RIVER PLANTATION MUD						ct No. 32000-60							11
TEN YEAR CAPITAL IMPROVEMENTS PLAN			Draft No. 4 Date of Revision 7/28/2021										
		PRIORITY	EST/BID				WWTF - River Plai						
No.	DESCRIPTION	BY YEAR		FYE 2022			FYE 2025		FYE 2027	FYE 2028	FYE 2029		FYE 2031
			Proposed - Total	District Share	District Share	District Share	District Share	District Share	District Share	District Share	District Share	District Share	District Share
		59.00%	(1)										
	WWTF Rehabilitation Phase 1	1	\$304,440										
	WWTF Rehabilitation Phase 2	2	\$304,440		\$304,440	0070.400							
3	WWTF Electrical Upgrades Lift Station 3	3 5	\$276,120			\$276,120		¢450,000	1				
5	Lift Station 3	6	\$150,000 \$19,800					\$150,000	\$19,800	1	+	+	_
6	Lift Station 2	7	\$19,800						\$19,000	\$19,800	1	+	
	Ent Glation 2	<i>'</i>	Ψ10,000						+	Ψ10,000	1	+	-
	Total proposed WWTF construction co	st 2021-2031	\$1,074,600	\$304,440	\$304,440	\$276,120	\$0	\$150,000	\$19,800	\$19,800	\$0	\$0	\$0
	Engineering, Surveying			· · · · · · · · · · · · · · · · · · ·									
		pairs by year		\$365,328									
		PRIORITY	EST/BID					Water Plant Fa	acilities				
No.	DESCRIPTION	BY YEAR	AMOUNT	FYE 2022	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031
1	Water Plant No. 1 Evaluation/Demolition	1	\$132,000	\$132,000									
2	Water Plant No. 3 Electrical Upgrades	2	\$87,000		\$87,000								
	Water Plant No. 2 Recoating	3	\$208,200			\$208,200							
	Water Plant No. 2 Electrical Upgrades	5	\$237,000					\$237,000					
5	Water Plant No. 3 Recoating	6	\$202,200						\$202,200				
	7.61	1 0004 555	****	A 100 05 5	007.000	0000 000		200= 22=	4000.000		+		A -
	Total proposed water plant construction co					\$208,200							
	Engineering, Surveying		\$173,280			\$41,640	-						
	ı otal kej	pairs by year	EST/BID	\$158,400	\$104,400	\$249,840	\$0			\$0	\$0	\$0	\$0
N.	DESCRIPTION	PRIORITY		EVE 2022	EVE 2022	EVE 2024		ater Distribution		TVE 2020	EVE 2020	TEVE 2020	EVE 2024
No.	DESCRIPTION	BY YEAR			· · · · · · · · · · · · · · · · · · ·	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031
2	Fire Hydrant & Valve Survey Fire Hydrant & Valve Rehabilitation	3	\$50,000 \$150,000			\$150,000			+	+	+		
	Fire Hydrant & Valve Renabilitation	3	\$150,000			\$150,000			+	 			
	Total proposed water distribution construction co	ost 2021-2031	\$200,000	\$50,000	\$0	\$150,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Engineering, Surveying						\$0						
		pairs by year		\$60,000			\$0						
		PRIORITY	EST/BID	, ,	<u> </u>		<u> </u>	Sanitary Coll		<u>, I </u>	<u>, I</u>	, 1	<u>, I </u>
No.	DESCRIPTION	BY YEAR	AMOUNT	FYE 2022	FYE 2023	FYE 2024	FYE 2025		FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031
1	Sanitary Clean & Televise	1	\$327,616	\$327,616									
	Sanitary Sewer Rehabilitation Phase 1	2	\$452,000		\$452,000								
3	Sanitary Manhole Rehabilitation Phase 1	2	\$442,371		\$442,371								
4	Sanitary Sewer Rehabilitation Phase 2	3	\$452,000			\$452,000							
	Sanitary Sewer Rehabilitation Phase 3	4	\$452,000				\$452,000						
	Sanitary Manhole Rehabilitation Phase 2	5	\$442,371					\$442,371					_
	Sanitary Sewer Rehabilitation Phase 4	5	\$452,000					\$452,000					_
	Sanitary Manhole Rehabilitation Phase 3 Sanitary Sewer Rehabilitation Phase 5	6 6	\$442,371 \$452,000					 	\$442,371 \$452,000		+	+	_
	Sanitary Manhole Rehabilitation Phase 4	7	\$452,000 \$442,371					 	φ452,000	\$442,371	+	+	+
	Sanitary Sewer Rehabilitation Phase 6	7	\$452,000						+	\$452,000		+	-
12	Sanitary Manhole Rehabilitation Phase 5	8	\$442,371						1	Ţ.52,000	\$442,371	1	
	Sanitary Sewer Rehabilitation Phase 7	8	\$452,000								\$452,000		
	Sanitary Manhole Rehabilitation Phase 6	9	\$442,371									\$442,371	
15	Sanitary Manhole Rehabilitation Phase 7	10	\$442,371										\$442,371
	Total proposed sanitary collection construction co					\$452,000	\$452,000						
	Engineering, Surveying					\$90,400							
	Total Rep	pairs by year		\$393,139	\$1,073,245	\$542,399	\$542,399			\$1,073,245	\$1,073,245	\$530,846	\$530,846
1		PRIORITY	EST/BID		E)/E 6000		E)/E 6007	Drainage Fac			TEX. C	TEX. C	TEX. C. C. C.
No.	DESCRIPTION	BY YEAR			FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031
	Storm Sewer Clean and Televise	1 1	\$34,246						+	+	+	+	+
	Channel Survey & Evaluation	1	\$50,000		10 to			 	+	+	+	+	
(0)(0)	Storm Sewer Rehabilitation Phase 1	2	\$457,347		\$457,347				+	+		+	+
	Storm Sewer Rehabilitation Phase 2	3	\$457,347			\$457,347							
	Mosswood Ditch RehabilitationPhase 1	4	\$488,490		A		\$488,490	4	1	1	i	Ī	
	Mosswood Ditch RehabilitationPhase 2	5	\$488,490				+100,100	\$488,490	+	+	+	+	1

		PRIORITY	EST/BID		Drainage Facilities 14						12		
No.	DESCRIPTION	BY YEAR	AMOUNT	FYE 2022	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031
(0)													
7 ⁽³⁾	Plantation Creek Concrete Channel Rehabiliation Phase 1	6	\$610,020						\$610,020				
(0)													
8 ⁽³⁾	Plantation Creek Concrete Channel Rehabiliation Phase 2	7	\$610,020							\$610,020			
	Total propsed drainage facilities construction co	st 2021-2031	\$3,195,960	\$84,246	\$457,347	\$457,347	\$488,490	\$488,490	\$610,020	\$610,020	\$0	\$0	\$0
	Engineering, Surveying, Inspection \$639		\$639,192	\$16,849	\$91,469	\$91,469	\$97,698	\$97,698	\$122,004	\$122,004	\$0	\$0	\$0
	Total Repairs by year			\$101,095	\$548,816	\$548,816	\$586,188	\$586,188	\$732,024	\$732,024	\$0	\$0	\$0
	Grand Total for All Items			\$1,077,962	\$2,091,790	\$1,852,400	\$1,128,587	\$2,123,833	\$2,071,669	\$1,829,029	\$1,073,245	\$530,846	\$530,846

NOTES:

- River Plantation MUD owns 59% of WWTF. East Plantation MUD owns 41%.
 Storm sewer is for underground conveyance piping. Does not include roadside ditches or culverts. To be discussed with Montgomery County.
 Cost sharing with East Plantation not accounted for

Facility	Project Name	Project Description	Priority	Estimated Construction Cost	Cost Basis	Notes
Tachicy	- Project Name	Draining cleaning and disinfection of basins, misc. work	Thority	25timatea construction cost	Estimated cost to replace the items listed	Preliminary estimate based on facility tours. Estimated
		to repair/replace diffusers, piping and			under project description. See specific items	construction cost reflects only RP MUD's portion of the
		recoating/replacement of existing piping, building a CI2			under the WWTF rehabilitation cost	project. Based on 59% ownership per the agreement between
WWTF	Rehabilitation Phase 1		1	\$ 204.440	estimate.	the two districts.
VVVVIF	Renabilitation Phase 1	room	1	\$ 304,440	Estimated cost to replace the items listed	Preliminary estimate based on facility tours. Estimated
		Decree and an allowed a filter decree and the annual contract to the contract			·	
		Removal and replacement of headworks splitter box,			under project description. See specific items	construction cost reflects only RP MUD's portion of the
		new headworks, and Remove and replace clarifier	_		under the WWTF rehabilitation cost	project. Based on 59% ownership per the agreement between
WWTF	Rehabilitation Phase 2	troughs	2	\$ 304,440	estimate.	the two districts.
					Electrical engineers investigation held on	Estimated construction cost reflects only RP MUD's portion of
		Motor control center replacement, ATS replacement,			3/3/21, recommendation & PCE provided.	the project. Based on 59% ownership per the agreement
		Generator replacement, Generator fuel tank,			Additional 20% contingency added to the	between the two districts. Age, issue obtaining parts for future
WWTF	Electrical Upgrades	autodialer, General electrical modifications/upgrades	3	\$ 276,120	PCE they provided	repairs and safety to operations
						Scope TBD after evaluation. Well currently in monitoring mode
						per the TCEQ. Further evaluation needed to provide
						information on necessity of plant to serve the entire system
						and boards decision to keep plant online. Plant will further
						deteriorate if left un attended for extended period of time
Water Plant Facilities	Water Plant No. 1	Evaluation, Demolition or Rehabilitation	1	\$ 132,000	Estimate	which could lead to a greater financial burden.
					Electrical engineers investigation held on	
					3/3/21, recommendation & PCE provided.	
		Replace Pressure/level switches, Autodialer, New CMU			Additional 20% contingency added to the	
Water Plant Facilities	Water Plant No. 3 Electrical Upgrades	Building	2	\$ 87,000	PCE they provided	Based on existing MCC building in poor condition.
Water Francisco	Water Flame No. 5 Electrical oppidacis	- Danianing		7 37,686	Typical costs associated with recoating a	based on existing week banding in poor condition.
		Recoating of GST, HPT, Buildings, Pumps and all above			water plant about this size from previous	Based on age of current coating, noted excess chalking/rust
Water Plant Facilities	Water Plant No. 2 Recoating	ground piping	3	\$ 208 200	projects VSE has performed	during site visit.
water Flant Facilities	Water Flant No. 2 Necoating	ground piping	<u> </u>	208,200	Electrical engineers investigation held on	during site visit.
		MCC Replacement, Pump Control Panel, ATS			3/3/21, recommendation & PCE provided.	
		replacement, Autodialer, General electrical			Additional 20% contingency added to the	Based on age of equipment and difficulty to repair parts as
Water Blant Facilities	Water Blant No. 2 Floatrical Ungrades		г	¢ 227,000	- · · ·	
Water Plant Facilities	Water Plant No. 2 Electrical Upgrades	modification/upgrades	3	\$ 237,000	PCE they provided	failures begin to happen.
		Passating of CCT LIPT Puildings Pursus and all should			Typical costs associated with recoating a	December 2015 of support sections and start of shelling / such
		Recoating of GST, HPT, Buildings, Pumps and all above	6	4 202.000	water plant about this size from previous	Based on age of current coating, noted start of chalking/rust
Water Plant Facilities	Water Plant No. 3 Recoating	ground piping	6	\$ 202,000	projects VSE has performed	during site visit
						Estimate based on an evaluation of these items has never been
		Evaluation, and documentation of location of all fire			Average cost based on number of fire	done to the engineer's knowledge. Allow scope of repair work
Water Distribution System	Fire Hydrant & Valve Survey	hydrants and valves located within the District.	1	\$ 50,000	hydrants and valves within the District.	to be completed
						Estimate based on average life of sanitary sewer pipe
						depending on the construction material. See subdivision sheet
		Rehabilitation of all Fire hydrants and valves found to			Estimate based on repair/replacement of	with year built, construction material and estimated life
Water Distribution System	Fire Hydrant & Valve rehabilitation	be broken during evaluation and survey	3	\$ 150,000	approx. 50% of valves and fire hydrants	expectancy
					Based on cost estimate for price per linear	
Storm Sewer System	Storm Sewer Clean & Televise	Storm Sewer C&TV	1	\$ 34,246	foot to clean & TV from other projects	Required to determine scope of rehabilitation
						Estimate based on site inspections, sinkhole frequency and age
						of system. See subdivision sheet with Year built, construction
		Rehab/Remove & Replace of half of the existing storm				material and estimated life expectancy. See RP MUD report
Storm Sewer System	Storm Sewer Rehabilitation Phase 1	sewer system	2	\$ 457,347	based on 50% of the cost estimate.	with examples of sinkholes found
·						
						Estimate based on site inspections, sinkhole frequency and age
						of system. See subdivision sheet with year built, construction
		Rehab/Remove & Replace of half of the existing storm				material and estimated life expectancy. See RP MUD report
Storm Sewer System	Storm Sewer Rehabilitation Phase 2	sewer system	3	\$ 457.347	based on 50% of the cost estimate.	with examples of sinkholes found
		7,555		.57,517		

Facility	Project Name	Project Description	Priority	Estimated Const	ruction Cost	Cost Basis	Notes
Sanitary Sewer System	Sanitary Sewer C&TV	Sanitary Sewer C&TV	1	\$	327,616	Estimated cost to C&TV entire system per cost estimate	Required to determine scope of rehabilitation
Sanitary Sewer System	Sanitary Manhole Rehabilitation Phase 1	Rehab/Replace of approx. 14% of manholes in District	2	\$	442,371	Based on approx. 14% of cost estimate	Estimate based on average life of manhole depending on the construction material. See subdivision sheet with year built, construction material and estimated life expectancy
Sanitary Sewer System	Sanitary Sewer Rehabilitation, Phase 1	CIP/Rehabilitation on 14% of sanitary sewer lines in District	2	\$		Based on approx. 14% of cost estimate	Estimate based on average life of sanitary sewer pipe depending on the construction material. See subdivision sheet with year built, construction material and estimated life expectancy
Sanitary Sewer System	Sanitary Sewer Rehabilitation, Phase 2	CIP/Rehabilitation on 14% of sanitary sewer lines in District	3	\$	452,000	Based on approx. 14% of cost estimate	Estimate based on average life of sanitary sewer pipe depending on the construction material. See subdivision sheet with year built, construction material and estimated life expectancy
Sanitary Sewer System	Sanitary Sewer Rehabilitation, Phase 3	CIP/Rehabilitation on 14% of sanitary sewer lines in District	4	\$	452,000	Based on approx. 14% of cost estimate	Estimate based on average life of sanitary sewer pipe depending on the construction material. See subdivision sheet with year built, construction material and estimated life expectancy
Sanitary Sewer System	Sanitary Manhole Rehabilitation Phase 2	Rehab/Replace of approx. 14% of manholes in District	5	\$	442,371	Based on approx. 14% of cost estimate	Estimate based on average life of manhole depending on the construction material. See subdivision sheet with year built, construction material and estimated life expectancy Estimate based on average life of sanitary sewer pipe
Sanitary Sewer System	Sanitary Sewer Rehabilitation, Phase 4	CIP/Rehabilitation on 14% of sanitary sewer lines in District	5	\$	452,000	Based on approx. 14% of cost estimate	depending on the construction material. See subdivision sheet with year built, construction material and estimated life expectancy
Sanitary Sewer System	Sanitary Manhole Rehabilitation Phase 3	Rehab/Replace of approx. 14% of manholes in District	6	\$	442,371	Based on approx. 14% of cost estimate	Estimate based on average life of manhole depending on the construction material. See subdivision sheet with year built, construction material and estimated life expectancy Estimate based on average life of sanitary sewer pipe
Sanitary Sewer System	Sanitary Sewer Rehabilitation, Phase 5	CIP/Rehabilitation on 14% of sanitary sewer lines in District	6	\$	452,000	Based on approx. 14% of cost estimate	depending on the construction material. See subdivision sheet with year built, construction material and estimated life expectancy
Sanitary Sewer System	Sanitary Manhole Rehabilitation Phase 4	Rehab/Replace of approx. 14% of manholes in District	7	\$	442,371	Based on approx. 14% of cost estimate	Estimate based on average life of manhole depending on the construction material. See subdivision sheet with year built, construction material and estimated life expectancy
Sanitary Sewer System	Sanitary Sewer Rehabilitation, Phase 6	CIP/Rehabilitation on 14% of sanitary sewer lines in District	7	\$	452,000	Based on approx. 14% of cost estimate	Estimate based on average life of sanitary sewer pipe depending on the construction material. See subdivision sheet with year built, construction material and estimated life expectancy
Sanitary Sewer System	Sanitary Manhole Rehabilitation Phase 5	Rehab/Replace of approx. 14% of manholes in District	8	\$	442,371	Based on approx. 14% of cost estimate	Estimate based on average life of manhole depending on the construction material. See subdivision sheet with year built, construction material and estimated life expectancy
Sanitary Sewer System	Sanitary Sewer Rehabilitation, Phase 7	CIP/Rehabilitation on 14% of sanitary sewer lines in District	8	\$	452,000	Based on approx. 14% of cost estimate	Estimate based on average life of sanitary sewer pipe depending on the construction material. See subdivision sheet with year built, construction material and estimated life expectancy

Facility	Project Name	Project Description	Priority	Estimated Construction Cost	Cost Basis	Notes
racinty	- Troject Name	Troject Bescription	I Hority	Estimated Construction Cost	Cost busis	Hotes
						Estimate based on average life of manhole depending on the
						construction material. See subdivision sheet with year built,
Sanitary Sewer System	Sanitary Manhole Rehabilitation Phase 6	Rehab/Replace of approx. 14% of manholes in District	9	\$ 442.371	Based on approx. 14% of cost estimate	construction material and estimated life expectancy
Sumary Sewer System	Same y Warmore Renadireation / Mase o	remas/Replace of approxi 17% of mannoles in District		ļ 112,372	Based on approx. 1770 or cost estimate	construction material and estimated ine expectancy
						Estimate based on average life of manhole depending on the
						construction material. See subdivision sheet with year built,
Sanitary Sewer System	Sanitary Manhole Rehabilitation Phase 7	Rehab/Replace of approx. 14% of manholes in District	10	\$ 442.371	Based on approx. 14% of cost estimate	construction material and estimated life expectancy
				, , , , , ,		
						Current lift station is just a manhole with pump in someone's
		Construct a permanent lift station in place of the			Estimated on cost of package lift station.	backyard. This would be relocated to a place for operator to
Lift Station	Lift Station 3 Relocation	existing temporary one	5	\$ 150,000	Does not include land acquisition	leasily access and properly maintain
				,	Electrical engineers investigation held on	
		General Electrical upgrades, Area light pole, auto			3/3/21, recommendation & PCE provided.	
		dialer, manual transfer switch, raise main disconnect			Additional 20% contingency added to the	
Lift Station	Lift Station 1 Electrical Upgrades	above flood elevations	6	\$ 19,800	PCE they provided	
					Electrical engineers investigation held on	
		General Electrical upgrades, Area light pole, auto			3/3/21, recommendation & PCE provided.	
		dialer, manual transfer switch, raise main disconnect			Additional 20% contingency added to the	
Lift Station	Lift Station 2 Electrical Upgrades	above flood elevations	7	\$ 19,800	PCE they provided	
		Evaluation and Survey of existing channels to get				will provide better evaluation of channels, necessary CAD files
Drainage Facility	Channel Survey & Evaluation	proper information and damage locations	1	\$ 50,000	Estimate based on surveying costs	for design and location of all problem areas
						Estimate based on site visits walking up and down channels
		Cleaning out of the entire ditch, addressing the most			work derived from historical projects that	identifying sink holes, broken and failed concrete and heavy
Drainage Facility	Mosswood Ditch Rehabilitation Phase 1	critical items found during evaluation	4	\$ 488,490	VSE has performed	debris
						Estimate based on site visits walking up and down channels
		Repair to all side slopes, additional tree removal and			work derived from historical projects that	identifying sink holes, broken and failed concrete and heavy
Drainage Facility	Mosswood Ditch Rehabilitation Phase 2	possible retaining wall construction	5	\$ 488,490	VSE has performed	debris
						Estimate based on site visits walking up and down channel,
						identifying sink holes, broken and failed concrete and heavy
		Cleaning out of the entire ditch, addressing the most			work derived from historical projects that	debris. Total costs do not consider potential FEMA money or
Drainage Facility	East Ditch Channel Rehabilitation Phase 1	critical items found during evaluation	6	\$ 610,020	VSE has performed	contribution by East Plantation MUD
						Estimate based on site visits walking up and down channel,
						identifying sink holes, broken and failed concrete and heavy
		Repair to all side slopes, additional tree removal and			work derived from historical projects that	debris. Total costs do not consider potential FEMA money or
Drainage Facility	East Ditch Channel Rehabilitation Phase 2	possible retaining wall construction	7	\$ 610,020	VSE has performed	contribution by East Plantation MUD

Facility	Project Name	Project Description	Priority	Estimated Construction Cost	Cost Basis	Notes
- Talemay		Draining cleaning and disinfection of basins, misc. work	,		Estimated cost to replace the items listed	Preliminary estimate based on facility tours. Estimated
		to repair/replace diffusers, piping and			under project description. See specific items	construction cost reflects only RP MUD's portion of the
		recoating/replacement of existing piping, building a CI2			under the WWTF rehabilitation cost	project. Based on 59% ownership per the agreement between
WWTF	Rehabilitation Phase 1	room	1	\$ 304.440	estimate.	the two districts.
VV VV 11	Kenabilitation i nase 1	Toom		304,440	Commute.	the two districts.
						Scope TBD after evaluation. Well currently in monitoring mode
						per the TCEQ. Further evaluation needed to provide
						information on necessity of plant to serve the entire system
						and boards decision to keep plant online. Plant will further
		5 L 0 5 Pt 199 0		422.000		deteriorate if left un attended for extended period of time
Water Plant Facilities	Water Plant No. 1	Evaluation, Demolition or Rehabilitation	1	\$ 132,000	Estimate	which could lead to a greater financial burden.
		5 1 11 61 6 116				Estimate based on an evaluation of these items has never beer
		Evaluation, and documentation of location of all fire			Average cost based on number of fire	done to the engineer's knowledge. Allow scope of repair work
Water Distribution System	Fire Hydrant & Valve Survey	hydrants and valves located within the District.	1	\$ 50,000	hydrants and valves within the District.	to be completed
					Based on cost estimate for price per linear	
Storm Sewer System	Storm Sewer Clean & Televise	Storm Sewer C&TV	11	\$ 34,246	foot to clean & TV from other projects	Required to determine scope of rehabilitation
					Estimated cost to C&TV entire system per	
Sanitary Sewer System	Sanitary Sewer C&TV	Sanitary Sewer C&TV	1	\$ 327,616	cost estimate	Required to determine scope of rehabilitation
		Evaluation and Survey of existing channels to get				will provide better evaluation of channels, necessary CAD files
Drainage Facility	Channel Survey & Evaluation	proper information and damage locations	1	\$ 50,000	Estimate based on surveying costs	for design and location of all problem areas
					Estimated cost to replace the items listed	Preliminary estimate based on facility tours. Estimated
		Removal and replacement of headworks splitter box,			under project description. See specific items	construction cost reflects only RP MUD's portion of the
		new headworks, and Remove and replace clarifier			under the WWTF rehabilitation cost	project. Based on 59% ownership per the agreement between
WWTF	Rehabilitation Phase 2	troughs	2	\$ 304,440	estimate.	the two districts.
					Electrical engineers investigation held on	
					3/3/21, recommendation & PCE provided.	
		Replace Pressure/level switches, Autodialer, New CMU			Additional 20% contingency added to the	
Water Plant Facilities	Water Plant No. 3 Electrical Upgrades	Building	2	\$ 87,000	PCE they provided	Based on existing MCC building in poor condition.
						Estimate based on site inspections, sinkhole frequency and age
						of system. See subdivision sheet with Year built, construction
		Rehab/Remove & Replace of half of the existing storm				material and estimated life expectancy. See RP MUD report
Storm Sewer System	Storm Sewer Rehabilitation Phase 1	sewer system	2	\$ 457,347	based on 50% of the cost estimate.	with examples of sinkholes found
·						·
						Estimate based on average life of manhole depending on the
						construction material. See subdivision sheet with year built,
Sanitary Sewer System	Sanitary Manhole Rehabilitation Phase 1	Rehab/Replace of approx. 14% of manholes in District	2	\$ 442,371	Based on approx. 14% of cost estimate	construction material and estimated life expectancy
						Estimate based on average life of sanitary sewer pipe
						depending on the construction material. See subdivision sheet
		CIP/Rehabilitation on 14% of sanitary sewer lines in				with year built, construction material and estimated life
Sanitary Sewer System	Sanitary Sewer Rehabilitation, Phase 1	District	2	\$ 452,000	Based on approx. 14% of cost estimate	expectancy
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					Electrical engineers investigation held on	Estimated construction cost reflects only RP MUD's portion of
		Motor control center replacement, ATS replacement,			3/3/21, recommendation & PCE provided.	the project. Based on 59% ownership per the agreement
		Generator replacement, Generator fuel tank,			Additional 20% contingency added to the	between the two districts. Age, issue obtaining parts for future
WWTF	Electrical Upgrades	autodialer, General electrical modifications/upgrades	3	\$ 276.120	PCE they provided	repairs and safety to operations
		and an area of the		- 270,120	Typical costs associated with recoating a	
		Recoating of GST, HPT, Buildings, Pumps and all above			water plant about this size from previous	Based on age of current coating, noted excess chalking/rust
Water Plant Facilities	Water Plant No. 2 Recoating	ground piping	3	\$ 202.200	projects VSE has performed	during site visit.
atter riant racinties	Tracer Flant No. 2 Recouning	סיייאין איייס	J	7 200,200	p. ojesto roz nas periorinea	www.mo.once violes

Facility	Project Name	Project Description	Priority	Estimated Construction Cost	Cost Basis	Notes
Water Distribution System	Fire Hydrant & Valve rehabilitation	Rehabilitation of all Fire hydrants and valves found to be broken during evaluation and survey	3	\$ 150,000	Estimate based on repair/replacement of approx. 50% of valves and fire hydrants	Estimate based on average life of sanitary sewer pipe depending on the construction material. See subdivision sheet with year built, construction material and estimated life expectancy
Storm Sewer System	Storm Sewer Rehabilitation Phase 2	Rehab/Remove & Replace of half of the existing storm sewer system	3		based on 50% of the cost estimate.	Estimate based on site inspections, sinkhole frequency and age of system. See subdivision sheet with year built, construction material and estimated life expectancy. See RP MUD report with examples of sinkholes found
Sanitary Sewer System	Sanitary Sewer Rehabilitation, Phase 2	CIP/Rehabilitation on 14% of sanitary sewer lines in District	3	\$ 452,000	Based on approx. 14% of cost estimate	Estimate based on average life of sanitary sewer pipe depending on the construction material. See subdivision sheet with year built, construction material and estimated life expectancy
Sanitary Sewer System	Sanitary Sewer Rehabilitation, Phase 3	CIP/Rehabilitation on 14% of sanitary sewer lines in District	4		Based on approx. 14% of cost estimate	Estimate based on average life of sanitary sewer pipe depending on the construction material. See subdivision sheet with year built, construction material and estimated life expectancy
Drainage Facility	Mosswood Ditch Rehabilitation Phase 1	Cleaning out of the entire ditch, addressing the most critical items found during evaluation	4	\$ 488,490	work derived from historical projects that VSE has performed	r Estimate based on site visits walking up and down channels identifying sink holes, broken and failed concrete and heavy debris
Water Plant Facilities	Water Plant No. 2 Electrical Upgrades	MCC Replacement, Pump Control Panel, ATS replacement, Autodialer, General electrical modification/upgrades	5	\$ 237,000	Electrical engineers investigation held on 3/3/21, recommendation & PCE provided. Additional 20% contingency added to the PCE they provided	Based on age of equipment and difficulty to repair parts as failures begin to happen.
Sanitary Sewer System	Sanitary Manhole Rehabilitation Phase 2	Rehab/Replace of approx. 14% of manholes in District	5	\$ 442,371	Based on approx. 14% of cost estimate	Estimate based on average life of manhole depending on the construction material. See subdivision sheet with year built, construction material and estimated life expectancy
Sanitary Sewer System	Sanitary Sewer Rehabilitation, Phase 4	CIP/Rehabilitation on 14% of sanitary sewer lines in District	5	\$ 452,000	Based on approx. 14% of cost estimate	Estimate based on average life of sanitary sewer pipe depending on the construction material. See subdivision sheet with year built, construction material and estimated life expectancy
Lift Station	Lift Station 3 Relocation	Construct a permanent lift station in place of the existing temporary one	5	\$ 150,000	Estimated on cost of package lift station. Does not include land acquisition	Current lift station is just a manhole with pump in someone's backyard. This would be relocated to a place for operator to easily access and properly maintain r Estimate based on site visits walking up and down channels
Drainage Facility	Mosswood Ditch Rehabilitation Phase 2	Repair to all side slopes, additional tree removal and possible retaining wall construction	5	\$ 488,490	work derived from historical projects that VSE has performed Typical costs associated with recoating a	identifying sink holes, broken and failed concrete and heavy debris
Water Plant Facilities	Water Plant No. 3 Recoating	Recoating of GST, HPT, Buildings, Pumps and all above ground piping	6	\$ 202,000	water plant about this size from previous projects VSE has performed	Based on age of current coating, noted start of chalking/rust during site visit
Sanitary Sewer System	Sanitary Manhole Rehabilitation Phase 3	Rehab/Replace of approx. 14% of manholes in District	6	\$ 442,371	Based on approx. 14% of cost estimate	Estimate based on average life of manhole depending on the construction material. See subdivision sheet with year built, construction material and estimated life expectancy Estimate based on average life of sanitary sewer pipe
Sanitary Sewer System	Sanitary Sewer Rehabilitation, Phase 5	CIP/Rehabilitation on 14% of sanitary sewer lines in District	6	\$ 452,000	Based on approx. 14% of cost estimate	depending on the construction material. See subdivision sheet with year built, construction material and estimated life expectancy
		General Electrical upgrades, Area light pole, auto dialer, manual transfer switch, raise main disconnect			Electrical engineers investigation held on 3/3/21, recommendation & PCE provided. Additional 20% contingency added to the	
Lift Station	Lift Station 1 Electrical Upgrades	above flood elevations	6) 19,800	PCE they provided	

Facility	Project Name	Project Description	Priority	Estimated Construction Cost	Cost Basis	Notes				
Drainage Facility	East Ditch Channel Rehabilitation Phase 1	Cleaning out of the entire ditch, addressing the most critical items found during evaluation	6	\$ 610,020	based on 50% of the cost estimate. Prices for work derived from historical projects that VSE has performed	Estimate based on site visits walking up and down channel, identifying sink holes, broken and failed concrete and heavy debris. Total costs do not consider potential FEMA money or contribution by East Plantation MUD				
Sanitary Sewer System	Sanitary Manhole Rehabilitation Phase 4	Rehab/Replace of approx. 14% of manholes in District	7	\$ 442,371	. Based on approx. 14% of cost estimate	Estimate based on average life of manhole depending on the construction material. See subdivision sheet with year built, construction material and estimated life expectancy				
Sanitary Sewer System	Sanitary Sewer Rehabilitation, Phase 6	CIP/Rehabilitation on 14% of sanitary sewer lines in District	7	\$ 452,000	Based on approx. 14% of cost estimate	Estimate based on average life of sanitary sewer pipe depending on the construction material. See subdivision sheet with year built, construction material and estimated life expectancy				
Lift Station	Lift Station 2 Electrical Upgrades	General Electrical upgrades, Area light pole, auto dialer, manual transfer switch, raise main disconnect above flood elevations	7	\$ 19,800	Electrical engineers investigation held on 3/3/21, recommendation & PCE provided. Additional 20% contingency added to the PCE they provided					
Drainage Facility	East Ditch Channel Rehabilitation Phase 2	Repair to all side slopes, additional tree removal and possible retaining wall construction	7	\$ 610,020	based on 50% of the cost estimate. Prices for work derived from historical projects that VSE has performed	Estimate based on site visits walking up and down channel, identifying sink holes, broken and failed concrete and heavy debris. Total costs do not consider potential FEMA money or contribution by East Plantation MUD				
Sanitary Sewer System	Sanitary Manhole Rehabilitation Phase 5	Rehab/Replace of approx. 14% of manholes in District	8	\$ 442,371	. Based on approx. 14% of cost estimate	Estimate based on average life of manhole depending on the construction material. See subdivision sheet with year built, construction material and estimated life expectancy				
Sanitary Sewer System	Sanitary Sewer Rehabilitation, Phase 7	CIP/Rehabilitation on 14% of sanitary sewer lines in District	8	\$ 452,000	Based on approx. 14% of cost estimate	Estimate based on average life of sanitary sewer pipe depending on the construction material. See subdivision sheet with year built, construction material and estimated life expectancy				
Sanitary Sewer System	Sanitary Manhole Rehabilitation Phase 6	Rehab/Replace of approx. 14% of manholes in District	9	\$ 442,371	Based on approx. 14% of cost estimate	Estimate based on average life of manhole depending on the construction material. See subdivision sheet with year built, construction material and estimated life expectancy				
Sanitary Sewer System	Sanitary Manhole Rehabilitation Phase 7	Rehab/Replace of approx. 14% of manholes in District	10	\$ 442,371	. Based on approx. 14% of cost estimate	Estimate based on average life of manhole depending on the construction material. See subdivision sheet with year built, construction material and estimated life expectancy				