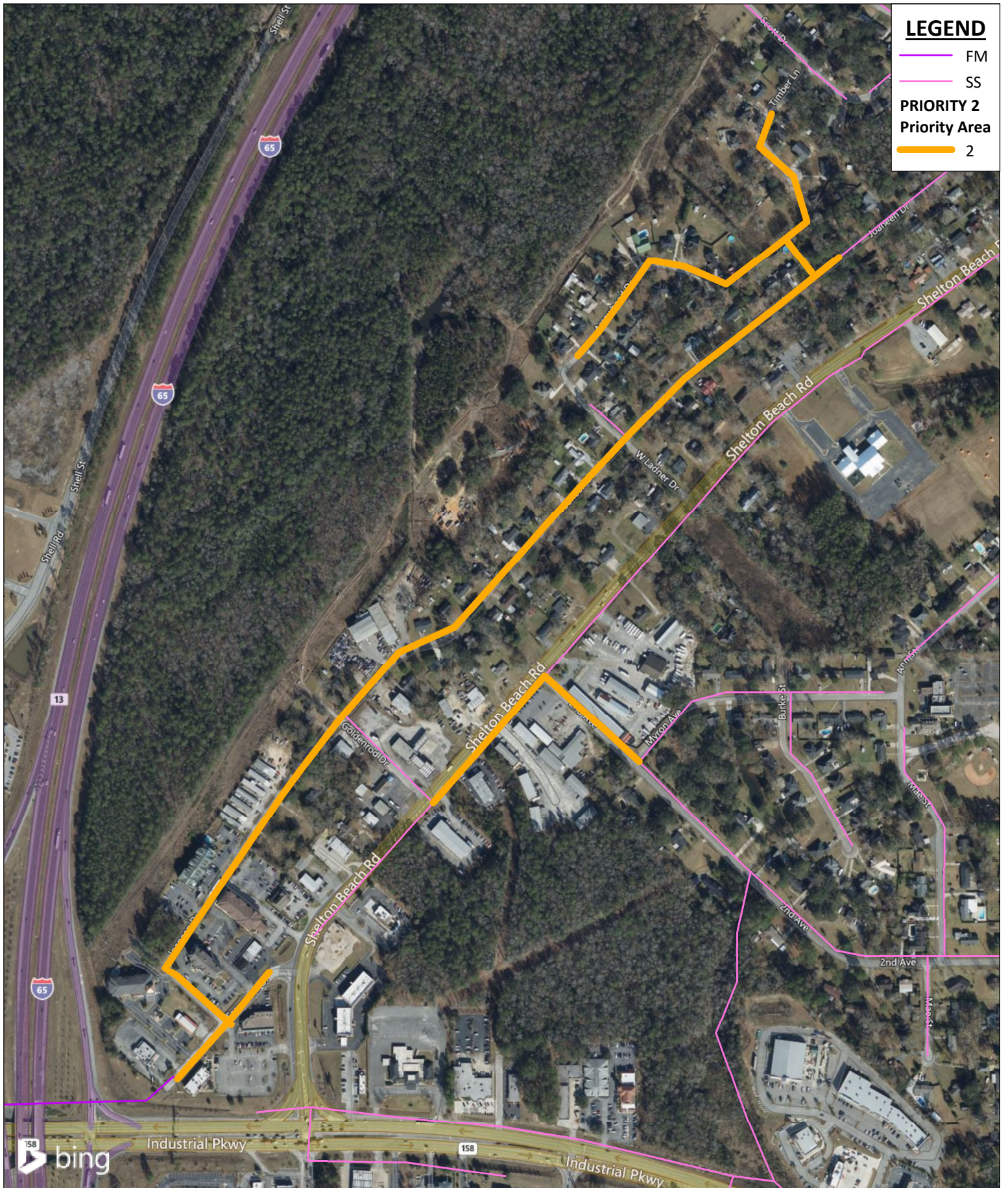
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 2 - Priority Area 1



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

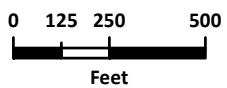
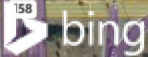
PRIORITY CATEGORY 2 - SHORT-TERM PRIORITY AREA 1					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 57,000.00	\$ 57,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 100,000.00	\$ 100,000.00
4	Traffic Control	LS	1	\$ 50,000.00	\$ 50,000.00
5	Erosion Control/BMPs	LS		\$ 25,000.00	\$ -
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	11216	\$ 1.00	\$ 12,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	11216	\$ 4.00	\$ 45,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF		\$ 200.00	\$ -
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	11216	\$ 40.00	\$ 449,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	47	\$ 10,000.00	\$ 470,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 1,183,000.00
25% CONTINGENCY:					\$ 295,750.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 1,479,000.00
*ENGINEERING DESIGN (13.0%):					\$ 193,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 89,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 1,761,000.00

* Cost rounded up to nearest thousand.



LEGEND

- FM
- SS
- PRIORITY 2**
- Priority Area**
- 2



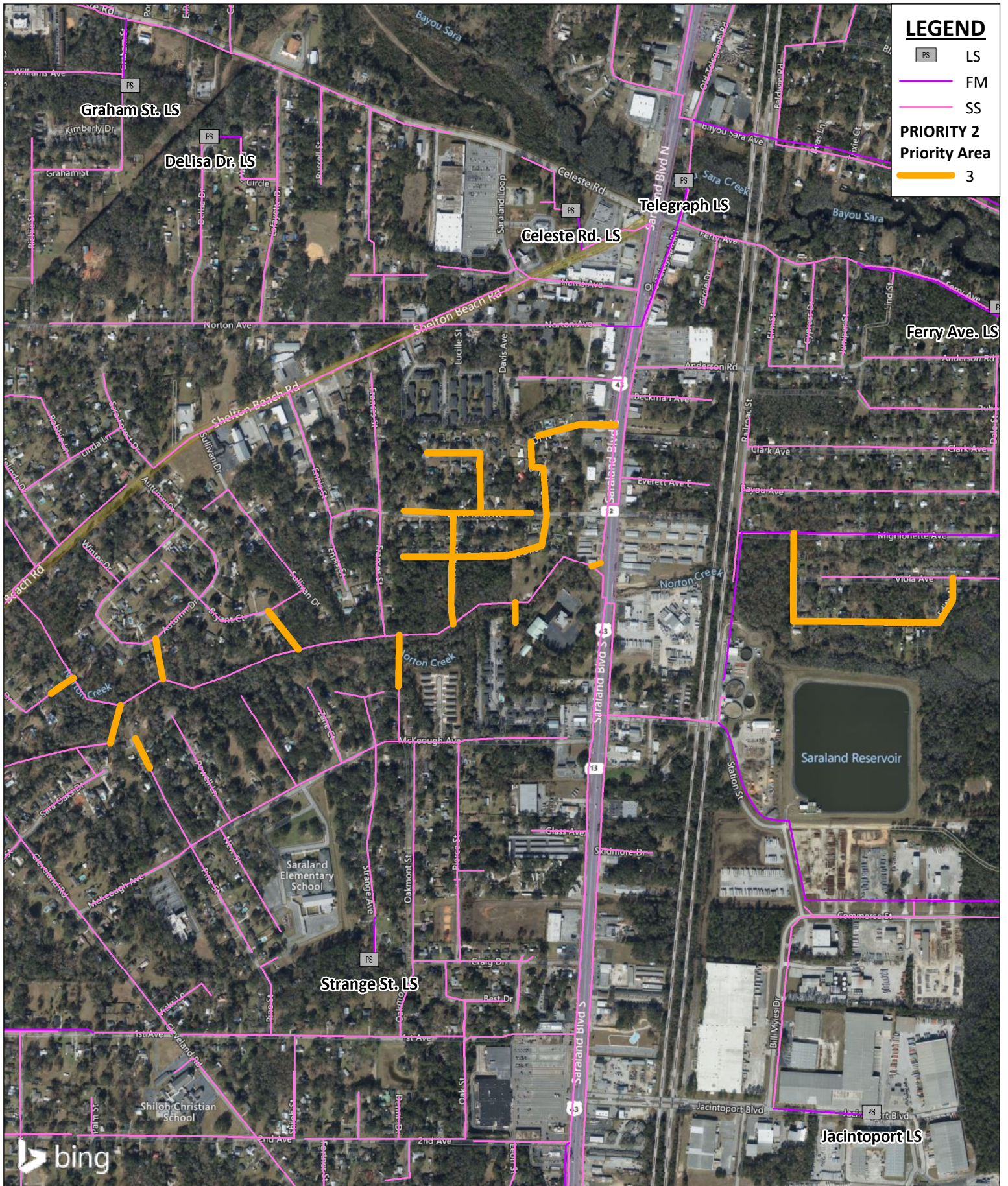
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 2 - Priority Area 2



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

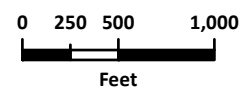
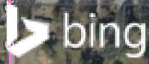
PRIORITY CATEGORY 2 - SHORT-TERM					
PRIORITY AREA 2					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 77,000.00	\$ 77,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS		\$ 1,750,000.00	\$ -
4	Traffic Control	LS		\$ 50,000.00	\$ -
5	Erosion Control/BMPs	LS		\$ 25,000.00	\$ -
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	6813	\$ 1.00	\$ 7,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF	1188	\$ 3.00	\$ 4,000.00
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	6813	\$ 4.00	\$ 28,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF	1188	\$ 5.00	\$ 6,000.00
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF	4631	\$ 200.00	\$ 927,000.00
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF	1188	\$ 300.00	\$ 357,000.00
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	1724	\$ 40.00	\$ 69,000.00
20	10" CIPP Mainline Rehabilitation	LF	192	\$ 50.00	\$ 10,000.00
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	13	\$ 10,000.00	\$ 130,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 1,615,000.00
25% CONTINGENCY:					\$ 403,750.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 2,019,000.00
*ENGINEERING DESIGN (13.0%):					\$ 263,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 122,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 2,404,000.00

* Cost rounded up to nearest thousand.



LEGEND

- PS LS
- FM
- SS
- PRIORITY 2**
- Priority Area**
- 3



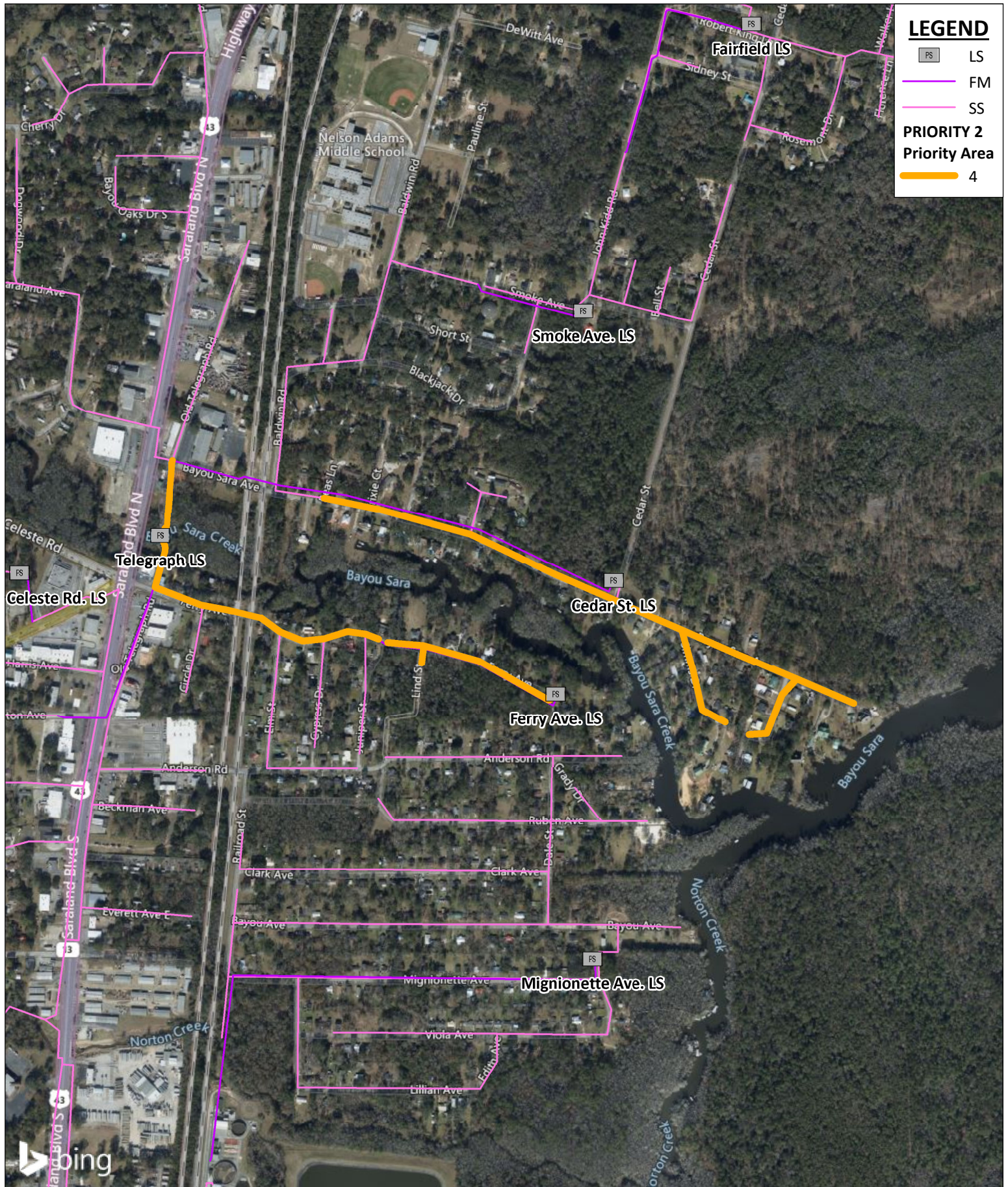
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 2 - Priority Area 3



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

PRIORITY CATEGORY 2 - SHORT-TERM PRIORITY AREA 3					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 43,000.00	\$ 43,000.00
2	Clearing and Grubbing	AC	1	\$ 5,000.00	\$ 5,000.00
3	Bypass Pumping	LS	1	\$ 100,000.00	\$ 100,000.00
4	Traffic Control	LS	1	\$ 50,000.00	\$ 50,000.00
5	Erosion Control/BMPs	LS	1	\$ 25,000.00	\$ 25,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	7912	\$ 1.00	\$ 8,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	7912	\$ 4.00	\$ 32,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF	318	\$ 200.00	\$ 64,000.00
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	7594	\$ 40.00	\$ 304,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF	1931	\$ 65.00	\$ 126,000.00
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	10	\$ 10,000.00	\$ 100,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA	3	\$ 13,000.00	\$ 39,000.00
SUBTOTAL:					\$ 896,000.00
25% CONTINGENCY:					\$ 224,000.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 1,120,000.00
*ENGINEERING DESIGN (13.0%):					\$ 146,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 68,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 1,334,000.00

* Cost rounded up to nearest thousand.

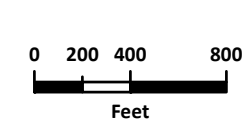


LEGEND

- LS
- FM
- SS

**PRIORITY 2
Priority Area**

- 4



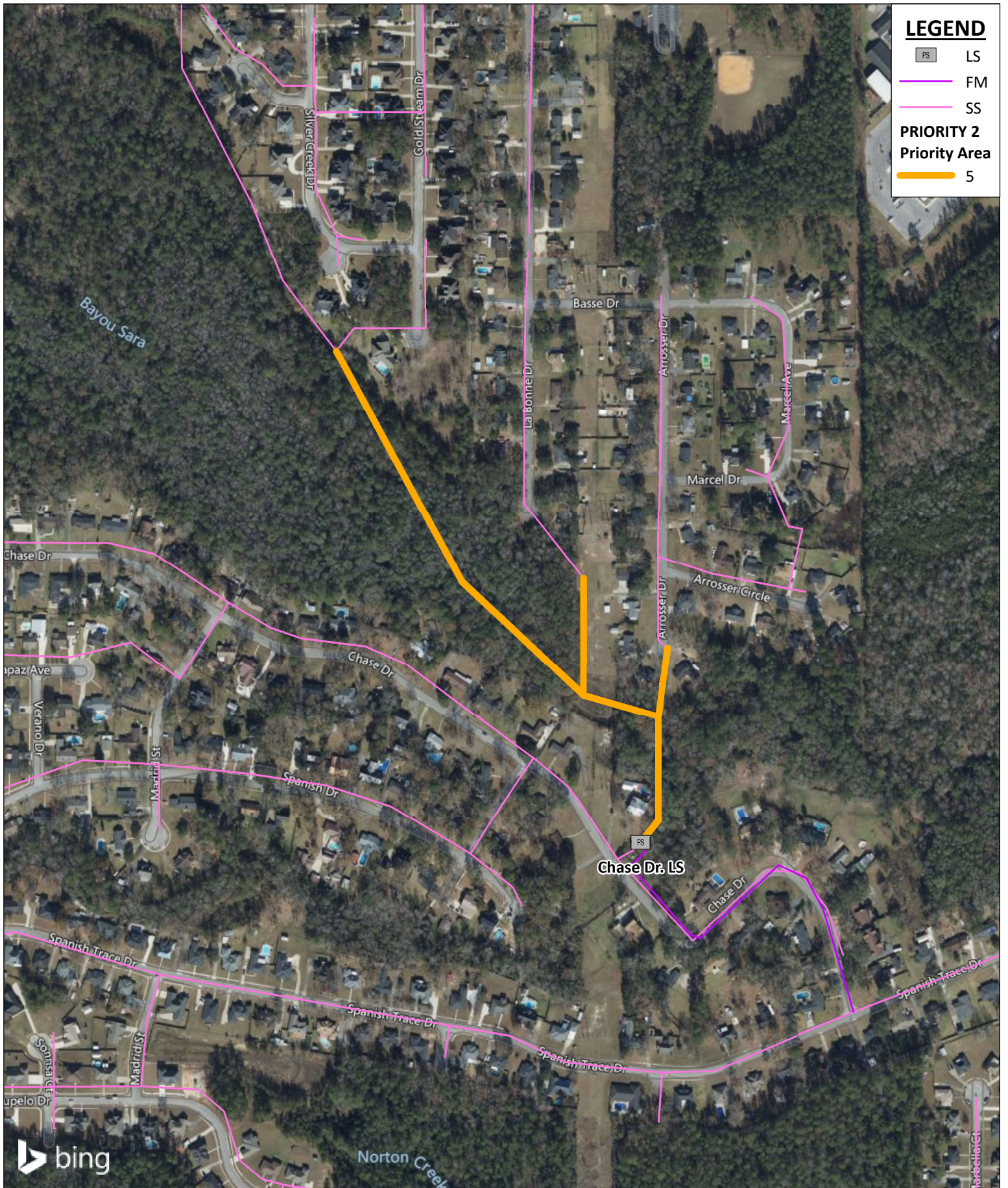
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 2 - Priority Area 4



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

PRIORITY CATEGORY 2 - SHORT-TERM PRIORITY AREA 4					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 42,000.00	\$ 42,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 200,000.00	\$ 200,000.00
4	Traffic Control	LS	1	\$ 50,000.00	\$ 50,000.00
5	Erosion Control/BMPs	LS	1	\$ 25,000.00	\$ 25,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	8021	\$ 1.00	\$ 9,000.00
8	CCTV Inspection - 12" to 16"	LF	497	\$ 2.00	\$ 1,000.00
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	8021	\$ 4.00	\$ 33,000.00
12	Sewer Cleaning - 12" to 16"	LF	497	\$ 4.50	\$ 3,000.00
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF	200	\$ 200.00	\$ 40,000.00
16	Pipe Replacement - 12" - 16"	LF	50	\$ 250.00	\$ 13,000.00
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	8021	\$ 40.00	\$ 321,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF	497	\$ 82.00	\$ 41,000.00
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	10	\$ 10,000.00	\$ 100,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 878,000.00
25% CONTINGENCY:					\$ 219,500.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 1,098,000.00
*ENGINEERING DESIGN (13.0%):					\$ 143,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 66,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 1,307,000.00

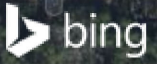
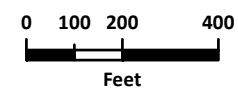
* Cost rounded up to nearest thousand.



LEGEND

- PS LS
- FM
- SS
- PRIORITY 2**
- Priority Area**
- 5

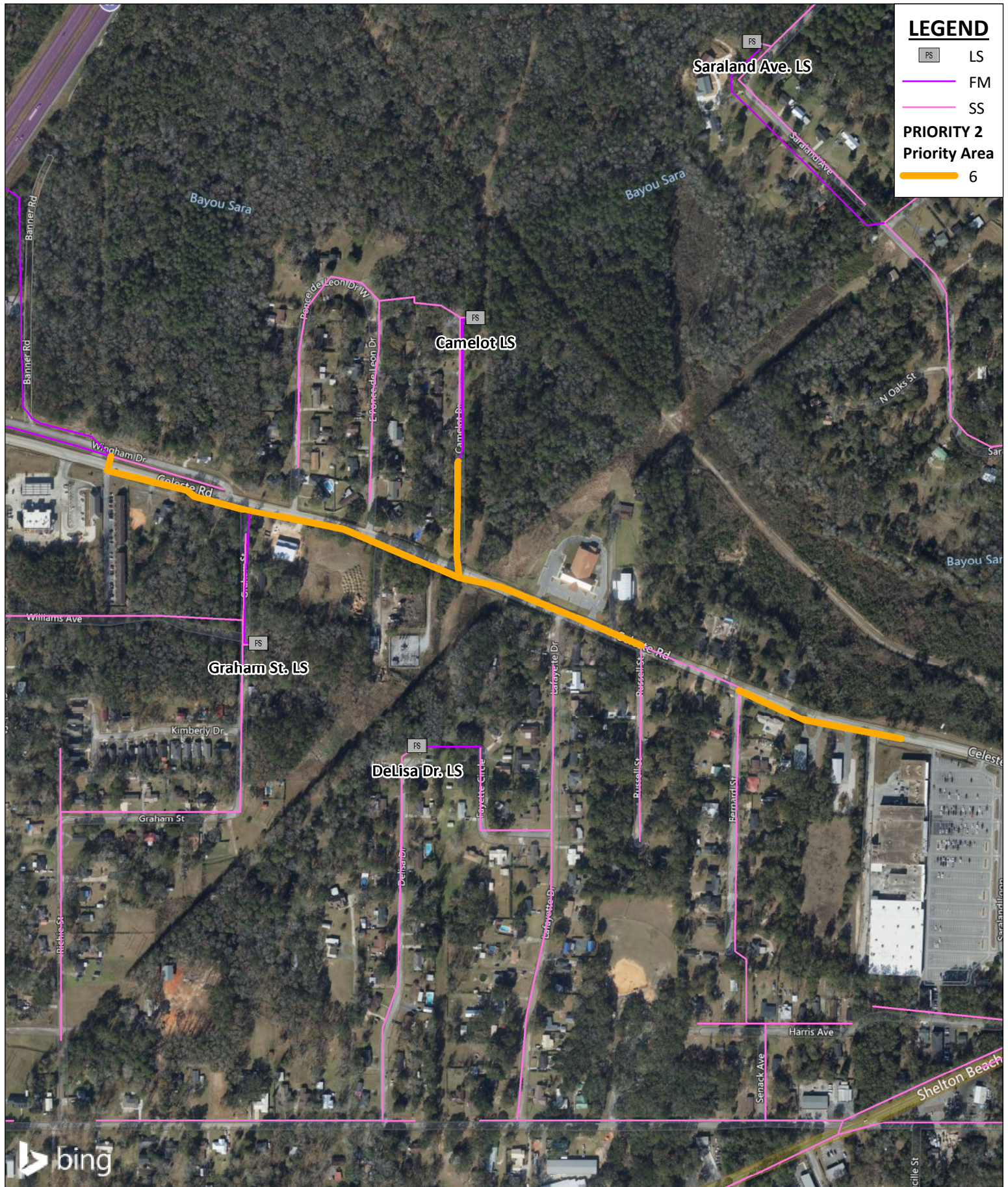
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 2 - Priority Area 5



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

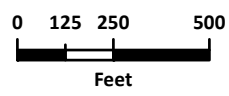
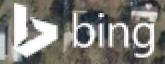
PRIORITY CATEGORY 2 - SHORT-TERM PRIORITY AREA 5					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 15,000.00	\$ 15,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 100,000.00	\$ 100,000.00
4	Traffic Control	LS	1	\$ 20,000.00	\$ 20,000.00
5	Erosion Control/BMPs	LS		\$ 25,000.00	\$ -
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	2648	\$ 1.00	\$ 3,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	2648	\$ 4.00	\$ 11,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF		\$ 200.00	\$ -
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	2648	\$ 40.00	\$ 106,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	6	\$ 10,000.00	\$ 60,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 315,000.00
25% CONTINGENCY:					\$ 78,750.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 394,000.00
*ENGINEERING DESIGN (13.0%):					\$ 52,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 24,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 470,000.00

* Cost rounded up to nearest thousand.



LEGEND

- PS LS
- FM
- SS
- PRIORITY 2 Priority Area**
- 6



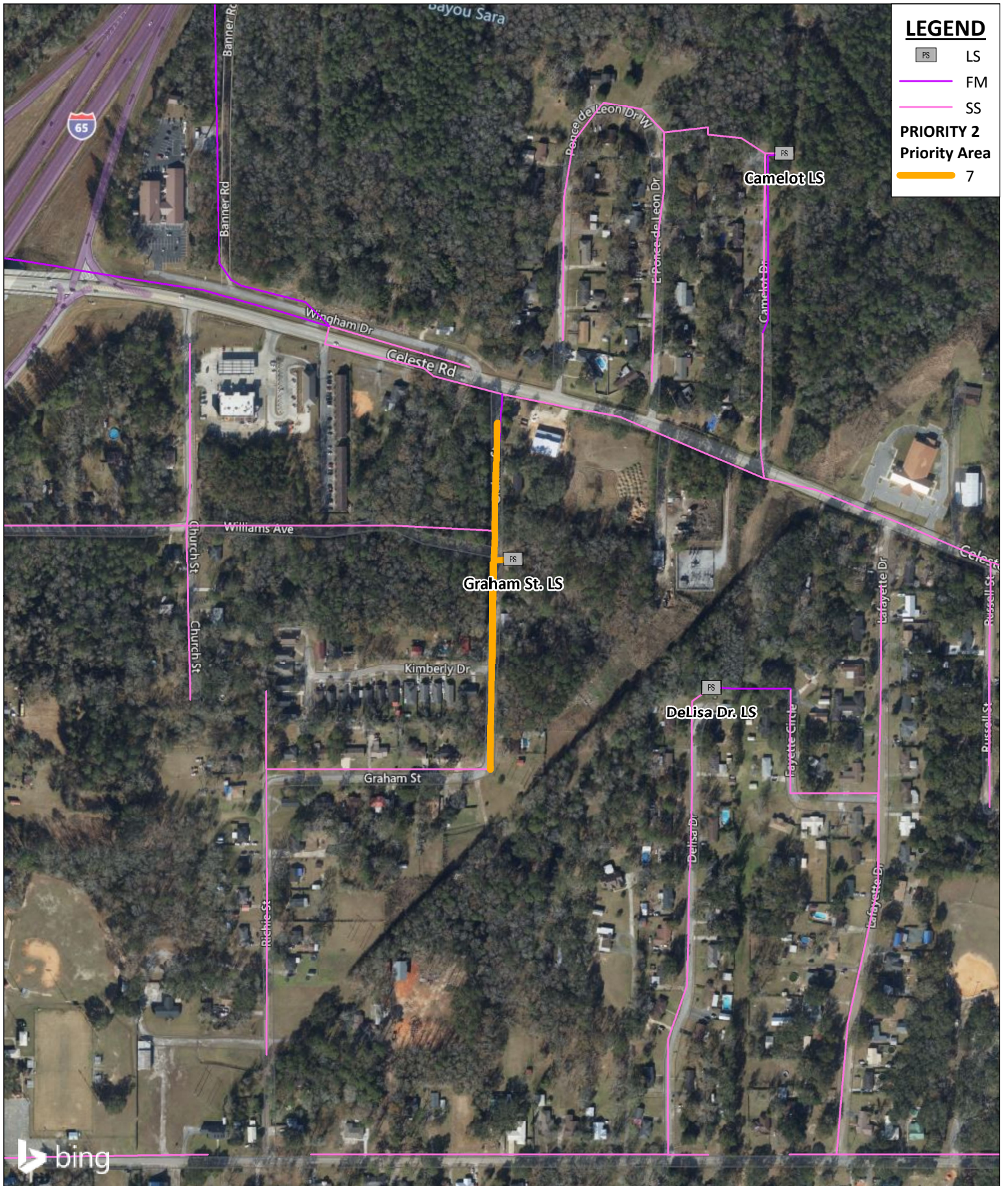
**SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 2 - Priority Area 6**



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

PRIORITY CATEGORY 2 - SHORT-TERM PRIORITY AREA 6					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 74,000.00	\$ 74,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 500,000.00	\$ 500,000.00
4	Traffic Control	LS	1	\$ 50,000.00	\$ 50,000.00
5	Erosion Control/BMPs	LS	1	\$ 25,000.00	\$ 25,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	467	\$ 1.00	\$ 1,000.00
8	CCTV Inspection - 12" to 16"	LF	682	\$ 2.00	\$ 2,000.00
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	467	\$ 4.00	\$ 2,000.00
12	Sewer Cleaning - 12" to 16"	LF	682	\$ 4.50	\$ 4,000.00
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF	50	\$ 200.00	\$ 10,000.00
16	Pipe Replacement - 12" - 16"	LF	50	\$ 250.00	\$ 13,000.00
17	Pipe Replacement - 18" - 20"	LF	2321	\$ 300.00	\$ 697,000.00
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	467	\$ 40.00	\$ 19,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF	682	\$ 65.00	\$ 45,000.00
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	10	\$ 10,000.00	\$ 100,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 1,542,000.00
25% CONTINGENCY:					\$ 385,500.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 1,928,000.00
*ENGINEERING DESIGN (13.0%):					\$ 251,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 116,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 2,295,000.00

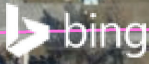
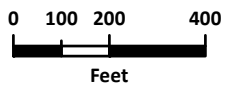
* Cost rounded up to nearest thousand.



LEGEND

- PS LS
- FM
- SS
- PRIORITY 2**
- Priority Area**
- 7

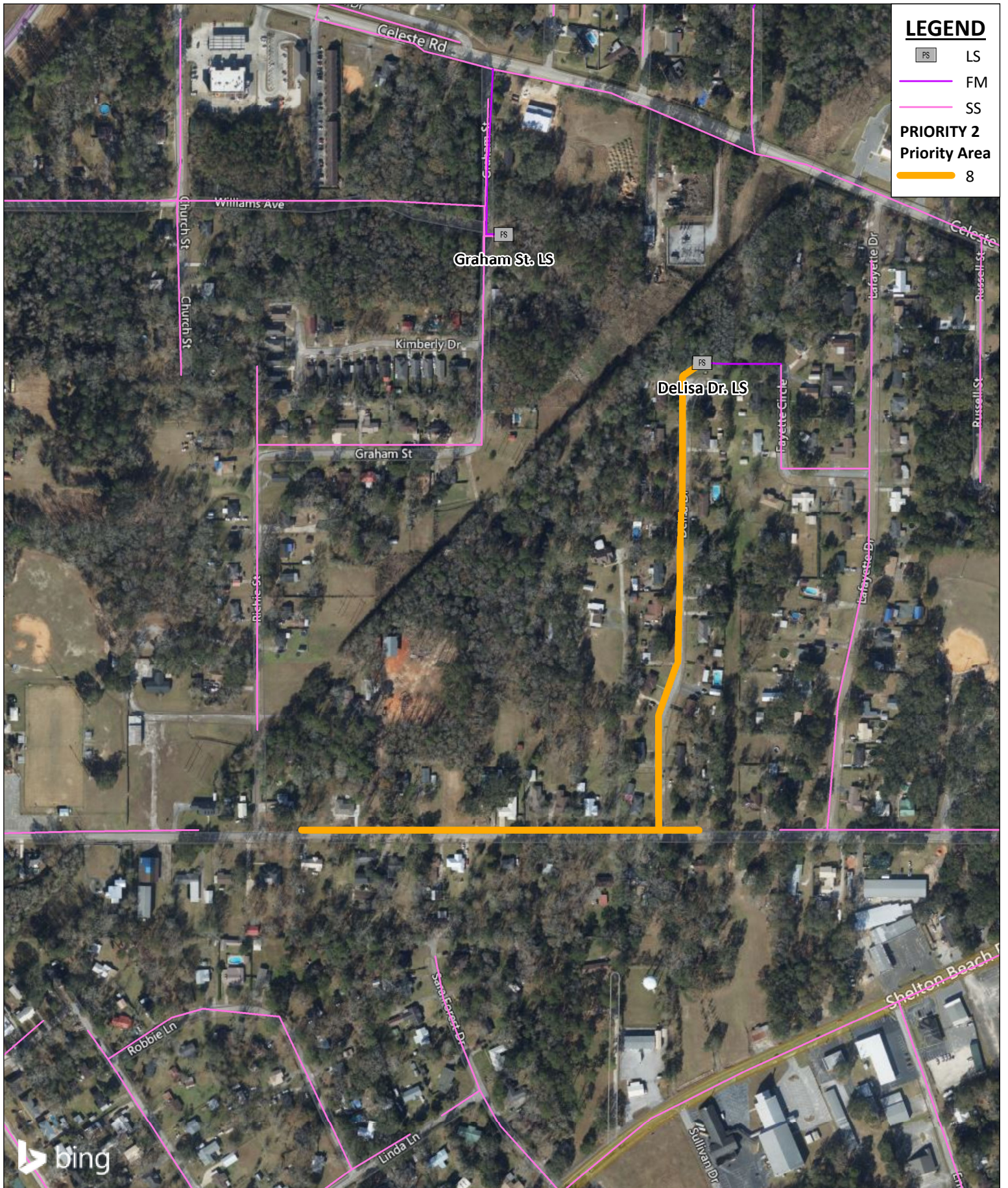
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 2 - Priority Area 7



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

PRIORITY CATEGORY 2 - SHORT-TERM PRIORITY AREA 7					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 10,000.00	\$ 10,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 50,000.00	\$ 50,000.00
4	Traffic Control	LS	1	\$ 20,000.00	\$ 20,000.00
5	Erosion Control/BMPs	LS	1	\$ 10,000.00	\$ 10,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	1016	\$ 1.00	\$ 2,000.00
8	CCTV Inspection - 12" to 16"	LF	154	\$ 2.00	\$ 1,000.00
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	1016	\$ 4.00	\$ 5,000.00
12	Sewer Cleaning - 12" to 16"	LF	154	\$ 4.50	\$ 1,000.00
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF	100	\$ 200.00	\$ 20,000.00
16	Pipe Replacement - 12" - 16"	LF	25	\$ 250.00	\$ 7,000.00
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	1016	\$ 40.00	\$ 41,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF	154	\$ 65.00	\$ 11,000.00
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	3	\$ 10,000.00	\$ 30,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 208,000.00
25% CONTINGENCY:					\$ 52,000.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 260,000.00
*ENGINEERING DESIGN (13.0%):					\$ 34,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 16,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 310,000.00

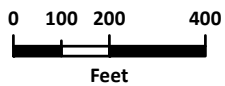
* Cost rounded up to nearest thousand.



LEGEND

- PS LS
- FM
- SS
- PRIORITY 2**
- Priority Area**
- 8

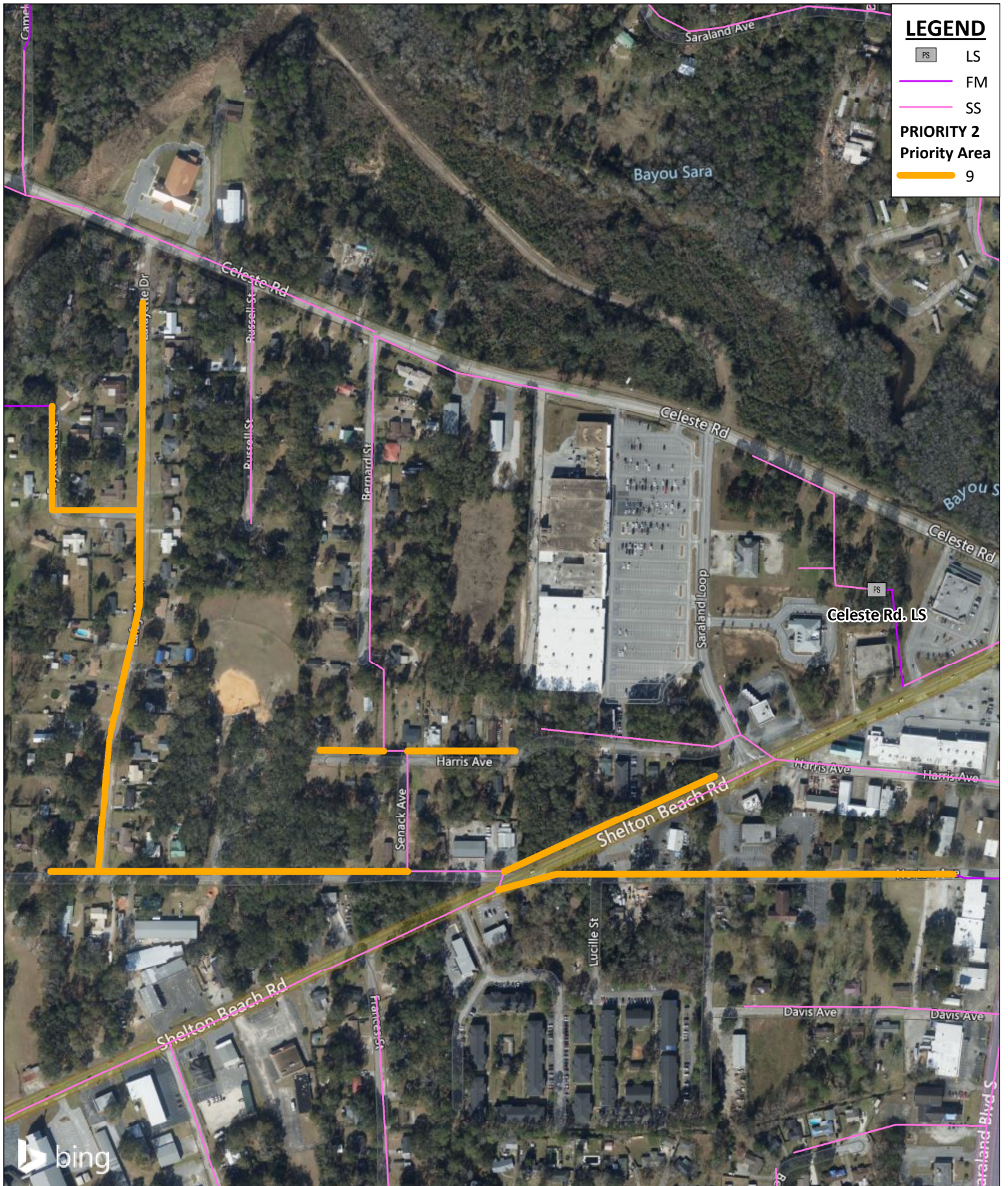
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 2 - Priority Area 8



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

PRIORITY CATEGORY 2 - SHORT-TERM PRIORITY AREA 8					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 13,000.00	\$ 13,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 50,000.00	\$ 50,000.00
4	Traffic Control	LS	1	\$ 25,000.00	\$ 25,000.00
5	Erosion Control/BMPs	LS	1	\$ 20,000.00	\$ 20,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	2819	\$ 1.00	\$ 3,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	2819	\$ 4.00	\$ 12,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF		\$ 200.00	\$ -
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	2819	\$ 40.00	\$ 113,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	2	\$ 10,000.00	\$ 20,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 256,000.00
25% CONTINGENCY:					\$ 64,000.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 320,000.00
*ENGINEERING DESIGN (13.0%):					\$ 42,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 20,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 382,000.00

* Cost rounded up to nearest thousand.






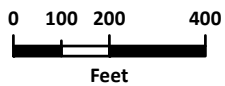
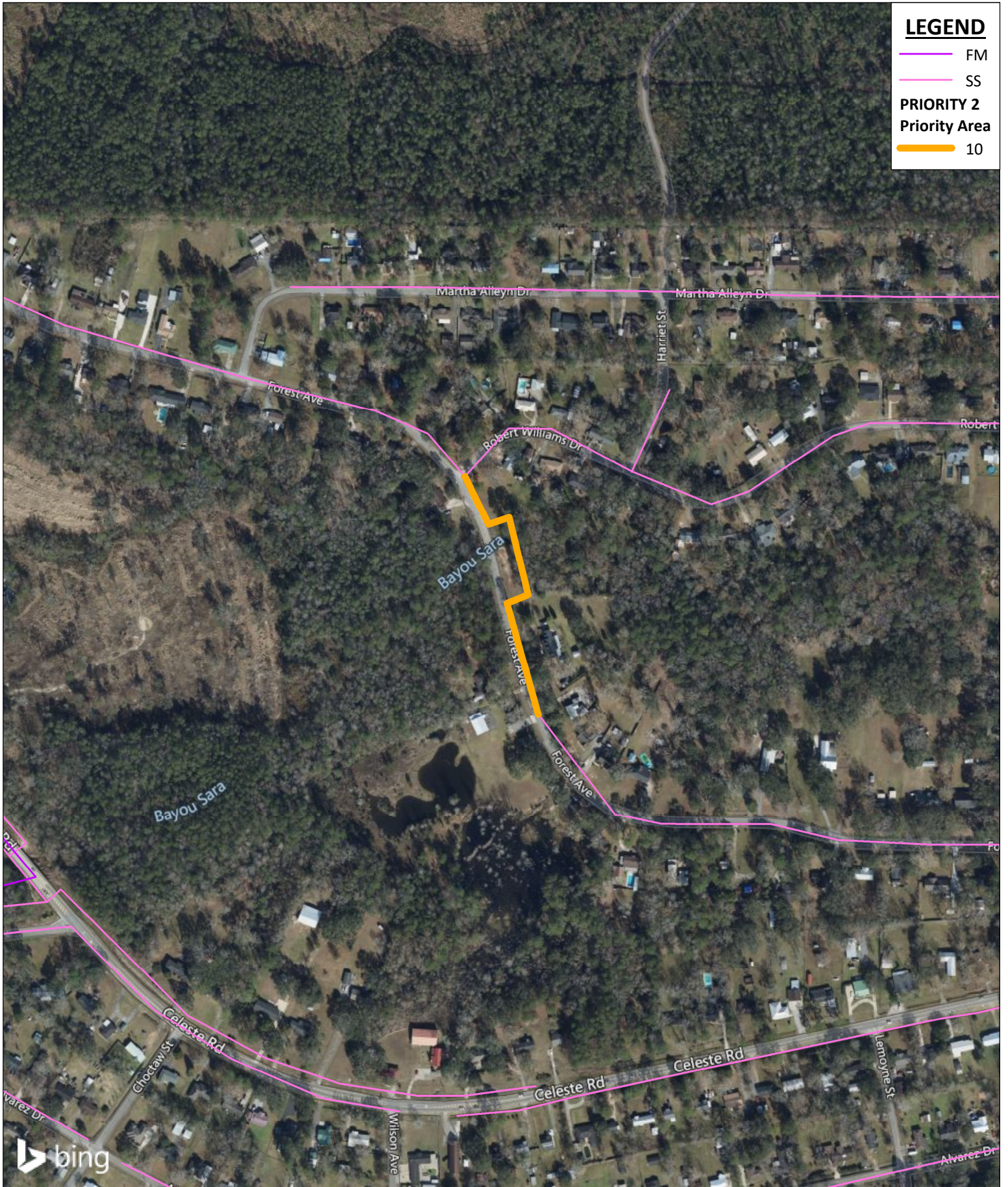
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

PRIORITY CATEGORY 2 - SHORT-TERM PRIORITY AREA 9					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 27,000.00	\$ 27,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 20,000.00	\$ 20,000.00
4	Traffic Control	LS	1	\$ 25,000.00	\$ 25,000.00
5	Erosion Control/BMPs	LS	1	\$ 20,000.00	\$ 20,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	4897	\$ 1.00	\$ 5,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF	1470	\$ 3.00	\$ 5,000.00
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	4897	\$ 4.00	\$ 20,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF	1470	\$ 5.00	\$ 8,000.00
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF	200	\$ 200.00	\$ 40,000.00
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	4897	\$ 40.00	\$ 196,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF	1470	\$ 100.00	\$ 147,000.00
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	5	\$ 10,000.00	\$ 50,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 563,000.00
25% CONTINGENCY:					\$ 140,750.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 704,000.00
*ENGINEERING DESIGN (13.0%):					\$ 92,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 43,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 839,000.00

* Cost rounded up to nearest thousand.

LEGEND

-  FM
-  SS
- PRIORITY 2**
- Priority Area**
-  10



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 2 - Priority Area 10







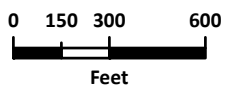
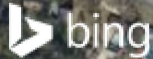
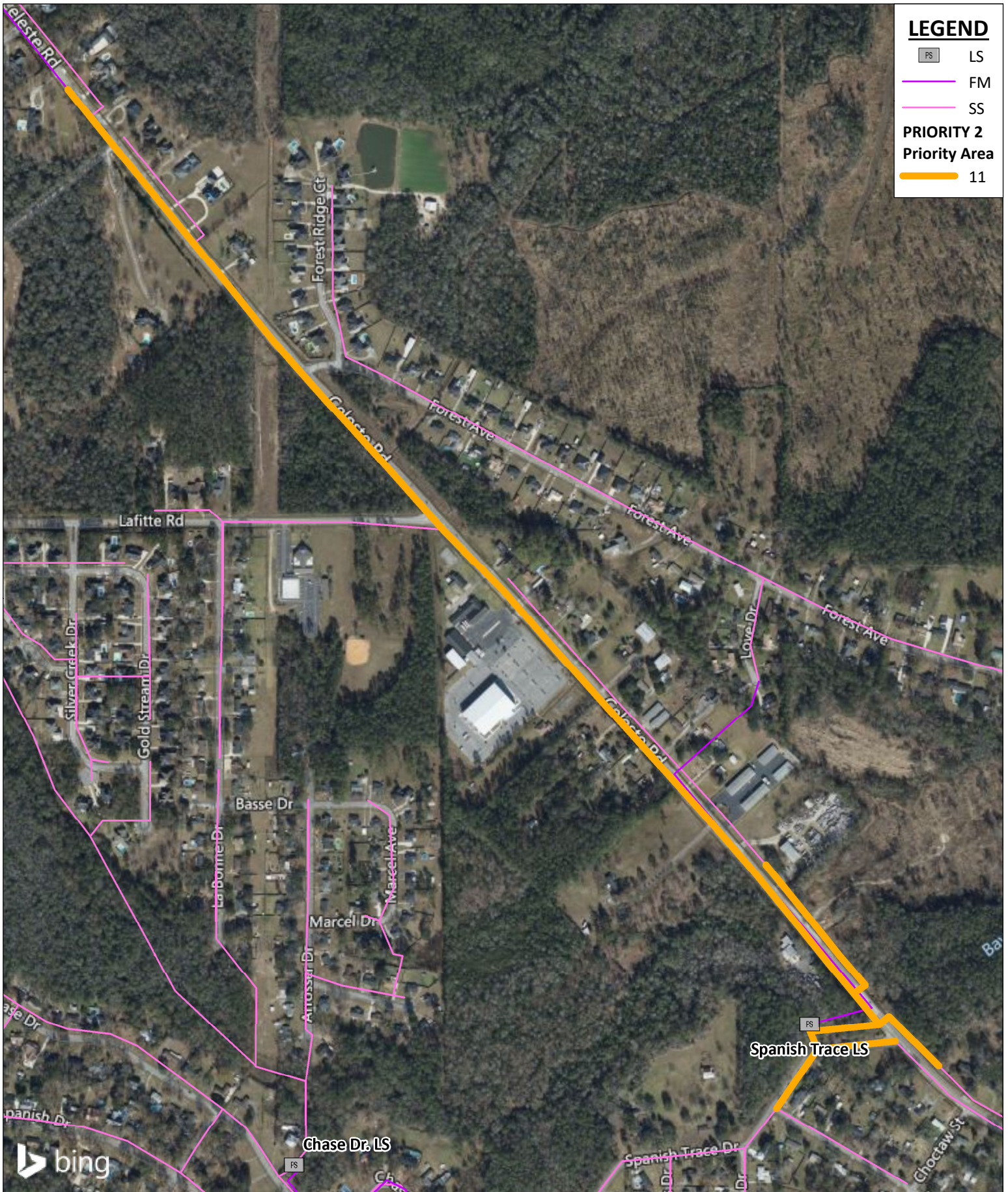
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

PRIORITY CATEGORY 2 - SHORT-TERM					
PRIORITY AREA 10					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 11,000.00	\$ 11,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 50,000.00	\$ 50,000.00
4	Traffic Control	LS	1	\$ 20,000.00	\$ 20,000.00
5	Erosion Control/BMPs	LS	1	\$ 10,000.00	\$ 10,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	941	\$ 1.00	\$ 1,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	941	\$ 4.00	\$ 4,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF	100	\$ 200.00	\$ 20,000.00
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	941	\$ 40.00	\$ 38,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	6	\$ 10,000.00	\$ 60,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 214,000.00
25% CONTINGENCY:					\$ 53,500.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 268,000.00
*ENGINEERING DESIGN (13.0%):					\$ 35,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 17,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 320,000.00

* Cost rounded up to nearest thousand.

LEGEND

-  LS
-  FM
-  SS
- PRIORITY 2**
- Priority Area**
-  11



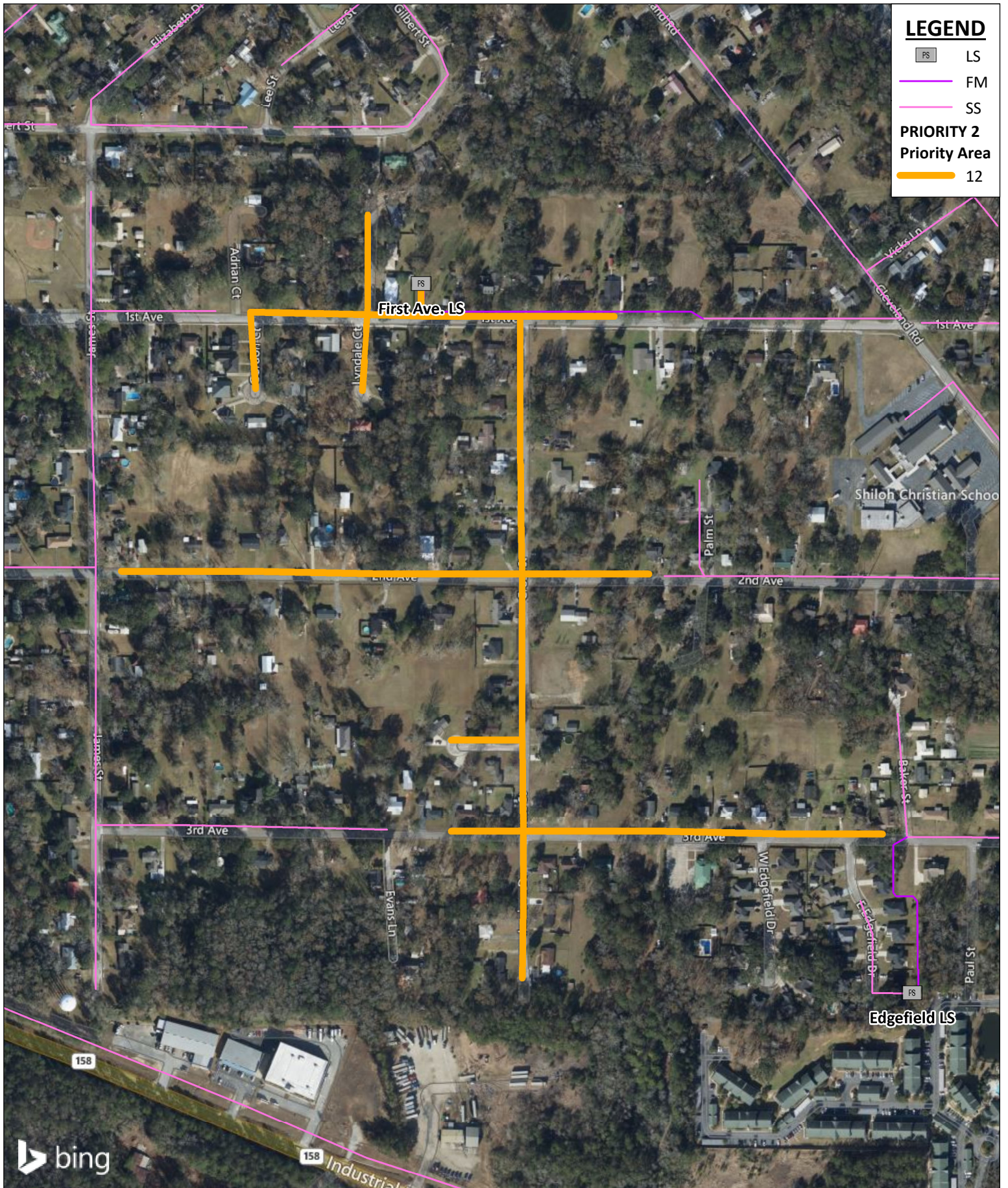
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 2 - Priority Area 11



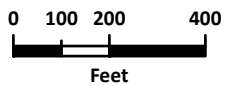
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

PRIORITY CATEGORY 2 - SHORT-TERM					
PRIORITY AREA 11					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 128,000.00	\$ 128,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 1,000,000.00	\$ 1,000,000.00
4	Traffic Control	LS	1	\$ 50,000.00	\$ 50,000.00
5	Erosion Control/BMPs	LS	1	\$ 25,000.00	\$ 25,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	1191	\$ 1.00	\$ 2,000.00
8	CCTV Inspection - 12" to 16"	LF	472	\$ 2.00	\$ 1,000.00
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	1191	\$ 4.00	\$ 5,000.00
12	Sewer Cleaning - 12" to 16"	LF	472	\$ 4.50	\$ 3,000.00
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF	6673	\$ 200.00	\$ 1,335,000.00
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	1191	\$ 40.00	\$ 48,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF	472	\$ 65.00	\$ 31,000.00
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	6	\$ 10,000.00	\$ 60,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 2,688,000.00
25% CONTINGENCY:					\$ 672,000.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 3,360,000.00
*ENGINEERING DESIGN (13.0%):					\$ 437,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 202,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 3,999,000.00

* Cost rounded up to nearest thousand.



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 2 - Priority Area 12



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

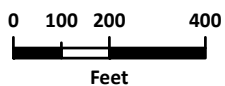
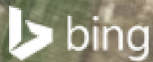
PRIORITY CATEGORY 2 - SHORT-TERM					
PRIORITY AREA 12					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 28,000.00	\$ 28,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 50,000.00	\$ 50,000.00
4	Traffic Control	LS	1	\$ 20,000.00	\$ 20,000.00
5	Erosion Control/BMPs	LS	1	\$ 20,000.00	\$ 20,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	7518	\$ 1.00	\$ 8,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	7518	\$ 4.00	\$ 31,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF	500	\$ 200.00	\$ 100,000.00
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	7518	\$ 40.00	\$ 301,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	3	\$ 10,000.00	\$ 30,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 588,000.00
25% CONTINGENCY:					\$ 147,000.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 735,000.00
*ENGINEERING DESIGN (13.0%):					\$ 96,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 45,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 876,000.00

* Cost rounded up to nearest thousand.



LEGEND

- SS
- PRIORITY 2**
- Priority Area**
- 13**



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 2 - Priority Area 13



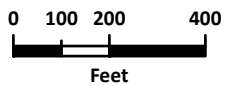
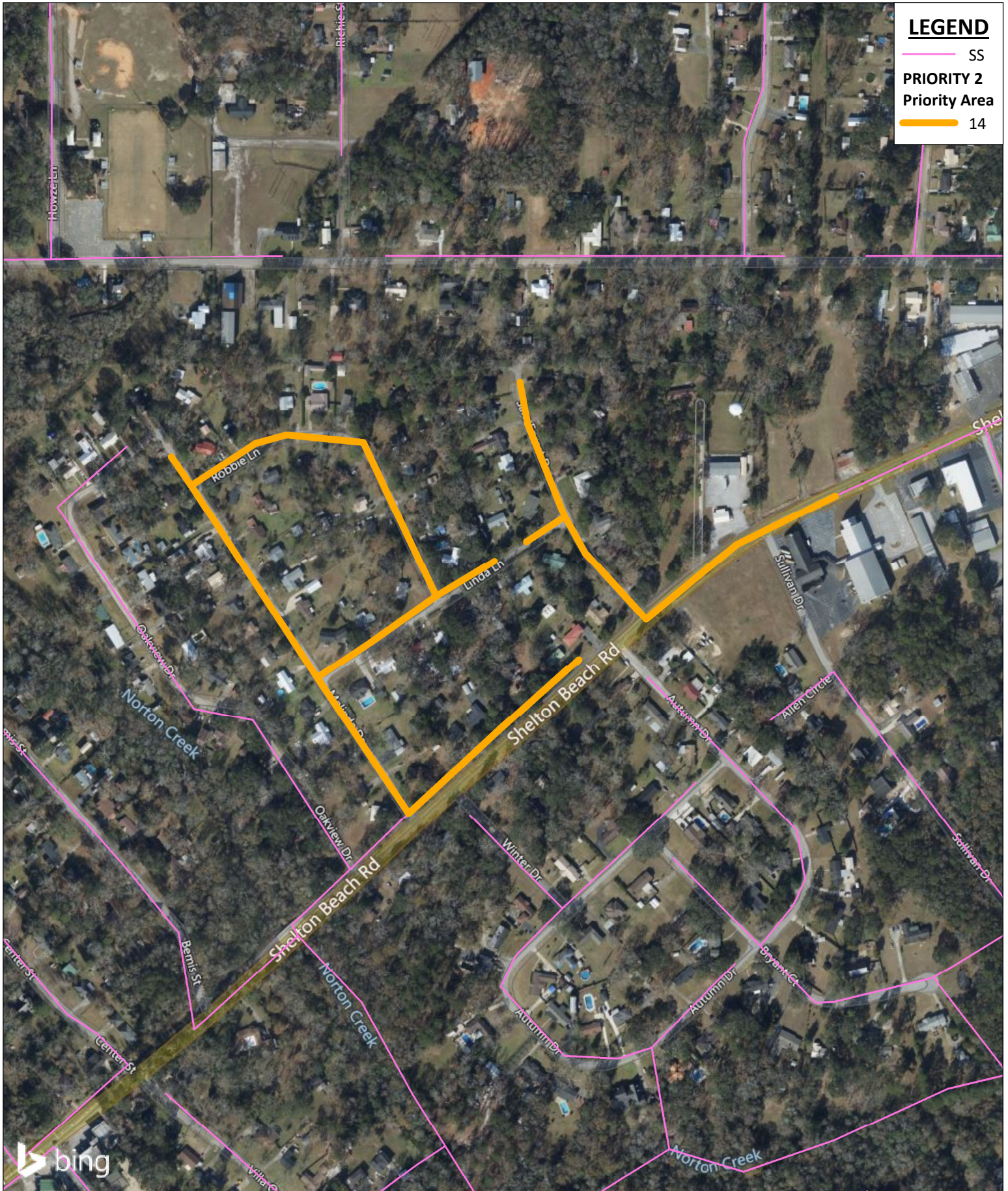
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

PRIORITY CATEGORY 2 - SHORT-TERM					
PRIORITY AREA 13					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 17,000.00	\$ 17,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 50,000.00	\$ 50,000.00
4	Traffic Control	LS	1	\$ 20,000.00	\$ 20,000.00
5	Erosion Control/BMPs	LS	1	\$ 20,000.00	\$ 20,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF		\$ 1.00	\$ -
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF		\$ 4.00	\$ -
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF		\$ 200.00	\$ -
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF	698	\$ 300.00	\$ 210,000.00
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF		\$ 40.00	\$ -
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	3	\$ 10,000.00	\$ 30,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 347,000.00
25% CONTINGENCY:					\$ 86,750.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 434,000.00
*ENGINEERING DESIGN (13.0%):					\$ 57,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 27,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 518,000.00

* Cost rounded up to nearest thousand.

LEGEND

- SS
- PRIORITY 2**
- Priority Area**
- 14



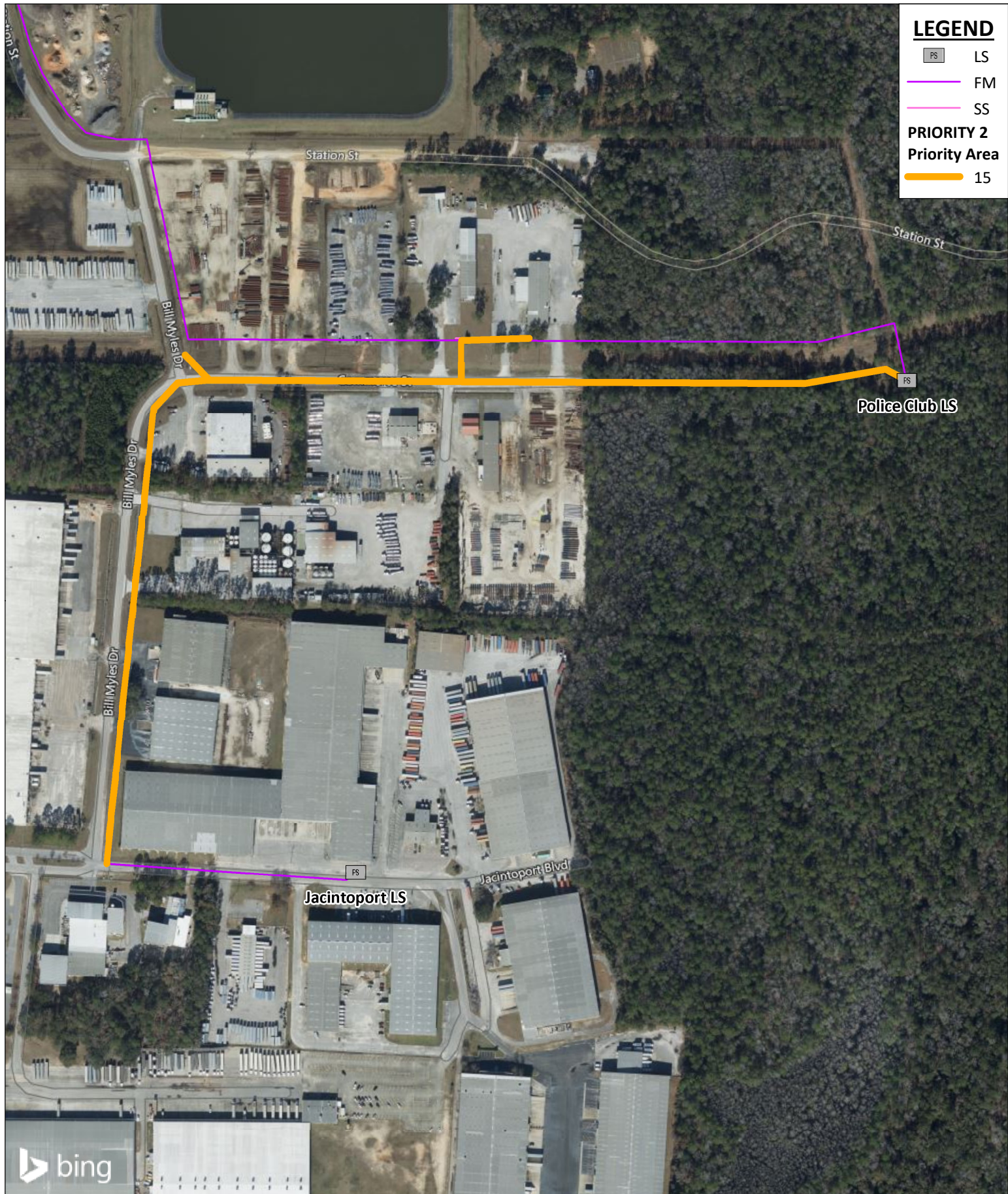
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 2 - Priority Area 14



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

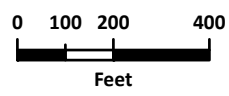
PRIORITY CATEGORY 2 - SHORT-TERM PRIORITY AREA 14					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 20,000.00	\$ 20,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 50,000.00	\$ 50,000.00
4	Traffic Control	LS	1	\$ 20,000.00	\$ 20,000.00
5	Erosion Control/BMPs	LS	1	\$ 20,000.00	\$ 20,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	5671	\$ 1.00	\$ 6,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	5671	\$ 4.00	\$ 23,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF		\$ 200.00	\$ -
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	5671	\$ 40.00	\$ 227,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	4	\$ 10,000.00	\$ 40,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 406,000.00
25% CONTINGENCY:					\$ 101,500.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 508,000.00
*ENGINEERING DESIGN (13.0%):					\$ 67,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 31,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 606,000.00

* Cost rounded up to nearest thousand.



LEGEND

- PS LS
- FM
- SS
- PRIORITY 2**
- Priority Area**
- 15



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 2 - Priority Area 15



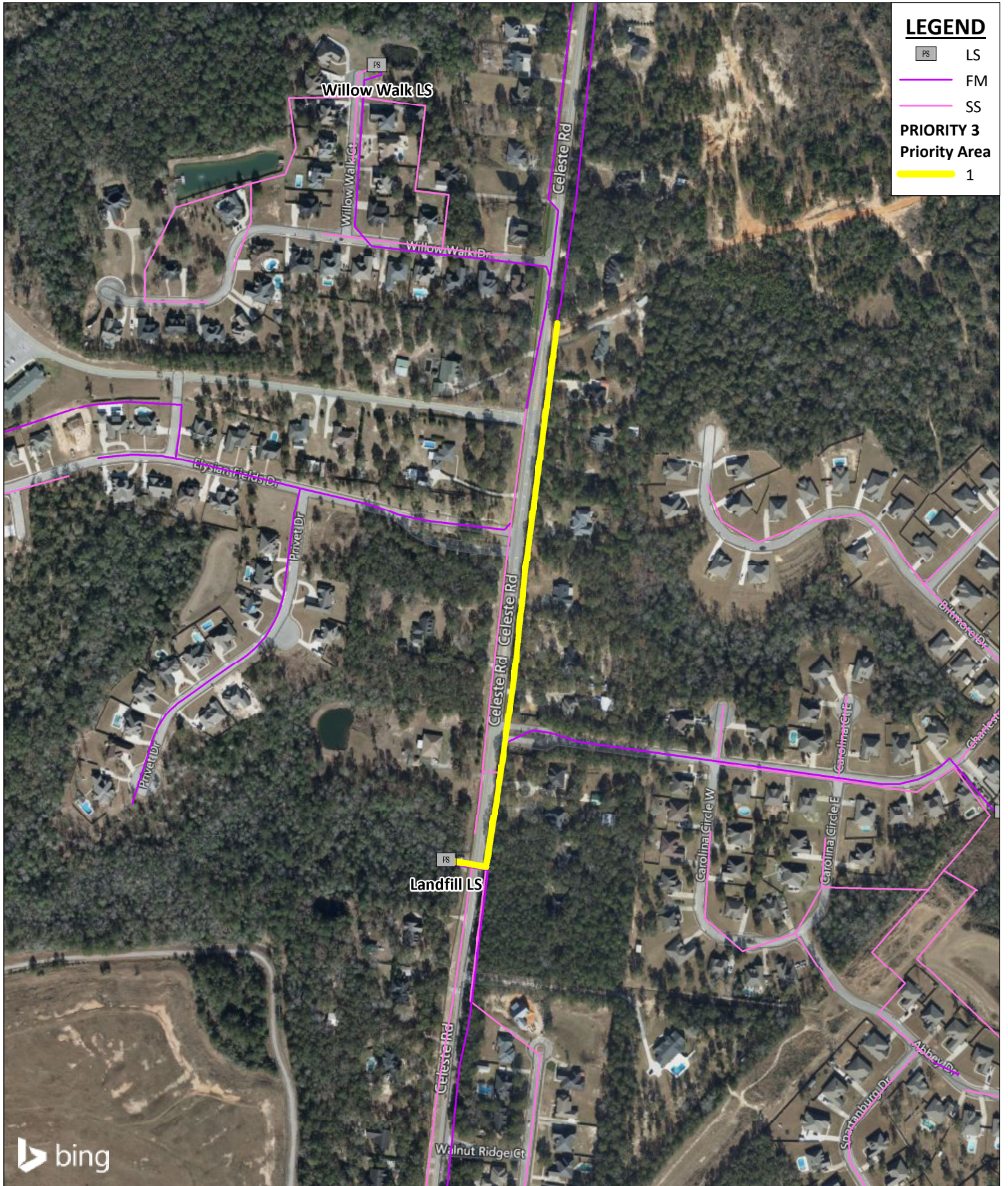
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

PRIORITY CATEGORY 2 - SHORT-TERM					
PRIORITY AREA 15					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 18,000.00	\$ 18,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 50,000.00	\$ 50,000.00
4	Traffic Control	LS	1	\$ 20,000.00	\$ 20,000.00
5	Erosion Control/BMPs	LS	1	\$ 20,000.00	\$ 20,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	4369	\$ 1.00	\$ 5,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	4369	\$ 4.00	\$ 18,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF	200	\$ 200.00	\$ 40,000.00
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	4369	\$ 40.00	\$ 175,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	3	\$ 10,000.00	\$ 30,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 376,000.00
25% CONTINGENCY:					\$ 94,000.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 470,000.00
*ENGINEERING DESIGN (13.0%):					\$ 62,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 29,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 561,000.00

* Cost rounded up to nearest thousand.

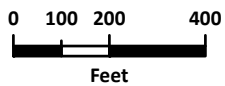
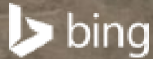


PRIORITY CATEGORY 3
INTERMEDIATE-TERM PRIORITY



LEGEND

- FS LS
- FM
- SS
- PRIORITY 3**
- Priority Area**
- 1



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 3 - Priority Area 1



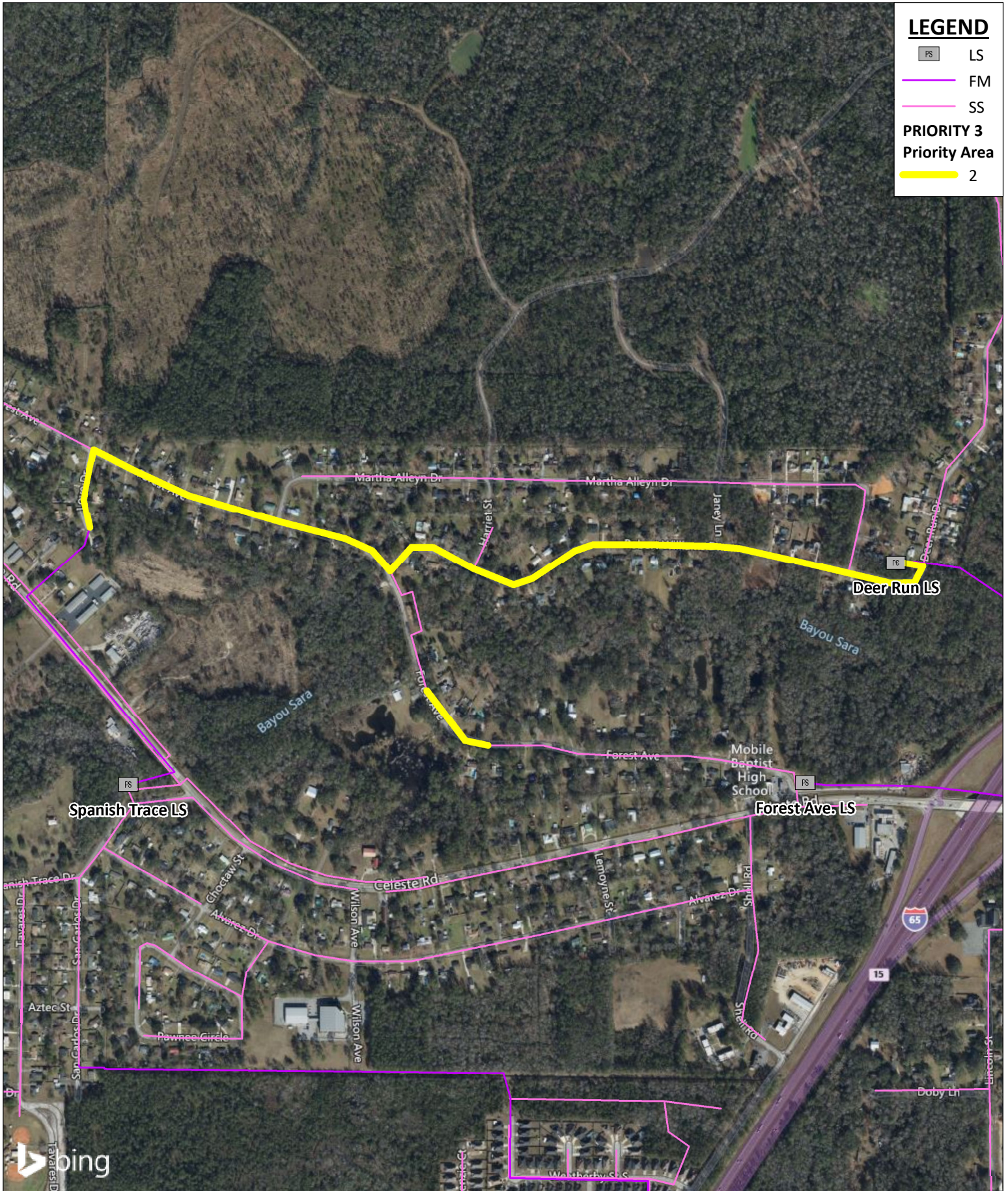
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

PRIORITY CATEGORY 3 - INTERMEDIATE-TERM					
PRIORITY AREA 1					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 36,000.00	\$ 36,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 250,000.00	\$ 250,000.00
4	Traffic Control	LS	1	\$ 25,000.00	\$ 25,000.00
5	Erosion Control/BMPs	LS	1	\$ 20,000.00	\$ 20,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF		\$ 1.00	\$ -
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF		\$ 4.00	\$ -
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF	1888	\$ 200.00	\$ 378,000.00
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF		\$ 40.00	\$ -
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	3	\$ 10,000.00	\$ 30,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 739,000.00
25% CONTINGENCY:					\$ 184,750.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 924,000.00
*ENGINEERING DESIGN (13.0%):					\$ 121,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 56,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 1,101,000.00

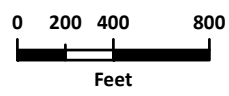
* Cost rounded up to nearest thousand.

LEGEND

- PS LS
- FM
- SS
- PRIORITY 3**
- Priority Area**
- 2



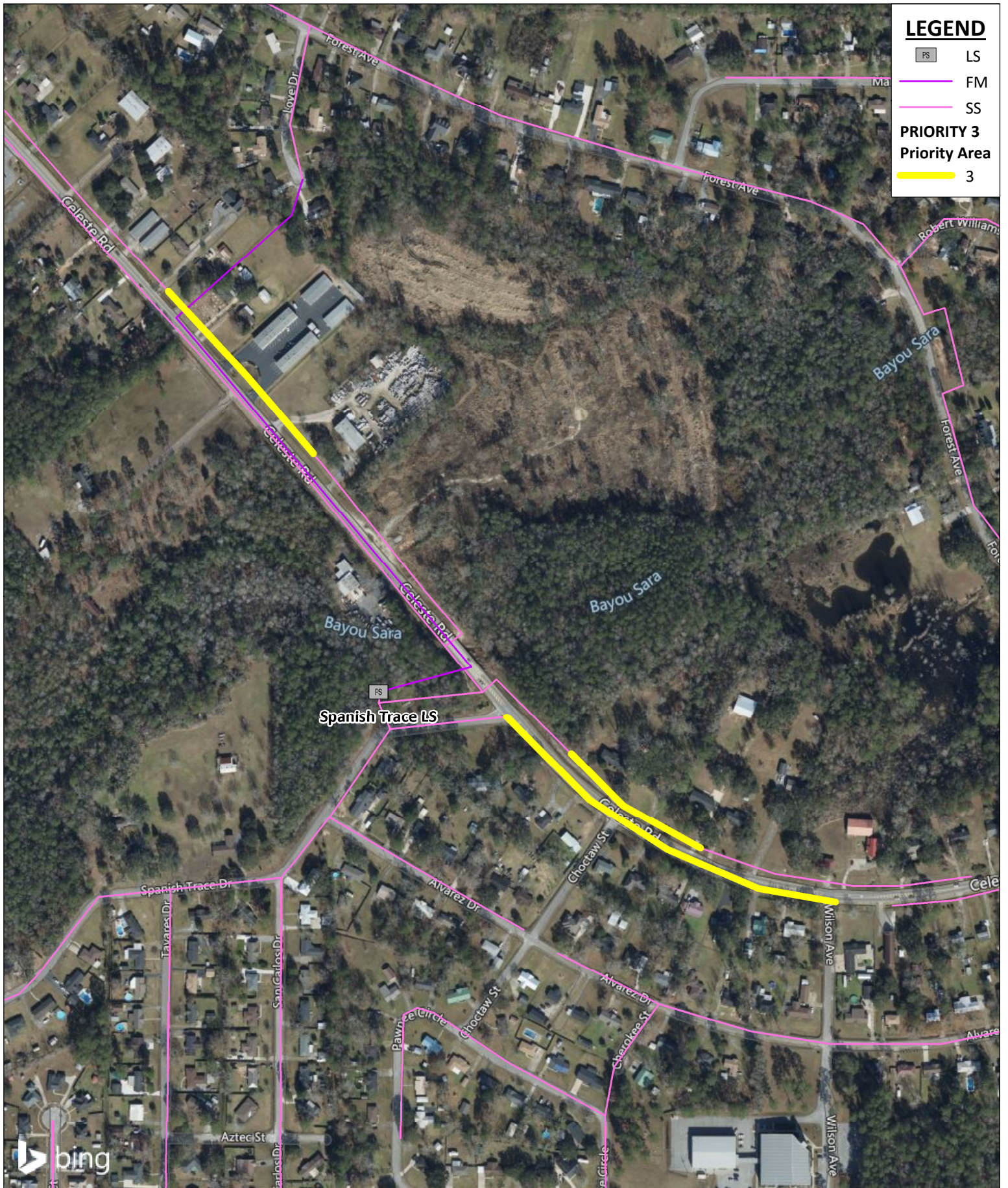
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 3 - Priority Area 2



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
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PRIORITY CATEGORY 3 - INTERMEDIATE-TERM					
PRIORITY AREA 2					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 113,000.00	\$ 113,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 500,000.00	\$ 500,000.00
4	Traffic Control	LS	1	\$ 50,000.00	\$ 50,000.00
5	Erosion Control/BMPs	LS	1	\$ 25,000.00	\$ 25,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	552	\$ 1.00	\$ 1,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	552	\$ 4.00	\$ 3,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF		\$ 200.00	\$ -
16	Pipe Replacement - 12" - 16"	LF	6448	\$ 250.00	\$ 1,612,000.00
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	552	\$ 40.00	\$ 23,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	4	\$ 10,000.00	\$ 40,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 2,367,000.00
25% CONTINGENCY:					\$ 591,750.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 2,959,000.00
*ENGINEERING DESIGN (13.0%):					\$ 385,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 178,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 3,522,000.00

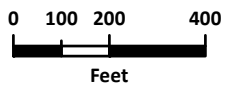
* Cost rounded up to nearest thousand.



LEGEND

- PS LS
- FM
- SS
- PRIORITY 3**
- Priority Area**
- 3

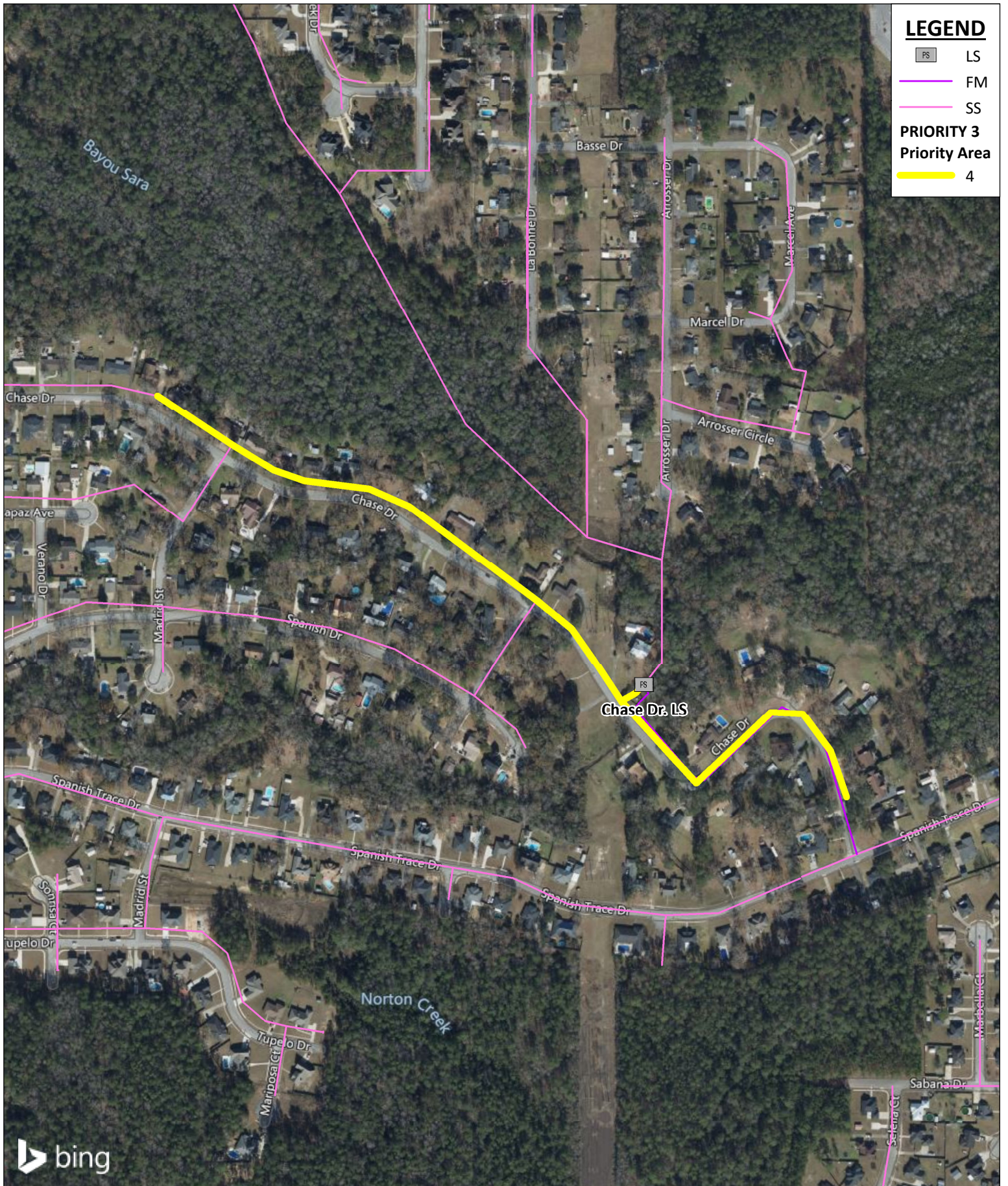
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 3 - Priority Area 3



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

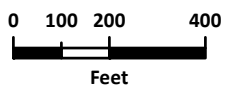
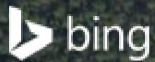
PRIORITY CATEGORY 3 - INTERMEDIATE-TERM					
PRIORITY AREA 3					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 11,000.00	\$ 11,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 25,000.00	\$ 25,000.00
4	Traffic Control	LS	1	\$ 15,000.00	\$ 15,000.00
5	Erosion Control/BMPs	LS	1	\$ 10,000.00	\$ 10,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	2459	\$ 1.00	\$ 3,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	2459	\$ 4.00	\$ 10,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF		\$ 200.00	\$ -
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	2459	\$ 40.00	\$ 99,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	5	\$ 10,000.00	\$ 50,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 223,000.00
25% CONTINGENCY:					\$ 55,750.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 279,000.00
*ENGINEERING DESIGN (13.0%):					\$ 37,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 17,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 333,000.00

* Cost rounded up to nearest thousand.



LEGEND

- PS LS
- FM
- SS
- PRIORITY 3**
- Priority Area**
- 4



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 3 - Priority Area 4



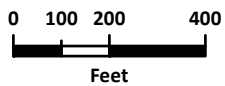
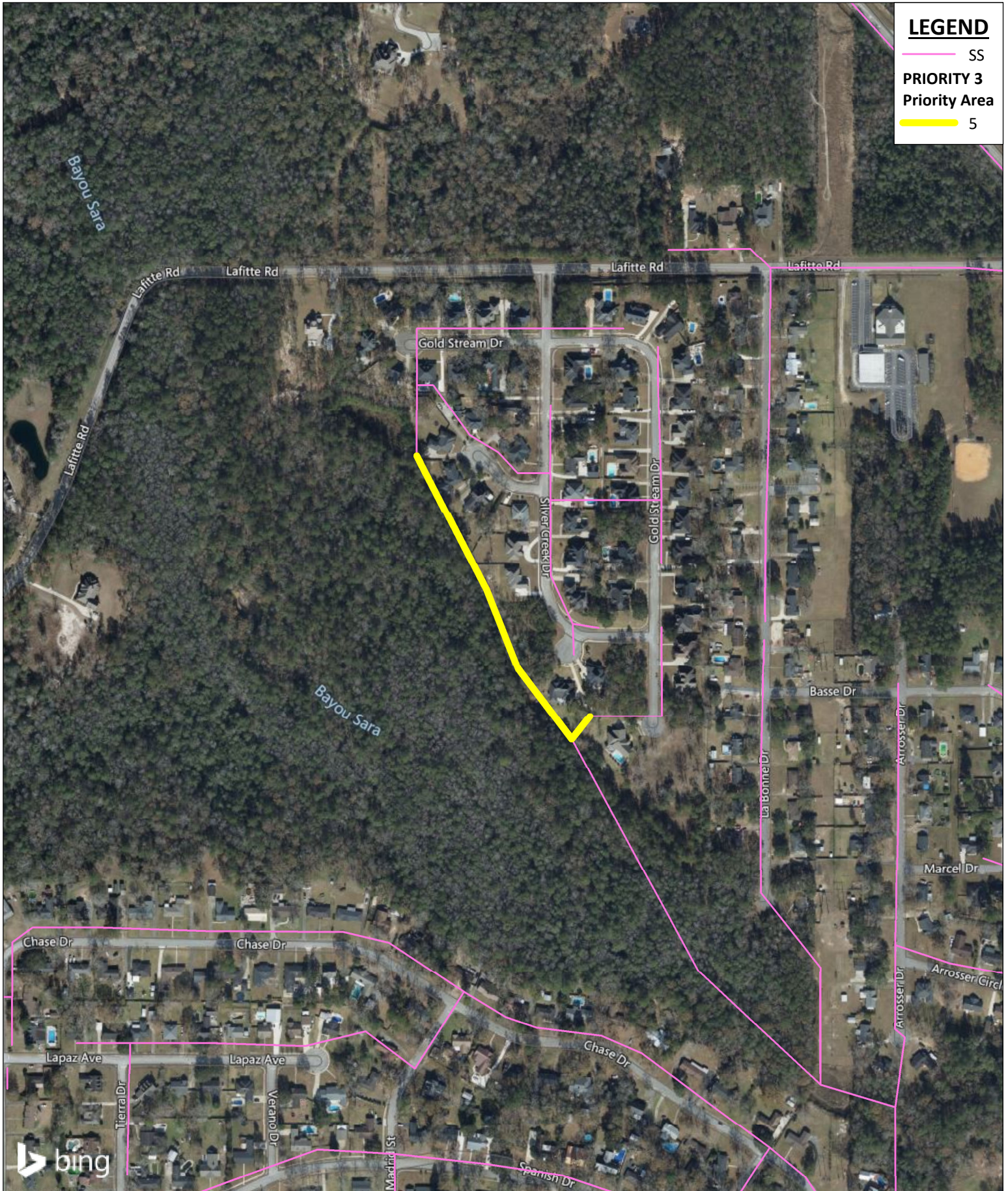
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

PRIORITY CATEGORY 3 - INTERMEDIATE-TERM					
PRIORITY AREA 4					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 19,000.00	\$ 19,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 100,000.00	\$ 100,000.00
4	Traffic Control	LS	1	\$ 40,000.00	\$ 40,000.00
5	Erosion Control/BMPs	LS	1	\$ 25,000.00	\$ 25,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	2499	\$ 1.00	\$ 3,000.00
8	CCTV Inspection - 12" to 16"	LF	518	\$ 2.00	\$ 2,000.00
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	2499	\$ 4.00	\$ 10,000.00
12	Sewer Cleaning - 12" to 16"	LF	518	\$ 4.50	\$ 3,000.00
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF		\$ 200.00	\$ -
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	2499	\$ 40.00	\$ 100,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF	518	\$ 65.00	\$ 34,000.00
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	5	\$ 10,000.00	\$ 50,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 386,000.00
25% CONTINGENCY:					\$ 96,500.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 483,000.00
*ENGINEERING DESIGN (13.0%):					\$ 63,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 29,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 575,000.00

* Cost rounded up to nearest thousand.

LEGEND

- SS
- PRIORITY 3**
- Priority Area**
- 5



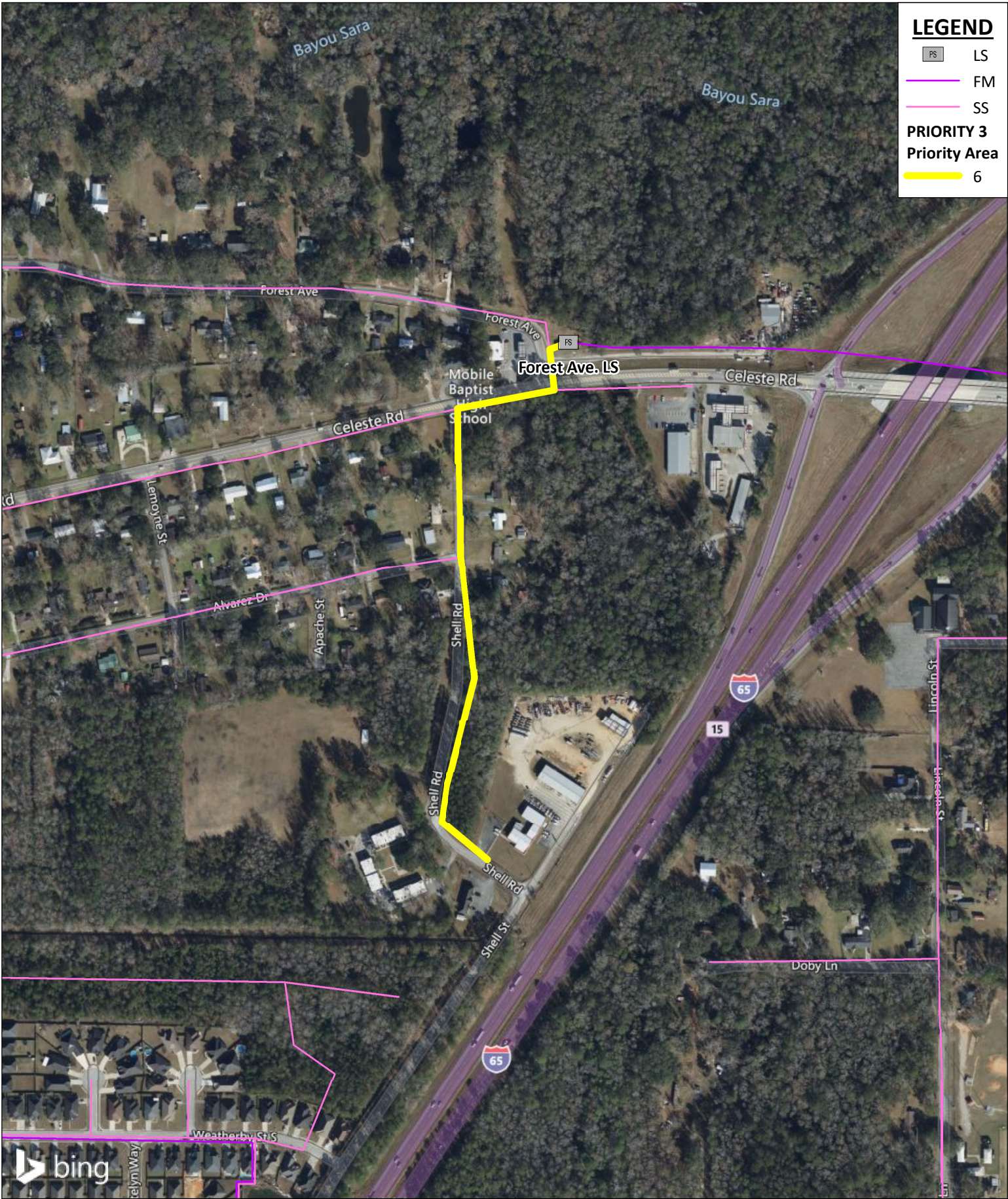
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 3 - Priority Area 5



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

PRIORITY CATEGORY 3 - INTERMEDIATE-TERM					
PRIORITY AREA 5					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 8,000.00	\$ 8,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 50,000.00	\$ 50,000.00
4	Traffic Control	LS	1	\$ 20,000.00	\$ 20,000.00
5	Erosion Control/BMPs	LS	1	\$ 5,000.00	\$ 5,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	1131	\$ 1.00	\$ 2,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	1131	\$ 4.00	\$ 5,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF		\$ 200.00	\$ -
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	1131	\$ 40.00	\$ 46,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	2	\$ 10,000.00	\$ 20,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 156,000.00
25% CONTINGENCY:					\$ 39,000.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 195,000.00
*ENGINEERING DESIGN (13.0%):					\$ 26,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 12,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 233,000.00

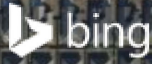
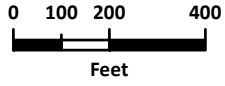
* Cost rounded up to nearest thousand.



LEGEND

- PS LS
- FM
- SS
- PRIORITY 3**
- Priority Area**
- 6

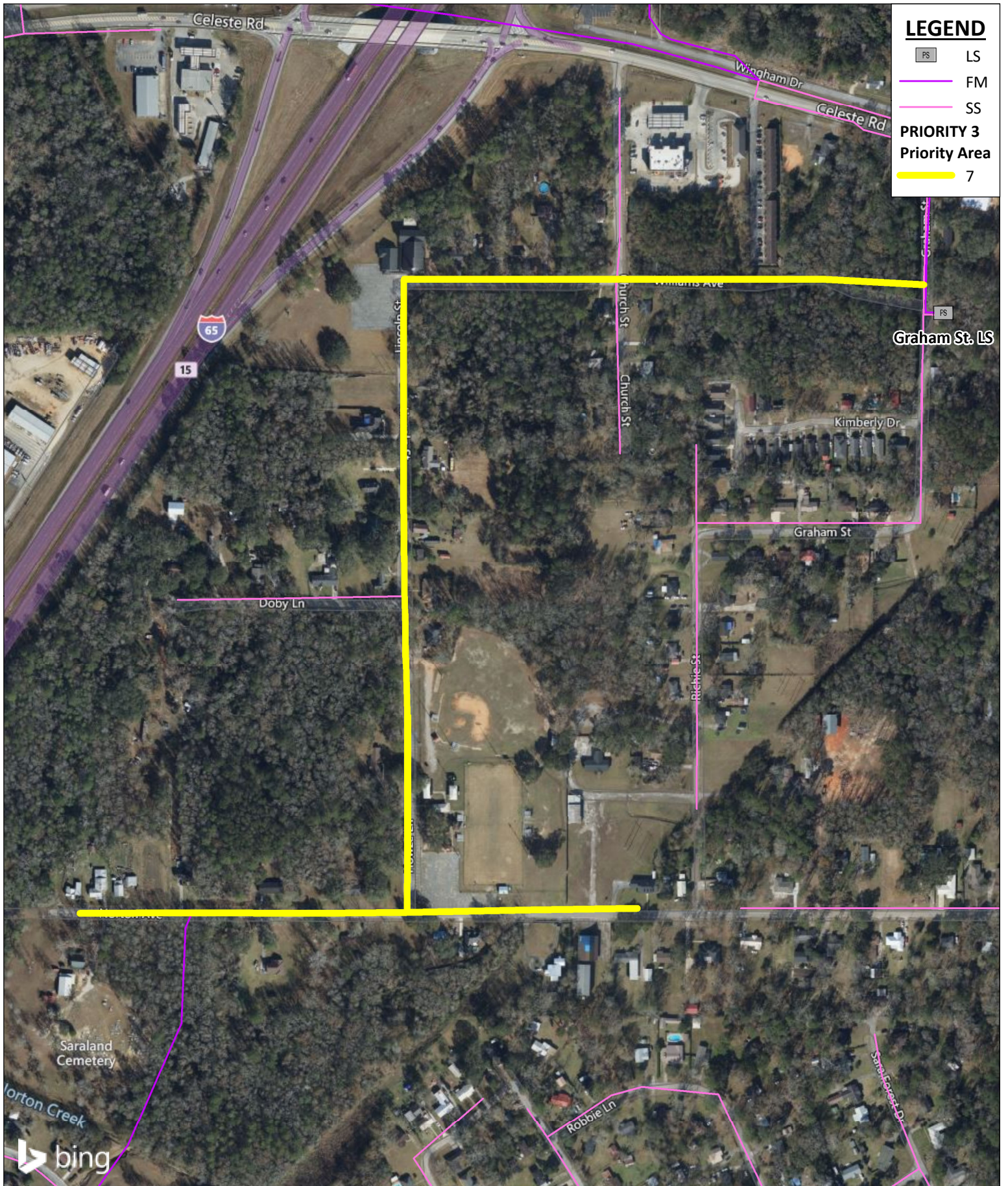
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 3 - Priority Area 6



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

PRIORITY CATEGORY 3 - INTERMEDIATE-TERM					
PRIORITY AREA 6					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 11,000.00	\$ 11,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 50,000.00	\$ 50,000.00
4	Traffic Control	LS	1	\$ 15,000.00	\$ 15,000.00
5	Erosion Control/BMPs	LS	1	\$ 10,000.00	\$ 10,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	2025	\$ 1.00	\$ 3,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	2025	\$ 4.00	\$ 9,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF		\$ 200.00	\$ -
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF		\$ 40.00	\$ -
20	10" CIPP Mainline Rehabilitation	LF	2025	\$ 50.00	\$ 102,000.00
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	2	\$ 10,000.00	\$ 20,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 220,000.00
25% CONTINGENCY:					\$ 55,000.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 275,000.00
*ENGINEERING DESIGN (13.0%):					\$ 36,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 17,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 328,000.00

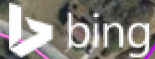
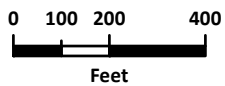
* Cost rounded up to nearest thousand.



LEGEND

- PS LS
- FM
- SS
- PRIORITY 3**
- Priority Area**
- 7

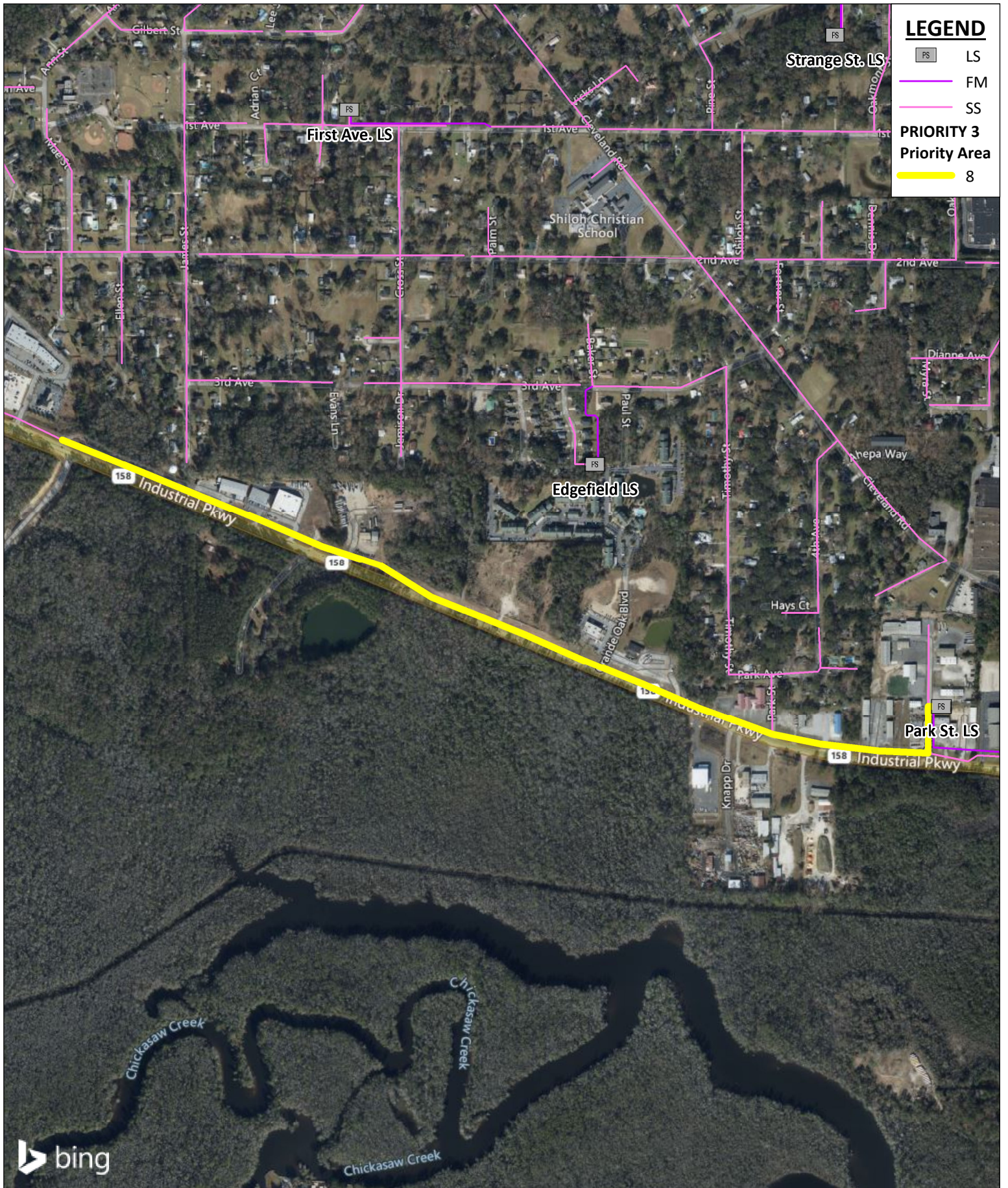
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 3 - Priority Area 7



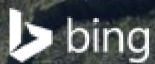
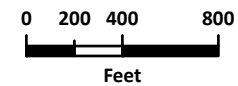
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

PRIORITY CATEGORY 3 - INTERMEDIATE-TERM					
PRIORITY AREA 7					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 23,000.00	\$ 23,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 50,000.00	\$ 50,000.00
4	Traffic Control	LS	1	\$ 15,000.00	\$ 15,000.00
5	Erosion Control/BMPs	LS	1	\$ 10,000.00	\$ 10,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	1101	\$ 1.00	\$ 2,000.00
8	CCTV Inspection - 12" to 16"	LF	4394	\$ 2.00	\$ 9,000.00
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	1101	\$ 4.00	\$ 5,000.00
12	Sewer Cleaning - 12" to 16"	LF	4394	\$ 4.50	\$ 20,000.00
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF		\$ 200.00	\$ -
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	1101	\$ 40.00	\$ 45,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF	4394	\$ 65.00	\$ 286,000.00
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA		\$ 10,000.00	\$ -
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 465,000.00
25% CONTINGENCY:					\$ 116,250.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 582,000.00
*ENGINEERING DESIGN (13.0%):					\$ 76,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 35,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 693,000.00

* Cost rounded up to nearest thousand.



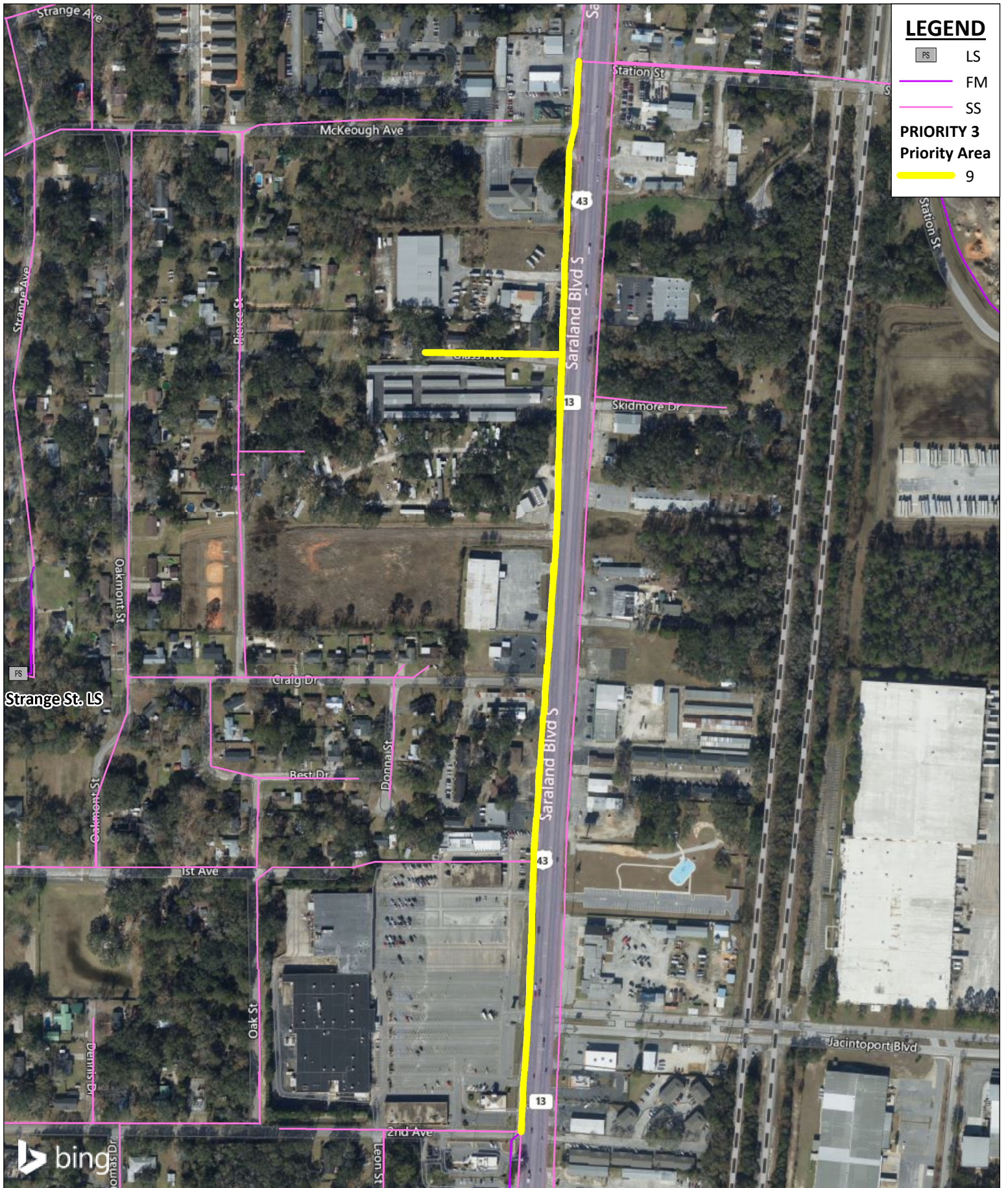
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 3 - Priority Area 8



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

PRIORITY CATEGORY 3 - INTERMEDIATE-TERM					
PRIORITY AREA 8					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 152,000.00	\$ 152,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 1,000,000.00	\$ 1,000,000.00
4	Traffic Control	LS	1	\$ 50,000.00	\$ 50,000.00
5	Erosion Control/BMPs	LS	1	\$ 25,000.00	\$ 25,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF		\$ 1.00	\$ -
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF		\$ 4.00	\$ -
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF		\$ 200.00	\$ -
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF	6346	\$ 300.00	\$ 1,904,000.00
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF		\$ 40.00	\$ -
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	5	\$ 10,000.00	\$ 50,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 3,181,000.00
25% CONTINGENCY:					\$ 795,250.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 3,977,000.00
*ENGINEERING DESIGN (13.0%):					\$ 518,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 239,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 4,734,000.00

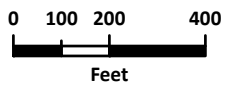
* Cost rounded up to nearest thousand.



LEGEND

- PS LS
- FM
- SS
- PRIORITY 3**
- Priority Area**
- 9

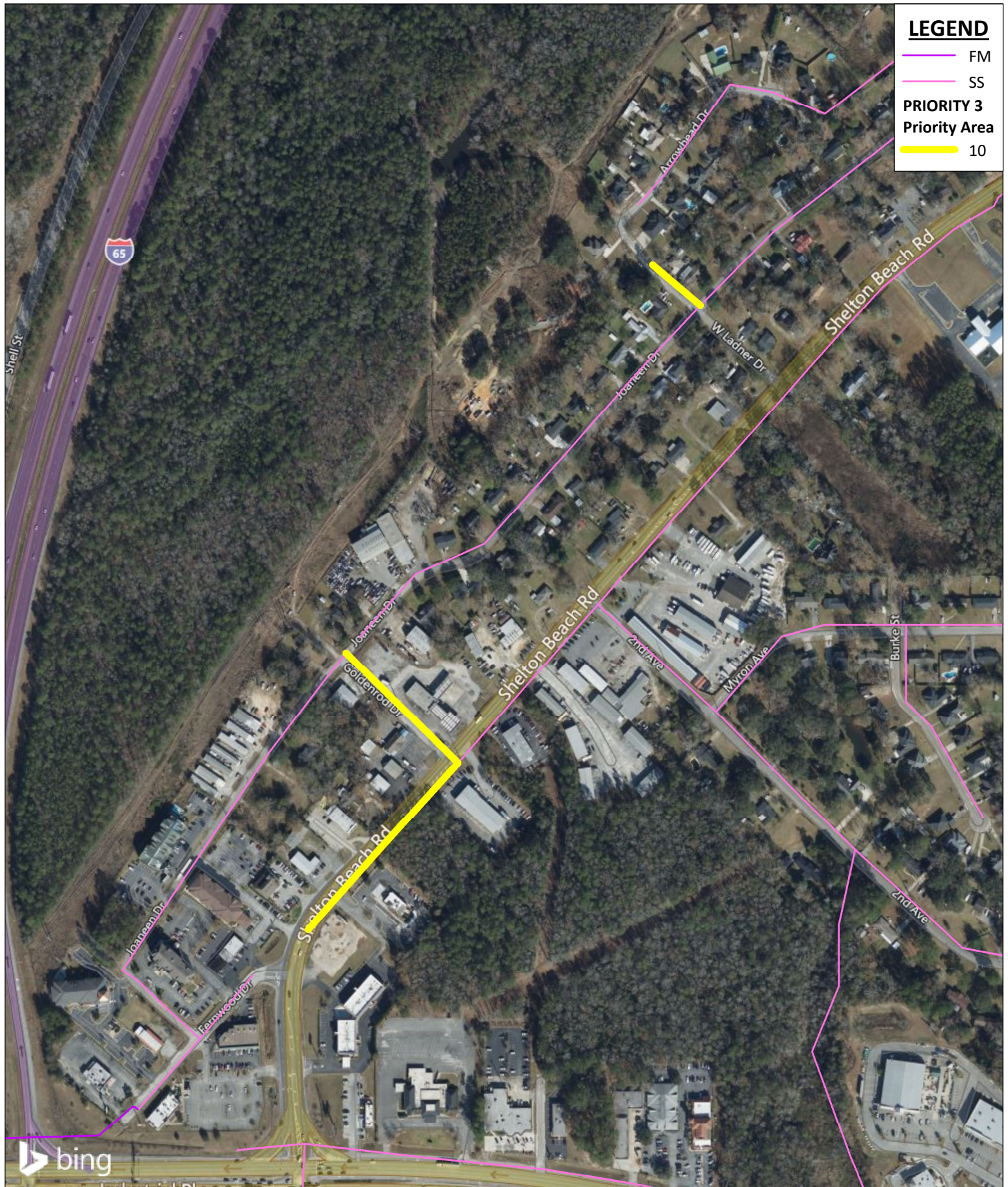
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 3 - Priority Area 9



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

PRIORITY CATEGORY 3 - INTERMEDIATE-TERM					
PRIORITY AREA 9					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 130,000.00	\$ 130,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 1,000,000.00	\$ 1,000,000.00
4	Traffic Control	LS	1	\$ 50,000.00	\$ 50,000.00
5	Erosion Control/BMPs	LS	1	\$ 25,000.00	\$ 25,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF		\$ 1.00	\$ -
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF		\$ 4.00	\$ -
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF		\$ 200.00	\$ -
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF	3881	\$ 375.00	\$ 1,456,000.00
19	8" CIPP Mainline Rehabilitation	LF		\$ 40.00	\$ -
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	5	\$ 10,000.00	\$ 50,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 2,711,000.00
25% CONTINGENCY:					\$ 677,750.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 3,389,000.00
*ENGINEERING DESIGN (13.0%):					\$ 441,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 204,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 4,034,000.00

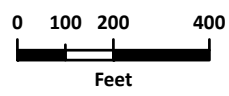
* Cost rounded up to nearest thousand.



LEGEND

- FM
- SS
- PRIORITY 3**
- Priority Area**
- 10

bing



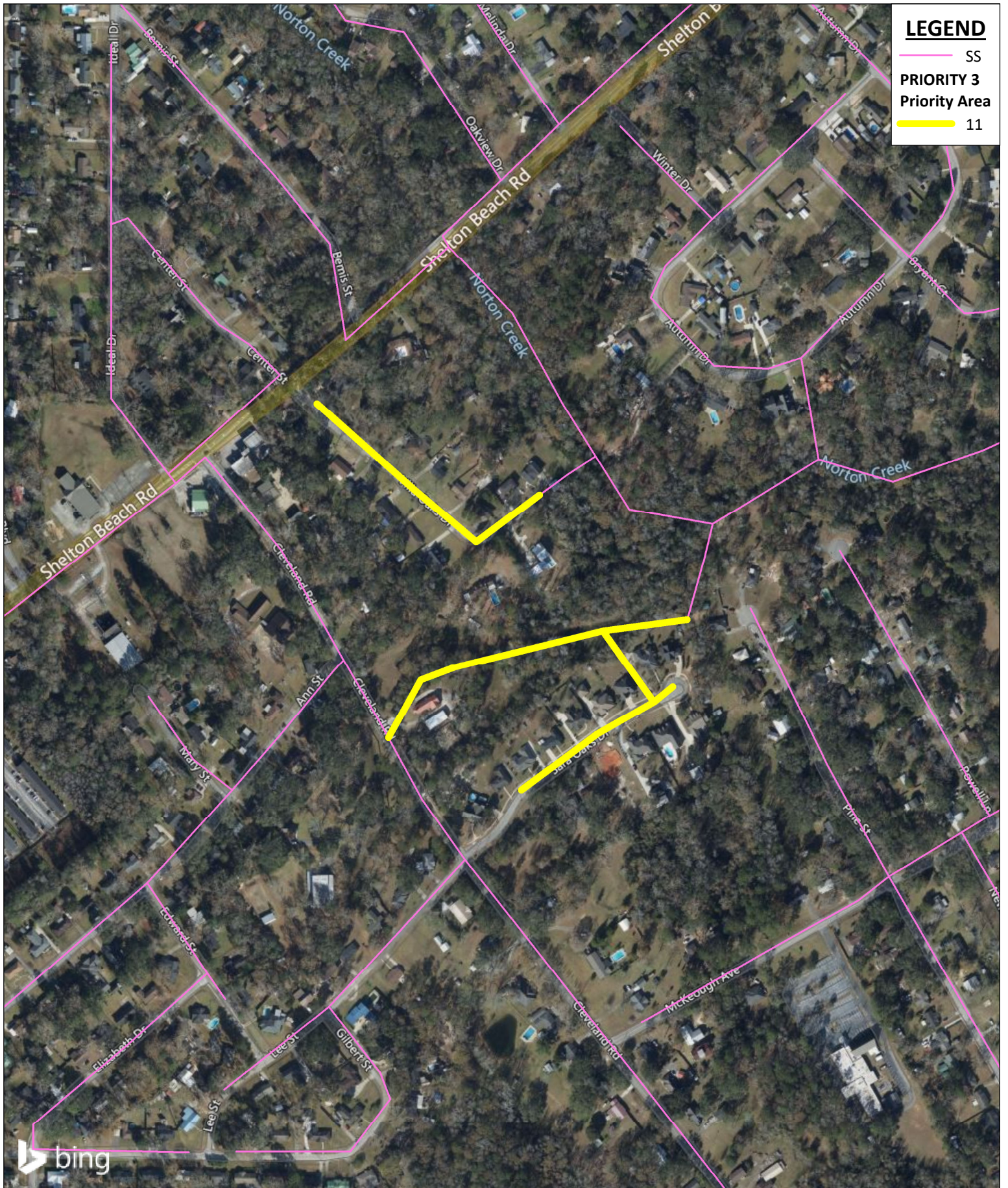
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 3 - Priority Area 10



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

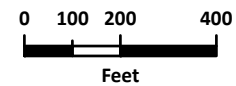
PRIORITY CATEGORY 3 - INTERMEDIATE-TERM					
PRIORITY AREA 10					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 14,000.00	\$ 14,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 100,000.00	\$ 100,000.00
4	Traffic Control	LS	1	\$ 20,000.00	\$ 20,000.00
5	Erosion Control/BMPs	LS	1	\$ 10,000.00	\$ 10,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	919	\$ 1.00	\$ 1,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	919	\$ 4.00	\$ 4,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF	504	\$ 200.00	\$ 101,000.00
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	919	\$ 40.00	\$ 37,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA		\$ 10,000.00	\$ -
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 287,000.00
25% CONTINGENCY:					\$ 71,750.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 359,000.00
*ENGINEERING DESIGN (13.0%):					\$ 47,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 22,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 428,000.00

* Cost rounded up to nearest thousand.



LEGEND

- SS
- PRIORITY 3**
- Priority Area**
- 11



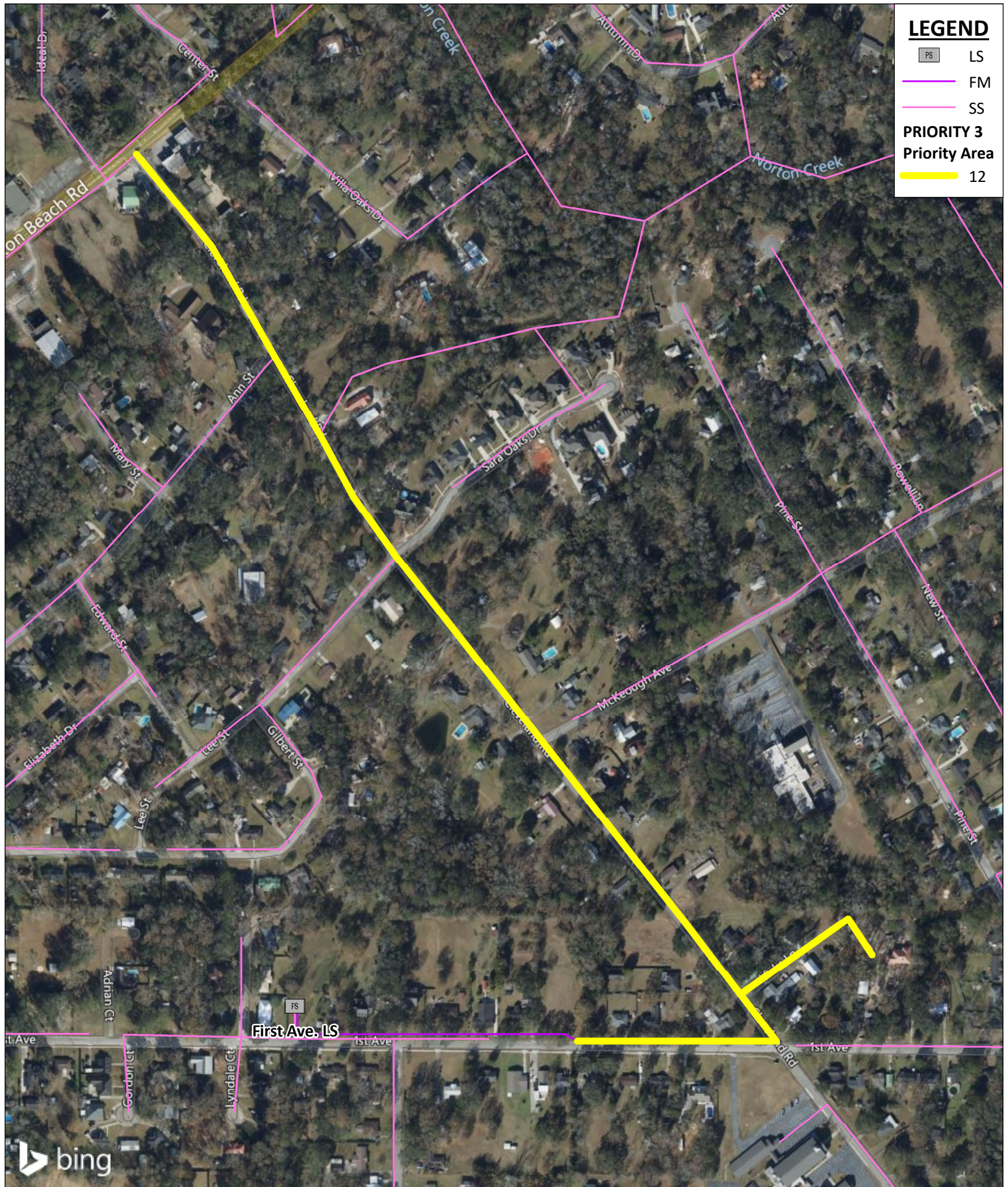
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 3 - Priority Area 11



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

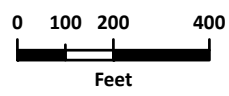
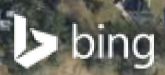
PRIORITY CATEGORY 3 - INTERMEDIATE-TERM					
PRIORITY AREA 11					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 26,000.00	\$ 26,000.00
2	Clearing and Grubbing	AC	1	\$ 5,000.00	\$ 5,000.00
3	Bypass Pumping	LS	1	\$ 100,000.00	\$ 100,000.00
4	Traffic Control	LS	1	\$ 40,000.00	\$ 40,000.00
5	Erosion Control/BMPs	LS	1	\$ 20,000.00	\$ 20,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	1801	\$ 1.00	\$ 2,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	1801	\$ 4.00	\$ 8,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF	1092	\$ 200.00	\$ 219,000.00
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	1801	\$ 40.00	\$ 73,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	5	\$ 10,000.00	\$ 50,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 543,000.00
25% CONTINGENCY:					\$ 135,750.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 679,000.00
*ENGINEERING DESIGN (13.0%):					\$ 89,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 41,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 809,000.00

* Cost rounded up to nearest thousand.



LEGEND

- PS LS
- FM
- SS
- PRIORITY 3**
- Priority Area**
- 12



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 3 - Priority Area 12



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

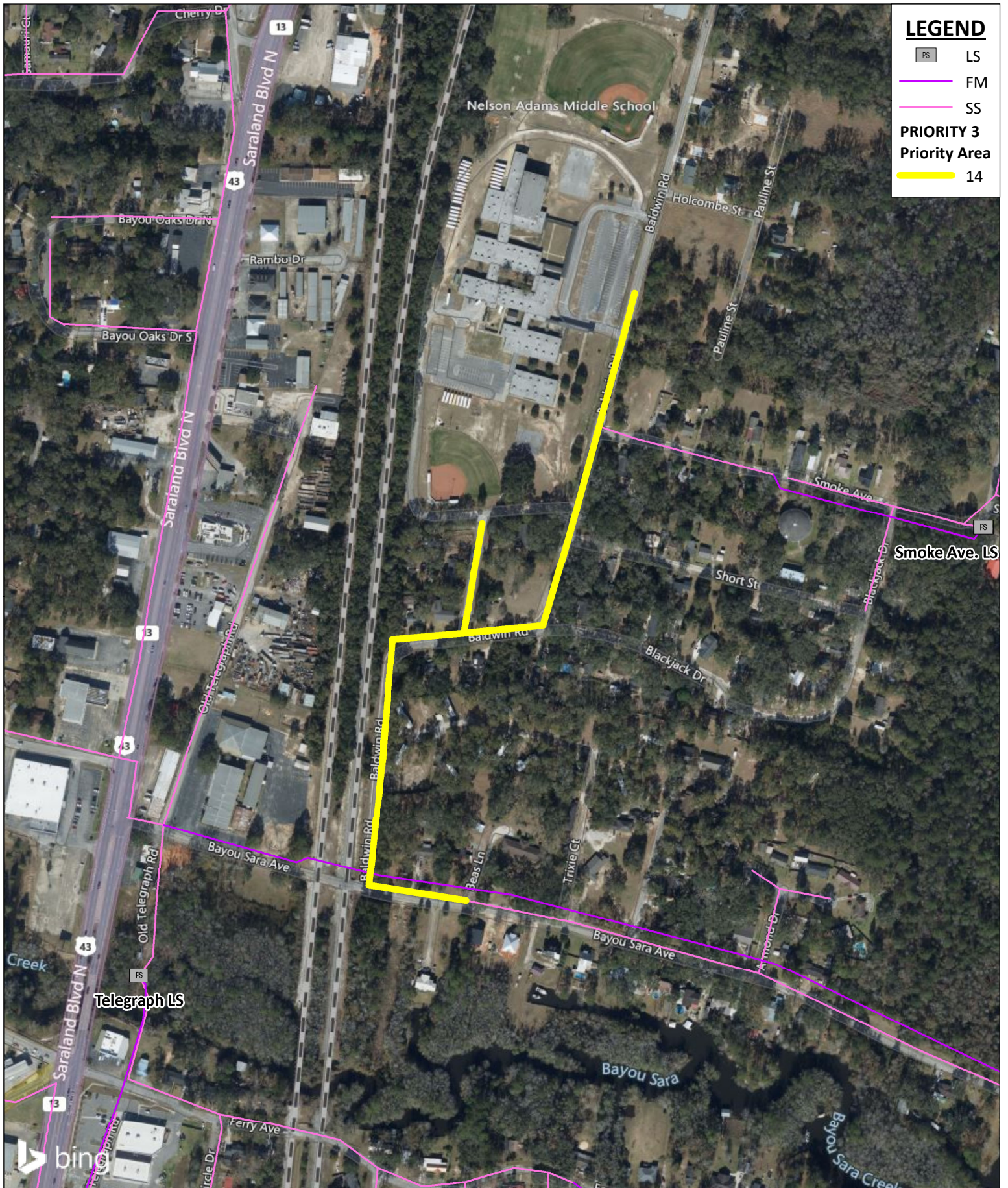
PRIORITY CATEGORY 3 - INTERMEDIATE-TERM					
PRIORITY AREA 12					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 32,000.00	\$ 32,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 100,000.00	\$ 100,000.00
4	Traffic Control	LS	1	\$ 50,000.00	\$ 50,000.00
5	Erosion Control/BMPs	LS	1	\$ 25,000.00	\$ 25,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	3631	\$ 1.00	\$ 4,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	3631	\$ 4.00	\$ 15,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF	1081	\$ 200.00	\$ 217,000.00
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	1664	\$ 40.00	\$ 67,000.00
20	10" CIPP Mainline Rehabilitation	LF	1967	\$ 50.00	\$ 99,000.00
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	5	\$ 10,000.00	\$ 50,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 659,000.00
25% CONTINGENCY:					\$ 164,750.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 824,000.00
*ENGINEERING DESIGN (13.0%):					\$ 108,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 50,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 982,000.00

* Cost rounded up to nearest thousand.

SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

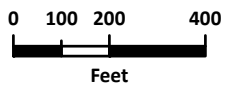
PRIORITY CATEGORY 3 - INTERMEDIATE-TERM					
PRIORITY AREA 13					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 51,000.00	\$ 51,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 250,000.00	\$ 250,000.00
4	Traffic Control	LS	1	\$ 50,000.00	\$ 50,000.00
5	Erosion Control/BMPs	LS	1	\$ 25,000.00	\$ 25,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	2220	\$ 1.00	\$ 3,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF	763	\$ 3.00	\$ 3,000.00
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	2220	\$ 4.00	\$ 9,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF	763	\$ 5.00	\$ 4,000.00
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF	2252	\$ 200.00	\$ 451,000.00
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	2220	\$ 40.00	\$ 89,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF	763	\$ 100.00	\$ 77,000.00
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	5	\$ 10,000.00	\$ 50,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 1,062,000.00
25% CONTINGENCY:					\$ 265,500.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 1,328,000.00
*ENGINEERING DESIGN (13.0%):					\$ 173,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 80,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 1,581,000.00

* Cost rounded up to nearest thousand.



LEGEND

- PS LS
- FM
- SS
- PRIORITY 3**
- Priority Area**
- 14



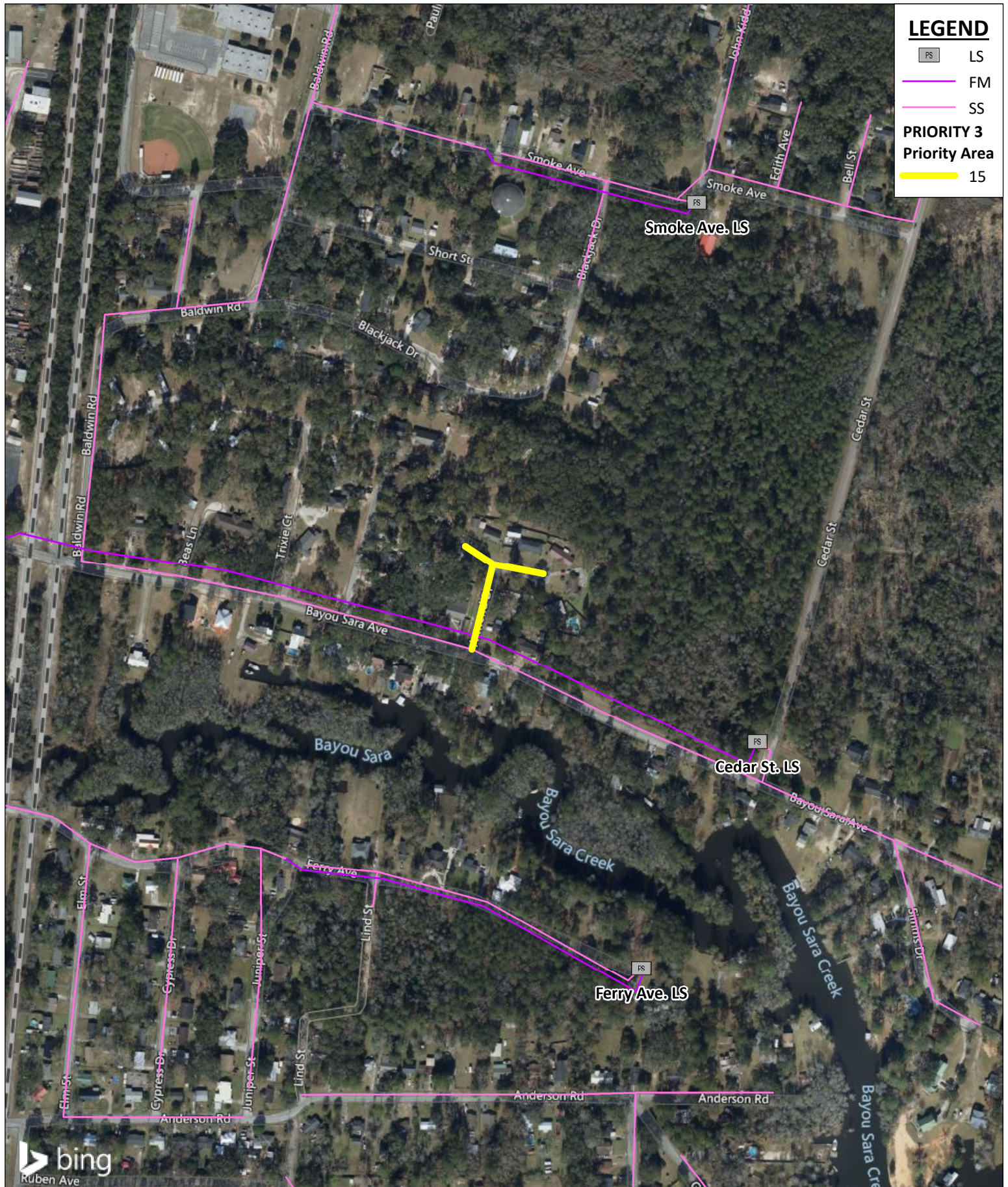
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 3 - Priority Area 14



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
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PRIORITY CATEGORY 3 - INTERMEDIATE-TERM					
PRIORITY AREA 14					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 16,000.00	\$ 16,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 100,000.00	\$ 100,000.00
4	Traffic Control	LS	1	\$ 20,000.00	\$ 20,000.00
5	Erosion Control/BMPs	LS	1	\$ 15,000.00	\$ 15,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	3054	\$ 1.00	\$ 4,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	3054	\$ 4.00	\$ 13,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF		\$ 200.00	\$ -
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	3054	\$ 40.00	\$ 123,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	3	\$ 10,000.00	\$ 30,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 321,000.00
25% CONTINGENCY:					\$ 80,250.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 402,000.00
*ENGINEERING DESIGN (13.0%):					\$ 53,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 25,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 480,000.00

* Cost rounded up to nearest thousand.

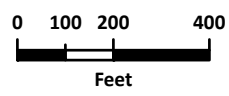


LEGEND

- PS LS
- FM
- SS
- PRIORITY 3**
- Priority Area**
- 15



Ruben Ave



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 3 - Priority Area 15



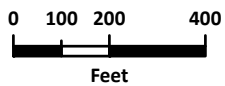
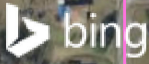
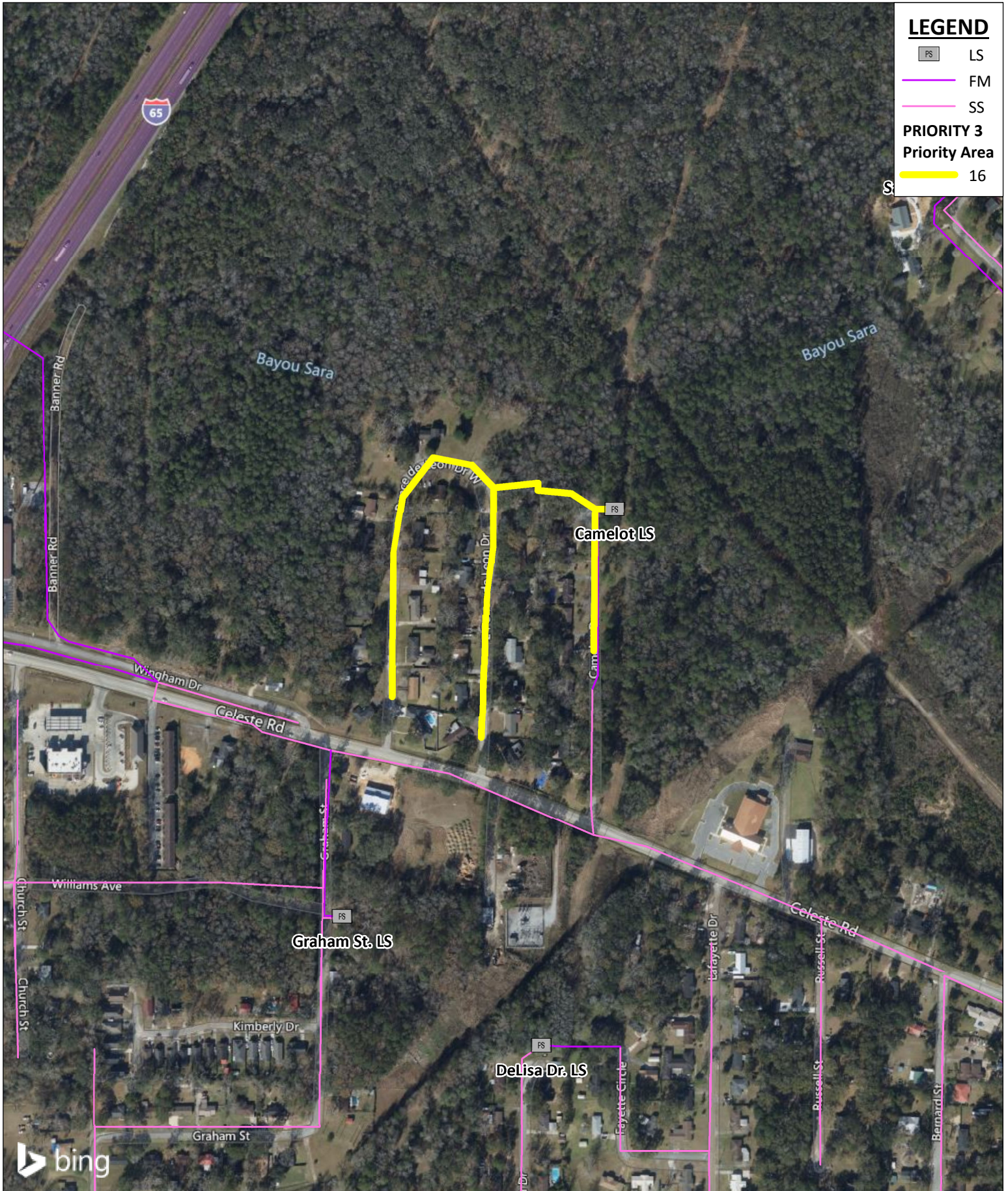
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

PRIORITY CATEGORY 3 - INTERMEDIATE-TERM					
PRIORITY AREA 15					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 6,000.00	\$ 6,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 50,000.00	\$ 50,000.00
4	Traffic Control	LS	1	\$ 20,000.00	\$ 20,000.00
5	Erosion Control/BMPs	LS	1	\$ 10,000.00	\$ 10,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	549	\$ 1.00	\$ 1,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	549	\$ 4.00	\$ 3,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF		\$ 200.00	\$ -
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	549	\$ 40.00	\$ 22,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	1	\$ 10,000.00	\$ 10,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 122,000.00
25% CONTINGENCY:					\$ 30,500.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 153,000.00
*ENGINEERING DESIGN (13.0%):					\$ 20,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 10,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 183,000.00

* Cost rounded up to nearest thousand.

LEGEND

- PS LS
- FM
- SS
- PRIORITY 3**
- Priority Area**
- 16



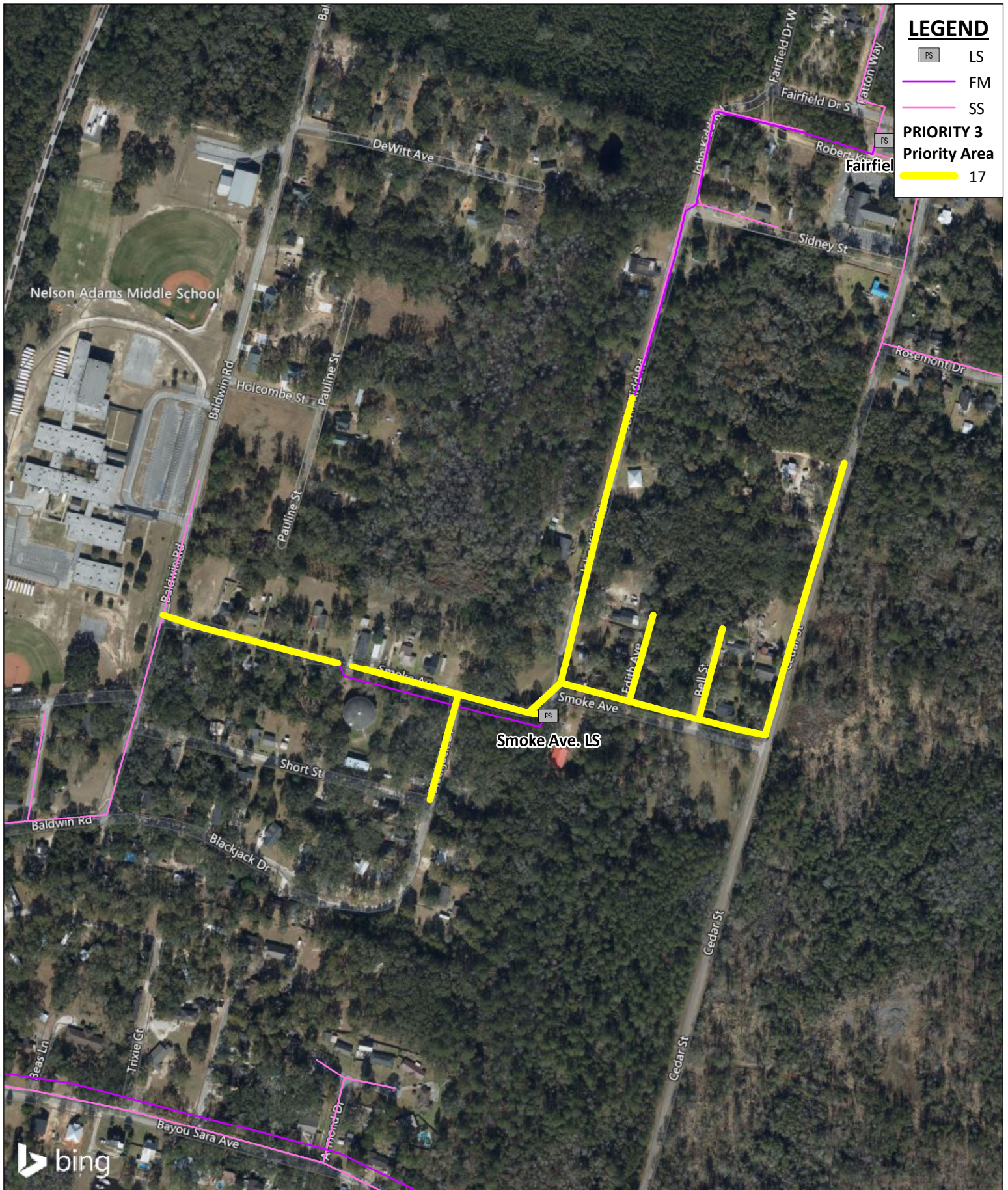
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 3 - Priority Area 16



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

PRIORITY CATEGORY 3 - INTERMEDIATE-TERM					
PRIORITY AREA 16					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 22,000.00	\$ 22,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 200,000.00	\$ 200,000.00
4	Traffic Control	LS	1	\$ 35,000.00	\$ 35,000.00
5	Erosion Control/BMPs	LS	1	\$ 15,000.00	\$ 15,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	2706	\$ 1.00	\$ 3,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	2706	\$ 4.00	\$ 11,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF		\$ 200.00	\$ -
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	2706	\$ 40.00	\$ 109,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	5	\$ 10,000.00	\$ 50,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 445,000.00
25% CONTINGENCY:					\$ 111,250.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 557,000.00
*ENGINEERING DESIGN (13.0%):					\$ 73,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 34,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 664,000.00

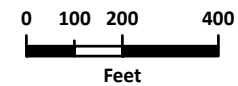
* Cost rounded up to nearest thousand.



LEGEND

- PS LS
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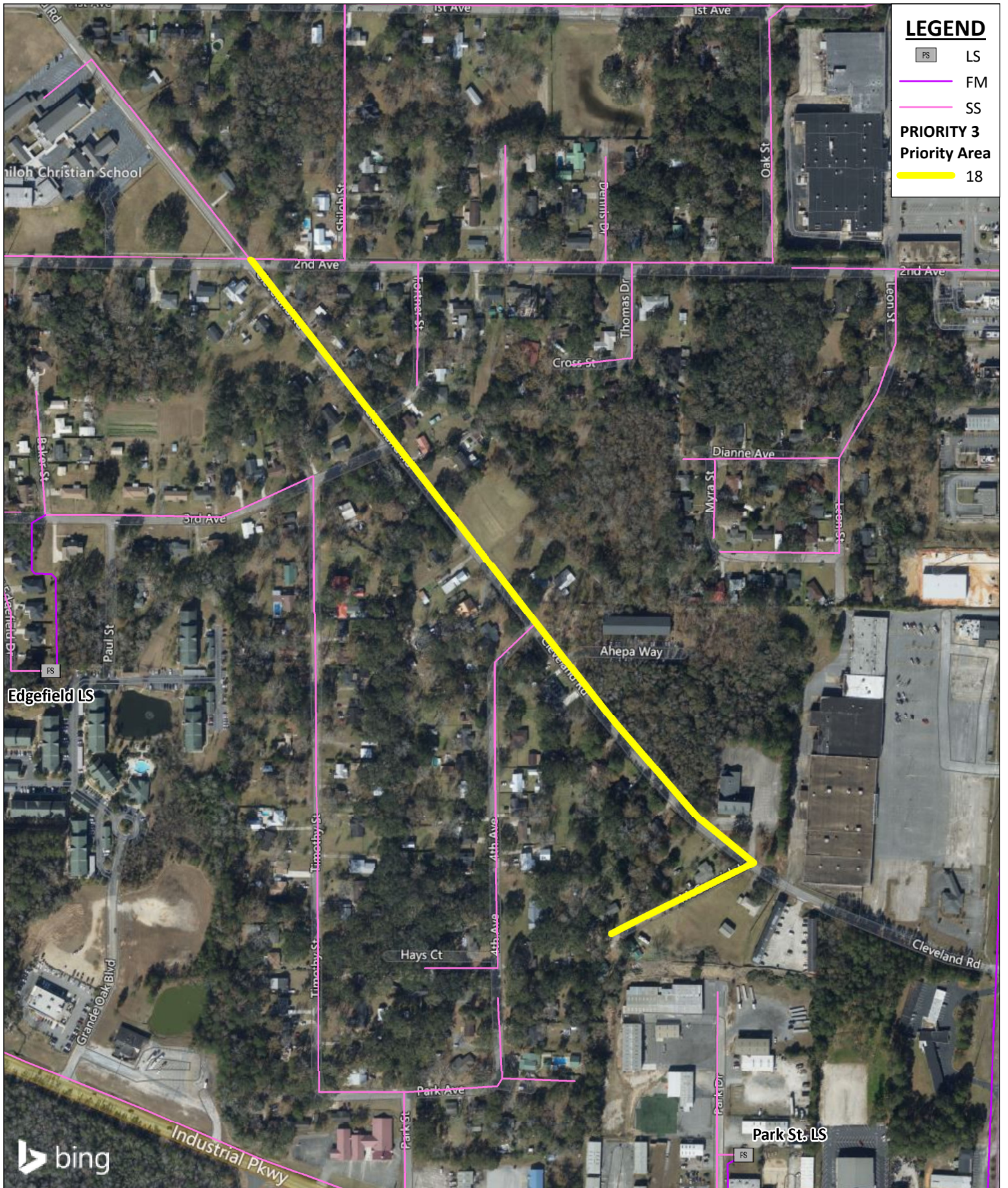
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 3 - Priority Area 17



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
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PRIORITY CATEGORY 3 - INTERMEDIATE-TERM					
PRIORITY AREA 17					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 16,000.00	\$ 16,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 25,000.00	\$ 25,000.00
4	Traffic Control	LS	1	\$ 10,000.00	\$ 10,000.00
5	Erosion Control/BMPs	LS	1	\$ 10,000.00	\$ 10,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	4828	\$ 1.00	\$ 5,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	4828	\$ 4.00	\$ 20,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF		\$ 200.00	\$ -
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	4828	\$ 40.00	\$ 194,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	4	\$ 10,000.00	\$ 40,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 320,000.00
25% CONTINGENCY:					\$ 80,000.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 400,000.00
*ENGINEERING DESIGN (13.0%):					\$ 52,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 24,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 476,000.00

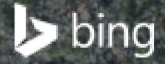
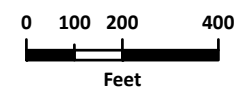
* Cost rounded up to nearest thousand.



LEGEND

- PS LS
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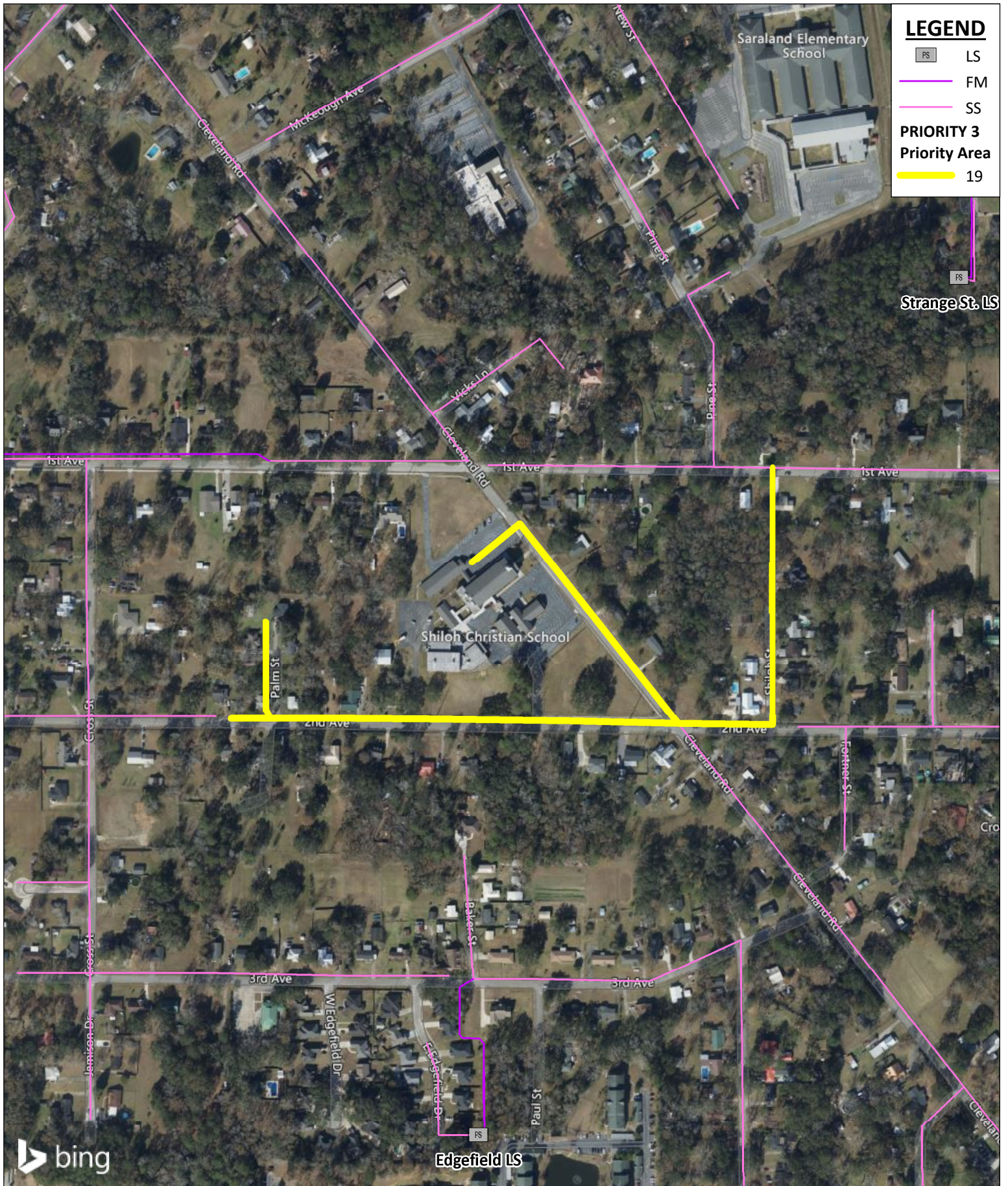
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
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SARALAND WATER AND SEWER SERVICE
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PRIORITY CATEGORY 3 - INTERMEDIATE-TERM					
PRIORITY AREA 18					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 14,000.00	\$ 14,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 50,000.00	\$ 50,000.00
4	Traffic Control	LS	1	\$ 25,000.00	\$ 25,000.00
5	Erosion Control/BMPs	LS	1	\$ 10,000.00	\$ 10,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	3036	\$ 1.00	\$ 4,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	3036	\$ 4.00	\$ 13,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF		\$ 200.00	\$ -
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	3036	\$ 40.00	\$ 122,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA	5	\$ 10,000.00	\$ 50,000.00
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 288,000.00
25% CONTINGENCY:					\$ 72,000.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 360,000.00
*ENGINEERING DESIGN (13.0%):					\$ 47,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 22,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 429,000.00

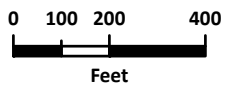
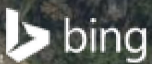
* Cost rounded up to nearest thousand.



LEGEND

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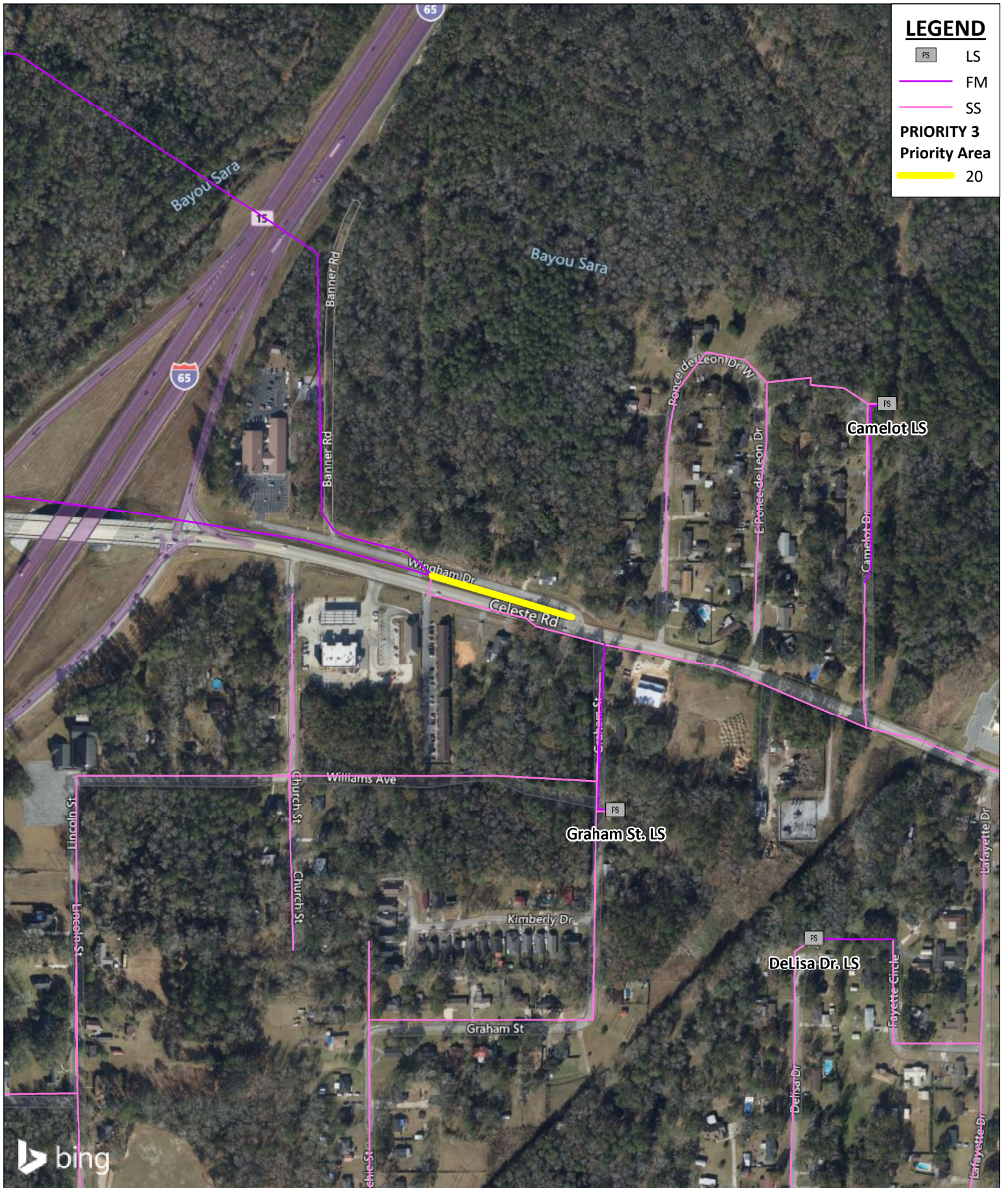
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
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SARALAND WATER AND SEWER SERVICE
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PRIORITY CATEGORY 3 - INTERMEDIATE-TERM					
PRIORITY AREA 19					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 13,000.00	\$ 13,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 50,000.00	\$ 50,000.00
4	Traffic Control	LS	1	\$ 20,000.00	\$ 20,000.00
5	Erosion Control/BMPs	LS	1	\$ 10,000.00	\$ 10,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	3895	\$ 1.00	\$ 4,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	3895	\$ 4.00	\$ 16,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF		\$ 200.00	\$ -
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	3895	\$ 40.00	\$ 156,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA		\$ 10,000.00	\$ -
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 269,000.00
25% CONTINGENCY:					\$ 67,250.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 337,000.00
*ENGINEERING DESIGN (13.0%):					\$ 44,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 21,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 402,000.00

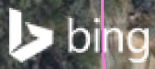
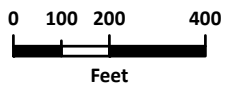
* Cost rounded up to nearest thousand.



LEGEND

- PS LS
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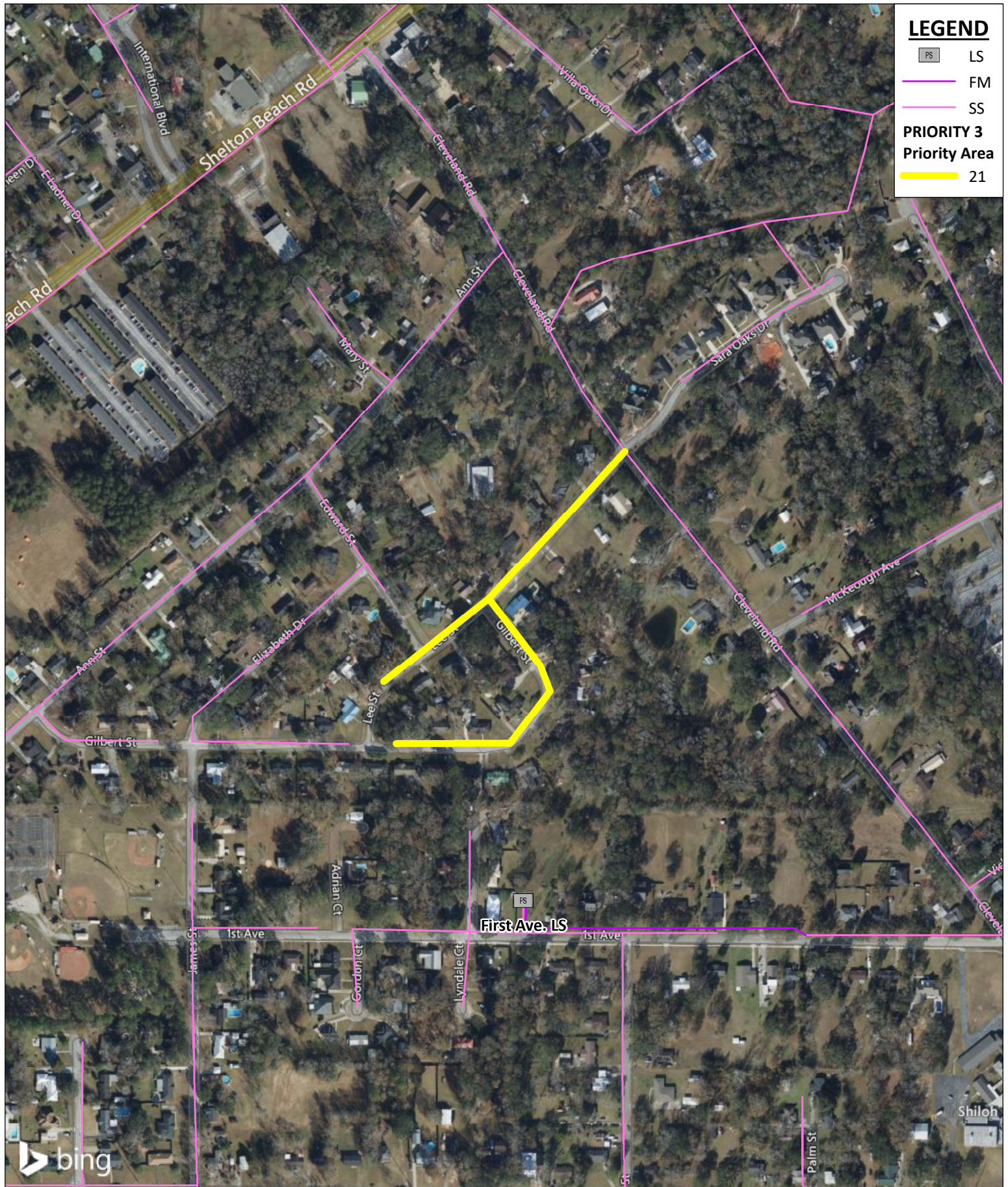
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
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Priority Category 3 - Priority Area 20



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
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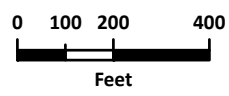
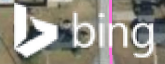
PRIORITY CATEGORY 3 - INTERMEDIATE-TERM					
PRIORITY AREA 20					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 5,000.00	\$ 5,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 50,000.00	\$ 50,000.00
4	Traffic Control	LS	1	\$ 15,000.00	\$ 15,000.00
5	Erosion Control/BMPs	LS	1	\$ 10,000.00	\$ 10,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	469	\$ 1.00	\$ 1,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	469	\$ 4.00	\$ 2,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF		\$ 200.00	\$ -
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	469	\$ 40.00	\$ 19,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA		\$ 10,000.00	\$ -
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 102,000.00
25% CONTINGENCY:					\$ 25,500.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 128,000.00
*ENGINEERING DESIGN (13.0%):					\$ 17,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 8,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 153,000.00

* Cost rounded up to nearest thousand.



LEGEND

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SARALAND WATER AND SEWER SERVICE
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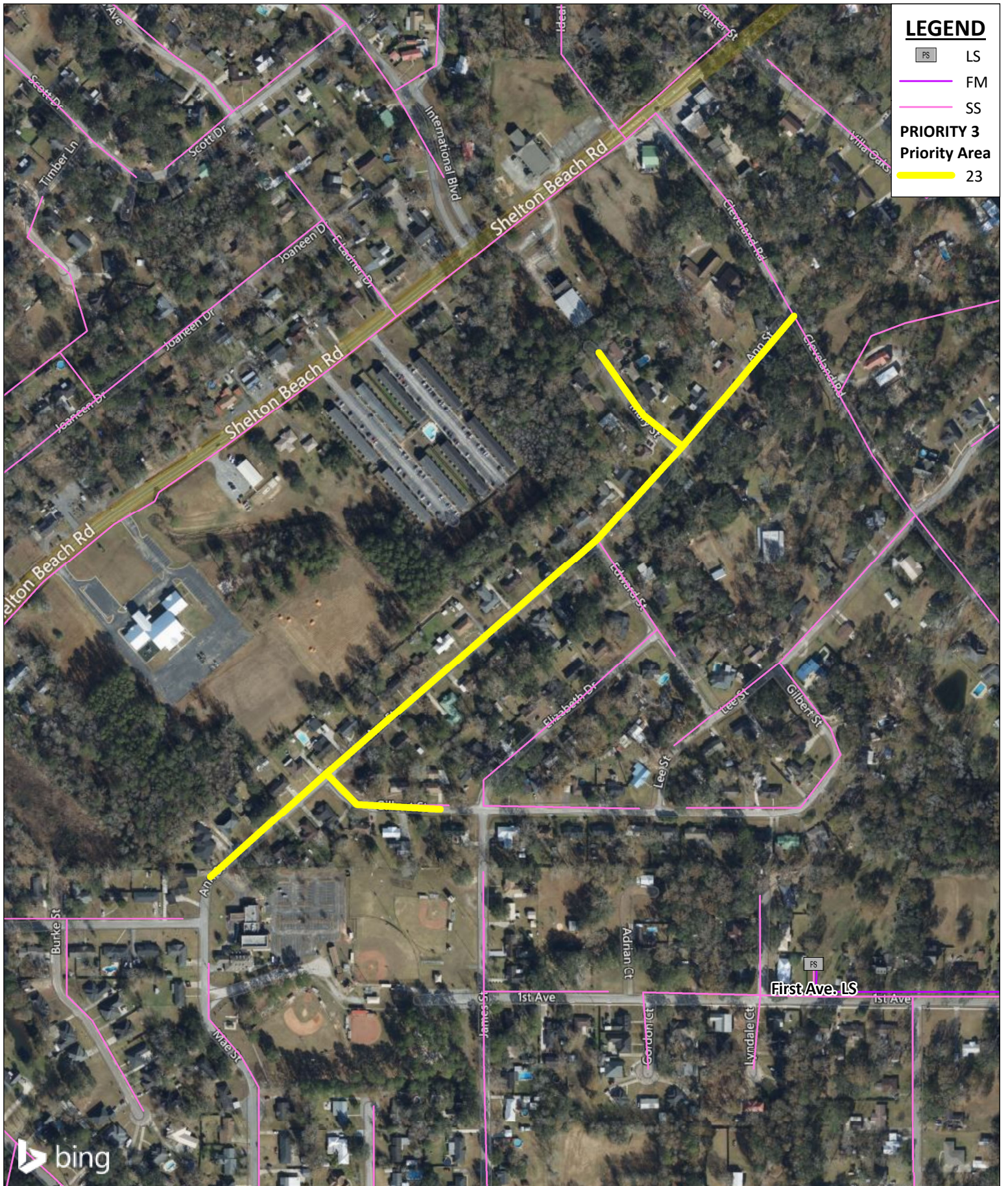
PRIORITY CATEGORY 3 - INTERMEDIATE-TERM					
PRIORITY AREA 21					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 9,000.00	\$ 9,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 50,000.00	\$ 50,000.00
4	Traffic Control	LS	1	\$ 20,000.00	\$ 20,000.00
5	Erosion Control/BMPs	LS	1	\$ 10,000.00	\$ 10,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	2009	\$ 1.00	\$ 3,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	2009	\$ 4.00	\$ 9,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF		\$ 200.00	\$ -
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	2009	\$ 40.00	\$ 81,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA		\$ 10,000.00	\$ -
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 182,000.00
25% CONTINGENCY:					\$ 45,500.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 228,000.00
*ENGINEERING DESIGN (13.0%):					\$ 30,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 14,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 272,000.00

* Cost rounded up to nearest thousand.

SARALAND WATER AND SEWER SERVICE
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PRIORITY CATEGORY 3 - INTERMEDIATE-TERM					
PRIORITY AREA 22					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 9,000.00	\$ 9,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 50,000.00	\$ 50,000.00
4	Traffic Control	LS	1	\$ 20,000.00	\$ 20,000.00
5	Erosion Control/BMPs	LS	1	\$ 10,000.00	\$ 10,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	1770	\$ 1.00	\$ 2,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	1770	\$ 4.00	\$ 8,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF		\$ 200.00	\$ -
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	1770	\$ 40.00	\$ 71,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA		\$ 10,000.00	\$ -
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 170,000.00
25% CONTINGENCY:					\$ 42,500.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 213,000.00
*ENGINEERING DESIGN (13.0%):					\$ 28,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 13,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 254,000.00

* Cost rounded up to nearest thousand.



LEGEND

- PS LS
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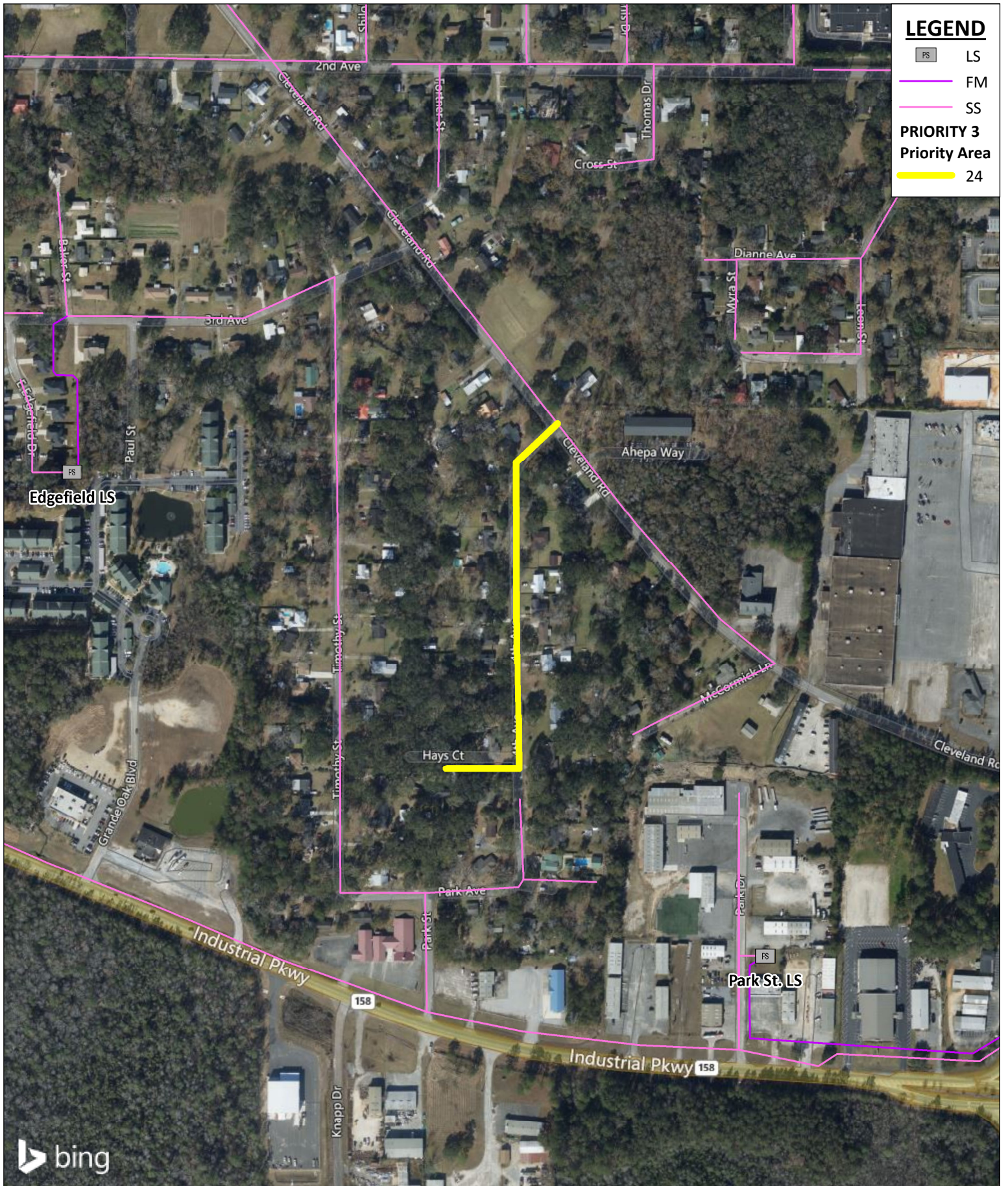
SARALAND WATER AND SEWER SERVICE
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Gravity Sewer System
Preliminary Cost Estimate

PRIORITY CATEGORY 3 - INTERMEDIATE-TERM					
PRIORITY AREA 23					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 12,000.00	\$ 12,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 50,000.00	\$ 50,000.00
4	Traffic Control	LS	1	\$ 20,000.00	\$ 20,000.00
5	Erosion Control/BMPs	LS	1	\$ 10,000.00	\$ 10,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	3420	\$ 1.00	\$ 4,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	3420	\$ 4.00	\$ 14,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF		\$ 200.00	\$ -
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	3420	\$ 40.00	\$ 137,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA		\$ 10,000.00	\$ -
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 247,000.00
25% CONTINGENCY:					\$ 61,750.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 309,000.00
*ENGINEERING DESIGN (13.0%):					\$ 41,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 19,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 369,000.00

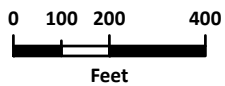
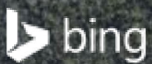
* Cost rounded up to nearest thousand.



LEGEND

- PS LS
- FM
- SS
- PRIORITY 3**
- Priority Area**
- 24

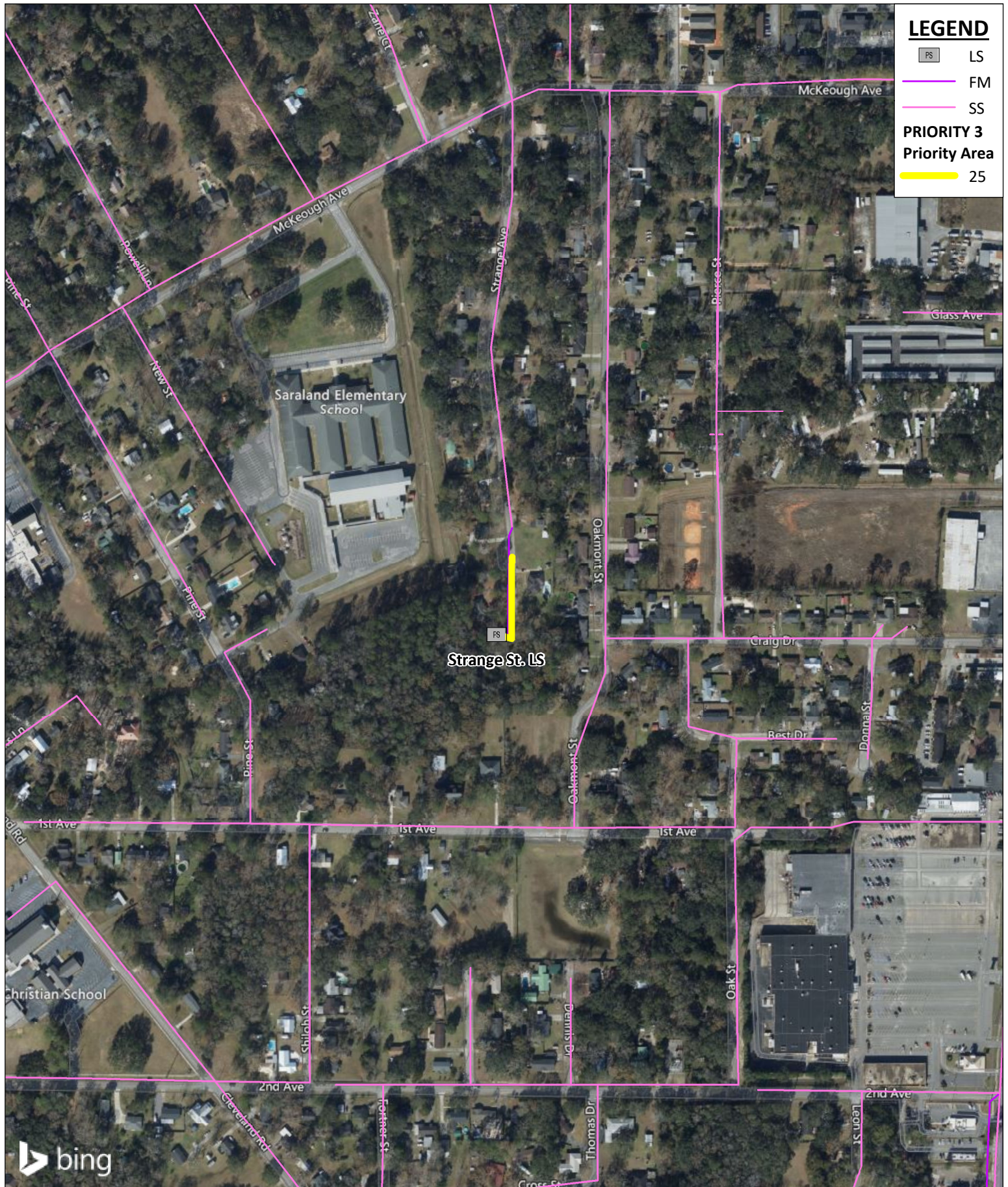
SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 3 - Priority Area 24



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

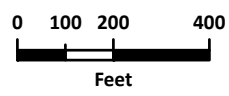
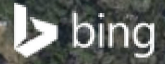
PRIORITY CATEGORY 3 - INTERMEDIATE-TERM					
PRIORITY AREA 24					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 8,000.00	\$ 8,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 50,000.00	\$ 50,000.00
4	Traffic Control	LS	1	\$ 20,000.00	\$ 20,000.00
5	Erosion Control/BMPs	LS	1	\$ 10,000.00	\$ 10,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	1399	\$ 1.00	\$ 2,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	1399	\$ 4.00	\$ 6,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF		\$ 200.00	\$ -
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	1399	\$ 40.00	\$ 56,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA		\$ 10,000.00	\$ -
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 152,000.00
25% CONTINGENCY:					\$ 38,000.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 190,000.00
*ENGINEERING DESIGN (13.0%):					\$ 25,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 12,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 227,000.00

* Cost rounded up to nearest thousand.



LEGEND

- PS LS
- FM
- SS
- PRIORITY 3**
- Priority Area**
- 25



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 3 - Priority Area 25



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate





PRIORITY CATEGORY 3 - INTERMEDIATE-TERM					
PRIORITY AREA 25					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 5,000.00	\$ 5,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS	1	\$ 50,000.00	\$ 50,000.00
4	Traffic Control	LS	1	\$ 20,000.00	\$ 20,000.00
5	Erosion Control/BMPs	LS	1	\$ 10,000.00	\$ 10,000.00
6	Smoke Testing	LF		\$ 0.75	\$ -
7	CCTV Inspection - 8" to 10"	LF	312	\$ 1.00	\$ 1,000.00
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF	312	\$ 4.00	\$ 2,000.00
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF		\$ 200.00	\$ -
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF	312	\$ 40.00	\$ 13,000.00
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA		\$ 10,000.00	\$ -
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 101,000.00
25% CONTINGENCY:					\$ 25,250.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 127,000.00
*ENGINEERING DESIGN (13.0%):					\$ 17,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 8,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 152,000.00

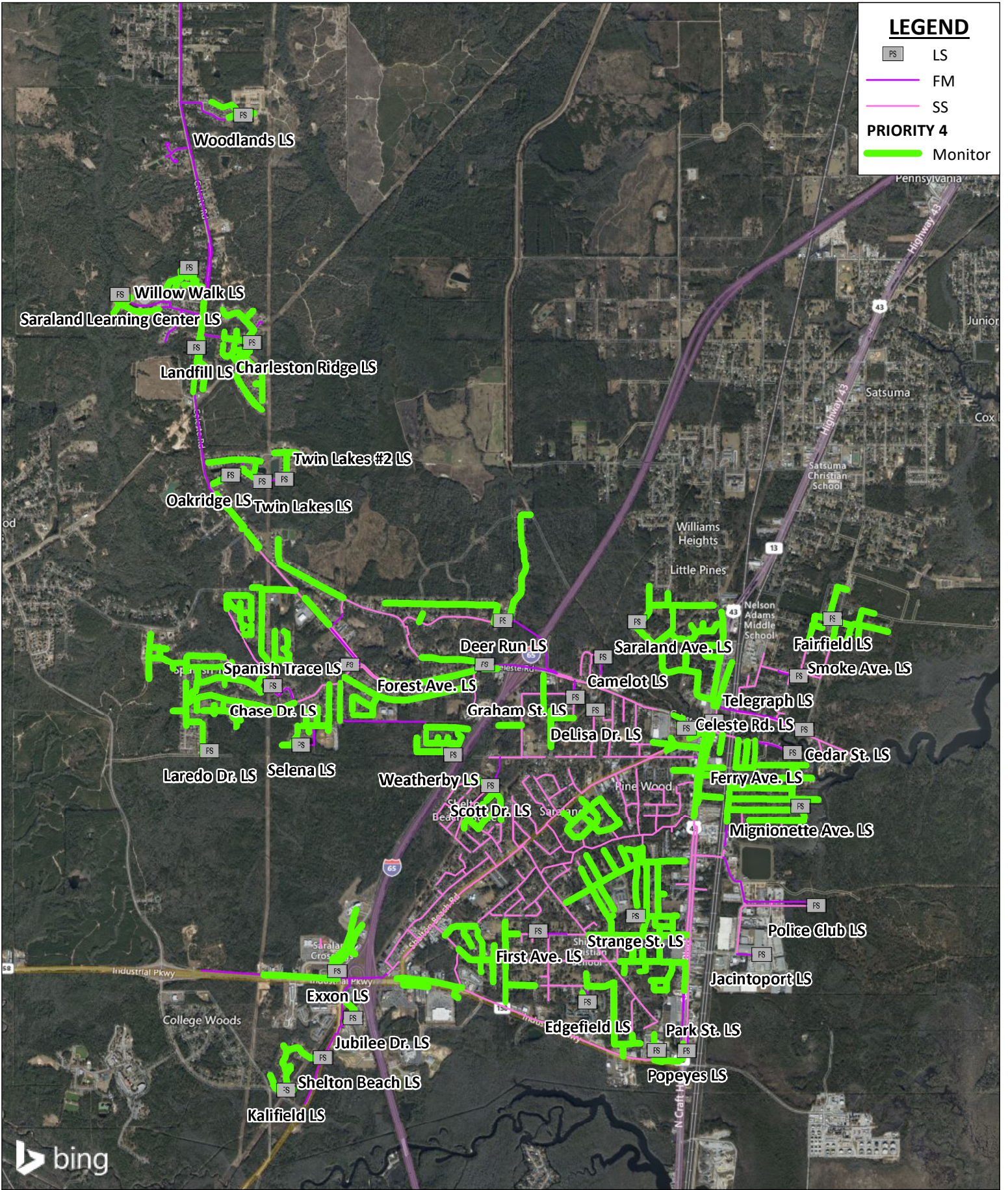
* Cost rounded up to nearest thousand.



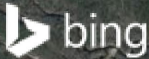
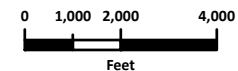
PRIORITY CATEGORY 4
LONG-TERM/MONITOR PRIORITY

LEGEND

-  LS
-  FM
-  SS
- PRIORITY 4**
-  Monitor



**SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Priority Category 4 - Monitor**



SARALAND WATER AND SEWER SERVICE
Sanitary Sewer Collection System Master Plan
Gravity Sewer System
Preliminary Cost Estimate

PRIORITY CATEGORY 4 - LONG-TERM/MONITOR					
Item No.	Description	Unit	Approx. Quantities	Approx. Unit Price	Est. Cost
1	Mobilization/Demobilization (Up to 5% of Construction)	LS	1	\$ 14,000.00	\$ 14,000.00
2	Clearing and Grubbing	AC		\$ 5,000.00	\$ -
3	Bypass Pumping	LS		\$ 1,750,000.00	\$ -
4	Traffic Control	LS	1	\$ 100,000.00	\$ 100,000.00
5	Erosion Control/BMPs	LS		\$ 25,000.00	\$ -
6	Smoke Testing	LF	232,417	\$ 0.75	\$ 175,000.00
7	CCTV Inspection - 8" to 10"	LF		\$ 1.00	\$ -
8	CCTV Inspection - 12" to 16"	LF		\$ 2.00	\$ -
9	CCTV Inspection - 18" to 20"	LF		\$ 3.00	\$ -
10	CCTV Inspection - 21" to 30"	LF		\$ 4.00	\$ -
11	Sewer Cleaning - 8" to 10"	LF		\$ 4.00	\$ -
12	Sewer Cleaning - 12" to 16"	LF		\$ 4.50	\$ -
13	Sewer Cleaning - 18" to 20"	LF		\$ 5.00	\$ -
14	Sewer Cleaning - 21" to 30"	LF		\$ 6.00	\$ -
15	Pipe Replacement - 8" - 10"	LF		\$ 200.00	\$ -
16	Pipe Replacement - 12" - 16"	LF		\$ 250.00	\$ -
17	Pipe Replacement - 18" - 20"	LF		\$ 300.00	\$ -
18	Pipe Replacement - 21" - 30"	LF		\$ 375.00	\$ -
19	8" CIPP Mainline Rehabilitation	LF		\$ 40.00	\$ -
20	10" CIPP Mainline Rehabilitation	LF		\$ 50.00	\$ -
21	12" CIPP Mainline Rehabilitation	LF		\$ 65.00	\$ -
22	15" CIPP Mainline Rehabilitation	LF		\$ 80.00	\$ -
23	16" CIPP Mainline Rehabilitation	LF		\$ 82.00	\$ -
24	18" CIPP Mainline Rehabilitation	LF		\$ 100.00	\$ -
25	21" CIPP Mainline Rehabilitation	LF		\$ 120.00	\$ -
26	24" CIPP Mainline Rehabilitation	LF		\$ 140.00	\$ -
27	30" CIPP Mainline Rehabilitation	LF		\$ 160.00	\$ -
28	Manhole Rehabilitation (Base and Lining) - 4' dia.	EA		\$ 10,000.00	\$ -
29	Manhole Rehabilitation (Base and Lining) - 5' dia.	EA		\$ 13,000.00	\$ -
SUBTOTAL:					\$ 289,000.00
25% CONTINGENCY:					\$ 72,250.00
*TOTAL OPINION OF PROBABLE CONSTRUCTION COST:					\$ 362,000.00
*ENGINEERING DESIGN (13.0%):					\$ 48,000.00
*CONSTRUCTION PHASE SERVICES (6.0%):					\$ 22,000.00
*TOTAL ESTIMATED PROJECT COST:					\$ 432,000.00

* Cost rounded up to nearest thousand.



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