

NORTH SUMTER COUNTY UTILITY DEPENDENT DISTRICT (NSCUDD)

**North Sumter Utilities (NSU) - Water and Wastewater System
The Villages Water Conservation Authority (VWCA) - Irrigation & Fire Protection System**

NSU / VWCA Five Year Capital Improvement and Major Maintenance Plan

Facility	Project Area	Recommended Work	Account	2023-24	2024-25	2025-26	2026-27	2027-2028	5 Year Total
NSU WWTP									
NSU WWTP	Headworks	Headworks - Bar Screen (Rehab or Replacement) and Auto Bypass	633	1,400,000	0	0	0	0	1,400,000
NSU WWTP	Oxidation Ditch	Anoxic Mixers (4) - Replacement	633	0	0	225,000	0	0	225,000
NSU WWTP	Oxidation Ditch	Aerator Gear Boxes (6) - Rebuilds	633	0	0	0	0	475,000	475,000
NSU WWTP	Oxidation Ditch	OD No. 1 Grit Removal	462	0	0	0	0	130,000	130,000
NSU WWTP	Oxidation Ditch	OD No. 2 Grit Removal	462	0	150,000	0	0	0	150,000
NSU WWTP	Surge Tank	Surge Tank - Grit Removal	462	0	0	0	100,000	0	100,000
NSU WWTP	Surge Tank	Surge Tank - Cover Replacement	462	0	25,000	135,000	0	0	160,000
NSU WWTP	Clarifiers	Clarifier No. 3 Construction	633	0	1,820,000	0	0	0	1,820,000
NSU WWTP	Clarifiers	Coating No 1 & 2 Internals	462	0	35,000	265,000	265,000	0	565,000
NSU WWTP	Clarifiers	Clarifier Gear Boxes (2) - Rebuild	633	0	0	0	0	100,000	100,000
NSU WWTP	RAS/WAS System	Replace RAS/WAS Pumps (4)	633	0	0	0	100,000	0	100,000
NSU WWTP	Traveling Bridge	Filter Sand Replacement (3)	462	80,000	0	0	0	0	80,000
NSU WWTP	Traveling Bridge	Filter Replacements	633	0	0	0	300,000	3,050,000	3,350,000
NSU WWTP	Chlorine Contact Chamber	Compound Loop Chlorine Analyzer	633	35,000	0	0	0	0	35,000
NSU WWTP	Reclaimed Water System	Inplant Reuse Pumps Replacement	633	0	0	60,000	0	0	60,000
NSU WWTP	Effluent Holding Basins	Reject and Effluent Holding Basin - Re-Lining	633	0	0	0	200,000	1,050,000	1,250,000
NSU WWTP	In-Plant Pump Station	Inplant Pump Station Rehabilitation Improvements	633	0	0	0	0	50,000	50,000
NSU WWTP	In-Plant Pump Station	Replace Submersible Pump #2	462	10,700	0	0	0	0	10,700
NSU WWTP	RIBs	RIBs Percolation Study	312	75,000	0	0	0	0	75,000
NSU WWTP	RIBs	RIBs Valve Optimization	633	0	0	0	0	575,000	575,000
NSU WWTP	Effluent	Replace Effluent Pipes to VWCA 1 & 2	633	0	60,000	60,000	225,000	0	345,000
NSU WWTP	Plant Site	Wastewater Facility Master Plan	312	150,000	0	0	0	0	150,000
NSU WWTP	Electrical	Lightning Protection & Surge Module Replacement	633	0	0	0	75,000	220,000	295,000
		Subtotal		1,750,700	2,090,000	745,000	1,265,000	5,650,000	11,500,700
NSU Lift Stations & Collection									
General Lift Stations	Pumps	Pump Rebuild/Replacements	462	0	60,000	70,000	70,000	70,000	270,000
General Lift Stations		FOG Remediation	462	50,000	0	0	0	0	50,000
General Lift Station		Misc Lift Station Repairs	633	0	55,000	55,000	65,000	65,000	240,000
Lift Station No 2	All components	Rehab Station (Mech, Pumps and Coating)	633	0	0	60,000	275,000	0	335,000
Lift Station No 5	Pumps	Replace Submersible Pump #2	462	9,700	0	0	0	0	9,700
Lift Station No 7	Pumps	Replace Submersible Pump #1	462	6,300	0	0	0	0	6,300
Lift Station No 10	Pumps	Replace Submersible Pump #2	462	6,500	0	0	0	0	6,500
Lift Station No 15	Pumps	Replace Submersible Pump #1	462	6,500	0	0	0	0	6,500
Lift Station No 23	Pumps	Replace Submersible Pump #2	462	6,500	0	0	0	0	6,500
Collection System	Gravity Sewer	Hydraulic Model	312	0	200,000	0	0	0	200,000
Collection System	Gravity Sewer	Desktop - I & I Study	312	0	0	200,000	0	0	200,000
Collection System	Gravity Sewer	Collection System Inspection	312	0	0	0	350,000	0	350,000
Collection System	Gravity Sewer	Collection System Repair	633	0	0	0	0	275,000	275,000
		Subtotal		85,500.00	315,000.00	385,000.00	760,000.00	410,000.00	1,955,500.00
NSU Potable Water System									

NSU / VWCA Five Year Capital Improvement and Major Maintenance Plan

Facility	Project Area	Recommended Work	Account	2023-24	2024-25	2025-26	2026-27	2027-2028	5 Year Total
General - Water	Distribution System	Chapman Loop	633	75,000	225,000	0	0	0	300,000
General - Water	Distribution System	Addition of Blow offs	633	75,000	75,000	75,000	60,000	60,000	345,000
General - Water	Distribution System	Interconnect Rehab (2- VCSA and LSSA)	633	75,000	0	0	0	0	75,000
General - Water	Distribution System	Potable Pipe Material DEP Reporting	312	5,000	0	0	0	0	5,000
WTP 1	Disinfection System	Chlorine Rehab & Gas Auto Shut Off Valves Installation	633	120,000	0	0	0	0	120,000
WTP 2	Clear Well	Structural Inspection & Cleaning	319	20,000	0	0	0	0	20,000
WTP 2	Biofilter	Cover & Internals Replacement	462	0	0	0	260,000	0	260,000
WTP 2	Biofilter	Coat Sump Area	462	82,500	0	0	0	0	82,500
WTP 2	Stripping Tower	Install OSHA Safety Structure	462	0	0	150,000	0	0	150,000
WTP 2	Site	Driveway Repavement & Drainage Improvements	462	0	0	0	0	120,000	120,000
WTP 2	Disinfection System	Chlorine Rehab & Gas Auto Shut Off Valves Installation	633	120,000	0	0	0	0	120,000
WTP 2	Iron Filtration	Install Iron Filtration	633	0	0	400,000	1,560,000	0	1,960,000
WTP 3	Clear Well	Structural Inspection & Cleaning	319	20,000	0	0	0	0	20,000
WTP 3	Stripping Tower	Install OSHA Safety Structure	462	0	0	150,000	0	0	150,000
WTP 3	Biofilter	Cover & Internals Replacement	462	0	0	0	260,000	0	260,000
WTP 3	Biofilter	Coat Sump Area	633	82,500	0	0	0	0	82,500
WTP 3	Disinfection System	Chlorine Rehab & Gas Auto Shut Off Valves Installation	633	120,000	0	0	0	0	120,000
		Subtotal		795,000	300,000	775,000	2,140,000	180,000	4,190,000
VWCA Irrigation Pump Stations									
General - Irrigation/Fire System	Irr/Fire Distribution System	Bleed Down Valve Replacements (10/yr)	633	203,000	178,000	178,000	0	0	559,000
General - Irrigation/Fire System	Irr/Fire Distribution System	Pump Rebuild/Replacement Program	462	0	100,000	100,000	100,000	100,000	400,000
General - Irrigation/Fire System	Stations	Chlorine System Rehab (2/yr)	633	305,000	305,000	305,000	305,000	265,000	1,485,000
General - Irrigation/Fire System	Stations	Coat Wet Well (2/yr)	462	215,000	0	215,000	0	215,000	645,000
General - Irrigation/Fire System		Retrofit Roof Hatches -OSHA Standards	462	115,000	115,000	0	0	0	230,000
TS D44-1		Stormwater TS Remote Capabilities (SCADA)	633	0	25,000	0	0	0	25,000
Station 1	Piping, Valves and Appurt.	Replace Main Station Discharge Flow Meter	462	20,000	0	0	0	0	20,000
Station 1	Electrical	Electrical Upgrades (Breakers, Fuses & Relays)	462	0	0	30,000	0	0	30,000
Station 1	Site	Install Access Driveway	462	0	0	0	0	5,000	5,000
Station 2	Piping, Valves and Appurt.	Replace Main Station Discharge Flow Meter	462	20,000	0	0	0	0	20,000
Station 2	Electrical	Electrical Upgrades (Breakers, Fuses & Relays)	462	0	0	30,000	0	0	30,000
Station 3	Site	Access Driveway Extension	462	0	0	0	0	5,000	5,000
Station 4	Site	Replace Generator Enclosure	462	0	0	25,000	0	0	25,000
		Subtotal		878,000	723,000	883,000	405,000	590,000	3,479,000
Metering System									
Residential Potable	Distribution System	Meter Repairs, 4% replacement of 23,372 meters	526	240,000	240,000	240,000	240,000	90,000	1,050,000
Residential Irrigation	Irr/Fire Distribution System	Meter Repairs, 3% replacement of 23,356 meters	526	150,000	150,000	150,000	150,000	80,000	680,000
Commercial Potable	Distribution System	Meter Repairs, 3% replacement of 427 meters	526	10,000	10,000	10,000	10,000	4,400	44,400
Commercial Irrigation	Irr/Fire Distribution System	Meter Repairs, 3% replacement of 679 meters	526	14,000	14,000	14,000	14,000	7,000	63,000
Metering System - NSU	Distribution System	Implementation of Advanced Meters	633	25,000	1,600,000	1,600,000	1,600,000	1,600,000	6,425,000
Metering System - VWCA	Distribution System	Implementation of Advanced Meters	633	25,000	1,600,000	1,600,000	1,600,000	1,600,000	6,425,000
		Subtotal		464,000	3,614,000	3,614,000	3,614,000	3,381,400	14,687,400
NSU General									
Valve Replacement Program	System Wide	VRP - Collections & Distribution System	633	60,000	75,000	75,000	50,000	50,000	310,000
Valve Replacement Program	System Wide	VRP - Irrigation Stations	633	65,000	75,000	75,000	75,000	50,000	340,000
VFD Program	Variable Frequency Drive	Variable Frequency Drive Program	633	75,000	75,000	0	0	0	150,000

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Facility	Project Area	Recommended Work	Account	2023-24	2024-25	2025-26	2026-27	2027-2028	5 Year Total
GIS/Cityworks		GIS/Cityworks Implementation	349	117,000	117,000	0	0	0	234,000
SCADA System		SCADA Master Plan	633	900,580	1,516,367	380,328	370,188	107,156	3,274,619.40
Maintenance System		AWIA Compliance (Key Door Access)	462	50,000	0	0	0	0	50,000
Vehicles		Crane Truck (Replacement)	641	150,000	0	0	0	0	150,000
Vehicles		Vermeer Trailer (New)	641	175,000	0	0	0	0	175,000
Vehicles		Vac Truck (Replacement)	641	540,000	0	0	0	0	540,000
		Subtotal		2,132,580	1,858,367	530,328	495,188	207,156	5,223,619
		Combined Subtotal without Fees		6,105,780	8,900,367	6,932,328	8,679,188	10,418,556	37,733,413
NSU Fees									
Engineering Services		Engineering Services - Vikus	312	270,000	310,000	330,000	350,000	370,000	1,630,000
Capital Plan Engineering		Capital Plan Engineering - Vikus	312	250,000	360,000	170,000	220,000	260,000	1,260,000
Engineering Services		Engineering Services - Other	312	35,000	35,000	40,000	40,000	40,000	190,000
		Subtotal		555,000	705,000	540000	610000	670000	3080000
		GRAND TOTAL		6,660,780	9,605,367	7,472,328	9,289,188	11,088,556	44,116,219
		Engineering Services	312	785,000	905,000	740,000	960,000	670,000	4,060,000
		Other Professional Services	319	40,000	0	0	0	0	40,000
		Misc. Contractual Services	349	117,000	117,000	0	0	0	234,000
		Building/Structure Maintenance	462	678,700	485,000	1,170,000	1,055,000	645,000	4,033,700
		Meter Repairs	526	414,000	414,000	414,000	414,000	181,400	1,837,400
		Infrastructure	633	3,761,080	7,684,367	5,148,328	6,860,188	9,592,156	33,046,119
		Vehicles	641	865,000	0	0	0	0	865,000
		GRAND TOTAL		6,660,780	9,605,367	7,472,328	9,289,188	11,088,556	44,116,219